



B  
1

4955 PROCESSING UNIT (4)  
PAPER ONLY MAP  
PAGE 2 OF 18

MAP 2573-2

002  
(ENTRY POINT E)

SEE MLD BINDER.  
SEE ALD PA100.  
SEE ALD PA105.  
THE CORRECT PROCESSING UNIT ALD A5XXX.  
THE TABLE BELOW IS A REFERENCE ONLY.

PROCESSING UNIT MODEL	DATA CARD	ADDRESS CARD	ROS CARD
MODEL A	J2	K2	L2
MODEL B	D2	E2	F2
MODEL C	L2	M2	N2
MODEL D	H2	J2	K2
MODEL E	H2	J2	K2

(XX) = CABLE OFF		
* = JUMPER ON		
C1	C2	(C3)

RECORD THE CONSOLE DATA AND THE STATUS OF LOAD INDICATOR.

DISCONNECT CONSOLE CABLE 'C3'  
FROM THE ROS TOP CARD CONNECTOR 'W'

IS THE CONSOLE SILENT ?

N

003  
DISCONNECT CONSOLE CABLE 'C2'  
FROM THE ADDRESS TOP CARD CONNECTOR 'WL'

(XX) = CABLE OFF		
* = JUMPER ON		
C1	(C2)	(C3)

IS THE CONSOLE SILENT ?

N

004  
DISCONNECT CONSOLE CABLE 'C1'  
FROM THE DATA TOP CARD CONNECTOR 'X'

(XX) = CABLE OFF		
* = JUMPER ON		
(C1)	(C2)	(C3)

IS THE CONSOLE SILENT ?

N

005  
INSPECT THE CONSOLE FOR GROUND SHORT TO AUDIBLE DEVICE C3-B11.

C1	C2	(C3)	N
(C1)	(C2)	(C3)	N

GO TO MAP 1071, ENTRY POINT A.

006

CABLE C1 TO THE AUDIBLE DEVICE  
INSPECT THE CONSOLE FOR A SHORT IN THESE AREAS:

C1	C2	(C3)	N
(C1)	(C2)	(C3)	N

1. THE DATA INDICATOR THAT WAS ACTIVE --- TO --- THE AUDIBLE DEVICE.  
2. COLUMN 1 -- TO -- THE AUDIBLE DEVICE.  
3. COLUMN 7 -- TO -- THE AUDIBLE DEVICE.  
GO TO MAP 1071, ENTRY POINT A.

007

CONSOLE C2 TO THE AUDIBLE DEVICE  
INSPECT THE CONSOLE FOR A SHORT IN THESE AREAS:

C1	C2	(C3)	N
C1	(C2)	(C3)	Y

1. THE LEVEL INDICATOR THAT WAS ACTIVE --- TO --- THE AUDIBLE DEVICE.  
2. COLUMN 2 THROUGH 6 -- TO -- THE AUDIBLE DEVICE.  
GO TO MAP 1071, ENTRY POINT A.

2  
C

2

008  
CONNECT A JUMPER FROM THE AUDIBLE DEVICE ON  
CABLE CONNECTOR C3-B11  
TO  
THE ROS TOP CARD CONNECTOR 'W' PIN '31'.

(XX) = CABLE OFF  
\* = JUMPER ON  
C1 C2 \*(C3)

SEE MLD BINDER.  
SEE ALD PA100.  
SEE ALD PA105.  
SEE THE CORRECT PROCESSING UNIT ALD A5XXX.  
THE TABLE BELOW IS A REFERENCE ONLY.

PROCESSING UNIT MODEL	DATA CARD	ADDRESS CARD	ROS CARD
MODEL A	J2	K2	L2
MODEL B	D2	M2	N2
MODEL C	H2	J2	K2
MODEL D	H2	J2	K2
MODEL E	H2	J2	K2
MODEL F	H2	J2	K2

IS THE CONSOLE SILENT ?

Y  
N

009  
DISCONNECT CONSOLE CABLE 'C1'  
FROM  
THE DATA TOP CARD CONNECTOR 'X'

(XX) = CABLE OFF  
\* = JUMPER ON  
(C1) C2 \*(C3)

IS THE CONSOLE SILENT ?

Y  
N

010  
DISCONNECT CONSOLE CABLE 'C2'  
FROM  
THE ADDRESS TOP CARD CONNECTOR 'WL'

(XX) = CABLE OFF  
\* = JUMPER ON  
(C1) (C2) \*(C3)

IS THE CONSOLE SILENT ?

Y  
N

011  
GO TO MAP 2570, ENTRY POINT D.

012

C2

INSPECT THE CONSOLE FOR A SHORT IN THESE AREAS:

C1 C2 \*(C3) Y  
(C1) C2 \*(C3) N  
(C1) (C2) \*(C3) Y

1. THE LEVEL INDICATOR THAT WAS ACTIVE  
--- TO --- COLUMN 2 THROUGH 6.  
GO TO MAP 1071, ENTRY POINT A.

013  
DISCONNECT CONSOLE CABLE 'C2'  
FROM  
THE ADDRESS TOP CARD CONNECTOR 'WL'

(XX) = CABLE OFF  
\* = JUMPER ON  
C1 (C2) \*(C3)

CONNECT CONSOLE CABLE 'C1'  
TO  
THE DATA TOP CARD CONNECTOR 'X'

SEE MLD BINDER.  
SEE ALD PA100.  
SEE ALD PA105.  
SEE THE CORRECT PROCESSING UNIT ALD A5XXX.  
THE TABLE BELOW IS A REFERENCE ONLY.

