Task Oriented Practice (TOP)

4ESS™ SWITCH

1B PROCESSOR

4E18 TO 4E19 GENERIC RETROFIT

TOP Comments Hot Line:
Monday through Friday
8:00 a.m. – 4:00 p.m. Eastern Time
Call: 1-800-334-0404
Or FAX to: 1-910-727-3043

Developed by
AT&T Network Systems Customer Education & Training

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AT&T Network Systems Customer Education & Training

FIND YOUR JOB IN THE LIST BELOW . . . . . THEN GO TO	
Acceptance	NTP-002

NOTE: The tasks listed below for 4E18 to 4E19 Generic Retrofit, must be performed at the interval with respect to retrofit date

4E18 TO 4E19 GENERIC RETROFIT (AT&T OFFICE ONLY)

–2 WEEK TASK:

Perform MCC Tests	NTP-003

–1 WEEK TASKS:

Evaluate 1B Processor – Support to Installer (INST)	NTP-011

–3 DAY TASKS:

Arrange for AMA Data Collection and Check SCANS for Generic Overwrites	NTP-004

–2 DAY TASK:

NOTE: NTP-006 should not be run concurrently with NTP-012 and NTP-014

Test Retrofit Process	NTP-006

NOTE: Run NTP-012 and NTP-014 48 hours prior to beginning NTP-008

Perform 1B Processor to *4ESS*™ Switch Periphery Limited Access Test – Support to Installer (INST)	NTP-012
Perform 1B Processor Stream Exerciser Limited Access Tests – Support to Installer (INST)	NTP-014

EVENING OF RETROFIT:

Prepare for Retrofit	NTP-007

RETROFIT:

Perform Generic Retrofit	NTP-008

FIND YOUR JOB IN THE LIST BELOW . . . . . THEN GO TO

4E18 TO 4E19 GENERIC RETROFIT (AT&T OFFICE ONLY) (Contd)

+2 DAY TASK (MONDAY):

BACKOUT:

CAUTION: The following procedure must only be used if 1B Processor has not been committed to, but UPDATE file has been renamed to NORMAL file

CAUTION: The following procedure must only be used if 1B Processor has been committed to, and backout is required

4E18 TO 4E19 GENERIC RETROFIT (LEC OFFICE ONLY)

–2 WEEK TASK:

–1 WEEK TASK:

–3 DAY TASK:

4E18 TO 4E19 GENERIC RETROFIT (LEC OFFICE ONLY) (Contd)

–2 DAY TASK:

NOTE: NTP-006 should not be run concurrently with NTP-012 and NTP-014

NOTE: Run NTP-012 and NTP-014 48 Hours Prior to Beginning NTP-008

EVENING OF RETROFIT:

RETROFIT:

BACKOUT:

CAUTION: The following procedure must only be used if 1B Processor has not been committed to, but UPDATE file has been renamed to NORMAL file

CAUTION: The following procedure must only be used if 1B Processor has been committed to, and backout is required

Acceptance tests do not apply to the procedures contained in this volume.

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

			DATE	TIME	SIGNATURE
1	At MTC Terminal, Enter Message **OP:OOSUNITS!** To Obtain List of Units That Are Out of Service	–			
2	Enter Message **RST:**a b! (a = Unit Type, b = Member Number) To Restore Any 1A Processor Units That Are Out of Service	–			
3	Wait for Response **RST:**a b **COMPLETED** for 1A Processor Units That Were Out of Service	–			
4	Perform Master Control Console Lamp Tests	DLP-500			
5	At MTC Terminal, Enter Message **DGN:MCC O!**	–			
6	Wait for Response **DGN:MCC O COMPLETED ATP**	–			
7	Perform MCC Demand Diagnostic Phase 91 on MCC Processor Display Panel and Program Request Panel				
	Note: Due to the complexity of these tests, each procedure should be studied thoroughly prior to beginning. Once started, each test should be performed completely without delay				
	1. Run Phase 91 Program Unit 1 System Display Tests	DLP-501			
	2. Run Phase 91 Program Unit 2 Manual Interrupt Program Request Tests	DLP-502			
	3. Run Phase 91 Program Unit 3 Override Control Tests	DLP-503			
	4. Run Phase 91 Program Unit 4 Update Tests	DLP-504			
	5. Run Phase 91 Program Unit 5 Processor Configuration Sequencer Tests	DLP-505			
	6. Run Phase 91 Program Unit 6 Processor Display Tests	DLP-506			
8	Perform MCC Demand Diagnostic Phase 92 on MCC System Status Control Panel				
	Note: Due to the complexity of these tests, each procedure should be studied thoroughly prior to beginning. Once started, each test should be performed completely without delay				
	1. Run Phase 92 Program Unit 1 System Performance Tests	DLP-507			
	2. Run Phase 92 Program Unit 2 System Alarms Tests	DLP-508			

PERFORM 1A PROCESSOR MCC TESTS

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

			DATE	TIME	SIGNATURE
8 (Contd)	3. Run Phase 92 Program Unit 3 System Status Tests	DLP-509			
	4. Run Phase 92 Program Unit 4 System Control Tests	DLP-510			
	5. Run Phase 92 Program Unit 5 Equipment Status Tests	DLP-511			
	6. Run Phase 92 Program Unit 5A Equipment Status Key Tests	DLP-512			
9	At MTC Terminal, Enter Message **RST:MCC 0!**	—			
10	Wait for Response **RST:MCC 0 COMPLETED**	—			
11	PC Program Stores (PSs 0, 2, 4 or PSs 18, 20, 22) Must Be Equipped With **FE63** Circuit Packs To Perform Items 12 Through 23. If PC Program Stores Contain **FE70** Circuit Packs, Replace **FE70** Circuit Packs With **FE63** Circuit Packs for Following Diagnostics and Subsequent Retrofit Process. If Unable to Replace **FE70** Circuit Packs, Contact Next Higher Technical Support Group	—			
12	At 1A Processor MCC **PROCESSOR DISPLAY** Panel, Determine Which CC Is Standby (CC With **ACTIVE** Lamp Off)	—			
13	Run Standby CC Diagnostic Phase 91 To Test PC Function (Three Combinations)	DLP-513			
14	Remove Power From Standby CC Using Power Switch	DLP-570			
15	Run Standby CC Power Down Phase 92 Tests (**DGN:CC a:PH 92!**)	DLP-571			
16	Restore Power to Standby CC Using Power Switch	DLP-572			
17	Restore Standby CC to Service (**RST:CC a!**)	—			
18	Switch CCs To Make Other CC Standby (**SW:CC!**)	—			
19	Run CC Diagnostic Phase 91 To Test PC Function (Three Combinations)	DLP-513			
20	Remove Power From Standby CC Using Power Switch	DLP-570			
21	Run Standby CC Power Down Phase 92 Tests (**DGN:CC a:PH 92!**)	DLP-571			
22	Restore Power to Standby CC Using Power Switch	DLP-572			
23	Restore Standby CC to Service (**RST:CC a!**)	—			
	(Continued on Page 3)				

PERFORM 1A PROCESSOR MCC TESTS

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

			DATE	TIME	SIGNATURE
24	Perform MCC Demand Diagnostic Phase 94 on MCC Manual Recovery Circuitry				
	Note: Due to complexity of these tests, each procedure should be studied thoroughly prior to beginning. Once started, each test should be performed without delay				
	1. Run Phase 94 Soft A-Level Tests	DLP-515			
	2. Run Phase 94 Hard A-Level Tests	DLP-516			
	3. Run Phase 94 PC B-Level Tests	DLP-517			
	4. Switch CCs (SW:CC!)	—			
	5. Run Phase 94 Soft A-Level Tests	DLP-515			
	6. Run Phase 94 Hard A-Level Tests	DLP-516			
	7. Run Phase 94 PC B-Level Tests	DLP-517			
25	Test Processor Manual Recovery MCC Controls	DLP-518			
26	Switch CCs (SW:CC!)	—			
27	Test Processor Manual Recovery MCC Controls Using Other CC	DLP-518			

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

			DATE	TIME	SIGNATURE
1	Notify AMA Control Center and/or Revenue Accounting Office (RAO), Whichever Processes AMA Data, of Expected Date and Time of Generic Retrofit or ODA Update	—			
2	If AMA Data Is Written to Tape				
	1. Notify Billing Center That an AMA Tape Will Be Written Just Prior to Generic Retrofit or ODA Update, Plus Regularly Scheduled AMA Tape	—			
	2. If Necessary, Arrange for Special Handling of These Tapes	—			
	3. If Necessary, Obtain AMA Tapes From Billing Center	—			
3	If Teleprocessing Is Used for AMA Data				
	1. Arrange for Special Teleprocessing Session To Be Completed Just Prior To Performing Generic Retrofit or ODA Update	—			
	2. If Special Teleprocessing Session Is Not Possible, Arrange for Processing AMA Tape Which Will Be Written Just Prior to Generic Retrofit or ODA Update	—			
	3. If Necessary, Obtain AMA Tapes From Billing Center	—			
	Note: AMA data should be saved via tape or teleprocessing to provide AMA processing centers with a known starting point for 4E17 data. Processing centers will verify the new AMA data on first business day following retrofit or update, so that any problems with new data can be quickly identified and resolved				
4	Check BWMs for Current 4E19 Generic Overwrites and if 4E19 Generic Overwrites Are Required, Save Per Local Practice. These Overwrites Will Be Inserted Into System After Office Is Running Successfully on 4E19 Generic	—			

ARRANGE FOR AMA DATA COLLECTION AND CHECK SCANS FOR OVERWRITES

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO
1	Determine Phone Number for Office Under Test/Being Retrofitted and Record for Later Use	—
2	Determine Phone Number for AT&T - Bell Laboratories Field Support and Record for Later Use	—
3	Determine Phone Number for Mini-Maintenance Operation Center (MMOC) and Record for Later Use	—
4	Set Up Conference Call With NESAC (1-708-393-5502), AT&T - Bell Laboratories Field Support, and MMOC	—
	NOTES: 1. MMOC will set up conference call to DMAC (1-800-232-6717) and PECC diagnostic center (1-800-225-4672) 2. At appropriate time, MMOC will notify DMAC to perform RUAS cutover	
5	Request MMOC To Perform RUAS Cutover to Post-Config File Procedure. Wait for MMOC To Complete Cutover Before Proceeding	—
6	Verify RUAS Cutover	DLP-654
7	Request NESAC To Verify RUAS Cutover	DLP-654
8	Request AT&T - Bell Laboratories Field Support To Verify RUAS Cutover	DLP-654
9	Request MMOC To End Its Conference Connections	—
10	End Conference Call With NESAC, AT&T - Bell Laboratories Field Support, and MMOC	—

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

			DATE	TIME	SIGNATURE
1	**Place Check Mark Beside Each Item or Subitem When Completed, or If Not Required**	–			
2	If AT&T Office Is Being Retrofitted, Contact Office Being Retrofitted and Verify That Conflicting Activities Are Not Scheduled	–			
3	If Current Office Generic Has Not Been Written to Tape (800 BPI), Write Backup Generic Tape				
	A. If Data Base Is To Be Loaded by Tape	DLP-527			
	B. If Data Base Has Been Loaded by Off-Line Processor	DLP-564			
4	At 3B MCRT, if Screen Displays EAI Page, Depress **NORM/DISP** (**PF2**) Key	–			
5	Enter **101** in Command Mode To Obtain Display Page 101	–			
6	Depress **CMD/MSG** (**PF3**) Key To Move Cursor to Bottom of Screen	–			
7	If Data Base Has Been Loaded by Off-Line Processor, At 3B MCRT, Verify Data Base To Ensure Generic Is 4E<19>5x.yy Ra and Proper Office Name Is Listed (**OP:APPLOAD UPD!**)	DLP-565			
8	If Data Base Is To Be Loaded by Tape, Perform Items 9 Through 30; Otherwise, Go to Item 31	–			
9	Obtain Following New 1600 BPI Tapes Associated With Retrofit • Generic Tape • ODA • NWM	–			
10	If Test Retrofit Process Is Expected To Last Through Midnight				
	1. At 3B MCRT, Enter Message **INH:DMQ;SRC REX!** To Inhibit REX	–			
	2. At MTC Channel, Enter Message **INH:MACLI,CLASS MTCE;REX!** To Inhibit REX	–			
11	Mount New Generic and ODA Tapes for Disk Update				
	A. If Two Idle Tape Units Are Available for Update				
	1. Verify That Tape Identification Data Is Correct for 4E19 Generic Tape (Step 9)	–			

TEST RETROFIT PROCESS

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

			DATE	TIME	SIGNATURE
11 (Contd)	2. Verify That Office Identification Code (Base and Control) and Generic Issue Are Correct for 4E19 ODA Tape (Step 9)	–			
	3. Mount Generic Tape on MT 0 and ODA Tape on MT 1	DLP-531			
	4. At MCRT, Enter Message **VER:UPDATE:TAPE,MT 0!** and Record Generic Identification Number (4E<19>5x.yy Ra) for Later Use in LOAD Message	DLP-532			
	5. Enter Message **VER:UPDATE:TAPE,MT 1!** and Record BASE and CONTROL Numbers for Later Use in LOAD Message. Ensure That BASE and CONTROL Numbers Are Correct for This Office	DLP-532			
	B. If Only One Tape Unit Is Available for Update				
	1. Verify That Tape Identification Data Is Correct for 4E19 Generic Tape (Step 9)	–			
	2. At Idle Tape Unit, Mount Generic Tape	DLP-531			
	3. At 3B MCRT, Enter Message **VER:UPDATE:TAPE,MT** a! (a = Tape Unit Number) and Record Generic Identification Number (4E<19>5x.yy Ra) for Later Use	DLP-532			
12	Load New Generic on Disk (**LOAD:UPDATE:GEN "4E<19>5x.yy Ra",MT a!**)	DLP-533			
	Caution: When GENERIC COMPLETE - READY FOR ODA *output message is received, update program enters 20-minute wait mode. Input message to process ODA tape must be entered within this time limit or test will be terminated and complete restart will be required*				
13	If Loading of Generic Tape Was Successful, Go to Item 14. If It Was Aborted, Perform Items 21 Through 23	–			
14	If ODA Tape Was Not Mounted in Item 10, Perform Items 15 Through 18; Otherwise, Go to Item 19	–			
15	At Tape Unit Containing Generic Tape, Demount Tape After Tape Rewinds	DLP-534			
16	Verify That Office Identification Code (Base and Control) and Generic Issue Are Correct for 4E19 ODA Tape (Item 9)	–			
17	At Tape Unit Just Idled, Mount ODA Tape	DLP-531			

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

			DATE	TIME	SIGNATURE
18	At 3B MCRT, Enter Message **VER:UPDATE:TAPE,MT a!** (a = Tape Unit Number) and Record BASE and CONTROL Numbers for Later Use in LOAD Message. Ensure That BASE and CONTROL Numbers Are Correct for This Office	DLP-532			
19	Load New ODA on Disk **(LOAD:UPDATE:CONT "aaaabb",MT c!)**	DLP-535			
	Caution: When ODA COMPLETE - READY FOR NWM *output message is received, update program enters 20-minute wait mode. Input message to process network management tape must be entered within this time limit or test will be terminated and complete restart will be required*				
20	If ODA Tape Load Was Successful, Go to Item 24. If It Was Aborted, Perform Items 21 Through 23	—			
21	At Tape Unit Containing Tape That Failed, Demount Tape After Tape Rewinds	DLP-534			
22	At 3B MCRT, Enter Message **OP:OOS!** and Ensure That All Units Are in Service	DLP-596			
23	Repeat From Item 11 Using Another Copy of Tape That Failed	—			
24	Demount Tape on Idle Tape Unit	DLP-534			
25	Mount New Network Management Tape on Tape Unit and Verify That Tape Identification Is Correct for 4E19 Update (**VER:UPDATE:TAPE,MT** a! a = Tape Unit Number)	DLP-538			
26	Load New Network Management on Disk and Complete Data Base (**LOAD:UPDATE:CONT NWM,MT** a!)	DLP-536			
	Notes: 1. After receiving **MAPPING DYNAMIC DATA FROM NORMAL FILE** output message, **WAITING FOR 4 TO 13 MINUTES PAST QUARTER HOUR** may be received. Mapping dynamic data cannot cross 15-minute time boundary due to long-term storage data mutilation. System will automatically map dynamic data when in proper window 2. After receiving **DATABASE COMPLETE — READY FOR GENERIC RETROFIT** output message, loading process is complete				
27	If Loading of Network Management Tape Was Successful, Go to Item 31. If It Was Aborted, Perform Items 28 Through 30	—			

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

			DATE	TIME	SIGNATURE
28	Demount Network Management Tape From Tape Unit	DLP-534			
29	At 3B MCRT, Enter Message **OP:OOS!** and Ensure That All Units Are in Service	DLP-596			
30	Repeat From Item 11	—			
31	At 3B MCRT, Enter Message **COPY:LSNC ALL!** To Rebuild Large Scale Nailup Connections and Update TOSL in UPDATE File; Ensure **REPT LSNC: LSNC MAPPING COMPLETE** Message Is Received	—			
32	After **VER** message has been entered (Item 33) and if no critical overwrites are required (Item 34), procedure can be continued at Item 35 without waiting for verify to complete. Printout must be observed periodically for errors	—			
33	At 3B MCRT, Verify 1AFILE Hashed Areas for 0 Errors (**VER:APPFILE UPD!**)	DLP-537			
34	If Critical Overwrites Are Required, Insert Critical Overwrites Into UPDATE File and Save Printout of Overwrites	DLP-539			
35	Compare Critical Data in New ODA With Data in Active System by Performing Items 36 and 37	—			
36	Run Cross Translations Compare Program	DLP-540			
37	Analyze, With Help From Support Organization, Results of Compare for Unexpected Mismatches	—			
38	If Compare Did Not Find Unexpected Mismatches, Go to Item 40	—			
39	If Compare Found Unexpected Mismatches Between New ODA and Data in Active System, After Consulting with Appropriate Support Organization, Select Option A or B and Proceed as Directed				
	A. If Mismatches Can Be Corrected Within the Hour, Determine Additional Overwrites To Be Inserted and Repeat From Item 34	—			
	B. If It Is Determined That Corrections Cannot Be Made Within the Hour, Await Further Instructions Before Proceeding	—			
40	If AT&T Office Is Being Retrofitted, Obtain Password for tccadm login for Office Being Retrofitted from PECC Diagnostic Center	—			

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

			DATE	TIME	SIGNATURE
41	Compare MT Values of 1B Processor Units				
	A. For AT&T Office	DLP-658			
	B. For LEC Office	DLP-662			
42	If Compare Found Discrepancies, Perform Critical Overwrites in Update File Using Information Recorded in Item 41	DLP-539			
43	If Data Base Was Loaded by Tape, Perform Items 44 Through 47; Otherwise, Go to Item 48	—			
44	Demount Tape(s) From Tape Unit(s)	DLP-534			
45	If REX Was Inhibited in Item 9				
	1. At MTC Channel, Enter Message **ALW:MACLI,CLASS MTCE!** To Allow REX	—			
	2. At 3B MCRT, Enter Message **ALW:DMQ;SRC REX!** To Allow REX	—			
46	Obtain List of All Trunks Added During Quiet Period From TOC. These Trunks Will Be Set to CAD.DSA State During "Prepare for Update" Procedure	—			
47	End of Procedure	—			
48	Obtain List of All Trunks Added Since Off-Line Processor Recent Change Update (if Any) From NSC Provisioning. These Trunks Will Be Set to CAD.DSA State During "Prepare for Update" Procedure	—			
49	At IPUB 0 Power Switch in One DIF/DIF-E1 Frame, Rotate **ROS/OFF** Switch to **ROS** Position; Ensure **OS** Lamp Is On	—			
50	Since 1B Processor Is More Sensitive to DIF PUB Problems, Ensure TG1, TG2, and TG3 Circuit Packs Associated With IPUB 0 at Level 80 in DIF/DIF-E1 Frame (Item 49) Are Fully Seated	—			
51	At IPUB 0 Power Switch (Item 49), Rotate **ROS/OFF** Switch to Normal Position; Ensure **OS** Lamp Is Off	—			
	(Continued on Page 6)				

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

			DATE	TIME	SIGNATURE
52	At IPUB 1 Power Switch in One DIF/DIF-E1 Frame, Rotate **ROS/OFF** Switch to **ROS** Position; Ensure **OS** Lamp Is On	_			
53	Ensure TG1, TG2, and TG3 Circuit Packs Associated With IPUB 1 at Level 80 in DIF/DIF-E1 Frame (Item 52) Are Fully Seated	_			
54	At IPUB 1 Power Switch (Item 52), Rotate **ROS/OFF** Switch to Normal Position; Ensure **OS** Lamp Is Off	_			
55	Repeat Items 49 Through 54 for Each Equipped DIF/DIF-E1 Frame	_			

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

			DATE	TIME	SIGNATURE
	NOTE: Installer is responsible to perform Items 5 through 9				
1	**Place Check Mark Beside Each Item or Subitem When Completed, or If Not Required**	—			
2	Obtain Most Recent Records of Office Performance Data; Organize for Orderly Post Update Comparison	—			
3	At 1A MTC Terminal, Enter Message **OP:OOSUNITS!** and Ensure That Required Units Are in Service	DLP-526			
4	At 3B MCRT, Enter Message **OP:OOS!** and Ensure That Required 3B Computer Units Are in Service	DLP-596			
5	Allow Utility Interfering Actions	DLP-585			
6	At 1B Processor Utility System Workstation, Start I/O Message Process, if Required	DLP-574			
7	Enable 1B Utility Paging Administration (UPAD) Processes **(ALW:UPAD!)**	DLP-575			
8	Verify All 1B Processor Units Are In-Service **(OP:OOSUNITS!)**	DLP-577			
9	At 1B Processor Utility System Workstation, Exit Output Message Window (Input Message Window Must Remain Open for Monitoring)	—			
10	At 1A Processor MCC **SYSTEM STATUS** Panel, Depress **RECENT CHANGE — RESTRICT RECENT CHANGES** Key (Lamp ON)	—			
	NOTE: For AT&T offices, Items 11 through 17 are to be performed on-site				
	Caution: DO NOT enter COPY:APPFILE NORM *message after ODA tape has been written*				
11	Write Backup ODA Tape (800 BPI Tape)	DLP-541			
12	If Office Is Covered by Operation Support System, Request Appropriate Support Organization To Convert Recent Change Data Bases for Monitor Channel and Operation Support System	—			
	NOTE: Writing of long-term storage must be initiated during 7-minute window beginning 4 minutes past any quarter hour				
13	Write Backup Long-Term Storage (LTS) Tape	DLP-543			

