

AMARS  
#1A AUTOMATIC MESSAGE ACCOUNTING AND RECORDING CENTER  
(NO. 1A AMARC)  
GENERIC 2 TO GENERIC 3 RETROFIT PROCEDURE  
(TRANSITION PANEL INSTALLATION)

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1. GENERAL INFORMATION

- "IMPORTANT NOTE: Generic 2 will not load into a system with more than 768K of memory. On Generic 2 to Generic 3 retrofits, do not add memory passed 768K until after fully converted to Generic 3".
- 1.1 This procedure provides the first step for the retrofit of a No. 1A AMARC Phase II (Generic 2) to a No. 1A AMARC Phase III (Generic 3) configuration. This procedure will be used to install the transition panels and cables on the No. 1A AMARC Phase II (Generic 2) system.
- 1.2 The transition panels facilitate fallback to a No. 1A AMARC Phase II (Generic 2) configuration.
- 1.3 The preliminary TTY cabling, transition panel and one end of the jumper cables will be mounted in both processors prior to any power or system removals (can be finished prior to calling in DEC or maintenance personnel). Once completed, the remainder of the cabling will be completed on one side only followed by diagnostics on that side. The system will then be brought up to a polling configuration utilizing the panels. The same procedures will then be followed on the other side.
- 1.4 Incorrect responses to the following tests, when the generic program is executing, can be examined by referring to the Input and Output manuals (IM/OM).
- 1.5 The J1P040D cabinet should be in position prior to the start of this handbook section.
- 1.6 Cabling
- 1.61 In connecting a cable to the male connector on a DEC circuit board, the triangle on the cable (female) connector should be inserted to mate with the "A" designation on the circuit board.
- 1.62 When connecting cables to the male connector on the transition panel, the triangle on the cable (female) connector should be inserted to mate with the triangle designation stamping on the panel.
- 1.7 The TELCO should arrange to have DEC or maintenance personnel present to make cable replacements in the DEC equipment, install the LAXX-LG on the TTY equipment and install tape drive straps or authorize Western Electric to perform these operations.

- 1.8 This handbook section was written for a fully equipped No. 1A AMARC Phase II. If not fully equipped, this handbook section must be modified accordingly.
- 1.9 Tapes will be removed from the No. 1A AMARC system during the testing in this section. These tapes may contain BILLING DATA. Turn these tapes over to the TELCO or label, remove the 'write enable ring' and store in the appropriate storage location.

## 2. RECORDS AND REQUIREMENTS

- 2.1 The Test Trouble Record forms (SD-97-1313 and SD-97-1315) should be used to record all troubles which may be encountered when executing the tests in this handbook section.

## 3. TEST EQUIPMENT

- 3.1 One ITE-5632 Digital Multimeter (or equivalent).
- 3.2 AMARC Phase 2 to Phase 3 conversion kit, TH-405-000 (Transition kit).
- 3.3 Several clean magnetic tapes (1600 BPI) for recording billing data (obtained from the TELCO).
- 3.4 One ITE-5237B Oscilloscope (or equivalent).
- 3.5 SPP-832 spare parts package.
- 3.6 No. 1A AMARC DSIAF (Phase II) diagnostic on magnetic tape.
- 3.7 Handbook 59, Section 205A and UIS (if any issued).
- 3.8 Input/Output Manuals, IH/OM, for the associated Generic 2 program issue.

## 4. PANEL AND PRELIMINARY CABLE INSTALLATION

### 4.1 Panel Installation

- 4.11 Four panels and associated mounting brackets are required for this procedure (two per side). The panels and brackets can be mounted on both sides prior to any power or system removals. Extreme Care should be exercised during the mounting of this equipment so that no hardware falls into the drawers in the cabinets. The

two panels with the markings 'SIDE 0' are to be mounted in the CPUO cabinets and the two panels with markings 'SIDE 1' are to be mounted in the CPU1 cabinets. The panels marked 'DETAIL 1' are to be mounted in the associated J1P040K cabinets. The panels marked 'DETAIL 2' are to be mounted in the associated J1P040L cabinets. Refer to drawing number TH-405-120 (shipped with the transition kit) for panel mounting details.

