AMARS
NO. 1A AUTOMATIC MESSAGE ACCOUNTING RECORDING CENTER
FIRST SUPPLEMENTARY PROCESSOR INTERFACE CABINET INSTALLATION
(J1P040V-1, LIST 1)
(INITIAL NO. 1A AMARC INSTALLATIONS ONLY)

CONTENTS

1. GENERAL INFORMATION

1.1 The First Supplementary Processor Interface Cabinet contains:

Asynchronous Interface Unit (1ASYN) (SD-5P014-01) (J1P040DC)

Asnychronous Interface Unit (OASYN) (SD-5P014-01) (J1P040DC)

Asynchronous Interface Unit (TTY) (SD-5P014-01) (J1P040DC)

Power Transfer and Static Filter Unit (1PWR/FLT) (J1P040DG), and Power Supply

1.2 Refer to ED5P285 for cable dress information.

1.3 Refer to SD-5P014-01, Note 302 for connector to backplane pin number conversions.

1.4 The installation and tests of this cabinet should be completed before proceeding to Sections 204F and 204G.

1.5 Disregard the lighting of LEDs on circuit packs unless specified in this handbook section. Handbook 59, Section 204H will be used to verify proper illuminations of all untested LEDs.

1.6 This handbook section is not to be used for installing a J1P040V-1, List 1 cabinet to an existing live billing No. 1A AMARC. The Generic 2 to Generic 3 Retrofit Procedure Handbook sections, contain all the necessary information for installing a J1P040V-1, List 1 cabinet to an existing live billing No. 1A AMARC.

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 are encountered when running the tests in this handbook section.

3. TEST EQUIPMENT

3.1 One ITE-5632 Digital Multimeter (or equivalent).

3.2 SPP-832 Spare Packs Package.

4. INSTALLATION OF THE CABINET

4.1 The first Supplementary Processor Interface Cabinet should be positioned in accordance with floor plan data requirements (FPD 824-100-105-1).

4.2 The uninterruptable power supplies (UPS) should have been installed and tested. Each UPS provides power to one complete side of AMARC. Verify that the output voltage at each outlet for each phase is 120VAC. Measure voltage between phase and neutral leads.

4.3 The data sets associated with the No. 1A AMARC are housed in their own separate cabinet. The 202T data sets are housed by 40B1 mountings. The 202S and 212A data sets and the 801C automatic dialing units are housed in a 40A2 mounting. The 829A data auxiliary data sets are housed by 46A1 data mountings. These are installed and maintained by the telephone company.

5. CABLING

NOTE: In connecting the ED-5P284-31 cables to the male connector on a DEC circuit board, the triangle on the cables (female) connector should be inserted to mate with the "A" designation on the circuit board. When connecting to the isolation backplane, the triangle should always be on the bottom.

5.1 Remove power by turning the ON/OFF switch on both programmer's console to OFF position.

5.2 Connect the following interframe cables from Table 1 (ED-5P284-31) between the First Supplementary Processor Interface Cabinet and Processor 0. (See Cabling Note under Paragraph 5.)

5.3 Connect the following interframe cables from Table 2 (ED-5P284-31) between the First Supplementary Processor Interface Cabinet and Processor 1. (See Cabling Note under Paragraph 5.)

5.4 Restore power by turning the ON/OFF switch on both processor's console to the ON position.

6. FUSE AND POWER

6.1 Power Transfer Unit

6.101 Power for the First Supplementary Processor Interface Cabinet is supplied by the Power Transfer Unit. The Power Transfer Unit obtains power from a single phase receptacle at the power distribution circuit. J0 and J1 receptacles on the unit receive plugs from the power strip within the cabinet. Do not connect power to the Power Transfer Unit until specified in the following paragraphs.

6.102 Remove all plugs from outlets on both sides of the First Supplementary Processor Interface Cabinet.

6.103 Disengage all circuit packs in the Asynchronous Interface Unit (J1P040DC) (0 ASYN and 1 ASYN), Asynchronous Interface Unit (TTY) (J1P040DC), and Power Transfer and Static Filter Unit (J1P040DG).

6.104 Verify the 'PWR CORD 0' is connected from the receptacle 1 on the side 0 power strip to the J0 outlet on the Power Transfer Unit.

