SIEMENS

EPABX SD-192 MX GENERAL INFORMATION

This training aid describes the installation of an MX Kit and the features which are different in the SD-192MX from the SD-192, except the Lease Cost Routing feature. Separate training aids describing the Least Cost Routing feature are available.

The following information is provided:

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SD-192 MX COMMON EQUIPMENT KIT P/N 24-K9650-D12 INSTALLATION

The following describes the procedure for installing the MX kit into a ${\tt K1040-A4XX}$ SDEPABX cabinet. It does not describe retrofit procedures for other cabinets. The kit consists of the following items:

QUANTITY	PART NUMBER	DESCRIPTION
1 1 1 1 1	B1200-A100 B1201-A100 B1236-A100 C1133-A200 C39322-A9650-C81 C39322-A9650-C84	SYCON-X TERM-X SCRAM-X (128K) DISK Subsystem Name Plate (SD192 MX) Board Locator Strip MX Console Decal "MSG WTG" Keycard Decal "MSG WTG"

Remove the protective paper on the back of the name plate and glue it to the top front of the cabinet (see Figure 1).

Remove all PCBs from the control shelf.

Remove the protective paper on the back of the board locator strip MX, and glue it over the existing strip on the control shelf.

Check the strapping on the SYCON X PCB. The following straps should be in place (see Figure 3):

TERMINAL	PINS STRAPPED
El	1 to 2
E2	2 to 3
E3	2 to 3
E4	2 to 3
E5	1 to 2
E6	1 to 2
E7	1 to 2
E8	2 to 3
E19	1 to 2
E20	1 to 2
E21	1 to 2
E22	1 to 2

Terminals which have a strap over the two pins:

E27, E28, E32, E34, E35, E36, E37

Terminals which have no straps:

E9 through E17, E23 through E26, E30, E31, E33

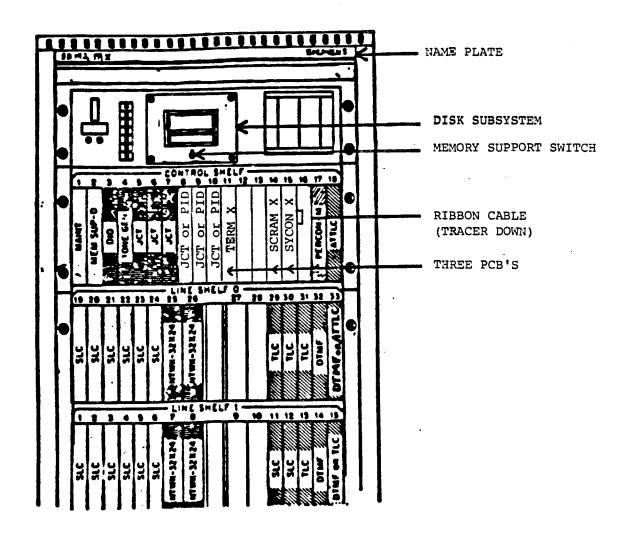


FIGURE 1.

Check the strapping on the SCRAM X PCB.

The two pins on El and the two pins on E4 should be strapped.

Insert the board into any one of the three SCRAM X slots on the control shelf.

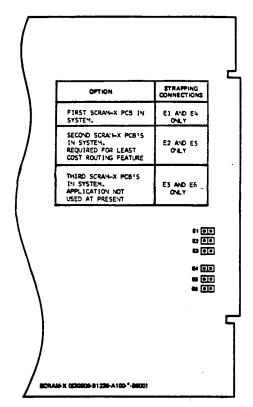


FIGURE 2. System Control Random Access Memory-X PCB (B1236-A100), Board Layout

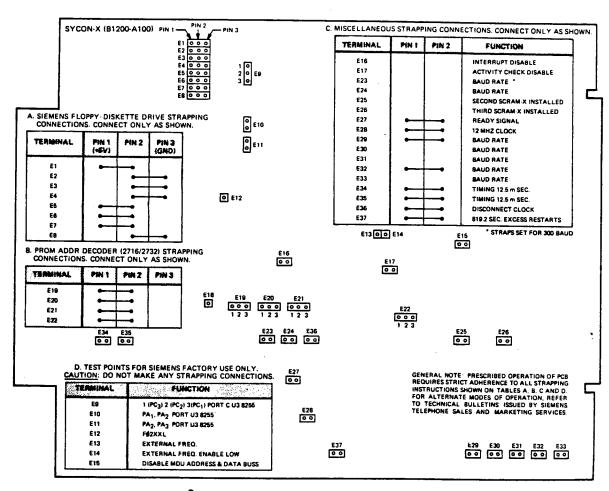


FIGURE 3. System Control-X PCB (B1200-A100), Board Layout

Insert the board into the slot labeled SYCON X on the control shelf.

Insert the TERM-X PCB into the slot labeled TERM X.

Remove the Memory Support switch on the Auxiliary Panel (remove hex nut at front of cabinet). Do not disconnect any wires from the switch, just let it hang loose for the time being.

Should some wires on the switch come loose, the following table shows how they are connected:

	1	2	3	4
A				
В	2	4	6	8
С	3	5	7	9

Numbers inside the box are the numbers with which the wires are labeled.

WIRE # AT SWITCH END	WIRE # AT OTHER END	CONNECTING POINT AT OTHER END
2	24	XAll, pin 5
3	28	XAl2, pin 5
4	2 5	XAll, pin 7
5	29	XA12, pin 7
6	30	XAll, pin 8
7	45	XA 2, pin 99
8	26	XAll, pin 3
9	27	XAl2, pin 65

On the disk subsystem all necessary strapping has been done at the factory, but it should be checked.

Check the DISCON (bottom board) strapping. It should be as shown below:

J101 pin 2 to pin 4 J104 no strapping

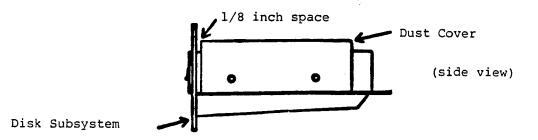
Wl strap across the two pins

W2 strap across the two pins

W3 no strap

W4 no strap

Before inserting the Disk Subsystem, make sure a one-eighth inch space exists between the dust cover and the front plate.



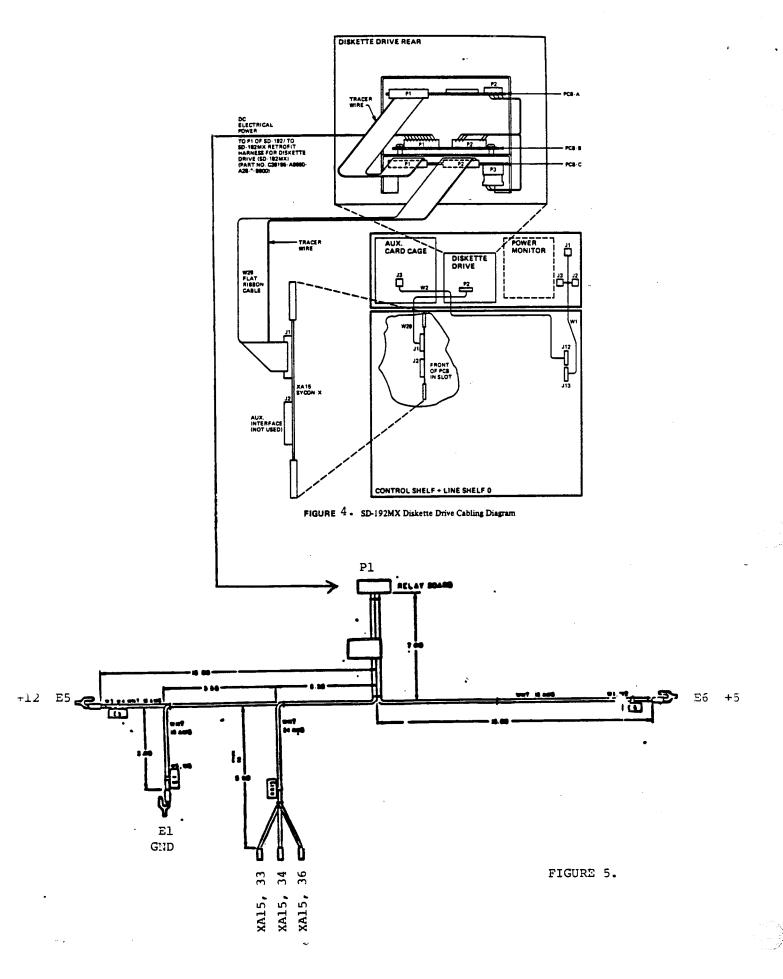
Insert the disk assembly through the front of the cabinet into the center hole on the auxiliary panel (see Figure 1). Do not tighten it at this time.

Install the Memory Support switch (removed earlier) in the hole of the front plate on the disk assembly.

Tighten the disk assembly with the four screws provided.

On the rear of the disk assembly, connect a ribbon cable between P2 of the DISCON PCB (lower board) and J1 of the SYCON X PCB (see Figure 4).

- (1) One edge of the ribbon cable has a tracer. Make sure the tracer is on the left at P2 and the bottom at J1.
- (2) Run the cable through the slot at the top of the control shelf between the SYCON X PCB and the left PERCON PCT slot.



(3) Make sure the ribbon cable does not touch the components at the sides of any PCBs.

On the rear of the disk assembly, connect one end of the power harness to Pl of the Disk Drive (upper board).

Connect the other leads as shown below at the rear of the control shelf (back plane) (see Figure 5):

W7 to XA15 pin 36 (W7 is labeled 36 on latest version) W8 to XA15 pin 34 (W8 is labeled 34 on latest version)

W9 to XA15 pin 33 (W9 is labeled 33 on latest version)

Remove the wire already connected to pin El (top left) and connect lead El of the harness to the pin. Connect the removed lead to the second pin of the Y connector at the end of lead El.

Repeat the above step with E5 (top left) and E6 (top right).

The modifications shown below have to be made at the rear of the control shelf (back plane).

Some tie wraps have to be cut so that the wires reach the new destination.

Destination	Wire #	Remove From:	Reinsert to:
SCR1	A18-P14	XA8-44	XA15-35
SCR2	A18-P15	XA8-43	XA15-37
MW & BR	A18-P16	XA8-42	XA15-38
	Wire label at XA8 end	 	

On the attendant console, place the message waiting decals as shown in Figure 6.

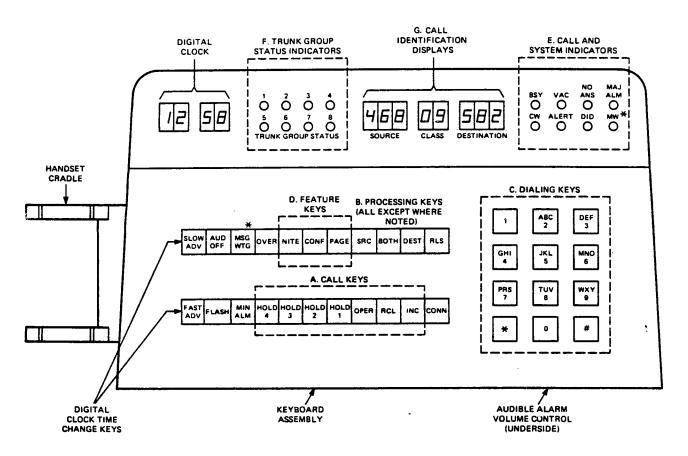
The LEDs cannot be seen. Place the MW decal directly under MAJ ALM and in line with DID.

Two message waiting decals are provided.

The MSG WTG decal is placed on the console key marked with an asterisk in Figure 6 below.

The MW decal is for the message waiting LED on the display of the console marked with an asterisk in Figure 6 below. (LED cannot be seen when off.)

Place the MW decal directly under MAJ ALM and in line with DID.



* MESSAGE WAITING FEATURE USED ONLY WITH EXTENDED BUSINESS APPLICATIONS SYSTEMS

FIGURE 6. Business Applications And Extended Business Applications Attendant Console Keys, Displays And Controls

·CONVERSION OF SD-192/232 CABINET TO SD-192 MX

SD-192 MX Retrofit Kit (P/N C39324-K9650-D-10-*-B900) is used for this.

The Kit contains the following:

- 1 MX High Speed Bus Ribbon Cable, P/N C39195-A9650-A25-*-B900
- 1 MX PID Adaptor Cable, P/N C39195-A9650-A28-*-B900
- 1 MX PID Jumper Cable, P/N C39195-A9650-A29-*-B900

Install the SD-192 MX Common Equipment Kit (P/N 24-K9650-D12) as outlined previously.

Install the MX High Speed Bus Ribbon Cable.

The Cable consists of the following parts:

- 5 plastic orientation strips
- 1 ribbon cable with 5 connectors

Each orientation strip has an arrow on one side. When the strip is installed, the arrow is at the top left.

The five strips are connected to the following connectors at the rear of the control shelf (see next illustration).

XAll (Term X slot)

XA12 (Mem X slot)

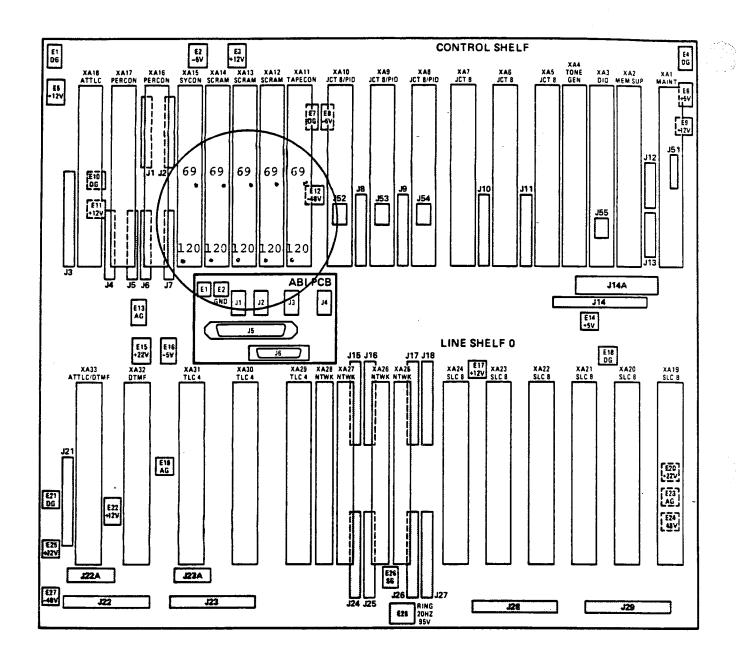
XAl3 (Mem X slot) One MEM X PCB is used at present XAl4 (Mem X slot) without the LCR feature, two

XA15 (Sycon X slot)

with the LCR feature.

The connector to which each orientation strip is to be connected has more pins than the strip has holes. Connect the strip so that the two bottom pins on the connector go into the two bottom holes on the strip. (Strip will connect to pins 69 through 120.)

After the five strips are connected, place the five connectors of the ribbon cable over the five strips with the red tracer up.



SD-192-MX HIGH SPEED BUS HARNESS CONNECTION PART NO. C39195-A9650-A25-*-B900

Install the MX PID Adaptor Cable

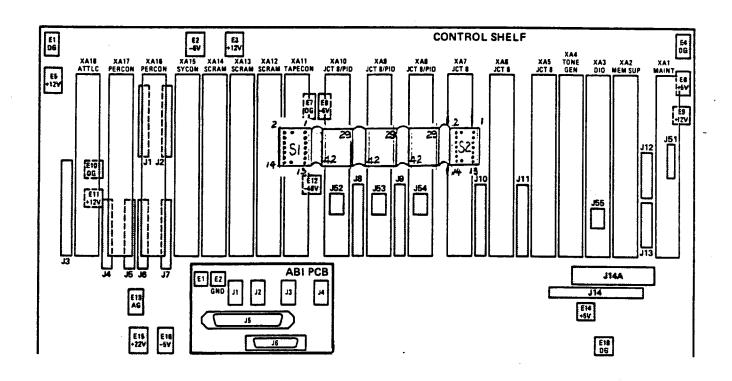
Connect the three connectors of the ribbon cable between pins 29 and 42 of connectors XA8, XA9, and XA10 with the blue tracer up. (See next illustration)

Two wirewrap sockets (S1 and S2) are at the two ends of the ribbon cable.

The pins face the installer.

Make sure that the two extra pins in the middle row are closer to the left row than to the right row. If they are closer to the right row, the ribbon cable is upside down.

The top right pin on S1 or S2 is pin 1, the bottom left pin is pin 14.



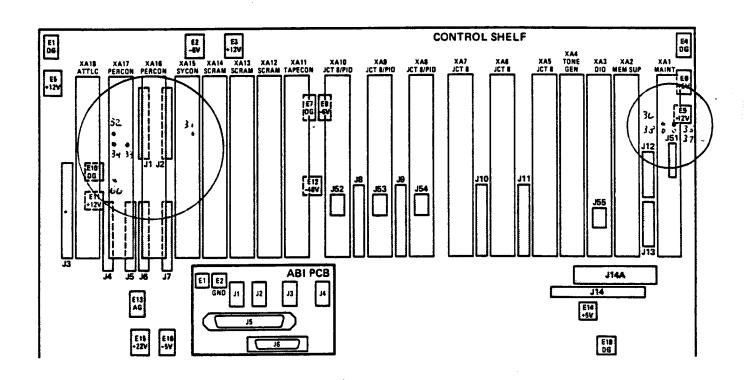
MX PID ADAPTOR CABLE CONNECTION
P/N C39195-A9650-A28-*-B900

Install the PID Adaptor Jumper Cables

Nine 10-inch long jumper wires with Berg female pins on both ends are provided.

Connect the jumper wires as shown below (see next illustration):

FROM	TO	FROM	<u>TO</u>
S1, pin 1 S1, pin 2 S1, pin 11 S1, pin 12 S1, pin 14	XA17, pin 33 XA17, pin 34 XA15, pin 31 XA17, pin 66 XA17, pin 32	S2, pin 7 S2, pin 8 S2, pin 9 S2, pin 10	XA1, pin 36 XA1, pin 35 XA1, pin 38 XA1, pin 37



PID ADAPTOR JUMPER CABLE CONNECTION
P/N C39195-A9650-A29-*-B900

CALLING NUMBER DISPLAY (CND) UNITS

Six slots (X45 through XAl0) on the control shelf may be used for junctor PCBs, for a total of 48 junctors.

If all slots are not used for junctors, up to three slots may be used for Peripheral Interface Driver (PID) PCBs.

Each PID PCB contains four circuits.

PID circuits are required to operate Calling Number Display (CND) Units.

The CND units display station or trunk numbers as discussed later.

Up to 12 CND units may be assigned in the system (four per PID PCB).

Of the six slots which may be used for junctors, the first three slots from left to right (XA5 through XA7) can be used for junctor PCBs only. The remaining three slots (XA8 through XA10) may be used for junctor PCBs or PID PCBs. Junctor PCBs must be in successive slots, however.

When the slots are used for PID PCBs, the PID circuits are numbered 0-11 from right to left. Note that this is exactly opposite from the PID numbering for the SD-232.

The CND units, when assigned to a station, display the following for that station. (Displays appear before a called station goes off hook.)

(1) Calls coming to station with CND unit

- (a) 1 is displayed when called by the attendant at console 1. 2 is displayed when called by the attendant at console 2. 1 or 2 is also displayed when the attendant is in the process of connecting a station or trunk party, before the attendant presses the CONN key.
- (b) The station number of the calling station is displayed. (If connected by an attendant, 1 or 2 is displayed first, then the station number.)
- (c) The trunk number (without display character) of the trunk on which the call comes in is displayed. (If connected by an attendant, 1 or 2 is displayed first, then the trunk number.) Also applies when a parked trunk call is retrieved or when a DIL, ANA, or UNA call is answered.

(2) Calls originating from the station with the CND unit

- (a) Station number of called station is displayed as soon as ringback tone is heard.
- (b) 1 is displayed when calling the attendant as soon as ringback tone is heard. If attendant 2 answers the call, the display changes to a 2.

- (c) The trunk number (without display character) of the trunk over which an outgoing call is made is displayed.
- (d) The station number of the station to which a call hunted is displayed.
- (e) The station number of the station which answered the call using dial call (group) pick-up or directed call pick-up is displayed.
- (f) When the station callback feature is used, the station number of the called station is displayed as soon as the calling station rings for callback.