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

			DATE	TIME	SIGNATURE
14	Notify Network Manager To Obtain Hard Copy of All Network Management Display System (NMDS) PA Pages Since Controls Associated With These Pages Will Be Lost Concurrent With Update	—			
15	Write Backup Traffic and Plant Measurement (TPM) Tape	DLP-544			
16	Write Backup Trunk Out-of-Service List (TOSL) Tape	DLP-545			
17	Save Tapes Just Written Until New Data Base Is Finally Committed	—			
18	Perform Item 18.A or 18.B per Local Practice To Obtain Trunk Subgroup Maintenance Status. Save Printout for Trunk Circuit Recovery Verification After Running on New Generic and/or ODA	—			
	A. Enter Message **OP:TSGSTAT;DETL:ALL!**	—			
	B. Enter Message **OP:TSGSTAT;DETL:TCA** a! a = Number for Each Assigned Trunk Control Area	—			
19	Enter Message **OP:TANTOTAN!** To Obtain Listing of All Active TAN-to-TAN Connections. Save Printout To Verify That Connections Are Still Up After Office Is Running on New Generic and/or ODA	—			
20	Enter Message **VER:NAILUP;ALL!** To Obtain Listing of All Active Large Scale Nailup Connections. Save Printout To Verify That Connections Are Still Up After Office Is Running on New Generic and/or ODA	—			
21	If LEC Office Is Being Updated and Is CAMA Equipped, on MCC **SYSTEM STATUS** Panel, Depress **SPECIAL CAMA RECORD** Key and Record CAMA Data From TTY Printout	—			
22	1A Processor PC Program Stores (PSs 0, 2, 4 or PSs 18, 20, 22) Must Be Equipped With **FE63** Circuit Packs To Perform Items 23 Through 27. If PC Program Stores Contain **FE70** Circuit Packs, Replace **FE70** Circuit Packs With **FE63** Circuit Packs for Following Diagnostics and Subsequent Retrofit Process. If Unable to Replace **FE70** Circuit Packs, Contact Next Higher Technical Support Group	—			
23	Run CC Diagnostic Phase 91 To Test PC Function (Three Combinations)	DLP-513			
24	Restore Standby CC to Service (**RST:CC** a!)	—			

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

			DATE	TIME	SIGNATURE
25	Switch CCs (**SW:CC!**)	—			
26	Run CC Diagnostic Phase 91 To Test PC Function (Three Combinations)	DLP-513			
27	Restore Standby CC to Service (**RST:CC** a**!**)	—			
28	If Office Is Set Up for AMA Recording, Save Primary IC and/or OC AMA Data and/or ICDR. This Must Be Scheduled To Be Completed Within 2 Hours Prior to Update				
	A. For Offices Which Write AMA Tapes	DLP-546			
	B. For Offices Which Do AMA Teleprocessing				
	1. At MCRT ROP, Review Printouts To Determine If AMA Teleprocessing Session Is in Progress or If AMA Session Has Completed Within Past 2 Hours	—			
	2. If Session Is in Progress, Wait Until Session Terminates	—			
	3. Ensure That **NORMAL TERMINATION — NO MORE DATA** Message Was Received on Session Summary Printout for Each AMA Stream Set to Teleprocessing	—			
	4. If AMA Session Has Not Completed Within Last 2 Hours, Perform Items 28.B.5 Through 28.B.8; Otherwise, Go to Item 29	—			
	5. At MCRT, Enter Message **OP:AMA;CONTROLFILE!** and Save Printout for Later Reference in Setting Control File Back to Normal	—			
	6. Enter Message **SET:AMA;CONTROL;**a**:OPTION TAPE [,TAPEID "**b**"]!** (a = **IC** or **OC** and b = Tape Data Set ID, As Required) for Each Stream Set to Teleprocessing	—			
	7. Save Primary AMA Data on Tape	DLP-546			
	8. Enter Message **SET:AMA;CONTROL;**a**:OPTION TP!** (a = IC or OC) To Set AMA Control File Back to Teleprocessing	—			
	C. For Offices Which Do AMA Constant Polling: Notify National AMA Control Center	—			
	D. For Offices Which Do ICDR: Notify AMA Center	—			

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

			DATE	TIME	SIGNATURE
28 (Contd)	E. For Offices With CDRP				
	1. At 3B MCRT, Enter Message **OP:NODES;SIN!**	—			
	2. Using Printout, Determine What State Nodes Are In	—			
	3. If Nodes Are Unequipped, Continue at Item 29. If Nodes Are Equipped, Notify NAMAC at 1-602-844-6406 and Inform Them That This Office Is Retrofitting to 4E19 Release x (Where x Is Release Number of 4E19 Generic Being Loaded) and Time Retrofit Is Scheduled	—			
29	Request Appropriate Support Organization (NSC Provisioning or TOC) To Set All Trunks That Have Been Added During Quiet Period or Since Off-Line Processor Recent Change Update (if any) to CAD.DSA State Before Performing Update	—			
30	Obtain 4E19 Informational BWM Concerning Incident Data Set Overwrites From SCANS. Overwrites Are To Be Applied After System Is Running on 4E19 Generic	—			
31	If CNI Ring Is Equipped in Office, Perform Items 32 Through 39; Otherwise, Go to Item 40	—			
32	At 3B MCRT, Depress **NORM/DISP** (**PF2**) Key and Enter **1106** in Command Mode To Obtain Display Page 1106	—			
33	Ensure **RING POS** Is **NORM** and **MAJOR STATE** Is **ACT** for Each Equipped CNI Ring Node	—			
34	Enter **1107** in Command Mode To Obtain Display Page 1107	—			
35	Ensure One Direct Link Node Is Assigned **1WAY IN** and One Direct Link Node **1WAY OUT**. Both Direct Link Nodes Must Have **HDWR STATE** and **APPL STATE** of **ACT**. If Four Direct Link Nodes Are Listed, **HDWR STATE** Must Be **ACT** and **APPL STATE** Must Be **STBY** for Direct Link Nodes Not Assigned **1WAY IN** or **1WAY OUT**	—			
36	Enter **1108** in Command Mode To Obtain Display Page 1108	—			
37	Ensure **LINK STATE** Is **AVL/IS** and **NODE STATE** Is **ACT** for Each Equipped Signaling Link	—			
38	Ensure In Progress CNI Ring Growth Has Been Completed. If Growth Has Not Been Completed, Contact Appropriate Support Organization To Determine if Update Can Be Performed	—			

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

			DATE	TIME	SIGNATURE
39	Verify No Audits Inhibited. If Audits Are Inhibited, Take Corrective Action As Determined by Appropriate Support Organization	DLP-567			
40	At MTC Terminal, Enter Message **OP:SVCSTAT!** and Save Printout for Later Use After Running on New Generic and/or ODA	—			
41	At 1A Processor MCC **SYSTEM ALARMS** Panel, Depress **SERVICE DEGRADING FAILURE** Key and Verify There Is No Service-Degrading Condition. If There Is, Contact Next Higher Technical Support Group	—			
42	Record Number of SAM and IBAM Matchers That Will Be Set Up for Update				
	A. If At&T Office Is Being Retrofitted, Review /uprog/1b/1Bboot.doc File Stored on RUAS Server for SAM and IBAM Matcher Information	—			
	B. If LEC Office Is Being Retrofitted, Review $HOME/bootscript/1Bboot.doc File for SAM and IBAM Matcher Information	—			
43	If AT&T Office Is Being Retrofitted, Request Local Administrator at TCC To Set Background to Black for 1B MCC, 1A MCC, and 3B MCRT Windows on RUAS Workstation To Be Used for Retrofit	—			
44	At Indicator/Remote Control Unit, Ensure **ACT PROC ALARM** Is Set to **1A**	—			

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

		RESPONSIBILITY	
	NOTES: 1. This procedure should not be performed until 2 hours before scheduled boot time 2. 1B Processor utility system workstation must be logged on before performing this procedure 3. AT&T 190-422-319 can be used to become familiar with TNM process 4. TNM communication for Autosequencing to office must be set up before performing this procedure [DLP-653] 5. In Responsibility column, TCC is Technology Control Center, OSWF is on-site workforce - office technician, and INST is installer		
1	**Place Check Mark Beside Item or Subitem When Completed, or If Not Required**	TCC/OSWF	—
2	Before Starting, Review and Become Familiar With DLP-553. At Least Two Technicians Locally Will Be Required To Assist in This Procedure	TCC/OSWF	—
3	Ensure Office Communication Between MOC Area, API Frame Area, and Incharge Is Operational. All Areas Must Be Conferenced Together To Avoid Confusion When Instructions Are Given. Ensure All Organizations Are Using Same Dated Issue of This Procedure	TCC/OSWF	—
4	Remove DLP-661 From This TOP Volume and Place Where Easily Accessible if Backout Is Required. This DLP Can Be Used For Reference to Determine What Backout Procedure To Use if Problems Occur While Performing Generic Retrofit Procedure	TCC/OSWF	—
5	At 1A MTC Terminal, Enter Message **INH:MACLI,CLASS MTCE;REX!** To Inhibit REX	TCC	—
6	Enter Message **OP:TSGSTAT;SUM:ALL!** To Obtain Trunk Subgroup Status Summary; Save Printout in a File for Trunk Circuit Recovery Verification	TCC	—
7	Enter Message **OP:OOSUNITS!** and Ensure That Required Units Are in Service	TCC	DLP-526
8	Ensure Two PC Program Stores Are Configured to K-Code 20 (**OP:PSSTATUS!**)	TCC	DLP-548
9	At 3B MCRT, Enter Message **INH:DMQ;SRC REX!** To Inhibit REX	TCC	—
10	Enter Message **OP:OOS!** and Ensure That Required 3B Computer Units Are in Service	TCC	DLP-596
11	Verify Data Base To Ensure That Generic Is **4E<19>5x.yy Ra** and Proper Office Is Listed (**OP:APPLOAD UPD!**)	TCC	DLP-549
12	If Critical Overwrites Are Required, Insert Critical Overwrites Into UPDATE File and Save Printout of Overwrites	TCC	DLP-539
	NOTE: If schedules that are entered by **SCHED:MEAS** input message are to be retained for update, include **MEAS** option in **LOAD** message. AT&T offices will use **MEAS** option		

PERFORM GENERIC RETROFIT

DO THE ITEMS BELOW IN THE ORDER LISTED			FOR DETAILS, GO TO
13	Map Dynamic Data From NORMAL File to UPDATE File (**LOAD:UPDATE:MAP[,MEAS]!**)	TCC	DLP-550
14	At 3B MCRT, Verify 1AFILE Hashed Areas for 0 Errors **(VER:APPFILE UPD!)**	TCC	DLP-537
15	Enter Message **COPY:LSNC TOSL!** To Update TOSL in UPDATE File; Ensure **REPT LSNC: LSNC MAPPING COMPLETE** Message Is Received	TCC	—
16	Copy NORMAL File to 1ASAVE File **(COPY:APPFILE NORM:DEST 1ASAVE!)**	TCC	DLP-592
17	Copy UPDATE File to 1BSAVE File **(COPY:APPFILE UPD:DEST 1BSAVE!)**	TCC	DLP-593
18	Enter Overwrite To Hold **MODIFY RECOVERY ACTIONS** Key During Retrofit	TCC	DLP-645
	NOTE: Items 19 through 29 are being performed to set up 1B Processor for retrofit		
19	Allow Utility Interfering Actions	OSWF/INST	DLP-585
20	At 1B Processor Utility System Workstation, in Available cmdtool Window, Enter **lab_info.** From Output, Determine Data in **OFFICE name:** Field (Do Not Give Server Name) and Give This Information to Next Higher Technical Support Group (This Information Is To Be Used When Setting Up Matchers)	OSWF/INST	—
21	At 1B Processor Utility System Workstation, Start I/O Message Process, if Required	OSWF/INST	DLP-574
22	Enter Message **INH:MACLI,CLASS MTCE;REX!** To Inhibit 1B Processor REX	OSWF/INST	—
23	Enable 1B Utility Paging Administration (UPAD) Processes **(ALW:UPAD!)**	OSWF/INST	DLP-575
24	Verify All 1B Processor Units Are in Service **(OP:OOSUNITS!)**	OSWF/INST	DLP-577
25	Remove Standby 1B Processor CC 1 and Ensure MUP 0 Is Active	OSWF/INST	DLP-666
26	At 1B Processor Utility System Workstation, Exit I/O Message Windows. Ensure All IO Daemon Processes From Local and External Users Are Stopped	OSWF/INST	DLP-582
27	Set Up 1B Processor Utility System Workstation To Match and Stop at End of 1B Processor Pump	TCC	DLP-586
28	Prepare 1B Processor MCC Terminal for Manual Recovery	TCC/OSWF	DLP-580
29	At Indicator/Remote Control Unit, Ensure **ALL-1A** Key and **ALL-1B** Key Are in **OFF** Position	OSWF	—
30	At Back of Indicator/Remote Control Unit, Disconnect P-Wire From GCP Trigger Input Terminals	OSWF	—

DO THE ITEMS BELOW IN THE ORDER LISTED . . . . . FOR DETAILS, GO TO			
31	Clear Assigned ADS Function(s)	TCC	DLP-660
32	At 1A MTC Terminal, Enter Message **RMV:DUS 0!** To Remove DUS 0 From Service; Ensure **RMV: DUS 0 COMPLETED** Message Is Received	TCC	—
33	Enter Message **RMV:TUC a!** for Each Equipped TUC To Remove TUC From Service; Ensure **RMV: TUC a COMPLETED** Message Is Received for Each Message Entered	TCC	—
34	Do NOT Proceed Until Instructed by NOC. Safe Point To Temporarily Stop This Procedure	TCC	—
	NOTE: Data enter by **DATA INSERT** keys (Item 35) is address of 4E clock. This display will be used to show that 1A Processor is cycling after system comes up on 1B Processor		
35	At 1A Processor MCC **SYSTEM DISPLAY** Panel, Depress **DATA INSERT - 2, 4, 6, 8,** and **11** Key (Lamp On)	OSWF	—
36	At 1A Processor MCC **PROCESSOR CONFIGURATION SEQUENCER** Panel, Depress **DISABLE AUTO PC** Key (Lamp On)	OSWF	—
37	If **PC ATTEMPT** Lamp Is On, Contact Next Higher Technical Support Group To Determine if Retrofit Can Be Continued. Proceed as Directed	OSWF	—
38	At 1A Processor MCC **MANUAL INTERRUPT PROGRAM REQUEST** Panel, Depress **DIRECT DATA INSERT - 14** Key (Lamp On)	OSWF	—
39	At 1A Processor MCC **MANUAL INTERRUPT PROGRAM REQUEST** Panel, Depress **MODIFY RECOVERY ACTIONS** Key	OSWF	—
40	At 1A MTC Terminal, Enter Message **DUMP:CC,ADR 17776332,L 3!** To Dump Status of MCC Keys	TCC	DLP-552
41	Enter Message **OP:APSTATUS!** and Determine if API 0 Is Standby	TCC	—
42	If API 0 Is Active (Item 41), Enter Message **SW:APS 0!** To Make API 0 Standby	TCC	—
	NOTE: API 0 will be removed from service when AUB 0 is removed		
43	Enter Message **RMV:AUB 0!** To Remove AUB 0 From Service; Ensure **RMV: AUB 0 COMPLETED** Message Is Received	TCC	—
44	Retrofit to 1B Processor	TCC/OSWF	DLP-553
45	If Attempt To Configure to New System Was Successful, Go to Item 54. If Unsuccessful, Perform Items 46 Through 53 Because System Is Returned to 1A Processor	TCC	—
	(Continued on Page 4)		

DO THE ITEMS BELOW IN THE ORDER LISTED . . . . . FOR DETAILS, GO TO			
46	**ENTERING THIS STEP BECAUSE BACKOUT TO 4E18 OCCURRED.** At 1A MTC Terminal, Enter Message **UPD:COMMIT;NORMFILE!**	TCC	—
47	At 1A Processor MCC **MANUAL INTERRUPT PROGRAM REQUEST** Panel, Release All Active (Lamps That Are On) **DIRECT DATA INSERT** Keys [Lamp(s) Off]	OSWF	—
48	At 1A Processor MCC **PROCESSOR CONFIGURATION SEQUENCER** Panel, if **DISABLE AUTO PC** Lamp Is On, Depress **DISABLE AUTO PC** Key (Lamp Off)	OSWF	—
49	At Workstation Where Matchers Were Set Up, in UCD Window, Enter **/lab/bin/msave** To Save Monitor Store Data; Continue to Next Item Without Waiting for Output Message	TCC	—
50	Stop UCD Matcher Processes	TCC	DLP-614
51	At Workstation Where **/lab/bin/msave** Command Was Entered, Ensure **(msave): Dump Completed** Message Was Received	TCC	—
52	Analyze, With Help From Next Higher Technical Support Group, Printout To Determine Why Update Failed	TCC	—
53	After Consulting With Support Organization, Select Option A or B and Proceed as Directed		
	A. If Update Is To Be Discontinued, It is End of Procedure. Ensure System Is Operating Properly and Restore All Out-of-Service Equipment	TCC	—
	B. If Update Is To Be Continued, Proceed as Directed by Next Higher Technical Support Group	TCC	—
54	**SUCCESSFUL CONTINUATION OF 1B PROCESSOR RETROFIT.** At Indicator/Remote Control Unit, Operate **ACT PROC ALARM** Switch to **1B**	OSWF	—
55	Operate **ALL-1B** Key Clockwise to **OFF** Position	OSWF	—
56	Verify Direct Link Nodes Were Pumped From Proper 1AFILE	TCC	DLP-566
57	If System Fails During Items 58 Through 104 and Backout Is Required, Perform NTP-009	TCC/OSWF	—
58	If Loaded Network Management Has Different Issue From Previous Network Management, Look Back in Printout for "OSOR BURST" Page. At Bottom of BURST Page, Ensure That **OSOR SCHEDULES** Are **NOT CHANGED** and **COUNT DATA BASE** Is **UPDATED**	TCC	—
59	When System Starts To Process Calls (I/O Communications Reestablished), If System Clock Time Data Is Incorrect, Set System Clock	TCC	DLP-554

DO THE ITEMS BELOW IN THE ORDER LISTED . . . . . FOR DETAILS, GO TO			
60	If New Data Base Was Loaded From Tape, Set Up MC 3, MC 4, and/or MC 8 Schedule(s). Enter Message **SCHED:TDASMC** a**;ADD:MSC** bb! for Each Schedule To Be Set Up (Contact Next Higher Technical Support Group for a and bb Variables)	TCC	—
61	At 1B MTC Terminal, Enter Message **INH:MACLI,CLASS MTCE;REX!** To Inhibit REX	TCC	—
62	Enter Message **OP:SVCSTAT!** and Observe Printout for Any Service Circuits That Are Not New DTMF Transmitters or Receivers or part of Hardware Rearrange Associated With Update. Compare Printout With Printout Saved in NTP-007, Item 40. Ensure All Required Service Circuits Are Active. If Problems Are Found, Request Assistance From Next Higher Technical Support Group for Resolution	TCC	—
63	If Any Active TAN-to-TAN Connections Existed Prior to Update, at 1B MTC Terminal, Enter Message **OP:TANTOTAN!** and Verify From Printout That TAN-to-TAN Connections Are Still Established (Compare Printout With Printout Saved in NTP-007, Item 19)	TCC	—
64	If Any Active Large-Scale Nailup Connections Existed Prior to Update, at 1B MTC Terminal, Enter Message **VER:NAILUP;ALL!** and Verify From Printout That Large-Scale Nailup Connections Are Still Established (Compare Printout With Printout Saved in NTP-007, Item 20)	TCC	—
65	Run Audits 43, 44, and 45 (Items 66 Through 69)	TCC	—
66	Enter Message **AUD:NUM (43,44,45)!**	TCC	—
67	While Audits Are Running, Continue To Perform Succeeding Items	TCC	—
68	If Any Errors Are Detected and NOT Corrected, Inform Support Organization of Audit Results and Follow Their Instructions for Further Action	TCC	—
69	During Execution of Audit 43, Scan Output Messages Perodically for Abort Message	TCC	—
70	Place TLP Tape in Service	OSWF	DLP-559
71	At 1B MTC Terminal, Restore Out-of-Service Units	TCC	DLP-619
72	At 3B MCRT, Depress **NORM/DISP (PF2)** Key and Enter **1106** in Command Mode To Obtain Display Page 1106	TCC	—
73	Ensure **RING POS** Is **NORM** and **MAJOR STATE** Is **ACT** for Each Equipped CNI Ring Link Node	TCC	—
74	Enter **1107** in Command Mode To Obtain Display Page 1107	TCC	—
	(Continued on Page 6)		

DO THE ITEMS BELOW IN THE ORDER LISTED . . . . . FOR DETAILS, GO TO			
75	Ensure One Direct Link Node Is Assigned **1WAY IN** and One Direct Link Node **1WAY OUT.** Both Direct Link Nodes Must Have **HDWR STATE** and **APPL STATE** of **ACT.** If Four Direct Link Nodes Are Listed, **HDWR STATE** Must be **ACT** and **APPL STATE** Must Be **STBY** for Direct Link Nodes Not Assigned **1WAY IN** or **1WAY OUT**	TCC	—
76	Enter 1108 in Command Mode To Obtain Display Page 1108	TCC	—
77	Ensure **LINK STATE** Is **AVL/IS** or **AVL/STBY** and **NODE STATE** Is **ACT** for Each Equipped Signaling Link	TCC	—
78	At 1B MTC Terminal, Enter Message OP:MSGRCD,FS! To Clear Recorded Message Area on Disk	TCC	—
79	Request Appropriate Work Centers To Set Up Vacant Code Traps, As Required	TCC	—
80	At 1B MTC Terminal, Enter Message OP:TSGSTAT;SUM:ALL! To Obtain Trunk Subgroup Status Summary. Compare Printout With Printout Saved in Item 6	TCC	—
81	If Trunk Subgroup Discrepancies Exist Which Cannot Be Resolved With the Summary Printout, Request Appropriate Support Organization (NSC Provisioning or TOC) To Initiate Request for Detailed Printout of Trunk Subgroup Status	TCC	—
82	Request Appropriate Support Organization (NSC Provisioning or TOC) To Initiate Sample Trunk Testing at Each Test Position	TCC	—
83	Notify Network Management Center To Begin Checkout of Network Management System	TCC	DLP-557
84	Review Maintenance Output Messages; Account for Interrupts, Interjects, and Audit Reports and Compare With Preupdate Office Performance Results	TCC	—
85	Compare Count of Ineffective Machine Attempts With Preupdate Level	TCC	—
86	Determine That Manually Placed Calls and System Placed Calls Complete Successfully	OSWF	—
87	Test Scan and SD Points (Both 1B SSD Units Must Be Inservice)	TCC	DLP-598
88	At 1B MTC Terminal, Enter Message INIT:PUEXINIT!	TCC	—
89	If Security Call Traps Existed Prior to Update, Request Network Management To Enter Security Call Traps per Local Practice	TCC	—
	NOTE: Writing of long-term storage must be initiated during 7-minute window beginning 4 minutes past any quarter hour		
90	Write Backup Long-Term Storage (LTS) Tape	OSWF	DLP-543

