

Task Oriented Practice
(TOP)

4ESS™ SWITCH
MISCELLANEOUS FRAMES A, B, AND C

SERVICE CIRCUITS & TRUNK TEST FACILITIES

Developed by
The AT&T Customer Information Development
and Business Translations Organization

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Issue 4	APR 1994
234-151-043	TPG
TITLE PAGE	000

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Issue 4	APR 1994
234-151-043	LPG
PAGE 1 of 1	000

FIND YOUR JOB IN THE LIST BELOW THEN GO TO

Acceptance	NTP-002
Aisle Pilot Lamps – Test	DLP-503
Alarm Circuit; Power – Continuity Check Transceiver – Test	DLP-504
Amplifier And Pad Unit Using RMS-D2 – Adjust	DLP-005
Attenuators; Loop Around Test Circuit – Continuity Check Transceiver – Adjust Using 51A Test Set	DLP-506
Blown AC Distribution Fuse – Clear	TAP-103
Blown Fuse – Fuse Panel J4A010AD – Clear	TAP-105
Blown Fuse – Fuse Panel J4A012AF – Clear	TAP-107
Blown Fuse – Fuse Panel J4A010BB – Clear	TAP-113
Blown Fuse – Fuse Panel J4A010CB-1 – Clear	TAP-115
Circuit Pack – Continuity Check Transceiver – Replace	NTP-003
Converter; DC-DC – Continuity Check Transceiver – Replace	NTP-004
Converter LED; Lighted – Continuity Check Transceiver – Clear	TAP-109
DC-DC Converter – Continuity Check Transceiver – Replace	NTP-004
Fuse; Blown – Fuse Panel J4A0101AD – Clear	TAP-105
Fuse; Blown – Fuse Panel J4A012AF – Clear	TAP-107
Fuse; Blown – Fuse Panel J4A010BB – Clear	TAP-113
Fuse; Blown – Fuse Panel J4A010CB-1 – Clear	TAP-115
Lamps; Aisle Pilot – Test	DLP-503
Lamps – Power Switch – Test	DLP-500
LED; Lighted Converter – Continuity Check Transceiver – Clear	TAP-109

FIND YOUR JOB IN THE LIST BELOW THEN GO TO

Lighted Converter LED – Continuity Check Transceiver – Clear TAP-109

Loop-Around And Test Circuit Attenuators – CPS FB606 - Using RMS-D2 And CONNECTVU or TOPAS DLP-512

Loop-Around And Test Circuit Attenuators – CPS FB606 – Using RMS-D2 And CMS-1C DLP-513

Loop-Around Test Circuit Attenuators – Continuity Check Transceiver – Adjust Using 51A Test Set DLP-506

Loop-Around Test Failure – Continuity Check Transceiver – Clear TAP-111

Maintenance Philosophy TAD-100

Pilot Lamps; Aisle – Test DLP-503

Power Alarm Circuit – Continuity Check Transceiver – Test DLP-504

Power Switch – Replace DLP-501

Test Circuit Attenuators; Loop-Around – Continuity Check Transceiver – Adjust DLP-506

Test Failure; Loop-Around – Continuity Check Transceiver – Clear TAP-111

Transceiver Failure – Continuity Check Transceiver – Clear TAP-110

Trunks – Continuity Check Transceiver – Restore to Service DLP-507

TTY Printout – TEST:TRK,CIN a SVC*XCVR***bbb,SVC STF TAP-110

TTY Printout – TEST:TRK,CIN a SVC*XCVT***bbb,SVC STF TAP-111

No acceptance test procedures are required for this frame.
The readiness of this frame to become a part of the
working system was established by the successful
completion of Installation Handbook test procedures

ACCEPTANCE

Issue 4	APR 1994
234-151-043	NTP
PAGE 1 of 1	002

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	At Appropriate CCT Power Switch, Rotate ROS/OFF Switch Clockwise to ROS Position	-
2	Replace Circuit Pack	DLP-502
3	At Power Switch, Rotate ROS/OFF Switch Counterclockwise to Normal Position	-
4	Restore to Service Trunks Associated With CCT Unit	DLP-507
5	If Circuit Pack Replaced Was FB606 (LAT), Adjust Attenuators	DLP-506

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	At Appropriate CCT Power Switch, Rotate ROS/OFF Switch Clockwise to ROS Position	-
2	Replace DC-DC Converter	DLP-505
3	At Power Switch, Rotate ROS/OFF Switch Counterclockwise to Normal Position	-
4	Restore to Service Trunks Associated With CCT Unit	DLP-507

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	Remove Associated Signal Link From Service	DLP-509
2	At TTY, Enter RMV:TGR a,TER b! (a = Terminal Group, b = Terminal Number)	-
	NOTE: Power switch associated with TERMINAL 01 is associated with amplifier and pad unit 01.	
3	Determine Power Switch Associated With Amplifier and Pad Unit To Be Adjusted	DLP-510
4	At Appropriate Power Switch, Rotate ROS/OFF Switch to ROS <i>Response: ACK</i> Lamp Flashes; Then OS and OFF NORM Lamps Light	-
5	At Appropriate Power Switch, Depress ROS/OFF Switch <i>Response: PWR OFF</i> Lamp Lights	-
6	Adjust Amplifier and Pads Using RMS-D2	DLP-511
	NOTE: If OS lamp flashes off and on and remains lighted, diagnostic failed.	
7	At Power Switch, Rotate ROS/OFF Switch 1/4-Turn Counterclockwise to Normal Position <i>Response: OS</i> and OFF NORM Lamps Go Off	-
8	At TTY, Enter RST:TGR a,TER b! (a = Terminal Group, b = Terminal Number)	-
9	Enter RST:SIGLK a! (a = Signal Link Number Removed in Item 1)	-
10	Inform STP Office That Signal Link Is Restored to Service	-

General

The maintenance philosophy contained in this volume is based upon the design of equipment hardware, service circuit software and test equipment employed. Procedures provided are intended to aid personnel in performing trouble-clearing tasks. When procedures are affected by differences in hardware and/or software, the procedure will address the difference, where possible. When extensive differences warrant, separate procedures will be provided and referenced according to SD, J-spec or option. Where a procedure does not address differences, it will apply to all versions and options of the equipment. Reference documents such as SDs, PRs, I/O manuals, etc, are referred to where applicable rather than duplicating information. Some portions of documents may be utilized in procedures but only as examples for purposes of explanation. Some procedures will require the use of test equipment; however, no attempt is made to provide the detail required to set up the equipment in order to obtain the expected results.

When documenting a procedural approach to trouble-clearing, certain assumptions are made. It is assumed that one fault is being cleared at a time. When directing the user to perform an action, it is assumed that he performs that action correctly. Similarly, when directed to make replacements, the replacement part is always assumed to be good and equipment used for testing, both built-in (hardware and software) and commercial, are assumed to be good. Only consistent fault signatures are covered.

IXL PHILOSOPHY

The Task Index List [IXL-001] is structured to provide fast access to procedures pertinent to identified symptoms. Within the IXL, procedures are listed by automatic devices (power alarms) and TTY printouts (TEST:TRK, CIN-STF-some

tests failed). Power faults are sensed by scan points which generate a major or minor alarm. The IXL is based on the assumption that the user following aisle pilot lights or reading REPT:PA printout can locate frame with the power fault. Symptoms, described in the IXL, reflect the above assumptions and indicate other conditions that are observable at the frame to enable user to access the proper trouble-clearing procedures. These conditions are blown fuse or lighted LED.

The service circuit trunks (XCVR and XCVT), which are the continuity check transceivers (CCT) and loop-around test circuits (LAT), will cause most of the functional circuit failures within the frame. When an irregularity is detected, implicating service circuit trunks, trunk maintenance (TMAD) and/or error analysis (TERA) programs are called. TMAD and TERA will, through retrieval and service circuit testing, filter out inconsistent faults. Consistent faults will result in trunks being removed from service and test failure results being printed. The test failure messages (TEST:TRK, CIN - SVC) will provide the access to trouble-clearing procedures through the IXL. The procedures on the IXL are listed according to service circuit type (XCVR or XCVT).

TAP PHILOSOPHY

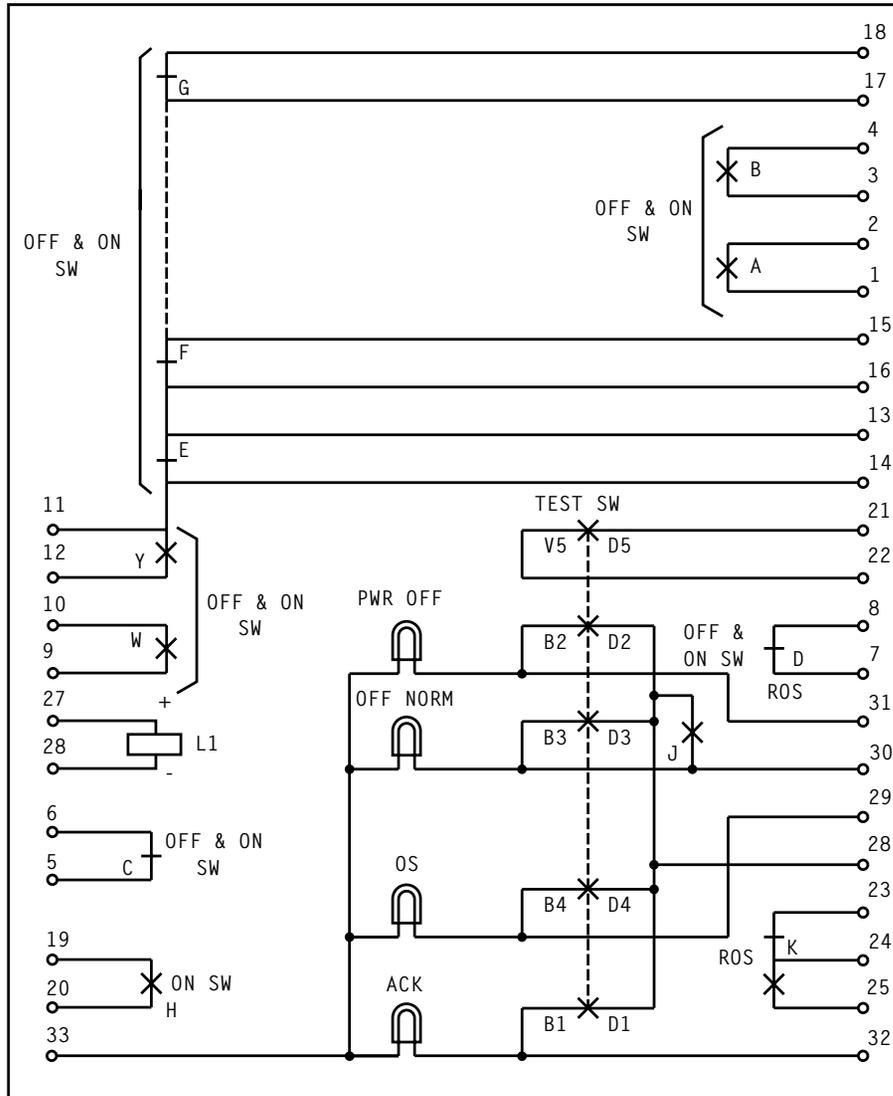
The power alarm related TAPs address spurious faults and circuit failures. Spurious faults require only the replacement of blown fuses and/or the restoration of power. When power cannot be restored, TAPs will take the user through an isolation process to clear the trouble.

Each service trunk, CCT or LAT, within the frame has only one circuit pack; therefore, TAPs provide the step-by-step procedure required to identify and replace faulty pack.

When circuit pack replacement does not clear the faulty condition (power alarm or test failure), a higher level of maintenance will be required to isolate the trouble cause. TAPs will reference the appropriate SD to be used for troubleshooting and/or signal tracing. However, no attempt is made to provide the step-by-step procedure required for this level of maintenance.

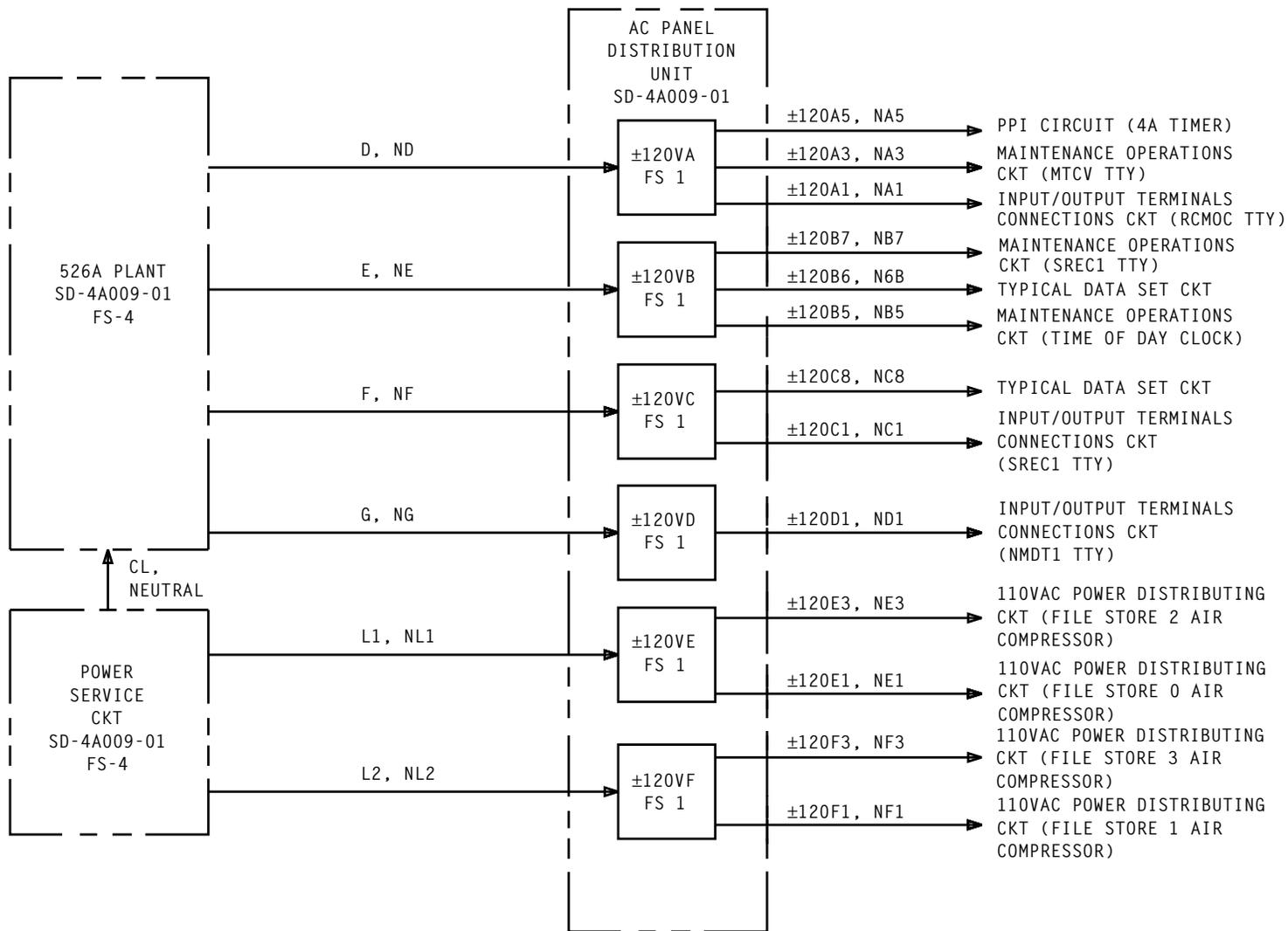
ALTERNATE METHODS

The more knowledgeable and experienced personnel may access TOP documents at a point in trouble clearing where analyzation is completed (faulty component determined) and only repair or replacement required. Most DLPs are built to support TAPs and NTPs with preconditioning and system restoration steps covered in those level procedures (TAPs, NTPs). Therefore, access to data (DLPs) on a hunt and find basis is a threat to equipment operation and may compound trouble-clearing problems.



