EC 826380		PN 2597109
27MAY83		

Tape Attachment Entry MAP

5360 Systems Unit

PAGE 1 OF 12

ENTRY POINTS

FROM	ENTER	THIS MAP	
MAP NUMBER	ENTRY POINT	PAGE NUMBER	STEP NUMBER
0101 0115 8809 8809 9910	A A B B	1 1 5 5	001 001 001 040 040

EXIT POINTS

EXIT THIS MAP		то	
PAGE NUMBER	STEP NUMBER	MAP NUMBER	ENTRY POINT
2	014	0101	C
11	072	0116	Α
3	031	0399	Α
10	064	0599	А
8	057	0599	А
7	050	0599	А
8	054	9905	А
8	058	9905	А

001 (Entry Point A)

MAP DESCRIPTION: Tape and Data Storage subsystem

FRUs PARTIALLY TESTED: A-A2K2 A2L2 A2C2 A2E2 A2D2 A2J2

Are any of the following 8809 tape drive symptoms present? Fails to power on. Fails to load tape. Fails to unload tape. Fails to come ready. Damages the tape. Y N

002 Do you have a 4 digit SRC? Y N

1 2 2 A B 003 Go to Page 4, Step 034, Entry Point C.

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30Jun86 PN 2596245 EC 842375 PEC 826487 MAP 9900-1