(3) While engaged in a conversation and then hookflash

- (a) The display disappears when a station hookflashes. (When two stations are connected, a hookflash by either will cause the display for both to disappear.)
- (b) When the call is transferred, the two stations connected by the transfer see each other's station numbers. (If one is a trunk party, the station has the trunk number of the trunk used displayed.)
- (c) When the station which hookflashed consults another station, the two see each other's station numbers. The station on consultation hold has no display.
- (d) When the station which hookflashed consults a trunk party, the station has the trunk number of the trunk used displayed. The station on consultation hold has no display.
- (e) When a station which hookflashed to consult another party hookflashes again (three-way conference), the station which hookflashed still has the consulted party displayed, and vice versa, and the station which was on consultation hold now has the station displayed to which it was connected at the beginning.

Hardware Changes and Cabling

In addition to plugging the appropriate number of PID PCBs into the proper control shelf slots, the following cabling has to be performed:

- (1) For each PID PCB used, a ribbon cable (supplied with PID kit) has to be connected between the backplane of the control shelf and the Auxiliary Backplane Interface PCB (see Figure 7).
- (2) A 25-pair cable with a 180 (T) amphenol connector (male) is connected from J5 of the Auxiliary Backplane Interface PCB to a block on the Main Distribution Frame (see Figure 8).
- (3) A cable is connected to the terminal block inside each CND unit (see Figure 9).
- (4) The CND units are connected to the block for J5 on the MDF.

CMU Changes

A table (Figure 10) is completed before programming the CND units into the customer data date.

- (1) A check mark is placed in the appropriate block for the PID circuit to which the CND unit is to be assigned. (During programming, the PID circuit number will be used.)
- (2) The station number to which the CND unit is to be assigned is entered.

Feature 16 of the System Features is used to select the junctor limit (8, 16, 24, 32, 40 or 48). PID PCB has to be backed out temporarily for this.

CMU procedure 113 is used to change the System Features (in this case Feature 16).

CMU procedure 153 is used to add CND units initially or to change CND unit assignments (CND units cannot be assigned to the slots which were reserved for junctors with System Feature 16, and the junctor limit cannot be increased if CND units are already assigned to the slots.)

- (1) Requests station number
- (2) Requests PID number of circuit used for the CND unit. (None is entered if a CND unit is to be deleted.)

CMU procedure 253 is used to display the stations (if any) which have CND units, and which PID circuit is used for each unit.

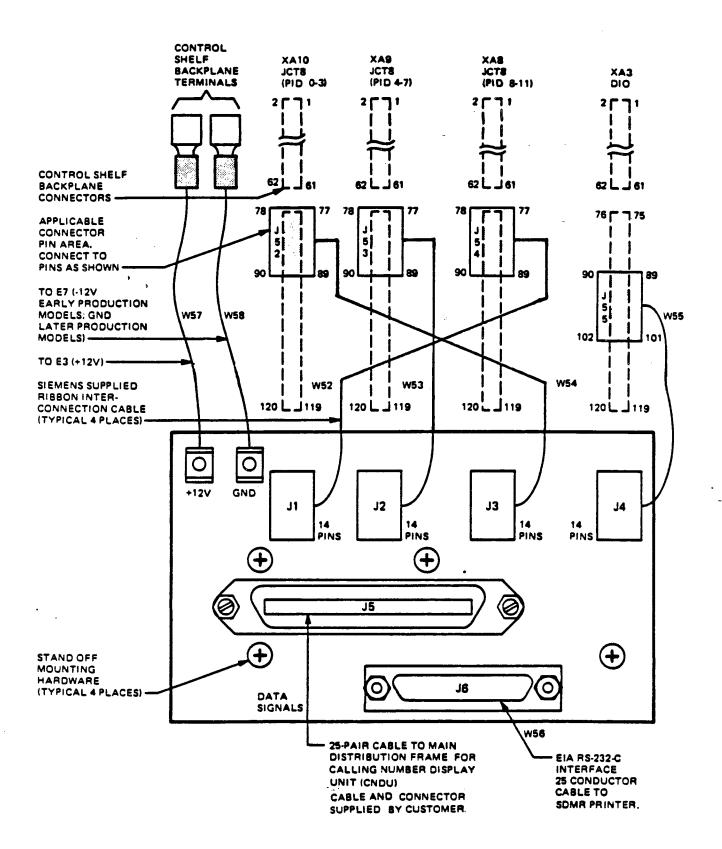


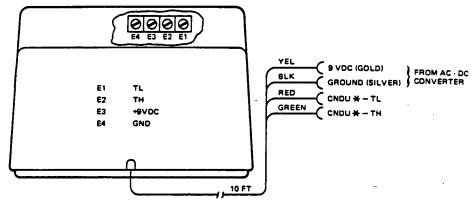
FIGURE 7. Auxiliary Backplane Interface (ABI) PCB, Interconnection Data

FIGURE 8. Cable Number 5, Assignments for Connector 15, Control Shelf, Peripheral Interface
Driver Circuits

PAIR NO.	PIN NO.	WIRE COLOR	FRAME DESIGNATION	NOTES
1	26 1	W-BL BL-W	CNDUO-TL CNDUO-TH	*PID #0
2	27 2	W-0 O-W		
3	28	. W-G G-W	CNDUI-TL	PID #1
4	3 29	W-BR	CNDUI-TH	
5	4 30	BR-W W-S	CNDU2-TL	PID #2
6	5 31	S-W R-BL	CNDU2-TH CNDU3-TL	PID #3
I	6	BL-R	CNDU3-TH	1.15 #3
7	32 7	R-O O-R		·
8	33	R-G	CNDU4-TL	PID #4
9	8 34	G-R R-BR	CNDU4-TH	
10	9 35	BR·R R·S	CNDUS-TL	PID #5
11	10 36	S-R BK-BL	CNDU5-TH	
12	11 37	BL-BK BK-O	CNDU6-TL	PID #6
	12	O-BK	CNDU6-TH	1
13	38 13	BK-G G-BK	CNDU7-TL CNDU7-TH	PID #7
14	39 14	BK-BR BR-BK		
15	40 15	BK-S S-BK	CNDU8-TL CNDU8-TH	PID #8
16	41	Y-BL	CND09-1H	
17	16 42	BL-Y Y-O	CNDU9-TL	PID #9
18	17 43	O-Y Y-G	CNDU9-TH	
19	18 44	G-Y Y-BR	CNDUIO-TL	PID #10
	19	BR-Y	CNDU10-TH	
20	45 20	Y-S S-Y	CNDU11-TL CNDU11-TH	PID #11
21	46 21	V-BL BL-V	GROUND GROUND	
22	47	V-0	GROUND GROUND	
23	22 48	O-V V-G	GROUND	
24	23 49	G-V V-BR	+12VDC	
25	24 50	BR-V V-S	+12VDC +12VDC	
23	25	s-v	+12VDC	

^{*}PID #'s are used during Customer Memory Update Procedures

FIGURE 9. Calling Number Display (CND) Unit Connections



CALLING NUMBER DISPLAY UNIT - REAR VIEW

NOTES:

- PID DATA CHANNELS 0, 1, 2 AND 3 ARE ASSOCIATED WITH THE PERIPHERAL INTERFACE DRIVER (PID) PCB INSTALLED IN CONNECTOR XA10 OF THE CONTROL SHELF.
- 2. PID DATA CHANNELS 4, 5, 8 AND 7 ARE ASSOCIATED WITH THE PID PCB INSTALLED IN CONNECTOR XA9 OF THE CONTROL SHELF.
- 3. PID DATA CHANNELS 8, 9, 10 AND 11 ARE ASSOCIATED WITH THE PID PCB INSTALLED IN CONNECTOR XAB OF THE CONTROL SHELF.
- CND UNITS CAN BE CONNECTED TO ANY PID # DATA CHANNEL. MAXIMUM OF 12 CNDU'S PER SYSTEM.

FIGURE 10. Assignments For Calling Number Display Units

PID PCB LOCATION	PID NOS.	ASSIGNMENTS AVAILABLE	SELECTED (V)	STATION NO.	NOTES
	0	CND UNIT 0			
XA 10	1	CND UNIT 1			
	2	CND UNIT 2			
	3	CND UNIT 3			
	4	CND UNIT 4			
XA 9	5	CND UNIT 5			
~~*	6	CND UNIT 6			
	7	CND UNIT 7			·
	8	CND UNIT 6			
XA 8	9	CND UNIT 9			
~* [10	CND UNIT 10			
	11	CND UNIT 11			

TRAFFIC METERING

The traffic metering is split into two parts:

- (1) Resident part
- (2) Overlay part

The resident part is activated by a <u>CMU procedure first</u> to start the metering process. Once activated, it collects data endlessly, unless deactivated again by another CMU procedure. During the activating CMU procedure, an interval (15, 30, or 60 minutes) is chosen for use with automatic reports.

The overlay part is activated by entering "M" to the prompt "D300-GS_ENTER C OR M", which appears when a MAP or printer is connected to the RS-232 interface on the auxiliary panel. (Metering must be activated prior to this by CMU procedure, otherwise "METERING INACTIVE" will appear, and the system will wait for an initial prompt, (IP) request, A MAP may be used to activate the metering, but a printer must be used when a report is to be generated, i.e. when entering "M".)

The following is an example of what will appear on the printer when "M" is entered when metering is active: (Items in parenthesis are not displayed; they are for information only.)

METERING ACTIVE

(DATE) (TIME, 24-HOUR (INTERVINE INCL. SECONDS) FOR A

(INTERVAL BETWEEN REPORTS FOR AUTOMATIC READOUTS)

06/07/80

13:45:15

PERIOD 15 MINUTES

LAST REPORT 13:40:00

IMMEDIATE REPORT (Y/N)?

If the question is answered with & (YES), a report is generated immediately.

If the question is answered with N (NO), reports will be generated at the interval chosen during the CMU procedure which started the metering.

If a report was printed out earlier, the next report will be either 15, 30, or 60 minutes after that last report <u>if</u> the last report was printed out not longer ago than the programming reporting interval.

If the traffic metering is activated, the reports are generated whether a printer is connected or not. Therefore, if "N" is entered to the prompt "IMMEDIATE REPORT (Y/N)?" a report is generated either 15, 30 or 60 minutes after a report would have been printed out if a printer had been connected.

When a report is generated, the actual reporting period is shown.

Two buffers are used to collect idential data. One buffer is used to collect data at a time. When data is removed from one buffer (printed out), the other is immediately cleared, and it starts to collect new data. (This occurs after each automatic reporting period whether a printer is connected or not.)

A soft restart will also clear the registers.

Four CMU procedures are associated with traffic metering.

- (1) Procedure 540 (Add Traffic Metering Parameters)
 - (a) Used to start metering
 - (b) Requests date, time, and metering period
 - (C) Result: Metering Active
- (2) Procedure 140 (Change Traffic Metering Parameters)
 - (a) Used to make a change in any or all parameters
 - (b) Requests new date, time, or metering period (STEP Key and ENTER Key are used to answer prompt for those parameters which are not being changed).
 - (c) Result: Metering Active
- (3) Procedure 240 (Display Traffic Metering Parameters)
 - (a) Shows date, time and metering period if metering is active.
 - (b) Indicates "Metering Inactive" if metering was not activated.
- (4) Procedure 640 (Delete Traffic Metering Parameters)
 - (a) Used to stop traffic metering
 - (b) Result: Metering Inactive.

ATTENDANT CONTROL OF TRUNK GROUP ACCESS

With this feature the attendant can accomplish two things.

- (1) For each of the first seven trunk groups (00-06), which have trunk group status indicators 1-7 respectively, the attendant can set a BUSY TRUNK GROUP THRESHOLD for each group. If the attendant wants to receive an indication when a trunk group has only a certain number of idle trunks left (all others are busy), that number is programmed as the threshold value.
- (2) The attendant can block all stations from accessing either one of the first seven trunk groups.

Busy Trunk Group Threshold

The attendant can program a 2-digit threshold value for each of the first seven trunk groups from the console (must be 2-digits, even if first digit is 0).

The Trunk group status indicator for a particular trunk group is off when the trunk group is not assigned or the number of idle trunks in the group is higher than the threshold value.

When the number of idle trunks for a particular trunk group is at or below the threshold value, the trunk group status light for the group will give one of the following indications:

- (1) Glow steady if the number of idle trunks is at or below the threshold value but not zero (not all trunks busy).
- (2) Flash slowly (60 IPM) if every trunk in the group is busy. It will do this even if the threshold is never set (left at 00).
- (3) Flash fast (120 IPM) if the attendant blocked dial access to the trunk group.

To set the Trunk Group Busy Threshold value, the attendant takes the following steps:

- (1) Momentarily depresses the SRC key (key will glow steady)
- (2) Dials the SET BUSY THRESHOLD access code (assigned in the customer data base). The access code will appear in the SOURCE field.
- (3) Dials the 2-digit trunk group number (00-06). The access code will disappear, and the trunk group number will appear in the SOURCE field. The threshold value will appear in the DESTINATION field. The SCR key will extinguish and the DEST key will glow steady.

- (4) Dials a 2-digit threshold value. The new value will be displayed in the DESTINATION field.
- (5) Momentarily depresses the CONN key. The DEST key and the display will extinguish. (If a mistake is made in the dialing, depressing the RLS key will abort the procedure.)

To change the Trunk Group Threshold value, the attendant takes the following steps:

- (1) Momentarily depresses the SRC key (key will glow steady)
- (2) Dials the SET BUSY THRESHOLD access code
- (3) Dials the trunk group number. The trunk group number will be displayed in the SOURCE field. The SRC key will extinguish and the DEST key will glow steady. If the attendant has blocked dial access to the trunk group, BL will appear in the class field. The current threshold value will appear in the DESTINATION field.
- (4) Dials the new threshold value. The new value will be displayed in the DESTINATION field.
- (5) Momentarily depresses the CONN key. DEST key and display will extinguish.

NOTE: If the attendant merely wants to display the threshold value for a trunk group without changing it, steps (1) through (3) above are followed with depressing the RLS key.

Set Dial Access

The attendant can block either one of the first seven trunk groups (00-06) from being accessed directly by stations.

Either attendant still has access to the blocked trunk group.

Either attendant can connect a station to a trunk in a blocked trunk group.

The trunk is not blocked for incoming calls.

Trunk queuing for the blocked trunk group is suspended, except for those stations already in the queue at the time the attendant blocks the trunk group.

For alternate trunk group routing, a blocked trunk group is skipped.

When going into night operation with the console (both consoles if two are used), the feature operates in a different way when just the NITE key is pressed than when the handset is also unplugged.

If only the NITE key is pressed, and the handset is not unplugged (for both consoles if two are used), the blocked trunk groups are still blocked during the night, and the following condition exists when going back into console operation:

- (1) The threshold values are still the same as they were before going into night operation.
- (2) The trunk groups which were blocked before going into night operation are still blocked.

When the handset is unplugged when going into night operation (both consoles if two are used), all trunk groups are unblocked during the night, and remain unblocked when going back into console operation. The threshold values are also reset to 00 when going back into console operation.

To block dial access to a trunk group, the attendant takes the following steps:

- (1) Momentarily depresses SRC key (key will glow steady)
- (2) Dials the SET DIAL ACCESS access code. The access code will appear in the SOURCE field.
- (3) Dials the 2-digit trunk group number. The access code will disappear and the trunk group number will appear in the SOURCE field. (If the group is already blocked BL will appear in the CLASS field.
- (4) Momentarily depresses DEST key (SRC key extinguishes, DEST key glows steady), then momentarily depresses CONN key. DEST key and display extinguish.

To unblock dial access for a trunk group, the attendant follows the same procedure as in steps 1 through 4 above, except instead of depressing the CONN key in the end, the RLS key is depressed.

A power failure or a reload will reset all thresholds to 00 and unblock all trunk groups.

Entering or Changing the TRUNK GROUP SET DIAL ACCESS Access Code and the SET BUSY THRESHOLD Access Code .

CMU procedure 157 allows crafts personnel to enter an access code for each of the two features into the customer data base.

The prompts on the MAP or printer will always ask for both access codes in sequence.

- (1) If an access code is desired, a 1- or 2-digit access code (not already used) may be assigned.
- (2) If no access code is desired for one of the two features, NONE is entered in response to the prompt for that feature.
- (3) If the access codes are changed, the new access codes are entered without having to delete the old ones.
- (4) If only one of the two access codes is to be changed, STEP is entered in response to the prompt for which the access code is to remain the same.

NOTE: To display the access codes, CMU procedure 257 is used.

Message Waiting

This feature allows the attendant to cause the message waiting light at station telephone to flash to show that a message is waiting at the message center.

The DIO PCB and Ring Interrupt and Message Waiting PCB (not just the Ring Interrupt PCB) have to be in the system.

CMU procedure 555 is used to program the feature into the customer data base.

- (1) A message center (attendant or station number) can be selected. If none is selected, the attendant has to clear the message waiting indication manually.
- (2) The number of ringing cycles between flashes is selected.

CMU procedure 655 is used to delete the feature.

CMU procedure 255 is used to display whether the feature is assigned.

CMU procedure 355 displays all station numbers which have a message waiting.

When the attendant calls a station to deliver a message and the station is now answering or busy, the attendant can momentarily press the MSG WTG key followed by the CONN key to cause the light on the station instrument to flash.

- (1) For a station which does not answer, it starts to flash immediately.
- (2) For a busy station, it starts to flash after the user goes on-hook.

The station user has to have a connection to the message center before the light will go off.

If the station user calls the attendant, the MW LED will light whether the attendant is the message center or not.

The attendant can also cause the message waiting light at a station to flash by momentarily depressing the MSG WTG key, dialing the station number, and then momentarily depressing the CONN key. (This will not ring the instrument)

To manually cancel the message waiting indication, the same procedure as above is followed, except the FLS key is depressed instead of the CONN key.

The DIO PCB is required in order to program the Message Waiting Feature. It will also store any station numbers that have Message Waiting signals assigned to them. In the event of a power failure, if power is restored within a 24 hour period, the Message Waiting signals will not have to be reassigned at the console.

DTMF Sender (DTMFS) and Dial Tone Detector (DTD)

Two versions of DTMFRS PBCs are available.

- (1) Two Dial Tone Detectors and two DTMF Senders on one PCB. P/N S30809-B1217-A100-*-B900. To add DTMF receivers to the PCB, DTMF receiver modules can be plugged into existing connectors.
- (2) To Dial Tone Detectors, two DTMF Senders and two DTMF Receivers on one PCB. P/N S30809-B1217-A200-*-B900.

Any combination of the three circuits can be assigned to any or all of the 14 DTMFR circuits (00 through 13).

The DTMFRS PCB has the following indicators (LEDs):

- (1) BUSY Lights when either of the three circuits (DTMF Receiver, DTMF Sender, or Dial Tone Detector) is busy.
- (2) VALID TONE . . . Lights every time a valid tone is received by the DTMF Receiver.
- (3) DTD Lights when a tone is detected by the Dial Tone Detector.
- (4) SEND Lights every time a valid digit is sent out over a trunk.

During the processing of $\underline{\text{one}}$ call, circuits on different PCBs may be used by the processor.

System Feature number 17 (Dial Tone Detectors)

Choices are: 0 - No Detectors Assigned

- 1 No Initial Dial Tone Detected
- 2 All Dial Tone Detected

System Feature number 18 (DTMF Senders) must be assigned as 1 for the DTMF Senders to operate.

CMU procedure 113 is used to change the system features.

Table 1.03 (next page) is prepared for the DTMFRS circuits to be assigned.

CMU procedure 57 is used to add, change, or delete DTMFRS circuits.

CMU procedure 67 used in the SD-192/232 is not used in the SD-192 MX.

CMU procedure 24 displays the DRMFRS circuits assigned.

When no Dial Tone Detectors are assigned, a dial tone emulator (timer 85) will be used to cut a station through to a trunk.