PROCESSING UNIT MODEL	DATA CARD	ADDRESS CARD	ROS CARD
MODEL A	J2	K2	L2
MODEL B	D2	M2	N2
MODEL C	L2	M2	N2
MODEL D	H2	J2	K2
MODEL E	H2	J2	K2
MODEL F	H2	J2	K2

IS THE CONSOLE SILENT ?

Y  
N

4 4 4  
D E F

014

C1

INSPECT THE CONSOLE FOR A SHORT IN THESE AREAS:

- 1. THE DATA INDICATOR THAT IS ACTIVE --- TO --- COLUMN 1.
  - 2. THE DATA INDICATOR THAT IS ACTIVE --- TO --- COLUMN 7.
- GO TO MAP 1071, ENTRY POINT A.

C1	C2	(C3)	Y
(C1)	C2	*(C3)	N
C1	(C2)	*(C3)	N

015

C1-C2

INSPECT THE CONSOLE FOR A SHORT IN THESE AREAS:

- 1. THE LEVEL INDICATOR THAT WAS ACTIVE --- TO --- COLUMN 1.
  - 1. THE LEVEL INDICATOR THAT WAS ACTIVE --- TO --- COLUMN 7.
  - 2. THE DATA INDICATOR THAT IS ACTIVE --- TO --- COLUMN 2 THROUGH 6.
- GO TO MAP 1071, ENTRY POINT A.

C1	C2	(C3)	Y
(C1)	C2	*(C3)	N
C1	(C2)	*(C3)	Y

016

DISCONNECT THE JUMPER FROM W-31 AND C3-B11.

DISCONNECT CONSOLE CABLE 'C1'

FROM THE DATA TOP CARD CONNECTOR 'X'

CONNECT CONSOLE CABLE 'C3'

TO THE ROS TOP CARD CONNECTOR 'W'

IS THE CONSOLE SILENT ?

Y N

(XX)	=	CABLE OFF
*	=	JUMPER ON
(C1)	C2	C3

017

DISCONNECT CONSOLE CABLE 'C2'

FROM THE ADDRESS TOP CARD CONNECTOR 'WL'

IS THE CONSOLE SILENT ?

Y N

018

WAS CONSOLE DATA 'FFFF' ?

Y N

019

WAS THE CONSOLE DATA '0000' ?

Y N

020

WAS THE CONSOLE DATA '00E5' AND THE LOAD LAMP ON ?

Y N

C1	C2	(C3)	Y
(C1)	C2	*(C3)	N
(C1)	(C2)	C3	N

M  
4

4955 PROCESSING UNIT (4)  
PAPER ONLY MAP  
PAGE 5 OF 18

MAP 2573-5

021  
SEE THE DATA INDICATORS.

DATA
FFF0
FFF4
FFF8
FFFC

DID THE DATA INDICATORS EQUAL ANY NUMBER ABOVE?  
Y N

022  
SEE THE DATA INDICATORS.

DATA
FFF1
FFF5
FFF9
FFFD

DID THE DATA INDICATORS EQUAL ANY NUMBER ABOVE?  
Y N

023  
SEE THE DATA INDICATORS.

DATA
FFF2
FFF6
FFFA
FFFE

DID THE DATA INDICATORS EQUAL ANY NUMBER ABOVE?  
Y N

024  
ROW D IS A SHORT CIRCUIT TO ONE OF THE COLUMN(S).

(ENTRY POINT B)