5-

5360 Systems Unit PAGE 2 OF 12 012 Cxxx SRC displayed on the screen or on the I? 12 D5 Is the SRC 135E or 135F? 06 Is the SRC 1301, 1356 or 13F5? 17 N 006 Is a 13xx SRC displayed on the panel with a system processor check? Y N 013 007 Is the failure a suspected tape problem? Y N Y N 015 008 Suspect you are in the wrong MAP. Do the failure a suspected tape problem? Y N 008 Suspect you are in the wrong MAP. Do the dollowing to determine the primary failing device: - Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). - Run EAP, analyze recorded failures to determine primary failing device. - Locate the SRC 135C, 135d, 13F0 or 13F4? Y N 009 Go to Page 4, Step 034, Entry Point C. 010 Is the SRC 13F3 or 135b? Y N 11 Is the SRC 13F3 or 135b? Y N 13 14 State SRC 13F3 or 135b? Y N 15 2 3 2 3 2 4 2 5 3 3 3 3 3 3 3 3 3 3 3 3	Entry MAP	G MAP 9900-2
PAGE 2 OF 12 Cxxx SRC displayed on the screen or on the al? 05 13 Is the SRC 135E or 135F? 14 05 15 a 15xx Or a 5bxx SRC displayed on the screen on the panel? N 06 15 a 15xx SRC displayed on the panel with a system processor check? Y N 07 15 the failure a suspected tape problem? Y N 08 Suspect you are in the wong MAP. Do the following to determine which MAP to tollow. 08 Suspect you are in the wong MAP. Do the following to determine which MAP to tollow. 009 Go to Page 4. Step 034, Entry Point C. 010 15 the SRC 135C, 135d, 13F0 or 13F4? Y N 011 Is the SRC 135C, 135d, 13F0 or 13F4? Y N 011 Is the SRC 13F3 or 135b7 Y N 012 Is file G 31 32 3 3 3 3 3 11 15 c SRC	5360 Systems Unit	
Cxxx SRC displayed on the screen or on the al? is the SRC 135E or 135F? 05 is the SRC 135C or 135F? 13 is the SRC 1301, 1356 or 13F5? 14 SRC not valid. Repeat the procedure the caused the original failure. 15 is al 3xx SRC displayed on the panel with a system processor check? 15 N 16 13xx SRC displayed on the panel with a system processor check? 17 N 18 13xx SRC displayed on the panel with a system processor check? 17 N 18 13x SRC displayed on the panel with a system processor check? 18 14 18 13x SRC displayed on the panel with a system processor check? 18 15 19 007 19 N 100 Suspect you are in the wrong MAP. Do the following to determine the primary failing device: - Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). - Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). - Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). - Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). - Run SKC 135C, 135d, 13F0 or 13F47 100 11 15 the SRC 13F3 or 135b7 11 she SRC 13F3 or 135b7 12 30.Jum86 13 3 14 33	PAGE 2 OF 12	
Cxxx SRC displayed on the screen or on the anel? Is the SRC 135E or 135F? 05 Is the SRC 135E or 135F? 18 Is the SRC displayed on the screen ron the panel? 19 N 1007 Is the failure a suspected tape problem? 19 N 108 Suspect you are in the wrong MAP. Do the following to determine the primary failing device. - Rouse the SRC obtained from above in MAP 113 through 116 to determine which MAP to follow. 1009 Go to Page 4. Step 034, Entry Point C. 009 Go to Page 4. Step 034, Entry Point C. 011 Is the SRC 13F3 or 135b? 11 Is the SRC 13F3 or 135b?	4	012
b)7 y N 005 13 10xx or a 5bxx SRC displayed on the screen ron the panel? N 006 1s a 13xx SRC displayed on the panel with a system processor check? Y N 007 1s the failure a suspected tape problem? Y N 007 1s the failure a suspected tape problem? Y N 007 1s the failure a suspected tape problem? Y N 008 Suspect you are in the wrong MAP. Do the following to determine the primary failing device: - Run SYSTEST, select tape, disk, and diskettle (use scratch tape and diskettle). - Run ERAP, analyze recorded failures to determine primary failing device. - Locate the SRC Obtained from above in MAP 113 through 116 to determine which MAP to follow. 009 Go to Page 4, Step 034, Entry Point C. 010 Is the SRC 13F3 or 135b7 Y N 011 1s the SRC 13F3 or 135b7 Y N 32 3 3 4 3 3 3 3 3 3 	a Cxxx SRC displayed on the screen or on the	Is the SRC 135E or 135F?
D5 013 13 18 the SRC 1301, 1356 or 13F57 14 15 15 16 16 14 17 14 18 17 18 17 19 107 15 16 15 16 16 16 17 17 18 17 19 107 19 18 107 15 19 10 108 Suspect you are in the wrong MAP. Do 108 Suspect you are in the wrong MAP. Do 108 Suspect you are in the wrong MAP. Do 109 15 18 18 19 N 108 13 109 113 111 111 12 111 13 18 111 15 12 136 111 15 12 136 131 135 14 135 15 135 16 135 17 13 18 135 19 113	nel? N	Y N I
D5 is to Exor a 5bxx SRC displayed on the screen r on the panel? is the SRC 1301, 1356 or 13F5? N 006 is a 13xx SRC displayed on the panel with a system processor check? Y N 007 is the failure a suspected tape problem? Y N 008 Suspect you are in the wrong MAP. Do the following to determine the primary failing device: - Run ERAP, analyze recorded failures to determine primary failing device. - Locate the SRC obtained from above in MAP 113 through 116 to determine which MAP to follow. O16 010 Suspect you 34, Entry Point C. O16 010 Suspect 135C, 135d, 13F0 or 13F4? Y N Y N 011 is the SRC 13F3 or 135b7 Y N 011 is the SRC 13F3 or 135b7 Y N 013 33 3 32 3 3 3		013
a Taxx or a box or a box of a box o		Is the SRC 1301, 1356 or 13F5?
N 014 006 Is a 13xx SRC displayed on the panel with a system processor check? Y N Go To Map 0101, Entry Point C. 007 Is the failure a suspected tape problem? Y N 015 008 Suspect you are in the wrong MAP. Do the following to determine the primary failing device: - Run SYSTEST, select tape, disk, and determine yrinary failing device. - Beiter 0000. - Run SYSTEST, select tape, disk, and determine which MAP to follow. Ot6 009 Go to Page 4, Step 034, Entry Point C. Ot6 009 Go to Page 4, Step 034, Entry Point C. Ot6 011 Is the SRC 135C, 135d, 13F0 or 13F4? Y N Y N Ot1 Ste SRC 13F3 or 135b? Y N 011 Ste SRC 13F3 or 135b? Y N 017 Bad card: 32 3 G 33 3 33 3 S MAP 9900-2	or on the panel?	