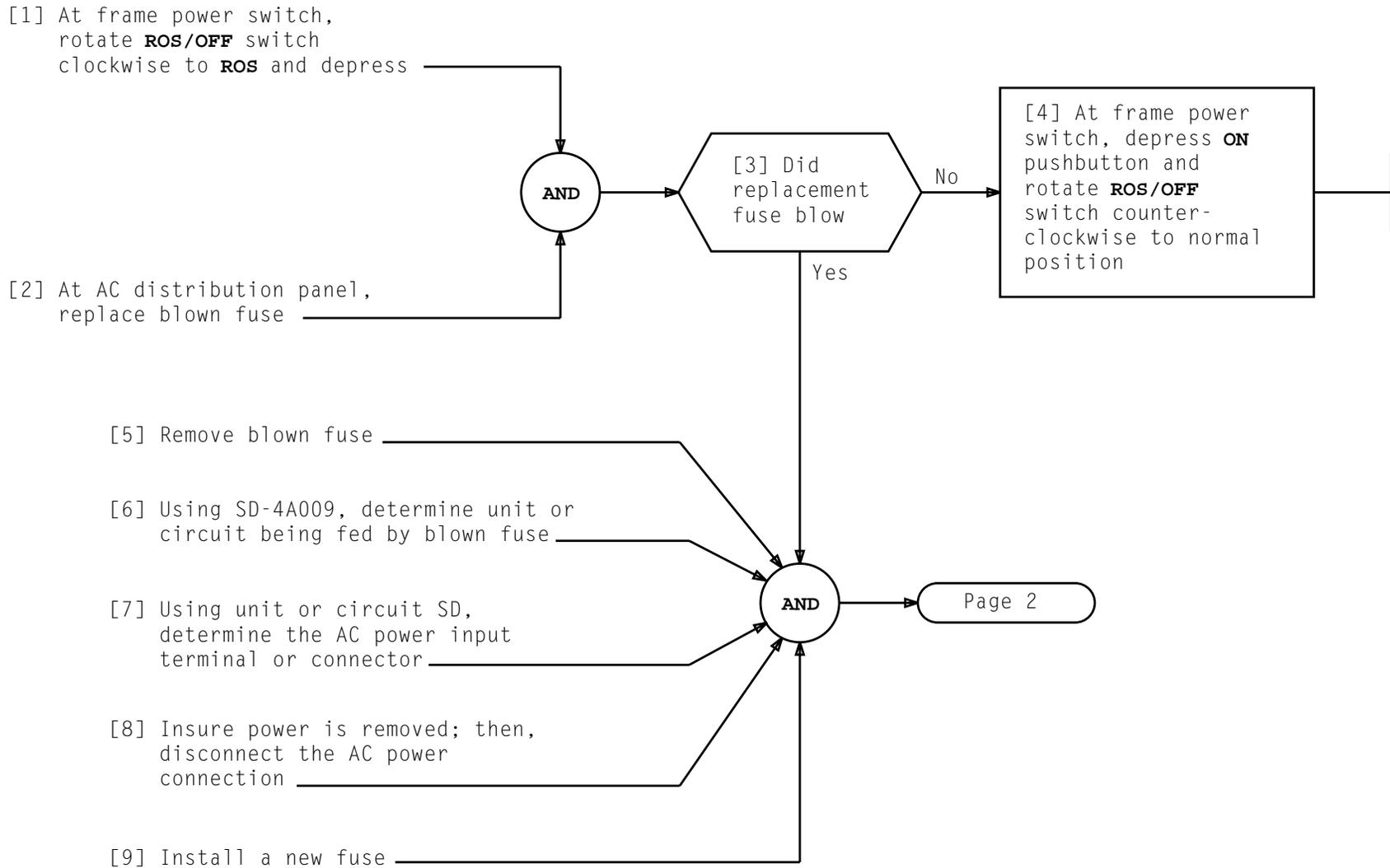
POWER SWITCH

Issue 4	APR 1994
234-151-043	TAD
PAGE 1 of 1	101



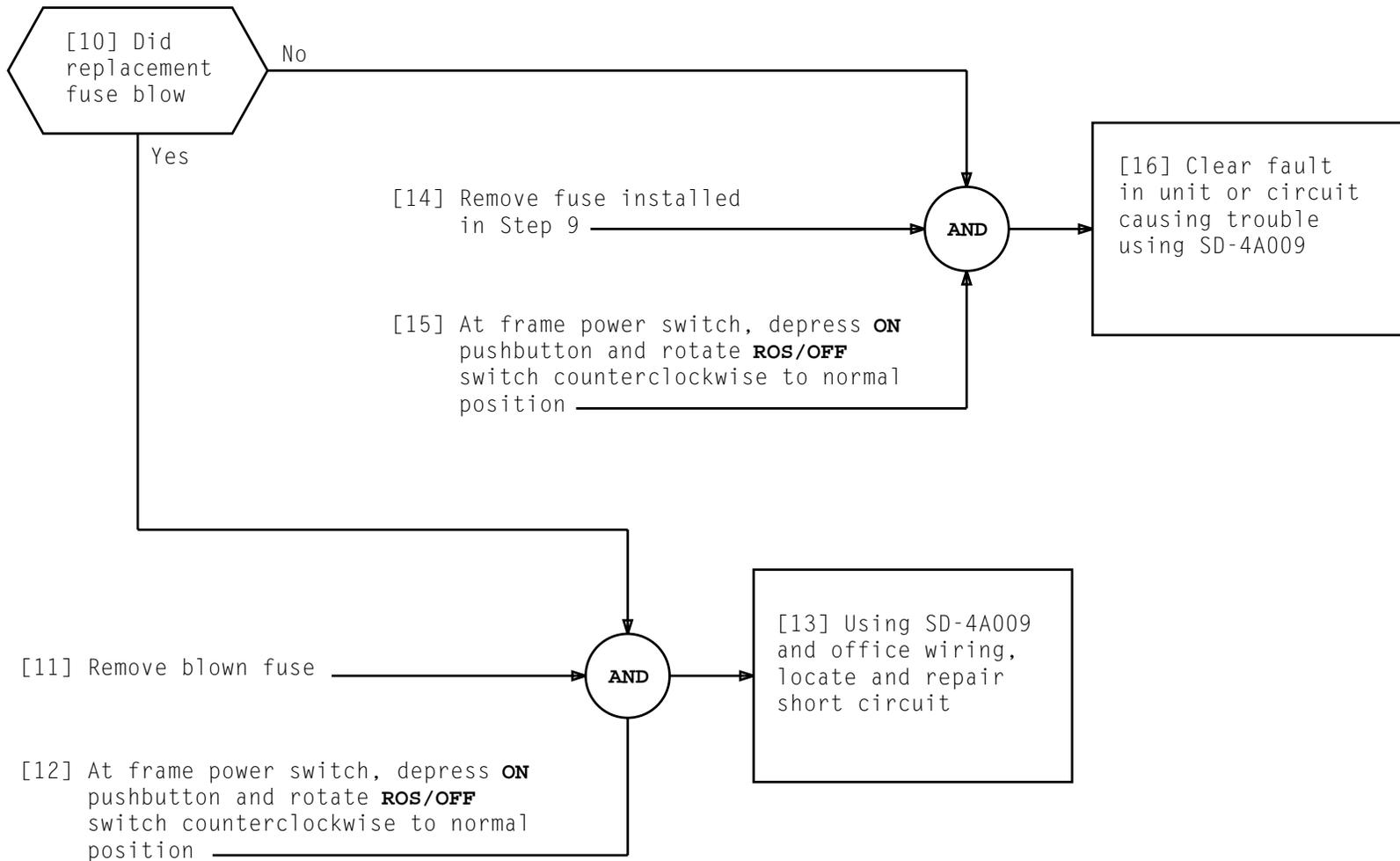
AC DISTRIBUTION FUSE CIRCUIT

Issue 4	APR 1994
234-151-043	ISD
PAGE 1 of 1	102



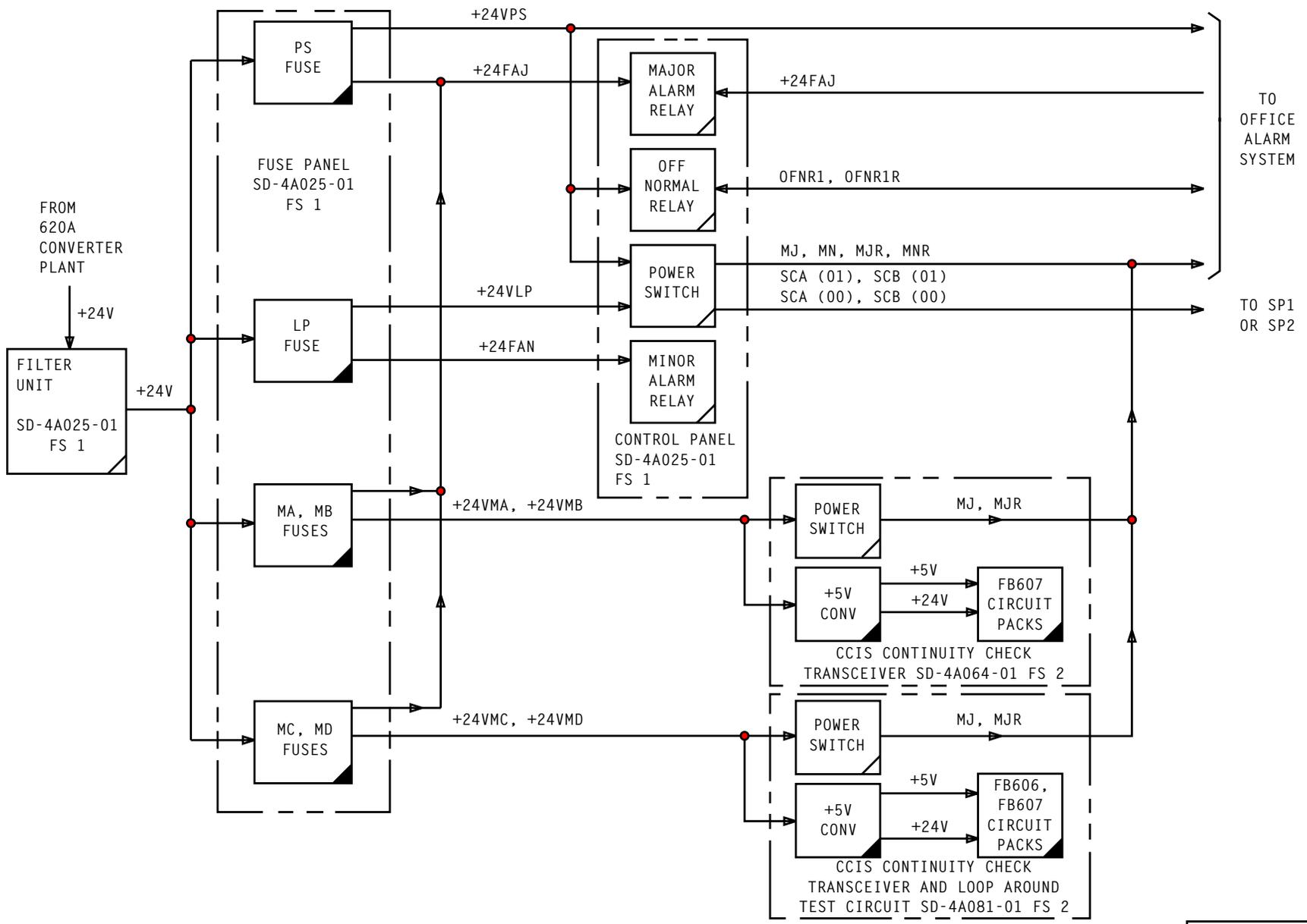
CLEAR BLOWN AC DISTRIBUTION FUSE

Issue 4	APR 1994
234-151-043	TAP
PAGE 1 of 2	103



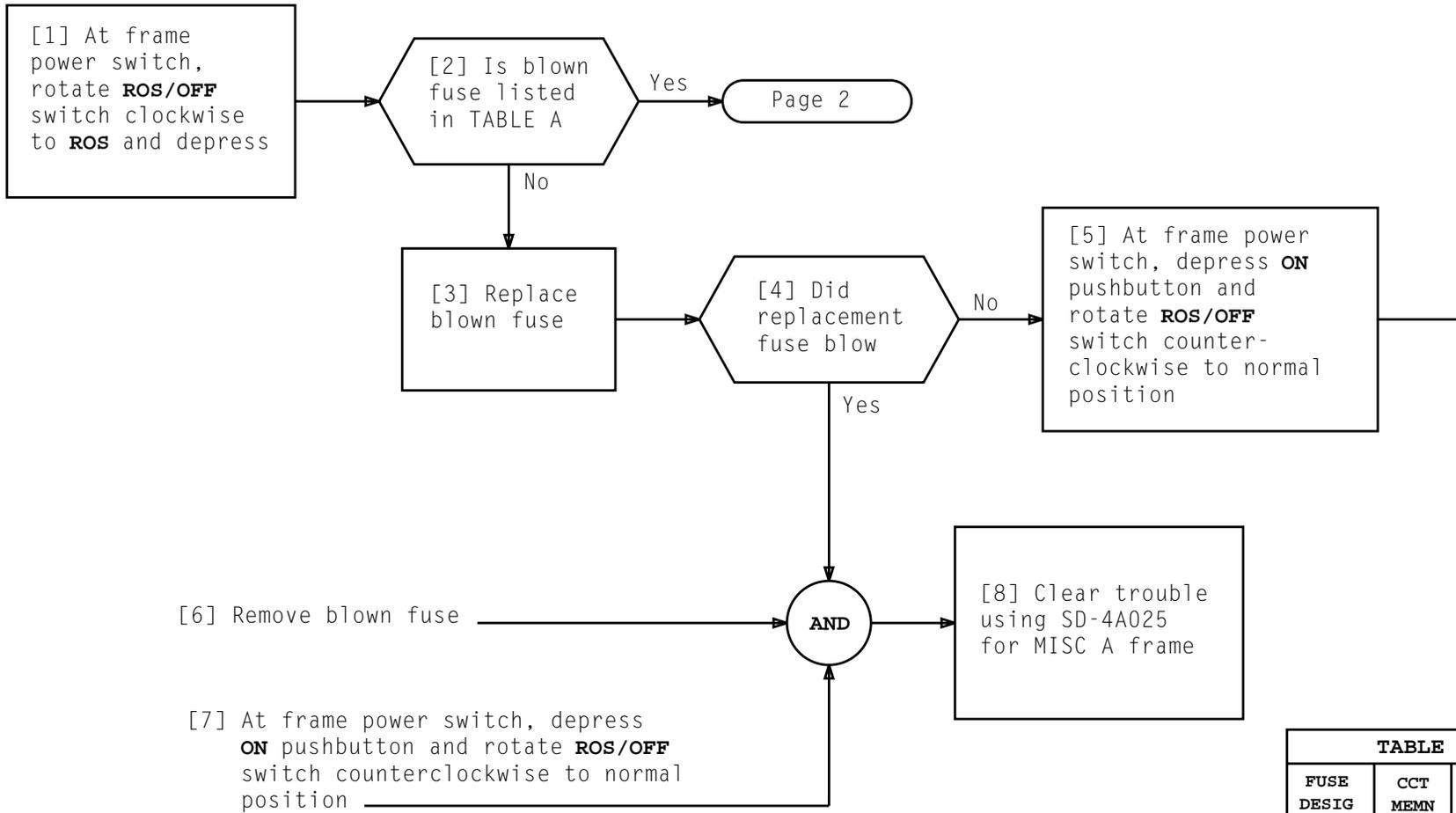
CLEAR BLOWN AC DISTRIBUTION FUSE

Issue 4	APR 1994
234-151-043	TAP
PAGE 2 of 2	103



FUSE PANEL J4A010AD CIRCUIT

Issue 4	APR 1994
234-151-043	ISD
PAGE 1 of 1	104



FUSE DESIG	CCT MEMN	CCT VERY. POS
MA	CCT3	60
MC	CCT2	56
MB	CCT1	52
MD	CCT0	48

Issue 4	APR 1994
234-151-043	TAP
PAGE 1 of 6	105

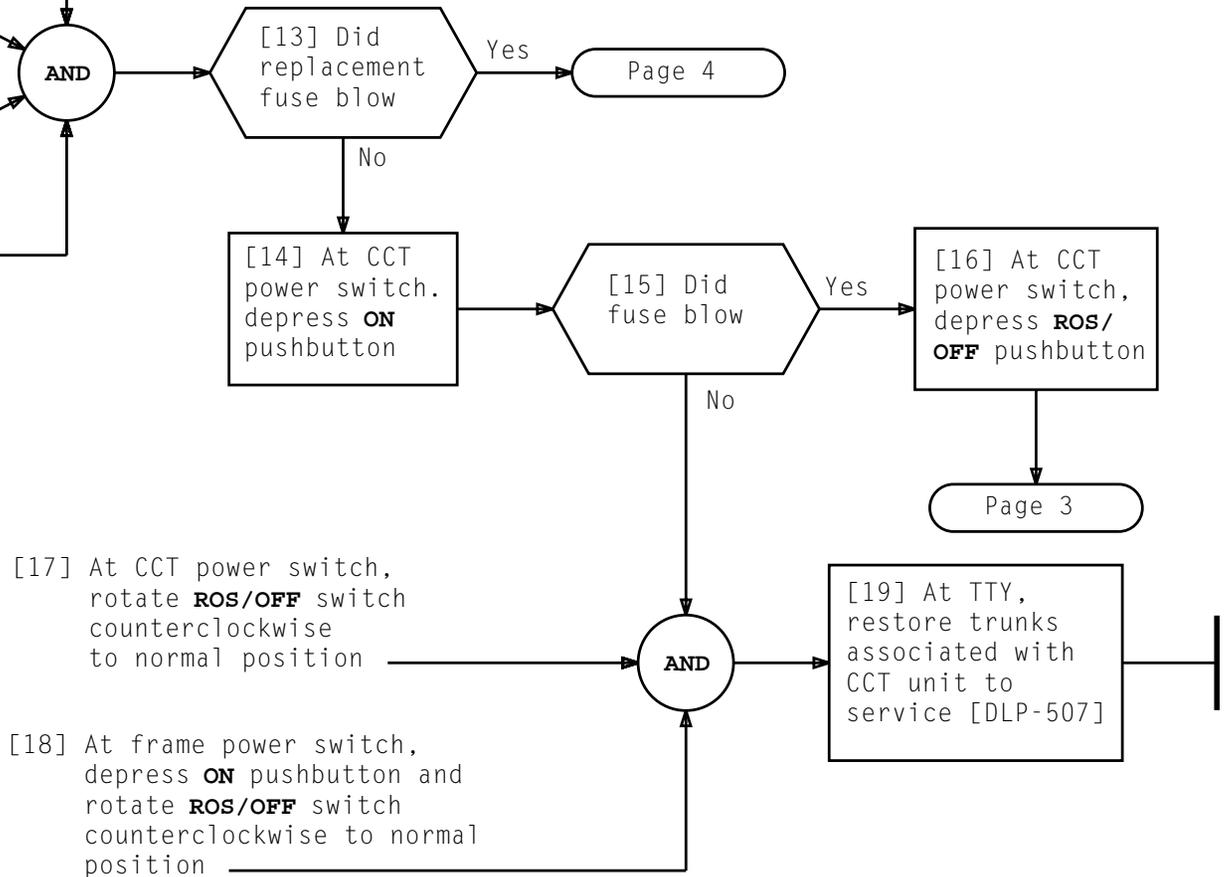
[9] Using TABLE A, Page 2
determine CCT member
number associated with
blown fuse

[10] At CCT power switch,
rotate **ROS/OFF** switch
clockwise to **ROS**

OS lamp
lights

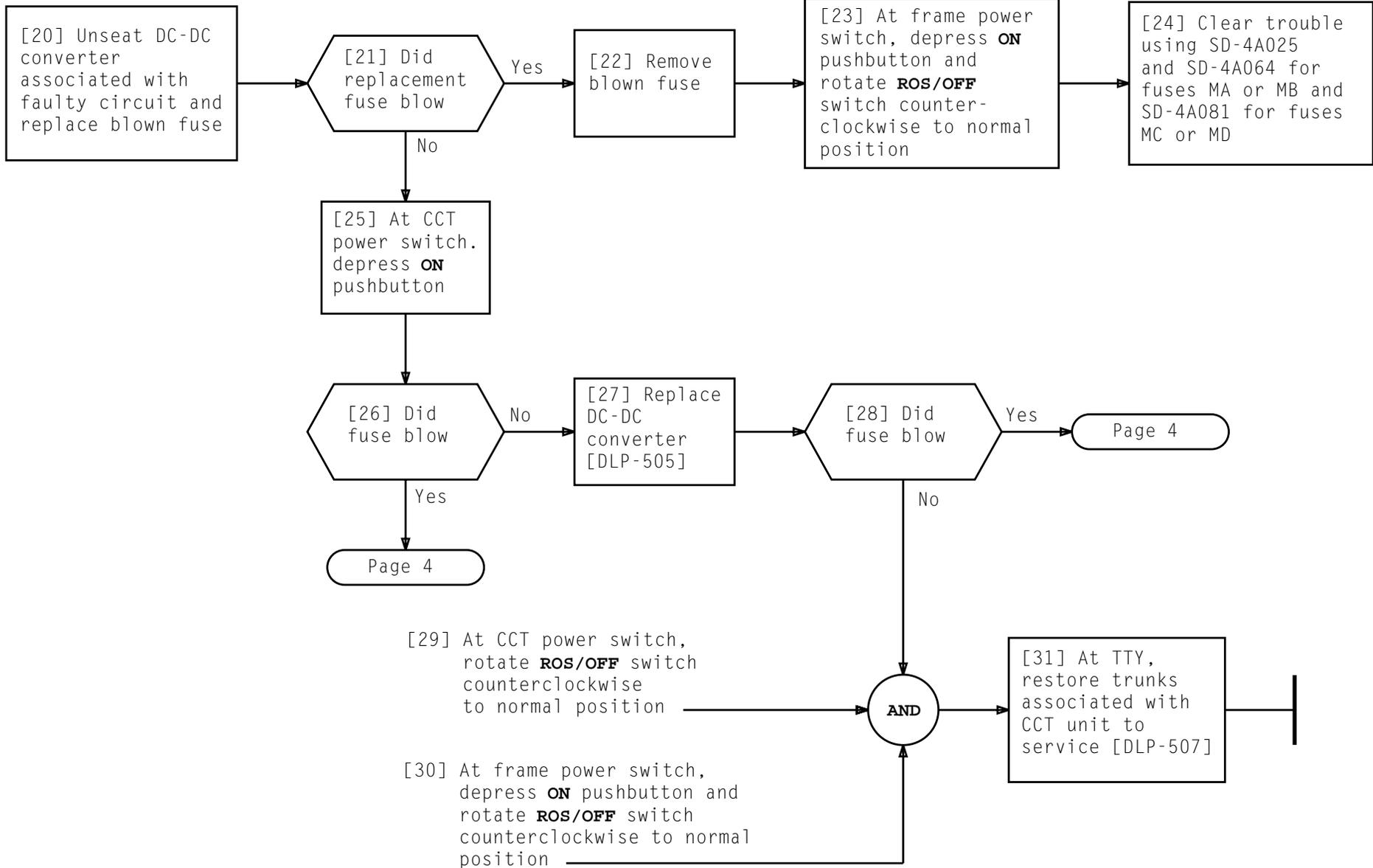
[11] Depress **ROS/OFF**
switch

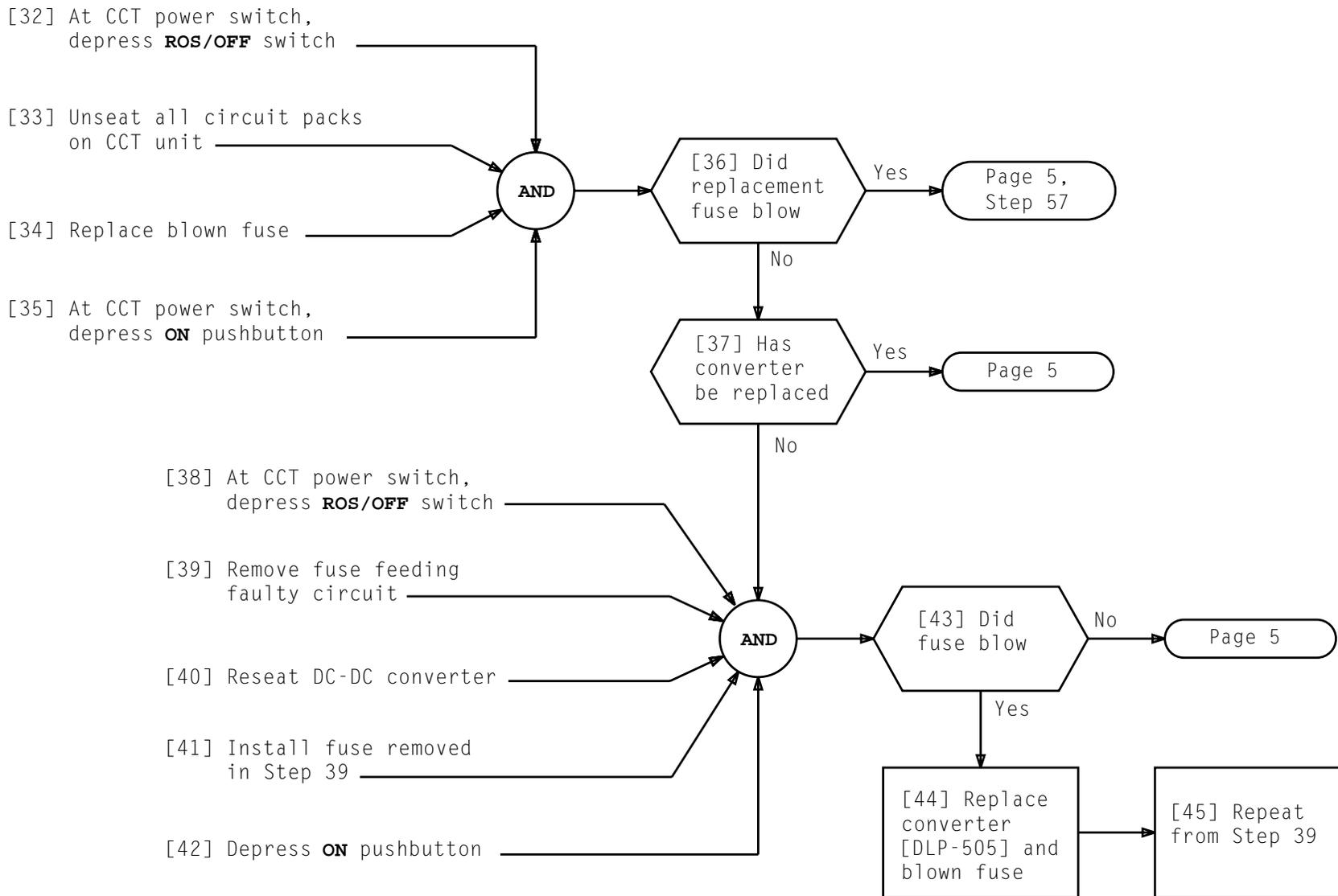
[12] Replace blown
fuse



CLEAR BLOWN FUSE, FUSE PANEL J4A010AD

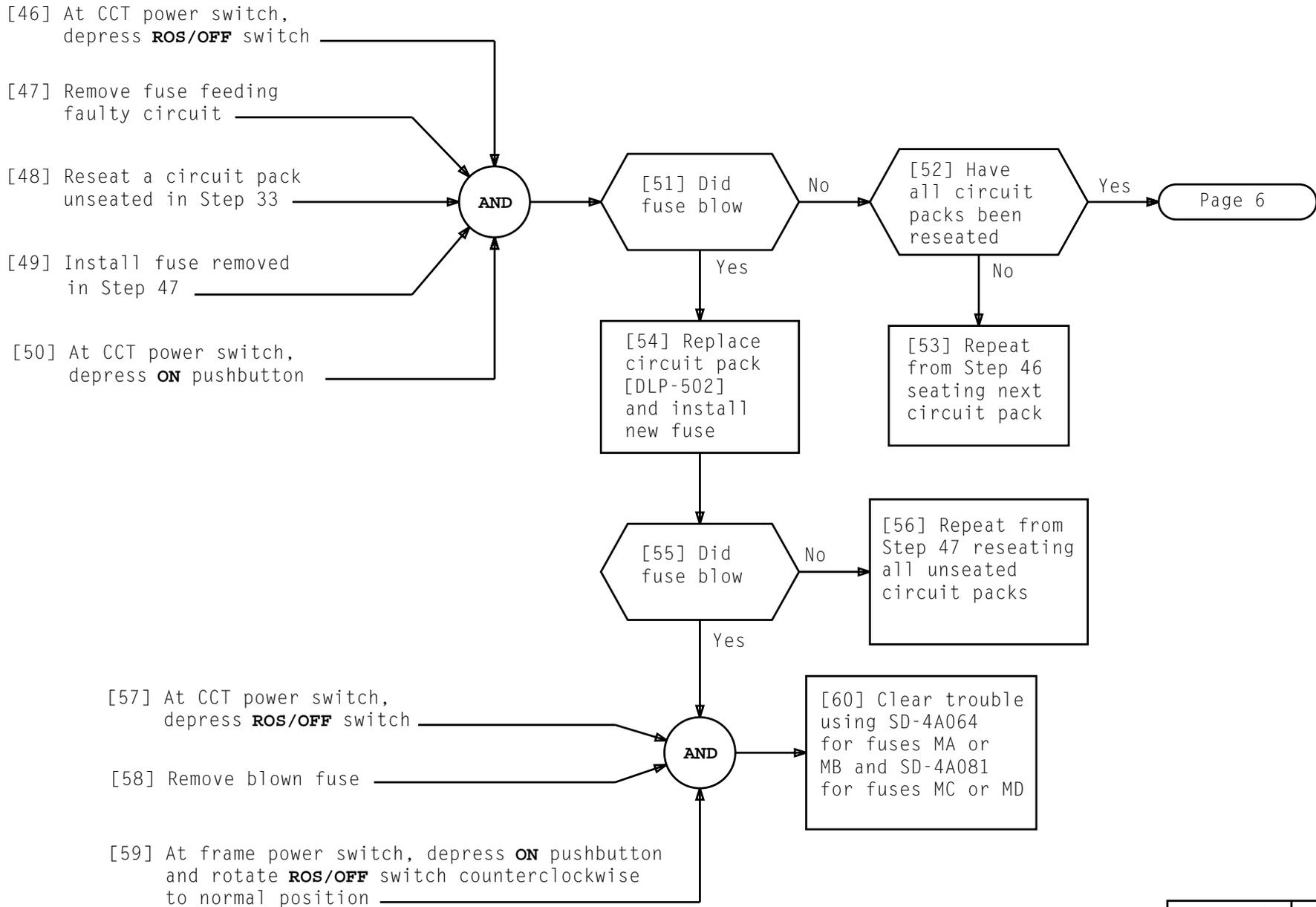
Issue 4	APR 1994
234-151-043	TAP
PAGE 2 of 6	105