NOTE: The bottom support angle for the panels are mounted 19.50 inches above the existing lower drawer slide.

### 4.2 Preliminary Cable Installation

#### 4.21 Panel Jumper Cables

- 4.211 One end of each jumper cable from the transition kit should be installed on the transition panels. The cable designation should match the stamping on the panel.

NOTE 1: The transition kit contains two identical sets of jumper cables. One set goes on side 0 and the other set goes on side 1.

NOTE 2: Each jumper cable has the same designation on both ends of the cable. Either end of the cable can be connected to the panel.

NOTE 3: The other ends of these cables will be connected later in this handbook section. Therefore, position the cables so that there is no interference with other equipment.

NOTE 4: Cable dress will be as follows:

- A) The cables are passed through the cable support clamps on the bottom of the panel, being fanned out and fed through toward the front of the cabinet.
- B) The cables are connected to the panel on the side facing the front of the cabinet (Refer to Paragraph 1.62 for connector connection information).
- C) After the cables have been connected to the panel, secure the cable support clamp.

#### 4.22 Preliminary TTY Cable Labeling

- 4.221 Place a label on the cable end connected to connector J8 on the 230A repeater associated with CPU0. Label this cable end "A".
- 4.222 Place a label on the cable end connected to connector J8 on the 230A repeater associated with a CPU1. Label this cable end "B".
- 4.223 Label both ends of an M25A cable, obtained from the transition kit, as "to J7 connector 230A CPU0."
- 4.224 Label both ends of an M25A cable, obtained from the transition kit, as "to J7 connector 230A CPU1."
- 4.225 Label both ends of an M6AS cable, obtained from the transition kit, as "to J9 connector 230A CPU0."
- 4.226 Label both ends of an M6AS cable, obtained from the transition kit, as "to J9 connector 230A CPU1."

#### 4.23 Preliminary TTY Cabling

- 4.231 Connect cable CB29-0 (end labeled OPWR/FLT 02-090) to connector "T" on the SH11 circuit pack in the J1P040D cabinet OPWR/FLT unit location 02-090. Route the other end of this cable (end labeled ALERTING TTY 0) to the area of the TTY associated with CPU0, with no connection made.
- 4.232 Connect cable CB29-1 (end labeled OPWR/FLT 02-098) to connector "T" on the SH11 circuit pack in the J1P040D cabinet OPWR/FLT unit location 02-098. Route the other end of this cable (end labeled ANALYSIS TTY 1) to the area of the TTY associated with CPU1 with no connection made.
- 4.233 Route a DEC part #BC05C-50 cable from the area of the J1P040D cabinet ALM unit location 02-016 to the area of the DL11WA in CPU0, with no connection made at either end. Note: EIA connector end in the ALM unit.
- 4.234 Route a DEC part #BC05C-50 cable from the area of the J1P040D cabinet ALM unit location 02-080 to the area of the DL11WA in CPU1, with no connection made at either end. Note: EIA connector end in the ALM unit.

4.235 Connect one end of the M25A cable labeled "to J7 connector 230A CPU0" into the DEC part #BC05C-50 cable that was routed to the area of the J1P040D cabinet ALM unit location 02-016. Route the other end of this M25A cable to the area of connector J7 on the 230A repeater associated with CPU0, with no connection made.

4.236 Connect one end of the M25A cable labeled "to J7 connector 230A CPU1" into the DEC part #BC05C-50 cable that was routed to the area of the J1P040D cabinet ALM unit location 02-080. Route the other end of this M25A cable to the area of connector J7 on the 230A repeater associated with CPU1, with no connection made.

4.237 Connect one end of the M6AS cable labeled "to J9 connector 230A CPU0" into the "A" connector on the SH11 circuit pack in the J1P040D cabinet OPWR/FLT unit location 02-090. Route the other end of this cable to the area of the TTY associated with CPU0, with no connection made.

4.238 Connect one end of the M6AS cable labeled "to J9 connector 230A CPU1" into the "A" connector on the SH11 circuit pack in the J1P040D cabinet OPWR/FLT unit location, after first disconnecting the connector from cable CB23 at that location. Route the other end of this M6AS cable to the area of the TTY associated with CPU1, with no connection made.