006 Is a 13xx SRC displayed on the panel with a system processor check? Y N 007 Is the failure a suspected tape problem? Y Y N 008 Suspect you are in the wrong MAP. Do the following to determine the primary failing device: - Run ERAP, analyze recorded failures to determine primary failing device. - Run ERAP, analyze recorded failures to determine primary failing device. - Locate the SRC obtained from above in MAP 113 through 116 to determine which MAP to follow. 009 Go to Page 4. Step 034, Entry Point C. 010 Is the SRC 13F3 or 135b7 Y N 11 Is the SRC 13F3 or 135b7 Y Y N 017 Bad card: 32 3 B 3 3 3 3 3 3	Ý N	014
006 caused the original failure. is a 13xx SRC displayed on the panel with a system processor check? Go To Map 0101, Entry Point C. 007 is the failure a suspected tape problem? Y N 007 is the failure a suspected tape problem? OIS Y N 008 Suspect you are in the wrong MAP. Do the following to determine the primary failing device: - Press the Power key (power off). - Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). - Run SYSTEST, select tape, disk, and diskette. - Does the failure repeat (processor check with SRC CFb1)? Y N O16 - Select mode 6. - Press the Power key (power off). - Run SYSTEST, select tape, disk, and diskette. - Locate the SRC obtained from above in MAP 113 through 116 to determine which MAP to follow. O16 009 Go to Page 4, Step 034, Entry Point C. O16 - Select mode 0. 010 Is the SRC 135C, 135d, 13F0 or 13F4? Y N O17 Y N O17 Bad card: A2L2. - Press the failure repeat (processor check wit SRC 131, 356 or 135b? Y N O17 Bad card: A2L2. - Select mode 0. - Select 301, 1356 or 13F5)? Y N O17 Bad card: A2L2. - Select 42375 - Select 42375		SRC not valid. Repeat the procedure that
Is a low SNC displayed on the panel with a system processor check? Y N 007 Is the failure a suspected tape problem? Y N 008 Suspect you are in the wrong MAP. Do the following to determine the primary failing device: - Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). - Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). - Run SYSTEST, solect tape and diskette). - Solect mode 6. - Press the Power key (power off). - Run SYSTEST, Solect app 034, Entry Point C. 010 Is the SRC 135C, 135d, 13F0 or 13F4? Y N 011 Is the SRC 13F3 or 135b? Y N 011 </td <td>006</td> <td>caused the original failure.</td>	006	caused the original failure.
Y N 007 Is the failure a suspected tape problem? Y N 008 Suspect you are in the wrong MAP. Do the following to determine the primary failing device: - Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). - Press the Power key (power off). - Run EAP, analyze recorded failures to determine primary failing device. - Locate the SRC obtained from above in MAP 113 through 116 to determine which MAP to follow. 009 Go to Page 4, Step 034, Entry Point C. 016 010 Is the SRC 135C, 135d, 13F0 or 13F4? Y Y N 017 Bat card: A2L2. 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 101 K 11 Sthe SRC 13F3 or 135b7 Y N 11 Sthe SRC 13F3 or 135b7 Y N 11 Sthe SRC 13F3 or 135b7 Y N	is a 13xx SRC displayed on the panel with a system processor check?	Go To Map 0101, Entry Point C.
007 Is the failure a suspected tape problem? Y N 008 008 Suspect you are in the wrong MAP. Do the following to determine the primary failing device: - Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). - Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). - Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). - Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). - Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). - Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). - Run SYSTEST, select tape, disk, and diskette). - Run SYSTEST, select tape, disk, and diskette. - Locate the SRC obtained from above in MAP to follow. - Press the Power key (power off). - Reinstall A2K2 and A2L2. 009 Go to Page 4, Step 034, Entry Point C. - Press the follow repart (processor check wit SRC 135C, 135d, 13F0 or 13F4? Y N 011 Is the SRC 13F3 or 135b? Y N 011 Is the SRC 13F3 or 135b? Y N 012 30Jun86 PN 2596245 E A G H J K MAP 990n-2	YN	015
007 - Press the Power Key (power off). Is the failure a suspected tape problem? - Press the Power Key (power off). Y N - Press the Power Key (power off). 008 Suspect you are in the wrong MAP. Do the following to determine the primary failing device: - Press the Power key (power off). - Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). - Run ERAP, analyze recorded failures to determine primary failing device. - Locate the SRC obtained from above in MAP 113 through 116 to determine which MAP to follow. 009 Go to Page 4, Step 034, Entry Point C. 010 100 Is the SRC 13F3 or 135b7 Y N Y N 011 Is the SRC 13F3 or 135b7 Y N 013 3 3 3 3 3 3 3 3 3 3 3 3 3 3 MAP 9900-2		- Select mode 6.
Y N Y N Y N O08 Suspect you are in the wrong MAP. Do the following to determine the primary failing device: - Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). - Run ERAP, analyze recorded failures to determine primary failing device. - Locate the SRC obtained from above in MAP 113 through 116 to determine which MAP to follow. 009 Go to Page 4, Step 034, Entry Point C. 010 S the SRC 135C, 135d, 13F0 or 13F47 Y N 011 Is the SRC 13F3 or 135b7 Y N 011 Is the SRC 13F3 or 135b7 Y N 011 Is the SRC 13F3 or 135b7 Y N 012 3 3 3 3 3 3 4 J K 008 Cose the failure repeat (processor check with SRC CFb1)? Y N 016 - Select mode 6. - Select mode 6. - Select mode 0. - Press the Power key (power on). - Select mode 0. - Press the Power key (power on). - Select mode 0. - Press the Power key (power on). - Select mode 0. - Press the Dower key (power on). - Select mode 0. - Press the Dower key (power on). - Select mode 0. - Press the Dower key (power on). - Select mode 0. - Press the Dower key (power on). - Select mode 0. - Press the Dower key (power on). - Select mode 0. - Press the Load key. Does the failure repeat (processor check with SRC 1301, 1356 or 13F5)? Y N 017 Bad card: A2L2. 3 3 3 - C 2842375 PEC 826487 MAP 9900-2	007	- Press the Power key (power off).
008 Suspect you are in the wrong MAP. Do the following to determine the primary failing device: - Select mode 0. - Run SYSTEST, select tape, disk, and diskette (use scrach tape and diskette). - Run ERAP, analyze recorded failures to determine primary failing device. - Locate the SRC obtained from above in MAP 113 through 116 to determine which MAP to follow. 009 Go to Page 4, Step 034, Entry Point C. O10 10 It is the SRC 135C, 135d, 13F0 or 13F4? Y N 011 Is the SRC 13F3 or 135b? Y N O11 2 3 3 G 3 3 3 3 3 3 4 3 4 X MAP 9900-2	Y N	 Remove A2K2 and A2L2. Press the Power key (power on)