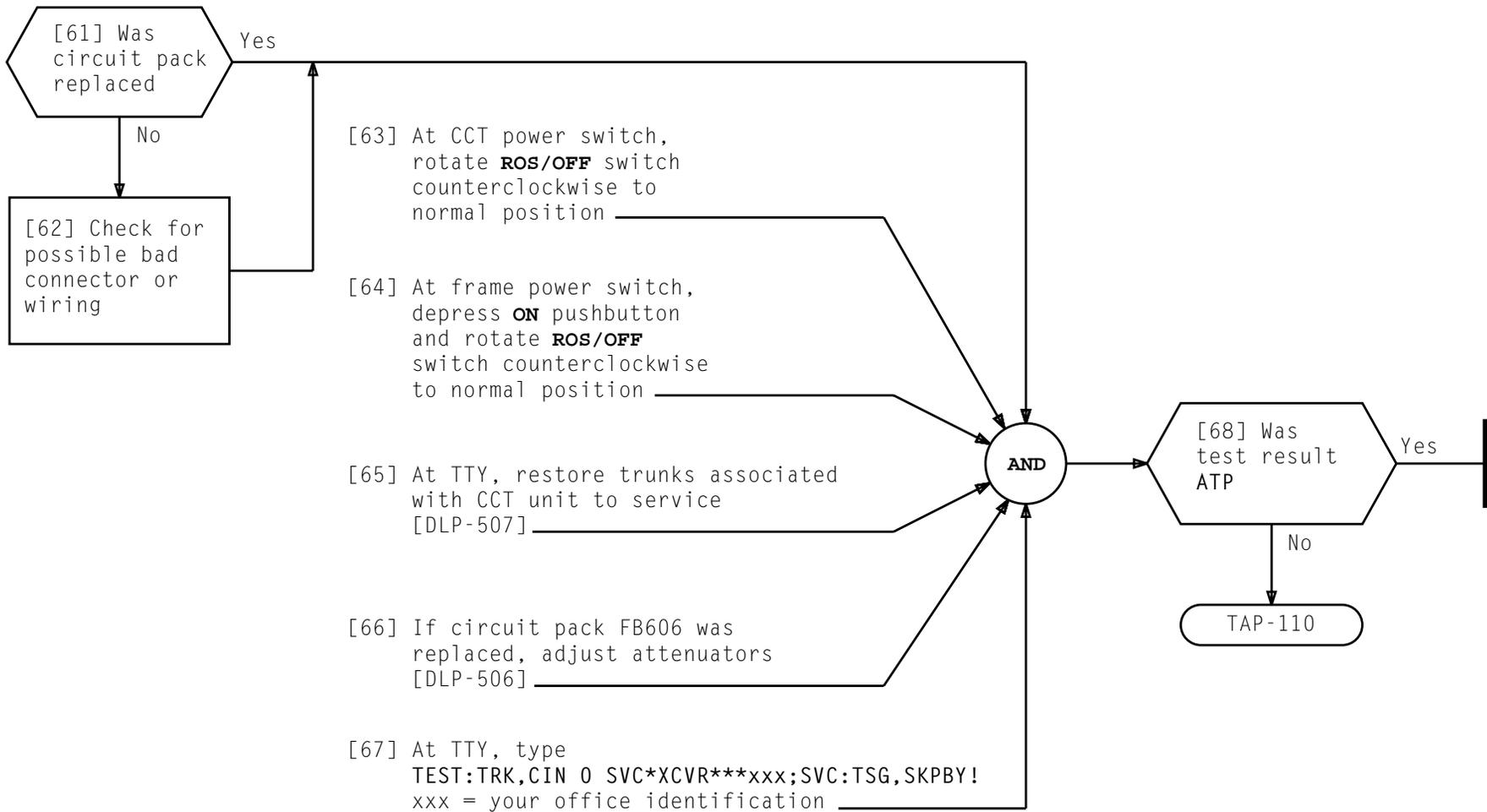
CLEAR BLOWN FUSE, FUSE PANEL J4A010AD

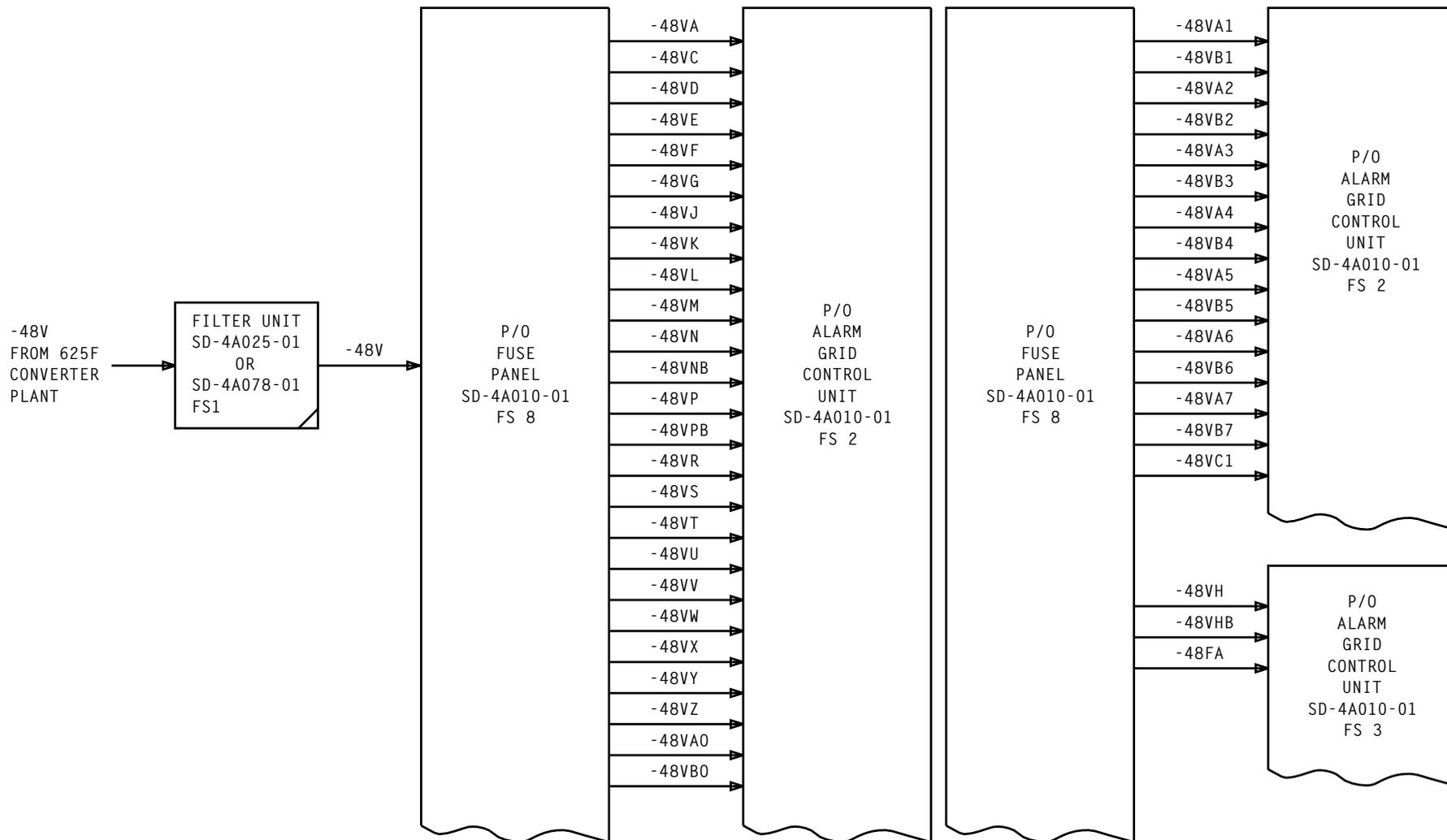
Issue 4	APR 1994
234-151-043	TAP
PAGE 4 of 6	105



CLEAR BLOWN FUSE, FUSE PANEL J4A010AD

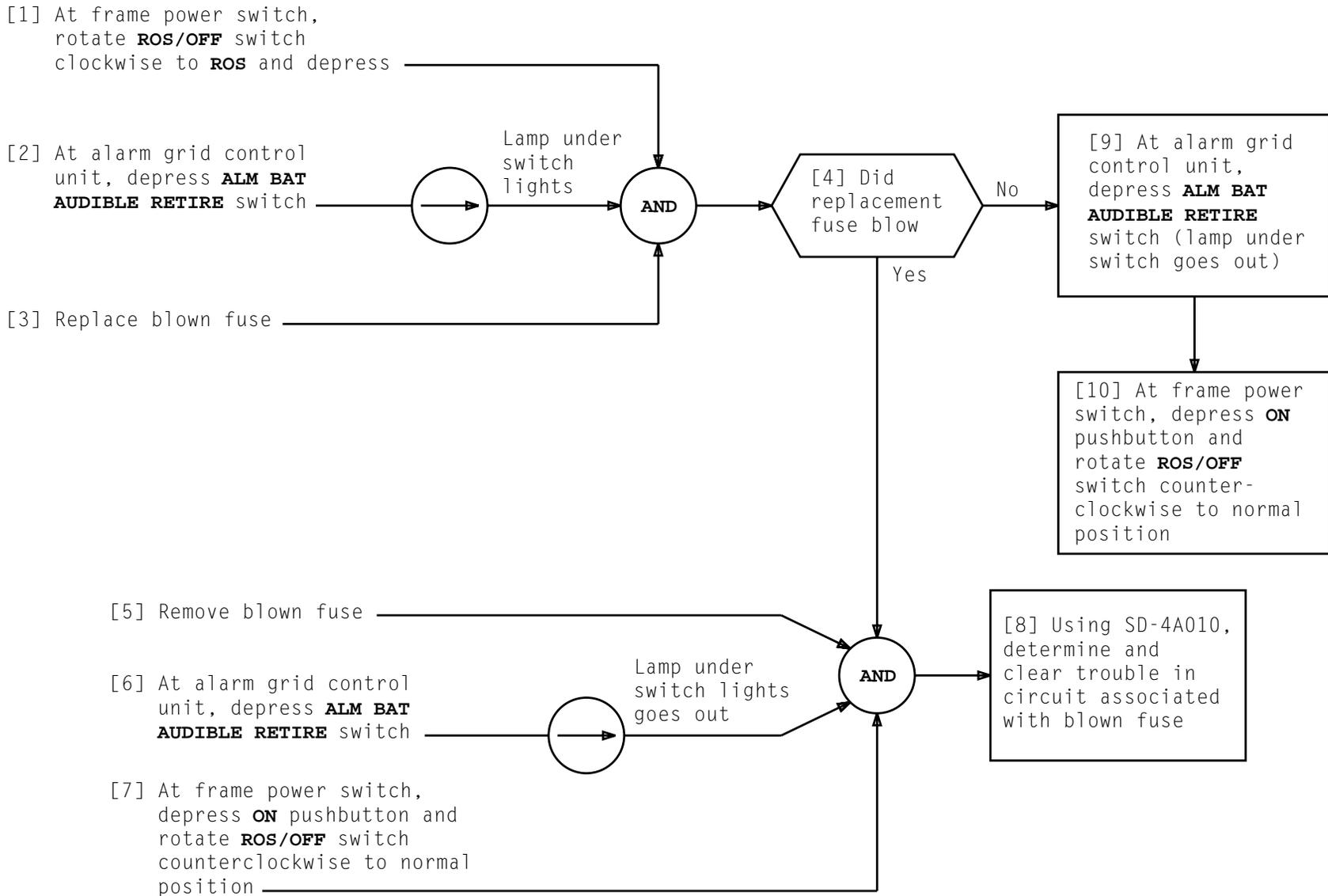
Issue 4	APR 1994
234-151-043	TAP
PAGE 5 of 6	105





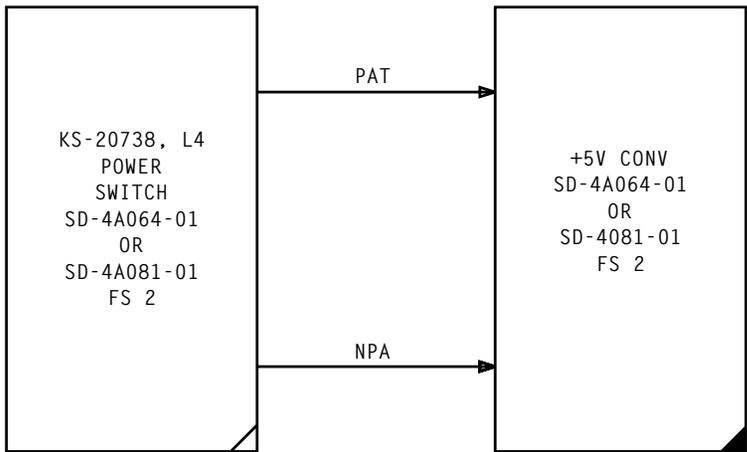
FUSE PANEL J4A012AF, -48V DISTRIBUTION

Issue 4	APR 1994
234-151-043	ISD
PAGE 1 of 1	106



CLEAR BLOWN FUSE ON FUSE PANEL J4A012AF

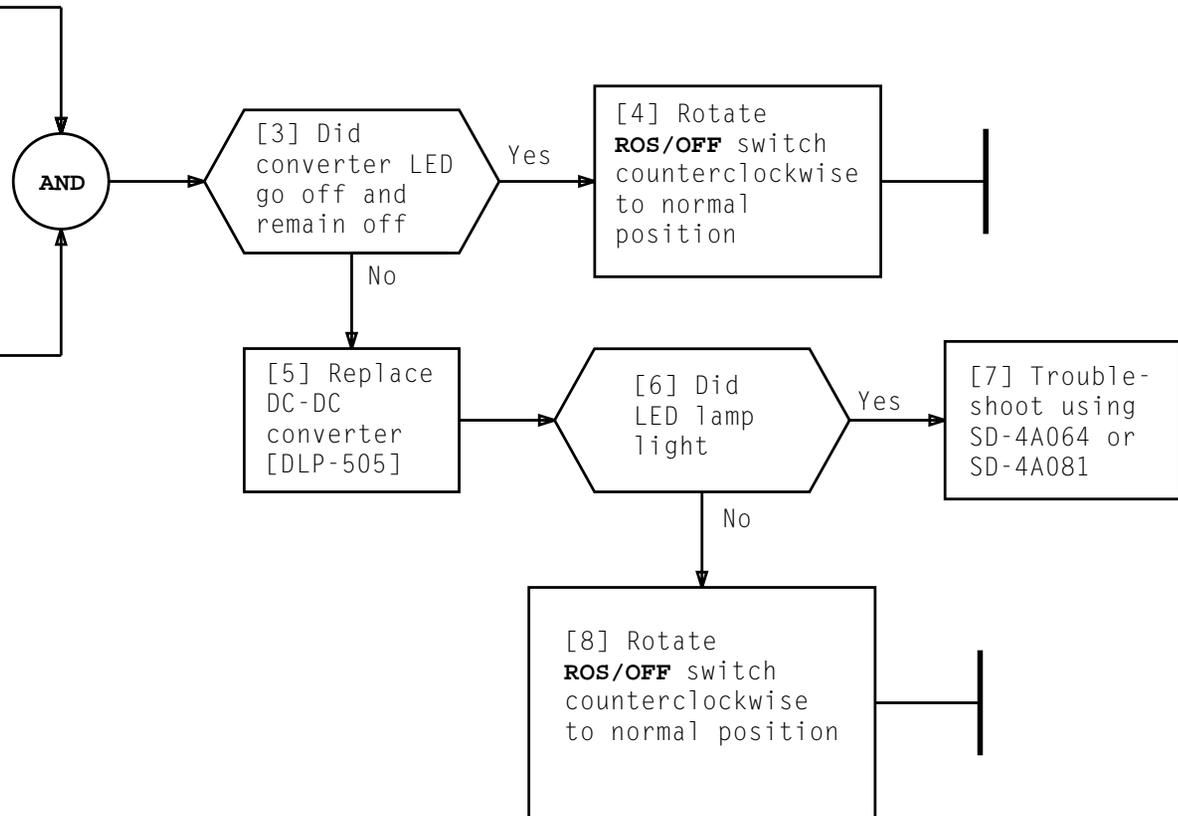
Issue 4	APR 1994
234-151-043	TAP
PAGE 1 of 1	107



At CCT, with converter LED lighted:

[1] Rotate **ROS/OFF** switch clockwise to **ROS**

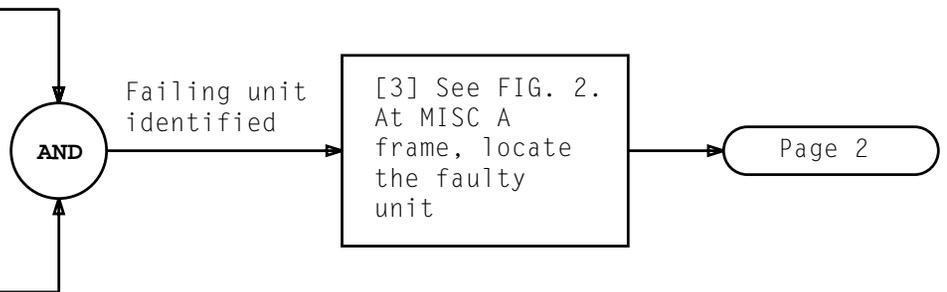
[2] Depress and hold **ON** pushbutton for 2 seconds



Issue 4	APR 1994
234-151-043	TAP
PAGE 1 of 1	109

[1] See FIG. 1. From TEST:TRK message, obtain traffic number (TFN) of CIN

[2] See FIG. 1. Convert TFN to CCT unit and transceiver numbers



TFN OF CIN
 TEST:TRK, CIN N₁ N₂ N₃ N₄ SVC*XCVR *** bbb; SVC, STF

N₁ = 0, 1 OR 2
 N₂ = 0, 1, 2, ..., 7 } CORRESPONDING TO CCT MEMBER NUMBER

N₃ }
 N₄ } = TRANSCEIVER NO.
 (00 → 07 IF N₂ = 0 OR 1)
 (00 → 11 IF N₂ = 2 OR 3)

FIG. 1 - TFN Identification for Transceivers

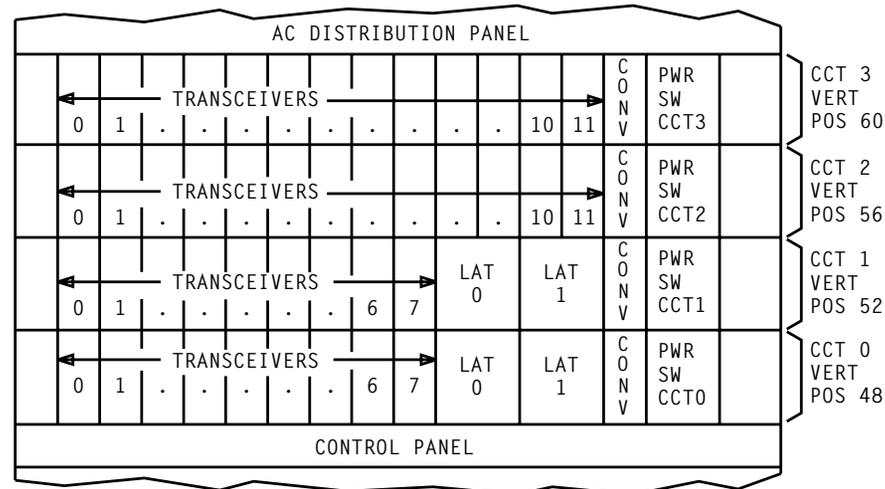
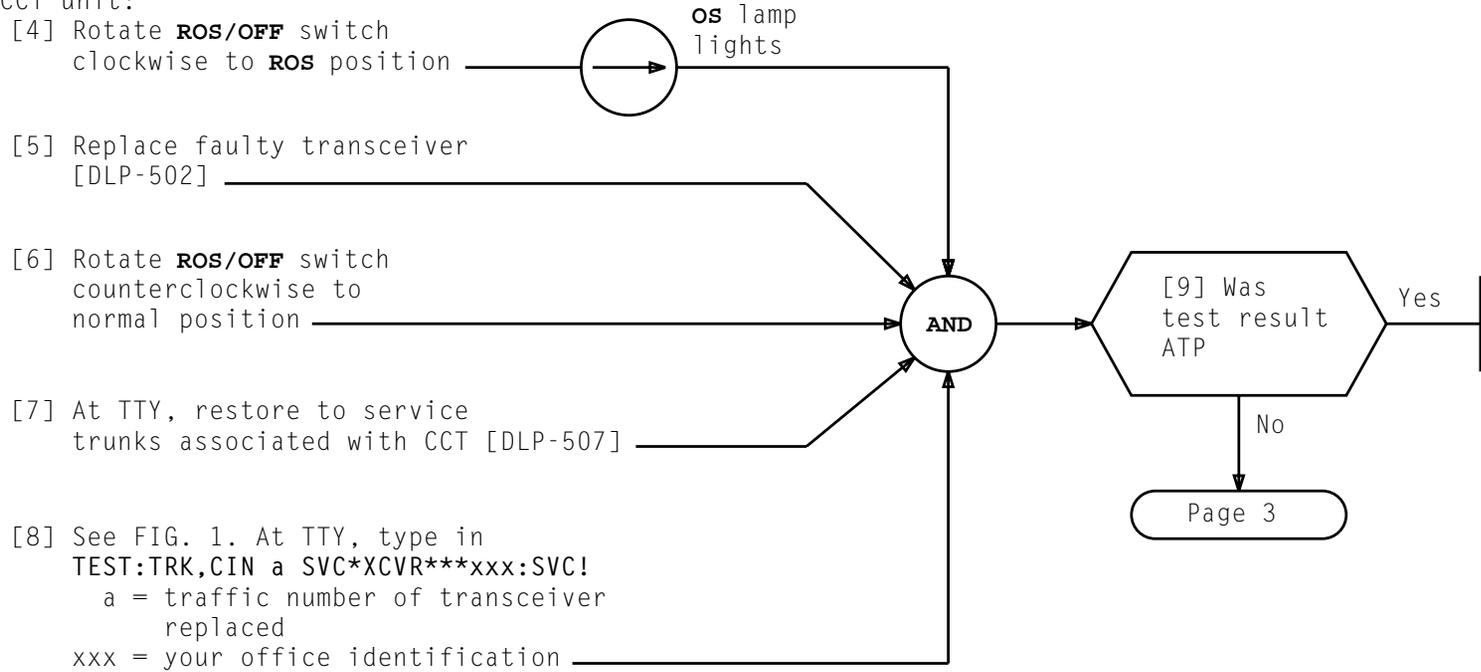