6.105 Verify that 'PWR CORD 1' is connected from the receptacle 1 on the side 1 power strip to the J1 outlet on the Power Transfer Unit.

6.106 Connect the power cord P0 from the Power Transfer Unit to the receptacle for the First Supplementary Processor Interface Cabinet associated with CPU0. Verify that the pilot lamp at the top of both power strips is illuminated. If the pilot lamps are not illuminated, depress the circuit breaker button on top of the assiciated power strip. Verify that 120VAC is obtained at all outlets on both sides of the First Supplementary Processor Interface Cabinet.

6.107 Remove the AC0 fuse. Verify that 120VAC has been removed from all outlets on side 0 of the First Supplementary Processor Interface Cabinet. Side 1 should still retain power.

6.108 Remove power cord P0 from the receptacle.

6.109 Restore the AC0 fuse.

6.110 Connect power cord P1 to the receptacle for the First Supplementary Processor Interface Cabinet associated with CPU1. Verify that 120VAC is obtained at all outlets on both sides of the First Supplementary Processor Interface Cabinet.

6.111 Remove the AC1 fuse. Verify that 120VAC has been removed from all outlets on side 1 of the First Supplementary Processor Interface Cabinet. Side 0 should still retain power.

6.112 Restore the AC1 fuse.

6.113 Restore power cord P0 to the receptacle for the First Supplementary Processor Interface Cabinet associated with CPU0.

6.2 Fuse and DC Power

6.201 Remove the D0, F0, D1 and F1 fuses.

6.202 Verify that all the fuses for the 1 PWR SUPP at the top of the frame are in place.

6.203 Connect the plug for the 1 PWR SUPP for side 0 to outlet 16 on side 0.

6.204 Connect the plug for the 1 PWR SUPP for side 1 to outlet 16 on side 1.

6.205 Operate both power switches on the 1 PWR SUPP power supply to the ON position.

6.206 Verify that no power or ground conditions exist on any of the +12v or -12v terminals on TB1 or TB3. Refer to SD-5P016-01, FS3, if necessary.

6.207 Insert an operated fuse, one at a time, into the fuse holder, listed in Table A, and observe that the associated LED indicator listed in Table A illuminates.

TABLE A

SIDE 0		SIDE 1	
FUSE HOLDER	LED	FUSE HOLDER	LED
D0	+12V0	D1	+12V1
F0	-12V0	F1	-12V1

6.208 Restore all fuses that were removed in Paragraph 6.201.

6.209 Verify the voltages at the terminals given in Table B. Refer to SD-5P012-01, FS3, if necessary.

TABLE B

VOLTAGE	RANGE	SIDE	LOC.	TERMINAL
+12v	+11.4v to +12.6v	0	TB1	7
+12v	+11.4v to +12.6v	1	TB3	7
-12v	-11.4v to -12.6v	0	TB1	10
-12v	-11.4v to -12.6v	1	TB3	10

NOTE: The output voltage must be within the range indicated. There is an adjustment potentiometer on the 1 PWR SUPP that can be used for adjustment.

6.210 Verify that power is supplied to both sides of all units within the First Supplementary Processor Interface Cabinet. Refer to Table C for available voltages on the specified units. Verify between the voltage bug and the GND bug.

TABLE C

UNIT	VOLTAGE	LOCATION
0ASYN	+12v	+12v BUG
0ASYN	-12v	-12v BUG
1ASYN	+12v	+12v BUG
1ASYN	-12v	-12v BUG
TTY	+12v	+12v BUG
TTY	-12v	-12v BUG

6.211 Turn the two power switches on the 1 PWR SUPP power supply to the OFF position. Insert all circuit packs in the Asynchronous Interface Units (0 ASYN and 1 ASYN) (J1P040DC), Asynchronous Interface Unit (TTY) (J1P040DC) and the Power Transfer and Static Filter Unit (1 PWR/FLT) (J1P040DG). Restore power using the two switches on the 1 PWR SUPP power supply.

6.212 Control Console 1 (J1P040E) for CPU1 should be powered from outlet 5 on side 1.

7. POWER TRANSFER TEST

7.1 Remove power cord P0 from the receptacle for the First Supplementary Processor Interface Cabinet associated with CPU0.