DATA
FFF0
FFF1
FFF2
FFF3

DID THE DATA INDICATORS EQUAL ANY NUMBER ABOVE?  
Y N

025  
SEE THE DATA INDICATORS.

DATA
FFF4
FFF5
FFF6
FFF7

DID THE DATA INDICATORS EQUAL ANY NUMBER ABOVE?  
Y N

6 6 6 6 6  
N P Q R S T

15JAN81 PN1635031  
EC869422 PEC375475  
MAP 2573-5

PAPER ONLY MAP  
PAGE 6 OF 18

026  
SEE THE DATA INDICATORS.

```
-----  
| DATA |  
|-----|  
| FFF8 |  
| FFF9 |  
| FFFA |  
| FFFB |  
|-----|
```

DO THE DATA INDICATORS EQUAL ANY  
NUMBER ABOVE?  
Y  
N

027  
ONE OF THE ROWS ALREADY DETERMINED  
IS A SHORT CIRCUIT TO COLUMN 11.  
GO TO MAP 1071, ENTRY POINT A.

028  
ONE OF THE ROWS ALREADY DETERMINED  
IS A SHORT CIRCUIT TO COLUMN 10.  
GO TO MAP 1071, ENTRY POINT A.

029  
ONE OF THE ROWS ALREADY DETERMINED IS  
A SHORT CIRCUIT TO COLUMN 9.  
GO TO MAP 1071, ENTRY POINT A.

030  
ONE OF THE ROWS ALREADY DETERMINED IS A  
SHORT CIRCUIT TO COLUMN 8.  
GO TO MAP 1071, ENTRY POINT A.

031  
ROW C IS A SHORT CIRCUIT TO ONE OF THE  
COLUMN(S).  
GO TO PAGE 5, STEP 024,  
ENTRY POINT B.

032  
ROW B IS A SHORT CIRCUIT TO ONE OF THE  
COLUMN(S).  
GO TO PAGE 5, STEP 024, ENTRY POINT B.

033  
ROW A IS A SHORT CIRCUIT TO ONE OF THE  
COLUMN(S).  
GO TO PAGE 5, STEP 024, ENTRY POINT B.

034  
 INSPECT THE CONSOLE FOR A SHORT IN THESE AREAS:

1. COLUMN 0 --- TO --- ROW D.
  2. COLUMN 0 --- TO --- INDICATOR THAT IS ON, CARRIED BY C3.
  3. COLUMN 0 --- TO --- THE AUDIBLE DEVICE.
  4. COLUMN 0 --- TO --- GROUND.
- GO TO MAP 1071, ENTRY POINT A.  
 IF THE CONSOLE IS GOOD,  
 GO TO MAP 2570, ENTRY POINT D.

035  
 INSPECT THE CONSOLE FOR A SHORT BETWEEN COLUMN 0 AND ROW C.  
 GO TO MAP 1071, ENTRY POINT A.

036

INSPECT THE CONSOLE FOR A SHORT BETWEEN THE AUDIBLE DEVICE AND THE INDICATOR ON C3 THAT IS ACTIVE.

1. COLUMN 11 AND ROW D.
2. ROW A-D TO CONSOLE AUDIBLE DEVICE.

INDICATORS CARRIED BY CABLE C3	
D04	RUN
D05	WAIT
D06	LOAD
D10	STOP
D11	INSTRUCTION STEP (IS)
D12	STOP ON ADDRESS (SOA)
D13	CHECK
B06	STOP ON ERROR (SOE)
B07	CHECK RESTART (CR)

GO TO MAP 1071, ENTRY POINT A.

037

C2 - C3

INSPECT THE CONSOLE FOR A SHORT IN THESE AREAS:

1. THE LEVEL INDICATOR THAT WAS ON --- TO --- COLUMN 0.
  2. THE LEVEL INDICATOR THAT WAS ON --- TO --- COLUMN 8 THROUGH 11.
  3. THE INDICATOR THAT IS ON --- TO --- COLUMN 2 THROUGH 6.
  4. ROW A THROUGH D --- TO --- COLUMN 2 THROUGH 6.
- GO TO MAP 1071, ENTRY POINT A.

C1	C2	*(C3)	Y
(C1)	(C2)	(C3)	Y
(C1)	(C2)	(C3)	N

038

C1 - C3

SEE THE CHART BELOW.

C1	C2	*(C3)	Y
(C1)	C2	(C3)	Y

COLUMN 7 KEYS CARRIED BY CABLE C1	
D11	INSTRUCTION STEP (IS)
	STOP ON ADDRESS (SOA)
	STOP ON ERROR (SOE)
	CHECK RESTART (CR)

WAS INDICATOR 'IS', 'SOA', 'SOE' OR 'CR' ON THAT SHOULD NOT BE ON ?

Y  
 N

039

C1 - C3

INSPECT THE CONSOLE FOR A SHORT IN THESE AREAS:

1. COLUMN 1 --- TO --- ROW A THROUGH D.
  2. COLUMN 1 --- TO --- INDICATOR THAT IS ON.
  3. THE INDICATOR THAT IS ON --- TO --- COLUMN 2 THROUGH 6.
- GO TO MAP 1071, ENTRY POINT A.

040  
C1 - C3

INSPECT THE CONSOLE FOR A SHORT IN THESE AREAS:

1. COLUMN 7 --- TO --- ROW A THROUGH D.
  2. COLUMN 7 --- TO --- INDICATOR THAT IS ON.
- GO TO MAP 1071, ENTRY POINT A.

041  
(ENTRY POINT D)  
(CONSOLE SILENT.)

SEE MLD BINDER.  
SEE ALD PA100.  
SEE ALD PA105.  
SEE THE CORRECT PROCESSING UNIT ALD A5XXX.  
THE TABLE BELOW IS A REFERENCE ONLY.

PROCESSING UNIT MODEL	DATA CARD	ADDRESS CARD	ROS CARD
MODEL A	J2	K2	L2
MODEL B	D2	E2	F2
MODEL C	L2	M2	N2
MODEL D	H2	J2	K2
MODEL E	H2	J2	K2
MODEL F	H2	J2	K2

IS THE LEVEL 0 INDICATOR ON ?