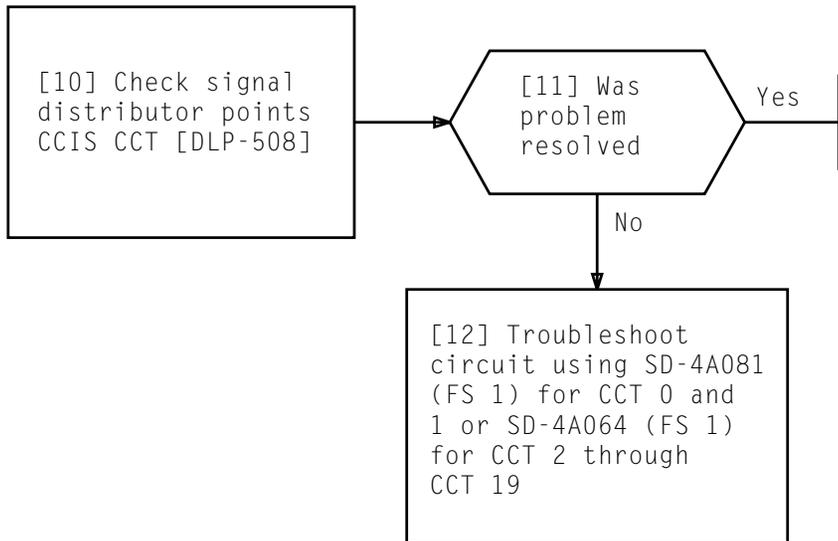
FIG. 2 - Partial MISC A Frame

At CCT unit:



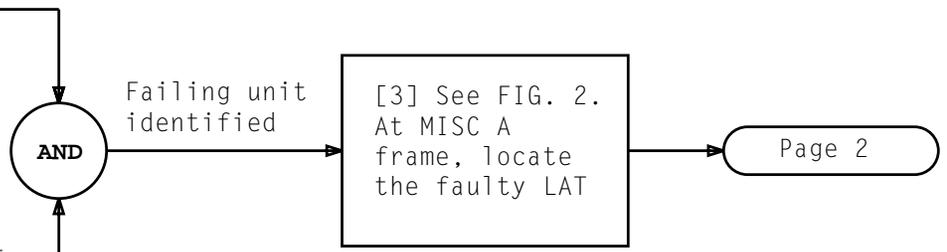
CLEAR TRANSCEIVER FAILURE, CONTINUITY CHECK TRANSCEIVER

Issue 4	APR 1994
234-151-043	TAP
PAGE 2 of 3	110



[1] See FIG. 1. From TEST:TRK message, obtain traffic number (TFN) of CIN

[2] See FIG. 1. Convert TFN to CCT unit and loop-around test CKT (LAT) numbers



[3] See FIG. 2. At MISC A frame, locate the faulty LAT

TFN OF CIN

TEST:TRK, CIN N₁ N₂ N₃ N₄ SVC*XCVT***bbb; SVC, STF

N₁ = 0 OR NOT PRINTED
 N₂ = 0 OR NOT PRINTED
 N₃ = 0 OR 1 CORRESPONDING TO CCT MEMBER NUMBER
 N₄ = 0 OR 1 CORRESPONDING TO LAT MEMBER NUMBER

FIG. 1 - TFN Identification for LAT

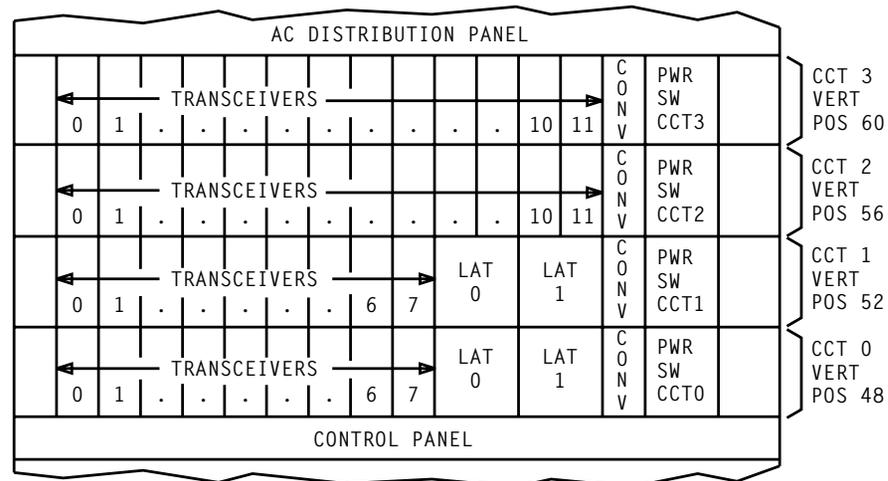
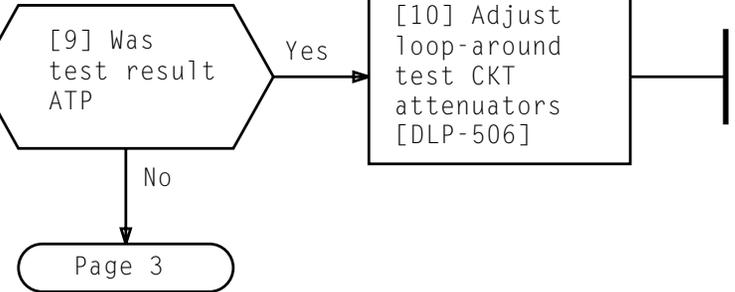
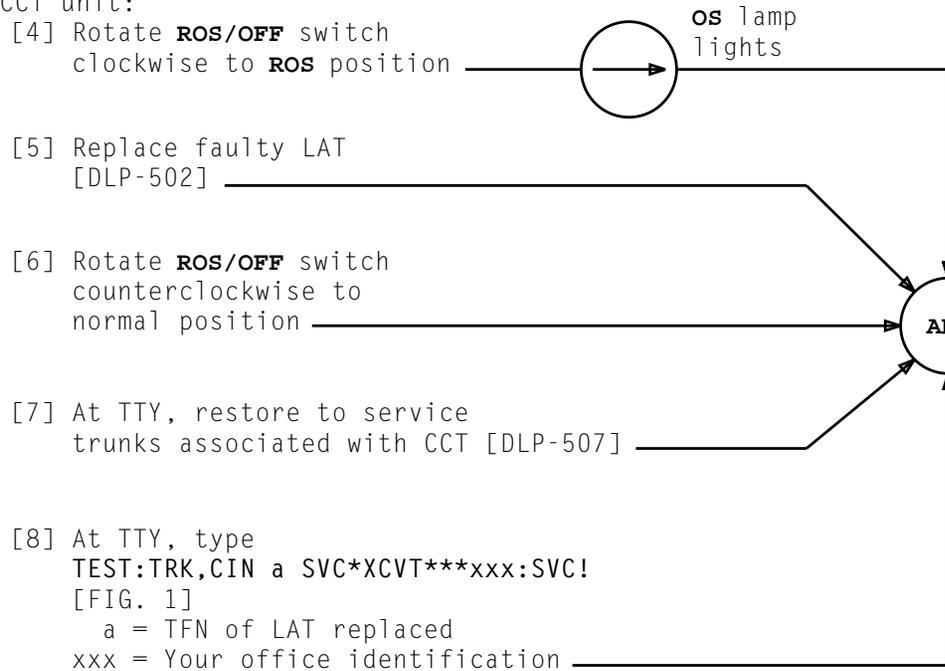


FIG. 2 - Partial MISC A Frame

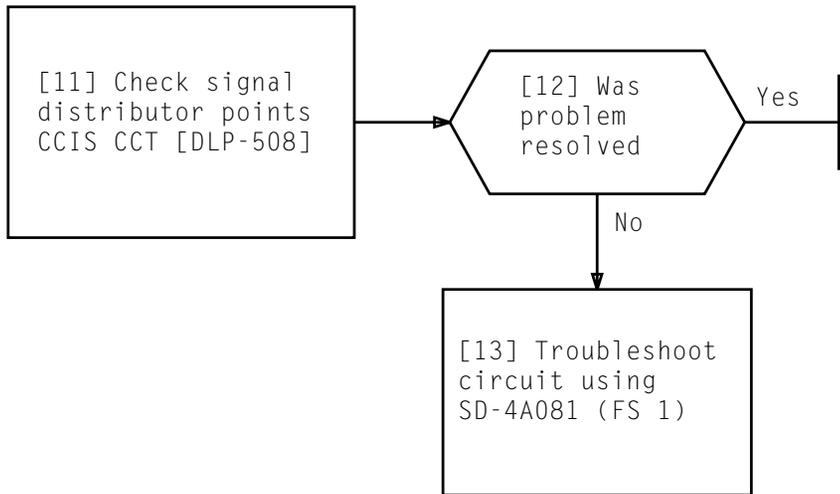
Issue 4	APR 1994
234-151-043	TAP
PAGE 1 of 3	111

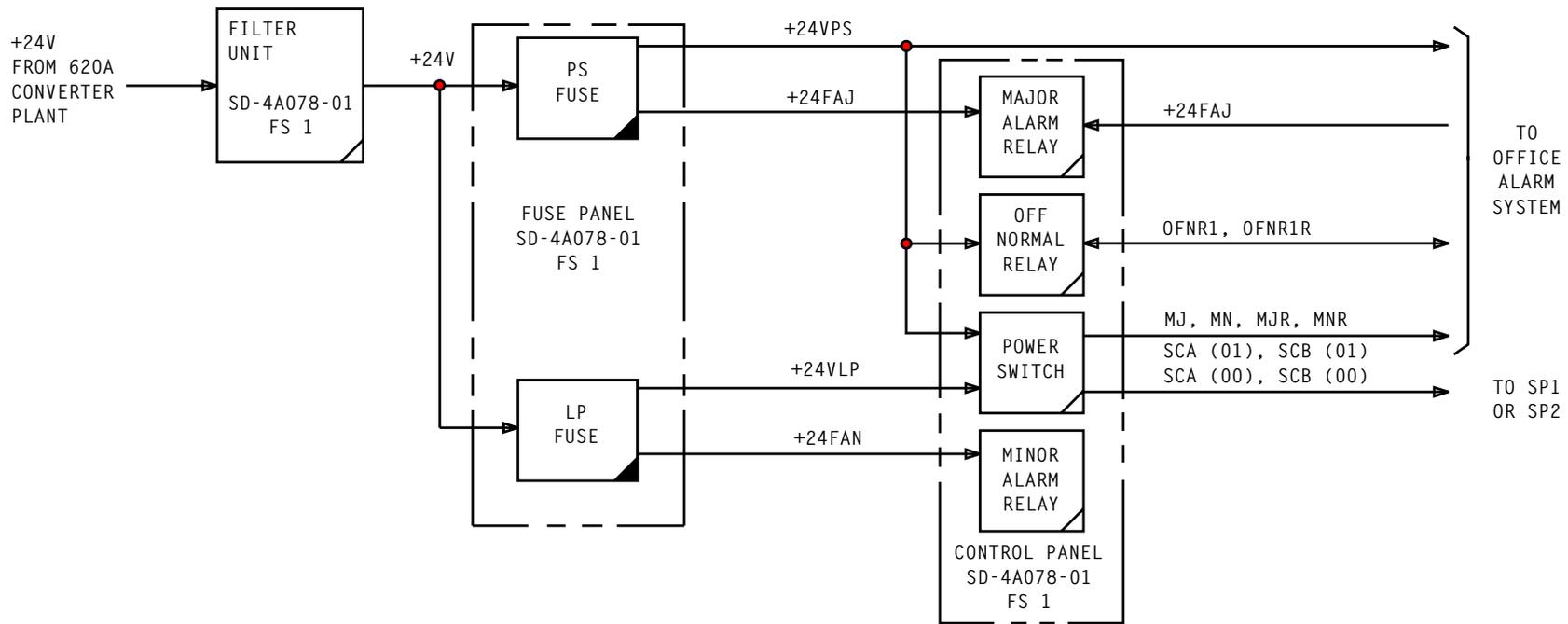
At CCT unit:



CLEAR LOOP-AROUND TEST FAILURE, CONTINUITY CHECK TRANSCEIVER

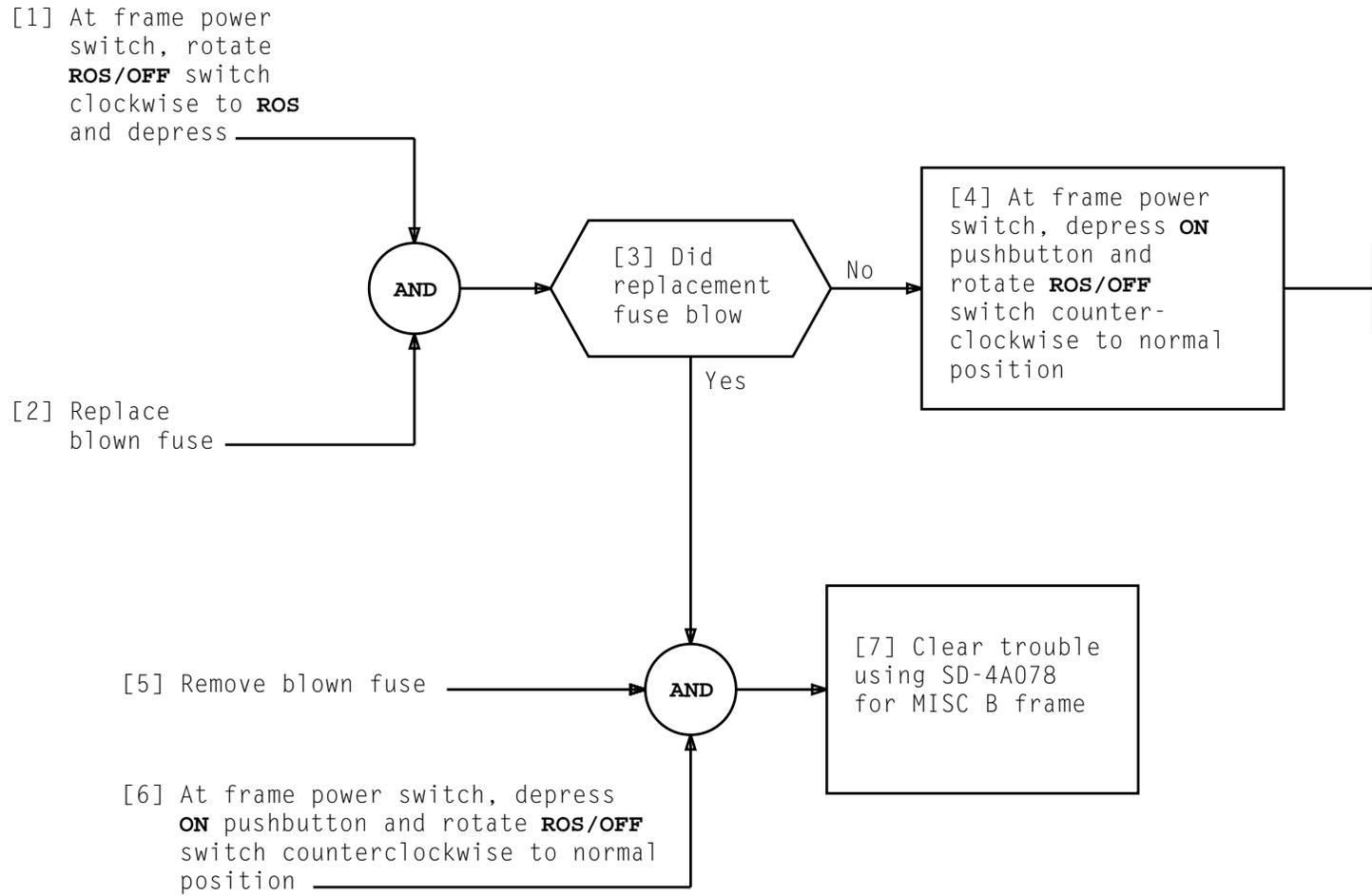
Issue 4	APR 1994
234-151-043	TAP
PAGE 2 of 3	111





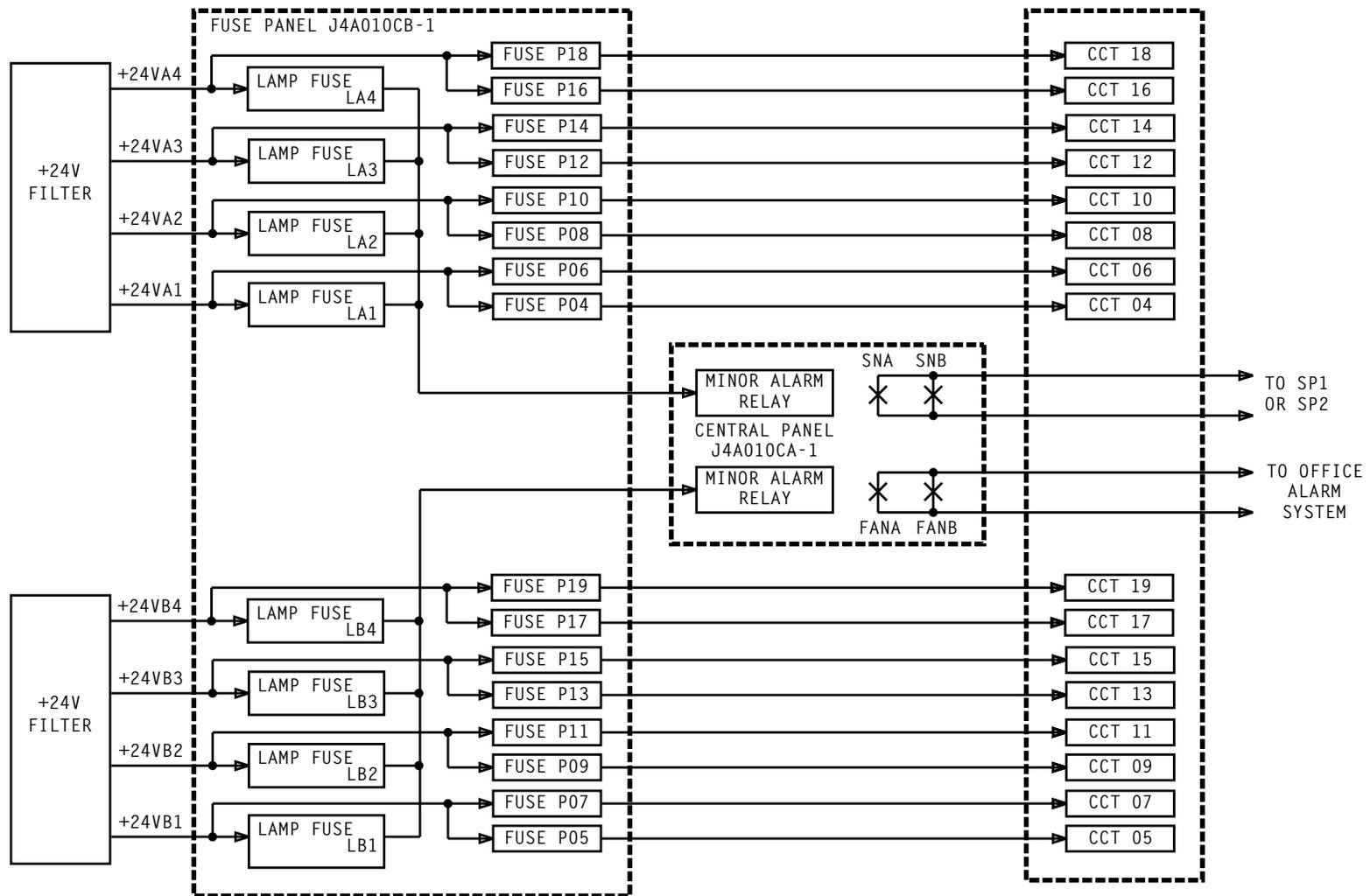
FUSE PANEL J4A010BB CIRCUIT

Issue 4	APR 1994
234-151-043	ISD
PAGE 1 of 1	112



CLEAR BLOWN FUSE - FUSE PANEL J4A010BB

Issue 4	APR 1994
234-151-043	TAP
PAGE 1 of 1	113



FUSE PANEL J4A010CB-1 CIRCUIT

Issue 4	APR 1994
234-151-043	ISD
PAGE 1 of 1	114

[1] Determine CCT member number associated with blown fuse

[2] At CCT power switch, rotate **ROS/OFF** switch clockwise to **ROS** position

OS lamp lights

[3] Depress **ROS/OFF** switch

[4] Replace blown fuse

AND

[5] Did replacement fuse blow

Yes

Page 3

No

[6] At CCT power switch. depress **ON** pushbutton

[7] Did fuse blow

Yes

[10] At CCT power switch, depress **ROS/OFF** pushbutton

Page 2

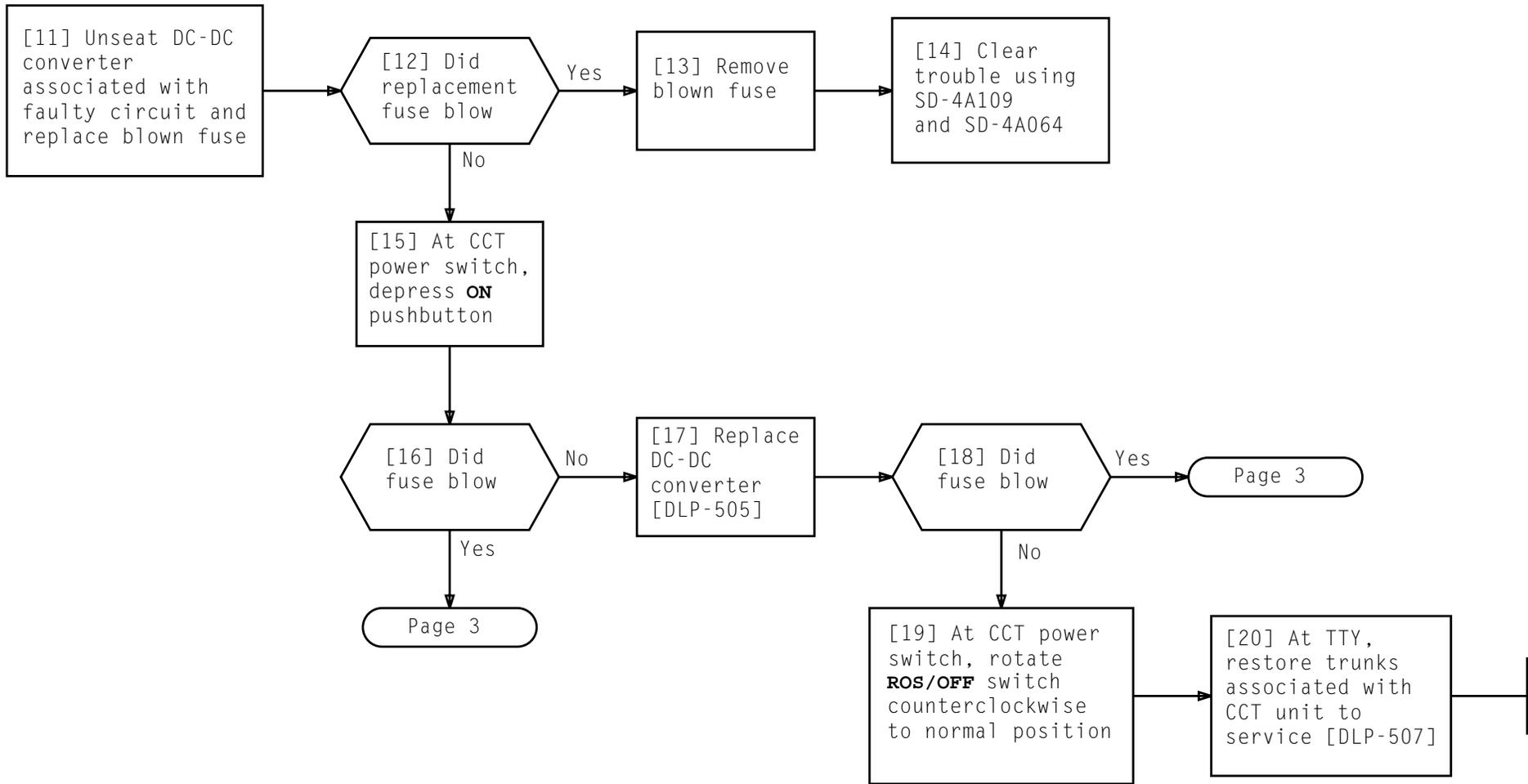
No

[8] At CCT power switch, rotate **ROS/OFF** switch counterclockwise to normal position