TABLE 1.03 DTMF Receiver, DTMF Sender, Dial Tone, Detector Assignments

	1 (./	/) IF ASSIGNE	D	ſ	NOTES	REMARKS (SEE NOTE)
CIRCUIT NUMBER	DTMF RECEIVER	DTMF SENDER	DIAL TONE DETECTOR			
	112021121		u	INE SHELF O	· · · · · · · · · · · · · · · · · · ·	
00					-	
01						
02						ATTLC 1 (2ND CONSOLE)
			L	INE SHELF	l	
03	T					TLC 24, 25
04						TLC 24, 25
05						TLC 26, 27
06		 		•		TLC 26, 27
			L	INE SHELF	2	
07]		TLC 40, 41
08		 		!	` `	TLC 40, 41
09		 	 	1		TLC 42, 43
10		 		1		TLC 42, 43
				J LINE SHELF	3	
11		Τ	T	1		TLC 56, 57
12	-	 	 	1		TLC 56, 57
		 		1		TLC 58
13	1	1	ł	ı	<u> </u>	

NOTE:

THE PARTICULAR CIRCUIT <u>CANNOT</u> BE ASSIGNED IF ANY OF THE ITEMS LISTED ON THE SAME LINE IN THIS COLUMN ARE ASSIGNED.

DTMF Sender Background Testing

Approximately every minute (traffic load permitting), the processor will test all DTMF Senders automatically.

Two DTMF receivers are required for the test.

One is selected by the processor to receive and evaluate the tones sent by the DTMF Senders, and if one DTMF Receiver indicates an invalid tone was sent by one of the senders, the tone is sent to a second DTMF Receiver for evaluation.

If DTMF Receivers are assigned to different PCBs as the DTMF Senders, to DTMF Receivers are sufficient for the test.

Should a bad DTMF Sender be detected, an error code message will be sent to the attendant console.

The attendant error code format is as follows:

Line l	8RR	JJ	LLL
Line 2	SSS	ВВ	DDD
Line l	8	= Sender	Failure
	RR	= Sender	Number
	JJ	= Juncton	number
	LLL	= Receive	er Number

Line 2 Has No Meaning

If the error code is displayed via CMU procedure 76 the message is as follows:

8RR	JJ	LLL			SSS	BB	DDD
			8	=	Sender	Failure	
			RR	=	Sender	Number	
			JJ	=	Juncto	number	
			LLL	=	Receive	er Number	

Dial Tone Detector Test with the Maintenance Phone

This test can be performed with the circuit to be tested in or out of service. It is recommended, however, that the circuit be taken out of service by turning the service switch on the PCB to OFF (up).

Dial 01 + 2-digit DTMFRS number (Do not dial the DTMFRS which was selected when you went off hook with the maintenance phone.)

If the circuit is busy, busy tone will be heard.

If the circuit is not assigned, reorder tone will be heard.

If the circuit number is valid and the circuit is available, the BUSY Lamp on the circuit to be tested lights.

For two seconds nothing is heard on the maintenance phone.

After the two seconds, if the circuit is functioning properly, RINGBACK tone is heard.

If the circuit is not functioning properly, BUSY tone is heard.

DTMF Sender Test with the Maintenance Phone

To perform this test, a DTMF Receiver and the DTMF Sender to be tested are required, and they cannot be assigned to the same circuit number.

Select a DTMF Receiver that is known to function properly.

The test can be performed with the two circuits in or out of service. It is recommended, however, that both circuits are taken out of service by turning the service switch for each OFF (up).

Dial 02 + 2-digit DTMF RECEIVER number + 2-digit DTMF SENDER number. (Do not dial the DTMFRS which was selected when you went off hook with the maintenance phone.)

If one of the two circuits is busy, BUSY tone will be heard.

If one of the two circuits is not assigned, REORDER tone will be heard.

If the circuit numbers are valid and the circuits are available, the BUSY Lamps on both circuits will light.

For three seconds nothing is heard on the maintenance phone.

After the three seconds, if the DTMF SENDER is functioning properly, RINGBACK tone is heard.

If the circuit is not functioning properly, BUSY tone is heard.

DTMF to Dial Pulse Conversion

To prevent rotary dial pulses and tones from reaching the Central Office when a tone station dials the telephone network address after dialing the access code of a trunk group for which the trunks are programmed for rotary dial pulse (DTMF to dial pulse conversion), the following will occur: (This does not apply when a Least Cost Routing or Speed Call access code is dialed.)

After the trunk group access code is dialed, the station is disconnected from the trunk audio path.

When CO dial tone is detected by a Dial Tone Detector (or the dial tone emulation is used), a DTMF Receiver is connected to the station and the user hears PBX dial tone.

The user has 15 seconds to dial the first digit, and 4-second interdigit time for the remaining digits (twice the value of timer 91).

The tones are converted to pulses and stored in a buffer.

They are outpulsed while the station is disconnected from the trunk audio path.

Eight-Digit Toll Restriction Lists

The number of bytes which can be used for the restriction lists is 1060.

To prevent a tone station user which has a restriction list assigned to his class-of-service from dialing digits before CO dial tone is received in order to defeat the restriction list, the following will occur: (This does not apply when a Least Cost Routing or Speed Call access code is dialed or when a trunk group access code is dialed, and dial pulse conversion takes place. In these cases the user never receives CO dial tone and the restriction lists could not be defeated as described above.)

After the trunk group access code is dialed, the station is disconnected from the trunk audio path and also from a DTMF receiver.

When CO dial tone is detected by a Dial Tone Detector (or the dial tone emulation is used), a DTMF Receiver and the trunk are connected to the station and the user hears CO dial tone.

Any digits dialed now will be outpulsed and also checked against assigned restriction lists.

Speed Calling

The user dials a speed-call access code and an index number, and the system outdials a pre-programmed address.

Two speed call access codes may be assigned:

One for use with SDMR standard account codes
Another for use with SDMR special account codes

Access codes may have one or two digits.

Index numbers may have one, two, or three digits.

If the index number has one digit, only 10 speed call numbers can be programmed with index numbers 0-9.

If the index number has two digits, 100 speed call numbers can be programmed with index numbers 00-99.

If the index number has three digits, 1000 index numbers are available (000-255); however, a maximum of 256 can be used.

Speed call can be used with or without DTMF senders.

Speed call can also be used in conjunction with Least Cost Routing (LCR).

Access to speed call is determined by Station class-of-service (separately for use with SDMR standard and special account codes).

If a station is given access to speed call by its class-of-service, trunk group restrictions and restriction lists for that class-of-service are meaningless when using the speed call feature. When the station dials the trunk group access code, the restrictions are in effect.

If a station is denied access to LCR, but is allowed access to speed call, and the station dials an index number for which the call is routed via LCR, the call will be routed to the attendant.

When programming speed call, the index number, the trunk group or LCR access code, and the called number (and possibly other data) are entered.

Trunk groups to be accessed via speed call must therefore have at least one access code. Whether the access code is for use with SDMR standard or special account codes does not matter. The speed call access codes determine this.

If the speed call is to be routed via LCR, an LCR access code is used. Again, it does not matter whether the LCR access code is for use with SDMR standard or special account codes. The speed call access codes determine this.

Before any index numbers and speed call numbers can be programmed, the speed call feature must be added in the system features (number of index digits and speed call access code(s) are programmed).

TABLE 1.16 Speed Calling

Number of Index Number Digits and Access Codes Assignment

NUMBER IN INDEX	OF DIGITS	3
1	2	3
0 to 9 (√)	00 to 99 (√)	000 - 255 (✔)

	CO			
SPEED CALL		SPEED CALL	SDMR SPL	ACCT CODE

TABLE 1.17 Speed Call Number Assignments

INDEX	(#E)			- 1	DiG	its:	101	BE C	UTI	DIAL	ΕĐ	ANI	D P	AU!	SE (P) I	DIAI	, TC	ΝE	DE.	TEC	T (6) T	oci	ST.E	(7)	OR	C+:	• CC	****	ANC) S (S	EΕ	VOT	ES 1	AN	0.5	,					
NUMBER	ALCESS CHIM	1 2	3	4	5	6	7	8	9	10	11 3	2	3 1	•	15	16	17	6	19	20 2	21 2	22 2	3 2	4 25	26	27	28	8	30	31 3	2 3	3 34	35	36	37	36	19 4	c 4	1 4	2 4	3 44	ŀ	COU!
		ш	\Box					Ц		\perp	\perp	\perp	\perp	\perp	\Box			1	\perp	\perp	_	I	L	Ι	L	L	L			_	_	Γ	L		Ц	I	I	1	\perp	Ι	\Box	[
		П					7	П	7	Т	T	Т	T	1	٦	7	Т	Ŧ	T	Т	Т	Т	Τ	Т	Т				П	T	Ţ	Т	Т		П	Т	Т	Т	Т	Ť	Т	1	П
	=	岩	-			_	Ξ	_	⇌	÷	÷	÷	÷	Ť	=	÷	Ť	Ť	÷	⇌	_	÷	÷	÷	÷	Ħ	F		_	╡	÷	_	÷		_	⇌	÷	÷	÷	÷	=		_
ليلا	ш	ш_	ш	Ш	Ш	Ц	_	ш			_	1	ᅼ	_	ᆜ	_	_		_		_	_	<u> </u>	<u> </u>		Ļ	<u></u>	Щ	_	_	_	1	1	L	Ц	ᆚ	ㅗ			_	ш	- 1	ட
		\Box						\Box	1		1	I	I	J	\Box	\Box	\perp			\perp	J	\perp	L	\perp		L					1	L	L			\Box	\perp	1	Ι	Ι	\Box		\square

Dialing an index number can cause a string of commands to be executed, if so programmed.

In addition to the commands to dial digits from 0 to 9, the following commands are available if the call is routed directly to a trunk group, not via Least Cost Routing (LCR).

D = 750 ms dial tone detect time (timer 86 = 750 ms) Meaning:

Stop outdialing and wait for valid dial tone for a period equal to 750 ms times the number of Ds programmed. (Dial tone detect is implicit at the beginning.)

P = 2-second pause (timer 87 = 2 seconds)

Meaning:

Stop outdialing and pause for a period equal to 2 seconds times the number of Ps programmed.

T = Change (toggle) outdialing mode from DTMF to dial pulse or vice versa. (DTMF outdialing is implicit at the beginning. A "T" command at the beginning is automatically followed by a "D" command, and the "D" command does not have to be programmed. Subsequent T commands have to be followed by programmed D commands.)

Ciii = C plus three numerical digits (another index number)
Meaning:

Insert another index number, and add to the outdial whatever is programmed to be outdialed for that index number. (Must have three digits regardless of what is programmed as the number of index digits, even if the leading digits have to be zeroes.) This index cannot be dialed by the user, unless it is the first entry to be used in the command string.

A string of commands can have several of each command listed above, but the number of characters cannot exceed 46, including the trunk group access code.

A certain amount of memory space is allocated for speed call entries. The maximum number of bytes cannot exceed 1024.

NUMBER OF BYTES = NUMBER OF CHARACTERS (INCL. ACCESS CODE) IN ENTRY WHOLE NUMBER)

(ROUNDED OFF TO NEXT WHOLE NUMBER)

Example of programming numerical digits only. To be routed directly to a trunk group:

INDEX NO.	TRK GRP ACCESS CODE	DIGITS TO BE OUTDIALED
00	80	9948100

Example of programming numerical digits only. To be routed via LCR:

INDEX NO.	LCR ACCESS CODE	DIGITS TO BE OUTDIALED
01	9	12013213400

Example of changing outdial mode (toggling):

INDEX NO.	TRK GRP ACCESS CODE	OUTDIAL COMMANDS
03	81	T994 8800

Example of dial tone detect and pausing:

INDEX NO.	TRK GRP ACCESS CODE	OUTDIAL COMMANDS										
04	80	18002345678	ממממ	2014941000	PPP	123456						
		ACCESS TO COMMON CARRIER	3-SEC DIAL TONE DETECT	CALLED NUMBER	6-SEC PAUSE	ACCT. CODE						

NOTE: Dial tone detect time period must be longer than 2 seconds otherwise the system will mistake a 2-second ringback tone for dial tone.

Example of Ciii commands:

The Ciii command is used when certain commands within several command strings are the same.

Less effective method:

INDEX	TRK GRP					
NO.	ACCESS CODE		OUTD	IAL COMMANDS		
		C. Carrier				ACCT CODE
04	80	18002345678	DDDD	2014941000	PPP	1234567
05	80	18002345678	DDDD	2014941001 -	PPP	1234567
06	80	18002345678	DDDD	2014941002	PPP	123456 7
07	80	18002345678	DDDD	2014941003	PPP	1234567
80	80	18002345678	DDDD	2014941004	PPP	1234567
09	80	18002345678	DDDD	2014941005	PPP	1234567
10	80	18002345678	DDDD	2014941006	PPP	1234567
	<u> </u>		2			
	same fo	or the		could be		same for
	seven ei	ntries		any address		seven
						entries

126 BYTES

More effective r	method:	int				ACT.
INDEX	, , , , , , , , , , , , , , , , , , ,	OT OT	JTDIAL COMMANDS			
04	c 011	DDDD	2014941000	PPP	C 012	
05	C 011	DDDD	2014941001	PPP	C 012	-
06	C 011	DDDD	2014941002	PPP	C 012	
07	C 011	DDDD	2014941003	PPP	C 012	
08	C 011	DDDD	2014941004	PPP	C 012	
09	C 011	DDDD	2014941005	PPP	C 012	
10	c 011	DDDD	2014941006	PPP	C_012	
> 11	8018002	345678			7	
*12	1234567	<				

102 BYTES

NOTE that the number of digits following the "C" is $\underline{\text{three}}$, although the number of digits in the index for the user is $\underline{\text{two}}$.

*not to be dialed by user

cannot put letters in indepe.

To use the speed call feature, the user dials one of the speed call access codes.

If the user is restricted from the feature, reorder tone is returned.

Next, the user dials the index number (and if the access code for special account codes was used, he also dials as many digits as were chosen in the program for the maximum number of digits in the account codes).

One of the following can now occur:

If the index is invalid, the call is routed to the attendant.

If the index is valid, and the call is routed directly to a trunk group (not via LCR), but all trunks in the desired group are busy, busy tone is returned. If the user goes onhook during the busy tone, he is not queuing. If he remains off-hook and a queue is available, the busy tone will change to steady tone. If he goes on-hook now, he is in a speed call queue.

If the index is valid, and the call is routed via LCR, but all trunks in the desired route list are busy, the normal progress tones (one short beep for each route searched) followed by busy tone will be heard. If the user goes on-hook during the busy tone he is not queuing. If he remains off-hook, progress tones are heard again. He is now in the LCR off-hook queuing mode. If he goes on-hook now, he is in the LCR on-hook queuing mode.

Each station can be in one queue only (speed call, LCR, or direct trunk group). Each attendant can be in two queues.

If a queue callback is not answered, it is cancelled.

If the user is busy at the time of a queue callback, the call is recycled.
When a queue callback is answered, everything is redialed automatically, including the special account code if it was used.

If the index is valid, and a trunk in the desired group or LCR route list is available, a confirmation tone (four short beeps) is heard, and the call will be completed.

STATION DETAILED MESSAGE RECORDING (SDMR)

Station detailed message recording (SDMR) can be assigned to a trunk group by its trunk group class-of-service.

The choices available for each trunk group are:

No SDMR recording
SDMR recording of incoming calls
SDMR recording of outgoing toll calls
SDMR recording of outgoing local calls

Any combination of the last three may be used.

When the SDMR feature is added to the system features, only the maximum number of digits in the account codes to be used is programmed. The set time and date access code is programmed separately.

The maximum number of digits in the account codes is eight.

The maximum number of digits in the account codes used by the particular customer can be programmed for a number from two to eight, and the standard account codes can vary from two digits to that maximum.

EXAMPLE:

If the number of digits in the acount codes for the particular customer is programmed as six, only 2-, 3-, 4-, 5-, or 6-digit standard account codes can be assigned (can be mixed).

However, the number of digits in the <u>special</u> account codes (dialed by the user) in this case is always six.

The set date and time access code is programmed when Least Cost Routing (LCR) and/or SDMR are assigned in the system.

A new CMU Procedure is used for this, procedure 158

To display the access code, use CMU procedure 258

The date and time can be set from the console or by CMU procedure (explained in a separate section).

A new CMU Procedure is used for this, procedure 159

To display the time and date, use CMU procedure 259

The system has to be able to distinguish local calls from toll calls.

The system knows that a toll call is being made if more than seven digits are dialed when accessing a CO trunk.

In areas where 1+ dialing is not required, all calls within the home area code zone only require seven digits (local and toll calls).

In order to distinguish between the toll office codes and local office codes, all toll office codes must be entered on an Outgoing Toll Code Exception table.

NOTE: The table need not be completed if local and toll calls are recorded for every CO trunk group.

The table consists of entries from 000 to 999.

TABLE 1.18 Listing of Outgoing Toll Code Exceptions

OFC CODE (v)	OFC CODE (4)	OFC CODE (v)						
001	026	051	076	101	126	151	176	201
002	027	052	077	102	127	152	177	202
003	028	053	078	103	128	153	178	203
ma		-				1.2.		

To add the exception codes to the data base, a new CMU Procedure is used, procedure 170.

To display the codes, use CMU procedure 270.

SDMR Print Format

The record printed below with the meaning of each field is an example of an outgoing call.

231	01	71	123456789012345678901234567890	12/12	10:14:51	00:01	12345678

Station Placing Call	Trunk Used	Access Code	Dialed Digits (Up to 29 Digits)		Call Origination Time 24 HD Hour Time)	Call Duration Time	Account Code STD & SPL Codes up to 8 Digits

The record printed below with the meaning of each field is an example of an incoming call completed to a station.

231	01	12/12	10:15:52	6754	1 -	00:01	1234
Station Receiving Call	Trunk Used	Call Date	Time Incoming Call Was Detected by the Switch	Pr	tendant ocessing	Call Duration Time	Account Code of Station Receiving Call STD. Account Code Only (up to 8 digits)

For those who use some other form of recording device (other than a hard copy printer), i.e. external polling, tape recorder, etc., the ASCII transmission data (7 bit ASCII even parity) is presented below.

Byte No.	Hex Value	Description
1	02 (1 - 9)	STX - start of transmission
2	ASCII (1 - 9)	lst digit of station lst digit of TRK 20 if Att.
3	ASCII (1 - 9)	Orig. 2nd digit of station -or 2nd digit of TRK -or 20 Call
4	ASCII	3rd digit of station space 20 20
5	20 (0 - 5)	Space
6	ASCII (0 - 9)	lst digit of trunk used
7	ASCII	2nd digit of trunk used
8	20 (2 - 9)	Space
9	ASCII (2 - 9)	One Digit Access code lst digit of Access Code -or
10	ASCII	20 2nd digit of Access Code
11	20 (0-9,D,P)	Space
12	ASCII	Dialed Digits or 20 no digits dialed or 20 To Fill out Field
13		Past Last digit dialed
TO		Field length 29 Digits
39	V (0-9,D,P)	Bytes 12 to 40
40	ASCII	v v
41	20 (0 - 1)	Space
42	ASCII (0 - 9)	lst digit of month
43	ASCII	2nd digit of month
44	2F (0 - 3)	/ slash
45	ASCII (0 - 9)	1st digit of day
46	ASCII	2nd digit of day
47	20 (0 - 2)	Space

Byte No.	Hex Value	Description
48	ASCII	1st digit of call hour (start)
49	(0 - 9) ASCII	2nd digit of call hour (start)
50	3A (0 – 5)	: colon
51	ASCII (0 - 9)	1st digit of call hour minutes (start)
52	ASCII	2nd digit of call hour minutes (start)
53	3A (0 - 5)	: colon
54	ASCII (0 - 9)	1st digit of call hour seconds (start)
55	ASCII	2nd digit of call hour seconds (start)
56	20 (0 - 9)	Space
57	ASCII (0 - 9)	1st digit of attendant answer time 20 If outgoing
58	ASCII (0 - 9)	2nd digit of attendant answer time -or call
59	(0 - 9)	3rd digit of attendant answer time
60	ASCII	4th digit of attendant answer time V
61	20 (1 - 2)	Space
62	ASCII	Attendant number of 20 if no attendant involved
63	20 (0 - 9)	Space
64 65	ASCII (0 - 9)	1st digit Hours - call duration
66	ASCII 3A	2nd digit Hours - call duration: colon
67	(0 - 5) ASCII	lst digit minutes - call duration
68	(0 - 9) ASCII	2nd digit minutes - call duration
69	20	Space
70	(0 - 9) ASCII	Account Code digits 20
71	(0 - 9) ASCII	Account Code digits up to 8 digits To fill
TO	(0 - 9) ASCII	left hand + 20 to or 8 byte Account Code digits justified fill 8 byte field
77	(0 - 9) ASCII	field if no Account Code digits account
78	OD	V code Carriage Return
79	OA	Line Feed
80	00	Null
TO		Non Printing
90	00	V
- 0	33	•

Reset to next print line.