DO THE ITEMS BELOW IN THE ORDER LISTED . . . . . FOR DETAILS, GO TO			
91	At Workstation Where Matchers Were Set Up, Stop UCD Matcher Processes	TCC	DLP-614
92	Load Library Package(s) That Is Required for Normal Local Use (If Not Loaded) Using New 4E19 Office Library Tape	OSWF	DLP-530
93	At 1B Processor MCC Terminal, Enter **108** To Obtain System Status Page (108)	OSWF	—
94	If **801 - RESTRICT RC** Is Colored Black on White, Enter **801**	OSWF	—
95	Reenter Recent Change Data		
	A. If Reentering Recent Change Data at Office, Reenter Per Local Practice	OSWF	—
	B. Request MAC To Enter New Recent Change Data, As Required, Into System	OSWF	—
	C. Request Operation Support System To Enter New Recent Changes, As Required, Into System	OSWF	—
	1. Notify CMAC To Perform Update	OSWF	—
	2. Wait Until Update Is Complete Before Continuing	OSWF	—
	3. Notify IRAS To Update Office Data Base. Request IRAS To Notify TCC When Data Base Is Complete	OSWF	—
	4. Do Not Write Any Backup Tapes Until IRAS Completes Update	OSWF	—
	5. Notify Network Management Center To Complete Network Management System Checkout	OSWF	DLP-563
96	At 1B MTC Terminal, Enter Message **AUD:NUM (43,44,45)!**; Do Not Continue Until Audits Have Completed With 0 Errors	OSWF	—
97	Write Backup 1B Processor ODA Tapes (800 BPI)	OSWF	DLP-583
98	Write Updated Traffic and Plant Measurement (TPM) Schedule Tape	OSWF	DLP-544
99	If Any 4E19 Overwrites Are To Be Installed, Install Per Local Practice	OSWF	—
100	Write 1B Processor Generic Tapes (800 BPI)	OSWF	DLP-584
101	Write Backup Network Management (NWM) Tape (800 BPI)	OSWF	DLP-562
102	If Data Base Was Loaded by Off-Line Processor, Write 4E Library Tape(s) Using TWRL Library Program	OSWF	DLP-568
103	Write Backup 1B Processor ODA Tapes (1600 BPI), If Required	OSWF	DLP-670

DO THE ITEMS BELOW IN THE ORDER LISTED . . . . . FOR DETAILS, GO TO			
104	Write Backup 1B Processor Generic Tapes (1600 BPI), if Required	OSWF	DLP-671
105	At 1B MTC Terminal, Enter Message **ALW:MACLI,CLASS MTCE!** To Allow REX	OSWF	—
106	At 3B MCRT, Enter Message **ALW:DMQ;SRC REX!** To Allow REX	OSWF	—
107	Request Next Higher Technical Support Group To Determine if Office Can Commit to 1B Processor Generic. Do Not Proceed Without Permission From Next Higher Technical Support Group	TCC	—
	WARNING: Item 108 will delete any reference to 4E18 generic in NORMAL and UPDATE files. File copy of 4E18 generic from 1AFILE backup partition to UPDATE file would have to be done before initializing 1A Processor		
108	Commit to 1B Processor	TCC	DLP-591
109	If System Fails and Back out Is Required, Perform NTP-010	TCC/OSWF	—
	NOTE: Items 110 through 113 are being performed to ensure that Conversion Switch Units stay in 1B position		
110	At Each Conversion Switch Unit on All **TN1808/TN2808** Circuit Packs, Operate **ON-OFF** Switch to **OFF** Position	OSWF	—
111	At PCDF or BDFB, Locate Seven 1/2-Amp **70G** (Red) Fuses Associated With Seven Conversion Switch Units and Remove. These Fuses Must Remain Close to PCDF or BDFB in Case Backout Is Required	OSWF	—
112	At PCDF or BDFB, Locate Seven 7-Amp **74C** Fuses Associated With Seven Conversion Switch Units and Remove. These Fuses Must Remain Close to PCDF or BDFB in Case Backout Is Required	OSWF	—
113	At Indicator/Remote Control Unit, Ensure **ALL-1B** Key and **ALL-1A** Key Are in **OFF** Position	OSWF	—
114	Remove Keys From **ALL-1B** and **ALL-1A** Key Switches and Place in 1B MCC Console Drawer	OSWF	—
	CAUTION: All TCC activity via RUAS to this office must be completed before performing Items 115 and 116		
115	At 1B Processor MCC Terminal, Enter 106 To Obtain MUP Status and Control Page (106)	OSWF	—
116	Enter 611 (NORMAL UTIL) **(UAS:NORMAL UTIL** Colored White on Black)	OSWF	—

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

			DATE	TIME	SIGNATURE
	WARNING: This procedure must be performed only to back out to 4E18 generic after renaming UPDATE file to NORMAL file, but before committing to 1B Processor				
1	At 1B Processor MCC Terminal, if EAI Page Is Not Displayed, Depress **EA DISP** Key	—			
2	If 70 **- DIS AUTO PC** Is Not Colored Black on Purple, Enter 70 (**70 - DIS AUTO PC** Colored Black on Purple)	—			
3	Prepare To Back Out to 1A Processor (4E18 Generic) After **UPD:COMMIT;UPDFILE** Message Entered	DLP-590			
4	Back Out to 1A Processor (4E18 Generic)	DLP-613			
5	If Backout to 1A Processor Failed, Perform Item 6; Otherwise, Go to Item 7	—			
6	Analyze, With Help From Next Higher Technical Support Group, Printout To Determine Why Update Failed. Proceed as Directed by Next Higher Technical Support Group	—			
7	At Indicator/Remote Control Unit, Operate **ACT PROC ALARM** Switch to **1A**	—			
8	Back Out Overwrite Used To Hold **MODIFY RECOVERY ACTIONS** Key	DLP-646			
	Note: Item 9 is not being performed to commit to 4E18 generic. Input message only renames UPDATE and NORMAL files				
9	At MTC Terminal, Enter Message **UPD:COMMIT;UPDFILE!** To Rename UPDATE File to NORMAL File. Ensure **UPD:COMMIT COMPLETED TO UPDFILE** Message Is Received	—			
10	At 1A Processor MCC **UPDATE** Panel, Depress **UPDATE** Key (Lamp OFF)	—			
11	When System Starts to Process Calls (I/O Communications Reestablished), If System Clock Time Data Is Incorrect, Set System Clock	DLP-554			
12	At MTC Terminal, Enter Message **INH:MACLI,CLASS MTCE;REX!** To Inhibit REX	—			
13	At 1A Processor MCC **EQUIPMENT STATUS** Panel, Depress **SERVICE CIRCUITS** Key and Compare Printout With Printout Received in NTP-007, Item 40	—			
14	If Other Service Circuits Were Listed (Item 13) and Need To Be Restored, at MTC Terminal, Enter Message **SET:TRKSTAT ACT,CIN a;SUM:TSG!** (a = CIN of Service Circuit Group) for Each Group of Circuits With Trunks Out	—			

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

			DATE	TIME	SIGNATURE
15	If Any Active TAN-to-TAN Connections Existed Prior to Update, at MTC Terminal, Enter Message **OP:TANTOTAN!** and Verify From Printout That TAN-to-TAN Connections Are Still Established	–			
16	If Any Active Large-Scale Nailup Connections Existed Prior to Update, at MTC Terminal, Enter Message **VER:NAILUP;ALL!** and Verify From Printout That Large-Scale Nailup Connections Are Still Established	–			
17	Run Audits 43, 44, and 45 (Items 18 Through 21)	–			
18	Enter Message **AUD:NUM (43,44,45)!**	–			
19	While Audits Are Running, Continue To Perform Succeeding Items	–			
20	If Any Errors Are Detected and NOT Corrected, Inform Support Organization of Audit Results and Follow Their Instructions for Further Action	–			
21	During Execution of Audit 43, Scan Output Messages Periodically for Abort Message	–			
22	At MTC Terminal, Restore Out-of-Service Units	DLP-619			
23	At 3B MCRT, Ensure All 3B Units Are In-Service	DLP-596			
24	If LEC Office Is Being Backed-Out and Arranged for CAMA, Check CAMA Operation	DLP-555			
25	At 3B MCRT, Depress **NORM/DISP (PF2)** Key and Enter **1106** in Command Mode To Obtain Display Page 1106	–			
26	Ensure **RING POS** Is **NORM** and **MAJOR STATE** Is **ACT** for Each Equipped CNI Ring Link Node	–			
27	Enter **1107** in Command Mode To Obtain Display Page 1107	–			
28	Ensure One Direct Link Node Is Assigned **1WAY IN** and One Direct Link Node **1WAY OUT**. Both Direct Link Nodes Must Have **HDWR STATE** and **APPL STATE** of **ACT**. If Four Direct Link Nodes Are Listed, **HDWR STATE** Must be **ACT** and **APPL STATE** Must be **STBY** for Direct Link Nodes Not Assigned **1WAY IN** or **1WAY OUT**	–			
29	Enter **1108** in Command Mode To Obtain Display Page 1108	–			
	(Continued on Page 3)				

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

			DATE	TIME	SIGNATURE
30	Ensure **LINK STATE** Is **AVL/IS** or **AVL/STBY** and **NODE STATE** Is **ACT** for Each for Each Equipped Signaling Link	–			
31	Verify Direct Link Nodes Were Pumped From Proper 1AFILE	DLP-566			
32	At MTC Terminal, Enter Message **OP:MSGRCD,FS!** To Clear Recorded Message Area on Disk	–			
33	At I/O Terminal Other Than MTC Terminal, Set Up Vacant Code Traps, As Required	DLP-556			
34	At MTC Terminal, Enter Message **OP:TSGSTAT;SUM:ALL!** To Obtain Trunk Subgroup Status Summary	–			
35	If Trunk Subgroup Discrepancies Exist Which Cannot Be Resolved With the Summary Printout, Request Appropriate Support Organization (NSC Provisioning or TOC) To Initiate Request for Detailed Printout of Trunk Subgroup Status	–			
36	Request Appropriate Support Organization (NSC Provisioning or TOC) To Initiate Sample Trunk Testing at Each Test Position	–			
37	Notify Network Management Center To Begin Checkout of Network Management System	DLP-557			
38	Review Maintenance Output Messages; Account for Interrupts, Interjects, and Audit Reports and Compare With Preupdate Office Performance Results	–			
39	Compare Count of Ineffective Machine Attempts With Preupdate Level	–			
40	If LEC Office Is Being Backed Out and Provides CAMA Service, Monitor CAMA Call Activity; Compare With Expected Level	–			
41	Determine That Manually Placed Calls and System Placed Test Calls Complete Successfully	–			
42	At MTC Terminal, Enter Message **INIT:PUEXINIT!**	–			
43	If Security Call Traps Existed Prior to Back Out, Request Network Management To Enter Security Call Traps per Local Practice	–			
44	Notify Network Management Center To Complete Network Management System Checkout	DLP-563			
45	If LEC Office Is Being Backed Out and CAMA Equipped, Install Any Special CAMA Data per Local Practice, As Required	–			
46	At MTC Terminal, Enter Message **ALW:MACLI,CLASS MTCE!** To Allow REX	–			

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

			DATE	TIME	SIGNATURE
	WARNINGS: 1. This procedure must be performed only to back out to 4E18 generic after committing to 1B Processor *2. The decision to invoke this procedure should be made jointly by TCC, NESAC, and NOC*				
1	At 1B Processor MCC Terminal, if EAI Page Is Not Displayed, Depress **EA DISP** Key	—			
2	If 70 **- DIS AUTO PC** Is Not Colored Black on Purple, Enter 70 (**70 - DIS AUTO PC** Colored Black on Purple)	—			
3	At 3B MCRT, Enter Message OP:STATUS:LISTDIR,FN"/dev/1afile.save"! and Determine When Last ODA Update Was Made for Office From Printout	—			
4	At PCDF or BDFB, Determine Location Where Seven 7-Amp **74C** Fuses Associated With Seven Conversion Switch Units Are To Be Installed and Install	—			
5	At PCDF or BDFB, Determine Location Where Seven 1/2-Amp **70G** (Red) Fuses Associated With Seven Conversion Switch Units Are To Be Installed and Install	—			
6	At Each Conversion Switch Unit on All **TN1808/TN2808** Circuit Packs, Operate **ON-OFF** Switch to **ON** Position	—			
7	At Indicator/Remote Control Unit. Ensure **ALL-1B** Key is in **OFF** Position	—			
8	If **ALL-1B** Key Is Not in **ON** Position, Operate **ALL-1B** Key Counterclockwise to **ON** Position	—			
9	Operate **ARM** Switch Down to **ALL** Position; Ensure All LEDs for Equipped Equipment Are Set to **1B** (On Red)	—			
10	Prepare To Back Out to 1A Processor (4E18 Generic) After Committing to 1B Processor	DLP-597			
11	Back Out to 1A Processor (4E18 Generic)	DLP-613			
12	If Backout to 1A Processor Failed, Perform Item 13; Otherwise, Go to Item 14	—			
13	Analyze, With Help From Next Higher Technical Support Group, Printout To Determine Why Update Failed. Proceed as Directed by Next Higher Technical Support Group	—			
14	At Indicator/Remote Control Unit, Operate **ACT PROC ALARM** Switch to **1A**	—			

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

			DATE	TIME	SIGNATURE
	NOTE: Item 15 is not being performed to commit to 4E18 generic. Input message only renames UPDATE and NORMAL files				
15	At MTC Terminal, Enter Message **UPD:COMMIT;UPDFILE!** To Rename UPDATE File to NORMAL File. Ensure **UPD:COMMIT COMPLETED TO UPDFILE** Message Is Received	—			
16	At 1A Processor MCC **UPDATE** Panel, Depress **UPDATE** Key (Lamp OFF)	—			
17	When System Starts To Process Calls (I/O Communications Reestablished), If System Clock Time Data Is Incorrect, Set System Clock	DLP-554			
18	At MTC Terminal, Enter Message **INH:MACLI,CLASS MTCE;REX!** To Inhibit REX	—			
19	At 1A Processor MCC **EQUIPMENT STATUS** Panel, Depress **SERVICE CIRCUITS** Key and Compare Printout With Printout Received in NTP-007, Item 41	—			
20	If Other Service Circuits Were Listed (Item 19) and Need To Be Restored, at MTC Terminal, Enter Message **SET:TRKSTAT ACT,CIN a;SUM:TSG!** (a = CIN of Service Circuit Group) for Each Group of Circuits With Trunks Out	—			
21	If Any Active TAN-to-TAN Connections Existed Prior to Update, at MTC Terminal, Enter Message **OP:TANTOTAN!** and Verify From Printout That TAN-to-TAN Connections Are Still Established	—			
22	If Any Active Large-Scale Nailup Connections Existed Prior to Update, at MTC Terminal, Enter Message **VER:NAILUP;ALL!** and Verify From Printout That Large-Scale Nailup Connections Are Still Established	—			
23	Run Audits 43, 44, and 45 (Items 24 Through 27)	—			
24	Enter Message **AUD:NUM (43,44,45)!**	—			
25	While Audits Are Running, Continue To Perform Succeeding Items	—			
26	If Any Errors Are Detected and NOT Corrected, Inform Support Organization of Audit Results and Follow Their Instructions for Further Action	—			
27	During Execution of Audit 43, Scan Output Messages Periodically for Abort Message	—			
28	At MTC Terminal, Restore Out-of-Service Units	DLP-619			
29	At 3B MCRT, Ensure All 3B Units Are In Service	DLP-596			

BACK OUT TO 1A PROCESSOR AFTER COMMITTING TO 1B PROCESSOR

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

			DATE	TIME	SIGNATURE
30	If LEC Office Is Being Backed Out and Arranged for CAMA, Check CAMA Operation	DLP-555			
31	At 3B MCRT, Depress **NORM/DISP (PF2)** Key and Enter 1106 in Command Mode To Obtain Display Page 1106	—			
32	Ensure **RING POS** Is **NORM** and **MAJOR STATE** Is **ACT** for Each Equipped CNI Ring Link Node	—			
33	Enter 1107 in Command Mode To Obtain Display Page 1107	—			
34	Ensure One Direct Link Node Is Assigned **1WAY IN** and One Direct Link Node **1WAY OUT**. Both Direct Link Nodes Must Have **HDWR STATE** and **APPL STATE** of **ACT**. If Four Direct Link Nodes Are Listed, **HDWR STATE** Must be **ACT** and **APPL STATE** Must be **STBY** for Direct Link Nodes Not Assigned **1WAY IN** or **1WAY OUT**	—			
35	Enter 1108 in Command Mode To Obtain Display Page 1108	—			
36	Ensure **LINK STATE** Is **AVL/IS** or **AVL/STBY** and **NODE STATE** Is **ACT** for Each Equipped Signaling Link	—			
37	Verify Direct Link Nodes Were Pumped From Proper 1AFILE	DLP-566			
38	At MTC Terminal, Enter Message OP:MSGRCD,FS! To Clear Recorded Message Area on Disk	—			
39	At I/O Terminal Other Than MTC Terminal, Set Up Vacant Code Traps, as Required	DLP-556			
40	At MTC Terminal, Enter Message OP:TSGSTAT;SUM:ALL! To Obtain Trunk Subgroup Status Summary	—			
41	If Trunk Subgroup Discrepancies Exist Which Cannot Be Resolved With the Summary Printout, Request Appropriate Support Organization (NSC Provisioning or TOC) To Initiate Request for Detailed Printout of Trunk Subgroup Status	—			
42	Request Appropriate Support Organization (NSC Provisioning or TOC) To Initiate Sample Trunk Testing at Each Test Position	—			
43	Notify Network Management Center To Begin Checkout of Network Management System	DLP-557			
44	Review Maintenance Output Messages; Account for Interrupts, Interjects, and Audit Reports and Compare With Preupdate Office Performance Results	—			

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

			DATE	TIME	SIGNATURE
45	Compare Count of Ineffective Machine Attempts With Preupdate Level	—			
46	If LEC Office Is Being Backed Out and Provides CAMA Service, Monitor CAMA Call Activity; Compare With Expected Level	—			
47	Determine That Manually Placed Calls and System-Placed Test Calls Complete Successfully	—			
48	At MTC Terminal, Enter Message **INIT:PUEXINIT!**	—			
49	If Security Call Traps Existed Prior to Back Out, Request Network Management To Enter Security Call Traps per Local Practice	—			
50	Notify Network Management Center To Complete Network Management System Checkout	DLP-563			
51	If LEC Office Is Being Backed Out and CAMA Equipped, Install Any Special CAMA Data per Local Practice, As Required	—			
52	At MTC Terminal, Enter Message **ALW:MACLI,CLASS MTCE!** To Allow REX	—			
53	If NSD Office Is Being Backed Out, Perform Item 54; Otherwise, End of Procedure	—			
54	Perform RUAS Backout to Pre-Config File Procedure [NTP-017]	—			

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

		RESPONSIBILITY		DATE	TIME	SIGNATURE
	NOTES: 1. Input messages are to be entered at 1B Processor utility system workstation 2. Appropriate Input/Output Manuals must be used if clarification of input message or output message is necessary					
1	Perform 1B Processor Stand-Alone Tests per NTP-013. Continue at Item 2 Upon Completion	TELCO/INST	—			
2	If Procedure Was Stopped (Item 1), Perform Items 3 Through 5; Otherwise, Go to Item 6	INST	—			
3	Allow Utility Interfering Actions	INST	DLP-585			
4	At 1B Processor Utility System Workstation, Start I/O Message Process, if Required	INST	DLP-574			
5	Enable 1B Processor Utility Paging Administration (UPAD) Processes (**ALW:UPAD!**)	INST	DLP-575			
6	At 1B Processor MCC Terminal, if 118 Page Is Not Displayed, Enter **118**	INST	—			
7	Determine Which CC Is Standby (MATCH)	INST	—			
8	At 1B Processor Utility System Workstation, Run Demand Diagnostics on Standby CC (**DGN:CC a:PH (90-94)!**)	INST	DLP-599			
9	Restore Standby CC to Service (**RST:CC a!**)	INST	DLP-600			
10	Switch CC (**SW:CC!**) (It Will Take Approximately 3 Minutes for CCs To Switch)	INST	DLP-601			
11	Run Demand Diagnostics on Standby CC (**DGN:CC a:PH (90-94)!**)	INST	DLP-599			
12	Restore Standby CC to Service (**RST:CC a!**)	INST	DLP-600			
13	Run Demand Diagnostics on One Equipped CS (**DGN:CS a:PH (19,91)!**)	INST	DLP-602			
14	Restore CS (Item 13) to Service (**RST:CS a!**)	INST	DLP-600			
	(Continued on Page 2)					

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

		RESPONSIBILITY		DATE	TIME	SIGNATURE
15	Repeat Items 13 and 14 for Each Equipped CS	INST	–			
16	Run Demand Diagnostics on One Equipped PS (**DGN:PS a:PH (19,91)!**)	INST	DLP-603			
17	Restore PS (Item 16) to Service (**RST:PS a!**)	INST	DLP-600			
18	Repeat Items 16 and 17 for Each Equipped PS	INST	–			
19	At 1B Processor MCC Terminal, if 118 Page Is Not Displayed, Enter **118**	INST	–			
20	Determine Which MUP Is Standby	INST	–			
21	At 1B Processor Utility System Workstation, Run Demand Diagnostics on Standby MUP (**DGN:MUP a:PH 91!**)	INST	DLP-604			
22	Restore Standby MUP to Service (**RST:MUP a!**)	INST	DLP-600			
23	Switch MUPs (**SW:MUP!**)	INST	DLP-605			
24	Run Demand Diagnostics on Standby MUP (**DGN:MUP a:PH 91!**)	INST	DLP-604			
25	Restore Standby MUP to Service (**RST:MUP a!**)	INST	DLP-600			
26	If AT&T Office Is Being Retrofitted, Verify That RUAS and MCC Access From TCC to Office Being Retrofitted Can Be Made per Local Procedures	TELCO	–			
27	At 1B Processor Utility System Workstation, Exit Output Message Window (Input Message Window Must Remain Open for Monitoring)	INST	–			

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

		RESPONSIBILITY		DATE	TIME	SIGNATURE
	WARNING: No other growth or maintenance activity is allowed during this procedure					
	NOTES: 1. This procedure must be performed during light traffic periods 2. Input messages are to be entered at either MTC terminal or 1B Processor utility system workstation 3. Appropriate Input/Output Manuals must be used if clarification of input message or output message is necessary					
1	Ensure Routine Exerciser (REX) Successfully Diagnosed 1A Processor Equipment Within 24 of Hours of Performing This Procedure	TELCO	—			
2	Ensure Any 1A Processor Problems Have Been Cleared Before Performing This Procedure	TELCO	—			
3	Ensure All 1A Processor and Peripheral Units Are Operating in Normal Duplex Mode	TELCO	DLP-615			
4	Ensure *4ESS*™ Switch Is in Stable Condition	TELCO	DLP-616			
5	At MTC Terminal, Enter Message **INH:MACLI,CLASS MTCE;REX!** To Inhibit REX	TELCO	—			
6	Diagnose PUB 0 Using Restore Message (**RST:PUB 0!**)	TELCO	DLP-606			
7	Diagnose PUB 1 Using Restore Message (**RST:PUB 1!**)	TELCO	DLP-606			
8	At 1B Processor, if Utility Interfering Actions Are Not Allowed, Allow Utility Interfering Actions	TELCO	DLP-585			
9	At 1B Processor Utility System Workstation, Start I/O Message Process, if Required	INST	DLP-574			
10	Enable 1B Processor Utility Paging Administration (UPAD) Processes (**ALW:UPAD!**)	INST	DLP-575			
	(Continued on Page 2)					