7.2 Observe that the TRNSFR0 LED illuminate on the SH9 circuit pack located in the 1 PWR/FLT unit.

7.3 Restore power cord P0. The TRNSFR0 LED should extinquish.

7.4 Remove power cord P1 from the receptacle for the First Supplementary Processor Interface Cabinet associated with CPU1.

7.5 Observe that the TRNSFR1 LED illuminate on the SH9 circuit pack located in the 1 PWR/FLT unit.

7.6 Restore power cord P1. The TRNSFR1 LED should extinquish.

8. POWER SUPPLY FAILURE TEST

8.1 Verify that the ACFLO and ACFL1 LEDs on the SH9 circuit pack in the 1 PWR/FLT unit are extinquished.

8.2 Operate the power switch on the 1 PWR SUPP associated with side 0 to the 'OFF' position.

8.3 Verify that the ACFLO LED on the SH9 ciruit pack in the 1 PWR/FLT unit illuminates.

8.4 Restore the power switch on the 1 PWR SUPP to the 'ON' position. The ACFLO LED should extinquish.

8.5 Operate the power switch on the 1 PWR SUPP associated with side 1 to the 'OFF' position.

8.6 Verify that the ACFL1 LED on the SH9 circuit pack in the 1 PWR/FLT unit illuminates.

8.7 Restore the power switch on the 1 PWR SUPP to the 'ON' position. The ACFL1 LED should extinquish.

ATTACHMENTS
TABLE 1
TABLE 2

Manager, Product Engineering
Control Center

Reason for Reissue
To include UIS information.

TABLE 1

DESIG.	GROUP	STAMPED	CONNECTED FROM LOC.	CONNECTED FROM UNIT	CONNECTED TO	STAMPED
CB60-0	68	TTY 06-017	06-017	TTY	0DZ11B-TTY	CPU0 0DZ11B-TTY
CB61-0	68	TTY 06-049	06-049	TTY	1DZ11B-TTY	CPU0 1DZ11B-TTY
CB70-0	68	0ASYN 06-017	06-017	0ASYN	00DZ11B	CPU0 00DZ11B
CB71-0	68	0ASYN 06-049	06-049	0ASYN	01DZ11B	CPU0 01DZ11B
CB72-0	68	0ASYN 06-085	06-085	0ASYN	02DZ11B	CPU0 02DZ11B
CB73-0	68	0ASYN 06-117	06-117	0ASYN	03DZ11B	CPU0 03DZ11B
CB74-0	69	1ASYN 06-017	06-017	1ASYN	04DZ11B	CPU0 04DZ11B
CB75-0	69	1ASYN 06-049	06-049	1ASYN	05DZ11B	CPU0 05DZ11B
CB76-0	69	1ASYN 06-085	06-085	1ASYN	06DZ11B	CPU0 06DZ11B
CB77-0	69	1ASYN 06-117	06-117	1ASYN	07DZ11B	CPU0 07DZ11B

TABLE 2

DESIG.	GROUP	STAMPED	CONNECTED FROM LOC.	CONNECTED FROM UNIT	CONNECTED TO	STAMPED
CB60-1	70	TTY 10-033	10-033	TTY	0DZ11B-TTY	CPU1 0DZ11B-TTY
CB61-1	70	TTY 10-065	10-065	TTY	1DZ11B-TTY	CPU1 1DZ11B-TTY
CB70-1	70	0ASYN 10-033	10-033	0ASYN	00DZ11B	CPU1 00DZ11B
CB71-1	70	0ASYN 10-065	10-065	0ASYN	01DZ11B	CPU1 01DZ11B
CB72-1	70	0ASYN 10-101	10-101	0ASYN	02DZ11B	CPU1 02DZ11B
CB73-1	70	0ASYN 10-133	10-133	0ASYN	03DZ11B	CPU1 03DZ11B
CB74-1	71	1ASYN 10-033	10-033	1ASYN	04DZ11B	CPU1 04DZ11B
CB75-1	71	1ASYN 10-065	10-065	1ASYN	05DZ11B	CPU1 05DZ11B
CB76-1	71	1ASYN 10-101	10-101	1ASYN	06DZ11B	CPU1 06DZ11B
CB77-1	71	1ASYN 10-133	10-133	1ASYN	07DZ11B	CPU1 07DZ11B