N

042  
DISCONNECT CONSOLE CABLE 'C2' FROM ADDRESS CONNECTOR 'WL'.

GROUND 'C2-B09'.

IS THE LEVEL 0 INDICATOR ON ?

N

043  
INSPECT CABLE 'C2' AND THE LEVEL 0 INDICATOR.

GO TO MAP 1071, ENTRY POINT A.

044  
GO TO MAP 2571, ENTRY POINT A.

045  
ARE INDICATORS LEVEL 1,2 AND 3 OFF ?

N

046  
RECORD THE LEVEL LAMP THAT IS ON. THIS IS AN ERROR SYMPTOM.  
GO TO PAGE 9, STEP 054, ENTRY POINT C.

047  
IS THE STOP INDICATOR ON ?

N

048  
DISCONNECT CONSOLE CABLE 'C3' FROM THE ROS TOP CARD CONNECTOR 'W'

GROUND 'C3-D10'.

IS THE STOP LAMP ON ?

N

049  
INSPECT THE CONSOLE FOR AN OPEN STOP CIRCUIT.  
GO TO MAP 1071, ENTRY POINT A.

050  
GO TO MAP 2571, ENTRY POINT A.

V  
8

051

-----  
| STOP ON ERROR  
| CHECK RESTART  
| INSTRUCTION STEP  
| STOP ON ADDRESS  
CHECK

ARE THESE CONSOLE INDICATORS ALL OFF ?  
Y  
N

052  
RECORD THE ERROR LAMP(S) ON.  
GO TO STEP 054, ENTRY POINT C.

053

-----  
| RUN  
| WAIT  
LOAD

ARE THESE CONSOLE INDICATORS ALL OFF ?  
N

054  
RECORD WHICH ONE OF THESE INDICATORS IS ON.

-----  
| RUN  
| WAIT  
LOAD

-----  
| (XX) = CABLE OFF  
(C1) C2 C3

(ENTRY POINT C)

THE TERM 'ERROR LAMP' USED IN THIS MAP IS A  
LAMP THAT IS ON AND SHOULD NOT BE ON.

DISCONNECT CONSOLE CABLE C1 FROM THE DATA  
TOP CARD CONNECTOR 'X'.

SEE MLD BINDER.  
ALD PA100.  
ALD PA105.  
THE CORRECT PROCESSING UNIT ALD A5XXX.  
THE TABLE BELOW IS A REFERENCE ONLY.

PROCESSING UNIT MODEL	DATA CARD	ADDRESS CARD	ROS CARD
MODEL A	J	K	L
MODEL B	D	M	T
MODEL C	L	N	S
MODEL D	E	O	U
MODEL E	H	P	V
MODEL F	N	Q	W
MODEL G	H	R	X
MODEL H	N	S	Y

IS THE ERROR LAMP NOW OFF ?

Y  
N

1  
X  
1  
Y

Y  
9

055  
DISCONNECT CONSOLE CABLE C2 FROM THE ADDRESS  
TOP CARD CONNECTOR 'WL'.

(XX) = CABLE OFF  
(C1) (C2) C3

SEE MLD BINDER.  
SEE ALD PA100.  
SEE ALD PA105.  
SEE THE CORRECT PROCESSING UNIT ALD A5XXX.  
THE TABLE BELOW IS A REFERENCE ONLY.

PROCESSING UNIT MODEL	DATA CARD	ADDRESS CARD	ROS CARD
MODEL A	J2	K2	L2
MODEL B	D2	E2	F2
MODEL C	L2	M2	N2
MODEL D	H2	J2	K2
MODEL E	H2	J2	K2
MODEL F	H2	J2	K2

IS THE ERROR LAMP NOW OFF ?

Y  
N

056  
DISCONNECT CONSOLE CABLE C3 FROM THE ROS TOP  
CARD CONNECTOR 'W'.

(XX) = CABLE OFF  
(C1) (C2) (C3)

SEE MLD BINDER.  
SEE ALD PA100.  
SEE ALD PA105.  
SEE THE CORRECT PROCESSING UNIT ALD A5XXX.  
THE TABLE BELOW IS A REFERENCE ONLY.

PROCESSING UNIT MODEL	DATA CARD	ADDRESS CARD	ROS CARD
MODEL A	J2	K2	L2
MODEL B	D2	E2	F2
MODEL C	L2	M2	N2
MODEL D	H2	J2	K2
MODEL E	H2	J2	K2
MODEL F	H2	J2	K2

IS THE ERROR LAMP NOW OFF ?

Y  
N

057

INSPECT THE ERROR LAMP FOR A SHORT TO  
GROUND.

(C1) C2 C3 | N |  
(C1) (C2) (C3) | N |

GO TO MAP 1071, ENTRY POINT A.

058  
PROBE THE ROS TOP CARD CONNECTOR 'W' FOR THE  
ERROR LAMP.

- USE LOGIC PROBE 2 OR SIMILAR.
  - SET THE TECHNOLOGY SWITCH TO 'MULTI'.
  - SET LATCH SWITCH TO 'NONE'.
  - SET GATE REF SWITCH TO 'GND'.
  - PLUG RED (+) WIRE OF PROBE POWER CABLE ON +5
  - PLUG THE BLACK WIRE OF THE POWER CABLE ON A GROUND PIN.
- GROUND AND VOLTAGE FOR THE PROBE IS ON ANY I/O POSITION OF THE PROCESSING UNIT BOARD.