SET DATE AND TIME

The date and time can be set from the console or by CMU procedure.

During initial installation, the data must be recorded with CMU procedure 91 (year is recorded).

If no DIO PCB is used, a software clock will maintain the time. In case of power failure, the data (except year) may be lost immediately or at best after 7½ or 15 minutes if a Memory Support PCB is used.

If a DIO PCB is used, the software clock is updated by the DIO clock, making it more accurate, and the DIO memory support is good for 24 hours.

If a DIO PCB is used, it must be in place when setting the date and time.

Setting Date and Time from the Console

Press the SRC Key SRC Key lights Dial "set date and time" access code Date appears on display (two digits for each)

MM DD YY

Month Day Year

Set to correct date (including leading zeroes if required) New date appears on display Press CONN Key display and Keys extinguish

Press SRC Key again SRC Key lights
Dial "set date and time" access code again
Date appears on display
Press DEST Key SRC Key extinguishes, DEST Key lights
Time appears on display

HH MM

Hour Minute

Set to correct time in 24-hour time (including leading zeroes). New time appears on display Press CONN Key display and Keys extinguish

Setting Date and Time by CMU Procedure

Perform procedure 159

Enter month, day, year, and time as shown below:

159

MONTH = 05 DAY = 17 YEAR = 82 TIME = 1415

To display the date and time, perform CMU procedure 259. (Seconds are included in display.)

259

05/17/82 14:15:09

CALL FORWARDING

Three types of call forwarding are available

Immediate
Busy
Don't Answer

Each can be assigned separately in a station's class-of-service.

Any combination of the three can be assigned.

Each receives a separate access code to activate the feature. To cancel either, one cancel access code is required.

The maximum number of stations which can be in a forwarding mode is 64.

When in the immediate call forwarding mode the call is forwarded immediately. The station which forwarded the call hears one short ring (cannot be answered). The forwarding station can make any type of call or use any feature.

When in the call forwarding-busy mode the call is forwarded only when the station is busy. The forwarding station has no indication that a call is being forwarded.

When in the call forwarding-don't answer mode, the call is forwarded if it is not answered within 5 seconds (timer 90 setting).

Queuing recalls are not forwarded.

If the forwarding station is in a hunt group, a call which would have hunted to the forwarding station will not hunt to the forwarding destination.

To activate either of the call forwardings, the station dials the respective access code and the forwarding destination, station number or $\mathbf{0}$ for attendant.

If the station's class mark does not allow the feature or the maximum number of calls forwarded has been exceeded, reorder tone is heard.

If the attempt is successful, confirmation tone (two short beeps) is heard.

Active call forwarding modes are changed if a new mode is chosen.

To cancel call forwarding, the station dials the cancel access code. Confirmation tone is heard.

A forwarded call can be transferred back to the forwarding station.

The station to which calls are forwarded can call the station which forwards its calls to that station.

SYSTEM FEATURE DEFINITIONS

TABLE 1.02 Part II System Feature Definitions

			,		
FEATURE NO	SYSTEM FEATURE TITLE	STANDARD DATA BASE ASSIGNMENT	ASSIGNMENTS AVAILABLE	NEW ASSIGNMENT	NOTES
1	BUSY LAMP DISPLAY	0	0.1		
2	VACANT NUMBER INTERCEPT	0	0.1	-	
3	MUSIC-ON-HOLD	0	01		
4	QUANTITY OF LINE SHELVES IN SYSTEM	1	1.2.3.4		
5	BUSY LINE HUNT	7	0.1		
6	MIXED STATION DIALING	0	0.1		
7	CONSOLE CALLS-WAITING INDICATOR STEADY ASSIGNMENT	1	,1 TO 255		
8	CONSOLE CALLS-WAITING INDICATOR FLASHING ASSIGNMENT	2	1 TO 255		
9	TIE-DID CALL FORWARDING (BUSY)	0	01		
10	TIE-DID VACANT NUMBER INTERCEPT	0	01		
11	TIE-DID CALL FORWARDING (NO-ANSWER)	0	01		
12	CALL TRANSFER OPTION	1	1 2.4		
13	TRUNK QUEUING	0	0 1		
14	ABANDONED TRUNK RECALL	1	0.1		
15	SHORT PULSE DETECTION	2	012		
16	QUANTITY OF JUNCTORS IN SYSTEM	48	8.16.24 32.40.48		
17	DIAL TONE DETECTORS	0	0.1		
18	DTMF SENDERS	0	0.1		

^{*}NEW ASSIGNMENT CODING FOR FEATURE IDENT NOS 1,2,3,5,6,9,10,11,13,14,17,18 ONLY, 0-NO, 1-YES

Feature 16 must show the correct number of junctors in order to allow PID PCBs to be used for CND units.

While changing feature 16, back out the PID PCBs temporarily.

Feature 17 must be assigned if dial tone detectors are assigned in the system .

Feature 18 must be assigned if DTMF senders are assigned in the system.

TRUNK GROUP CLASS-OF-SERVICE

TABLE 1.07 Trunk Group Class-of-Service Definitions

							MAF								MAF NIP 2				•		CL	ASS GRO	MAR UP 3	ĸS					CL	ASS GRO	MAR UP 4	ĸs		
	USE	-																										,	INCOMING CALLS	OUTGOING TOLL CALLS	OUTGOING LOCAL CALLS			
COS	TRK GRP	USE AND NOTES	TRK GRP 0	TAK GRP 1	TAK GAP 2	TAK GRP 3	TRK GRP 4	TRK GRP S	TAK GAP 6	тяк бяр 7	TRK GRP 8	THK GRP 9	TRK GRP 10	TRK GRP 11	TRK GAP 12	TRK GRP 13	THK GRP 14	TRK GRP 15	RESTR LIST 0	RESTR LIST 1	RESTR LIST 2	AESTA LIST 3	RESTR LIST 4	RESTA LIST S	RESTR LIST 6	RESTR LIST 7		TRK QUEUING	RECORD SDMR. INCOMI	RECORD SDMR OUTGO	RECORD SDMR OUTGO			
	İ		T	2	3	4	5	6	7	8	1	2	3	4	5	6	7		1	2	3	4	5	6	7	•	-	2	3	4	5	6	7	8
- 00			1			Г	Ī																											
01	1		1	1	_	1	\vdash						П		Г																			
02			1				П																				L							
83																											L			乚				
04			1				1																					L.,	1	<u></u>	L			
05			Г	П	1																													
06			1			Ι												П																
07											L		oxdot	$ldsymbol{oxed}$	_	_	_	Ľ	L.	Ш		\perp	Щ	<u> </u>	Щ	<u> </u>	╙	╙	╙	!	╙	igspace	_	<u> </u>
08			L	L		Ĺ					L					_	_		Ш	Ш			Ш	Щ	Щ	<u> </u>	┖	<u> </u>	┞	_	┖		<u> </u>	_
09																	_		oxdot	Ш			Щ	oxdot	_	<u> </u>	┞-	L	<u>_</u>	↓_	!		_	L
10													L	L	L					Ш					Щ	_	┖	L.	L.	ļ.	╙	└	_	Щ
11	I		L														<u> </u>			Ш					_	L	L	1_	Ļ.,	<u> </u>	<u> </u>	<u> </u>	L_	_
12																L.									_	_	<u> </u>	<u></u>	L	L	<u> </u>	L.	╙	╙
13													\Box		_	_	L_	L				$ldsymbol{ldsymbol{ldsymbol{\sqcup}}}$	Ш		_	_	┡	↓_	_	\vdash	\vdash	_	Щ	\vdash
14							L	L			L	L	上			_		Ш	Ш			$ldsymbol{ldsymbol{ldsymbol{eta}}}$		_		<u>_</u>	L	1_	_	_	_	1	_	╙
15					П	П	Г]	1	١ -	i	1	L							<u> </u>	L	l_	L	L	L	<u>L</u>		ŀ	1

STANDARD ASSIGNMENTS OF CLASS MARKS
 GROUPS 1 & 2 ALL TRK GROUPS INITIALLY RESTRICTED FROM ACCESSING EACH OTHER
 GROUP 3 ALL RESTRICTION LISTS INITIALLY APPLIED
 GROUP 4 NOT ASSIGNED

2 DATA ENTRY

GROUPS 1 2 & 3 TO REMOVE RESTRICTIONS CHANGE COS LINE WITH CLASS MARKS <u>LEFT OUT</u> FOR THOSE TRUNKS TO WHICH ACCESS IS <u>NOT</u> TO BE RESTRICTED AND FOR THOSE RESTRICTION LISTS WHICH DO NOT APPLY GROUP 4 ENTER CORRESPONDING NUMERICAL DESIGNATOR FOR PARTICULAR FEATURE TO BE ASSIGNED

The SDMR Special Account Code class mark has been removed. The access code (direct trunk group, speed call, or LCR) determines whether standard or special account codes are used on a trunk call.

SDMR Recording has been added to be assigned per trunk group. Any combination of SDMR recording listed below can be used.

> Incoming calls Outgoing toll calls Outgoing local calls

TRUNK GROUP DEFINITION

TABLE 1.04 Trunk Group Definitions

RK GAP NO	ALT GAP 1	ALT GRP 2	ALT GRP 3	DISPLAY CHAR	ANSWER PRIORITY	TRUMA GHOUP GLASS OF SERVICE CODE
60						
01						
62						
60						
04						ļ
05						
06						
07						
09						
œ						ļ
10						<u> </u>
11						ļ
12		<u> </u>				
13						
14						<u> </u>
15		<u> </u>		<u> </u>	<u> </u>	

MOTES

When programming a trunk group definition, CMU procedure 56 assigns only alternate trunk groups, display character, answer priority, and trunk group class-of-service.

A new CMU procedure, procedure 162, is used to assign access codes to the trunk groups.

CMU Procedure 26 displays a trunk group definition, including access codes.

CMU Procedure 66 deletes a trunk group definition, including access codes.

¹ DEFINE TRUNK GROUPS BEFORE ASSIGNING TRUNKS

² TRUNK GROUP MUNISERS OF TO 05 ARE ASSIGNED TO CONSOLE TRUNK GROUP STATUS INDICATORS 1 TO 2. TRUNK GROUP STATUS INDICATOR B IS

³ ALWAYS ASSIGN CLASS-OF SERVICE AS NONE TO TRUME GROUPS WHER

TABLE 1.13 Station Class-of-Service Definitions

The following features have been added to the station class-of-service table, and access to each feature can be allowed or denied:

Speed call for use with SDMR standard account codes Speed call for use with SDMR special account codes LCR for use with SDMR standard account codes LCR for use with SDMR special account codes Call Forwarding - Busy Call Forwarding - Don't Answer

Trunk group restrictions on this table do $\underline{\text{not}}$ apply when using speed call or LCR to access a trunk group.

Restriction lists on this table do $\underline{\text{not}}$ apply when using speed call or LCR to access a trunk group.

* A full size example of this table is located on page 30 of the SD192MX database tables.

DISPLAY OF ALL ACCESS CODES

CMU Procedure 35 can be used to display all access codes.

```
ŤŘK GRP 00 STAC = 80
TRK GRP 02 STAC = 82
TRK GRP 02 SPAC = 81
                                3
TRK GRP 05 STAC = 83
                                S
TRK GRP 06 STAC = 84
TRK GRP 10 STAC = 88
DIAL CALL PICKUP= 63
                                3
DIRECTED CPKUP = 64
                                \mathbb{S}
UNA ACCESS CODE = 69
PAGE ZONE #1
              = 61
                                \Im
PAGE ZONE #2
                 = 62
                                S
MEET ME CONF #0 = 75
                                S
ATTENDANT CONF = 76
CALL FORWARD IM = 65
CALL FORWARD CA = 68
CALL FORWARD DA = 66
                                \mathbb{S}
CALL FORWARD BU = 67
                                S
SET TIME ACCESS = 60
CALL PARK #01
                 = 70
                 = 79
CALL PARK #02
                                 S
                 = 78
CALL PARK #03
                                 S
CALL PARK #04
                 = 77
                                 \mathbb{S}
CALL PARK #05
                 = 74
CALL PARK #06
                 = 73
                                 \mathfrak S
CALL PARK #07
                 = 72
                                 S
CALL PARK #08
                = 71
                                 S
TRK GRP THRSHLD = 87
TRK GRP BLOCKED = 86
LCR STANDARD ACC= 9
                                 3
LCR SPECIAL ACC = 89
SPEED CALL STAC = 5
SPEED CALL SPAC = 85
END OF TABLE
```

TRUNK QUEUING

The trunk queuing feature can be assigned to trunk group class-of-services and also to station class-of-service.

In order for a station to queue for a trunk in a particular trunk group, it has to be assigned in that trunk group class-of-service and the station's class-of-service.

When no idle trunk is found in a group a busy tone is returned and then the busy tone changes to steady tone.

If the user goes on hook during the busy tone, he is not queuing for a trunk.

If the user goes on hook during the steady tone, he is placed in a queue for a trunk in that group.

A station can only be in one queue for a trunk at a time (direct trunk access, LCR, or speed call). Busy tone will not change to steady tone on a second encounter with all trunks busy.

An attendant can be in two queues.

When a station is called back, a distinctive ring is heard.

When an attendant is called back, the call comes in on the RECALL Key, and the trunk is displayed on the console display.

When the station is busy during the callback, the queuing is not cancelled.

When the station does not answer a callback, it is cancelled.

MEMORY SUPPORT PCB

Memory Support PCB with Siemens Part Number 530809-Bl238-Al01-*-B900 provided either 7½ or 15 minutes of support depending on the strapping on the PCB.

STRAPPING

SD-192 MX E8 to E9 $7\frac{1}{2}$ minutes of support SD-192 or SD-232 E9 to E10 15 minutes of support

The support time in the SD-192 MX is lower than in the SD-192 or SD-232 because more memory is supported.

DISPLAY OF ERROR MESSAGES

When performing CMU procedure 76, the following prompt appears:

DISPLAY NEW/ALL/CLEAR 0/1/2

If answered with 0, only error messages which have not been read out before (either at the console or via CMU procedure 76) are displayed.

If answered with 1, up to 10 of the latest error messages are displayed.

If answered with 2, all error messages are erased.

 TABLE 1.15
 Variable System Timers

TIMER TITLE	CMD INPUT NO.	DESCRIPTION AND STANDARD SETTING	NEW SETTING							
A. GENERAL SYSTEM CATEGORY										
CAMP-ON TONE ON TIME	20	ONTIME OF TONE HEARD BY CALLING TRUNK PARTY DURING ATTENDANT CAMP-ON (500 ms).								
CAMP-ON TONE OFF TIME	21	OFF TIME OF CAMP-ON TONE (6,000 ms).								
OVERRIDE TONE BREAK-IN TIME	28	TIME OVERRIDE TONE IS HEARD BEFORE ATTENDANT ENTERS CONNECTION (4250 ms).	·							
TRANSFER DIAL TONE TIME	33	TIME INTERRUPTED DIAL TONE IS HEARD (600 ms) BEFORE STEADY DIAL TONE IS RECEIVED.								
CAMP-ON RECALL TIME	37	TIME TRUNK CALL CAMPED-ON TO BUSYSTATIONBEFORE RECALLED TO ATTENDANT (50,000 ms).								
NO-ANSWER RECALL TIME	38	TIME TRUNK CALL RINGS STATIONS BEFORE RECALLED TO ATTENDANT (25,000 ms).								
TRUNK ANSWERING PRIORITY TIME	40	TIME A LOW PRIORITY INCOMING TRUNK CALL IS WAITING TO BE ANSWERED BEFORE IT "JUMPS AHEAD" OF HIGH PRIORITY TRUNKS WAITNG LESS THAN THIS TIME (60,000 ms).								
ATTENDANT CONSOLE OUT-OF- SERVICE TIME	41	TIME AFTER WHICH REMOVED CONSOLE HANDSET/HEADSET CAUSES SYSTEM TO PLACE CONSOLE OUT-OF-SERVICE (10,000 ms).								

 TABLE 1.15
 Variable System Timers (Continued)

TIMER TITLE	CMD INPUT NO.	DESCRIPTION AND STANDARD SETTING	NEW SETTING
A 05	NEDAL CV	STEM CATEGORY	

A. GEN		STSTEIN CATEGORT	
CALL PARK RECALL TIME	75	TIME AN UNANSWERED CALL IS ALLOWED TO BE PARKED BEFORE RECALLED TO ATTENDANT (90,000 ms).	
HOOKFLASH IGNORE TIME	76	THEELAPSEDTIMEBEFOREATRANS- FER ON AN OUTGOING CALL CAN BE INITIATED (10,000 ms).	
STATION CALL BACK OFF- HOOK TIME	77	TIME THE CALLING STATION MUST REMAIN OFF HOOK BEFORE BEING QUEUED FOR A BUSY CALLED PARTY (5,000 ms).	
STATION CALL BACK RING LENGTH TIME	78	LENGTH OF TIME A CALLING STATION IS RUNG BEFORE THE CALLBACK IS CANCELLED (24,000 ms).	
CITY CALL HOLD RECALL	80	TIME IN WHICH A TRUNK ON CITY CALL HOLD IS RECALLED TO THE ATTENDANT (90,000 ms).	
STANDARD INTERVAL	81	DURATION OF LCR STANDARD TIME INTERVAL (200 ms).	
LCR PROGRESS TONE OF	82	LENGTHOFTIMETHELCR PROGRESS TONE IS HEARD (500 ms).	
LCR CONFIRMATION TONE	83	LENGTHOFTIMETHELCRCONFIRMA- TION TONE IS HEARD (500 ms).	
CALL FORWARD - DON'T ANSWER	90	TIME A CALL FORWARDED - DON'T ANSWER STATION HAS TO RESPOND TO AN INCOMING CALL, BEFORE THE CALL IS FORWARDED (5,000 ms).	

 TABLE 1.15 Variable System Timers (Continued)

TIMER TITLE	CMD INPUT NO.	DESCRIPTION AND STANDARD SETTING	NEW SETTING
A. GEI	VERAL	SYSTEM CATEGORY	
LCR STATION ON-HOOK QUEUE TIMER:	92	DETERMINES THE LENGTH OF TIME THE USER HAS BEFORE HEARING THE ON-HOOK QUEUE WARNING TONE, AT WHICH TIME THE USER MUST DECIDE TO ABANDON THE CALL, REMAIN IN AN OFF-HOOK QUEUE OR GO INTO AN ON-HOOK QUEUE. OPERATES IN CONJUNCTION WITH TIMER 72 WHICH DETERMINES THE TIME THE QUEUE WARNING TONE WILL BE HEARD. (5000 ms.)	
ATTENDANTON-HOOKQUEUE TIMER	94	PROVIDES FOR THE SAME FUNCTION AS TIMER 92 EXCEPT THE SETTING ISINDEPENDENT FOR THE ATTENDANT (2500 ms.)	•

TABLE 1.15 Variable System Timers (Continued)

TIMER TITLE	CMD INPUT NO.	DESCRIPTION AND STANDARD SETTING	NEW SETTING
E	3. TRU	NK CATEGORY	
GROUND-START RE-SEIZE DELAY TIME	66	TIME GROUND-START TRUNK IS RE- LEASED AND RE-SEIZED TO PROVIDE "FRESH" CO DIAL TONE (1200 ms).	
LOOP-START RE-SEIZE DELAY TIME	67	TIME LOOP-START TRUNK IS RE- LEASED AND RE-SEIZED TO PROVIDE "FRESH" CO DIAL TONE (1200 ms).	
TIE-TRUNK RE-SEIZE DELAY TIME	68	TIME TIE-TRUNK IS RELEASE AND RE- SEIZED TO PROVIDE "FRESH" PBX DIAL TONE (1750 ms).	
CALLBACK TONE DURATION TIME	69	DURATION OF PERIOD WHERE SHORT BURSTS OF RINGING ARE HEARD WHEN STATION IS CALLED BACK FOR TRUNK QUEUE (5000 ms).	
TRUNK QUEUE TIME	72	LENGTHOFTIME STATION MUST WAIT TO GET INTO TRUNK QUEUE (AND DURING WHICH BUSY TONE IS HEARD). (5000 ms)	
TRUNKQUEUERELEASETIME	73	LENGTH OF TIME STATION HAS TO ANSWERTRUNKQUEUECALLBACK(TIME STARTS AT INITIATION OF RINGING). (11,000 ms).	
END OF DIALING TIMEOUT	79	TIMER STARTS AT THE END OF EACH DIAL DIGIT. IF NO FURTHER DIGITS ARE DIALED WITHIN THE INTERVAL, DIALING WILL BE CONSIDERED COMPLETE (15,000 ms).	