008 - Enter 0000. Suspect you are in the wrong MAP. Do the following to determine the primary failing device: - Run SYSTEST, select tape, disk, and diskettel. - Run SYSTEST, select tape and diskettel. - Run ERAP, analyze recorded failures to determine primary failing device. - Locate the SRC obtained from above in MAP 113 through 116 to determine which MAP to follow. 016 009 Go to Page 4, Step 034, Entry Point C. 010 Is the SRC 135C, 135d, 13F0 or 13F4? Y N 011 Is the SRC 13F3 or 135b7 Y N Y N 017 Bad card: A2L2. Y N 30Jun86 PN 2596245 EC 842375 PE S G 3 3 3		- Select mode 0.
Suspect you are in the wrong MAP. Do the following to determine the primary failing device: - Press the Load key. - Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). - Run ERAP, analyze recorded failures to determine primary failing device. - Locate the SRC obtained from above in MAP 113 through 116 to determine which MAP to follow. 009 Go to Page 4, Step 034, Entry Point C. 016 010 Is the SRC 135C, 135d, 13F0 or 13F4? Press the Load key. Y N 011 Is the SRC 13F3 or 135b? Y N 011 Is the SRC 13F3 or 135b? Y N 32 3 G 3 3 3 4 J K MAP 9900-2	008	- Enter 0000.
$\begin{bmatrix} \text{the following to determine the primary failing device:} \\ - \text{Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette).} \\ - \text{Run ERAP, analyze recorded failures to determine primary failing device.} \\ - \text{Locate the SR cotained from above in MAP 113 through 116 to determine which MAP to follow.} \\ 009 \\ \text{Go to Page 4, Step 034, Entry Point C.} \\ 010 \\ \text{Is the SRC 135C, 135d, 13F0 or 13F4?} \\ Y \\ $	Suspect you are in the wrong MAP. Do	- Press the Load key.
I Run SYSTEST, select tape, disk, and diskette (use scratch tape and diskette). Run ERAP, analyze recorded failures to determine primary failing device. Locate the SRC obtained from above in MAP 113 through 116 to determine which MAP to follow. 009 Go to Page 4, Step 034, Entry Point C. 010 Is the SRC 135C, 135d, 13F0 or 13F4? Y N 011 Is the SRC 13F3 or 135b? Y N 011 Is the SRC 13F3 or 135b? Y N 32 3 4 3 3 3 3 3 3 3 3 3 3 3 3 4 3 3 4 	failing device:	SBC CEb1)?
diskette (use scratch tape and diskette). - Run ERAP, analyze recorded failures to determine primary failing device. - Locate the SRC obtained from above in MAP 113 through 116 to determine which MAP to follow. 009 Go to Page 4, Step 034, Entry Point C. 010 Is the SRC 135C, 135d, 13F0 or 13F4? Y N 011 Is the SRC 13F3 or 135b7 Y N $\begin{array}{c} 011\\$	- Run SYSTEST, select tape, disk, and	Y N
 - Run ERAP, analyze recorded failures to determine primary failing device. - Locate the SRC obtained from above in MAP 113 through 116 to determine which MAP to follow. 009 Go to Page 4, Step 034, Entry Point C. 000 Go to Page 4, Step 034, Entry Point C. 010 Is the SRC 135C, 135d, 13F0 or 13F4? Y N 011 Is the SRC 13F3 or 135b? Y N 011 Is the SRC 13F3 or 135b? Y N 31 3 3 33 3 33 3 33 3 34 4 MAP 9900-2 	diskette (use scratch tape and diskette).	
a determine primary failing device. - Select mode 6. - Locate the SRC obtained from above in MAP 113 through 116 to determine which MAP to follow. - Press the Power key (power off). 009 Go to Page 4, Step 034, Entry Point C. - Select mode 0. 010 - Enter 0000. - Press the Load key. 010 - Press the SRC 135C, 135d, 13F0 or 13F47 - Press the Load key. Y N 011 Is the SRC 13F3 or 135b7 Y N 011 Is the SRC 13F3 or 135b7 Y N 3 3 3 - Guun86 PN 2596245 E F G H J K MAP 9900-2	- Run ERAP, analyze recorded failures to	016
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	determine primary failing device.	- Select mode 6.
which MAP to follow. - Press the Power key (power on). 009 Go to Page 4, Step 034, Entry Point C. 010 - Press the Load key. 010 - Press the failure repeat (processor check with SRC 135C, 135d, 13F0 or 13F4? Y N 011 Is the SRC 13F3 or 135b? Y N 011 - Other set of the set of th	MAP 113 through 116 to determine	- Reinstall A2K2 and A2L2.
Image: state in the state	which MAP to follow.	- Press the Power key (power on).
009 Go to Page 4, Step 034, Entry Point C. 010 Press the Load key. 010 Does the failure repeat (processor check with SRC 135C, 135d, 13F0 or 13F4? Y N 011 1s the SRC 13F3 or 135b? Y N 011 Is the SRC 13F3 or 135b? Y N 017 Bad card: A2L2. 3 3 3 3 B F G H J K		- Select mode 0.
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	009 Go to Page 4, Step 034, Entry Boint C	- Enter 0000.
010 Is the SRC 135C, 135d, 13F0 or 13F4? Y N 011 011 Is the SRC 13F3 or 135b? Y N 017 Bad card: A2L2. Y N Image: SRC 13F3 or 135b? Y N Image: SRC 13F3 or 13F3 or 135b? Y N Image: SRC 13F3 or 13F3 or 135b? Y N Image: SRC 13F3 or 13F3 or 135b? Y N Image: SRC 13F3 or 13F3 or 135b? Y N Image: SRC 13F3 or 13	do to rage 4, otep 034, Entry Point C.	Does the failure repeat (processor check with
Is the SRC 135C, 135d, 13F0 or 13F4? Y N 011 Is the SRC 13F3 or 135b? Y N 3 3 3 E F G Y N 1 V N 017 Bad card: A2L2. Y N 3 3 3 H J K N N 017 Bad card: A2L2. Y N 1 State SRC 13F3 or 135b? Y N 1 State SRC 13F3 or 135b? 1 State SRC 13F3 or 13F3 or 135b? 1 State SRC 13F3 or	010	SRC 1301, 1356 or 13F5)?
Y N 017 Bad card: A2L2. Y N I I <td>Is the SRC 135C, 135d, 13F0 or 13F4?</td> <td>Y N</td>	Is the SRC 135C, 135d, 13F0 or 13F4?	Y N
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Y N I	017
Is the SRC 13F3 or 135b? A2L2. Y N I A2L2. Y N I SOJun86 B F G A2L2.	011	Bad card:
Y N I I I I 30Jun86 PN 2596245 EC 842375 PEC 826487 B I B I I I<	Is the SRC 13F3 or 135b?	A2L2.
30Jun86 PN 2596245 30Jun86 PN 2596245 EC 842375 PEC 826487 B H J K MAP 9900-2		
3 3 3 E F G 3 3 3 H J K 30Jun86 PN 2596245 B 2 3 3 H J K B 2 5 9 6 2 4 5 B 2 5 9 6 2 4 5		
I I I I 3 3 3 3 E F G H J		30Jun86 PN 2596245
3 3 3 E F G H J K MAP 9900-2		EC 842375 PEC 826487
	3 3 3 · D E F G	3 3 3 H J K MAP 9900-2