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

		RESPONSIBILITY		DATE	TIME	SIGNATURE
11	Ensure Stand-Alone 1B Processor Is in Stable Condition, and 1B Processor and 3B Clocks Have Same Time	INST	DLP-617			
12	Ensure 1B Processor Units Are Inservice (OP:OOSUNITS!)	INST	DLP-577			
13	Notify Next Higher Technical Support Group That PUB 0 Conversion Switch Unit Is Going To Be Switched to 1B Processor Bus Access	TELCO	—			
	NOTES: 1. If problems occur between Items 14 and 17 with 1A peripheral equipment, 1B Processor must be suspended and 1A faults cleared. Once cleared, continue 2. If 1A Processor system fault occurs while conversion switch is set to 1B Processor bus access, conversion switch will automatically switch back to 1A Processor bus access 3. While running following tests, 1A and 1B Processors' operation must be closely monitored					
14	At Indicator/Remote Control Unit, Ensure **ALL-1A** and **ALL-1B** Keys in **OFF** Position	TELCO	—			
	CAUTION: Care must be taken to ensure only PUB 0 conversion switch is being operated					
15	Switch PUB 0 Conversion Switch to 1B Processor Bus Access	TELCO	DLP-608			
16	At 1B Processor Utility System Workstation, Diagnose PUB 0 Specifying Phase 2 on Both CCs (DGN:PUB 0:PH 2!)	INST	DLP-609			
	CAUTION: Care must be taken to ensure only PUB 0 conversion switch is being operated					
17	At Indicator/Remote Control Unit, Switch PUB 0 Conversion Switch to 1A Processor Bus Access	TELCO	DLP-610			
18	Notify Next Higher Technical Support Group That PUB 0 Conversion Switch Unit Was Switched Back to 1A Processor Bus Access	TELCO	—			
19	At MTC Terminal, Restore PUB 0 to Service (RST:PUB 0!)	TELCO	DLP-606			
20	At 1B Processor Utility System Workstation, Restore PUB 0 to Service Unconditionally (RST:PUB 0;UCL!)	INST	DLP-618			

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

		RESPONSIBILITY		DATE	TIME	SIGNATURE
21	Safe Point to Temporarily Stop This Procedure. If Stopping Perform Items 22 Through 24; Otherwise, Go to Item 33	TELCO/INST	—			
22	At MTC Terminal, Enter Message **ALW:MACLI,CLASS MTCE!** To Allow REX	TELCO	—			
23	Set MUP Back to Non-Interference	INST	DLP-594			
24	Stop Procedure for Now. Resume at Item 25 When Continuing	TELCO/INST	—			
25	Ensure All 1A Processor and Peripheral Units Are Operating in Normal Duplex Mode	TELCO	DLP-615			
26	Ensure *4ESS*™ Switch Is in Stable Condition	TELCO	DLP-616			
27	Ensure Stand-Alone 1B Processor Is in Stable Condition	INST	DLP-617			
28	At MTC Terminal, Enter Message **INH:MACLI,CLASS MTCE;REX!** To Inhibit Rex	TELCO	—			
29	At 1B Processor, if Utility Interfering Actions Are Not Allowed, Allow Utility Interfering Actions	TELCO	DLP-585			
30	At 1B Processor Utility System Workstation, Start I/O Message Process, if Required	INST	DLP-574			
31	Enable 1B Processor Utility Paging Administration (UPAD) Processes (**ALW:UPAD!**)	INST	DLP-575			
32	Ensure 1B Processor Units Are Inservice (**OP:OOSUNITS!**)	INST	DLP-577			
33	Notify Next Higher Technical Support Group That PUB 1 Conversion Switch Unit Is Going To Be Switched to 1B Processor Bus Access	TELCO	—			
	(Continued on Page 4)					

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

		RESPONSIBILITY		DATE	TIME	SIGNATURE
	NOTES: 1. If problems occur between Items 34 and 37 with 1A peripheral equipment, 1B Processor must be suspended and 1A faults cleared. Once cleared, continue 2. If 1A Processor system fault occurs while conversion switch is set to 1B Processor bus access, conversion switch will automatically switch back to 1A Processor bus access 3. While running following tests, 1A and 1B Processors' operation must be closely monitored					
34	At Indicator/Remote Control Unit, Ensure **ALL-1A** and **ALL-1B** Keys in **OFF** Position	TELCO	—			
	CAUTION: Care must be taken to ensure only PUB 1 conversion switch is being operated					
35	Switch PUB 1 Conversion Switch to 1B Processor Bus Access	TELCO	DLP-611			
36	At 1B Processor Utility System Workstation, Diagnose PUB 1 Specifying Phase 2 on Both CCs **(DGN:PUB 1:PH 2!)**	INST	DLP-609			
	CAUTION: Care must be taken to ensure only PUB 1 conversion switch is being operated					
37	At Indicator/Remote Control Unit, Switch PUB 1 Conversion Switch to 1A Processor Bus Access	TELCO	DLP-612			
38	Notify Next Higher Technical Support Group That PUB 1 Conversion Switch Unit Was Switched Back to 1A Processor Bus Access	TELCO	—			
39	At MTC Terminal, Restore PUB 1 to Service (**RST:PUB 1!**)	TELCO	DLP-606			
40	At 1B Processor Utility System Workstation, Restore PUB 1 to Service Unconditionally (**RST:PUB 1;UCL!**)	INST	DLP-618			
41	At MTC Terminal, Enter Message **ALW:MACLI,CLASS MTCE!** To Allow REX	TELCO	—			
42	At 1B Processor Utility System Workstation, Exit Output Message Window (Input Message Window Must Remain Open for Monitoring)	INST	—			

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

			DATE	TIME	SIGNATURE
	NOTES: 1. This procedure is to be performed after 1B Processor is installed and connected to conversion switch units 2. No connections from 1A Processor side to conversion switch units are allowed until successful completion of this procedure 3. Any problem unit that goes out of service during this test must be repaired and restored to service before continuing 4. At MCC terminal, No MUP forces allowed on 106 page or EAI page 5. This procedure is performed by installation force with office technician observing 6. All input messages are to be entered at utility system workstation				
1	Allow Utility Interfering Actions	DLP-585			
	NOTE: If I/O message process stops during this procedure, Item 2 will have to be repeated				
2	At 1B Processor Utility System Workstation, Start I/O Message Process, if Required	DLP-574			
3	Enable 1B Utility Paging Administration (UPAD) Processes **(ALW:UPAD!)**	DLP-575			
4	Ensure 1B Processor Is Running in Stable State, and 1B Processor and 3B Clocks Have Same Time	DLP-617			
5	Verify All 1B Processor Units Are In-service **(OP:OOSUNITS!)**. Listed Units Must Be Restored to Service	DLP-577			
	NOTE: Items 6 through 10 are being performed to diagnose CC 0 and CC 1				
6	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter 118	—			
7	On 118 Page, Determine Which CC Is Standby (MATCH)	—			
8	Diagnose Standby CC (Item 7) Using Power Control Switch on Circuit Pack **KLW11**	DLP-635			
9	Switch CCs **(SW:CC!)** (It Will Take Approximately 3 Minutes for CCs To Switch)	DLP-601			
10	Diagnose Standby CC Using Power Control Switch on Circuit Pack **KLW11**	DLP-635			
	(Continued on Page 2)				

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

			DATE	TIME	SIGNATURE
11	Diagnose CS 0 Through CS 9, PS 0 Through PS 3, SSD 0, and SSD 1 Using Appropriate Power Control Switch on Circuit Pack	DLP-636			
12	Diagnose CSB 0 and CSB 1 Using Appropriate Power Control Switch on Circuit Pack	DLP-637			
13	Diagnose XPWR 0 and XPWR 1 Using Power Control Switch on Circuit Pack **KLW23**	DLP-638			
	NOTE: Items 14 through 19 are being performed to diagnose MUP 0 and MUP 1				
14	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter **118**	–			
15	On 118 Page, Ensure IFB 0 and IFB 1 Are Duplex (Both IFBs ACT)	–			
16	On 118 Page, Determine Which MUP Is Standby	–			
17	Diagnose Standby MUP (Item 14) Using Power Control Switch on Circuit Pack **KLW25**	DLP-639			
18	Switch MUPs **(SW:MUP!)**	DLP-605			
19	Diagnose Standby MUP Using Power Control Switch on Circuit Pack **KLW25**	DLP-639			
20	On 118 Page, Determine Which AUI Is Standby	–			
21	Diagnose Standby AUI (Step 20) Using Power Control Switch on Circuit Pack **KLW18**	DLP-640			
22	Switch AUIs **(SW:AUI!)**	DLP-641			
23	Diagnose Standby AUI (Step 20) Using Power Control Switch on Circuit Pack **KLW18**	DLP-640			
24	Diagnose PSB 0 **(RST:PSB 0!)** Using Restore Message	DLP-600			
25	Diagnose PSB 1 **(RST:PSB 1!)** Using Restore Message	DLP-600			
26	Diagnose IFB 0 **(RST:IFB 0!)** Using Restore Message	DLP-600			
27	Diagnose IFB 1 **(RST:IFB 1!)** Using Restore Message	DLP-600			
28	Diagnose Miscellaneous Power	DLP-642			
	NOTE: Items 29 through 35 are being performed to test PC functions				
29	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter **118**	–			

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

			DATE	TIME	SIGNATURE
30	On 118 Page, Determine Which CC Is Standby (MATCH)	–			
31	Run 1B Processor CC Diagnostic Phase 95 on Standby CC To Test PC Function	DLP-643			
32	Restore Standby CC to Service **(RST:CC a!)**	DLP-600			
33	Switch CCs **(SW:CC!)** (It Will Take Approximately 3 Minutes for CCs To Switch)	DLP-601			
34	Run 1B Processor CC Diagnostic Phase 95 on Standby CC To Test PC Function	DLP-643			
35	Restore Standby CC to Service **(RST:CC a!)**	DLP-600			
36	Test Fan System	DLP-656			
37	Verify Base API, DUS, TUC, and PUBB Unit Type Translators for 1A Processor and 1B Processor	DLP-644			
38	If This Is Going To Be Stopped for Now, Perform Item 39; Otherwise, End of Procedure	–			
39	At 1B Processor Utility System Workstation, Exit Output Message Window (Input Message Window Must Remain Open for Monitoring)	–			

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

		RESPONSIBILITY		DATE	TIME	SIGNATURE
	WARNING: No other growth or maintenance activity is allowed during this procedure					
	NOTES: 1. Input messages are to be entered at MTC terminal, 3B MCRT, or 1B Processor utility system workstation. Terminal/workstation will be given at first occurrence and message(s) must be entered there until procedure indicates different terminal/workstation 2. If AU conversion switch switches back, procedure must be totally repeated 3. Appropriate Input/Output Manuals must be used if clarification of input message or output message is necessary 4. This procedure must be performed during light traffic periods					
1	At 3B MCRT, Enter Message **DUMP:BWM!**; Ensure **BWM 94-0026** Is Listed. If This BWM Is NOT Listed, Stop Procedure and Contact Next Higher Technical Support Group. Procedure MUST NOT Be Continued	TELCO	—			
2	Ensure No API Interjects or Interrupts Have Occurred Within 24 Hours of Performing This Procedure	TELCO	—			
3	Ensure Any 1A Processor Problems Have Been Cleared Before Performing This Procedure	TELCO	—			
4	Ensure All 1A Processor and Peripheral Units Are Operating in Normal Duplex Mode	TELCO	DLP-620			
5	Ensure *4ESS*™ Switch Is in Stable Condition	TELCO	DLP-616			
6	Allow Utility Interfering Actions	INST	DLP-585			
	NOTE: If I/O message process stops during this procedure, Item 8 will have to be repeated					
7	At 1B Processor Utility System Workstation, Start I/O Message Process, if Required	INST	DLP-574			
8	Enable Utility Paging Administration (UPAD) Processes (**ALW:UPAD!**)	INST	DLP-575			
	(Continued on Page 2)					

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

		RESPONSIBILITY		DATE	TIME	SIGNATURE
9	Ensure Stand-Alone 1B Processor Is in Stable Condition, and 1B Processor and 3B Clocks Have Same Time	INST	DLP-617			
10	Ensure 1B Processor Units Are In-Service (**OP:OOSUNITS!**)	INST	DLP-577			
11	At 1B Processor Indicator/Remote Control Unit, Ensure All Switches Associated With Equipped Office Equipment Are Set to 1A Processor Position (Associated LEDs On Green) and Permit Bus Access	TELCO	DLP-621			
12	At 3B MCRT, Verify API-DLN Stream (**OP:DLNCM;STREAM!**)	TELCO	DLP-622			
13	Enter Following Messages To Inhibit APS Automatic Diagnostics: • **INH:DMQ;SRC REX!** • **INH:DMQ;SRC ADP!**	TELCO	—			
14	At MTC Terminal, Enter Message **INH:MACLI,CLASS MTCE;REX!** To Inhibit 1A Processor REX	TELCO	—			
15	At MTC Terminal, Determine Which API Is Standby (**OP:APSTATUS!**)	TELCO	DLP-623			
16	Diagnose Standby API (Item 17) Using Restore Message (**RST:API a!**)	TELCO	DLP-606			
17	Switch APIs To Make Other API Standby (**SW:APS 0!**)	TELCO	DLP-624			
18	Diagnose Standby API Using Restore Message (**RST:API a!**)	TELCO	DLP-606			
	NOTE: Items 19 through 55 are being performed to test API 0 stream exerciser limited access					
19	Notify Next Higher Technical Support Group That AUB 0 Conversion Switch Is Going To Be Switched to 1B Processor Bus Access	TELCO	—			
20	Determine Which API Is Standby (**OP:APSTATUS!**)	TELCO	DLP-623			
21	If API 1 Is Standby, Switch APIs To Make API 0 Standby (**SW:APS 0!**)	TELCO	DLP-624			
22	Remove API 0 From Service (**RMV:API 0!**)	TELCO	DLP-607			
23	Remove DUS 0 From Service (**RMV:DUS 0!**)	TELCO	DLP-607			
24	Clear Assigned ADS Function(s) (**CLR:ADSFUNC a!**)	TELCO	DLP-660			
	(Continued on Page 3)					

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

		RESPONSIBILITY		DATE	TIME	SIGNATURE
25	Remove All Inservice Equipped TUCs From Service (**RMV:TUC a!**)	TELCO	DLP-607			
26	Remove AUB 0 From Service (**RMV:AUB 0!**)	TELCO	DLP-607			
27	Set API Being Tested to Off-Line State (**ALW:APSTEST!**)	TELCO	DLP-625			
	CAUTION: Care must be taken to ensure only AUB 0 conversion switch is being operated					
	NOTES: 1. If 1A Processor system fault occurs while conversion switch is set to 1B Processor bus access, conversion switch will automatically switch back to 1A Processor bus access 2. While running following tests, 1A and 1B Processors' and 3B APS operation must be closely monitored					
28	This DLP Must Be Followed. Prepare to Switch AU0; Then At Indicator/Remote Control Unit, Switch AUB 0 to 1B Bus Access	TELCO	DLP-626			
29	At 1B Processor Utility System Workstation, Restore AUB 0 to Service (**RST:AUB 0;UCL!**)	INST	DLP-627			
	NOTES: 1. If phase 7, 8, or 9 failure occurs during diagnostic (Items 30 through 36), Items 49 through 51 must be performed and procedure repeated from Item 1 2. If failure occurs during Items 30 through 36, Items 30 through 36 must be repeated					
30	Diagnose API 0 (**DGN:API 0:PH (2,4-9)!**)	INST	DLP-628			
31	Switch AUIs (**SW:AUI!**)	INST	DLP-641			
32	Diagnose API 0 (**DGN:API 0:PH (2,4-9)!**)	INST	DLP-628			
33	Switch CCs (**SW:CC!**) (It Will Take Approximately 3 Minutes for CCs To Switch)	INST	DLP-601			
34	Diagnose API 0 (**DGN:API 0:PH (2,4-9)!**)	INST	DLP-628			
35	Switch AUIs (**SW:AUI!**)	INST	DLP-641			
	(Continued on Page 4)					

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

		RESPONSIBILITY		DATE	TIME	SIGNATURE
36	Diagnose API 0 (**DGN:API 0:PH (2,4-9)!**)	INST	DLP-628			
37	At 1B Processor Utility System Workstation, Restore API 0 to Service Unconditionally (**RST:API 0;UCL!**)	INST	DLP-627			
38	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter **118**	INST	—			
39	If AUI 0 Is Active, Switch AUIs To Make AUI 1 Active (**SW:AUI!**)	INST	DLP-641			
40	Diagnose AUI 0 Using Restore Message (**RST:AUI 0!**)	INST	DLP-668			
41	Switch AUIs To Make AUI 0 Active (**SW:AUI!**)	INST	DLP-641			
42	Diagnose Standby AUI 1 Using Restore Message (**RST:AUI 1!**)	INST	DLP-668			
43	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter **118**	INST	—			
44	Ensure 118 Page Displays API 0 Active	INST	—			
45	Wait 1 Minute Before Continuing To Ensure No Interrupts Received for Either 1A or 1B Processor	TELCO/INST	—			
46	Test Capability To Exchange Test Messages Between 1B Processor and APS	INST	DLP-629			
47	Switch AUIs (**SW:AUI!**)	INST	DLP-641			
48	Test Capability To Exchange Test Messages Between 1B Processor and APS	INST	DLP-629			
	CAUTION: Care must be taken to ensure only AUB 0 conversion switch is being operated					
	NOTE: When conversion switch is switched back to 1A Processor bus access, 1B Processor will interject					
49	This DLP Must Be Followed. Prepare to Switch AUO; Then At Indicator/Remote Control Unit, Switch AUB 0 to 1A Bus Access	TELCO/INST	DLP-630			
50	Notify Next Higher Technical Support Group That AUB 0 Conversion Switch Was Switched Back to 1A Processor Bus Access	TELCO	—			

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

		RESPONSIBILITY		DATE	TIME	SIGNATURE
51	At MTC Terminal, Clear API Being Tested From Off-Line State (**INH:APSTEST!**)	TELCO	DLP-631			
52	At MTC Terminal, Restore AUB 0 to Service (**RST:AUB 0!**)	TELCO	DLP-606			
53	Restore API 0 to Service (**RST:API 0!**)	TELCO	DLP-606			
54	Restore DUS 0 to Service (**RST:DUS 0!**)	TELCO	DLP-606			
55	Restore TUCs That Were Removed From Service in Item 25 (**RST:TUC a!**)	TELCO	DLP-606			
56	Safe Point To Temporarily Stop This Procedure. If Stopping, Perform Items 57 Through 60; Otherwise, Go to Item 74	TELCO/INST	—			
57	At MTC Terminal, Enter Message **ALW:MACLI,CLASS MTCE!** To Allow 1A Processor REX	TELCO	—			
58	Set MUP Back to Non-Interference	INST	DLP-594			
59	At 3B MCRT, Enter Following Messages To Allow Automatic Diagnostics: • **ALW:DMQ;SRC REX!** • **ALW:DMQ;SRC ADP!**	TELCO	—			
60	Stop Now Until Resuming	TELCO/INST	—			
61	Ensure No API Interjects or Interrupts Have Occurred Within 24 Hours of Performing This Procedure	TELCO	—			
62	Ensure Any 1A Processor Problems Have Been Cleared Before Performing This Procedure	TELCO	—			
63	Ensure All 1A Processor and Peripheral Units Are Operating in Normal Duplex Mode	TELCO	DLP-620			
64	Ensure *4ESS* Switch Is in Stable Condition	TELCO	DLP-616			
65	Ensure Stand-Alone 1B Processor Is in Stable Condition	INST	DLP-617			
66	Allow Utility Interfering Actions	INST	DLP-585			
67	At 1B Processor Utility System Workstation, Start I/O Message Process, if Required	INST	DLP-574			

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

		RESPONSIBILITY		DATE	TIME	SIGNATURE
68	Enable Utility Paging Administration (UPAD) Processes (**ALW:UPAD!**)	INST	DLP-575			
69	Ensure 1B Processor Units Are Inservice (**OP:OOSUNITS!**)	INST	DLP-577			
70	At 1B Processor Indicator/Remote Control Unit, Ensure All Switches Associated With Equipped Office Equipment Are Set to 1A Processor Position (Associated LEDs On Green) and Permit Bus Access	TELCO	DLP-621			
71	At 3B MCRT, Verify API-DLN Stream (**OP:DLNCM;STREAM!**)	TELCO	DLP-622			
72	Enter Following Messages To Inhibit APS Automatic Diagnostics: • **INH:DMQ;SRC REX!** • **INH:DMQ;SRC ADP!**	TELCO	—			
73	MTC Terminal, Enter Message **INH:MACLI,CLASS MTCE;REX!** To Inhibit 1A Processor REX	TELCO	—			
74	At MTC Terminal, Determine Which API Is Standby (**OP:APSTATUS!**)	TELCO	DLP-623			
75	Diagnose Standby API (Item 74) Using Restore Message (**RST:API a!**)	TELCO	DLP-606			
76	Switch APIs To Make Other API Standby (**SW:APS 0!**)	TELCO	DLP-624			
77	Diagnose Standby API Using Restore Message (**RST:API a!**)	TELCO	DLP-606			
	NOTE: Items 78 through 114 are being performed to test AUB 1 limited access					
78	Notify Next Higher Technical Support Group that AUB 1 Conversion Switch Is Going To Be Switched to 1B Processor Bus Access	TELCO	—			
79	Determine Which API Is Standby (**OP:APSTATUS!**)	TELCO	DLP-623			
80	If API 0 Is Standby, Switch APIs To Make API 1 Standby (**SW:APS 0!**)	TELCO	DLP-624			
81	Remove API 1 From Service (**RMV:API 1!**)	TELCO	DLP-607			
82	Remove DUS 1 From Service (**RMV:DUS 1!**)	TELCO	DLP-607			
83	Clear Assigned ADS Function(s) (**CLR:ADSFUNC a!**)	TELCO	DLP-660			
84	Remove All In-service Equipped TUCs From Service (**RMV:TUC a!**)	TELCO	DLP-607			
	(Continued on Page 7)					

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

		RESPONSIBILITY		DATE	TIME	SIGNATURE
85	Remove AUB 1 From Service (**RMV:AUB 1!**)	TELCO	DLP-607			
86	Set API Being Tested to Off-Line State (**ALW:APSTEST!**)	TELCO	DLP-625			
	CAUTION: Care must be taken to ensure only AUB 1 conversion switch is being operated					
	NOTES: 1. If 1A Processor system fault occurs while conversion switch is set to 1B Processor bus access, conversion switch will automatically switch back to 1A Processors' bus access 2. While running following tests, 1A and 1B Processors' and 3B APS operation must be closely monitored					
87	This DLP Must Be Followed. Prepare to Switch AU1; Then At Indicator/Remote Control Unit, Switch AUB 1 to 1B Bus Access	TELCO	DLP-632			
88	At 1B Processor Utility System Workstation, Restore AUB 1 to Service (**RST:AUB 1;UCL!**)	INST	DLP-627			
	NOTES: 1. If phase 7, 8, or 9 failure occurs during diagnostic (Items 89 through 95), Items 108 through 110 must be performed and procedure repeated from Item 1 2. If failure occurs during Items 89 through 95, Items 89 through 95 must be repeated					
89	Diagnose API 1 (**DGN:API 1:PH (2,4-9)!**)	INST	DLP-628			
90	Switch AUIs (**SW:AUI!**)	INST	DLP-641			
91	Diagnose API 1 (**DGN:API 1:PH (2,4-9)!**)	INST	DLP-628			
92	Switch CCs (**SW:CC!**) (It Will Take Approximately 3 Minutes for CCs To Switch)	INST	DLP-601			
93	Diagnose API 1 (**DGN:API 1:PH (2,4-9)!**)	INST	DLP-628			
94	Switch AUIs (**SW:AUI!**)	INST	DLP-641			
95	Diagnose API 1 (**DGN:API 1:PH (2,4-9)!**)	INST	DLP-628			
	(Continued on Page 8)					