[9] At TTY, restore trunks associated with CCT unit to service [DLP-507]

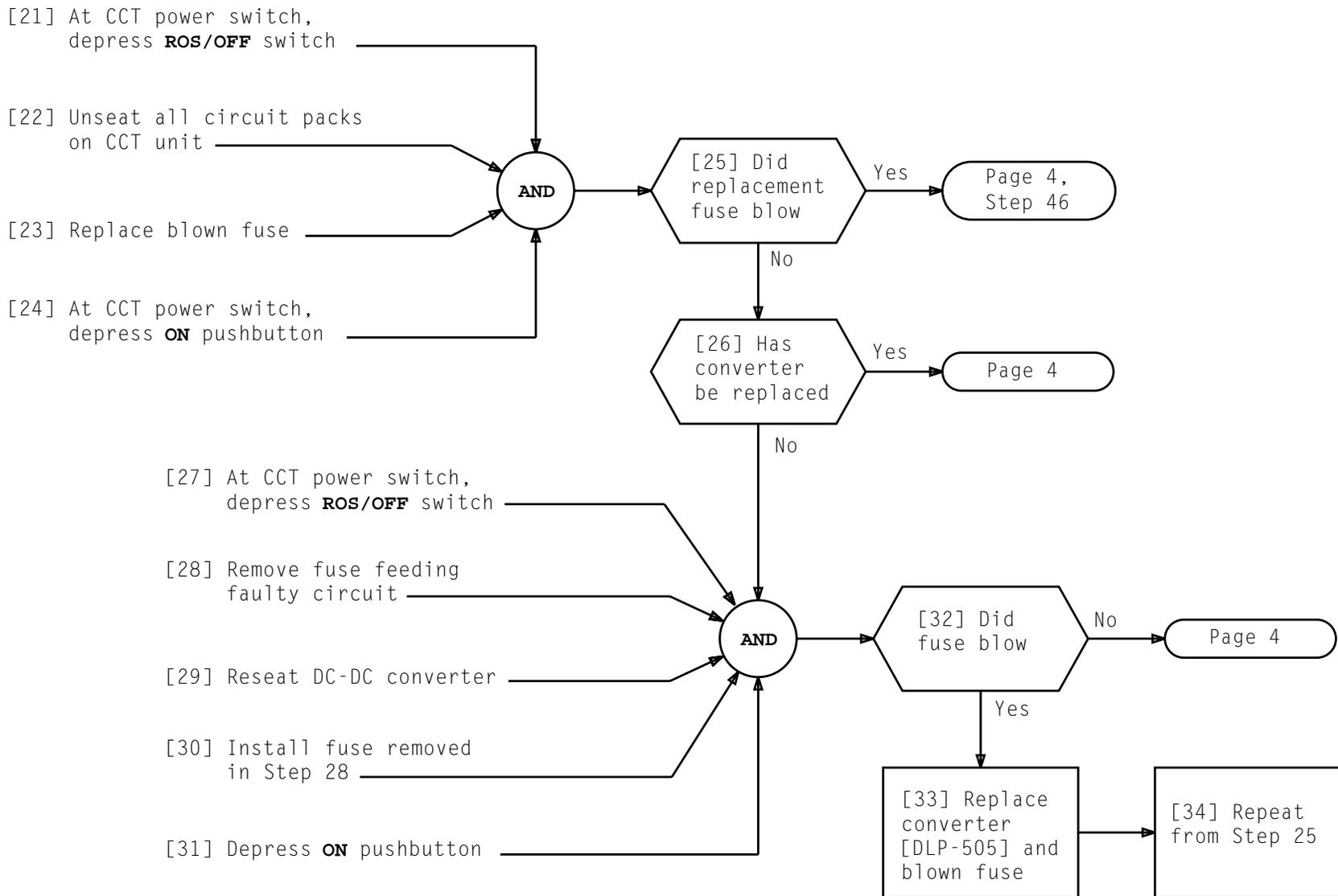
CLEAR BLOWN FUSE, FUSE PANEL J4A010CB-1

Issue 4	APR 1994
234-151-043	TAP
PAGE 1 of 5	115



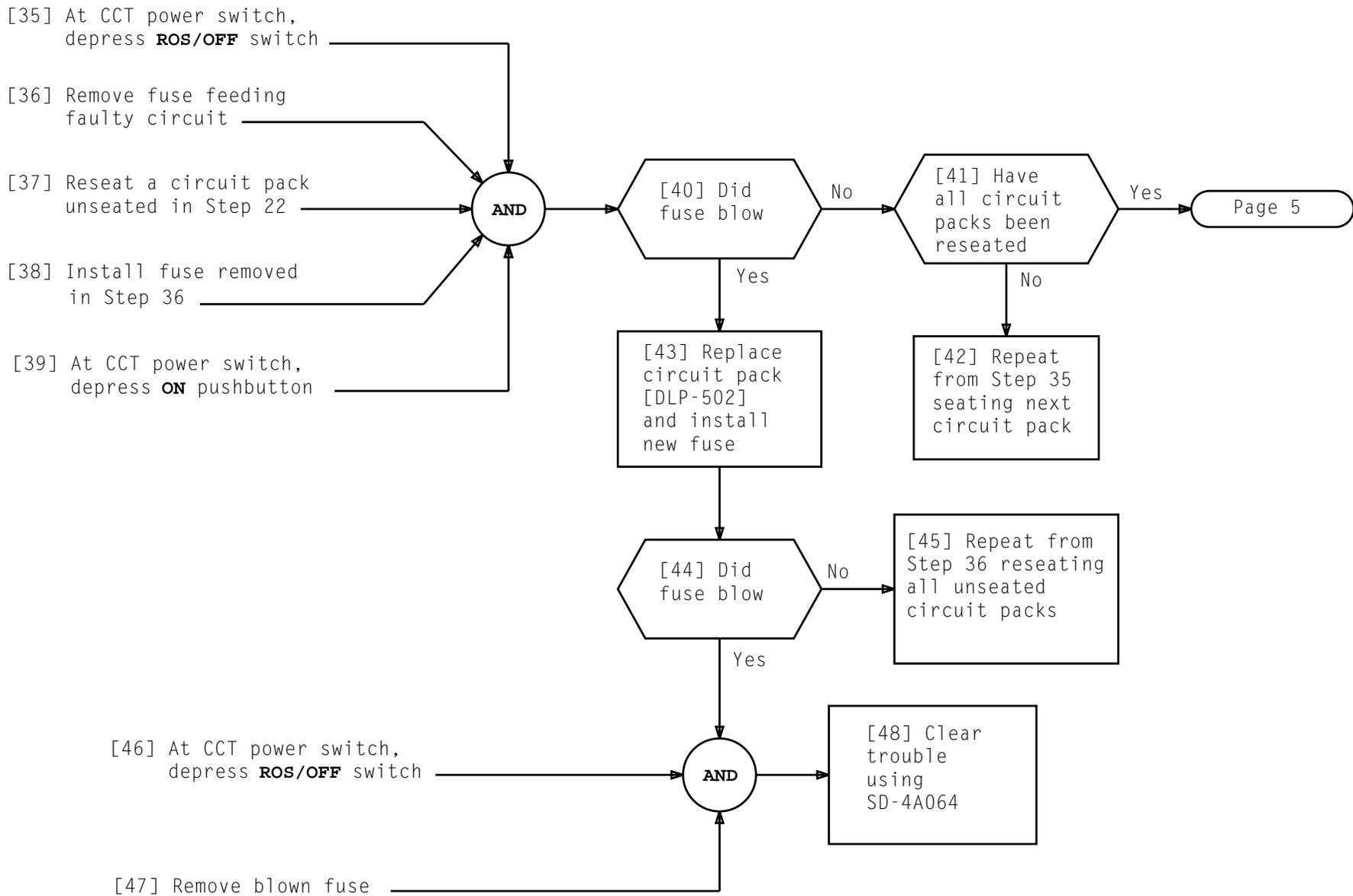
CLEAR BLOWN FUSE, FUSE PANEL J4A010CB-1

Issue 4	APR 1994
234-151-043	TAP
PAGE 2 of 5	115



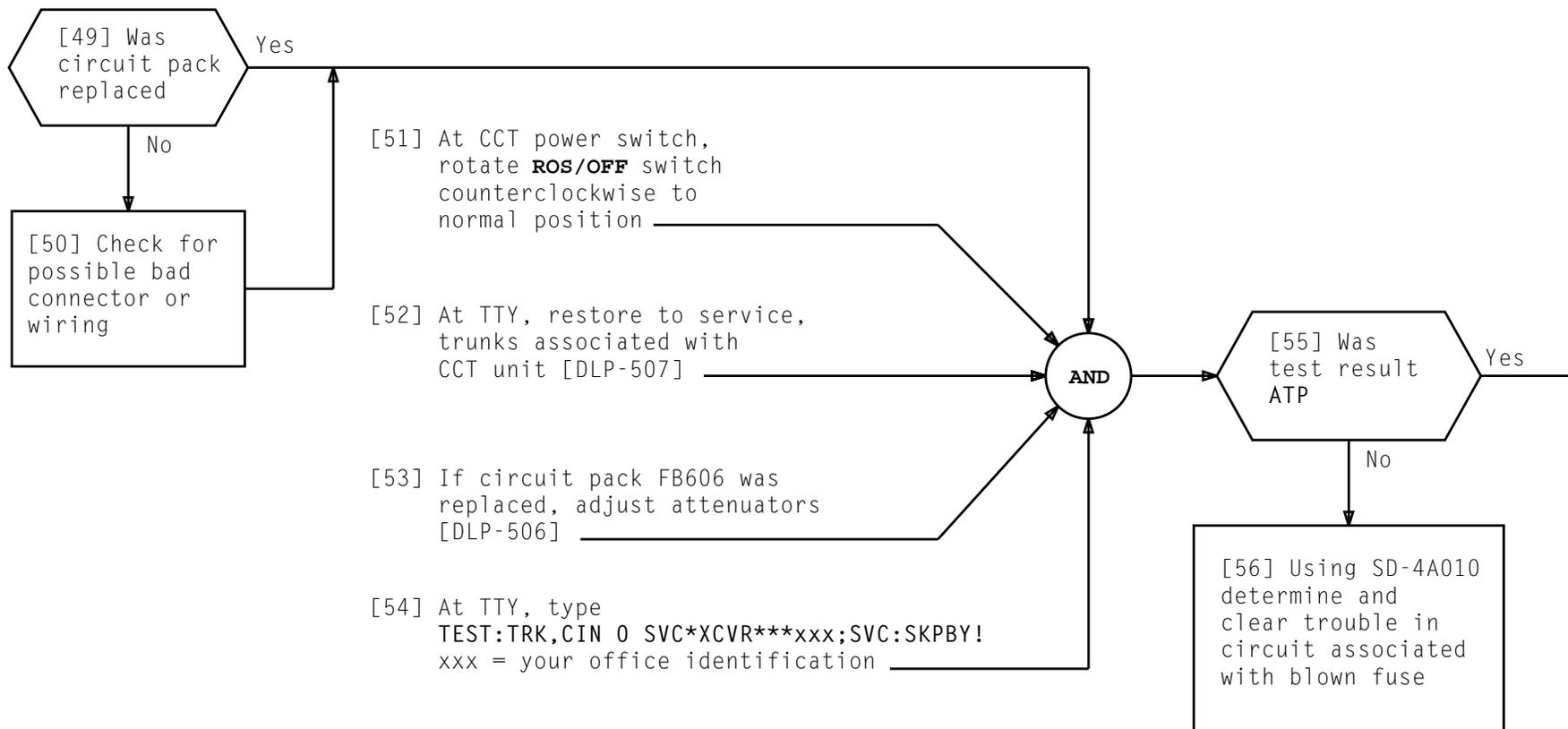
CLEAR BLOWN FUSE, FUSE PANEL J4A010CB-1

Issue 4	APR 1994
234-151-043	TAP
PAGE 3 of 5	115



CLEAR BLOWN FUSE, FUSE PANEL J4A010CB-1

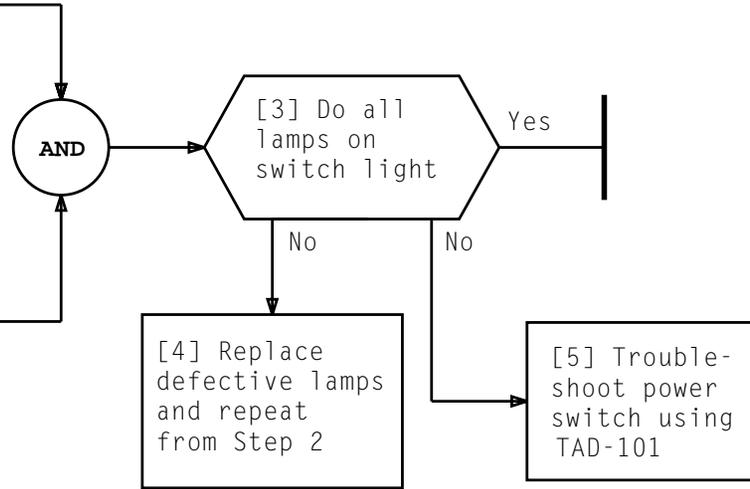
Issue 4	APR 1994
234-151-043	TAP
PAGE 4 of 5	115



At power switch:

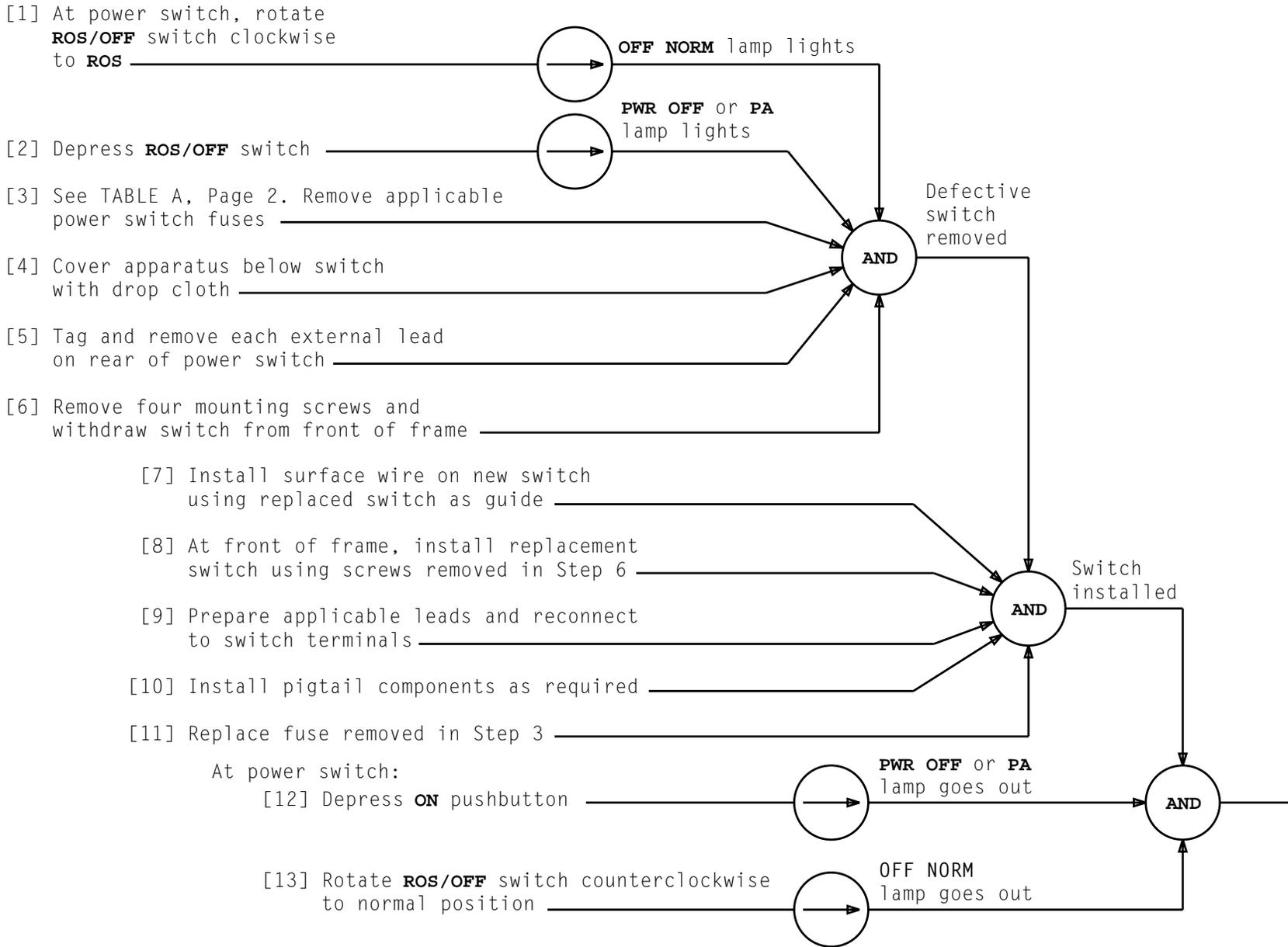
[1] Ensure **ROS/OFF** switch is rotated to counterclockwise position

[2] Depress and hold **TEST** pushbutton while observing lamps



TEST POWER SWITCH LAMPS

Issue 4	APR 1994
234-151-043	DLP
PAGE 1 of 1	500



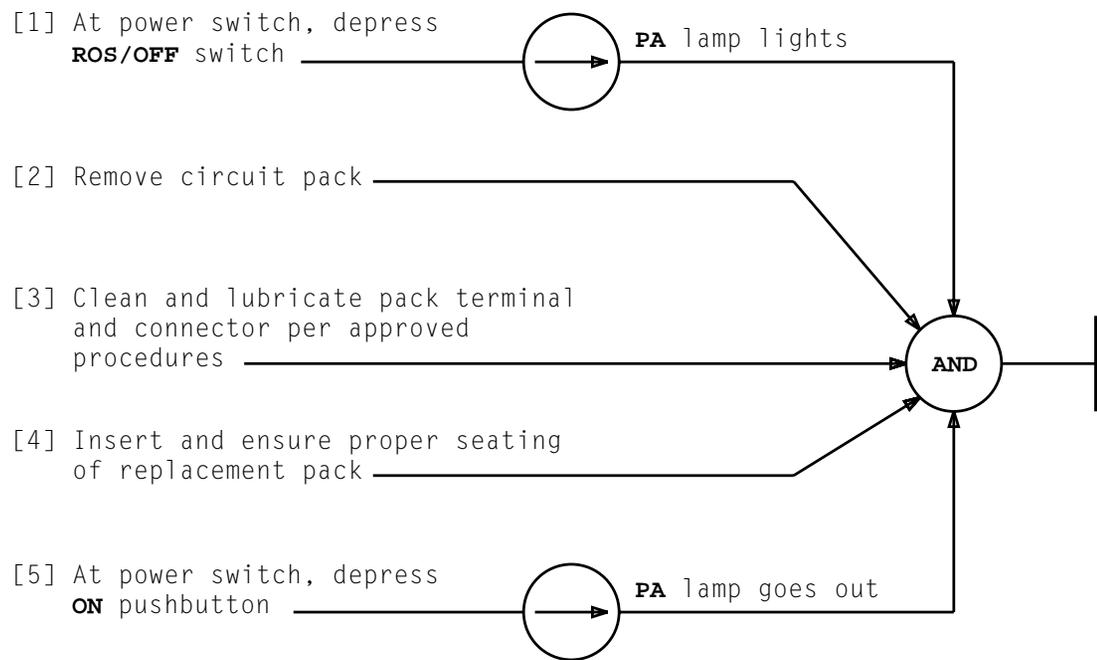
REPLACE POWER SWITCH

Issue 4	APR 1994
234-151-043	DLP
PAGE 1 of 2	501

TABLE A					
FRAME	UNIT LOCATION	UNIT DESIGNATION	SWITCH LOCATION	FUSE BLOCK LOCATION	FUSE DESIGNATION
Miscellaneous A	060	CCIS Continuity Check Transceiver -3	062-34	007-36	MA
	056	CCIS Continuity Check Transceiver -2	058-34	007-36	MC
	052	CCIS Continuity Check Transceiver -3	054-34	007-36	MB
	048	CCIS Continuity Check Transceiver -2	050-34	007-36	MD
	044	Control Panel	046-44	007-36	LP PS
Miscellaneous B	044	Control Panel	046-44	007-36	LP PS