.

ΕΗJΚ	Entry MAP	D) Ę	LM		MAP 9900-3
	5360 Systems Unit	2	2 2	1		
	PAGE 3 OF 12					
018				024		
Bad car	d:			Bad card:		
A2K2				A2J2.		
or				1		
AZJZ.				U25 - Select mode (6	
019				- Press the Pov	u. ver kev (power c	off)
Bad card:				- Swap A2K2	(removed in pre	ceding step) with
A2K2				A2E2.		
or				- Install both ca	ards.	
A2J2.				- Press the Pov	ver key (power c	on).
020				- Select mode (0.	
Is the SRC 1	35E?			- Press the Loa	nd kev.	
ΥN				Does the failur	re repeat (SRC	13F3 or 135b)?
				ΥN		
021						
- Configur	e the system.			026 Rad cardi		
Bad card:	nicrocode.			A2K2 (now i	n A2F2)	
A2J2				or		
or				A2L2.		
A2K2.						
				027		
Bad card				Bad card:		
A2J2				A292.		
or			02	28		
A2K2			Ba	ad card:		
or			A	2J2.		
AZLZ.	rocode	l	20			
noidu me		U I:	s th	e SRC 1b0C?		
023		Ŷ	N			
- Select mode 6).					
- Press the Pow	ver key (power off).		03	30 		
- Remove AZKZ	ver kev (power op)		ls V	this a solid fail	ure?	
- Select mode 0).					
- Enter 0000.				031		
- Press the Load	d key.			Intermittent fail	ure.	
Does IPL fail w	vith SRC CFb1?			Go To Map 03	99, Entry Point	Α.
	•				20 10-00	
		. I			SUJUNSO	FN 2596245
1		1	4		EC 842375	PEC 826487
LM		Ñ	ÌŻ			MAP 9900-3