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

		RESPONSIBILITY		DATE	TIME	SIGNATURE
96	At 1B Processor Utility System Workstation, Restore API 1 to Service Unconditionally (**RST:API 1;UCL!**)	INST	DLP-627			
97	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter **118**	INST	—			
98	If AUI 1 Is Active, Switch AUIs To Make AUI 0 Active (**SW:AUI!**)	INST	DLP-641			
99	Diagnose AUI 1 Using Restore Message (**RST:AUI 1!**)	INST	DLP-668			
100	Switch AUIs To Make AUI 1 Active (**SW:AUI!**)	INST	DLP-641			
101	Diagnose Standby AUI 0 Using Restore Message (**RST:AUI 0!**)	INST	DLP-668			
102	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter **118**	INST	—			
103	Ensure 118 Page Displays API 1 Active	INST	—			
104	Wait 1 Minute Before Continuing To Ensure No Interrupts Received for Either 1A or 1B Processor	TELCO/INST	—			
105	Test Capability To Exchange Test Messages Between 1B Processor and APS	INST	DLP-629			
106	Switch AUIs (**SW:AUI!**)	INST	DLP-641			
107	Test Capability To Exchange Test Messages Between 1B Processor and APS	INST	DLP-629			
	CAUTION: Care must be taken to ensure only AUB 1 conversion switch is being operated					
	NOTE: When Conversion Switch is switched back to 1A Processor bus access, 1B Processor will interject					
108	This DLP Must Be Followed. Prepare to Switch AU1; Then At Indicator/Remote Control Unit, Switch AUB 1 to 1A Bus Access	TELCO/INST	DLP-633			
109	Notify Next Higher Technical Support Group That AUB 1 Conversion Switch Was Switched Back to 1A Processor Bus Access	TELCO	—			
	(Continued on Page 9)					

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

		RESPONSIBILITY		DATE	TIME	SIGNATURE
110	At MTC Terminal, Clear API Being Tested From Off-Line State (**INH:APSTEST!**)	TELCO	DLP-631			
111	At MTC Terminal, Restore AUB 1 to Service (**RST:AUB 1!**)	TELCO	DLP-606			
112	Restore API 1 to Service (**RST:API 1!**)	TELCO	DLP-606			
113	Restore DUS 1 to Service (**RST:DUS 1!**)	TELCO	DLP-606			
114	Restore TUCs That Were Removed From Service in Item 89 (**RST:TUC a!**)	TELCO	DLP-606			
115	At 1B Processor Utility System Workstation, Exit Output Message Window (Input Message Window Must Remain Open for Monitoring)	INST	—			
116	At MTC Terminal, Enter Message **ALW:MACLI,CLASS MTCE!** To Allow 1A Processor REX	TELCO	—			
117	At 3B MCRT, Enter Following Messages To Allow Automatic Diagnostics: • **ALW:DMQ;SRC REX!** • **ALW:DMQ;SRC ADP!**	TELCO	—			

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

			DATE	TIME	SIGNATURE
	WARNING: This procedure must only be performed in a LEC office				
	NOTE: 1B Processor utility system workstation must be logged on before performing this procedure				
1	***Place Check Mark Beside Item or Subitem When Completed, or If Not Required***	–			
2	Before Starting, Review and Become Familiar With DLP-665. At Least Two Technicians Locally Will Be Required To Assist in This Procedure	–			
3	Ensure Office Communication Between MOC Area, API Frame Area and Incharge (if Being Used) Is Operational. All Areas Must Be Conferenced Together To Avoid Confusion When Instructions Are Given	–			
4	Remove DLP-669 From This TOP Volume and Place Where Easily Accessible if Backout Is Required. This DLP Can Be Used For Reference To Determine What Backout Procedure To Use if Problems Occur While Performing Generic Retrofit Procedure	–			
5	At 1A MTC Terminal, Enter Message **INH:MACLI,CLASS MTCE;REX!** To Inhibit REX	–			
6	Enter Message **OP:TSGSTAT;SUM:ALL!** To Obtain Trunk Subgroup Status Summary; Save Printout for Trunk Circuit Recovery Verification	–			
7	Enter Message **OP:OOSUNITS!** and Ensure That Required Units Are in Service	DLP-526			
8	Ensure Two PC Program Stores Are Configured to K-code 20 (**OP:PSSTATUS!**)	DLP-548			
9	At 3B MCRT, Enter Message **INH:DMQ;SRC REX!** To Inhibit REX	–			
10	Enter Message **OP:OOS!** and Ensure That Required 3B Computer Units Are in Service	DLP-596			
11	Verify Data Base To Ensure That Generic Is **4E<19>5x.yy Ra** and Proper Office Is Listed (**OP:APPLOAD UPD!**)	DLP-549			
12	If Critical Overwrites Are Required, Insert Critical Overwrites Into UPDATE File and Save Printout of Overwrites	DLP-539			
	NOTE: If schedules that are entered by **SCHED:MEAS** input message are to be retained for update, include **MEAS** option in **LOAD** message.				
13	Map Dynamic Data From NORMAL File to UPDATE File (**LOAD:UPDATE:MAP[,MEAS]!**)	DLP-550			

PERFORM GENERIC RETROFIT (LEC OFFICE ONLY)

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

			DATE	TIME	SIGNATURE
14	At 3B MCRT, Verify 1AFILE Hashed Areas for 0 Errors (**VER:APPFILE UPD!**)	DLP-537			
15	Enter Message **COPY:LSNC TOSL!** To Update TOSL in UPDATE File; Ensure **REPT LSNC: LSNC MAPPING COMPLETE** Message Is Received	–			
16	Copy NORMAL File to 1ASAVE File (**COPY:APPFILE NORM:DEST 1ASAVE!**)	DLP-592			
17	Copy UPDATE File to 1BSAVE File (**COPY:APPFILE UPD:DEST 1BSAVE!**)	DLP-593			
18	Enter Overwrite To Hold **MODIFY RECOVERY ACTIONS** Key During Retrofit	DLP-645			
	NOTE: Items 19 through 29 are being performed to set up 1B Processor for retrofit				
19	Allow Utility Interfering Actions	DLP-585			
20	At 1B Processor Utility System Workstation, Start I/O Message Process, if Required	DLP-574			
21	Enter Message **INH:MACLI,CLASS MTCE;REX!** To Inhibit 1B Processor REX	–			
22	Enable 1B Utility Paging Administration (UPAD) Processes (**ALW:UPAD!**)	DLP-575			
23	Verify All 1B Processor Units Are in Service (**OP:OOSUNITS!**)	DLP-577			
24	Remove Standby 1B Processor CC 1 and Ensure MUP 0 Is Active	DLP-666			
25	At 1B Processor Utility System Workstation, Exit I/O Message Windows. Ensure All IOdaemon Processes From Local and External Users Are Stopped	DLP-582			
26	Set Up 1B Processor Utility System Workstation To Match and Stop at End of 1B Processor Pump	DLP-664			
27	Prepare 1B Processor MCC Terminal for Manual Recovery	DLP-663			
28	At Indicator/Remote Control Unit, Ensure **ALL-1A** Key and **ALL-1B** Key Are in **OFF** Position	–			
29	At Back of Indicator/Remote Control Unit, Disconnect P-Wire From GCP Trigger Input Terminals	–			
30	Clear Assigned ADS Function(s)	DLP-660			
	(Continued on Page 3)				

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

			DATE	TIME	SIGNATURE
31	At 1A MTC Terminal, Enter Message **RMV:DUS 0!** To Remove DUS 0 From Service; Ensure **RMV: DUS 0 COMPLETED** Message Is Received	—			
32	Enter Message **RMV:TUC a!** for Each Equipped TUC To Remove TUC From Service; Ensure **RMV: TUC a COMPLETED** Message Is Received for Each Message Entered	—			
33	Safe Point To Temporarily Stop This Procedure	—			
	NOTE: Data entered by **DATA INSERT** keys (Item 34) is address of 4E clock. This display will be used to show that 1A Processor is cycling after system comes up on 1B Processor				
34	At 1A Processor MCC **SYSTEM DISPLAY** Panel, Depress **DATA INSERT - 2, 4, 6, 8,** and **11** Key (Lamp On)	—			
35	At 1A Processor MCC **PROCESSOR CONFIGURATION SEQUENCER** Panel, Depress **DISABLE AUTO PC** Key (Lamp On)	—			
36	If **PC ATTEMPT** Lamp Is On, Contact Next Higher Technical Support Group To Determine if Retrofit Can Be Continued. Proceed as Directed	—			
37	At 1A Processor MCC **MANUAL INTERRUPT PROGRAM REQUEST** Panel, Depress **DIRECT DATA INSERT - 14** Key (Lamp On)	—			
38	At 1A Processor MCC **MANUAL INTERRUPT PROGRAM REQUEST** Panel, Depress **MODIFY RECOVERY ACTIONS** Key	—			
39	At 1A MTC Terminal, Enter Message **DUMP:CC,ADR 17776332,L 3!** To Dump Status of MCC Keys	DLP-552			
40	Enter Message **OP:APSTATUS!** and Determine if API 0 Is Standby	—			
41	If API 0 Is Active (Item 40), Enter Message **SW:APS 0!** to Make API 0 Standby	—			
	NOTE: API 0 will be removed from service when AUB 0 is removed				
42	Enter Message **RMV:AUB 0!** To Remove AUB 0 From Service; Ensure **RMV: AUB 0 COMPLETED** Message Is Received	—			
43	Retrofit to 1B Processor	DLP-665			
	(Continued to Page 4)				

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

			DATE	TIME	SIGNATURE
44	If Attempt To Configure to New System Was Successful, Go to Item 53. If Unsuccessful, Perform Items 45 Through 52 Because System Is Returned to 1A Processor	_			
45	**ENTERING THIS STEP BECAUSE BACKOUT TO 4E18 OCCURRED.** At 1A MTC Terminal, Enter Message UPD:COMMIT;NORMFILE!	_			
46	At 1A Processor MCC **MANUAL INTERRUPT PROGRAM REQUEST** Panel, Release All Active (Lamps That Are On) **DIRECT DATA INSERT** Keys [Lamp(s) Off]	_			
47	At 1A Processor MCC **PROCESSOR CONFIGURATION SEQUENCER** Panel, if **DIABLE AUTO PC** Lamp Is On, Depress **DISABLE AUTO PC** Key (Lamp Off)	_			
48	At 1B Processor Utility System Workstation, in UCD Window, Enter msave To Save Monitor Store Data; Continue to Next Item Without Waiting for Completed Output Message	_			
49	Stop UCD Matcher Processes	DLP-614			
50	Ensure (msave): Dump Completed Message Was Received	_			
51	Analyze, With Help From Next Higher Technical Support Group, Printout To Determine Why Update Failed	_			
52	After Consulting With Support Organization, Select Option A or B and Proceed as Directed	_			
	A. If Update Is To Be Discontinued, End of Procedure. Ensure System Is Operating Properly and Restore all Out-of-Service Equipment	_			
	B. If Update Is To Be Continued, Proceed as Directed by Next Higher Technical Support Group	_			
53	**SUCCESSFUL CONTINUATION OF 1B PROCESSOR RETROFIT.** At Indicator/Remote Control Unit, Operate **ACT PROC ALARM** Switch to 1B	_			
54	If System Fails During Items 55 Through 111, and Backout Is Required, Perform NTP-009	_			
55	Perform Items 56 Through 60 to Restore 1B Processor Complex Units	_			

PERFORM GENERIC RETROFIT (LEC OFFICE ONLY)

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

			DATE	TIME	SIGNATURE
56	At 1B MTC Terminal, Enter Message **OP:MACLI,CLASS MTCE!**	—			
57	If 1B Processor Complex Unit(s) Is Listed in Printout, Go to Item 60; Otherwise, Perform Items 58 Through 60	—			
58	At 1B MTC Terminal, Enter Message **OP:OOSUNITS!**	—			
	NOTE: IFB must be restored before restoring MUP, AUI, or SSD				
59	If 1B Processor Complex Unit(s) Is Listed in Printout, Enter Restore Message To Restore Each Unit Listed	—			
	NOTE: It is important to get 1B Processor units restored to service as soon as possible while the remainder of the retrofit procedure is being performed				
60	Periodically Repeat From Item 56 While Continuing to Perform Succeeding Steps in This NTP Until 1B Processor Complex Units Are Restored	—			
61	Operate **ALL-1B** Key Clockwise to **OFF** Position	—			
62	Verify Direct Link Nodes Were Pumped From Proper 1AFILE	DLP-566			
63	If Loaded Network Management Has Different Issue From Previous Network Management, Look Back in Printout for "OSOR BURST" Page. At Bottom of BURST Page, Ensure That **OSOR SCHEDULES** Are **NOT CHANGED** and **COUNT DATA BASE** Is **UPDATED**	—			
64	When System Starts To Process Calls (I/O Communications Reestablished), Is System Clock Time Data Is Incorrect, Set System Clock	DLP-554			
65	At 1B MTC Terminal, Enter Message **INH:MACLI,CLASS MTCE;REX!** To Inhibit REX	—			
66	Enter Message **OP:SVCSTAT!** and Observe Printout for Any Service Circuits That Are Not New DTMF Transmitters or Receivers or Part of Hardware Rearrange Associated With Update. Compare Printout With Printout Saved in NTP-007, Item 40. Ensure All Required Service Circuits Are Active. If Problems Are Found, Request Assistance From Next Higher Technical Support Group for Resolution	—			
	(Continued on Page 6)				

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

			DATE	TIME	SIGNATURE
67	If Any Active TAN-to-TAN Connections Existed Prior to Update, at 1B MTC Terminal, Enter Message **OP:TANTOTAN!** and Verify From Printout That TAN-to-TAN Connections Are Still Established (Compare Printout With Printout Saved in NTP-007, Item 19)	_			
68	If Any Active Large-Scale Nailup Connections Existed Prior to Update, at 1B MTC Terminal, Enter Message **VER:NAILUP;ALL!** and Verify From Printout That Large-Scale Nailup Connections Are Still Established (Compare Printout With Printout Saved in NTP-007, Item 20)	_			
69	Run Audits 43, 44, and 45 (Items 70 Through 73)	_			
70	Enter Message **AUD:NUM (43,44,45)!**	_			
71	While Audits Are Running, Continue To Perform Succeeding Items	_			
72	If Any Errors Are Detected and NOT Corrected, Inform Support Organization of Audit Results and Follow Their Instructions for Further Action	_			
73	During Execution of Audit 43, Scan Output Messages Periodically for Abort Message	_			
74	Place TLP Tape in Service	DLP-559			
75	At 1B MTC Terminal, Restore Out-of-Service Units	DLP-619			
76	If Office Is Arranged for CAMA, Check CAMA Operation	DLP-555			
77	At 3B MCRT, Depress **NORM/DISP (PF2)** Key and Enter **1106** in Command Mode To Obtain Display Page 1106	_			
78	Ensure **RING POS** Is **NORM** and **MAJOR STATE** Is **ACT** for Each Equipped CNI Ring Link Node	_			
79	Enter **1107** in Command Mode To Obtain Display Page 1107	_			
80	Ensure One Direct Link Node Is Assigned **1WAY IN** and One Direct Link Node **1WAY OUT**. Both Direct Link Nodes Must Have **HDWR STATE** and **APPL STATE** of **ACT**. If Four Direct Link Nodes Are Listed, **HDWR STATE** Must Be **ACT** and **APPL STATE** Must Be **STBY** for Direct Link Nodes Not Assigned **1WAY IN** or **1WAY OUT**	_			

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

			DATE	TIME	SIGNATURE
81	Enter **1108** in Command Mode To Obtain Display Page 1108	—			
82	Ensure **LINK STATE** Is **AVL/IS** or **AVL/STBY** and **NODE STATE** Is **ACT** for Each Equipped Signaling Link	—			
83	At 1B MTC Terminal, Enter Message **OP:MSGRCD,FS!** To Clear Recorded Message Area on Disk (**NG** Is Proper Response - No Messages To Clear on Disk)	—			
84	At I/O Terminal Other Than 1B MTC Terminal, Set Up Vacant Code Traps, As Required	DLP-556			
85	At 1B MTC Terminal, Enter Message **OP:TSGSTAT;SUM:ALL!** To Obtain Trunk Subgroup Status Summary. Compare Printout With Printout Saved in Item 6	—			
86	If Trunk Subgroup Discrepancies Exist Which Cannot Be Resolved With the Summary Printout, Request Appropriate Support Organization (TOC) To Initiate Request for Detailed Printout of Trunk Subgroup Status	—			
87	Request Appropriate Support Organization (TOC) To Initiate Sample Trunk Testing at Each Test Position	—			
88	Notify Network Management Center To Begin Checkout of Network Management System	DLP-557			
89	Review Maintenance Output Message; Account for Interrupts, Interjects, and Audit Reports; and Compare With Preupdate Office Performance Results	—			
90	Compare Count of Ineffective Machine Attempts With Preupdate Level	—			
91	If Office Provides CAMA Service, Monitor CAMA Call Activity; Compare With Expected Level	—			
92	Determine That Manually Placed Calls and System-Placed Test Calls Complete Successfully	—			
93	Test Scan and SD Points (Both 1B SSD Units Must Be Inservice)	DLP-598			
94	At 1B MTC Terminal, Enter Message **INIT:PUEXINIT!**	—			
95	If Security Call Traps Existed Prior to Update, Request Network Management To Enter Security Call Traps Per Local Practice	—			

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

			DATE	TIME	SIGNATURE
	NOTE: Writing of long-term storage must be initiated during 7-minute window beginning 4 minutes past any quarter hour				
96	Write Backup Long-Term Storage (LTS) Tape	DLP-543			
97	At 1B Processor Utility System Workstation, Stop UCD Matcher Processes	DLP-614			
98	Load Library Package(s) That Is Required for Normal Local Use (if Not Loaded) and Library Package ***LG19RCUA***, if Necessary for Recent Change Update Using New 4E19 Office Library Tape	DLP-530			
99	At 1B MTC Terminal, Enter Message **ALW:MACLI,CLASS MTCE!** To Allow REX	—			
100	At 3B MCRT, Enter Message **ALW:DMQ;SRC REX!** To Allow REX	—			
101	At 1B Processor MCC Terminal, Enter **108** To Obtain System Status Page (108)	—			
102	If **801 - RESTRICT RC** Is Colored Black on White, Enter **801**	—			
103	Reenter Recent Change Data				
	A. Reenter Recent Change Data Using Recent Change Library Program				
	1. Mount RC Message Tape Created Via Task 1 or 2 Without Write-Enable Ring Attached	DLP-529			
	2. Enter Message **SET:TUC a;FUNCTION UPD!.** Verify That Tape Header Information in Output Message Is Correct for Tape To Be Processed (a = TUC With Task 1 or 2 Tape Mounted)	—			
	3. Enter Message **ALW:TUC a:RO!**	—			
	4. Execute Task 3 of RCLI Library Program to Reenter Recent Changes Into System	DLP-558			
	5. Enter Message **CLR:ADSFUNC UPD!**	—			
	6. Demount RC Message Tape	DLP-528			
	B. If Reentering Recent Change Data at Office, Reenter Per Local Practice	—			
	C. Request MAC To Enter New Recent Change Data, As Required, Into System. Do Not Continue Until MAC Is Done	—			

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

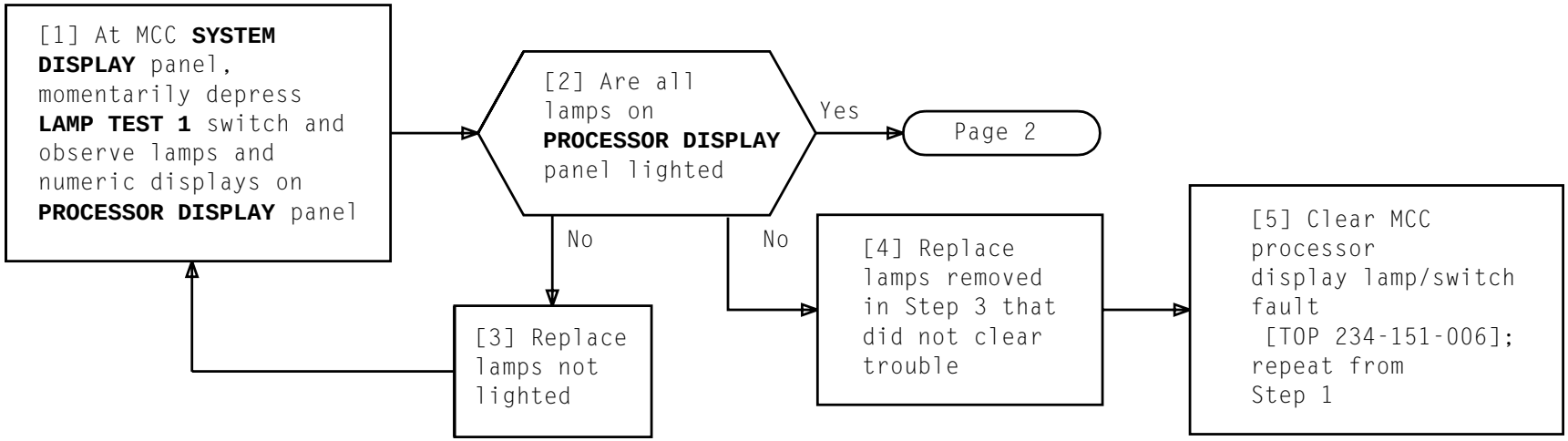
			DATE	TIME	SIGNATURE
104	If Office Is CAMA Equipped, Install Any Special CAMA Data Per Local Practice, As Required	–			
105	At 1B MTC Terminal, Enter Message **AUD:NUM (43,44,45)!;** Do Not Continue Until Audits Have Completed With 0 Errors	–			
106	Write Backup 1B Processor ODA Tapes (800 BPI)	DLP-583			
107	Write Updated Traffic and Plant Measurement (TPM) Schedule Tape	DLP-544			
108	If Any 4E19 Overwrites Are To Be Installed, Install Per Local Practice	–			
109	Write 1B Processor Generic Tapes (800 BPI)	DLP-584			
110	Write Backup Network Management (NWM) Tape (800 BPI)	DLP-562			
111	If Data Base Was Loaded by Off-Line Processor, Write 4E Library Tape(s) Using TWRL Library Program	DLP-568			
112	Write Backup 1B Processor ODA Tapes (1600 BPI), if Required	DLP-670			
113	Write Backup 1B Processor Generic Tapes (1600 BPI), if Required	DLP-671			
114	Request Next Higher Technical Support Group To Determine if Office Can Commit to 1B Processor Generic. Do Not Proceed Without Permission From Next Higher Technical Support Group	–			
	WARNING: Item 115 will delete any reference to 4E18 generic in NORMAL and UPDATE files. File copy of 4E18 generic from 1AFILE backup partition to UPDATE file would have to be done before initializing 1A Processor				
115	Commit to 1B Processor	DLP-591			
116	If System Fails and Backout Is Required, Perform NTP-010	–			
	NOTE: Items 117 through 120 are being performed to ensure that conversion switch units stay in 1B position				
117	At Each Conversion Switch Unit on All **TN1808/TN2808** Circuit Packs, Operate **ON-OFF** Switch to **OFF** Position	–			
	(Continued on Page 10)				