#### 5. INITIAL AMARC STATUS

5.1 Verify processor states by typing the following on the active processor's TTY (Alerting TTY, TTY0, if the functional TTY feature is enabled):

```
Input: REPT SYS!
Response: REPT SYS STA 0 aaaaaa, 1
          bbbbbb ... FTTY:ccc ... ...
Where: aaaaaa = system 0 status
        bbbbbb = system 1 status
        ccc = ON or OFF
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5.11 If the 'ccc' field indicated 'ON', then type the following on TTY0.

```
Input: INH FTTY!
Response: INH FTTY IP
```

- 5.12 If the 'aaaaaa' or 'bbbbbb' field indicates 'STANDBY', remove the standby processor to OSS by typing the following on the standby processor's TTY:
- Input: RMV SYS!  
Response: RMV SYS X OOS ...  
Where: X = processor ID number
- 5.2 Tape Removal
- 5.21 Type the following on the OOS processor's TTY:
- Input: RMV TAPE!  
Response: RMV TAPE ANA ...
- 5.22 Remove the tape from the OOS processor's tape drive.
- 5.23 Remove the 'write enable' ring from the tape reel.
- 5.24 Label this tape and turn over to the TELCO or store the tape in the appropriate storage location.
- IMPORTANT NOTE: This tape may contain BILLING DATA.
- 5.3 Remove the PTP channel by typing the following on both TTY's:
- Input: RMV PTP!  
Reponse: OK
- 5.4 At this point the isolation unit for the OOS processor should be enabled to the DEC isolation state. This is done by pushing the DEC key under CIRCUIT, for the OOS processor, up and pressing the EXECUTE key. The red LED above the DEC key should light; the red DECX (where X = OOS CPU ID) LED on all TN38 packs should light; and all red ISO LED's on the TN37 packs in the CBX (where X = OOS CPU ID) units light.
- 5.5 Execute the "Data Set Interface Auxiliary Function Circuit Diagnostic" on the out-of-service processor only (Refer to Handbook 59, Section 205A and UIS, if any).
- 5.6 Place the OOS processor into the DEC isolation state in the same manner as Paragraph 5.4.
6. MODIFICATION OF OOS CPU
- 6.1 Initial Setup
- 6.11 Halt the out-of-service processor by placing its HALT/ENABLE key to the HALT position.
- 6.12 Remove power from the out-of-service processor by turning its power key to the OFF position.
- 6.13 Disconnect the cables from connectors J5, J7 and J8 at the 230A repeater associated with the out-of-service processor.
- 6.14 Disconnect the cable from connector J7 on the 230A repeater associated with the ACTIVE processor.
- 6.15 The 230A repeater associated with the out-of-service processor must be modified with "Z" option. To add "Z" option, perform the following steps on the 230A repeater associated with the out-of-service processor, only.
- 6.151 Remove power from the 230A repeater.
- 6.152 Remove the front faceplate.
- 6.153 Remove the screws holding the bracket containing the switches.
- 6.154 Remove the circuit pack and install a bare wire strap between the lands on the circuit pack by the word "STRAP."
- 6.155 Reassemble the 230A repeater.
- 6.156 Restore power to the 230A repeater.
- 6.16 Place switch 5 on the 230A repeater associated with the out-of-service processor to the OUT position.
- 6.17 At connector J7 of the 230A repeater associated with CPU0, connect the cable labeled "to J7 connector 230A CPU0."
- 6.18 At connector J7 on the 230A repeater associated with CPU1, connect the cable labeled "to J7 connector 230A CPU1."
- 6.19 If CPU0 is the out-of-service processor, connect the M6AS cable labeled "to J9 connector 230A CPU0" to connector J9 on the 230A repeater associated with CPU0. If CPU1 is the out-of-service processor, connect the M6AS cable labeled "to J9 connector 230A CPU1" to connector J9 on the 230A repeater associated with CPU1.