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Р
3
               Entry MAP
               5360 Systems Unit
               PAGE 4 OF 12
032
Is the SRC 1b7C, 1b7d or 1b4F?
Y N
  033
  Is the SRC 1bCA, 1bA0, 1bd6, 1bd7, 1b35, 1b39
  or 5bd3?
   YN
     034
     (Entry Point C)
     Is the system available for dedicated
     maintenance?
     Y N
       035
       Is the SRC 1b54 through 1bF0?
        Y N
          036
          Do not continue testing until a dedicated
          system is available. The SRC indicates that
          the problem is in the adapter. Verify the
          adapter before testing the 8809 tape
          drives.
          When dedicated system time is available,
          Go to Step 034, Entry Point C.
       037
       Is the customer using the 8809 tape drive?
        Y N
100
  1
0 5 5 5
R S T U
```

30Jun86 PN 2596245 EC 842375 PEC 826487 MAP 9900-4

S T U 4 4 4

Entry MAP

5360 Systems Unit

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038

Go to 8809 MIM Start section (see note 1).

039

Additional testing cannot continue until the tape drive(s) are available (On a two drive system both drives must be available). When the tape drive(s) are available,

Go to Page 4, Step 034, Entry Point C.

040

(Entry Point B) Did you run the tape MDI following the instructions before?

ΥN

041

Run tape MDI (see note 2).

- Select mode 1.
- Press the System Reset key.
- Select mode E.
- Enter FF00.
- Insert DIAG21/41 diskette.
- Press the Load key.
- Repeat MDI MAPs.
- From the second menu select 8809 Tape Drive 1.

- Follow the MDI instructions.

(Step 041 continues)

Note 1: For additional testing of the tape attachment you must have a dedicated system to run the 8809 tape MDIs, but, the 8809 diagnostic link series (DLS) tests will run in concurrent mode while the customer is using the system. Go to 8809 MIM Start section and run the DLS. If the DLS fails to isolate the problem schedule dedicated system time and return to this MAP at Entry Point B, step 041 on page 5 to continue testing the attachment in dedicated mode.

 30Jun86
 PN 2596245

 EC 842375
 PEC 826487

 MAP 9900-5

۷ 5

Entry MAP

5360 Systems Unit

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(Step 041 continued)

MAP 9900-6

Note 2: The MDIs need a dedicated system. The 8809 tape MDIs will test the 8809 attachment and interface cables to the 8809 tape drives. Because the attachment and cables are common to both drives (if installed) the MDIs run only with tape drive 1.

If the MDIs do not isolate the failure, you will be instructed to go to the 8809 tape drive MIM Start pages.

042

The tape MDI failed to locate the problem. Did a failure occur during MDI 61xx? Y N

043 Did a failure occur during MDI 65xx? Y N

044 Did a failure occur during MDI Mb101, Mb102 or Mb103? Y N 045 The failure may be associated with the 8809 tape drive. Go to 8809 tape drive MIM, Start section. 046 The failure is associated with the tape attachment card. Was card A-A2L2 replaced before? Y N 047 Bad card: A2L2.

> 30Jun86 PN 2596245 EC 842375 PEC 826487 MAP 9900-6

977 WXY

X Y **Entry MAP** 6 6

5360 Systems Unit

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048

- Measure the A-A2 board voltages at the tape attachment card pins in table 3.

 Voltage	Tolera High	ance Low	Probe Points
+5.0 	+5.5	+4.55 	A2L2D03, J03
Ground			A2L2D08, J08

Table 3

Are all voltages in tolerance on each pin? Y $\,N$

049

- Select mode 6.
- Press the Power key (power off).
- Remove the A-A2L2 card.
- Press the Power key (power on).
- Measure the voltages from table 3 for the level that failed in the preceding step.

Is the voltage now in tolerance?

ΥN

050

System power problem. Go To Map 0599, Entry Point A.

051

The tape attachment card is causing the failing voltage. Bad card:

A2L2.

052

Bad card: A2L2.

053

The failure is associated with the tape DSA card. Was the DSA A-A2K2 card replaced before?

ľ	N
1	Q
8 Z	Ă

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	MAP 9900-7

ţ.

MAP 9900-8

Z A Entry MAP A 5360 Systems Unit PAGE 8 OF 12 054

Go To Map 9905, Entry Point A.

055

- Measure the A-A2 board voltages at the DSA card A2K2 listed in table 2.

Table 2				
 Voltage	Toler High	ance Low		
+1.7	+1.73 	+1.67 	A2K2B09, G09,M09, S09	
+5.0 	+ +5.5 	+4.5 	A2K2D03, J03,P03 U03	
Ground	 	 	A2K2D08, J08,P03 U03	

Are all voltages in tolerance on each pin?

ΥN

056

- Select mode 6.

- Press the Power key (power off).
- Remove the A-A2K2 card.

- Press the Power key (power on).

- Measure the voltages from table 2 for the level that failed in the preceding step.
- Is the voltage now in tolerance?

ΥN

057

System power problem. Go To Map 0599, Entry Point A.

. 058

The DSA A2K2 card is probably causing the failing voltage.

Go To Map 9905, Entry Point A.

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1-

9 A B



060

The failure is probably associated with the Data Storage controller.

Was the DSC A-A2J2 card replaced before?



062

Ν

0 A D

.

- Measure the A-A2 board voltages at the A2J2 (DSC) card pins indicated in table 1.

Table 1				
 Voltage	Tolera High	ance Low	 	
+1.7	+1.73 	+1.6 	A2J2B05, G05,G09, M05	
+5.0 	+5.5 	+ +4.55 	A2J2D03, J03,U03	
-5.0	-5.5	-4.55	A2J2S06	
+8.5	+9.35	+7.68	A2J2M11	
Ground	 	 	A2J2D08, J08,P08, U08	

Are all voltages in tolerance on each pin listed?

•

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30Jun86 PN 2596245 EC 842375 PEC 826487 MAP 9900-9

0 R A A 4 4 C D - 9 9 **Entry MAP** 5360 Systems Unit PAGE 10 OF 12 **063** - Select mode 6. - Press the Power key (power off). - Remove the DSC A-A2J2 card. - Press the Power key (power on). - Measure the voltages from table 1 for the failed level. Is the voltage now in tolerance? ΥN 064 System Power problem. Go To Map 0599, Entry Point A. 065 The DSC card is probably causing the failing voltage. Bad card: A2J2. 066 Bad card: A2J2. 067 - Clean head. Reference 8809 MIM Carr 1 (tape path cleaning procedure). - Check tape. Reference 8809 MIM, Start section to determine how to identify damaged tape. Creases. Stretch marks. .Curled edges. - Repeat the procedure that caused the original SRC. If problem remains, Go to Page 4, Step 034, Entry Point C.

068

- Check for 8809 Drive Not Ready.

- Check for loose cables between system and tape drive.

Go to Page 4, Step 035, Entry Point C.

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 MAP 9900-10



12 A E 30Jun86 PN 2596245 EC 842375 PEC 826487 MAP 9900-11



Go to 8809 MIM Start section.

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PEC 826487

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EC 842375

MAP 9900-12

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Tape Attachment

5360 Systems Unit

PAGE 1 OF 4

ENTRY POINTS

FROM	ENTER	THIS MAP	
MAP NUMBER	ENTRY POINT	PAGE NUMBER	STEP NUMBER
B101	A	1	001
B103	Â	1	001

EXIT POINTS

EXIT THIS MAP		то	
PAGE NUMBER	STEP NUMBER	MAP NUMBER	ENTRY POINT
4	017	9910	Α

MAP DESCRIPTION: - Swap A2K2 and A2E2 DSA cards.

FRUs PARTIALLY TESTED: A-A2L2, A-A2K2, A-A2E2

Did you IPL from the disk during this failure before?

ΥN

001

(Entry Point A)

002

- Select mode 1.
- Press the System Reset key.
- Select mode 6.
- Press the Power key (power off).
- Swap the A2K2 and A2E2 cards.
- Reinstall the TCC on both cards.