 TABLE 1.15
 Variable System Timers (Continued)

TIMER TITLE	CMD INPUT NO.	DESCRIPTION AND STANDARD SETTING	NEW SETTING	
B. TRUNK CATEGORY				
OUTDIAL DELAY (GROUND START)	84	DELAYS OUTPULSING ON A GROUND STARTTRUNK FOR THE TIME INTERVAL (STARTS AFTER GROUND ON TIP IS DETECTED) TO INSURE DIAL TONE IS PRESENT (1250 ms) ONLY USED WHEN DIAL TONE DETECTORS ARE NOT ASSIGNED IN THE SYSTEM.		
DIAL TONE EMULATOR	85	DELAYSOUTPULSING ON A LOOP START TRUNK, AFTER THE TRUNK IS SEIZED, FOR THE SET TIME INTERVAL TO INSURE DIAL TONE IS PRESENT (3000 ms) ONLY USED WHEN DIAL TONE DETECTORS ARE NOT ASSIGNED IN THE SYSTEM.		
DIAL TONE DETECTION	86	TIME STEADY DIAL TONE MUST BE DETECTED (NO BREAKS) BEFORE DIAL TONE PRESENT IS CONSIDERED VALID (750 ms).		
PAUSE TIME	87	TIME VALUE OF A "P" USED TO IN- DICATE A PAUSE IN OUT-DIALING OF A SPEED CALL NUMBER (2000 ms).		
DTMF SENDER TONE OFF	88	INTER DIGIT TIME OF DTMF SENDER. TIMEBETWEENDIGITS OUTPULSED BY DTMF SENDER (50 ms).		
DTMF SENDER TONE ON	89	TIME DTMF SENDER IS ON FOR EACH DIGIT OUTPULSED (50 ms).		
END OF DIALING	91	DETERMINES WHEN LAST DIGIT IS OUTPULSED DURING A DTMFTO DP OR DP TO DTMF CONVERSION AND CUTS THRU AUDIO PATH (2000 ms).		

 TABLE 1.15 Variable System Timers (Continued)

TIMER TITLE INPU NO.	T STANDARD SETTING	NEW SETTING
B. TF	RUNK CATEGORY	
NO DIAL TONE DETECTION. 93	WHEN A DIAL TONE DETECTOR IS USED IN THE CONNECTION AND NO DIAL TONE IS DETECTED FOR THE TIMER SETTING, THE USER WILL BE CUTTHROUGHTO THE TRUNK INORDER TO MONITOR THE CONNECTION FOR BUSY REORDER OR ANY OTHER TONE OR MESSAGE. NOTTO BE CONFUSED WITH TIMER 86-LENGTH OF TIME DIAL TONE MUST BE PRESENT FOR A VALID DIAL TONE DETECT. TIMER 93 IS USED ON ALL TRUNK CONNECTIONS WHERE DIAL TONE DETECTION IS EMPLOYED. (20,000 ms)	

 TABLE 1.15
 Variable System Timers (Continued)

TIMER TITLE	CMD INPUT NO.	DESCRIPTION AND STANDARD SETTING	NEW SETTING
C. STATION I	HOOKE	LASH INTERVAL CATEGORY	
STATION HOOKFLASH TIME (MIN.)	_	MINIMUMTIME STATION CAN DEPRESS TELEPHONE HOOKSWITCH AND INITIATE TRANSFER DIAL TONE (200 ms).	
		CAUTION: SETTING LESS THAN MINIMUMSYSTEM VALUE (150 ms) CAN CAUSE POSSIBLE IMPROPER SYSTEM OPERATION.	
STATION HOOKFLASH TIME (MAX.)	_	MAXIMUMTIME STATION CAN DEPRESS HOOKSWITCH AND INITIATE TRANSFER DIAL TONE. EXCEEDING THIS TIME WILL RESULT IN DISCONNECTION (1200 ms).	

INTRODUCTION

1. Function

This diagnostic system is a collection of "OFFLINE" tests that can be run to partially verify the operation/integration of selected hardware subsystems within the SD 192MX.

2. Diskette Handling

Protection of the diskette requires careful handling:

- a. Return the diskette to its storage envelope whenever it is removed from the disk drive.
- Keep diskettes away from magnetic fields and ferromagnetic materials.
- Replace storage envelopes when they become worn, cracked, or distorted.
- d. Do not write on the plastic jacket with a lead pencil or ballpoint pen; use a felt-tip pen.
- e. Do not touch or try to clean the diskette surface. Abrasions may cause loss of data.
- f. Do not expose diskette to heat or sunlight. Exposure to temperatures that exceed 51.6 celcius (125 F) may cause diskette to be damaged beyond useability.

3. Loading the Diskette into the Disk Drive

To load the diskette, open the door on the front panel of the disk drive, insert the diskette (label up, toward the door) and close the door.

4. Write Protect Feature

The diskette is protected from being written on when a write protect tab is used. A photoelectric sensor detects the presence or absence of a notch in the side of the diskette. When the open notch is sensed, writing is allowed. When the notch is not sensed (covered with a tab), writing is inhibited and a status signal informs the controller that a write protect condition exists.

5. Man-Machine Interface

Primary communications with any diagnostic is through the MAP console. An alternate data terminal (E.G. TI Silent 700) may be used with the standard MAP port. Display messages are alphanumeric and are limited to 30 characters to allow for a (step) prompt, "S", at the end of a line (E. G. Initial Prompt). This technique holds an important message in the map display and suspends the current test until an operator has read it and responded by depressing the STEP key. Replies to prompts are done using the available MAP keyboard (Figure 3).

Numeric data is entered using the decimal keypad and the ENTR key. Errors can be corrected by depressing the BKSP key and retyping the correct digit before the ENTR key is depressed.

6. Diagnostic Tests (not including Factory Tests)

Descriptions of the following diagnostics are included as appendixes:

TEST ====	DESCRIPTION	APPENDIX
7	MAP CONSOLE DIAGNOSTIC	Α
2	FAST MEMORY DIAGNOSTIC	В
3	SLOW MEMORY DIAGNOSTIC	С
4	CROSSPOINT DIAGNOSTIC	D

Two additional tests, 5 and 6, are used for factory testing only, and are not described.

7. System Load

The diagnostic system is loaded from diskette by the SD192MX "FIRMWARE" loader. The load process is initiated by a power up reset or by depressing the MASTER RESET button. A successful load is indicated by the drive select indicator extinguishing and the initial prompt message displaying at the MAP console:

"SYSTEM READY: RELEASE D200-GS1 S".

8. Auto Step

An auto step option, available for hardcopy display, can be enabled by a positive 1 plus ENTR key response to the prompt:

"AUTO STEP OPTION (YES=1)?

Once this option is enabled, a STEP response will no longer be required until the system is restarted using the IP key (figure 1). The "S" (STEP) prompt is not printed.

9. MAP Console Test

The MAP console test runs automatically after the "INITIAL" load. This test can be aborted by depressing the IP key.

10. Diagnostic Test Selection

Individual diagnostic tests are selectable by number or through a positive I plus ENTR key response to a alphanumeric prompt describing the test. Notice (figures I and 2) that the number preceding this prompt is the test number. All test prompts can be displayed by depressing the ENTR key in response to the request:

"DIAGNOSTIC TEST NUMBER ?,

and to each request that follows.

11. Diagnostic Test Abort

ነ

Any test can be stopped by depressing the IP key for the initial prompt at the MAP console. A stopped test can be continued by entering a C plus ENTR key sequence for the diagnostic test number request. A new copy can be loaded by entering the proper test number.

12. Power Failure Restart

Whenever a power failure occurs, during a diagnostic test, the diagnostic system program restarts and displays a message:

"POWER FAILURE RESTART S".

After a STEP response, the system then recalculates a program checksum and verifies it with an expected result. If this checksum is wrong, a message displays.

"DOS PROGRAM CHECKSUM ERROR S".

and the diagnostic disk is reloaded. Otherwise, the interrupted test can be continued.

MAP DISPLAY	<key> ACTION</key>
32222222	
SYSTEM READY: RELEASE D200-GS1 S	/69CD\
AUTO STEP OPTION (YES=1) ? 0	<step></step>
MAP DISPLAY TEST	<pre><0><entr>STEP</entr></pre>
we procourt too.	<step></step>
A A A A A A A A A A A A A A A A A A A	
BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB	
CCCCCCC	<ip>STOP TEST</ip>
	CIPYSIUP 1EST
CVCTCU DC10VA DC10100 DCAA CCA	
SYSTEM READY: RELEASE D200-GS1 S	<step></step>
AUTO STEP OPTION (YES=1) ? 1	<1> <entr> AUTO STE</entr>
DIAGNOSTIC TEST NUMBER ?	<entr></entr>
6 DISK TEST (YES=1) ?	<entr></entr>
5 PATTERN MEMORY TEST (YES=1) ?	<entr></entr>
4 CROSS POINT TEST (YES=1) ?	<entr></entr>
3 SLOW MEMORY TEST (YES=1) ?	<entr></entr>
2 FAST MEMORY TEST (YES=1) ?	<entr></entr>
1 MAP TEST (YES=1) ?	<entr></entr>
DIAGNOSTIC TEST NUMBER ? 1	<1> <entr> SELECT 1</entr>
WAIT - DISK OPERATION	
TEST 1 STARTED	
MAP DISPLAY TEST	NOTE NO STEP "S"

B BBBBB	<ip>STOP TEST</ip>
SYSTEM READY: RELEASE D200-GS1 S	<step></step>
AUTO STEP OPTION (YES=1) ? 0	<0> <entr></entr>
DIAGNOSTIC TEST NUMBER ? C	<c><entr> CONTINUE</entr></c>
TEST STARTED	
MAP DISPLAY TEST S	<step></step>
	•
88888888888888888888888888	
CCC	410
	<ip></ip>

SYSTEM READY: RELEASE D200-GS1 S

FIGURE 1. AUTO STEP OPTION SELECTION AND TEST PROMPTS

MAP DISPLAY	<pre><key>ACTION</key></pre>
	222222222222
SYSTEM READY: RELEASE D200-GS1 S	<stfp></stfp>
	<0> <entr></entr>
	<entr></entr>
6 DISK TEST (YES=1) ?	<entr></entr>
5 PATTERN MEMURY TEST (YES=1) ?	
	<entr></entr>
	<entr></entr>
2 FAST MEMORY TEST (YES=1) ?1	<1> <entr>SELECT 2</entr>
WAIT - DISK OPERATION	TIP TENTINE TO TELECT 2
TEST 2 STARTED	
FMT CYCLING 128K, PASS = 1	
TEST 2 COMPLETE, CYCLING	
FMT CYCLING 128K, PASS = 2	
FMT CYCLING 128K, PASS = 3	<ip></ip>
FMI CICHING 120K, FROS - 3	1117
SYSTEM READY: RELEASE D200-GS1 S	<step></step>
AUTO STEP OPTION (YES=1) ? 0	<0> <entr></entr>
DIAGNOSTIC TEST NUMBER ? 2	<2> <entr>SELECT 2</entr>
WAIT - DISK OPERATION	
TEST 2 STARTED	
FMT CYCLING 128K, PASS = 1	
TEST 2 COMPLETE, CYCLING	
FMT CYCLING 128K, PASS = 2	
FMT CYCLING 128K, PASS = 3	<ip></ip>

SYSTEM READY: RELEASE D200-GS1 S

FIGURE 2. SAMPLE DIAGNOSTIC TEST SELECTION

MAP DATA TERMINAL (ASCII) 2222222222222222222 <0><1>...<9> DIGITS 0 THROUGH 9 <ENTR> CARRIAGE RETURN OR RETURN <SP> SPACE BAR <BKSP> DELETE OR RUBOUT <STEP> LINE FEED <CNCL> CONTROL KEY AND C KEY TOGETHER <NONE> DASH ("-") <C> LETTER C

FIGURE 3. MAP/DATA TERMINAL KEY EQUIVALENTS

ESCAPE OR ESC

<IP>

APPENDIX A

MAP CONSOLE TEST

A.1 Function

The MAP test verifies the operation of the MAP console.

A.2 Load

The test is automatically loaded during initial system load and is ready to run following the STEP response to the initial system prompt. It is also loaded by the DOS monitor after a correct response to one of the following prompts:

	MAP DISPLAY	KEYACTION
OR	DIAGNOSTIC TEST NUMBER ? 1	1 PLUS ENTR
	1 MAP TEST (YES-1) ?1	1 PLUS ENTR

A.3 Operation

The MAP test start is identified by:

"MAP DISPLAY TEST

The "S" at the end of this line indicates that the "STEP" option was selected and that the STEP key should be depressed for the test to begin its two phases:

display and key response. This test can be aborted by depressing the IP key once during the display phase and twice during the key response phase.

A.3.1 Display Phase

The display phase pauses slightly, then prints a full line (32 characters) of each letter A through Z and each number 0 through 9 (figure A.1).

A.3.2 Key Response Phase

The key response phase begins with the prompt:

"DEPRESS MAY KEY 1"

this phase proceeds by depressing the requested MAP key. All keys are tested during this phase (figures A.1 and A.2).

A.4 Error Reporting

An invalid display can only be identified by observation, however, an invalid key response is identified as:

"DEPRESS MAP KEY 1 INVALID S"

notice that the test will only continue after the STEP key is depressed in response to any key error (see auto step). The same key is requested until a correct response is received.

MAP DISPLAY

SYSTEM READY: RELEASE D200-GS1 S AUTO STEP OPTION (YES=1) ? 0 MAP DISPLAY TEST S

DDDDDDDDDDDDDDDDDDDDDDDDDDDDD EEEEEEEEEEEEEEEEEEEEEEEE **ЖНИНИНИНИНИНИНИНИНИНИНИНИНИНИНИНИ** TTITTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT *YYYYYYYYYYYYYYYYYYYYYYYYYYYYY* **ZZZZZZZZZZZZZZZZZZZZZZZZZZZZ**ZZZZZZZ 1111111111111111111111111111111111111 **22222222222222222222222222222** 333333333333333333333333333333333 **44444444444444444**44444444444444444 **\$5555555555555555555555555555** 6666666666666666666666666666666 9999999999999999999999999

<KEY> ...ACTION

<STEP>
<0><ENTR>
<STEP> ...START TEST

3

...DISPLAY PHASE

FIGURE A.1 MAP CONSOLE TEST RUN (PAGE 1 OF 2)

MAP DISPLAY		/VEV\ 10000
		<key>ACTION</key>
		2222222222
DEPRESS MAP KEY 1		
		<1>KEY PHASE
DEPRESS MAP KEY 2		<2>
DEPRESS MAP KEY 3		<3>
DEPRESS MAP KEY 4		<4>
DEPRESS MAP KEY 5		<5>
DEPRESS MAP KEY 6		
DEPRESS MAP KEY 7		<6>
DEPRESS MAP KEY 8		<7>
DEPRESS MAP KEY 9		<8>
		<9>
DEPRESS MAP KEY O		<0>
DEPRESS MAP KEY SP		<sp></sp>
DEPRESS MAP KEY ENTR		<entr></entr>
DEPRESS MAP KEY STEP		<step></step>
DEPRESS MAP KEY NONE		 -
DEPRESS MAP KEY C		<none></none>
DEPRESS MAP KEY CNCL		<c></c>
		<cncl></cncl>
		<bksp></bksp>
DEPRESS MAP KEY IP		<1P>
MAP DISPLAY TEST	S	NEXT PASS
		TTT INDU

FIGURE A.1 MAP CONSOLE TEST RUN (PAGE 2 OF 2)

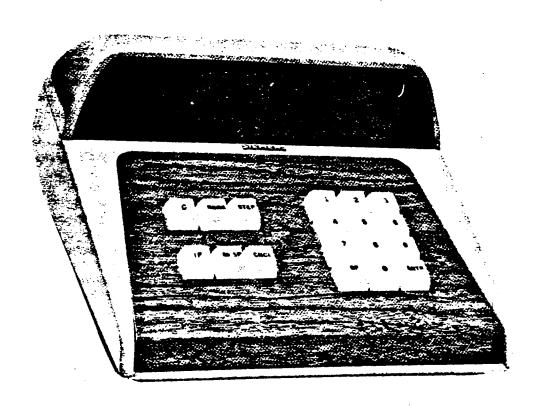


FIGURE A2 Maintenance And Administrative Panel Assembly

APPENDIX B

FAST MEMORY TEST (FMT)

B.1 Function

The fast memory test quickly tests all available RAM for "HARD" errors.

B.2 Load

This test is loaded by the DOS monitor after a correct response to one of the following prompts:

	MAP DISPLAY	KEY ACTIO)N ==
OR	DIAGNOSTIC TEST NUMBER ? 2	2 plus ENTR	
	2 FAST MEMORY TEST (YES-1) ?1	l plus ENTR	

B.3 Tests

The fast memory test tests 128K of memory in 10 seconds. Each of the following tests is run.

- 1. An address test
- A zeros pattern test
 A ones pattern test
 A parity check test

At the start of each pass through memory, a message displays the test type (FMT), the amount of available RAM (XXXK, K=1024 Decimal Bytes), and the current pass count (Y):

"FMT CYCLING XXXK, PASS = Y".

B.4 Error Reporting

B.4.1 Address Conflict

An address conflict error is reported as:

"ADDRESS CONFLICT: BLOCK XX=YY S".

This simply indicates that when a certain block was referenced for a data write, another block actually received the data. There are too many components involved for this test to determine which one (s) failed.

B.4.2 Parity Errors

A memory parity error is reported as:

"PARITY ERROR: BAD CHIP UYY-Z S".

The parity chip YY on board Z has an error or the parity detection circuits are malfunctioning.

B.4.3 Value Errors

A data value error is reported as:

"VALUE ERROR: BAD CHIP UYY-Z S".

The data chip YY on board Z has a data error.

B.4.4 Chip Error Summary

This summary represents the total errors detected on each memory chip for the current test and prints only when there are errors to report. The summary follows the parity and value error messages in this format:

"CHIP UXX, ERRORS = YYYYY S".

Chip XX had YYYYY errors detected. The chip board number is identified in the preceding value or parity error message.

MAP DISPLAY	ì	<key> ACTION</key>
SYSTEM READY: RELEASE D200-GS: AUTO STEP OPTION (YES=1) ? O DIAGNOSTIC TEST NUMBER ? 2 WAIT - DISK OPERATION TEST 2 STARTED FMT CYCLING 128K, PASS = 1 TEST 2 COMPLETE, CYCLING FMT CYCLING 128K, PASS = 2 VALUE ERROR: BAD CHIP U25-0 VALUE ERROR: BAD CHIP U54-0 VALUE ERROR: BAD CHIP U54-0 VALUE ERROR: BAD CHIP U50-0 CHIP U5, ERRORS = 17 CHIP U25, ERRORS = 17 CHIP U24, ERRORS = 17 FMT CYCLING 128K, PASS = 3 FMT CYCLING 128K, PASS = 4		<step> <0><entr> <0><entr> <2><entr> <step> <step step="" step<="" td=""></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></step></entr></entr></entr></step>

SYSTEM READY: RELEASE D200-GS1 S

FIGURE 8.1 SAMPLE FAST MEMORY TEST RUN

APPENDIX C

SLOW MEMORY TEST (SMT)

C.1 Function

The slow memory test is a comprehensive set of tests that attempt to find "HIDDEN" faults in a reasonable amount of time.

C.2 Load

This test is loaded by the DOS monitor after a correct response to one of the following prompts:

	MAP DISPLAY	KEYACTION
OR	DIAGNOSTIC TEST NUMBER ? 3	3 plus ENTR
	3 SLOW MEMORY TEST (YES=1) ?1	l plus ENTR

C.3 Operation

C.3.1 General

The operation of the slow memory test is equivalent to the fast memory test.