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

			DATE	TIME	SIGNATURE
118	At PCDF or BDFB, Locate Seven 1/2-Amp 70G (Red) Fuses Associated With Seven Conversion Switch Units and Remove. These Fuses Must Remain Close to PCDF or BDFB in Case Backout Is Required	_			
119	At PCDF or BDFB, Locate Seven 5-Amp 74C Fuses Associated With Seven Conversion Switch Units and Remove. These Fuses Must Remain Close to PCDF or BDFB in Case Backout Is Required	_			
120	At Indicator/Remote Conversion Switch Unit, Ensure **ALL-1B** Key and **ALL-1A** Key Switches Are in OFF Position	_			
121	Remove Keys From **ALL-1B** and **ALL-1A** Key Switches and Place in 1B MCC Console Drawer	_			
122	At 1B Processor MCC Terminal, Enter **106** To Obtain MUP Status and Control Page	_			
123	Enter **611** (NORMAL UTIL) **(UAS:NORMAL UTIL** Colored White on Black)	_			

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO
1	Determine Phone Number for Office Under Test/Being Backed Out and Record for Later Use	—
2	Determine Phone Number for Mini-Maintenance Operation Center (MMOC) and Record for Later Use	—
3	Set Up Conference Call With Office, PECC Diagnostic Center (1-800-225-4672), MMOC, and DMAC (1-800-232-6717)	—
	NOTE: At appropriate time, MMOC will notify DMAC to perform RUAS backout	
4	Request MMOC To Perform RUAS Backout to PreConfig File Procedure. Wait for MMOC To Complete Backout Before Proceeding	—
5	Request Installer To Verify RUAS Backout	DLP-655
6	Request PECC Diagnostic Center To Verify RUAS Backout	DLP-655
7	End Conference Call	—

SUMMARY	
Depress each of the five **LAMP TEST** switches on MCC **SYSTEM DISPLAY** panel to light the lamps and numeric displays on MCC panels. After depressing **LAMP TEST** switch, check that the lamps and numeric displays light as indicated in TABLES A-C. If lamp does not light, replace lamp. If lamp replacement does not clear the trouble or if numeric displays do not light as all 8s, refer to appropriate TAP in TOP 234-151-006	



PERFORM MASTER CONTROL CONSOLE LAMP TESTS

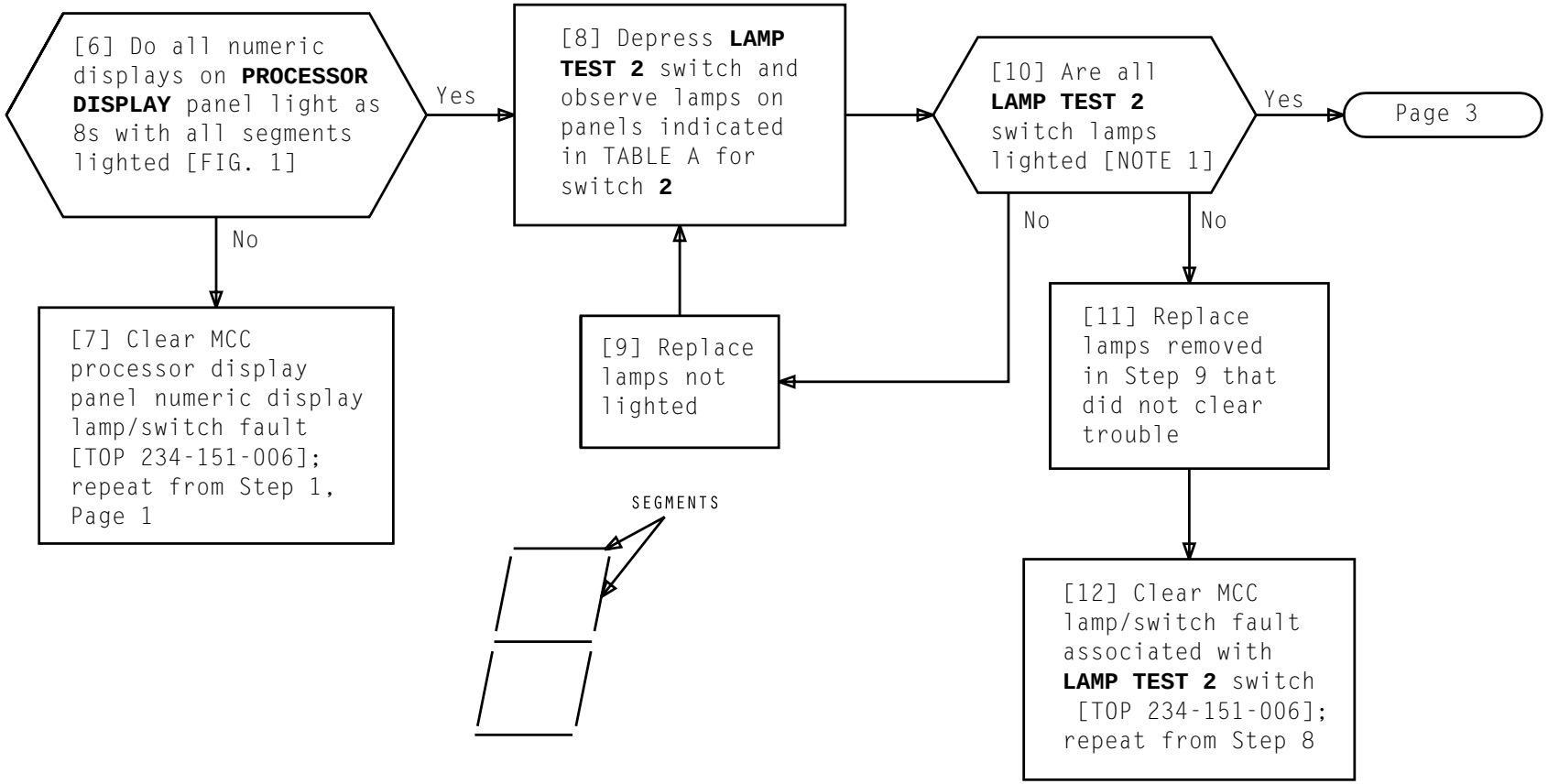


FIG. 1 – Numeric Display Segments

TABLE A	
LAMP TEST SWITCH	**MCC PANELS LIGHTED**
2	**UPDATE, OVERRIDE CONTROL, SYSTEM REINITIALIZATION, PROCESSOR CONFIGURATION SEQUENCER,** and **MANUAL INTERRUPT PROGRAM REQUEST** panels

NOTE 1
RESET COUNTER and **ACTIVATE PC** switches on **PROCESSOR CONFIGURATION SEQUENCER** panel do not contain lamps. Also, the **ACTIVATE PROGRAM REQUEST** switch on **MANUAL INTERRUPT PROGRAM REQUEST** panel does not contain lamp

PERFORM MASTER CONTROL CONSOLE LAMP TESTS

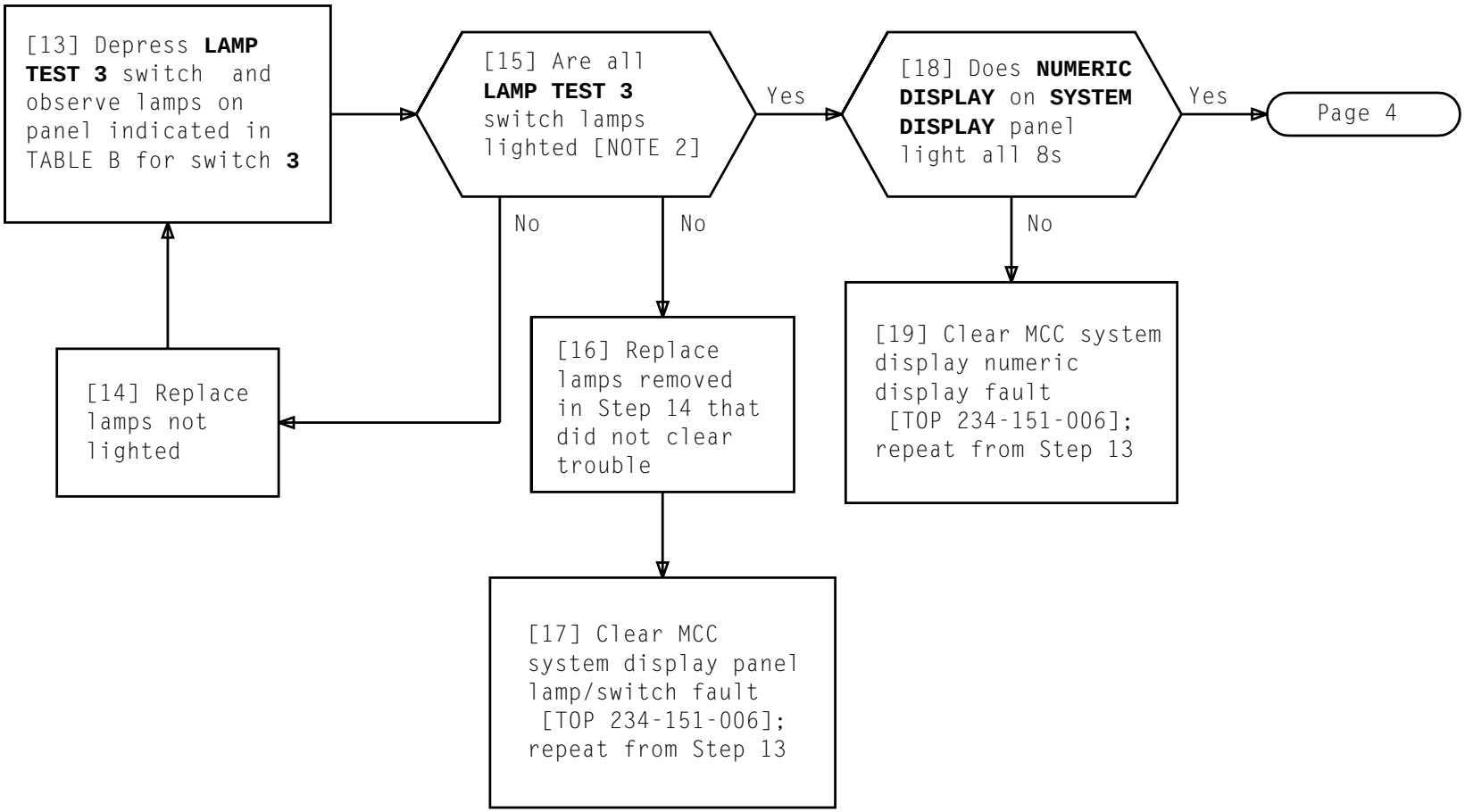


TABLE B

LAMP TEST SWITCH	MCC PANEL LIGHTED
3	**SYSTEM DISPLAY** panel (except **POWER STATUS-OS** and **PA** lamps)

NOTE 2
LAMP TEST switches do not contain lamps

PERFORM MASTER CONTROL CONSOLE LAMP TESTS

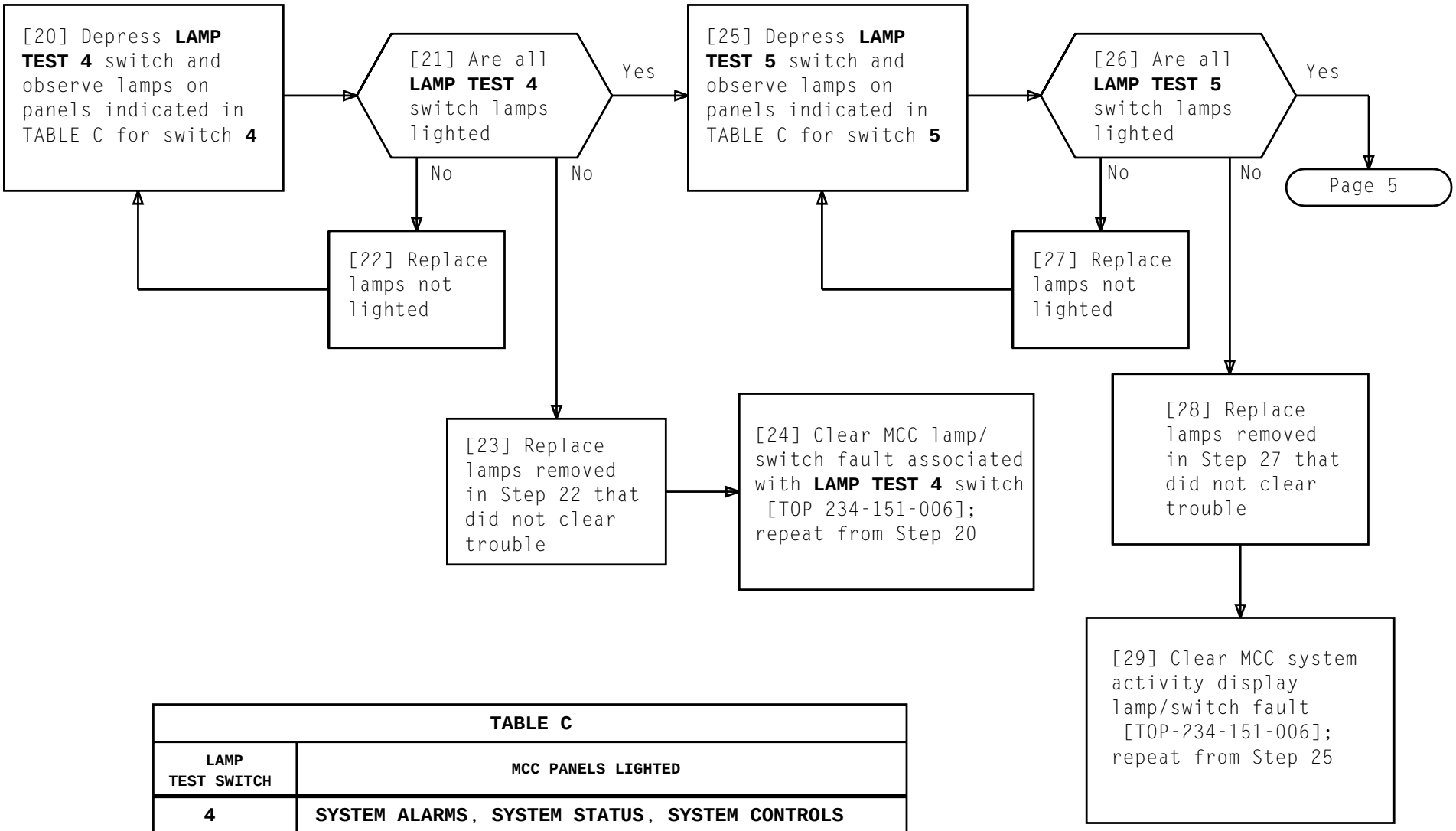
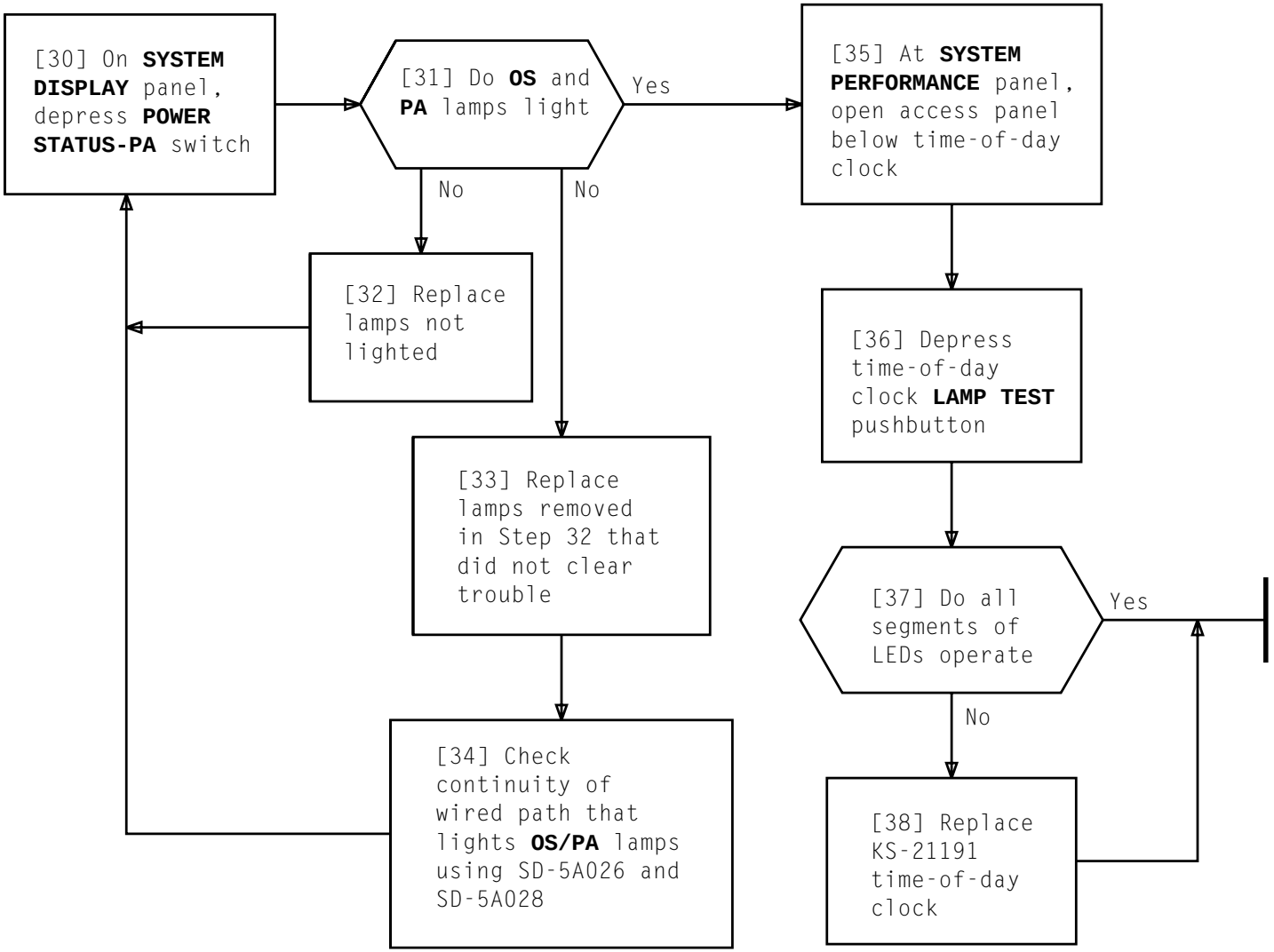


TABLE C

LAMP TEST SWITCH	MCC PANELS LIGHTED
4	**SYSTEM ALARMS**, **SYSTEM STATUS**, **SYSTEM CONTROLS EQUIPMENT STATUS**, and **TEST CALLS** lamps on **SYSTEM PERFORMANCE** panel. Critical alarm sounds
5	**SYSTEM ACTIVITY** on **SYSTEM PERFORMANCE** panel

PERFORM MASTER CONTROL CONSOLE LAMP TESTS



PERFORM MASTER CONTROL CONSOLE LAMP TESTS

1. General

1.1 If any lamp or switch faults are detected during execution of these tests, refer to trouble analysis procedures in TOP 234-151-006 for repair

1.2 If a failure is detected in a test group, complete remaining steps in that group, then clear fault. Repeat group under test before continuing with tests in the next group

1.3 For each test, look for test number to appear on **NUMERIC DISPLAY** and **DIAGNOSIS IN PROGRESS** lamp to begin flashing; then proceed with the appropriate action to record the passing or failing of the test

1.4 Failure to perform required action within 20 seconds after **DIAGNOSIS IN PROGRESS** lamp on **SYSTEM STATUS** panel starts flashing, or next test number appears, will result in program stepping to next test and failure recorded for test not performed

1.5 This group of tests concerns lamps and keys on the **SYSTEM DISPLAY** panel

2. Test Sequence

2.1 Enter message DGN:MCC 0:PH 91!

Response: **37** is displayed on **NUMERIC DISPLAY**

2.2 At **SYSTEM DISPLAY** panel:

(a) Ensure that **DATA INSERT** keys **21**, **22**, and **23** are off

(b) Depress **DATA INSERT** key **13** to begin program unit 1 testing

2.3 If **NUMERIC DISPLAY** responds through sequence listed in TABLE A, then displays test number **61**, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**

TABLE A

SEQUENCE NUMBER	NUMERIC DISPLAY	DISPLAY TIME
1	**111111**	2 sec
2	**222222**	2 sec
3	**333333**	2 sec
4	**444444**	2 sec
5	**555555**	2 sec
6	**666666**	2 sec
7	**777777**	2 sec
8	**888888**	2 sec
9	**999999**	2 sec
10	**000000**	2 sec

RUN PHASE 91 PROGRAM UNIT 1 SYSTEM DISPLAY TESTS

2.4 As test numbers appear on **NUMERIC DISPLAY** per TABLE B, depress indicated **DATA INSERT** key

TABLE B			
NUMERIC DISPLAY TEST NUMBER	DATA INSERT KEY	NUMERIC DISPLAY TEST NUMBER	DATA INSERT KEY
63	0	111	12
65	0	113	12
67	1	115	13
69	1	117	13
71	2	119	14
73	2	121	14
75	3	123	15
77	3	125	15
79	4	127	16
81	4	129	16
83	5	131	17
85	5	133	17
87	6	135	18
89	6	137	18
91	7	139	19
93	7	141	19
95	8	143	20
97	8	145	20
99	9	147	21
101	9	149	21
103	10	151	22
105	10	153	22
107	11	155	23
109	11	157	23

2.5 When test number appears on **NUMERIC DISPLAY** per TABLE C and associated **NUMERIC** or **BINARY DISPLAY SELECTION** key is lighted, depress lighted key

TABLE C	
NUMERIC DISPLAY TEST NUMBER	NUMERIC OR BINARY DISPLAY SELECTION KEY
160	SR/UPDATE PROGRESS
163	CONTENTS OF MEMORY
166	MAC CLIENT
169	PHASE PROGRESS
172	CONTENTS OF MEMORY
175	SCAN POINT READING
178	OVERLOAD DATA

RUN PHASE 91 PROGRAM UNIT 1 SYSTEM DISPLAY TESTS

2.6 As each test number appears on **NUMERIC DISPLAY,** if listed **BINARY DISPLAY** lamp is lighted per TABLE D, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**

TABLE D			
NUMERIC DISPLAY TEST NUMBER	BINARY DISPLAY LAMP	NUMERIC DISPLAY TEST NUMBER	BINARY DISPLAY LAMP
182	0	218	12
185	1	221	13
188	2	223	14
191	3	226	15
194	4	229	16
197	5	232	17
200	6	235	18
203	7	238	19
206	8	241	20
209	9	244	21
212	10	247	22
215	11	250	23