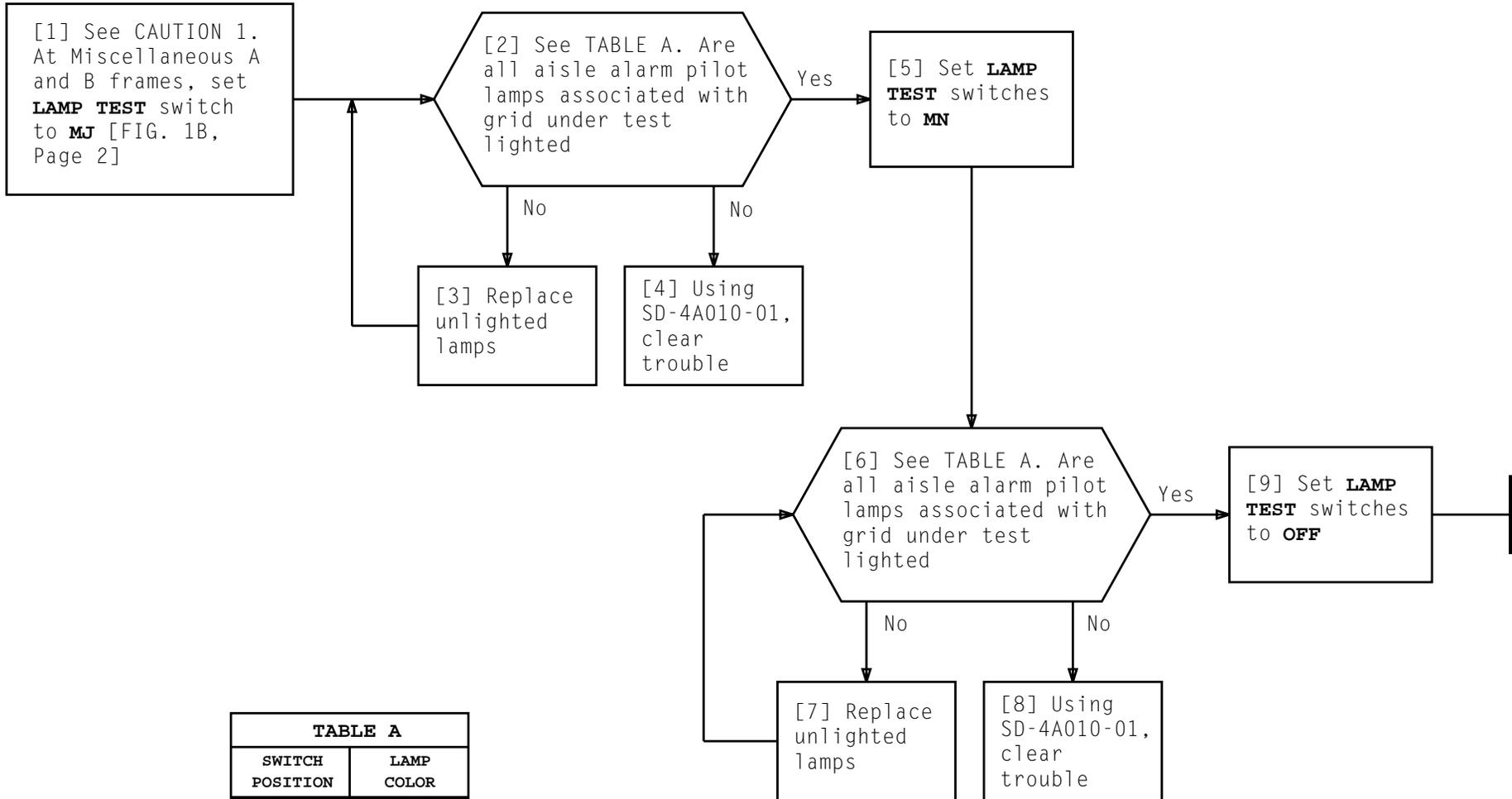
REPLACE POWER SWITCH

Issue 4	APR 1994
234-151-043	DLP
PAGE 2 of 2	501



REPLACE CIRCUIT PACK

Issue 4	APR 1994
234-151-043	DLP
PAGE 1 of 1	502



SWITCH POSITION	LAMP COLOR
MJ	Red
MN	Amber

CAUTION 1
Setting lamp test switch to MJ or MN inhibits associated audible alarm

Issue 4	APR 1994
234-151-043	DLP
PAGE 1 of 2	503

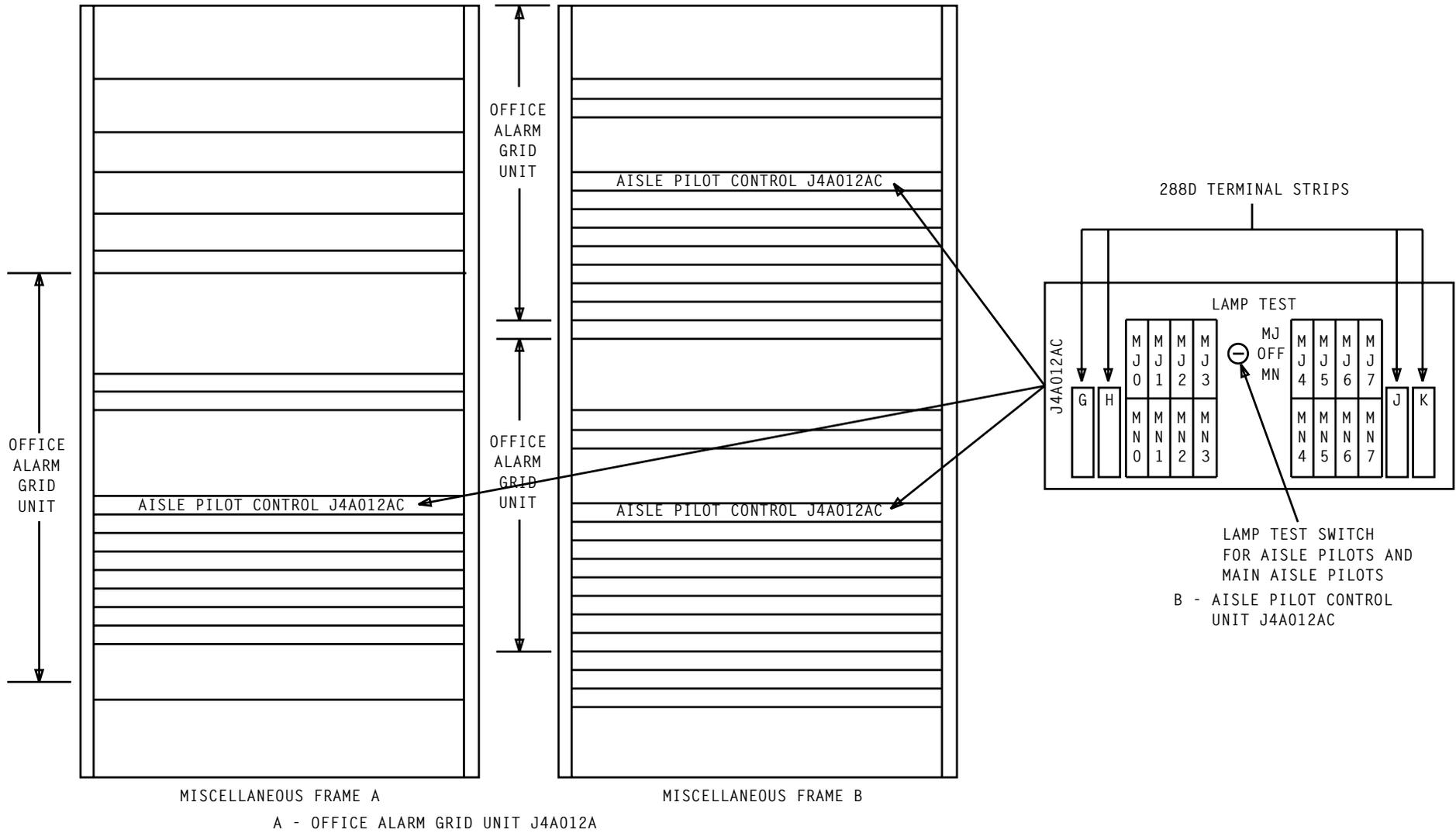
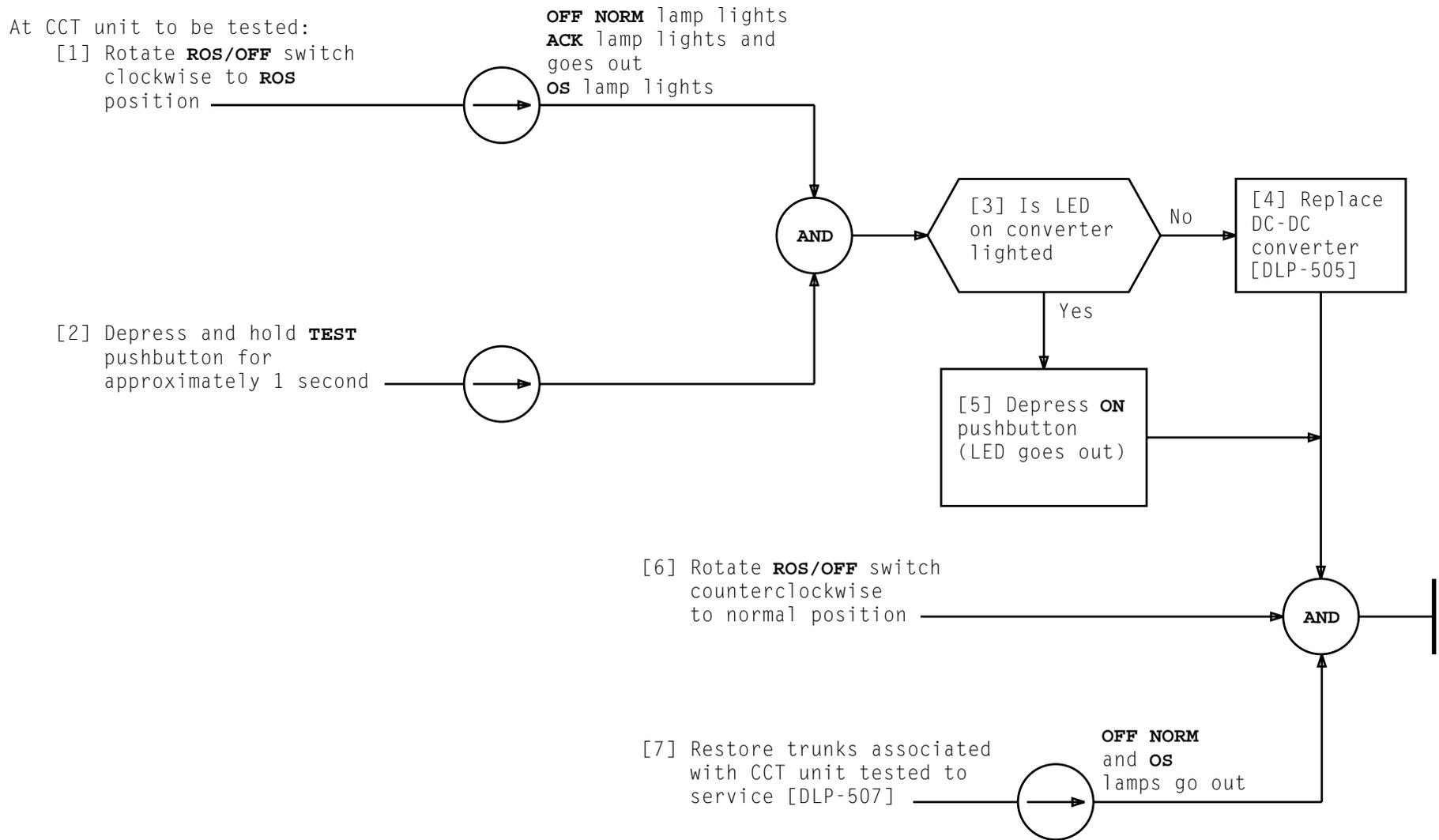


FIG. 1 - Miscellaneous A and B Frames



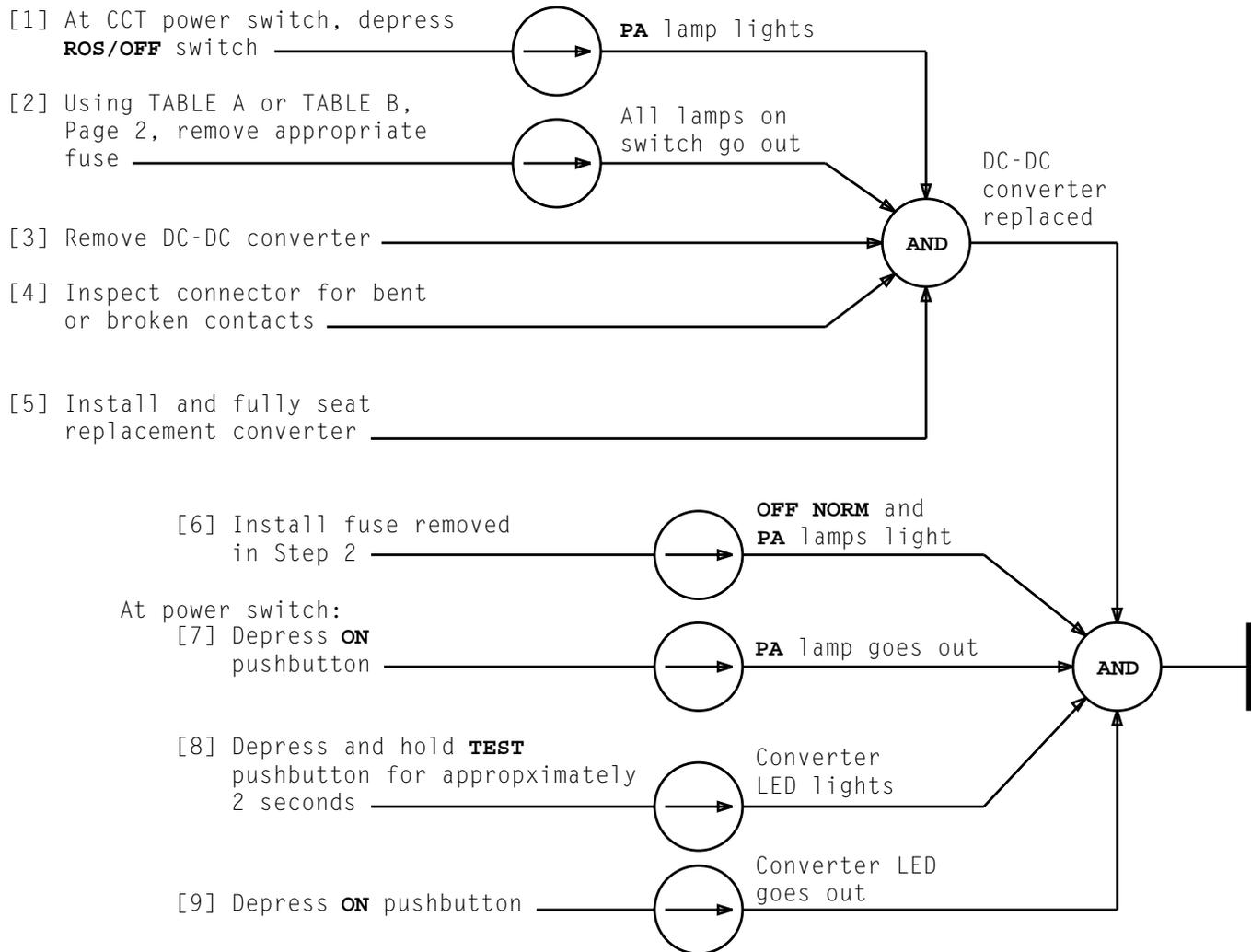


TABLE A - MISC FRAME A			
CCT		FUSE	
MEMN	VERT POS	DESIG	POS
CCT0	48	MD	07-36
CCT1	52	MB	07-36
CCT2	56	MC	07-36
CCT3	60	MA	07-36

REPLACE DC-DC CONVERTER

TABLE B - MISC FRAME C			
CCT		FUSE	
MEMN	VERT POS	DESIG	POS
CCT4	16	P4	11-17
CCT5	20	P5	11-30
CCT6	24	P6	11-17
CCT7	28	P7	11-30
CCT8	32	P8	11-17
CCT9	36	P9	11-30
CCT10	40	P10	11-17
CCT11	44	P11	11-30
CCT12	50	P12	11-23
CCT13	54	P13	11-36
CCT14	58	P14	11-23
CCT15	62	P15	11-36
CCT16	66	P16	11-23
CCT17	70	P17	11-36
CCT18	74	P18	11-23
CCT19	78	P19	11-36

REPLACE DC-DC CONVERTER

Issue 4	APR 1994
234-151-043	DLP
PAGE 2 of 2	505

SUMMARY

To adjust loop-around test CKT (LAT) attenuators, set TRK-STAT of LAT to CAD.DSA. Set AMP/ATT SD points for 0 dB. Set OSC loop SD point, connect transmission measuring set (TMS) to test point P01 and request TOC to apply 1mW tone from 51A to LAT. Adjust ATTEN 1 for reading of -3.5 dBm on TMS.

Request tone be removed, and remove TMS from P01. Set OUTGATE SD point and request TOC to apply 1mW tone and make level measurement of return. Adjust ATTEN 2 for reading of -7 dBm on 51A TMS. Request TOC to release connection to LAT and restore LAT to active status.

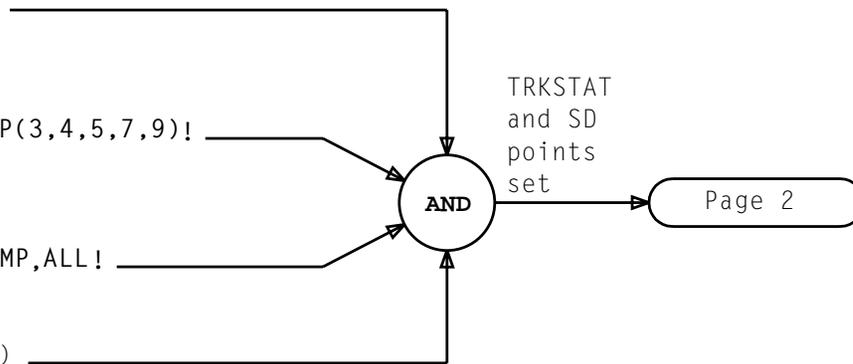
At TTY:

[1] Type in
SET:TRKSTAT CAD.DSA,CIN ab SVC*XCVT***xxx!
a = CCT member number
b = LAT number on CCT unit
xxx = your office identification

[2] Type in
ORD:SD;OPR:CIN [as in Step 1],BMP(3,4,5,7,9)!

[3] Type in
ORD:SD;READ:CIN [as in Step 1],BMP,ALL!

[4] Verify SD points are (0011101010)



**ADJUST LOOP-AROUND TEST CIRCUIT ATTENUATORS IN CONTINUITY CHECK
TRANSCEIVER USING 51A TEST SET**

Issue 4	APR 1994
234-151-043	DLP
PAGE 1 of 3	506

Request TOC to:

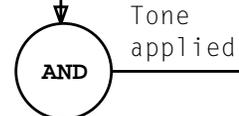
[5] SET:CONN a;TP bb:CIN [as in Step 1, Page 1],MODE 4!
a = TAT number
bb = Test position number

[6] Depress **1004 HZ** key

See NOTE 1. At MISC A Frame CCT unit:

[7] Connect transmission measuring set (TMS)
to P01 of LAT to be adjusted

[8] Request TOC to depress and hold **UP 10**
key while ATTEN 1 is being adjusted



Tone
applied



[9] Adjust
ATTEN 1 on LAT
for a reading
of -3.5 dBm
on TMS

Page 3

NOTE 1 At CCT loop-around test unit, raise identifier strip. P01 is a two lead connector on component side of circuit pack FB606	
Issue 4	APR 1994
234-151-043	DLP
PAGE 2 of 3	506

**ADJUST LOOP-AROUND TEST CIRCUIT ATTENUATORS IN CONTINUITY CHECK
TRANSCEIVER USING 51A TEST SET**

Request TOC to:

[10] Remove tone (depress
TMRT RLS key)

[11] Set 51A to measure
(Depress **LEV MEAS** key)

At MISC A Frame CCT unit:

[12] Remove TMS

[13] At TTY type in
ORD:SD;OPR:CIN [as in Step 1, Page 1],BMP 10!

[14] Type in
ORD:SD;READ:CIN [as in Step 1, Page 1],BMP,ALL!

[15] Verify SD points are (0011101011)

Loopback
set up

AND

Request TOC to:

[16] Depress **1004 HZ** key

[17] Depress and hold **UP 10** key until
ATTEN 2 has been adjusted

[18] Read TMS and direct adjustment
of ATTEN 2 for -7 dBm on meter

[19] Adjust
ATTEN 2 on LAT
for a reading
of -7 dBm on
51A TMS

[20] Request TOC to release LAT
connection (depress **TAT RLS** key)

[21] At TTY, type in
SET:TRKSTAT ACT,CIN [as in Step 1, Page 1]!