- 6.2 EIA Conversion of LA36 on OOS CPU
- 6.21 This procedure is to be performed by the DEC or maintenance personnel.

6.211 The LAXX-LG conversion kit needs to be added to the LA36 associated with the out-of-service processor.

6.212 The DL11-WA on the out-of-service processor needs to be converted to a DL11-WB by using the DEC part #BC05C-50. When removing the existing cable that is plugged into the DL11-WA (DEC part #7008360 and M6AR cord), route these cables to the area of the DL11B on the out-of-service processor.

Note: The DEC part #BC05C-50 cable was run to the general area of the DEC peripheral equipment in paragraph 4.233 or 4.234, depending on the processor.

6.213 At the DL11B on the out-of-service processor disconnect the DEC part #BC05C-25 cable and connect the cable routed in paragraph 6.212 (DEC part #7008360 and M6AR cord). The cable just removed will no longer be used.

Note: The connection of the DEC part #7008360 and M6AR cord converts to DL11B to a DL11A.

6.22 This step is to be performed after the TTY associated with the out-of-service processor has been modified to EIA. If CPU0 is the out-of-service processor, connect cable CB29-0 to the TTY. If CPU1 is the out-of-service processor, connect cable CB29-1 to the TTY.

Note 1: Cable CB29-0 was routed in paragraph 4.231. Cable CB29-1 was routed in paragraph 4.232.

Note 2: The M6AT cord, that was disconnected from the TTY during its modification to EIA, is no longer used.

6.3 Cable installation in the OOS processor's J1P040K cabinet.

6.31 All cable connections on the DEC peripheral equipment should be made by the DEC or maintenance personnel.

6.32 Carefully, disconnect the cable ends in the OOS processor's J1P040K cabinet as listed in TABLE 1.

TABLE 1

CABLE DESIG	EQUIPMENT DESIG
CA30-X	00DZ11B
CA31-X	01DZ11B
CA32-X	02DZ11B
CA33-X	03DZ11B
CA36-X	00DN11DA
CA37-X	01DN11DA
CA46-X	02DN11DA
CA47-X	03DN11DA

NOTE: X = OOS processor ID number.

6.33 Dress the cables, just disconnected, up the back right side of the cabinet as viewed from the rear. Secure the cables to the lower support angle of the transition panel with a tie wrap. Drape the cable over the cable support bar located behind the transition panel. Connect these cables to the transition panel (DETAIL 1) as listed in Table 2.

TABLE 2

CABLE DESIG	PANEL CONNECTOR DESIG
CA30-X	CA30-X J5B 00DZ11B
CA31-X	CA31-X J6B 01DZ11B
CA32-X	CA32-X J7B 02DZ11B
CA33-X	CA33-X J8B 03DZ11B
CA36-X	CA36-X J3B 00DN11DA
CA37-X	CA37-X J4B 01DN11DA
CA46-X	CA46-X J3D 02DN11DA
CA47-X	CA47-X J4D 03DN11DA

NOTE: X = OOS processor ID number.

6.34 Carefully, connect the cable ends in the OOS processor's J1P040K cabinet listed in TABLE 3.

NOTE: These cables are coming from the transition panel (DETAIL 1).

TABLE 3

CABLE DESIG	EQUIPMENT DESIG
DET 18	00DZ11B 00DZ11B
DET 17	01DZ11B 01DZ11B
DET 16	02DZ11B 02DZ11B
DET 15	03DZ11B 03DZ11B
DET 14	00DN11DA 00DN11DA
DET 13	01DN11DA 01DN11DA
DET 12	02DN11DA 02DN11DA
DET 11	03DN11DA 03DN11DA

#### 6.4 Cable installation in the OOS processor's J1P040L cabinet.

- 6.41 All cable connections on the DEC peripheral equipment should be made by the DEC or maintenance personnel.
- 6.42 Carefully, disconnect the cable ends in the OOS processor's J1P040L cabinet as listed in TABLE 4.

TABLE 4

CABLE DESIG	EQUIPMENT DESIG
CA40-X	04DZ11B
CA41-X	05DZ11B
CA42-X	06DZ11B
CA43-X	07DZ11B
CA56-X	04DN11DA
CA57-X	05DN11DA
CA50-X	10DZ11B
CA51-X	11DZ11B
CA52-X	12DZ11B
CA53-X	13DZ11B

NOTE: X = OOS processor ID number.