2.7 When test number, or octal number, appears per TABLE E, depress indicated **DISPLAY STATUS** key

Note: Octal numbers in this test indicate arbitrary failing addresses

TABLE E	
NUMERIC DISPLAY TEST NUMBER	DISPLAY STATUS KEY
253	FAIL ADDR
Octal number	FAIL ADDR
257	UTIL FLAG
Octal number	UTIL FLAG
261	HOLD
261	HOLD

2.8 When test number **265** appears on **NUMERIC DISPLAY**, depress to light **DATA INSERT** keys **21**, **22**, and **23**

2.9 Depress to light **DATA INSERT** key **13**

Response: Printout indicating ATP or a list of failed tests

End of procedure

1. This group of tests concerns lamps and keys on the **MANUAL INTERRUPT PROGRAM REQUEST** panel

2. Test Sequence

   2.1 Enter message DGN:MCC O:PH 91!

   Response: **37** is displayed on **NUMERIC DISPLAY**

   2.2 At **SYSTEM DISPLAY** panel:

   (a) Depress to light **DATA INSERT** key **21**

   (b) Ensure that **DATA INSERT** keys **22** and **23** are off

   (c) Depress **DATA INSERT** key **13** to begin program unit 2 testing

   2.3 When test numbers in TABLE A appear (**267**-**361**), depress indicated **DIRECT DATA INSERT** key

TABLE A

TEST NUMBER	DIRECT DATA INSERT KEY	TEST NUMBER	DIRECT DATA INSERT KEY
267	0	315	12
269	0	317	12
271	1	319	13
273	1	321	13
275	2	323	14
277	2	325	14
279	3	327	15
281	3	329	15
283	4	331	16
285	4	333	16
287	5	335	17
289	5	337	17
291	6	339	18
293	6	341	18
295	7	343	19
297	7	345	19
299	8	347	20
301	8	349	20
303	9	351	21
305	9	353	21
307	10	355	22
309	10	357	22
311	11	359	23
313	11	361	23

RUN PHASE 91 PROGRAM UNIT 2 MANUAL INTERRUPT PROGRAM REQUEST TESTS

2.4 When test numbers in TABLE B appear (**379-425**), depress indicated key on **MANUAL INTERRUPT PROGRAM REQUEST** panel

TABLE B	
TEST NUMBER	MANUAL INTERRUPT PROGRAM REQUEST KEY
379	CLEAR UTILITY FUNCTION
381	CLEAR UTILITY FUNCTION
383	INHIBIT INTERRUPT
385	INHIBIT INTERRUPT
387	RESTORE MTCE I/O
389	RESTORE MTCE I/O
391	MODIFY RECOVERY ACTIONS
393	MODIFY RECOVERY ACTIONS
395	FULL CFG/EMER MODE
397	FULL CFG/EMER MODE
399	MIN CFG/EMER MODE
401	MIN CFG/EMER MODE
403	PHASE – 6 – REQUEST
405	PHASE – 6 – REQUEST
407	PHASE – 5 – REQUEST
409	PHASE – 5 – REQUEST
411	PHASE – 4 – REQUEST
413	PHASE – 4 – REQUEST
415	PHASE – 3 – REQUEST
417	PHASE – 3 – REQUEST
419	PHASE – 2 – REQUEST
421	PHASE – 2 – REQUEST
423	PHASE – 1 – REQUEST
425	PHASE – 1 – REQUEST

2.5 When test numbers in TABLE C appear (**428-456**), if indicated **MANUAL INTERRUPT PROGRAM REQUEST** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**

TABLE C	
NUMERIC DISPLAY TEST NUMBER	MANUAL INTERRUPT PROGRAM REQUEST LAMP
428	FULL CFG
432	MIN CFG
436	PHASE – 6 – IN PROG
440	PHASE – 5 – IN PROG
444	PHASE – 4 – IN PROG
448	PHASE – 3 – IN PROG
452	PHASE – 2 – IN PROG
456	PHASE – 1 – IN PROG

2.6 When test number **459** appears on **NUMERIC DISPLAY,** depress to light **DATA INSERT** keys **21**, **22**, and **23**

2.7 Depress to light **DATA INSERT** key **13**

Response: Printout indicating ATP or a list of failed tests

End of Procedure

1. This group of tests concerns keys on the **OVERRIDE CONTROL** panel

   Caution: ACTIVATE OVERRIDE IN EFFECT key should not be depressed during this test

   Note: The red **NO OVERRIDE** lamp will be lighted whenever an **OVERRIDE CONTROL** key is operated

2. Test Sequence

   2.1 Enter message DGN:MCC 0:PH 91!

   Response: **37** is displayed on **NUMERIC DISPLAY**

   2.2 At **SYSTEM DISPLAY** panel:

   (a) Depress to light **DATA INSERT** key **22**

   (b) Ensure that **DATA INSERT** keys **21** and **23** are off

   (c) Depress **DATA INSERT** key **13** to begin program unit 3 testing

   2.3 Depress any lighted keys on **OVERRIDE CONTROL** panel to off

   2.4 When test number **461** appears on **NUMERIC DISPLAY**, depress **DATA INSERT** key **1**

   2.5 When test numbers appear per TABLE A, depress indicated key on **OVERRIDE CONTROL** panel

   2.6 When test number **501** appears on **NUMERIC DISPLAY**, depress to light **DATA INSERT** keys **21**, **22**, and **23**

   2.7 Depress to light **DATA INSERT** key **13**

   Response: Printout indicating ATP or a listing of failed tests

End of Procedure

TABLE A

TEST NUMBER	OVERRIDE CONTROL KEY
465	VARIABLE PS 1
467	VARIABLE PS 1
469	VARIABLE PS 0
471	VARIABLE PS 0
473	AU BUS 1
475	AU BUS 1
477	PS BUS 1
479	PS BUS 1
481	CC1
483	CC1
485	BLOCK 0 PS 0
487	BLOCK 0 PS 0
489	AU BUS 0
491	AU BUS 0
493	PS BUS 0
495	PS BUS 0
497	CC0
499	CC0

RUN PHASE 91 PROGRAM UNIT 3 OVERRIDE CONTROL TESTS

1. This group of tests concerns keys on the **UPDATE** panel

2. Test Sequence

   2.1 Enter message DGN:MCC O:PH 91!

   Response: **37** is displayed on **NUMERIC DISPLAY**

   2.2 At **SYSTEM DISPLAY** panel:

   (a) Depress to light **DATA INSERT** keys **21** and **22**

   (b) Ensure that **DATA INSERT** key **23** is off

   (c) Depress **DATA INSERT** key **13** to begin program unit 4 testing

   2.3 When test number appears per TABLE A, depress indicated **UPDATE** key

TABLE A	
TEST NUMBER	**UPDATE KEY**
503	**UPDATE**
506	**UPDATE**
509	**NORMAL**
512	**NORMAL**

   2.4 When test number **516** appears on **NUMERIC DISPLAY**, if **UPDATE — IN PROGRESS** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**

   2.5 When test number **519** appears on **NUMERIC DISPLAY**, depress to light **DATA INSERT** keys **21**, **22**, and **23**

   2.6 Depress to light **DATA INSERT** key **13**

   Response: Printout indicating ATP or a listing of failed tests

End of Procedure

RUN PHASE 91 PROGRAM UNIT 4 UPDATE TESTS

1. General

1.1 This group of tests concerns lamps on the **PROCESSOR CONFIGURATION SEQUENCER** panel

1.2 On tests **524**, **526**, and **528** the indicated lamp will light for approximately 10 seconds, go out, then the test number will be displayed

2. Test Sequence

2.1 Enter message DGN:MCC 0:PH 91!

Response: **37** is displayed on **NUMERIC DISPLAY**

2.2 At **SYSTEM DISPLAY** panel:

(a) Depress to light **DATA INSERT** key **23**

(b) Ensure that **DATA INSERT** keys **21** and **22** are off

(c) Depress **DATA INSERT** key **13** to begin program unit 5 testing

At **PROCESSOR CONFIGURATION SEQUENCER** panel:

2.3 When test number **521** appears, depress **DISABLE AUTO PC** key

Response: Lamp lights

2.4 When test number **522** appears, depress **DISABLE AUTO PC** key

Response: Lamp goes off

2.5 When test numbers appear per TABLE A, if listed **PROCESSOR CONFIGURATION SEQUENCER** lamp was lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**

TABLE A

TEST NUMBER	PROCESSOR CONFIGURATION SEQUENCER LAMP
524	BASIC PROCESSOR *
526	CALL STORE *
528	PROGRAM STORE *
530	PROCESSOR CONFIG COMPLETE

* Lamp lights for approximately 10 seconds, goes out, and then test number is displayed

2.6 When test number **532** appears on **NUMERIC DISPLAY**, depress to light **DATA INSERT** keys **21, 22,** and **23**

2.7 Depress to light **DATA INSERT** key **13**

Response: Printout indicating ATP or a list of failed tests

End of procedure

RUN PHASE 91 PROGRAM UNIT 5 PROCESSOR CONFIGURATION SEQUENCER TESTS

1. General

1.1 This group of tests concerns the PS/CS Member Number display on the **PROCESSOR DISPLAY** panel

2. Test Sequence

2.1 Enter message DGN:MCC 0:PH 91!

Response: **37** to appear on **NUMERIC DISPLAY**

2.2 At **SYSTEM DISPLAY** panel:

(a) Depress to light **DATA INSERT** keys **21** and **23**

(b) Ensure that **DATA INSERT** key **22** is off

(c) Depress **DATA INSERT** key **13** to begin program unit 6 testing

2.3 If **PS-MEMBER NO** display sequence is as indicated in TABLE A, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**

TABLE A

TEST NUMBER	PROCESSOR DISPLAY — PS MEMBER NO DISPLAY SEQUENCE
555 *	**00**, **11**, **22**, **33**, **44**, **55**, **66**, **77**, **78** and **79**

* Test number is not displayed until after last member number is displayed

2.4 If **CS-MEMBER NO** display sequence is as indicated in TABLE B, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**

TABLE B

TEST NUMBER	PROCESSOR DISPLAY — CS MEMBER NO DISPLAY SEQUENCE
578 *	**00**, **11**, **22**, **33**, **44**, **55**, **66**, **77**, **78** and **79**

* Test number is not displayed until after last member number is displayed

2.5 When test number **581** appears on **NUMERIC DISPLAY**, depress to light **DATA INSERT** keys **21, 22,** and **23**

2.6 Depress to light **DATA INSERT** key **13**

Response: Printout indicating ATP or a list of the failed tests

End of procedure

RUN PHASE 91 PROGRAM UNIT 6 PROCESSOR DISPLAY TESTS

1. General

1.1 If any lamp or switch faults are detected during execution of these tests, refer to trouble analysis procedures in TOP 234-151-006 for repair

1.2 If a failure is detected in a test group, complete remaining steps in that group, then clear fault. Repeat group under test before continuing with tests in the next group

1.3 For each test, look for test number to appear on **NUMERIC DISPLAY** and **DIAGNOSIS IN PROGRESS** lamp to begin flashing, then proceed with the appropriate action to record the passing or failing of the test

1.4 Failure to perform required action within 20 seconds after **DIAGNOSIS IN PROGRESS** lamp starts flashing or next test number appears, will result in program stepping to next test and failure recorded for test not performed

1.5 This group of tests concerns lamps on the **SYSTEM PERFORMANCE** panel

2. Test Sequence

2.1 Enter message DGN:MCC 0:PH 92!

Response: **36** is displayed on **NUMERIC DISPLAY**

At **SYSTEM DISPLAY** panel:

2.2 If **DATA INSERT** keys **21**, **22**, and **23** are lighted, depress these keys to turn them off

2.3 Depress **DATA INSERT** key **13** to begin Program Unit 1 testing

At **SYSTEM PERFORMANCE** panel:

2.4 Observe **SYSTEM ACTIVITY** display as the 10 LEDs and the **THRESHOLD EXCEEDED** lamp lights for each activity in TABLE A. If LEDs and lamp are lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**

TABLE A

NUMERIC DISPLAY TEST NUMBER	SYSTEM ACTIVITY LAMP
39	BASE CYCLE TIME
41	TRAFFIC INCOMING
43	CALL REGISTER OCCUPANCY
45	CALLS QUEUED FOR SERV
47	TEST CALL SEIZURE TIME
49	DISK REQUESTS QUEUED
51	SWITCHING INEFF ATTEMPTS
53	EQUIP INEFF ATTEMPTS
55	NETWORK OCCUPANCY

RUN PHASE 92 PROGRAM UNIT 1 SYSTEM PERFORMANCE TESTS

2.5 When test numbers in TABLE B appear, if indicated lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**

2.6 When test number **76** appears on **NUMERIC DISPLAY**, depress **TEST CALLS-FAIL** key after lamp lights

2.7 When test number **77** appears, if **TEST CALL-PASS** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**

2.8 When test number **78** appears, if **TEST CALL-MONITOR INHIBITED** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**

2.9 When test number **80** appears, depress to light **DATA INSERT** keys **21**, **22**, and **23**

2.10 Depress to light **DATA INSERT** key **13**

Response: Printout indicating ATP or the test number of the failed test(s)

End of procedure

TABLE B

NUMERIC DISPLAY TEST NUMBER	SYSTEM PERFORMANCE LAMP
59	BASE CYCLE TIME
61	TRAFFIC INCOMING
63	CALL REGISTER OCCUPANCY
65	CALLS QUEUED FOR SERV
67	TEST CALL SEIZURE TIME
69	DISK REQUESTS QUEUED
71	SWITCHING INEFF ATTEMPTS
73	EQUIP INEFF ATTEMPTS
75	NETWORK OCCUPANCY

1. General

1.1 This group of tests concerns lamps and keys on the **SYSTEM ALARMS** panel

2. Test Sequence

2.1 Enter message DGN:MCC O:PH 92!

Response: **36** is displayed on **NUMERIC DISPLAY**

2.2 At **SYSTEM DISPLAY** panel:

(a) Depress to light **DATA INSERT** key **21**

(b) Ensure that **DATA INSERT** keys **22** and **23** are off

(c) Depress **DATA INSERT** key **13** to begin Program Unit 2 testing

2.3 Perform required actions as stated in TABLE A, Page 2

2.4 When **NUMERIC DISPLAY** displays **125**, depress to light **DATA INSERT** keys **21**, **22**, and **23**

2.5 Depress to light **DATA INSERT** key **13**

Response: Printout indicating ATP or the test numbers of the failed test(s)

End of procedure

RUN PHASE 92 PROGRAM UNIT 2 SYSTEM ALARM TESTS

TABLE A
SYSTEM ALARMS PANEL TESTS

TEST NUMBER	ACTION
87	Depress **RECENT CHANGE ROLLBACK** key if lamp is lighted
89	Depress **DIAGNOSIS FAILURE** key if lamp is lighted
91	Depress **MTCE INTERRUPT** key if lamp is lighted
93	Depress **STORE REGEN** key if lamp is lighted
95	Depress **MEMORY RECOVERY PHASE** key if lamp is lighted
97	Depress **PC CIRCUIT ACTIVATED** key if lamp is lighted
99	Depress **SYS PERF DISPLAY TIMEOUT** key if lamp is lighted
101	If **REFSTAT** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
102	If **FREERUN** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
103	Depress **REFSTAT/FREERUN** key
104	Depress **REFSTAT/FREERUN** key
105	If **BILLING RECORDING STOPPED** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
107	If **SERVICE DEGRADING FAILURE** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
109	Depress **SERVICE DEGRADING FAILURE** key (lamp does not light)
110	Depress **SERVICE DEGRADING FAILURE** key (lamp does not light)
112	If **CHANGE TAPE** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
114	If **CARRIER GROUP** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
116	If **EQUIPMENT POWER ALARM** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
118	If **POWER ROOM** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
120	If **MINOR** lamp is lighted, depress key
122	If **MAJOR** lamp is lighted, (alarm will sound) depress key
124	If **CRITICAL** lamp is lighted, (alarm will sound) depress key

1. General

1.1 This group of tests concerns lamps and keys on the **SYSTEM STATUS** panel

1.2 Before starting this test sequence, check the Network Management Control Frame for relay **DOCT** (location 051-35). If this relay has not been installed, test **170** times out and tests **171, 174,** and **175** are skipped, and test failure will be recorded for test **170.**

2. Test Sequence

2.1 Enter message DGN:MCC 0:PH 92!

Response: **36** is displayed on **NUMERIC DISPLAY**

2.2 At **SYSTEM DISPLAY** panel:

(a) Depress to light **DATA INSERT** key **22**

(b) Ensure that **DATA INSERT** keys **21** and **23** are off

(c) Depress **DATA INSERT** key **13** to begin Program Unit 3 testing.

2.3 Perform required actions as stated in TABLE A, Pages 2 and 3, when test number **132** appears

2.4 When test number **183** appears on **NUMERIC DISPLAY**, depress to light **DATA INSERT** keys **21**, **22**, and **23**

2.5 Depress to light **DATA INSERT** key **13**

Response: Printout indicating ATP or the test numbers of the failed test(s)

End of procedure

RUN PHASE 92 PROGRAM UNIT 3 SYSTEM STATUS TESTS

TABLE A

TEST NUMBER	ACTION
132	If **INTERRUPT INHIBITED** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
134	Depress **INTERRUPT INHIBITED** key
135	Depress **INTERRUPT INHIBITED** key
137	If **TTY MESSAGE INHIBITED** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
139	Depress **TTY MESSAGE INHIBITED** key
140	Depress **TTY MESSAGE INHIBITED** key
142	If **OVERLOAD CONTROLS IN EFFECT** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
144	Depress **OVERLOAD CONTROLS IN EFFECT** key
145	Depress **OVERLOAD CONTROLS IN EFFECT** key
147	If **SPECIAL CAMA RECORD** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
149	Depress **SPECIAL CAMA RECORD** key
150	Depress **SPECIAL CAMA RECORD** key
152	If **PROGRAM CONTROL OFF NORM** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
154	Depress **PROGRAM CONTROL OFF NORM** key
155	Depress **PROGRAM CONTROL OFF NORM** key
157	If **ONI CAMA SUSPENDED** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
160	If **MANUAL** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
162	Depress **MANUAL** key
163	Depress **MANUAL** key
165	If **AUTO** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
167	Depress **AUTO** key
168	Depress **AUTO** key
***170**	Depress **MC3 ACT/DISAB** key
***171**	If bottom half of **MC3 ACT/DISAB** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0** pushbutton. *There will be a 30-second delay*, then top half of **MC3 ACT/DISAB** lamp should light and go off before test number **174** appears on **NUMERIC DISPLAY**. Also, the critical alarm lamp will light, and alarm bells will ring for up to 30 seconds. DOC inconsistency report will print out
***174**	If top half of **MC3 ACT/DISAB** has lighted and extinguished, depress **DATA INSERT** key **1**; otherwise, (lamp did not light or remains lighted) depress **DATA INSERT** key **0**. *Caution: Do not depress* **MC3 ACT/DISAB** *pushbutton if both halves of the lamp remain lighted.*
***175**	If only bottom half of lamp is lighted, depress **MC3 ACT/DISAB** key

* The program may bypass these test numbers

RUN PHASE 92 PROGRAM UNIT 3 SYSTEM STATUS TESTS

TABLE A (Contd)	
TEST NUMBER	**ACTION**
177	If **RESTRICT RECENT CHANGES** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
179	Depress **RESTRICT RECENT CHANGES** key
180	Depress **RESTRICT RECENT CHANGES** key
181	If **RB AREA CAPACITY WARNING** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
182	If **ACTIVITY** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**

1. This group of tests concerns lamps and keys on the **SYSTEM CONTROLS** panel

2. Test Sequence

   2.1 Enter message DGN:MCC 0:PH 92!

   Response: **36** is displayed on **NUMERIC DISPLAY**

   2.2 At **SYSTEM DISPLAY** panel:

   (a) Depress to light **DATA INSERT** keys **21** and **22**

   (b) Ensure that **DATA INSERT** key **23** is off

   (c) Depress **DATA INSERT** key **13** to begin Program Unit 4 testing

   2.3 Perform required actions as stated in TABLE A when test numbers appear

   2.4 When test number **212** appears on **NUMERIC DISPLAY**, depress to light **DATA INSERT** keys **21**, **22**, and **23**

   2.5 Depress to light **DATA INSERT** key **13**

   Response: Printout indicating ATP or the test numbers of the failed test(s)

End of procedure

TABLE A
SYSTEM CONTROLS PANEL TESTS

TEST NUMBER	ACTION
187	Depress **ELEVATE AUDIT PRINTOUT** key
188	Depress **ELEVATE AUDIT PRINTOUT** key
189	Depress **INHIBIT AUDIT PRINTOUT** key
190	Depress **INHIBIT AUDIT PRINTOUT** key
191	Depress **INHIBIT INTERRUPT PRINTOUT** key
192	Depress **INHIBIT INTERRUPT PRINTOUT** key
193	Depress **INHIBIT SUPP INT PRINTOUT** key
194	Depress **INHIBIT SUPP INT PRINTOUT** key
196	If **FOR ATR/REQUEST** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
198	Depress **FOR ATR/REQUEST** key
199	Depress **FOR ATR/REQUEST** key
201	If **REINIT TTY SYSTEM** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
203	Depress **REINIT TTY SYSTEM** key
204	Depress **REINIT TTY SYSTEM** key
206	If **REQUEST TTY AUDIT** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**
208	Depress **REQUEST TTY AUDIT** key
209	Depress **REQUEST TTY AUDIT** key
210	Depress **CANCEL OVERLOAD CONTROL** key
211	Depress **CANCEL OVERLOAD CONTROL** key

RUN PHASE 92 PROGRAM UNIT 4 SYSTEM CONTROL TESTS

1. This group of tests concerns lamps on the **EQUIPMENT STATUS** panel

2. Test Sequence

   2.1 Enter message DGN:MCC 0:PH 92!

   Response: **36** is displayed on **NUMERIC DISPLAY**

   2.2 At **SYSTEM DISPLAY** panel:

   (a) Depress to light **DATA INSERT** key **23**

   (b) Ensure that **DATA INSERT** keys **21** and **22** are off

   (c) Depress **DATA INSERT** key **13** to begin Program Unit 5 testing

   2.3 When test numbers in TABLE A, Page 2, appear, if listed **EQUIPMENT STATUS** lamp is lighted, depress **DATA INSERT** key **1**; otherwise, depress **DATA INSERT** key **0**

   2.4 When test number **351** appears on **NUMERIC DISPLAY**, depress to light **DATA INSERT** keys **21**, **22**, and **23**

   2.5 Depress to light **DATA INSERT** key **13**

   Response: Printout indicating ATP or the test numbers of the failed test(s)