- Press the Power key (power on).
- Go to Page 2, Step 007, Entry Point B.

003

Did the SSP screen appear during the preceding IPL if wraps wer bypassed (FF00)? If wraps were not bypassed or if you do not know, answer no.



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ţ-

Swap DSA cards

5360 Systems Unit

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004

A B 1 1

- Select mode 1.
- Press the System Reset key.
- Select mode 6.
- Press the Power key (power off).
- Swap the A2K2 and A2E2 cards.
- Reinstall the TCC on both cards.
- Press the Power key (power on).
- Go to Step 007, Entry Point B.

005

- Select mode 1.
- Press the System Reset key.
- Select mode 6.
- Press the Power key (power off).
- Swap the A2K2 and A2E2 cards.
- Reinstall the TCC on both cards.
- Press the Power key (power on).
- Select mode 0.
- Enter FF00.
- Press the Load key.

Does the SSP screen appear?

ΥN

006

Bad card:

- Replace the tape DSA card now in the A2E2 location.

. 007

(Entry Point B)

- Insert DIAG21/41.
- Select mode E.
- Enter FF00.
- Press the Load key.

Does the DCP screen appear?

ΥN

3 C 008

Bad card:

- Replace the tape DSA card now in the A-A2E2 location.

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5

MAP 9905-2

Swap DSA cards

5360 Systems Unit

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009

С 2

- Run the tape MDI from DIAG22/42. Did the tape MDI run without errors?

Υ	Ν
L	
	010
1	010

Is the failure the same as before entering this MAP (see note 1)? Y N

011

- Select mode 6.

- Press the Power key (power off).
- Return the DSA cards A2E2 and A2K2 to their original locations.
- Reinstall the TCC's on both cards.
- Press the Power key (power on).
- Select mode E.
- Enter FF00.
- Press the Load key.
- Run the tape MDIs from DIAG22/42.

Is the failure the same as before entering this MAP (see note 1)?

ΥN

012 Is the failure the same as in the preceding step? Y N

013

Suspect a card seating problem.
Reseat A-A2K2, L2 and run the tape MDI.

•

014

4 4 4 D E F Bad card:Replace the disk DSA card A-A2E2 and the tape DSA card A-A2K2.

.

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MAP 9905-3

Note 1: After swapping the A2E2 and A2K2 cards, does the failure appear to be the same as before swapping the cards? Example: Did the MDI specify probing the same pins or indicate the

same FRU call out or Go To statement?

 D
 E
 F
 Swap DSA cards

 3
 3
 3
 5360 Systems Unit

 PAGE
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 4

 015
 Bad card:

 Bad card:
 Replace the tape DSA card A-A2K2.

 016
 Replace the A-A2L2 tape attachment card.

 Run the tape MDI from DIAG22/42.
 Did the tape MDI run without errors?

 Y
 N
 017

 Go To Map 9910, Entry Point A.
 Content A

018

Replacing the A-A2L2 card fixed the problem.

019

Bad card:

- Replace the tape DSA card now plugged into the A-A2E2 location. Although the card appears to work as the disk/diskette DSA, this card probably has a failing address line not used by a disk/diskette DSA.

MAP 9905-4

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Tape Attachment

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ENTRY POINTS

FROM	ENTER	THIS MAP	
MAP	ENTRY	PAGE	STEP
NUMBER	POINT	NUMBER	NUMBER
B 104	D	4	010
0500	D	4	010
9905	A	1	001

001

(Entry Point A)

This MAP will verify the cables between the 01A-A2 board and the system cable tower and the cables between the tape attachment and the tape drive.

This diagnostic routine will test all lines to and from the tape drive, with limited use of a probe will identify which line if any is open or short in the interface cables.

- Press the system Power key (power off).
- Power off tape drive(s).
- Disconnect the two interface cables (#1 and #2) at the tape drive cable tower located at the rear of the tape drive.
- Turn one connector 180 degrees and plug the two cable connectors into one another.
- Tighten the four thumb screws to ensure connection.
- Press the system Power key (power on).
- IPL DIAG21/41 diskette (mode E, FF00).
- Select exercisers.
- From the second menu, select 8809 tape 1.
- From the third menu, select special requirement diagnostic.
- Select '69-cable wrap' test.
- Select 'Run Routine'.

Does the test display an Isolation code of 0000?

EXIT POINTS

EXIT TH	IS MAP	то	
PAGE STEP NUMBER NUMBER		MAP NUMBER	ENTRY POINT
4	011	9900	В

MAP DESCRIPTION: Cable wrap test procedure

FRUs PARTIALLY TESTED: A-A2L2 A-A2U4, A-A2U5 cables I/O Control cables

The tape cable wrap test will normally be done while following the 8809 tape drive diagnostics (MAPs). The cable wrap test procedure is included here for free-lance trouble shooting.

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52 AB

Cable Wrap

5360 Systems Unit

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002

В 1

(Entry Point B)

One or more lines failed cable wrap test.

- Use the Isolation code or wrap line failure and table

1 to identify which return line is failing.

Table 1

 so] a	ation			·
Code	Driven	line	Return line	ļ
 *::::::	Cable	 #2		
****	+Tape DBO	bit	0 U4D02 Tape wrap line 4	 U5B02
****	+Tape DBO	bit	1 U4B03 Tape wrap line 2	U5D03
* * * * * * * * * *	+Tape DBO	bit	2 U4D03 Tape wrap line 5	U5B03
16001	+lape DBO	bit	3104B04 lape wrap line 3	
6905	+Tape DBO		5/114B06/+Check end	1058041
6906	+Tape DB0	bit	6 U4D06 +Normal end	U5B06
6907	+Tape DBO	bit	7 U4B07 +Tag valid	U5D07
	+Tape DBO	bit	P U4B02 +Tape wrap line 1	U5D02
6909 	+Sync out	# 1	U4D07 +Select active	U5B07
 6910		# I		
6911	+Select h	ble	UISD10 Tape DBL bit 1	U4DU9 IIL/B10
6912	+Tag gate		U5B10 Tape DBI bit 2	U4D10
6913	+Tag bus	bit	5 U5D11 Tape DBI bit 3	U4B11
6914	+Tag bus	bit	0 U5B11 Tape DBI bit 4	U4D11
6915	+Tag bus	bit	7 U5D12 Tape DBI bit 5	U4B12
10910 16917	+lag bus	DIT bit	4 U5B 2 lape DB bit 6	U4D12 III.D12
6918	+Recycle	DIL	USD09 Tape DBI bit P	114B09
6919	+Tag bus	bit	6 U5B13 Sync in	U4D13
6920	Many con	trol	line failures	
	or cable:	s plu	ugged wrong	
	no tariu			I I

**** Denotes lines not tested by cable wrap routine.

#Indicates lines not tested by Routine 69. They must be probed.

(Step 002 continues)

30Jun86 PN 2596244 EC 842375 PEC 826487 MAP 9910-2

Cable Wrap

5360 Systems Unit

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(Step 002 continued) - Select 'Exercisers'.

- Select '8809 Tape 1.'.
- Select 'Special Requirement Diagnostic'.
- Select routine '69-Cable Wrap'.
- Select option 1 'Run Routine'.
- Put the probe on the failing return line as identified in table 1 using the Isolation code or information obtained from previous probing.
- Observe the probe while pressing the Enter key (run Cable Wrap routine).

Does the return line pulse (up light flash) each time the Enter key is pressed?

ΥN

003

- Probe the driven line associated with the failing, return line as indicated in table 1.

Does the driven line pulse (up light flashes) each time the Enter key is pressed?

ΥN

004 Bad card:

A2L2

005

(Entry Point C)

- Reseat A2U4 and A2U5 at the A2 board.
- Reseat the tape cables in the system cable tower.
- Reseat and secure the tape interface cables at the system cable tower.
- Repeat the cable wrap test.
- Select exerciser.
- From the second menu, select 8809 tape 1.
- From the third menu, select special requirement diagnostic.
- Select '69-Cable Wrap'.

- Select (Run Routine).

ĎΕ