PROBE INDICATOR		LOGIC PROBED
UP	DOWN	MEANING
0	0	* UP
0	1	DOWN
1	1	PULSING

\* SIGNAL VOLTAGE IS NOT CORRECT OR THERE IS NO VOLTAGE.

FOR A DESCRIPTION OF THE LOGIC PROBE AND ITS USE SEE LOGIC PROBE 2 MANUAL 'SY27-0127-X'. OR MAP 0010, SECTION 11.00.00.

GROUND	+5V
D08	D03
J08	J03
P08	P03
U08	U03

IS THE POR LINE AT A DOWN LEVEL ?

Y  
N

I  
I  
Z A A B

Z A A  
1 A B  
0 1 0  
0 0 0

4955 PROCESSING UNIT (4)  
PAPER ONLY MAP  
PAGE 11 OF 18

MAP 2573-11

059

INSPECT FOR A SHORT IN THESE AREAS:

1. THE ERROR LAMP --- TO --- LAMP CARRIED BY C3 THAT SHOULD BE ON AND IS ON.
  2. THE ERROR LAMP --- TO --- GROUND.
  3. THE ERROR LAMP --- TO --- ROW A THROUGH D.
- GO TO MAP 1071, ENTRY POINT A.

(C1)	C2	C3	N
(C1)	(C2)	C3	Y
(C1)	(C2)	(C3)	Y

060

RESEAT THE CABLES.  
GO TO MAP 2571, ENTRY POINT A.

061

DISCONNECT CONSOLE CABLE C3 FROM THE ROS TOP CARD CONNECTOR 'WL'.  
CONNECT C2 TO 'WL'.

(C1)	C2	C3	N
(C1)	(C2)	C3	Y
(C1)	C2	(C3)	X

IS THE ERROR LAMP OFF ?

N

062

PROBE THE ADDRESS TOP CARD CONNECTOR 'WL' FOR THE ERROR LAMP.

PROBE INDICATOR		LOGIC PROBED
UP	DOWN	MEANING
0	0	*
1	0	UP
0	1	DOWN
1	1	PULSING

\* SIGNAL VOLTAGE IS NOT CORRECT OR THERE IS NO VOLTAGE.

FOR A DESCRIPTION OF THE LOGIC PROBE AND ITS USE SEE LOGIC PROBE 2 MANUAL 'SY27-0127-X' OR MAP 0010, SECTION 11.00.00.

USE THE LOGIC PROBE 2 OR SIMILAR.  
- SET THE TECHNOLOGY SWITCH TO 'MULTI'.  
- SET THE LATCH SWITCH TO 'NONE'.  
- SET THE GATE REF SWITCH TO 'GND'.

- PLUG THE RED (+) WIRE OF THE PROBE POWER CABLE ON +5 V.
- PLUG THE BLACK WIRE OF THE POWER CABLE ON A GROUND PIN.

THE GROUND AND VOLTAGE FOR THE PROBE IS ON ANY I/O POSITION OF THE PROCESSING UNIT BOARD.

GROUND	+5V
D08	D03
J08	J03
P08	P03
U08	U03

IS THE LINE AT A DOWN LEVEL ?

Y

063

INSPECT FOR A SHORT IN THE CONSOLE BETWEEN THE ERROR LAMP AND THE OTHER LAMPS IN C2.

GO TO MAP 1071, ENTRY POINT A.

(C1)	C2	C3	N
(C1)	(C2)	C3	Y
(C1)	C2	(C3)	N

064

RESEAT THE CABLES.  
GO TO MAP 2571, ENTRY POINT A.

065

INSPECT FOR A SHORT IN THESE AREAS:

1. THE ERROR LAMP --- TO --- THE LAMP ON C2 OR C3 THAT SHOULD BE ON AND IS ON.
  2. THE ERROR LAMP --- TO --- ROW A THROUGH D.
- GO TO MAP 1071, ENTRY POINT A.

(C1)	C2	C3	N
(C1)	(C2)	C3	Y
(C1)	C2	(C3)	Y

066  
DISCONNECT CONSOLE CABLE C2 FROM THE ADDRESS CONNECTOR 'W'.  
CONNECT CABLE C1 TO THE DATA CONNECTOR 'X'.

(C1)	C2	C3	Y
C1	(C2)	C3	X

SEE MLD BINDER.  
SEE ALD PA100.  
SEE ALD PA105.  
SEE THE CORRECT PROCESSING UNIT ALD A5XXX.  
THE TABLE BELOW IS A REFERENCE ONLY.

PROCESSING UNIT MODEL	DATA CARD	ADDRESS CARD	ROS CARD
MODEL A	J2	K2	L2
MODEL B	D2	E2	F2
MODEL C	L2	M2	N2
MODEL D	H2	J2	K2
MODEL E	H2	J2	K2
MODEL F	H2	J2	K2

IS THE ERROR LAMP OFF ?