MAP DISPLAY		<key> ACTION</key>
SYSTEM READY: RELEASE D200-GS1 AUTO STEP OPTION (YES=1) ? 0 DIAGNOSTIC TEST NUMBER ? 3 WAIT - DISK OPERATION	S	<step> <0><entr> <3><entr></entr></entr></step>
TEST 3 STARTED SMT CYCLING 128K, PASS = 1 TEST 3 COMPLETE, CYCLING SMI CYCLING 128K, PASS = 2 VALUE ERROR: BAD CHIP U25-0	S	<ŚTEP>
VALUE ERROR: BAD CHIP U54-0	S	<step></step>
VALUE ERROR: BAD CHIP U82-0 VALUE ERROR: BAD CHIP U5-0	S	<step></step>
CHIP U5, ERRORS = 17 CHIP U25, ERRORS = 17	_	<step></step>
CHIP U54, ERRORS = 17	S	<step></step>
CHIP U82, ERRORS = 17 SMT CYCLING 128K, PASS = 3	S	<step></step>
SMT CYCLING 126K, PASS = 4		<ip></ip>

SYSTEM READY: RELEASE D200-GS1 S

FIGURE C.1 SAMPLE SLOW MEMORY TEST RUN

C.3.2 Tests

The slow memory test tests 128K of memory in 65 seconds. It performs all the tests done by the fast memory test. The following additional tests are run:

- 1. A COLUMN PATTERN TEST
- 2. A ROW PATTERN TEST
- 3. A MATRIX PATTERN TEST
- 4. A MATRIX PARITY TEST

At the start of each pass through memory, a message displays the test type (SMT), the amount of available RAM (XXXK, K=1024 Decimal Bytes), and the current pass count (Y):

"SMT CYCLING XXXK, PASS = Y".

C.4 Error Reporting

All error messages are identical to those reported by the fast memory diagnostic.

APPENDIX D

CROSSPOINT TEST

D.1 Function

The cross point test tests every junctor to crosspoint to line circuit path that is installed in an SD192MX system.

D.2 Load

This test is loaded by the DOS monitor after a correct response to one of the following prompts:

	MAP DISPLAY	KEYACTION
OR	DIAGNOSTIC TEST NUMBER ? 4	4 plus ENTR
.	3 CROSS POINT TEST (YES=1) ?1	1 plus ENTR

D.3 Operation

D.3.1 General

This test sequentially scans all forty-eight (48) junctors until one is detected as in service. That junctor is then connected to the first in service line circuit. When the connection is complete, for a short period of time, the

current flow through the connection path is checked. The absence of a current flow indication constitutes a latch failure. After a successful connection, the line circuit is disconnected. When the disconnect is complete, for a short period of time, the current flow through the "connection" path is checked. The presence of a current flow indication here constitutes an unlatch failure. Upon successful completion of the connect/disconnect sequence, the diagnostic proceeds to the "next" in service line circuit. When all in service line circuits have been tested with the selected junctor, the service scan looks for the "next" in service junctor. All in service junctors are tested in one pass of the diagnostic.

The service scan for junctors and line circuits is done for an entire section. This means that if a junctor's in service status is altered, after the scan is done, the new status will not take effect until the next pass. If a line circuit's in service status is altered, after the scan is done, the new status will not take effect until the next junctor is selected.

D.3.2 Test Setup

After the cross point test is loaded, the following prompt is made:

"PERCON BOARD COUNT = ".

A response of 1 plus ENTR indicates testing is to be done only with line circuits 0 to 127, which constitute the first two line circuit shelves. A response of 2 plus ENTR indicates that both peripheral controller boards (PERCON) are present and all four (4) line shelves are to be tested. If PERCON 2-3 (second) is missing, a latch error will consistently be displayed for the first in service junctor and line circuit 128. The first PERCON (0-1) must always be present.

After the number of PERCONS is selected, the number of JUNCTOR boards in the current system must be selected by responding to the prompt:

"JUNCTOR BOARD COUNT = ".

This tells the diagnostic the number of JUNCTOR cards, in the system counting from left to right. There can be PERIPHERAL INTERFACE DRIVER (PID) cards in the common JUNCTOR/PID slots, they are not tested.

When both prompts have been correctly answered, a message prints confirming the PERCON (X) and JUNCTOR (Y) board counts:

"TESTING SD191MX: PER = X, JNC = Y",

then testing begins.

If the crosspoint diagnostic is restarted, the number of PERCONS and number of JUNCTORS are assumed to be the same. If this information needs to be changed, a "FRESH" copy of this test must be loaded.

D.4 Error Reporting

D.4.1 Latch/Unlatch Errors

These error messages identify the error type, the JUNCTOR number (XX), and the line circuit number (YYY),

LATCH UNLATCH ERROR: JNC XX LC YYY S

By responding to the STEP prompt, the second part of the error message is displayed indicating, the line circuit shelf number (S), the network board number (A,B,C, or D), the line circuit type (ATTENDANT/ALC, STATION/SLC, TRUNK/TLC, or DTMF RECEIVER/DTMF), and the line number with that line type (XX):

A /ALC X

NTWK S B /SLC XXX S

C /TLC XX

D /DTMF XX

D.4.2 Cross Point Test Abort

If a connect/disconnect fails, the test will not continue after the error messages are displayed since certain types of "HARD" errors can be propagated and cause additional board failure.

MAP DISPLAY	<key> ACTION</key>
SYSTEM READY: RELEASE D200-GS1 S AUTO STEP OPTION (YES=1) ? 0 DIAGNOSTIC TEST NUMBER ? 4 WAIT - DISK OPERATION TEST 4 STARTED	<step> <0><entr> <4><entr></entr></entr></step>
PERCON BOARD COUNT = 1 JUNCTOR BOARD COUNT = 6 TESTING SD192MX: PER= 1, JNC= 6 TEST 4 COMPLETE, CYCLING LATCH ERROR: JNC 0 LC 125 S NTWK 2B/TLC 25/DTMF 4 S	<1> <entr> <6><entr></entr></entr>

SYSTEM READY: RELEASE D200-GS1 S

FIGURE D.1 SAMPLE CROSSPOINT TEST RUN

ſ								BAC	ECTOR NO.								
Ī	XA19	XA20	XA21	XA22	XA23	XA24	XA25	X A 26	XA27	,	XA28	XA29	×A30	XA31	XA32	×A	A33
ED.																	i
	STATION LINE CIHCUIT	STATION LINE CIRCUIT	NETWORK (A)	METWORK (B)	NETWORK (C) OR	SPARE	NETWORK (D) OR	TRUNK LINE CIRCUIT ()	TRUNK LINE CIRCUIT ()	TRUNK LINE CIRCUIT ()	DTMF RECEIVER ()	DTMF RECEIVER (1) OR	ATTENDANT LINE CIRCUIT				
- 1				•					IELING	_							
	sLCO	SLC1	SLC2	SLC3	SLC4	SLC5	NTWK	NTWK	NTWI		NTWK/ SPARE	TLCG	TLC1	TLC2	DTMF		TTLC
	0.7	8.15	16-23	24-31	32-39	40-47	0-23	0.23	24-47	"	24-47/	0.3	4.7	8-11	0-1	2	2/1

NOTE CONNECTOR XA33 OF LINE SHELF O IS UNIVERSALLY WIRED TO ACCEPT EITHER AN ATTENDANT LINE CIRCUIT PCS FOR A SECOND CONSOLE (NOT USED IN SD-232/) OR A DTMF (1) RECEIVER PCS

ſ							8/	CKPLAN	E CONNECTOR NO							
Ì	XA1	XA2	EAX	XA4	XA5	XAG	XA7	XAB		XA9	XA10	XA11	XA12	EI AX	XA14	XA15
(√) LS1																
(√) LS2																
(√) LS3																1
ł							-					_	-	-		<u>_</u> -
	ı,	ī.	ā	Ē	CIRCUIT	CIRCUIT						Į,	110	UIT (_	CIRCUIT 1
	E CH	E CER	E CH	LINE CIRCUIT	E CH	LINE CIR	€			8	(0)	E CIRCUIT	LINE CIRCUIT	LINE CIRCUIT	IVER	RECEIVER K LINE CIRC
	N LEN	ON LIA	N CB	N C	ON LINE	No.	ORK (NETWORK (B)		NETWORK ICI	NETWORK (IK LINE			DTMF RECEIVER	RECEN K LINE
	STATION LINE CIRCUIT	STATION LINE CIRCUIT	STATION LINE CIRCUIT	STATION	STATION	STATION	NETWORK	NETW		NE TA	NETA	TRUNK	TRUNK	TRUNK	DTM	DTMF R
ĺ					لـــــا			SHEL	F LABELING							
	SLCO	SLC1	SLC2	SLC3	SLC4	SLC5	NTWK	NTWK		NTWK	NTWK	TLCO	- TLC1	TLC2	DTMF	TLC3/
	48.55	56-63	54-71	72-79	90-87	88-95	0.23	0-23	LINE SHELF!	24-47	24-47	12-15	16-19	20.23	5-6	24-27/ 3-4
	96-103	104-111	112-119	120-127	128-135	136-143	0-23	0-23	LINE SHELF 2	24-47	24-47	29-31	32-35	36-39	9-10	40-43/ 7/8
	144-151	152-159	160-167	168-175	176-183	184-191	0-23	0.23	LINE SHELF 3	24-47	24-47	44-47	48-51	52-55	13	56-58/ 11-12

NOTE:

CONNECTORS XA15 AND XA14 OF LINE SHELVES 1, 2, AND 3 ARE UNIVERSALLY WIRED TO ACCEPT COMBINATION OF EITHER TWO DTMF (2) RECEIVER PCB'S: A DTMF (2) RECEIVER PCB AND A TRUNK LINE CIRCUIT (2) PCB; OR A SINGLE TRUNK LINE CIRCUIT (4) PCB.

ADDITIONAL GENERAL INFORMATION

When the disk is loading into memory or when the diagnostic disk is being used, the MAJOR ALARM LED on the attendant console flashes.

SIEMENS PRACTICES
Operation Series
EPAEX Business Applications

XA006

SECTION

26 xA006

5D-192MX

CUSTOMER MEMORY UPDATE CATALOG NO. 2006

TITLE Display Trunk Group Definition

PAGE 1 OF 1

26 XX [E] 1,2,3 or 4 26 ACCESS LEVEL DIR. CHG. IN. PROGRAM CODE NO. ACTION REQUIRED FIELD results of action and comments BY OPERATOR REF NO. NO. Perform Preliminary and 1 Security Key Input Procedure No. DOSG. DISPLAY TRK CRP . . PROPT 26 E 2 Requests trunk group number (XX) definition to be displayed. TRE GRE XX AI 88 AZ CC A3 DO S RESULT XXE (System range 00 to 3 1 Trunk group XX is assigned: Access code A or AA, display character F, answer priority level code G or GG. No display character assignment is indicated by a single-dash in place of character. Depress STEP key for next result line. RESULT TRE CRP XX DCF PRI GG COS VV S B. Continuation - Trunk group XX is assigned: Display character F, answer priority level code G or GG, trunk group class of service No. VV. No display character assignment is indicated by a dash. No trunk group class assignment double -- dash. Depress STEP key for next result line. TRK GRP XX STAC YY SPAC ZZ C.RESULT Continuation - Trunk group XX is assigned: standard account code access is YY. Special account code access is ZZ. A NONE in place of YY or ZZ indicates an access code has not been assigned. <u>OR</u> ERROR CONDITIONS ERR-FLD 1 ANY KEY RESULT Error display field 1. Trunk group number XX is not in system range or the trunk group is not defined. Depress

El key and repest from PROMPT of step 2.

SIEMENS PRACTICES Operation Series EPASX Business Applications

XA007

SECTION

| 56 |× add7

CUSTO

CUSTOMER MEMORY UPDATE CATALOG NO. X A007

SD-192MX CUSTOMER MEMORY GPOUT CF021 L CHG. IN. SOF APPLICABLE OF 3

PROGRAM CODE NO. 56 ACCESS LEVEL 3 of 4 DIR. CHG. IN. Not Applicable

STEP NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
1	•	Perform Preliminary and Security Key Imput Procedure No. DOSO.	
2		S6E	PROPET DEFINE TRK GRP, TRK GRP * =
3	1	XXEE (System range 00 to 15 not already defined.)	Requests trunk group number (XX) to be defined. PROMPT ALTERNATE GRP 1 = Requests first alternate trunk group assignment (88). If no alternate trunk group
4	2	BBEE (System range 00 to 15) or NONE key E	PROMPT ALTERNATE GROUP 2 = Requests second alternate trunk group assignment (CC). If no alternate trunk group assignment is desired, enter NONE key.
5	3	CCE (System range 00 to 15) or NONE key E	PROPET ALTERNATE GROUP 3 = Requests third alternate trunk group assignment (DD). If no alternate trunk group assignment is desired, enter NONE key.
6	4	DDE (System range 00 to 15) or NONE key E	PROMPT DISPLAY CHARACTER = Requests display character (F).
7	5	FE (F = numeral or letter) Select (F) from the following: a. For digits, use 0 to 9. b. For A, use STEP key, 0 (display *A).	PROMPT ANSWER PRIORITY = Requests answer priority level code (G or CG).

ISS.1., SECTION

CUSTOMER MEMORY UPDATE CATALOG NO. X A007

COSIGNED WEIGHT	
TITLE Add Trunk Group Definition	PAGEOF

STEP NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
7 (cont)		c. For C, use STEP key, 2 (display °C). d. For F, use STEP key, 5 (display °F). e. For H, use STEP key, 6 (display °H). f. For L, use STEP key, 7 (display °L). g. For BLANK, use STEP key followed by NONE key display will be (dash-)	
8	7	GE or CCE (Highest pri- ority = 15, lowest priority = 0) or NOWE key E	Requests trunk group class-of-service assignment (VV). If no trunk group class-of-service assignment is desired, enter NONE key.
9		WE (System range 00 to LS) or NONE key E	Trunk group XX is assigned: First alternate trunk group BB, second alternate trunk group CC, Third alternate trunk group DD. No alternate trunk group assignment is indicated by a double-dash in place of trunk group number. Depress STEP key for next result line. B. RESULT TRK GRP XX DCF PRI GG COS VV S Continuation - Trunk group XX is assigned: Display character F, answer priority level code G or GG. trunk group class of service No. VV No display character assignment is indicated by a dash. No trunk group class assignment double dash. Depress STEP key for next result line. C. RESULT TRK GRP XX STAC YY SPAC ZZ Continuation - Trunk group XX is assigned: standard account code access is YY. Special account code access is ZZ. A NONE in place of YY or ZZ indicates an access code has not been assigned.

ISS_1, SECTION

CUSTOMER MEMORY UPDATE CATALOG NO. X A007

				•
TITLE Add Trunk Group Definition	PAGE_	٦	OF_	

STEP NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
9 (cont).		·	D. RESULT ERR-FLD 12345678 ANY NEY The field reference number(s) of the field(s) with in-
			valid data will be displayed. Repress [key and repeat from PROPT of step 2. Possible error conditions, as follows: FIELD REF NO. PROBABLE CAUSE 1 Trunk group number XX not in system range or is already defined.
			range or is already defined. 2,3,4 Number not in system range. 5,6,7
•			
10	•	Perform Write Data Base to Tape Procedure No. DOS1 (91)-

SIEMENS PRACTICES
Operation Series
EPBAX Business Applications

800AX

SECTION Issue

800Ax

5D-1924X

CUSTOMER MEMORY UPDATE CATALOG NO. XADOS

PROGRAM CODE NO. 66 ACCESS LEVEL 3 or 4 DIR. CHG. IN. 66 XE

STEP FIELD ACTION REQUIRED RESULTS OF ACTION AND COMMENTS

STEP NO.	FIELD REF NO.	NO. 66 ACCESS LEVEL ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
t	•	Delete or transfer all trunks from group before deleting trunk group definition.	
2	-	Perform Preliminary and Security Key Input Procedure No. D050.	·
3	-	66E	PROMPT DELETE-TRK GRP + =
		-	Requests trunk group number (XX) definition which is to be deleted.
4	1	XXEE (Systems range 00 to 15)	A. RESULT TRK GRP XX DELETED
			Trusk group number XX definition is deleted.
			. <u>OR</u>
		·	ERROR CONDITION
			B. RESULT ERR-FLO I ANY KEY
·			Error display field 1. Trunk group number XX is not in system range, or the trunk group is not defined, or trunk(s) assigned to group. Depress E key and repeat from PROPT of step 3
5	-	Perform Write Data Base to Tape Procedure No. DOS1 (91).	
	1		·
	1		

SECTION Issue

162 XA019

HPARX Business Applications

CUSTOMER MEMORY UPDATE CATALOG NO. XA019

TITLE Add, Change Delete Trunk Group Access Codes

PAGE 1 OF 2

PROGRAM CODE NO. 162 ACCESS LEVEL 1.2.3 or 4 DIR. CHG. IN. Not Applicable

STEP NQ.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
1	-	Perform Freliminary and Security Key Input Procedure No. DO50.	
2	-	162 E	PROMPT TRK GRP # =
			Requests trunk group number (XX)
3	1	XX E (System range 00 to 15)not already defined.	
		13)Hot already desired.	Requests trunk group access code (A) or (AA) used for access to trunk code (XX) when SDMR standard account codes are to be used. If no access desired use NONE key. If no change use STEP key.
14	2	AE or AAE (System	PROMPT SPC ACCT CODE TRK ACCESS =
		range 2 to 9, 20 to 99), NONE key E, or STEP E	Requests trunk group access code (3) or (BB) used for access to trunk group (XX) when SDMR special account codes are to be used. If no access desired use NONE key. If no change use STEP key.
5	3	BE or BBE (System range 2 to 9, 20 to 99),	A. RESULT TRK GRP XX STD ACCESS AA S
		NONE key E or STEP E	Trunk group XX is assigned access code (A) or (AA) for access to trunk group (XX) when SDMR standard account codes are used. A NONE in place of AA indicates no access code assigned, or no change in place of AA indicates no change from previous assignment depress STEP key for next link result.
			B. RESULT TRK GRP XX SPC ACCESS 3B:
			Trunk group IX is assigned access code (B) or (BB) for access to trunk group XX when SDMR special account codes are used. A NONE in place of BB indicates no access code assigned. A no change in place of BB indicates no change from previous assignement. OR RESULT ERR-FLD 1 2 3 ANY KEY A, AA, B, BB or IX out of system range or
		~ .	already assigned. Depress E key and repeat from step 2.

SIEMENS PRACTICES
Operation Series
EPARX Business Applications

XD001

CUSTOMER MEMORY UPDATE CATALOG NO. $\frac{X\ D0001}{}$

Display Station Class-of-Service Definition

PAGE_1

STEP NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
ı	•	Perform Preliminary and Security Key Imput Proce- dure No. 0050.	
2		27日	PROPT DISPLAY COS DEFINITION, COS » -
			Requests station class-of-service (SCDS) number (XX) definition to be displayed.
3	1	XXEE (System range 00 to	A. RESULT CDSXX GRP 182 12345678 12345678 S
			Station class-of-service code number XX is defined: Class mark groups 1 and 2 are defined as displayed. Numerical designator is a restriction and absence of a numerical designator is an access. The word NONE means all class-marks in group are set for access status. Depress STEP key for next result line.
			B. RESULT COSXX GRP 384 12345678 12345678 S
			Continuation - Station class-of-service code number XX is defined: Class-mark groups 3 and 4 are defined as displayed. Numerical designator is a restriction and absence of a mamerical designator is an access. The word NONE means all class-marks in group are set for access status. Depress STEP key for next result line.
			C. RESULT COSXX GRF 546 12345678 12345678
		·	Continuation - Station class-of-service code number XX is defined: Class-mark groups 1 & are defined as displayed. Numerical designator is a restriction and absence of a numerical designator is an access. The word TONE means all class-marks in group are set for access status. Depress STEP key for next result line.
			D. RESULT COSXX GRP 7 12345678
			Continuation - Station class-of-service cod- number XX is defined: Class-mark groups 3 and 4 are defined as displayed. Numerical designator is a restriction and absence of numerical designator is an access. The wor NONE means all class-marks in group are set for access status.