- 6.43 Dress the cables, just disconnected, up the back right side of the cabinet as viewed from the rear. Secure the cables to the lower support angle of the transition panel with a tie wrap. Drape the cables over the cable support bar located behind the transition panel. Connect these cables to the transition panel (DETAIL 2) as listed in TABLE 5.

TABLE 5

CABLE DESIG	PANEL CONNECTOR DESIG
CA40-X	CA40-X J5B 04DZ11B
CA41-X	CA41-X J6B 05DZ11B
CA42-X	CA42-X J7B 06DZ11B
CA43-X	CA43-X J8B 07DZ11B
CA56-X	CA56-X J3D 04DN11DA
CA57-X	CA57-X J4D 05DN11DA
CA50-X	CA50-X J5B 10DZ11B
CA51-X	CA51-X J6B 11DZ11B
CA52-X	CA52-X J7B 12DZ11B
CA53-X	CA53-X J8B 13DZ11B

NOTE: X = OOS processor ID number.

- 6.44 Carefully, connect the cable ends in the OOS processor's J1P040L cabinet listed in Table 6.

NOTE: These cables are coming from the transition panel (DETAIL 2).

TABLE 6

CABLE DESIG	EQUIPMENT DESIG	
DET 10	04DZ11B	04DZ11B
DET 9	05DZ11B	05DZ11B
DET 8	06DZ11B	06DZ11B
DET 7	07DZ11B	07DZ11B
DET 6	04DN11DA	04DN11DA
DET 5	05DN11DA	05DN11DA
DET 4	10DZ11B	10DZ11B
DET 3	11DZ11B	11DZ11B
DET 2	12DZ11B	12DZ11B
DET 1	13DZ11B	13DZ11B

#### 6.5 Tape Drive Straps on OOS CPU

- 6.51 The tape drive straps on the out-of-service CPU should be installed by the DEC or maintenance personnel.
- 6.52 The Generic 3 program requires two specific straps in the tape drive. Once the straps have been installed, they are left in permanently, since the Generic 2 program will function properly with these straps installed.

Note: As of the date of this handbook section, the straps cause error messages to be printed when DEC diagnostics on the tape drive are executed. The DEC or maintenance personnel should be notified of the error message indication.

- 6.53 The Control and Status PC assembly circuit pack in the TR79 tape drive unit, on the OOS CPU, must have its "W1" strap connected to the punching labeled "OFF." The Write Formatter circuit pack in the TR79 tape drive unit, on the OOS CPU, must have its strap, connected to the circuit pack designation of "2", be connected to the punching labeled "4".

#### 7. DIAGNOSTIC TESTS THROUGH THE PANEL-OOS CPU

- 7.1 Restore power to the out-of-service processor by turning the power key to the 'ON' position.
- 7.2 Place the HALT/ENABLE key on the OOS CPU to the ENABLE position, then depress CONTINUE.

- 7.3 Execute the 'Data Set Interface and Auxiliary Function Circuit Diagnostic' on the OOS CPU only (Refer to Handbook 59, Section 205A and UIS, if any).

NOTE: The diagnostic program should still be loaded in memory from Paragraph 5.5, therefore, the diagnostic tape need not be reloaded. If the diagnostic program does not function properly, the diagnostic program will have to be reloaded from tape.

#### 8. RESTORE OOS CPU TO ACTIVE

- 8.1 Restore the OOS CPU to service.
- 8.11 Verify that the OOS processor is in the normal state (i.e., non-isolated).
- 8.12 On the OOS CPU, place the ENABLE/HALT key to the HALT position, depress and release the START key and then place the ENABLE/HALT key to the ENABLE position.
- 8.13 On the ACTIVE processor's TTY:
- Type: UPD MEM PRG!  
Reponse: PF
- 8.14 When the generic program has been loaded into the OOS CPU the following will be printed:

On Active TTY: UPD MEM PRG COMPLETE  
On OOS TTY: CORE MEMORY SIZE IS XXXK WORDS  
INIT SYS Z OOS ...  
REPT TAPE OOS ...

Where: XXXK = core memory size  
z = OOS CPU ID number

Note 1: If the above attempt fails, restore the generic program from tape (Refer to Input Manual (IM) Section B, Paragraph 5).

Note 2: Other messages associated with the tape/disk may be printed.

- 8.15 Restore the NPD data by inputting the following on the Active processor's TTY:
- Input: UPD MEM NPD!  
Response: UPD MEM NPD COMPLETE