```
Does the test display an Isolation code of 0000? Y \,N
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MAP 9910-3

Ö06

Е

- Record the Isolation code.
- Swap the two tape interface cables at the system cable tower by plugging cable #1 into socket #2 and cable #2 into socket #1.
- Repeat the cable wrap test.
- Select exerciser.
- From the second menu, select 8809 tape 1.
- From the third menu, select special requirement diagnostic.
- Select Routine '69-Cable Wrap'.
- Select option 1, (Run Routine).

Is the failure the same as in the preceding step? Y $\,N$

007

One of the two interface cables between the system cable tower and the tape drive is failing.

- Use the TU failure data and table 1 to determine which cable lines are affected.
- Use the CE meter to check the affected cable line for open or short.
- If you cannot identify which cable is failing using the CE meter, disconnect one cable from the tape drive and move the disconnected end to the system cable tower.
- Connect both ends of this cable to the tape drive cable connectors in the system cable tower.
- Repeat cable wrap test.
- Select exerciser.
- From the second menu, select 8809 tape 1.
- From the third menu, select special requirement diagnostic.
- Select '69-Cable wrap'.
- Select 'Run Routine'.

Does the test display an Isolation code of 0000 (no errors)?

Ν

008

The cable that is now looped to the system cable tower is bad.

- Replace the interface cable.

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Ğ		MAP 9910-3

D F G 3 3 3

Cable Wrap

5360 Systems Unit

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<u>009</u>

The cable that is now looped to the system is good. The other tape interface cable is bad. - Replace the interface cable.

010

(Entry Point D)

Have the tape MDIs been run for this failure? Y N

011

For additional testing you must have a dedicated system. Schedule dedicated system time. Go To Map 9900, Entry Point B.

012

One of the two ribbon cables between the A-A2 board and the system cable tower is failing.

- Use the isolation code from the cable wrap test and table 1 on page 2 to determine which line is affected.
- Use the CE meter to check the affected cable line for open or short.
- Repair or replace bad cable.
- Reference system MIM 99-210 for cable tower pin locations.

013

- Probe the following pins one at a time while observing the probe when the Enter key is pressed (Running Cable Wrap routine):

A-A2U5B02 U5B03

U5D02 U5D03 U5D04.

Does the Up light flash each time the Enter key is pressed for all pins?

014

J

- Record the failing probe point.
- Swap the two tape interface cables at the system cable tower by plugging cable #1 into socket #2 and cable #2 into socket #1.
- Probe the following pins one at a time while observing the probe when the Enter key is pressed (Running Cable Wrap test):

A-A2U5B02
U5B03
U5D02
U5D03
U5D04.

Does the same line fail that failed before swapping the cables?

ΥN

015

One of the two interface cables between the system cable tower and the tape drive is failing.

- Use table 1 to determine which cable lines are affected.
- Use the CE meter to check the affected cable line for open or short.
- If you cannot identify which cable is failing using the CE meter, disconnect one cable from the tape drive and move the the disconnected end to the system cable tower.
- Connect both ends of this cable to the tape drive cable connectors in the system cable tower.
- Repeat cable wrap test while probing the failing line(s) and pressing the Enter key.

Does the Up light flash each time the Enter key is pressed?

YN

016

The cable that is now looped back to the system cable tower is bad.

- Replace the interface cable.

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	MAP 9910-4

5 H J

N

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