N

067  
DISCONNECT THE CONSOLE CABLE C3 FROM THE ROS TOP CARD CONNECTOR 'W'.

(C1)	C2	C3	Y
C1	(C2)	C3	N
C1	(C2)	(C3)	X

IS THE ERROR LAMP ON ?

N

068

INSPECT FOR A SHORT IN THESE AREAS:

1. THE ERROR LAMP --- TO --- THE LAMP ON C1 OR C3 THAT SHOULD BE ON AND IS ON.
2. THE ERROR LAMP --- TO --- ROW A THROUGH D.  
GO TO MAP 1071, ENTRY POINT A.

(C1)	C2	C3	Y
C1	(C2)	C3	N
C1	(C2)	(C3)	X

069  
PROBE THE DATA TOP CARD CONNECTOR 'X' FOR THE ERROR LAMP.

USE THE LOGIC PROBE 2 OR SIMILAR.  
- SET THE TECHNOLOGY SWITCH TO 'MULTI'.  
- SET THE LATCH SWITCH TO 'NONE'.  
- SET THE GATE REF SWITCH TO 'GND'.

- PLUG THE RED (+) WIRE OF PROBE POWER CABLE ON +5 V.  
- PLUG THE BLACK WIRE OF THE POWER CABLE ON A GROUND PIN.  
THE GROUND AND THE VOLTAGE FOR THE PROBE IS ON ANY I/O POSITION OF THE PROCESSING UNIT BOARD.

PROBE INDICATOR		LOGIC PROBED
UP	DOWN	MEANING
0	0	* UP
1	0	DOWN
0	1	PULSING

GROUND	+5V
D08	D03
J08	J03
P08	P03
U08	U03

\* SIGNAL VOLTAGE IS NOT CORRECT OR THERE IS NO VOLTAGE.

FOR A DESCRIPTION OF THE LOGIC PROBE AND ITS USE SEE THE LOGIC PROBE 2 MANUAL 'SY27-0127-X' OR MAP 0010, SECTION 11.00.00.

IS THE LINE AT A DOWN LEVEL ?

N

070

INSPECT FOR SHORT IN THESE AREAS:

1. ERROR LAMP --- TO --- LAMP CARRIED BY C1 THAT SHOULD BE ON AND IS ON.
2. ERROR LAMP --- TO --- GROUND.  
GO TO MAP 1071, ENTRY POINT A.

(C1)	C2	C3	Y
C1	(C2)	C3	N
C1	(C2)	(C3)	X

071  
RESEAT THE CABLES.  
GO TO MAP 2571, ENTRY POINT A.

W 9  
A C  
1 2

072

INSPECT FOR A SHORT IN THE CONSOLE BETWEEN THE ERROR LAMP AND THE LAMP ON C1 OR C2 THAT SHOULD BE AND IS ON.

(C1)	C2	C3	Y
C1	(C2)	C3	Y

GO TO MAP 1071, ENTRY POINT A.

073

(ENTRY POINT F)

DISCONNECT CONSOLE CABLE 'C3'  
FROM THE ROS TOP CARD CONNECTOR 'W'

(XX)	= CABLE OFF		
*	= JUMPER ON		
C1	C2	(C3)	

PRESS THE FAILING KEY.

IS THE CONSOLE SILENT ?

Y  
N

074

DISCONNECT CONSOLE CABLE 'C2'  
FROM THE ADDRESS TOP CARD CONNECTOR 'WL'

(XX)	= CABLE OFF		
*	= JUMPER ON		
C1	(C2)	(C3)	

- PRESS THE FAILING KEY.

IS THE CONSOLE SILENT ?

Y  
N

075

INSPECT FOR A SHORT CIRCUIT IN THESE AREAS:

C1	C2	(C3)	N
C1	(C2)	(C3)	N

1. STOP ON ERROR INDICATOR --- TO --- THE AUDIBLE DEVICE
  2. CHECK RESTART INDICATOR --- TO --- THE AUDIBLE DEVICE
  3. INSTRUCTION STEP --- TO --- THE AUDIBLE DEVICE
  4. STOP ON ADDRESS --- TO --- THE AUDIBLE DEVICE
- GO TO MAP 1071, ENTRY POINT A.

076

INSPECT THE CONSOLE FOR A SHORT CIRCUIT IN THESE AREAS:

1. THE CONSOLE CABLE --- TO --- THE AUDIBLE DEVICE.
- GO TO MAP 1071, ENTRY POINT A.

077

CONNECT A JUMPER FROM THE AUDIBLE DEVICE ON CABLE CONNECTOR C3-B11 TO THE ROS TOP CARD CONNECTOR 'W' PIN '31'.

(XX)	= CABLE OFF		
*	= JUMPER ON		
C1	C2	*(C3)	

PRESS THE FAILING KEY.

IS THE CONSOLE SILENT ?