Note: If the above attempt fails, restore the NPD data from tape (Refer to the Input Manual (IM) messages RST TAPE NPR and IN RCTBL TAPE).

- 8.16 Input the following on the OOS processor's TTY:
- Input: INIT SYS!  
Response: INIT SYS X OOS ...  
Where: X = OOS CPU ID number
- 8.17 Mount a clean (blank), certified accounting center magnetic tape on the OOS processor's tape drive. The tape must be equipped with a "write enable" ring. Place the tape drive 'ON LINE'. The 'ON LINE', 'LOAD' and 'WRITE ENABLE' lamps should illuminate.
- 8.18 Restore the tape by typing the following on the OOS processor's TTY:
- Input: RST TAPE!  
Response: UPD MEM TRN COMPLETE  
RST SYS X STANDBY  
RST TAPE AMA ...  
Where: X = CPU ID number
- Note: Several minutes will elapse before these messages are received.
- 8.2 Switch processors by typing the following on the ACTIVE processor's TTY:
- Input: SW SYS!  
Response: SW SYS 0 aaaaaa, 1 bbbbbb ...  
Where: aaaaaa = ACTIVE or STANDBY  
bbbbbb = ACTIVE or STANDBY
- 8.3 Repeat Paragraph 5.12 to remove the new STANDBY processor to OOS.
- 8.4 Repeat paragraph 5.2 to remove the new OOS processor's AMA tape.
- IMPORTANT NOTE: This tape may contain BILLING DATA. Label and store accordingly.
- 8.5 Remove the PTP channel by typing the following on both TTY's:
- Input: RIV PTP!  
Response: OK
- 8.6 At this point the isolation unit for the new OOS processor should be enables to the DEC isolation state. This is done by pushing the DEC key under CIR-

## 8.6 (Continued)

CUIT, for the OOS processor, up and pressing the EXECUTE key. The red LED above the DEC key should light; the red DECX (where X = OOS CPU ID) LED on all TN38 packs should light; and all red ISO LED's on the TN37 packs in the CBX (where X = OOS CPU ID) units light.

8.7 Execute the "Data Set Interface Auxiliary Function Circuit Diagnostic" on the new out-of-service processor only. (Refer to Handbook 59, Section 205A and UIS, if any).

8.8 Place the new OOS processor into the DEC isolation state in the same manner as paragraph 8.6.

9. MODIFICATION OF OTHER CPU9.1 Initial Setup

9.11 Halt the out-of-service processor by placing its HALT/ENABLE key to the HALT position.

9.12 Remove power from the out-of-service processor by turning its power key to the OFF position.

9.13 Disconnect the cable from connectors J5 and J8 on the 230A repeater associated with the out-of-service processor.

9.14 If CPU0 is the out-of-service processor, connect the cable labeled with a "B" to connector J8 on the 230A repeater associated with CPU0. If CPU1 is the out-of-service processor, connect the cable labeled with an "A" to connector J8 on the 230A repeater associated with CPU1.

9.15 If CPU0 is the out-of-service processor, connect the M6AS cable labeled "to J9 connector 230A CPU0" to connector J9 on the 230A repeater associated with CPU0. If CPU1 is the out-of-service processor, connect the M6AS cable labeled "to J9 connector 230A CPU1" to connector J9 on the 230A repeater associated with CPU1.

9.16 Place switch 5 on the 230A repeater associated with the out-of-service processor to the OUT position.

9.2 EIA Conversion of LA36 on OOS CPU

9.21 This procedure is to be performed by the DEC or maintenance personnel.

9.211 The LAXX-LG conversion kit needs to be added to the LA36 associated with the out-of-service processor.

9.212 The DL11-WA on the out-of-service processor needs to be converted to a DL11-WB by using the DEC part #BC05C-50. When removing the existing cable that is plugged into the DL11-WA (DEC part #7008360 and M6AR cord), route these cables to the area of the DL11B on the out-of-service processor.