CUSTOMER MEMORY UPDATE CATALOG NO. XD001

TITLE Display Station Class-of-Service Definition PAGE 2 OF 2

STEP NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
			OR ERROR CONDITION
			E. RESULT ERR-FLD 1 ANY KEY
			Error display field 1. Station class-of-service code number is not within 00 to 15 range. Depress E key and request for PROMPT of step 2.
			·
		·	

SIEMENS PRACTICES
Operation Series
EPABX Business Applications

XD002

×2002

CUSTOMER MEMORY UPDATE CATALOG NO. X DOOZ

TITLE Change Station Class-of-Service Definition

STEP NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESU	LTS OF ACTION AND COMMENTS
ı	•	Perform Preliminary and Security Key Input Procedure No. D050.		
2	•	112目	PROMPT	CHANGE COS DEFINITIONS, COS .
		·	Requests chan for SCOS code	ge of station class-of-service definition masher (XX).
3		XXEE (System range 00 to 15)	PROMPT	SET CLASS HARUS CRP 1 •
				or Group 1 class-marks No. 1 through No. 8 maps 0 through 7, respectively.
4	2	12345678 [E], or NONE key [E], or STEP key [E]. Use following rules when changing a new (or completely unrestricted) station class-of-service definition:	PROPT Request to se for trunk gro	SET CLASS MARKS GRP 2 = et Group 2 class-marks No. 1 through No. 8 sups 8 through 15, respectively.
•		a. To set a restriction for one or more class-marks, enter one or more correspond- ing numerical designator(s) (1 through 8 in ascending numerical order).		
		b. For no change to all class-marks of the group, use STEP key.		
		Use following rules when changing a previously defined station class-of-service definition, i.e., SCIS having one or more restrictions:		
		a. To add, change, or delets a restriction for one or more class-marks, add or re- move, accordingly, corres- ponding materical designator for every class-mark or the group that is to be affected.		

ISS_1, SECTION

CUSTOMER MEMORY UPDATE CATALOG NO. X DOOZ

TITLE Change Station Class-of-Service Definition PAGE 2 OF 4

STEP NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
(cont)		b. For no change to all class-marks of the group, use STEP key c. To set access (non-restriction) for all class-marks of the group, use NOME key.	
S	3	Same as for step 4.	PROMPT SET CLASS MARKS GRP 3 =
			Request to set Group 3 class-marks No. 1 through No. 8 for 8-digit toll restriction lists 0 through 7, respectively.
6		Same as for step 4.	PROOFT SET CLASS HARKS GIP 4 =
			Request to set Group 4 class-marks as follows: No. 1 (Directed Dial Call Pickup); No. 2 (Dial Call Pickup); No. 3 (Paging); No. 4 (Call-Forwarding); No. 5 (Station Controlled Trunk-to-Trunk Connections); No. 6 (Trunk Queuing); No. 7 (Meet-me Conference); No. 8 (Station Call Back).
7	5	Same as for stop 4.	PROMPT SET CLASS MARKS GRP 5 =
			Request to set Group 5 class-marks as follows: No. 1 speed call special acct.codes No. 2. Speed call No. 3 LCR special acct. codes, No. 4 LCR, No. 5 call forward - don't answer, No. 6 call-forward busy.
8	6	Same as for step 4.	PROMPT SET CLASS MARKS GRP 6 =
			Request to set Group 6 class-marks No. 1 through No. 8 for trunk groups 0 through 7, respectively. (No SDMR Special Account Code Access).
9	7	Same as for step 4.	PROMPT SET CLASS MARKS GRP 7 =
			Request to set Group 7 class-marks No. 1 through 8 for trunk groups 8 through 15, respectively. (No SDMR Special Account Code Access.

CUSTOMER MEMORY UPDATE CATALOG NO. X0002

TITLE Change Station Class of Service Definition PAGE 3 OF 4

STEP NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
10	8	Same as for step 4.	A.RESULT COSXX GRP 162 12345678 12345678 S
			Station class-of-service code number XX has been defined: Class-mark groups I and 2 are defined as displayed. Numerical designator is a restriction and absence of a numerical designator is an access. The word NG CHANGE means no class-mark change in that group. Depress STEP key for next result line.
			B.RESULT COSXX GRP 364 12345678 12345678 S
		·	Continuation - Station class-of-service code number XX has been defined: Class-mark groups 3 and 4 are defined as displayed. Numerical designator is a restriction and absence of a numerical designator is an access. The word NO CHANGE means no class-mark change in that group. Depress STEP key for next result line.
			C.RESULT COSXX GRP 566 12345678 12345678 S
			Continuation - Station class-of-service code number XX has been defined: Class-mark groups 5 and 6 are defined as displayed. Numerical designator is a restriction and absence of a numerical designator is an access. The word NO CHANGE means no class-mark change in that group. Depress STEP key for next result line.
	:		D.RESULT COSXX GRP 7 12345678
		•	Continuation - Station class-of-service code number XX has been defined: Class mark group 7 is defined as displayed. Numerical desginator is a restriction and absence of a numerical designator is an access. The word NO CHANGE means no class-mark change in that group.
		·	•

ISS_1_, SECTION

CUSTOMER MEMORY UPDATE CATALOG NO. X DOOZ

TITLE Change Station Class-of-Service Definition PAGE 4 OF 4

STEP NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
(cont)			CR ERROR CONDITIONS
			C. RESULT ERR-FLD 2345678 ANY KEY The field reference number(s) of the field(s) with in-
			valid data will be displayed. Depress [E] key and repeat from PROMET of step 2. Possible error conditions, as follows:
		·	FTELD REF. NO. PROBABLE CAUSE
		·	1 Station class-of-service code master is not within 00 to 15 range.
			2,3,4,5,6,7,8 Numerical designators are not within range assigned to group or are not in ascending numerical order.
11	•	Perform Write Data Base to Tape Procedure No. DOS1 (91)	
			·

XDQQ7

EPAR dustness Applications

TITLE Display Trunk Group Class-of-Service Definition

PAGE 1 0F 2

PROGRAM CODE NO. 231 ACCESS LEVEL 1,2,3 or 4 DIR. CHG. IN. 231 VVE

STEP	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS

NOTES: 1. Class-mark group 1 (trunk groups 0 through 7) and group 2 (trunk groups 8 through 15) in standard data base are initially restricted from accessing each other (inter-group access). This action has been incorporated as a precaution to prevent unplanned access until assignments can be fully carried out in operating program. Continuation of restrictions requires individual CMU assignments.

- 2. Class-mark group 3 (8-digits toll restriction lists 0 through 7) in standard data base are all initially applied. Continuation of applications requires individual CMU assignments.
- 3. Class-mark group 4 is used for assignment of levels of SDMR recording to trunk groups. Designator 3 is for incoming recording, designator 4 for O.G. Toll and designator 5 for O.G. local. In standard data base no recording is intially applied. Actuation of recording function requires CMU assignments.

1	-	Perform Preliminary and Security Key Input Procedure No. 0050.	:
2	-	231 E	PROMPT DISPLAY TRK GRP COS DEF # -
			Requests trunk group class-of-service (TGOS) number (VV) definition to be displayed.
3	. 1	VVE (System range 00 to 15)	A. RESULT COS VV GRP 162 12345678 12345678 S
			Trunk group class-of-service code number VV is defined: Class-mark groups 1 and 2 are defined as displayed. Numerical designator is a restriction and the absence of a designator is in access. The word NONE means all class-marks in group are set for access status. Depress STEP key for next result line.
			8. RESULT COS VV GRP 384 12345678 NONE
			Continuation - Trunk group class-of-service code number VV is defined: Class-mark groups 3 and 4 are defined as displayed. Numerical designator is the indicator to apply the restriction list (grp 3) until reassigned otherwise. In grp. 4 no indicators are set and therefore SDMR is not assigned to any trunk group.

	CUSTOMER MEMORY UPDATE CATALOG NO. X0007 .		
_	tenton Tenek Comp Classock-Service Definition	•	•

STEP NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
3 (Cont.)			ERROR CONDITION C. RESULT ERR-FLD 1 ANY KEY Error display 1. Trunk group class-of-service code number is not within 00 to 15 system range. Depress E key and repeat from PROMPT of step 2.

XDOO8

SECTION

131 x0008

EPABX Business Applications

CUSTOMER MEMORY UPDATE CATALOG NO. X DOOR

PAGE_1 OF_4 Change Trunk Group Class-of-Service Definition PROGRAM CODE NO. 131 ACCESS LEVEL DIR. CHG. IN. Not Applicable ACTION REQUIRED FIELD STEP RESULTS OF ACTION AND COMMENTS BY OPERATOR REF NO. NO. NOTES: 1. Class-mark group 1 (trunk groups 0 through 7) and group 2 (trunk groups 8 through 15) in standard data base are initially restricted from accessing each other (inter-group access). This action has been incorporated as a precaution to prevent unplanned access until assignments can be fully carried out in operating program. Continuation of restrictions requires individual Od assignments. Class-mark group 3 (8-digit tell restriction list 0 through 7) in standard data base are all initially applied. Continuation of applications requires individual CMU assignments. 3. Class marks group 4 in standard data base are not initially applied.
Marks 3,4,5 are used to assign SDMR call recording to trunk groups.(3 is
for recording of incoming calls. 4 is for recording of toll calls, 5 is for
recording of local calls). Activitation of recording option requires CMU
assignment. Perform Preliminary and L Security Key Input Procedure No. D050. CHANGE TRUNK GRP COS DEF . . PROMPT 131E 2 Requests change of trunk group class-of-service definition for TCCOS code number (VV). SET CLASS MARKS GRP 1 . PROMPT VVE (System range 00 to 15) 3 1 Requests to set Group 1 class-marks No. 1 through No. 8 for trunk groups 0 through 7, respectively. SET CLASS MARKS CRO 2 . 12345678 E, or NONE key E or STEP key E. PROMPT 1 . 2 Request to set Group 2 class-marks No. 1 through & for Use following rules when changing a new or undefined class-of-service definition: trunk groups & through 15, respectively. NOTE: See explanatory notes 1, 2, and 3 in heading of this table. a. For no change to all class-marks of any group, use STEP key.

ISS_1, SECTION

CUSTOMER MEMORY UPDATE CATALOG NO. X DOOR

TITLE Change Trunk Group Class-of-Service Classification PAGE 2 OF 4

STEP NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	results of action and comments
(cont)		b. For groups 1,2, and 3, to remove a restriction for one or more class-marks, enter corresponding mamerical designators (1 through 8) of those class-marks which are to remain in effect. c. For group 4, enter corresponding numerical designator for class-mark for the type of SDMR recording	
		required on the TRK GRI Use following rules when changing a previously de- fined trunk group class-of- service definition, i.e., TCCDS having one or more restrictions:	
		a. To add or delete a re- striction for one or more class-marks, enter corre- sponding numerical designator for every class-mark of the group that is to be re- stricted.	
		b. For no change to all class-marks of the group, use STEP key.	
		c. To set access (non-re- striction) for all class- marks of the group, use NCNE key.	
S	3	Same as for step 4.	PROMPT SET CLASS MARKS GRP 3 .
			Request to set Group 3 class-marks No. 1 through No. 8 for 8-digit toll restriction lists 0 through 7, respectively.

ISS 1 SECTION

CUSTOMER MEMORY UPDATE CATALOG NO. X 0008

TITLE Change Trunk Group Class-of-Service Definition PAGE OF

STEP NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
6	4	Same as for step 4.	Request to set Group 4 class-mark No. 3, incoming call SIMR recording, No. 4 O.G. toll recording No. 5 O.G. local recording, No. 2 trunk queuing.
7	5	Same as for step 4.	A. RESULT CCS W GP 162 12345678 12345678 S Trunk group class-of-service code number W has been defined: Class-mark groups 1 and 2 are defined as displayed. Numerical designator is a restriction and absence of a numerical designator is an access. The word NO CHANGE means no class-mark change in that group. A single-dash indicates access (no-restriction) for all class-marks of the group. Depress STEP key for next result line. 8. RESULT CCS W CRP 384 12345678 12345678 Continuation - Trunk group class-of-service code number VV has been defined: Class-mark groups 3 and 4 are defined as displayed. Numerical designator assigns toll lists or recording options. No marks indicates no assignment of toll restriction lists or SDMR recording options. The work no change means no class-mark change in that group. A single dash indicates no class marks in the group are set.

ISS 1 , SECTION

CUSTOMER MEMORY UPDATE CATALOG NO. X DOORS

TITLE Change Trunk Group Class-of-Service Definition PAGE 4 OF 4

STEP NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	results of action and comments
7 (cont)			CR ERROR CONDITTIONS
		·	C. RESULT ERR-FLD 1234S ANY KEY
			The field reference number(s) of the field(s) with invalid data will be displayed. Depress [2] key and repeat from PRCMPT of step 2. Possible error conditions as follows:
1			FIELD REF. NO. PROBABLE CAUSE
			Trunk group class-of-service code number is not within 00 to 15 system range.
			2,3,4 Numerical designators are not within range assigned to group.
			S Numerical designators are not within range assigned to group,
			•
8		Perform Write Data Base to Tape Procedure No. DOS1 (91)	
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SECTION issue

219 XIIO26

LPARY Business Applications

CUSTOMER MEMORY UPDATE CATALOG NO. XD026

Display Call-Forwarding Feature

.PAGE_L

PROGRA	PROGRAM CODE NO. 219 ACCESS LEVEL 3,4 DIR. CHG. IN. 219 E			
STEP NO.	FIELD REF NO.	ACTION REQUIRED	RESULTS OF ACTION AND COMMENTS	
1	-	Perform Preliminary and Security Key Input Procedure No. DO50		
2	-	219 E	A. RESULT IMEDIATE ACCESS CODE = ABCD S	
			Where ABCD is a 1 or 2 digit (A), (AA) access code, or NONE. Depress STEP key for next line.	
			B. RESULT DO NOT ANSWER ACCESS CODE=ABCD S	
			where ABCD is a 1 or 2 digit (B), (BB) access code or NONE. Depress STEP key for next line.	
			C. RESULT BUSY ACCESS CODE = ABCD S	
			Where ABCD is a 1 or 2 digit(C),(CC) access code or NONE. Depress STEP key for next 1	
			D. RESULT CANCEL CODE = ABCD	
			Where ABCD is a 1 or 2 digit(D), (DD) access code	
			<u>or</u>	
			RESULT CALL FORWARD NOT ASSIGNED	
		1.		

SECTION Issue

51 XCC2T

LPAR Business Applications

CUSTOMER MEMORY UPDATE CATALOG NO. XD027

SD-1929X	CUSTOMER MEMORY	UPDATE CATALOG NO.	·
TITLE A	d Call Forward Access	Codes	PAGE = OF 2

PROGRA	M CODE	NO. 519 ACCESS LEVEL	3,4 DIR. CHG. IN. Not Applicable
STEP NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
1	-	Perform Freliminary Security Key Input Procedure No. D050.	
2	-	519 E	PROMPT IMMEDIATE ACCESS CODE =
			Requests 1 or 2 digit (A), (AA) access code, or NONE if not desired.
3	1	AEOr AAE (System range 2 to 9 or 20 to	PROMPT DO NOT ANSWER ACCESS CODE =
		99) or NONEE if no access required.	Requests 1 or 2 digit (8), (BB) access code, or NONE if not desired.
14	2	BE or BBE (System range 2 to 9 or 20 to	PROMPT BUSY ACCESS CODE =
		99) or NONEE if no access required.	Requests 1 or 2 digit (C), (CC) access code, or NONE if not desired.
5	3	CE or CCE (System. range 2 to 9 or 20 to	PROMPT CANCEL CODE =
		99) or NONEE if no access required.	Requests 1 or 2 digit (D), (DD) access code.
6	14	DEOR DDE (System range 2 to 9 or 20 to	A. RESULT IMMEDIATE ACCESS CODE = XXXX S
		99).	Where XXXX is equal to A or AA or NONE. Depress STEP key for next line.
			3 . RESULT DO NOT ANSWER ACCESS CODE=XXXXX
			Where XXXX is equal to B or HB or NONE. Depress STEP key for next line.
			C. RESULT BUSY ACCESS CODE = XXXX S
			Where XXXX is equal to C or CC or NONE. Depress STEP key for next line.
		·	

CUSTOMER MEMORY UPDATE CATALOG NO. XD027

TITLE Add Call Forward Access Codes PAGE 2 OF 2

STEP NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
			O. RESULT CANCEL CODE - XXXX
			Where XXXX is equal to 0 or 00.
			<u>OR</u>
			ERR-FLD 1 2 3 4 ANY KEY
			Error field 1,2,3 A or AA, 8 or 88, C or CC out of system range (2 to 9, 20 to 99).
		·	Error field 4 D, DD, out of system range (2 to 9, 20 to 99) or an invalid entry of NONE.
			Depress E key and repeat from PROMPT of STEP 2.
	,		
		•	
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			·

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Operation	Series

Delete Call Forward Features

SECTION

LIME dusiness Applications

XD028 CUSTOMER MEMORY UPDATE CATALOG NO.

X0028

PAGE_ DIR. CHG. IN. 619 E PROGRAM CODE NO. 619 ACCESS LEVEL 3. 4

NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RES	SULTS OF ACTION AND COMMENTS
1	•	Perform Preliminary and Security Key Input Procedure No. D050.		•
2	-	619 E	RESULT	CALL FORWARD DELETED
			2	
	1			
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				•
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SIEMENS	PRACTICES
Operation	

SECTION lasue

24

LPARY Business Applications

CUSTOMER MEMORY UPDATE CATALOG NO. XD057

XEOS

TITLE Display DTMF Rec, DTMF Sdr, Dial Tone Detector (DTMFRS)

PROGRAM CODE NO. 24 ACCESS LEVEL 1.2.3 or 4 DIR. CHG. IN. 24 E

PAGE 1 OF 1

ROGRA	M CODE	NO. 24 ACCESS LEVEL 1	.,2,3 or 4 DIR. CHG. IN. 24 E
STEP NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
l	•	Perform Preliminary and Security Key Input Procedure No. D050.	
2	-	24 🗵	A. RESULT DIMFRS AA = RCV SND DID S
			DIMFRS number AA has REC, sender, dial tone detector assigned.
			OR
			DIMFRS BB = RCV DID S
			DIMFRS number BB has REC, dial tone detector assigned.
			OR
			DIMFRS CC = SND DID S
			DIMFRS number CC has sender, dial tone detector assigned
		·	<u>ro</u>
			END OF TABLE
		·	OR
			B. RESULT NONE ASSIGNED
		NOTE: The above illust consist of a DTMF receasing combination thereo	trated assignments are typical. A DIMFRS may iver, DIMF sender, and dial tone detector, or
			•
	1	1	I .

LPARY Business Applications

CUSTOMER MEMORY UPDATE CATALOG NO. XD058

X2058

TITLE Add, Change, Delete DTMF Rec - DTMF Sdr - Dial Tone Detector (DTMFRS) PAGE_

STEP	FIELD	ACTION REQUIRED	RESULTS OF ACTION AND COMMENTS
NO. 1	REF NO.	BY OPERATOR Perform Preliminary and Security Key Input	
_		Procedure No. D050.	PROMPT CHANGE DEAFRS # =
2	-	57 E	Requests DTMFRS number (XX) to be added, changed or deleted.
3	1	XX E (System range 00 to 13)	PROMPT (Y = 1 N = 0) RCV?
			Request addition or deletion of DTMF receive
4	2	OEor lEor NONEE (System range O or 1)or	PROMPT (Y = 1 N = 0) RCV? 0/1/-SID?
		NONE, where NONE is equal to a 0	Requests addition or deletion of DTMF sender
5	3	OE or le or NONE	PROMPT (Y=1 N=0)RCV? 0/1/-SND? 0/1/-DTD
		(System range 0 or 1)or NONE, where NONE is equal to a 0	Requests addition or deletion of dial tone detector.
6	4	OEor lEor NONEE Range O or 1 or NONE,	RESULT DIMFRS XX = REC SAID DID
•		where NONE is equal to	Note: Result will vary according to what ha
			<u>OR</u>
			RESULT DIMFRS XX = DELETED
			<u>OR</u>
			ERR-FLD 1234 ANY KEY
			Numbers not in system range. Depress E key and repeat from PROMPT of STEP 2.
Į			

SIEMENS PRACTICES
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XD067

SECTION Issue

224 20067

ARX Bus:	iness Appl		CATALOG NO X DOST
-19ZK	cna	TOMER MEMORY UPDAT	ng (SDR) Feature PAGE 1 OF 1
TLE_	Display	Station Detail Message Records	
ARDOF	M CODE	NO. 224 ACCESS LEVEL	,2,3 or 4 DIR, CHG, IN. 224 E
STEP NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
ı	-	Perform Preliminary and Security Key Input Procedure No. D050.	·
2	-	224回	A. RESULT SDMR SET DATE—TIME ACC CDE XX S
•			Station detail message recording (SDR) feature is assigned in system. Access code assigned to set the real date and time for account code recording is X (one-digit) or XX (two-digits). Depress STEP key for next display line.
			R RESULT NUMBER DIGITS IN SPC ACCT CODE Y
		·	Continuation - Number of digits assigned to account codes is Y (2 to 8 digits)
			<u>OR</u>
		·	C. RESULT SOMR UNASSIGNED
			Station detail message recording (SDAR) feature is unas signed.