Y  
N

078

DISCONNECT CONSOLE CABLE 'C1'  
FROM THE DATA TOP CARD CONNECTOR 'X'

(XX)	= CABLE OFF		
*	= JUMPER ON		
(C1)	C2	*(C3)	

- PRESS THE FAILING KEY.

IS THE CONSOLE SILENT ?

Y  
N

079

DISCONNECT CONSOLE CABLE 'C2'  
FROM THE ADDRESS TOP CARD CONNECTOR 'WL'

(XX)	= CABLE OFF		
*	= JUMPER ON		
C1	(C2)	C3	

REMOVE JUMPER FROM W31 AND C3B11.  
CONNECT CONSOLE CABLE 'C3'

TO THE ROS TOP CARD CONNECTOR 'W'

- PRESS THE FAILING KEY.

IS THE CONSOLE SILENT ?

Y  
N

1  
2  
3  
4  
D  
E  
F  
G



A A A  
F H J  
3 4 4

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MAP 2573-15

089  
INSPECT THE CONSOLE FOR SHORT CIRCUIT IN  
THESE AREAS:

1. COLUMN 7 --- TO --- COLUMN 2 THROUGH  
8.  
GO TO MAP 1071, ENTRY POINT A.  
-----  
IF THE CONSOLE IS CORRECT  
GO TO MAP 2570, ENTRY POINT D.

090  
INSPECT THE CONSOLE FOR A SHORT CIRCUIT IN  
THESE AREAS:

1. COLUMN 1 --- TO --- COLUMN 2 THROUGH 6.  
GO TO MAP 1071, ENTRY POINT A.  
-----  
IF THE CONSOLE IS CORRECT  
GO TO MAP 2570, ENTRY POINT D.

091  
IS THE ERROR KEY 'AKR' ?  
Y N

092  
IS THE ERROR KEY LEVEL 0,1,2 OR 3 ?  
Y N

093  
IS THE ERROR KEY REGISTER 0,1,2,3,4,5,6 OR  
7 ?  
Y N

094  
INSPECT THE CONSOLE FOR A SHORT CIRCUIT  
IN THESE AREAS:

1. COLUMN 3 --- TO --- COLUMN 4 THROUGH  
6  
GO TO MAP 1071, ENTRY POINT A.  
-----  
IF THE CONSOLE IS CORRECT  
GO TO MAP 2570, ENTRY POINT D.

095  
IS THE ERROR KEY REGISTER 0,1,2 OR 3 ?  
Y N

096  
INSPECT THE CONSOLE FOR A SHORT CIRCUIT  
IN THESE AREAS:

1. COLUMN 5 --- TO --- COLUMN 6.  
GO TO MAP 1071, ENTRY POINT A.  
-----  
IF THE CONSOLE IS CORRECT  
GO TO MAP 2570, ENTRY POINT D.

097  
INSPECT THE CONSOLE FOR A SHORT CIRCUIT IN  
THESE AREAS:

1. COLUMN 4 --- TO --- COLUMN 5.  
2. COLUMN 4 --- TO --- COLUMN 6.  
GO TO MAP 1071, ENTRY POINT A.  
-----  
IF THE CONSOLE IS CORRECT  
GO TO MAP 2570, ENTRY POINT D.

098  
INSPECT THE CONSOLE FOR A SHORT CIRCUIT IN  
THESE AREAS:

1. COLUMN 2 --- TO --- COLUMN 3 THROUGH 6.  
GO TO MAP 1071, ENTRY POINT A.  
-----  
IF THE CONSOLE IS CORRECT  
GO TO MAP 2570, ENTRY POINT D.

099  
INSPECT THE CONSOLE FOR A SHORT CIRCUIT IN  
THESE AREAS:

1. COLUMN 6 --- TO --- COLUMN 2 THROUGH 5.  
GO TO MAP 1071, ENTRY POINT A.  
-----  
IF THE CONSOLE IS CORRECT  
GO TO MAP 2570, ENTRY POINT D.

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MAP 2573-15

A  
D  
1  
3

100  
REMOVE THE JUMPER FROM W31 AND C3B11.  
CONNECT CONSOLE CABLE 'C3'  
TO  
THE ROS TOP CARD CONNECTOR 'W'  
PRESS THE FAILING KEY.

(XX) = CABLE OFF  
\* = JUMPER ON  
-----  
(C1) C2 C3  
-----

SEE MLD BINDER.  
SEE ALD PA100.  
SEE ALD PA105.  
SEE THE CORRECT PROCESSING UNIT ALD A5XXX.  
THE TABLE BELOW IS A REFERENCE ONLY.

PROCESSING UNIT MODEL	DATA CARD	ADDRESS CARD	ROS CARD
MODEL A	J2	K2	L2
MODEL B	D2	E2	F2
MODEL C	L2	M2	N2
MODEL D	H2	J2	K2
MODEL E	H2	J2	K2
MODEL F	H2	J2	K2

IS THE CONSOLE SILENT ?