AND

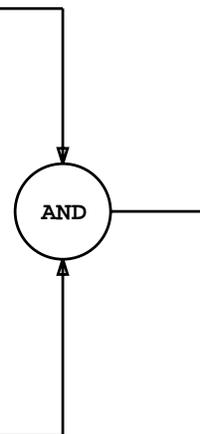
AND

ADJUST LOOP-AROUND TEST CIRCUIT ATTENUATORS IN CONTINUITY CHECK TRANSCEIVER USING 51A TEST SET

Issue 4	APR 1994
234-151-043	DLP
PAGE 3 of 3	506

[1] Type in
SET:TRKSTAT ACT,CIN abb SVC*XCVR***xxx:NUM c!
a = CCT member number
bb = 00 representing 1st transceiver on CCT unit
c = number of transceiver equipped on CCT unit
xxx = your office identification

[2] If CCT member number is CCT0 or CCT1
type in
SET:TRKSTAT ACT,CIN ab SVC*XCVT***xxx:NUM 2!
a = CCT member number
b = 0 representing 1st loop-around test CKT on the CCT unit
c = number of transceiver equipped on CCT unit
xxx = your office identification



RESTORE TRUNKS TO SERVICE, CONTINUITY CHECK TRANSCEIVER

Issue 4	APR 1994
234-151-043	DLP
PAGE 1 of 1	507

At TTY

[1] Type
VER:UTYPE:CCT aa, ENTRY!
aa = CCT number

TTY will output
VER:UTYMN; OPT
(ENTRY), CUR:

[2] See FIG. 1. Type
ORD:SD;RLS:MDN 0' b!
b = MDN octal number

[3] Type
ORD:SD;READ:MDN 0' b!
b = MDN octal number
found in Step 2

[6] Type
ORD:SD;OPR:MDN 0' b!
b = MDN octal number
found in Step 2

[7] Type
ORD:SD;READ:MDN 0' b!
b = MDN octal number
found in Step 2

AND

[4] Does TTY
output message
following READ input
message indicate 0

No

[5] Determine SP
location of suspect
MDN from MDN octal
number and
investigate TOP
234-151-031

Yes

AND

Page 2

VER:UTMN; OPT (ENTRY),CUR: FLN 13012.03, UTYN CCT,

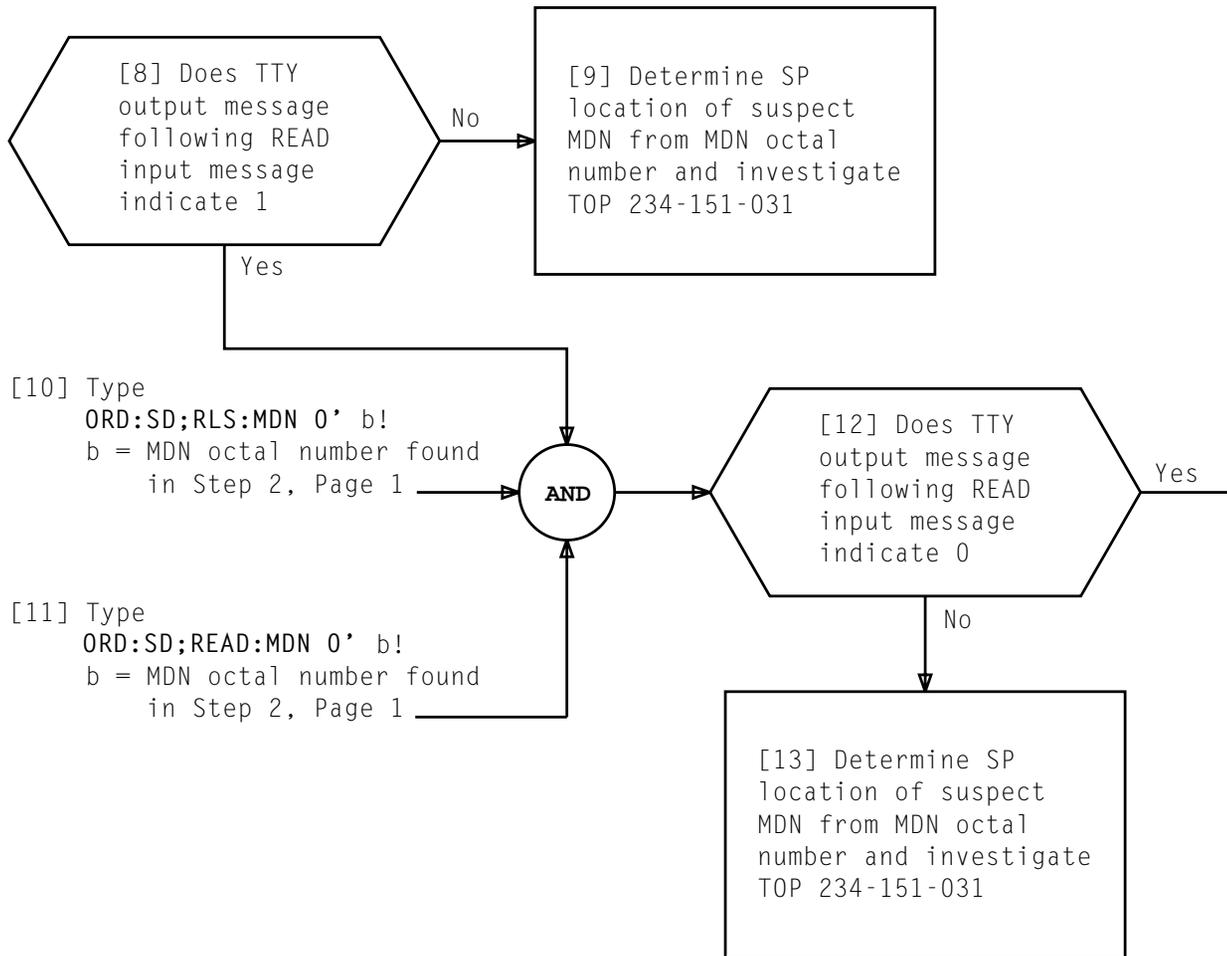
MEMN 5, ME OPER,
ENTRY ADDRESS 07643410, ENTRY SIZE 5,

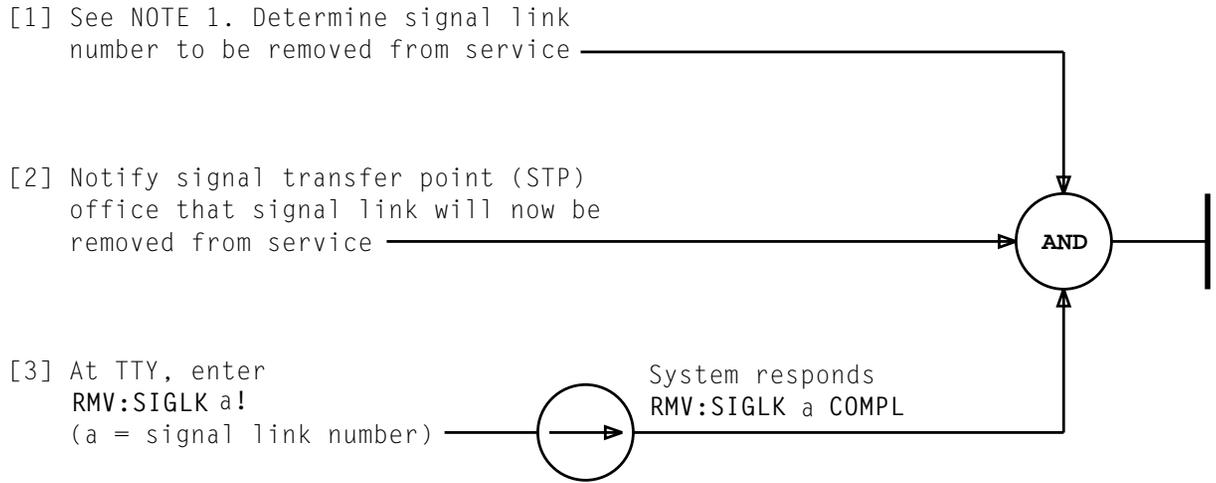
CUR
WORD 0 60060070 04030003 00460012 01454130
00064130

OCTAL MDN =
BITS 0-16
IE. 060012

FIG. 1

Issue 4	APR 1994
234-151-043	DLP
PAGE 1 of 2	508





NOTE 1	
Signal link number is a 4-digit number. First two digits are terminal group number; second two digits are terminal unit number within terminal group	
Issue 4	APR 1994
234-151-043	DLP
PAGE 1 of 1	509

NOTE: For power switch and fuse locations, first digit indicates in which bay or frame the unit is located.
 0 = Bay 0, Basic Frame
 1 = Bay 1, Basic Frame
 2 = 1st Supplementary Frame
 3 = 2nd Supplementary Frame

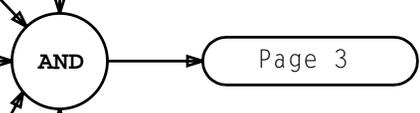
1. Identify power switch associated with amplifier and pad unit [TABLE A]
- End of procedure

TABLE A	
UNIT	PWR SWITCH LOCATION
TERM 00	054-27
TERM 01	054-31
TERM 02	054-35
TERM 03	154-27
TERM 04	154-31
TERM 05	154-35
TERM 06	254-27
TERM 07	254-31
TERM 08	254-35
TERM 09	254-39
TERM 10	254-43
TERM 11	354-27
TERM 12	354-31
TERM 13	354-35
TERM 14	354-39
TERM 15	354-43

IDENTIFY POWER SWITCH LOCATION

Issue 4	APR 1994
234-151-043	DLP
PAGE 1 of 1	510

- [1] If D4 channel units are associated with terminal to be adjusted, ensure channel unit pads have been adjusted for 0 drop across the 4ESS switch
- [2] At TTY, enter
VER:TRKNAME,CIN a MIS*TERM* b:OTAN!**
a = traffic number (TFN) of terminal =
TGR number times 16 plus terminal number within TGR
b = office identity
- [3] Record octal TAN (OTAN) from output (Step 2) for later reference
- [4] At terminal associated with AMP/PAD to be adjusted, remove terminal modem interface (TMI) unit
- [5] On facility test panel at location 27-37, connect transmission measuring set (TMS) [600 ohm terminated] to **RCV-B** (a) (a = terminal to be adjusted) test jack [FIG. 1, Page 2, for domestic, FIG. 2 for international]



ADJUST AMPLIFIER AND PAD ON AMP/PAD UNIT USING RMS-D2

Issue 4	APR 1994
234-151-043	DLP
PAGE 1 of 8	511

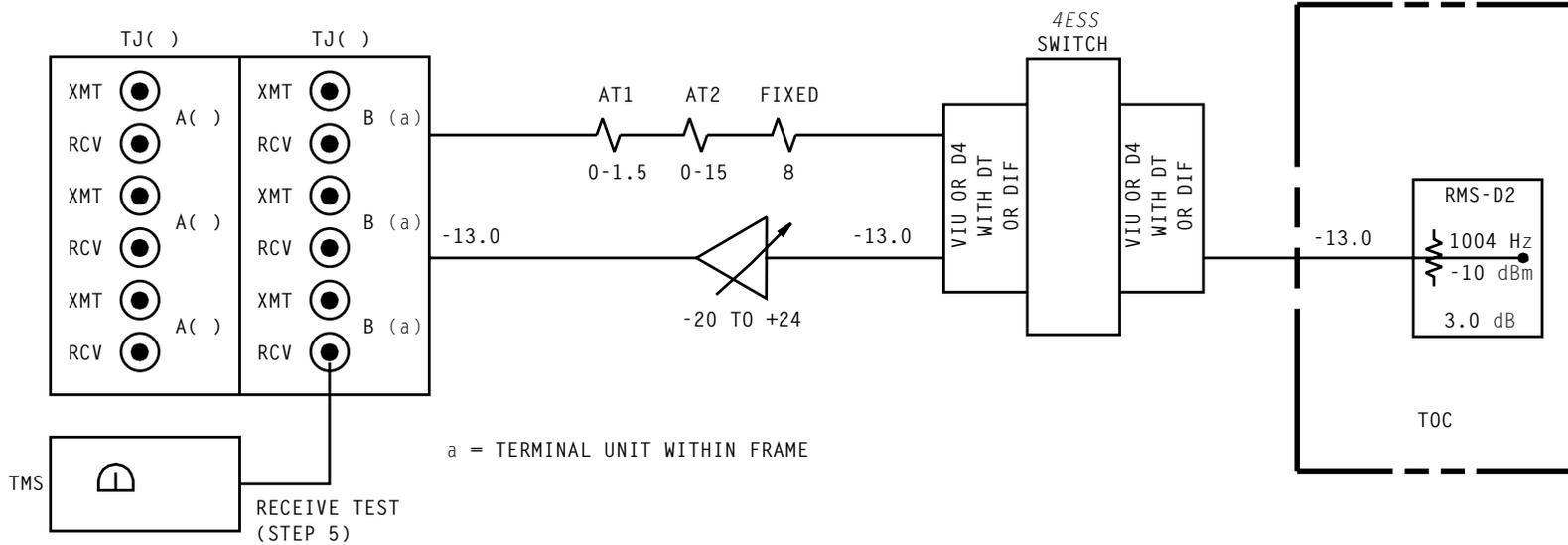


FIG. 1 - TMS and Loopback Connections - Domestic

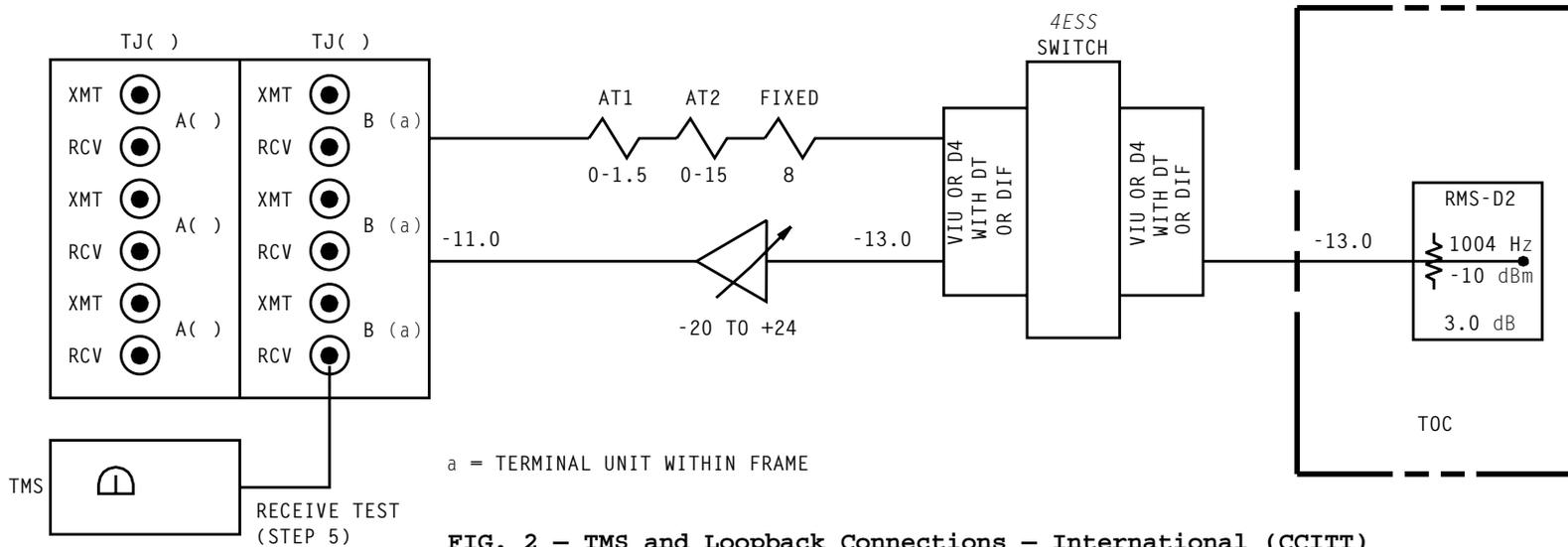


FIG. 2 - TMS and Loopback Connections - International (CCITT)

ADJUST AMPLIFIER AND PAD ON AMP/PAD UNIT USING RMS-D2

Issue 4	APR 1994
234-151-043	DLP
PAGE 2 of 8	511

Request TOC to [using trunk workstation (TWS)]:

[6] Enter sign on command

[7] Activate circuit via OTAN
(enter 113/a [a = OTAN recorded in Step 3, Page 1])

[8] Obtain DYNAMIC TEST CONTROL MENU (enter 705)

[9] Select SETC (enter 710/0)

[10] Send 1004 Hz tone at -10 dBm
(enter 721/0/1/-10)

AND

```
graph LR; S6["[6] Enter sign on command"] --> AND((AND)); S7["[7] Activate circuit via OTAN (enter 113/a [a = OTAN recorded in Step 3, Page 1])"] --> AND; S8["[8] Obtain DYNAMIC TEST CONTROL MENU (enter 705)"] --> AND; S9["[9] Select SETC (enter 710/0)"] --> AND; S10["[10] Send 1004 Hz tone at -10 dBm (enter 721/0/1/-10)"] --> AND; AND --> P4(["Page 4"]);
```

Page 4

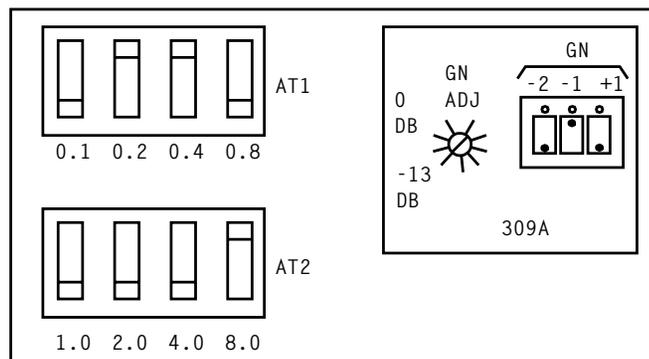
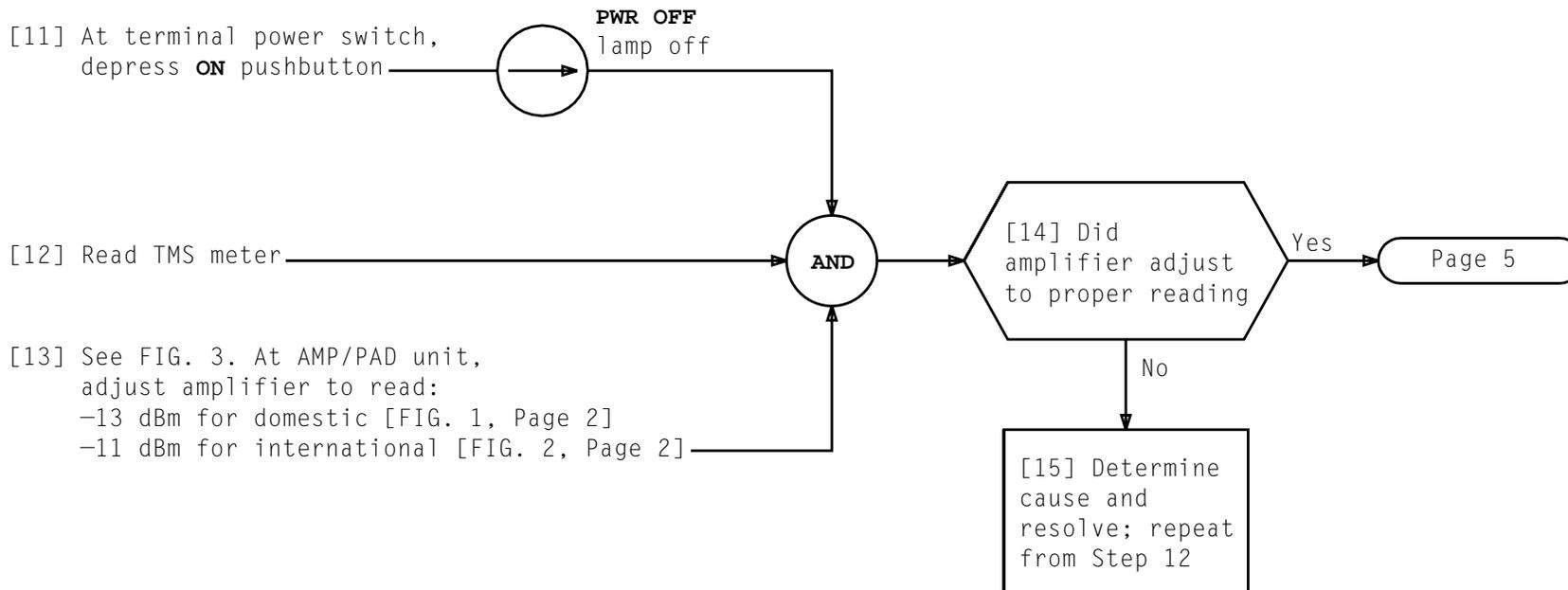


FIG. 3 - CCIS Amplifier and Pad Unit

ADJUST AMPLIFIER AND PAD ON AMP/PAD UNIT USING RMS-D2

Issue 4	APR 1994
234-151-043	DLP
PAGE 4 of 8	511

At facility test panel:

[16] Remove TMS

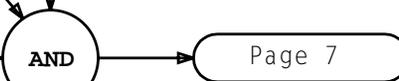
[17] Patch **RCV-B** (a) (a = terminal to be adjusted) test jack to **XMT-B** (a) test jack [FIG. 4, Page 6 or FIG. 5]

[18] See FIG. 3, Page 4. At AMP/PAD unit, pre-set **AT1** and **AT2** to 7.9

Request TOC to (using TWS):

[19] Release tone (enter 721/0)

[20] Send 1004 Hz tone at 0 dBm (enter 721/0/1/0)