Note: The DEC part #BC05C-50 cable was run to the general area of the DEC peripheral equipment in paragraph 4.233 or 4.234, depending on the processor.

9.213 At the DL11B on the out-of-service processor disconnect the DEC part #BC05C-25 cable and connect the cable routed in paragraph 9.212 (DEC part #7008360 and M6AR cord). The cable just removed will no longer be used.

Note: The connection of the DEC part #7008360 and M6AR cord converts the DL11B to a DL11A.

9.22 This step is to be performed after the TTY associated with the out-of-service processor has been modified to EIA. If CPU0 is the out-of-service processor, connect cable CB29-0 to the TTY. If CPU1 is the out-of-service processor, connect cable CB29-1 to the TTY.

Note 1: Cable CB29-0 was routed in paragraph 4.231. Cable CB29-1 was routed in paragraph 4.232.

Note 2: The M6AT cord, that was disconnected from the TTY during its modification to EIA, is no longer used.

9.3 Cable installation in the new OOS processor's J1P040K and J1P040L cabinets

9.31 All cable connections on the DEC peripheral equipment should be made by the DEC or maintenance personnel.

9.32 Perform the same cable installation procedures on the new OOS processor's J1P040K and J1P040L cabinets as in paragraphs 6.3 through 6.44.

9.4 Tape Drive Straps on the new OOS CPU

9.41 The tape drive straps on the out-of-service CPU should be installed by the DEC or maintenance personnel.

9.42 Perform the same tape drive strapping procedure as listed in paragraphs 6.5 through 6.53.

10. DIAGNOSTIC TESTS THROUGH THE PANEL-NEW OOS CPU

10.1 Restore power to the out-of-service processor by turning the power key to the "ON" position.

10.2 Place the HALT/ENABLE key on the OOS CPU to the ENABLE position, then depress CONTINUE.

10.3 Execute the "Data Set Interface and Auxiliary Function Circuit Diagnostic" on the new OOS CPU only. (Refer to Handbook 59, Section 205A and UIS, if any).

Note: The diagnostic program should still be loaded in memory from paragraph 8.7, therefore, the diagnostic tape need not be reloaded. If the diagnostic program does not function properly, the diagnostic program will have to be reloaded from tape.

11. RESTORE NEW OOS CPU TO ACTIVE

11.1 Restore the OOS CPU to ACTIVE and remove the formerly active CPU to OOS in the same manner as paragraphs 8 through 8.4.

Note: Do not isolate the OOS CPU.

12. FINAL MODIFICATION

12.1 Remove the "Z" option strap on the 230A repeater associated with the OOS CPU.

Note: The "Z" option strap was installed in paragraph 6.15.

12.2 IF CPU0 is the out-of-service processor, connect the cable labeled with a "B" to connector J8 on the 230A repeater associated with CPU0. IF CPU1 is the out-of-service processor, connect the cable labeled with an "A" to connector J8 on the 230A repeater associated with CPU1.

12.3 Restore the OOS CPU to STANDBY.

12.31 Input the following on the OOS processor's TTY:

Input: INIT SYS!  
RESPONSE: INIT SYS X OOS ...  
Where: X = OOS CPU ID number

12.32 Mount a clean (blank), certified accounting center magnetic tape on the OOS processor's tape drive. The tape must be equipped with a "write enable" ring. Place the tape drive "ON LINE." The "ON LINE," "LOAD" and "WRITE ENABLE" lamps should illuminate.

12.33 Restore the tape by typing the following on the OOS processor's TTY:

Input: RST TAPE!  
Response: UPD MEM TRN COMPLETE  
RST SYS X STANDBY  
RST TAPE AMA ...  
Where: X = CPU ID number

Note: Several minutes will elapse before these messages are received.

Manager, Product Engineering  
Control Center

Reason for Reissue:  
To include UIS information.