N  
101

C1 C2 (C3) Y  
C1 C2 \*(C3) N  
(C1) C2 \*(C3) Y  
(C1) C2 C3 N

C1-C3

IS THE ERROR KEY

THE STOP,  
START  
OR DATA BUFFER KEY?  
Y N

102  
INSPECT THE CONSOLE FOR A SHORT CIRCUIT  
IN THESE AREAS:

1. COLUMN 7 --- TO --- COLUMN 0, 8  
THROUGH 11.  
GO TO MAP 1071, ENTRY POINT A.

IF CONSOLE CORRECT  
GO TO MAP 2570, ENTRY POINT D.

103  
INSPECT THE CONSOLE FOR A SHORT CIRCUIT  
IN THESE AREAS:

1. COLUMN 1 --- TO --- COLUMN 0, 8  
THROUGH 11.  
GO TO MAP 1071, ENTRY POINT A.

IF THE CONSOLE IS CORRECT  
GO TO MAP 2570, ENTRY POINT D.

104

C1

INSPECT THE CONSOLE FOR A SHORT CIRCUIT IN  
THESE AREAS:

1. COLUMN 1 --- TO --- COLUMN 7.  
GO TO MAP 1071, ENTRY POINT A.

IF THE CONSOLE IS CORRECT  
GO TO MAP 2570, ENTRY POINT D.

C1 C2 (C3) Y  
C1 C2 \*(C3) N  
(C1) C2 \*(C3) Y  
(C1) C2 C3 Y

105  
SEE THE 'EMPTY SPACE BETWEEN RESET AND STORE  
KEY' OR THE STORE KEY.

IS ONE OF THESE KEYS THE ERROR KEY?

Y N

1  
8  
A  
K

A  
1  
6

106  
REMOVE THE JUMPER FROM W31 AND C3B11.  
CONNECT CONSOLE CABLE 'C3'  
TO  
THE ROS TOP CARD CONNECTOR 'W'  
AS EACH KEY IS PRESSED NOTE BITS 12,13,14,15.  
PRESS DATA KEYS 3,7,B AND F.  
DID EACH KEY DISPLAY CORRECTLY WHEN PRESSED ?  
Y  
N

107  
SEE THE DATA INDICATORS.

00E0
00E5
XXX7
XXXB
XXXF

IS THE ERROR DISPLAYED SHOWN IN THE CHART?  
Y  
N

108  
GO TO MAP 2570, ENTRY POINT D.

109  
INSPECT CONSOLE FOR SHORT CIRCUIT SHOWN IN  
CHART.  
SEE THE CHART. ----->  
ON THE CHART, LOOK DOWN THE COLUMN OF THE  
ERROR DISPLAYED TO THE ROW OF THE KEY GIVING  
THE ERROR.  
THE MEETING OF THE CHART 'ERROR DISPLAY  
COLUMN' AND THE CHART 'KEY ROW' WILL  
DETERMINE THE TWO CONSOLE COLUMN(S) TO  
INSPECT FOR A SHORT CIRCUIT TO EACH OTHER.

ERROR DISPLAY				
	*LD	F	B	7
KEY	0-8	11-8	10-8	9-8
3	0-9	11-9	10-9	
7	0-10	11-10		
B	0-11			
F				

\*LD = LOAD LAMP AND DATA 00E0 OR 00E5.

GO TO MAP 1071, ENTRY POINT A.  
IF THE CONSOLE IS CORRECT  
GO TO MAP 2570, ENTRY POINT D.

110  
AS EACH KEY IS PRESSED NOTE BITS 12,13,14,15.  
PRESS THE DATA KEYS 0,1,2 AND 3.  
SEE THE CHART. ----->

XXX1
XXX2
XXX3

IS THE ERROR DISPLAYED SHOWN IN THE CHART?  
Y  
N

111  
GO TO MAP 2570, ENTRY POINT D.

112  
INSPECT THE CONSOLE FOR A SHORT CIRCUIT SHOWN  
IN CHART.  
SEE THE CHART. ----->  
ON THE CHART, LOOK DOWN THE COLUMN OF THE  
ERROR DISPLAYED TO THE ROW OF THE KEY  
GIVING THE ERROR.  
THE MEETING OF THE CHART 'ERROR DISPLAY  
COLUMN' AND THE CHART 'KEY ROW' WILL DETERMINE  
THE TWO CONSOLE ROWS TO INSPECT FOR A SHORT  
CIRCUIT TO EACH OTHER.

ERROR DISPLAY			
	3	2	1
KEY	A-D	A-C	A-B
0	B-D	B-C	
1	C-D		
2			

GO TO MAP 1071, ENTRY POINT A.  
IF THE CONSOLE IS CORRECT  
GO TO MAP 2570, ENTRY POINT D.

A  
K  
1  
6

4955 PROCESSING UNIT (4)  
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MAP 2573-18

13  
INSPECT THE CONSOLE FOR A SHORT CIRCUIT IN  
THESE AREAS:

1. COLUMN 0 --- TO --- COLUMN 8 THROUGH 11.  
GO TO MAP 1071, ENTRY POINT A.

IF THE CONSOLE IS CORRECT  
GO TO MAP 2570, ENTRY POINT D.

15 JAN 81 PN1635031  
EC869422 PEC375475  
MAP 2573-18