ADJUST AMPLIFIER AND PAD ON AMP/PAD UNIT USING RMS-D2

Issue 4	APR 1994
234-151-043	DLP
PAGE 5 of 8	511

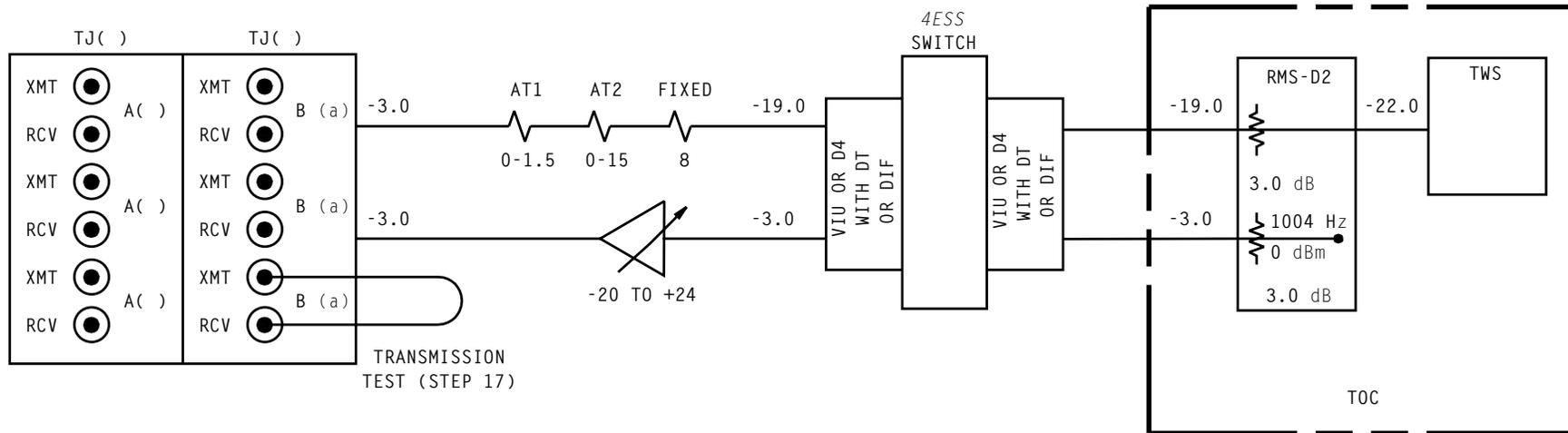


FIG. 4 - Loopback Connections - Domestic

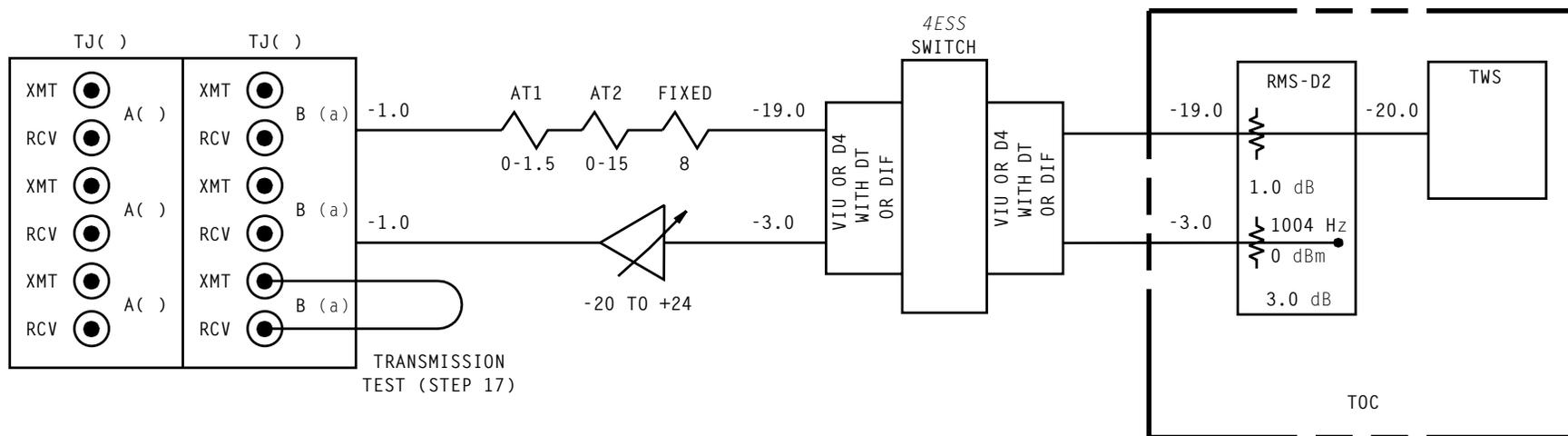
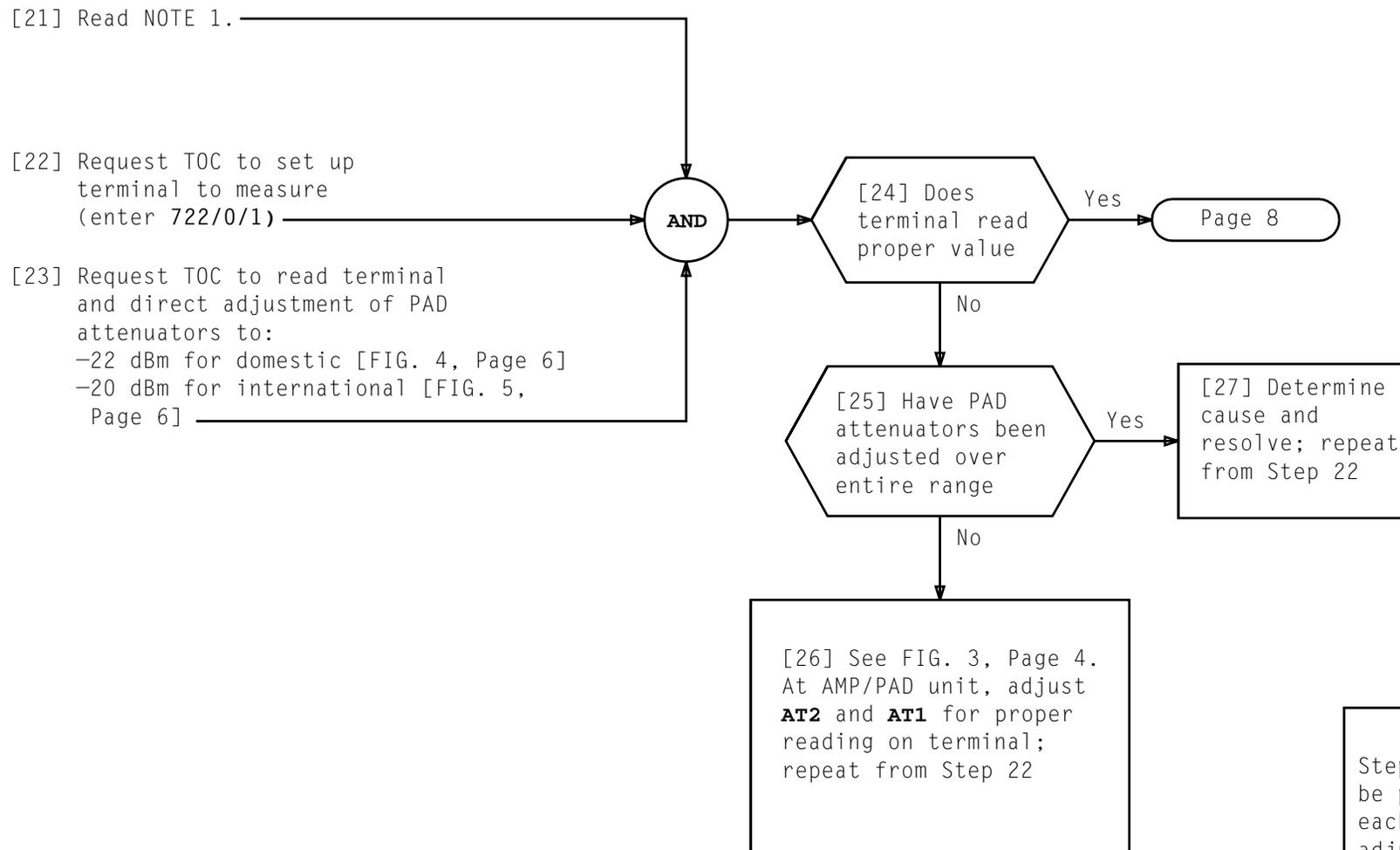


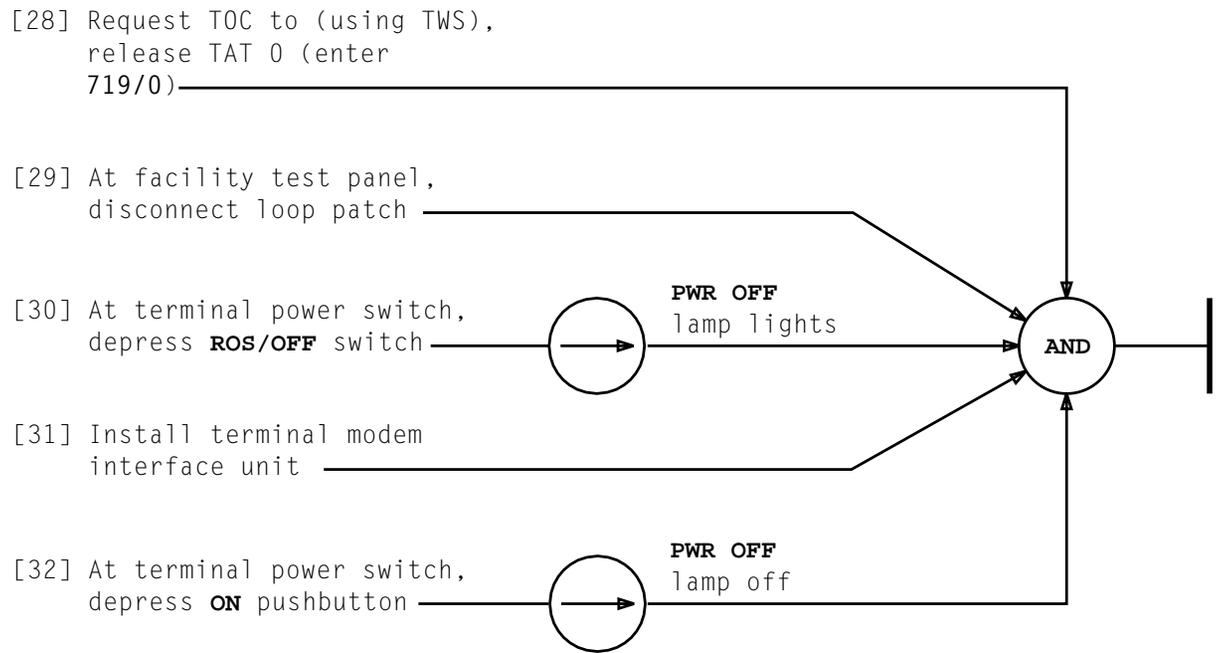
FIG. 5 - Loopback Connections - International (CCITT)

ADJUST AMPLIFIER AND PAD ON AMP/PAD UNIT USING RMS-D2

Issue 4	APR 1994
234-151-043	DLP
PAGE 6 of 8	511



NOTE 1	
Steps 22 and 23 must be performed for each PAD attenuator adjustment. TWS terminal will not continuously sample level readings	
Issue 4	APR 1994
234-151-043	DLP
PAGE 7 of 8	511



At CONNECTVU/TOPAS Workstation (TWS)

[1] Select Inservice trunk via CLCID,
CIN abSVC*XCVT***
traffic number ab
where a = CCT member number
b = LAT number on CCT unit

[2] Go to TESTING Screen

[3] Select **MANUAL**

[4] Select **SC** button on TAT 0
verify response

SET:CONN 0;TP nn:CIN abSVC*XCVT***; NO OUTPULSE COMPLETE

At TTY: (ROVER NEAR MISC A FRAME)

[5] Type in
TRC:TRK,CIN abSVC*XCVT***;TRC!
verify connection to CIN nnnOCLN*TAT**** STATE "TEST" 121

[6] Type in
ORD:SD;OPR:CIN abSVC*XCVT***,BMP (3,4,5,7,9)!
after COMPLETED response

[7] Type in
ORD:SD;READ:CIN abSVC*XCVT***,BMP<ALL!
verify response (0011101010)

TRKSTAT
and SD
points
set

AND

Page 2

**ADJUST LOOP-AROUND AND TEST CIRCUIT ATTENUATORS – CPS FB606,
USING RMS-D2 AND CONNECTVU OR TOPAS**

Issue 4	APR 1994
234-151-043	DLP
PAGE 1 of 3	512

At CONNECTVU/TOPAS Workstation (TWS)

[8] Select the **ST** button on TAT 0
(Select Tone)

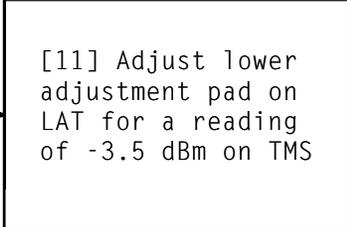
[9] Enter a frequency of 1004 HZ and
level of 0.0 dBm. Select
APPLY TONE button

See NOTE 1. At MISC A Frame CCT unit:

[10] See FIG. 1. Using small clip leads,
connect transmission measuring set (TMS)
to P01 of LAT to be adjusted



Tone applied



Page 3

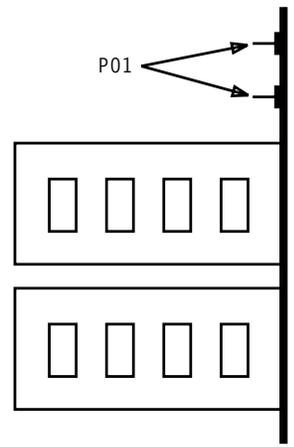
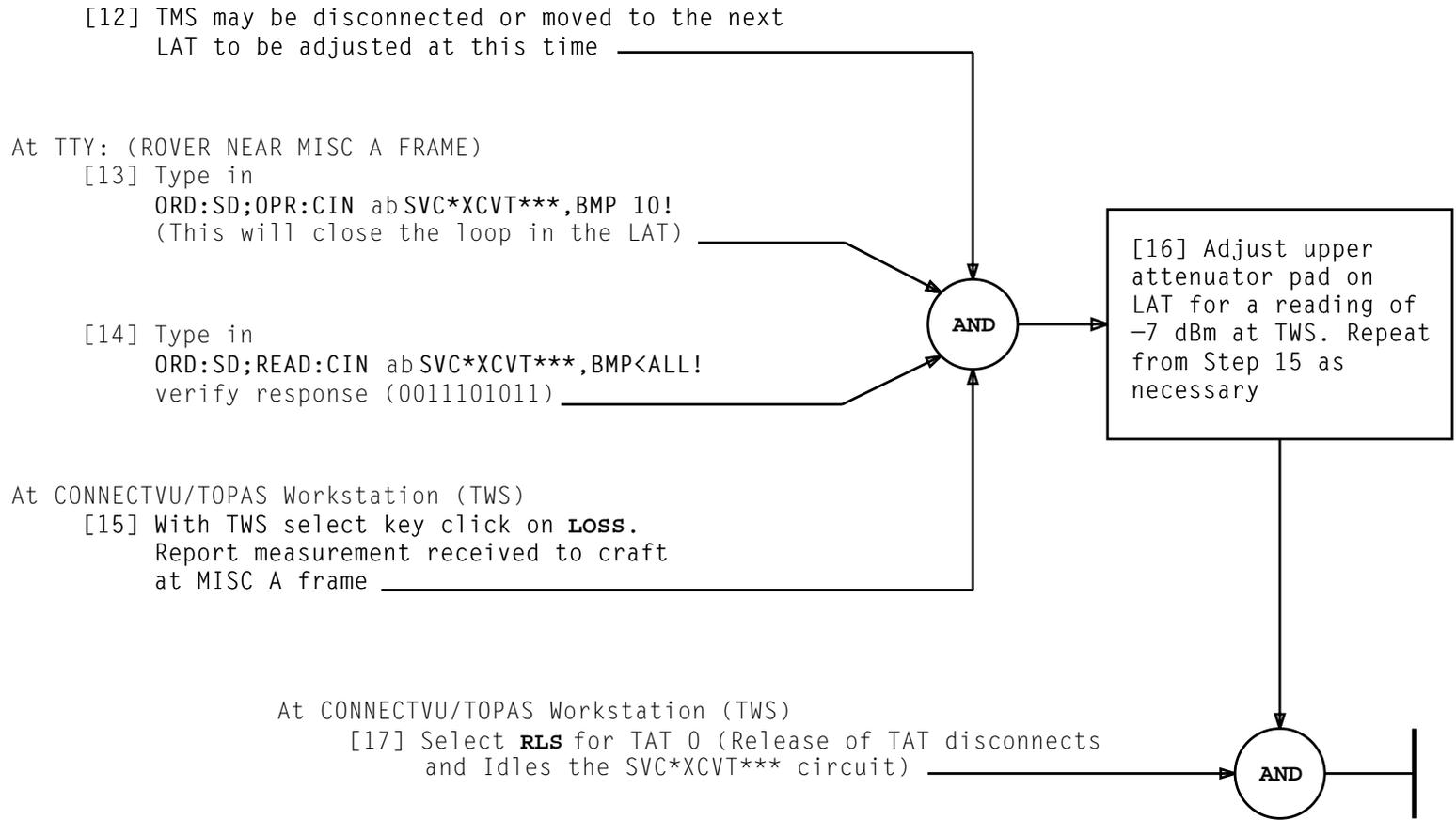


FIG. 1 - CPS FB606 Front View

NOTE 1 At CCT loop-around test unit, raise identifier strip. P01 is a two lead connector on component side of circuit pack FB606	
Issue 4	APR 1994
234-151-043	DLP
PAGE 2 of 3	512

**ADJUST LOOP-AROUND AND TEST CIRCUIT ATTENUATORS - CPS FB606,
USING RMS-D2 AND CONNECTVU OR TOPAS**



**ADJUST LOOP-AROUND AND TEST CIRCUIT ATTENUATORS – CPS FB606,
USING RMS-D2 AND CONNECTVU OR TOPAS**

Issue 4	APR 1994
234-151-043	DLP
PAGE 3 of 3	512

At CMS-1C TWS:

[1] Type in

110/a b SVC*XCVT***xxxx

a = CCT member number

b = LAT number on CCT unit

[2] Obtain DYNAMIC TEST CONTROL MENU

(enter 705)

[3] Select SETC on TAT 0

(enter 710/0) verify response

SET:CONN 0;TP nn:CIN abSVC*XCVT***xxxx;

NO OUTPUT PULSE COMPLETE

At TTY (ROVER near MISC A frame)

[4] TRC:TRK,CIN abSVC*XCVT***xxxx;TRC!

verify connection to TAT STAT "TEST" 121

[5] Operate selected Misc Points

ORD:SD;OPR:CIN abSVC*XCVT***xxxx,BMP (3,4,5,7,9)!

[6] Verify operation

ORD:SD;READ:CIN abSVC*XCVT****,BMP ALL!

AND

```
graph LR; S1[110/a b SVC*XCVT***xxxx] --> AND((AND)); S2[(enter 705)] --> AND; S3[SET:CONN 0;TP nn:CIN abSVC*XCVT***xxxx; NO OUTPUT PULSE COMPLETE] --> AND; S4[TRC:TRK,CIN abSVC*XCVT***xxxx;TRC! verify connection to TAT STAT "TEST" 121] --> AND; S5[ORD:SD;OPR:CIN abSVC*XCVT***xxxx,BMP (3,4,5,7,9)!] --> AND; S6[ORD:SD;READ:CIN abSVC*XCVT****,BMP ALL!] --> AND; AND --> P2([Page 2]);
```

Page 2

**ADJUST LOOP-AROUND AND TEST CIRCUIT ATTENUATORS — CPS FB606
USING RMS-D2 AND CMS-1C**

Issue 4	APR 1994
234-151-043	DLP
PAGE 1 of 3	513

At CMS-1C TWS:

- [7] Send 1004 HZ tone at -120 dBm on TAT 0
Enter **721/0/1/-10**

See NOTE 1. At MISC A Frame CCT unit:

- [8] See FIG. 1 Connect Transmission
Measuring Set (TMS)

- [9] Adjust ATTEN 1 (lower) on LAT
from a reading of -3.5 dBm on TMS

- [10] TMS may be disconnected or moved
to next LAT

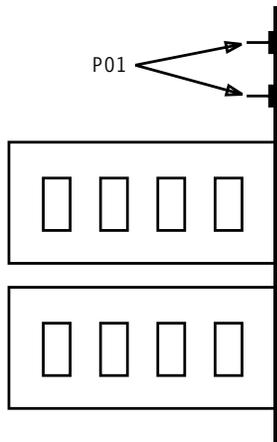
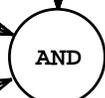


FIG. 1 - CPS FB606 Front View

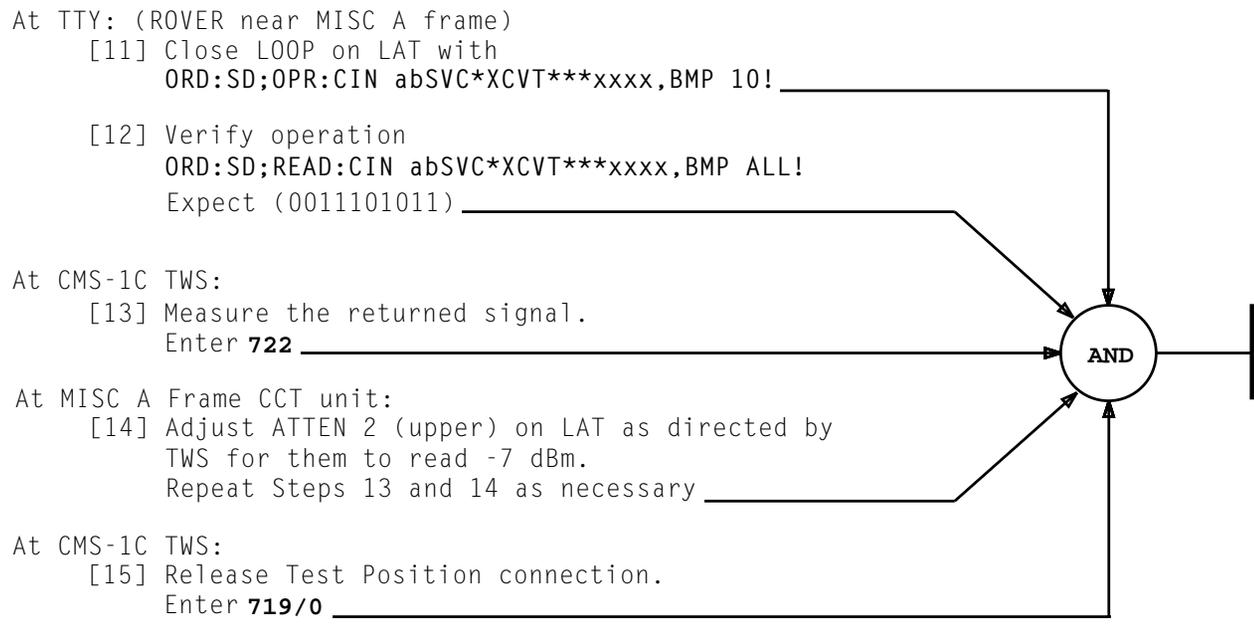


Page 3

ADJUST LOOP-AROUND AND TEST CIRCUIT ATTENUATORS - CPS FB606 USING RMS-D2 AND CMS-1C

NOTE 1
At CCT loop-around
test unit, raise
identifier strip.
P01 is a two-lead
connector on
component side of
circuit pack **FB606**

Issue 4	APR 1994
234-151-043	DLP
PAGE 2 of 3	513



**ADJUST LOOP-AROUND AND TEST CIRCUIT ATTENUATORS – CPS FB606
 USING RMS-D2 AND CMS-1C**

Issue 4	APR 1994
234-151-043	DLP
PAGE 3 of 3	513

ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE
• IXL-001 NTP-002 NTP-003 NTP-004 NTP-005		• CKL-891 TNG-893									
TAD-100 TAD-101 ISD-102 TAP-103 ISD-104											
TAP-105 ISD-106 TAP-107 ISD-108 TAP-109											
TAP-110 TAP-111 ISD-112 TAP-113 ISD-114											
TAP-115 DLP-500 DLP-501 DLP-502 DLP-503											
DLP-504 DLP-505 DLP-506 DLP-507 DLP-508											
DLP-509 DLP-510 DLP-511 • DLP-512 • DLP-513											

• REVISED OR ADDED ITEM

CANCELED ITEM

Issue 4 | APR 1994

234-151-043

CKL

CHECKLIST

PAGE 1 of 1

891