SIEMENS PRACTICES Operation Series EPARX Business Applications

XD068

Add Station Detail Message Recording (SDAR) Feature

SECTION

:D068

5D-1924X

TITLE.

XD068 CUSTOMER MEMORY UPDATE CATALOG NO.

PAGE__

Not Applicable

2,3 or 4 DIR. CHG. IN. 524 ACCESS LEVEL PROGRAM CODE NO._ ACTION REQUIRED RESULTS OF ACTION AND COMMENTS STEP FIELD BY OPERATOR REF NO. NO. Perform Preliminary and Security ı Key Input Procedure No. D050. A. PROMPT ADD SDMR, DATE-TIME ACC CDE = 2 524E Requests access code X (one-digit) or XX (two-digits) assigned to set the real time and date for account code recording in the SDMR feature. A PROMPT . DIGITS INISPC ACCT CODE = XE (Use sesigned one-digit) or 3 XXE (Use assigned two-digits). Requests number of digits Y uniqued to account codes in SDMR feature. NOTE: Access code digits must be assigned in customer data base to avoid resulting error conditions A. RESULT SOME SET DATE-TIME ACC COE XX S YE (Select either 2,3 or 4 2 5,6,7 or 8 for number Station detail message recording (SDAR) feature is assigned in system. Access code assigned to set the real data and time for account code recording is X (one-digit) of digits. or XX (mo-digits). Depress STEP key for next display RESULT NUMBER DIGITS IN SPC ACCT CODE Y Continuation - Number of digits assigned to account codes is Y (2 to 8 digits). OR ERROR CONDITIONS C. RESULT ERR-FLD I ANY KEY Error display field 1. One of the following conditions apply to invalid access code X or XX: (1) access code has already been assigned to another feature; or (2) access aireasy oeem assigned to another reature; or (2) access code X or XX is an "invalid mix", in that single-digit X is same as the leading digit of a group of XX numbers, or vice-versa; or (3) access code X or XX is not in system range; or (4) SDMR feature has already been assigned. Depress [2] key and repeat from PROMPT of step 2. D. RESULT ERR-FLD 2 ANY KEY Error display field 2. Number of digits assigned to account codes is out of system range. Depress [2] key and repeat from PROMPT of step 2. Perform Write Data Base to 5 Tape Procedure No. DOS1 (91)

XD069

SECTION

62.

EPABX Bus	iness App.	lications	x, DO6
SD-1924CK	CU	STOMER MEMORY UPDAT	E CATALOG NO. A Des
TITLE_	Delate S	tation Detail Message Recording	(SDR) Feature PAGE 1 OF I
		NO. 624 ACCESS LEVEL	3 or 4 DIR. CHG. IN. 624E
	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	results of action and comments
1	-	Perform Preliminary and Security Key Imput Procedure No. DOSO.	•
2	-	624匡	A. RESULT SOM DELETED
			Station detail message recording (SDAR) feature is deleted from system.
			<u> </u>
			B. RESULT SDAR UNASSIGNED
			Station detail message recording (SDAR) feature is un- assigned in system.
3	-	Perform Write Gata Base to Tape Procedure No. DOSI (91).	
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SECTION Issue

LPARA dusiness Applications

CUSTOMER MEMORY UPDATE CATALOG NO. XD109

TITLE Change LCR Access Codes

.PAGE <u>1</u>

NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
1	-	Perform Preliminary and Security Key Input Procedure No. D050.	
2	-	448 E	PROMPT STD ACCT CODE, LCR ACCESS =
			Requests assignment of access code (A) or (when LCR is used with SDMR STD ACCT codes. no access code is desired, enter NONE key. no change enter STEP key.
3	1	AEor AAE (System	PROMPT SPC ACCT CODE LCR ACCESS =
	·	range 2 to 9 or 20 to 99) or NONE key E or STEP E	Requests assignment of access code (3) or (when LCR is used with SDMR special account codes. If no access code is desired, enter NONE key. If no change enter STEP key.
4	2	BEor BBE (System	A. RESULT LCR STANDARD ACCESS = CC S
		range 2 to 9 or 20 to 99) or NONE key Elor	Where CC can be access code, NONE or no cha Depress step key for next result line.
			B. RESULT LCR SPECIAL ACCESS = CC
			Where CC can be access code, NONE or no change.
			<u>OR</u>
			RESULT ERR-FLD 1 2 ANY KEY
			Access code A, AA, B, BB not in system range (2 to 9, 20 to 99), is already assigned, or is not a valid code. Single digit code is mixed with 2 digit codes.
			Depress E key and repeat from PROMPT of STEP 2.

SECTION Issue

414

1.1/187 Business Applications

SD-192MX

XD110 CUSTOMER MEMORY UPDATE CATALOG NO.

XDI.

TITLE Display LCR Access Codes

.PAGE_

NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
1	•	Perform Preliminary and Security Key Input Procedure No. D050.	
2	-	414 E	RESULT LCR STANDARD ACCESS = CC S
			Where CC can be an access code or NONE. Depress STEP key for next result.
			LCR SPECIAL ACCESS = CC
			Where CC can be an access code or NONE.
		'	
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			·

SECTION Issue

LPARA dustness Applications

CUSTOMER MEMORY UPDATE CATALOG NO. 20126

XD126

TITLE Display Speed Call Access Codes

PAGE - OF 1

ACCESS LEVEL 1,2,3 or 4 DIR. CHG. IN. 261 PROGRAM CODE NO. 261 ACTION REQUIRED STEP FIELD RESULTS OF ACTION AND COMMENTS . BY OPERATOR REF NO. NQ. Perform Preliminary and 1 Security Key Input Procedure No. DO50. SC STD ACCESS = X RESULT 261 E 2 Where X is equal to a 1 or 2 digit access code or NONE. Depress STEP key for next line. B. RESULT SC SPC ACCESS = X Where X is equal to a 1 or 2 digit access code or NONE. OR RESULT SPEED CALL NOT ASSIGNED Speed call feature has not been assigned.

SECTION Issue

161

X0127

LPABY Business Applications

CUSTOMER MEMORY UPDATE CATALOG NO. XD127

AU 14/

PROGRAM CODE NO. 161 ACCESS LEVEL 4 DIR CHG IN Not Applicable

	REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
1	-	Perform Preliminary and Security Key Input Procedure No. 0050.	
2	-	161 E	PROMPT STD ACCT CODE, SC ACCESS -
		··	Requests 1 or 2 digit access code A or AA. If no change in existing code is desired enter STEP key. If no access code is desired enter NONE key.
3	1	AE or AAE (System range 2 to 9, 20 to 99)	PROMPT SPC ACCT CODE, SC ACCESS -
		or STEP E (no change) or NONE E (no access code).	Requests 1 or 2 digit access code 8 or 88. If no change in existing code is desired enter STEP key. If no access code is desired enter NONE key.
4	2	BEor 88E (System	A.RESULT SC STD ACCESS - XXX S
		range 2 to 9, 20 to 99) or STEP E (no change) or NONE E (no access code).	Where XXX is equal to 1 or 2 digit (A), (AA, access code, no change, or NONE, depress STEP key for next result.
			B.RESULT SC SPC ACCESS = XXX
			Where XXX is equal to 1 or 2 digit (8), (88) access code, no change, or NONE
			OR RESULT SPEED CALL NOT ASSIGNED
			Speed call feature has not been assigned.
		•	OR .
			RESULT ERR-FLD 1 2 ANY KEY
			A, AA, B, 88, out of system range (2 to 9, 20 to 99) or is already in use.
			Depress E key and repeat from PROMPT of STEP 2
			·

SIEMENS PRACTICEL Operation Series EPARY Rusiness Applications

SEGTION issue

262 XD128

CUSTOMER MEMORY UPDATE CATALOG NO. XD128

SD-1929X TITLE_

Display Speed Call Feature

PAGE_

262 E

ACCESS LEVEL 1,2,3 or 4 DIR. CHG. IN. PROGRAM CODE NO. 262 ACTION REQUIRED STEP FIELD RESULTS OF ACTION AND COMMENTS REF NO. BY OPERATOR NO. Perform Preliminary and 1 Security Key Input Procedure No. DO50. 2 262 E RESULT SPEED CALL INDEX - X DIGITS can be 1,2, or 3 digits OR SPEED CALL NOT ASSIGNED RESULT

SECTION Issue

560

XD129

LPARA Guerness Applications

CUSTOMER MEMORY UPDATE CATALOG NO. XD129 TITLE Add-Delete Speed Call Feature

PAGE LOF_

DIR. CHG. IN. 560 1 E or 2 E or 3 E or 0 PROGRAM CODE NO. 560 ACCESS LEVEL. FIELD REF NO. ACTION REQUIRED BY OPERATOR STEP RESULTS OF ACTION AND COMMENTS NQ. Perform Preliminary and 1 Security Key Input Procedure No. DO50. # SPEED CALL INDEX DIGITS = PROMPT 560 E 2 Requests number of digits (X) to be used for index numbers. FEATURE ADDED, X INDEX DIGITS RESULT XE (System range X = 1,2 or 3). To 3 l delete feature OE or NONEE OR RESULT FEATURE DELETED OR ERR-FLD 1 ANY KEY RESULT (I) Out of system range of 0,1,2,3 or NONE Depress E key and repeat from PROMPT of STEP 2.

SIEMENS PRACTICEL Operation Series LPARA dusiness Applications

SECTION issue

XXL30

266

CUSTOMER MEMORY UPDATE CATALOG NO. XD130

PAGE 1

TITLE Display Speed Call List Entries ACCESS LEVEL 1,2,3 or 4 DIR. CHG. IN. 260 ABC E or NONE E PROGRAM CODE NO. 260

the list. A "NONE" entry will start the display at the first valid entry. A index number entered. 3 1 ABCE or NONE E RESULT ABC: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	STEP NQ.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
Security Key Input Procedure No. D050. 2 - 260			NOTE: The use of a "MAP"	is not applicable to this Procedure
Requests index number from where the list displayed is to start continuing to the end the list. A "NONE" entry will start the display at the first valid entry. A index number entered. RESULT ABC: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1	-	Security Key Input Pro-	
displayed is to start continuing to the end the list. A "NOME" entry will start the display at the index number entered. ABCEOR NONE (System range ABC equal to 000 to 255) ABCE OF NONE (System range ABC equal to 000 to 255) Where X can be equal to the digits 0 to 9 so D or P, C, T. (% digits max.) END OF TABLE OR RESULT END OF TABLE No entries in table. OR RESULT END OF TABLE No entries for and beyond index number entered. OR RESULT END OF TABLE No entries for and beyond index number entered. OR RESULT ERR-FLD 1 ANY KEY ABC out of system range. Depress Ekey and repeat from FROMPT of	. 2	-	260 E	PROMPT . ENTER INDEX # =
(System range ABC equal to 000 to 255) Where X can be equal to the digits 0 to 9 so D or P, C, T. (46 digits max.) TO END OF TABLE OR RESULT END OF TABLE No entries in table. OR RESULT END OF TABLE No entries for and beyond index number entered. OR RESULT ERR-FLD 1 ANY KEY ABC out of system range. Depress E key and repeat from FROMPT of				displayed is to start continuing to the end of the list. A "NONE" entry will start the display at the first valid entry. A index number will start the display at the index number
where X can be equal to the digits 0 to 9 and 0 or P, C, T. (16 digits max.) TO END OF TABLE OR RESULT END OF TABLE No entries in table. OR RESULT END OF TABLE No entries for and beyond index number entered. OR RESULT ERR-FLD 1 ANY KEY ABC out of system range. Depress E key and repeat from PROMPT of	,3	1		RESULT ABC: XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
END OF TABLE OR RESULT END OF TABLE No entries in table. OR RESULT END OF TABLE No entries for and beyond index number entered. OR RESULT ERR-FLD 1 ANY KEY ABC out of system range. Depress E key and repeat from PROMPT of				Where X can be equal to the digits 0 to 9 am D or P, C, T. (46 digits max.)
RESULT END OF TABLE No entries in table. OR RESULT END OF TABLE No entries for and beyond index number entered. OR RESULT ERR-FLD 1 ANY KEY ABC out of system range. Depress E key and repeat from PROMPT of				<u>ro</u>
RESULT END OF TABLE No entries in table. OR RESULT END OF TABLE No entries for and beyond index number entered. OR RESULT ERR-FLD 1 ANY KEY ABC out of system range. Depress E key and repeat from PROMPT of				
No entries in table. OR RESULT END OF TABLE No entries for and beyond index number entered. OR RESULT ERR-FLD 1 ANY KEY ABC out of system range. Depress E key and repeat from PROMPT of				• <u>OR</u>
RESULT END OF TABLE No entries for and beyond index number entered. OR RESULT ERR-FLD 1 ANY KEY ABC out of system range. Depress E key and repeat from PROMPT of	• · · · · ·	 	•	RESULT END OF TABLE
RESULT END OF TABLE No entries for and beyond index number entered. OR RESULT ERR-FLD 1 ANY KEY ABC out of system range. Depress E key and repeat from PROMPT of				No entries in table.
No entries for and beyond index number entered. OR RESULT ERR-FLD 1 ANY KEY ABC out of system range. Depress E key and repeat from PROMPT of				<u>OR</u>
RESULT ERR-FLD 1 ANY KEY ABC out of system range. Depress E key and repeat from PROMPT of				RESULT END OF TABLE
RESULT ERR-FLD 1 ANY KEY ABC out of system range. Depress E key and repeat from PROMPT of				•
ABC out of system range. Depress E key and repeat from PROMPT of			·	<u>OR</u>
Depress E key and repeat from PROMPT of				RESULT ERR-FLD 1 ANY KEY
				ABC out of system range.

SECTION Issue

1 160

LPARY Business Applications

CUSTOMER MEMORY UPDATE CATALOG NO. XD131

XDI31

TITLE Add Change Delete Speed Call List Entries PAGE 1 OF

ROGRA	M CODE	NO. 160 ACCESS LEVEL	DIR. CHG. IN. Not Applicable
STEP NO.	FIELD REF NO.	ACTION REQUIRED BY OPERATOR	RESULTS OF ACTION AND COMMENTS
1	•	Perform Preliminary and Security Key Input Procedure No. D050.	
2	-	160 🗉	PROMPT ENTER INDEX # =
			Requests a 1, or 2, or 3 digit index number for the entry.
3	1	AEor ABE or ABCE	RESULT ENTER NEW NUMBER =
		(System range 0 to 255)	Requests number of up to 46 characters consisting of the digits 0 to 9, and alpha. characters D, P, T, C.
4	2	XXXX PXX DXX TXXE	RESULT NUMBER WAS =
		OR NONE E	NUMBER IS = XXXXPXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
		, 	Shows index number used did not have any number previously assigned. OR
		3,2,2,2,7	RESULT NUMBER WAS - XXXXPXXDXXXXXXX
		·	NUMBER IS = XCCPPFXCCDDDDXTXXX
	•		Shows previous number assigned to index number has been changed.
•		,	<u>OR</u>
			RESULT NUMBER DELETED
			Shows number assigned to index number has been deleted.
			<u>or</u>
			RESULT ERR-FLD 1.2. ANY KEY
			Error field 1; index number is out of range (0-255) Error field 2; number has exceeded 46 character
			Depress E key and repeat from PROMPT of STEP

NOTE: THE USE OF A "MAP" IS NOT APPLICABLE TO THIS PROCEDURE.

SECTION

EPARX Business Applications CUSTOMER MEMORY UPDATE CATALOG NO.

SD-1929X

Issue

XD132

X0132

Display SOMR Exception Code List -TITLE_ PAGE 1 1,2,3 or 1 270 NONE E or 270 XXX [PROGRAM CODE NO. 270 ACCESS LEVEL DIR. CHG. IN. STEP FIELD ACTION REQUIRED RESULTS OF ACTION AND COMMENTS NQ. REF NO. BY OPERATOR ı Perform Preliminary and Security Key Input Procedure No. D050. Ż-^ 270 E PROMPT CO CODE?-. . Requests CO Excepted Code to be displayed. A "MONE" entry will display the entire list. Entry of a discrete number "XXX" will check the list for that number only. 3 NONE E AAA BBB CCC DDD EEE FFF GGG HHH REQUEST Numbers indicated have been assigned. Depress "STEP" key for next result line. TO END OF TABLE OR END OF TABLE No excepted numbers have been assigned. 1 XXX E (System Range RESULT XXX ASSIGNED 000 to 999). OR XXX NOT ASSIGNED OR ERR-FLD I ANY KEY XXX not in system range depress E key and repeat from STEP 3.

SECTION

XD,133

HPABX Business Applications

CUSTOMER MEMORY UPDATE CATALOG NO. XD133

TITLE Add, Delete SDMR Central Office Exception Codes

AGE OF

Perform Preliminary and Sacurity Key Imput Procedure No. DOSO. 2 - 270 E PROMPT CD CODE?= Requests CO Code A8C to be entered. A8C E (System range 000 to 999). Requests add or delete CO Code. RESULT CO CODE A8C ADDED OR ERR-FLD 1,2 ANY KEY Field 1, not in system range 000-999 Field 2, 0, or 1 not used character used out of system range. Depress E key and repeat from STEP	S - 173
Requests CO Code ABC to be entered. Requests CO Code?= ABC (DEL=0,ADD=1 OCO to 999). Requests add or delete CO Code. RESULT CO CODE ABC ADDED OR CO CODE ABC DELETED OR ERR-FLD 1,2 ANY KEY Field 1, not in system range 000-999 Field 2, 0, or 1 not used character used out of system range. Depress E key and repeat from STEP	
ABC E (System range 000 to 999). Requests add or delete CO Code. RESULT CO CODE ABC ADDED OR CO CODE ABC DELETED OR ERR-FLD 1,2 ANY KEY Field 1, not in system range 000-999 Field 2, 0, or 1 not used character used out of system range. Depress E key and repeat from STEP	,]
Requests add or delete CO Code. RESULT CO CODE ABC ADDED OR CO CODE ABC DELETED OR ERR-FLD 1,2 ANY KEY Field 1, not in system range 000-999 Field 2, 0, or 1 not used character used out of system range. Depress E key and repeat from STEP	
Requests add or delete to Lode. RESULT CO CODE ABC ADDED OR CO CODE ABC DELETED OR ERR-FLD 1,2 ANY KEY Field 1, not in system range 000-999 Field 2, 0, or 1 not used character used out of system range. Depress E key and repeat from STEP	?=
OR CO CODE ABC DELETED OR ERR-FLD 1,2 ANY KEY Field 1, not in system range 000-999 Field 2, 0, or 1 not used character used out of system range. Depress E key and repeat from STEP	
CO CODE ABC DELETED OR ERR-FLD 1,2 ANY KEY Field 1, not in system range 000-999 Field 2, 0, or 1 not used character used out of system range. Depress E key and repeat from STEP	
ERR-FLD 1,2 ANY KEY Field 1, not in system range 000-999 Field 2, 0, or 1 not used character used out of system range. Depress E key and repeat from STEP	
Field 1, not in system range 000-999. Field 2, 0, or 1 not used character used out of system range. Depress E key and repeat from STEP	A
Field 2, 0, or 1 not used character used out of system range. Depress E key and repeat from STEP	
Character used out of system range. Depress E key and repeat from STEP	
	J
	3. "