End of procedure

RUN PHASE 92 PROGRAM UNIT 5 EQUIPMENT STATUS TESTS

TABLE A					
TEST NUMBER	EQUIPMENT STATUS LAMPS	LAMP COLOR	TEST NUMBER	EQUIPMENT STATUS LAMPS	LAMP COLOR
219	CC0		275	SIGNAL PROCESSOR	
221	CC1		277	CCIS SLK	
223	PROGRAM STORES		279	CCIS	
225	CALL STORES		281	VOICE INTERFACE UNIT	
227	API		283	DIGROUP TERMINAL	
229	Blank key to right of **API** key		285	SYS CLOCK	
231	PS BUS 0		287	NCLK SYNC	
233	PS BUS 1		289	RT SIDE 0	
235	CS BUS 0		291	RT SIDE 1	RED
237	CS BUS 1		293	RECORDED ANN	
239	AU BUS 0		295	SERVICE CIRCUITS	
241	AU BUS 1		297	ECHO SUPP TERMINAL	
243	PU BUS 0	RED	299	DIGITAL INTERFACE	
245	PU BUS 1		308	PROGRAM STORES	
247	DATA UNIT SELECTORS		310	CALL STORES	
249	TAPE UNIT CONT		312	API	
251	CAMA TAPE UNIT		314	Blank key to right of **API** key	
253	DATA LINK CONT		316	DATA UNIT SELECTORS	
255	I/O UNIT SELECTORS		318	TAPE UNIT CONT	
257	I/O UNIT CONT		320	CAMA TAPE UNIT	
259	PROCESSOR PWR CONV AND DIST		322	DATA LINK CONT	
260	Depress **DATA INSERT** key **13**		324	I/O UNIT SELECTORS	
265	PERIPH UNIT CONT/SCS		326	I/O UNIT CONT	AMBER
267	MASS ANN SYSTEM/Blank key		328	PROCESSOR PWR CONV AND DIST	
269	TIME MULTIPLEX SWITCH		346	RECORDED ANN	
271	TIME SLOT INTER		348	SERVICE CIRCUITS	
273	NETWORK CLOCK		350	DIGITAL INTERFACE	

1. This group of tests concerns lamps and keys on the **EQUIPMENT STATUS** panel

2. Test Sequence

   2.1 Enter message DGN:MCC O:PH 92!

   Response: **36** is displayed on **NUMERIC DISPLAY**

   2.2 At **SYSTEM DISPLAY** panel:

   (a) Depress to light **DATA INSERT** keys **21** and **23**

   (b) Ensure that **DATA INSERT** key **22** is off

   (c) Depress **DATA INSERT** key **13** to begin Program Unit 5A testing

   2.3 In TABLE A, Page 2, when test number appears on **NUMERIC DISPLAY**, depress indicated **EQUIPMENT STATUS** key

   2.4 When test number **426** appears on **NUMERIC DISPLAY**, depress to light **DATA INSERT** keys **21**, **22**, and **23**

   2.5 Depress to light **DATA INSERT** key **13**

   Response: Printout indicating ATP or the test numbers of the failed test(s)

End of procedure

RUN PHASE 92 PROGRAM UNIT 5A EQUIPMENT STATUS KEY TESTS

TABLE A			
TEST NUMBER	EQUIPMENT STATUS LAMPS *	TEST NUMBER	EQUIPMENT STATUS LAMPS *
355	CC0/CC1	391	PERIPH UNIT CONT/SCS
356	CC0/CC1	392	PERIPH UNIT CONT/SCS
357	PROGRAM STORES	393	MASS ANN SYSTEM/Blank key
358	PROGRAM STORES	394	MASS ANN SYSTEM/Blank key
359	CALL STORES	395	TIME MULTIPLEX SWITCH
360	CALL STORES	396	TIME MULTIPLEX SWITCH
361	API	397	TIME SLOT INTER
362	API	398	TIME SLOT INTER
363	Blank key to right of **API** key	399	NETWORK CLOCK
364	Blank key to right of **API** key	400	NETWORK CLOCK
365	PS BUS 0/PS BUS 1	401	SIGNAL PROCESSOR
366	PS BUS 0/PS BUS 1	402	SIGNAL PROCESSOR
367	CS BUS 0/CS BUS 1	403	CCIS SLK/CCIS VFL
368	CS BUS 0/CS BUS 1	404	CCIS SLK/CCIS VFL
369	AU BUS 0/AU BUS 1	405	CCIS
370	AU BUS 0/AU BUS 1	406	CCIS
371	PU BUS 0/PU BUS 1	407	VOICE INTERFACE UNIT
372	PU BUS 0/PU BUS 1	408	VOICE INTERFACE UNIT
373	DATA UNIT SELECTORS	409	DIGROUP TERMINAL
374	DATA UNIT SELECTORS	410	DIGROUP TERMINAL
375	TAPE UNIT CONT	411	SYS CLOCK/NCLK SYNC
376	TAPE UNIT CONT	412	SYS CLOCK/NCLK SYNC
377	CAMA TAPE UNIT	413	RT SIDE 0/RT SIDE 1
378	CAMA TAPE UNIT	414	RT SIDE 0/RT SIDE 1
379	DATA LINK CONT	415	RECORDED ANN
380	DATA LINK CONT	416	RECORDED ANN
381	I/O UNIT SELECTORS	417	SERVICE CIRCUITS
382	I/O UNIT SELECTORS	418	SERVICE CIRCUITS
383	I/O UNIT CONT	419	ECHO SUPP TERMINAL
384	I/O UNIT CONT	420	ECHO SUPP TERMINAL
385	PROCESSOR PWR CONV AND DIST	421	DIGITAL INTERFACE
386	PROCESSOR PWR CONV AND DIST	422	DIGITAL INTERFACE
387	Depress **DATA INSERT** key **13**		
* Lamps do not light during test			

RUN PHASE 92 PROGRAM UNIT 5A EQUIPMENT STATUS KEY TESTS

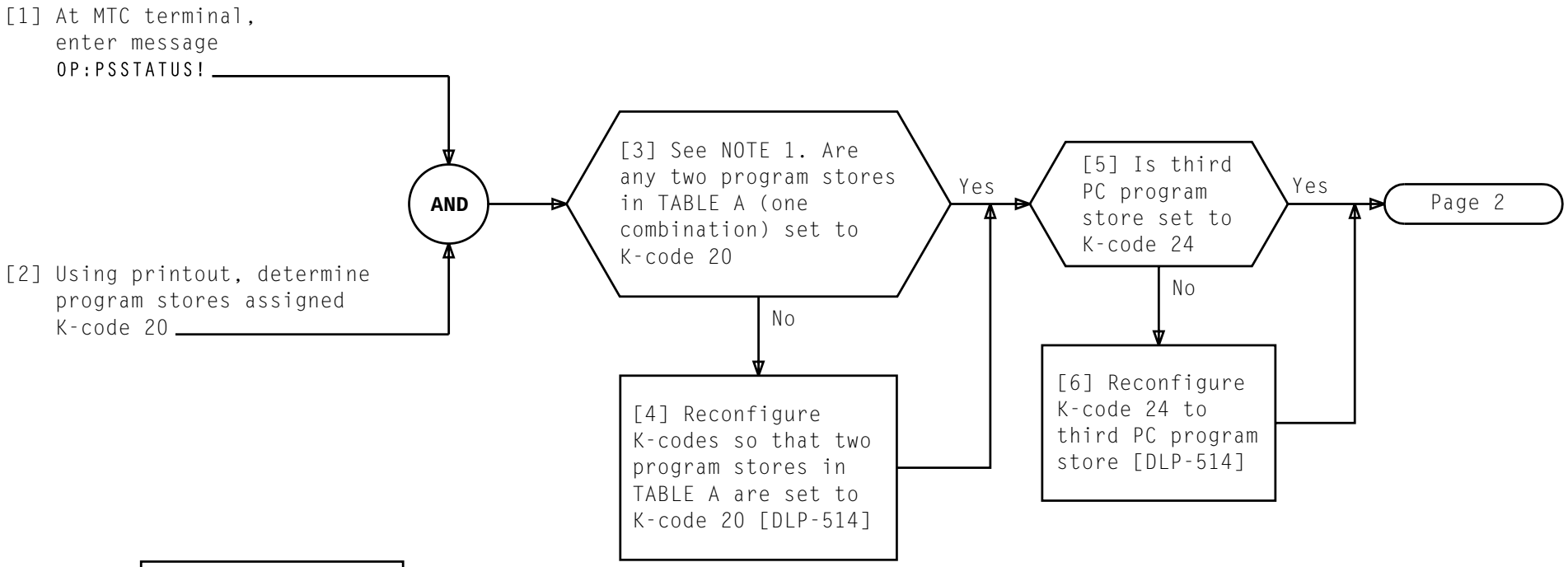
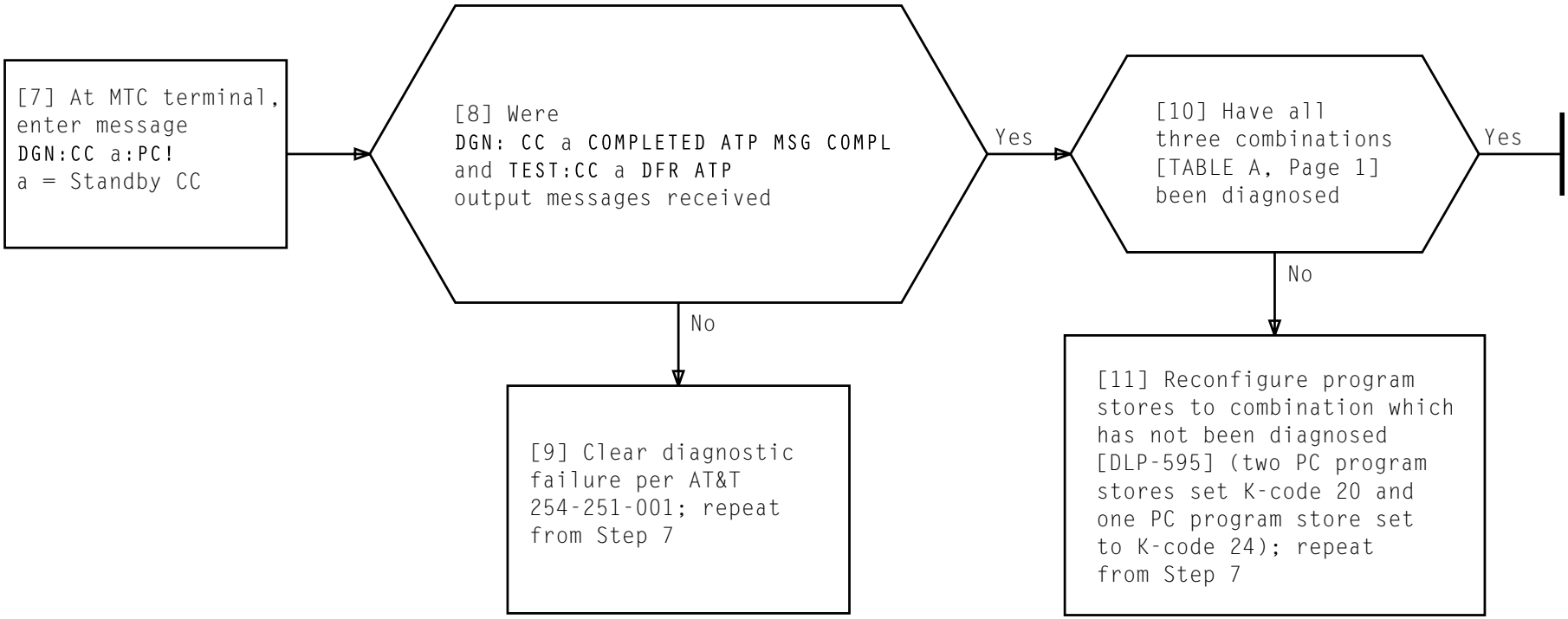


TABLE A	
PC PS COMBINATIONS	
256K START OFFICE	64K START OFFICE
0 and 2	18 and 20
0 and 4	18 and 22
2 and 4	20 and 22

NOTE 1

If office was equipped initially with 256 K stores, program stores 0, 2, and 4 are normally the PC stores (K-code 20). If office was equipped initially with 64 K stores that were replaced by 256 K stores, program stores 18, 20, and 22 are normally the PC stores

RUN 1A PROCESSOR CC DIAGNOSTIC PHASE 91 TO TEST PC FUNCTION



RUN 1A PROCESSOR CC DIAGNOSTIC PHASE 91 TO TEST PC FUNCTION

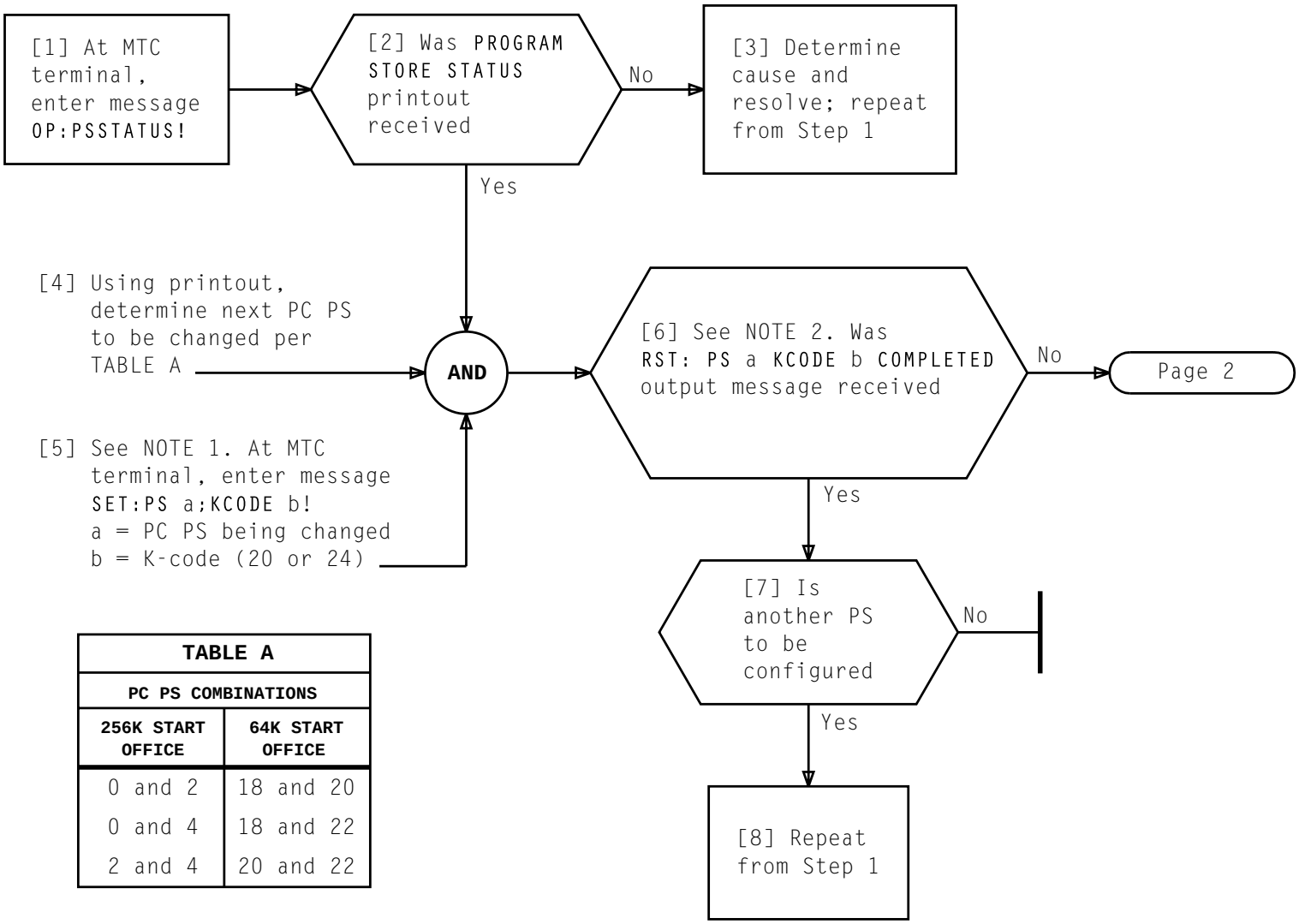
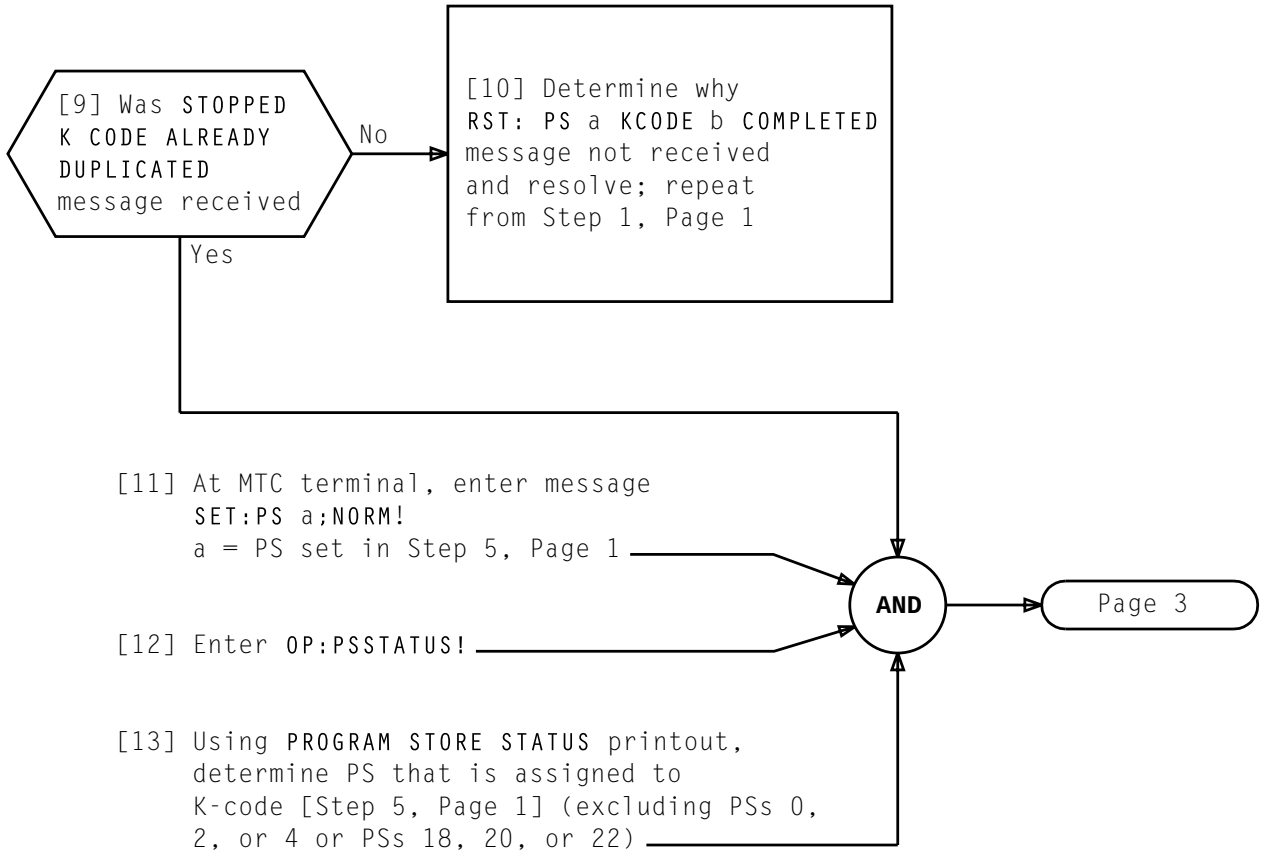


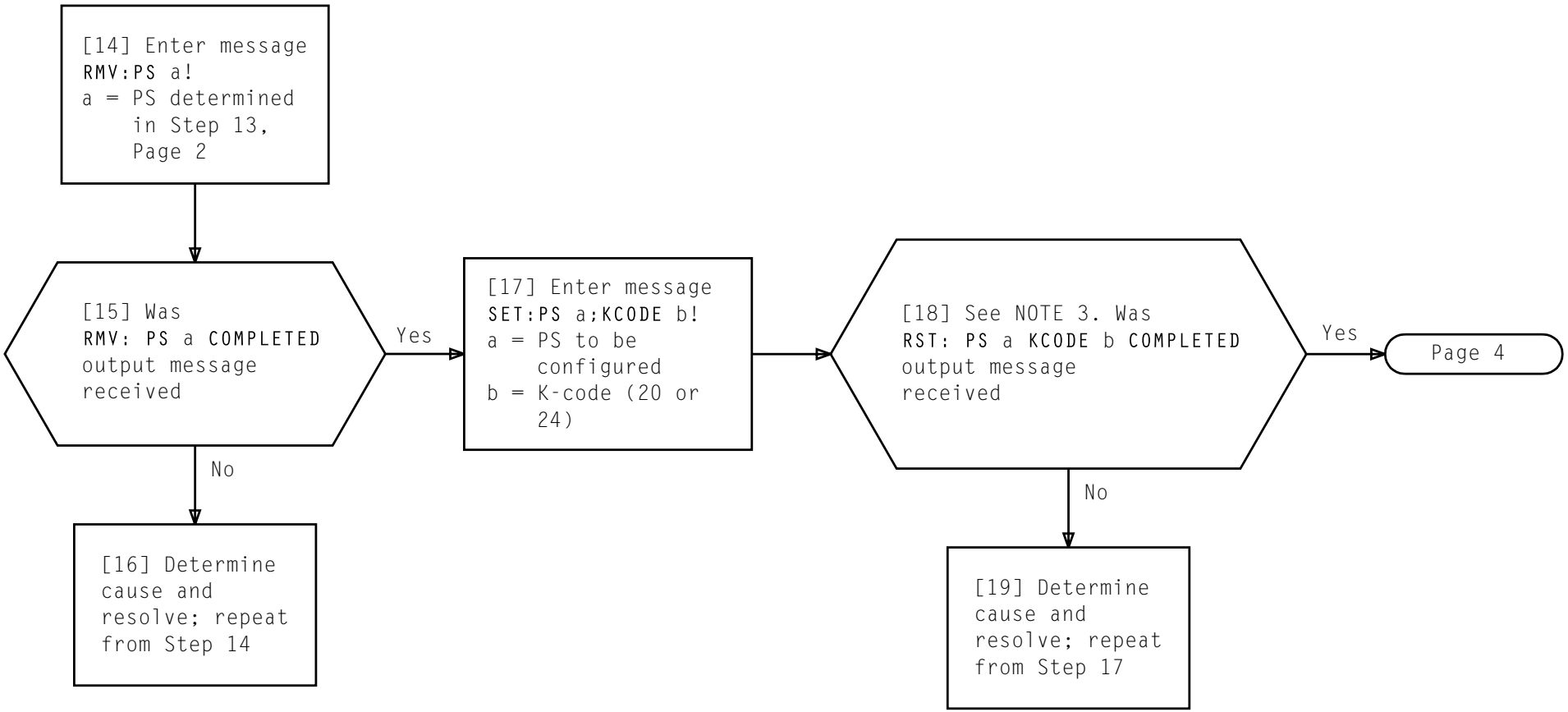
TABLE A	
PC PS COMBINATIONS	
256K START OFFICE	64K START OFFICE
0 and 2	18 and 20
0 and 4	18 and 22
2 and 4	20 and 22

NOTES
1. Program store may need to be removed in order to set PC PS to appropriate K-code
2. CATP bit 15 will be received if standby CC is out-of-service

CONFIGURE PS TO K-CODE

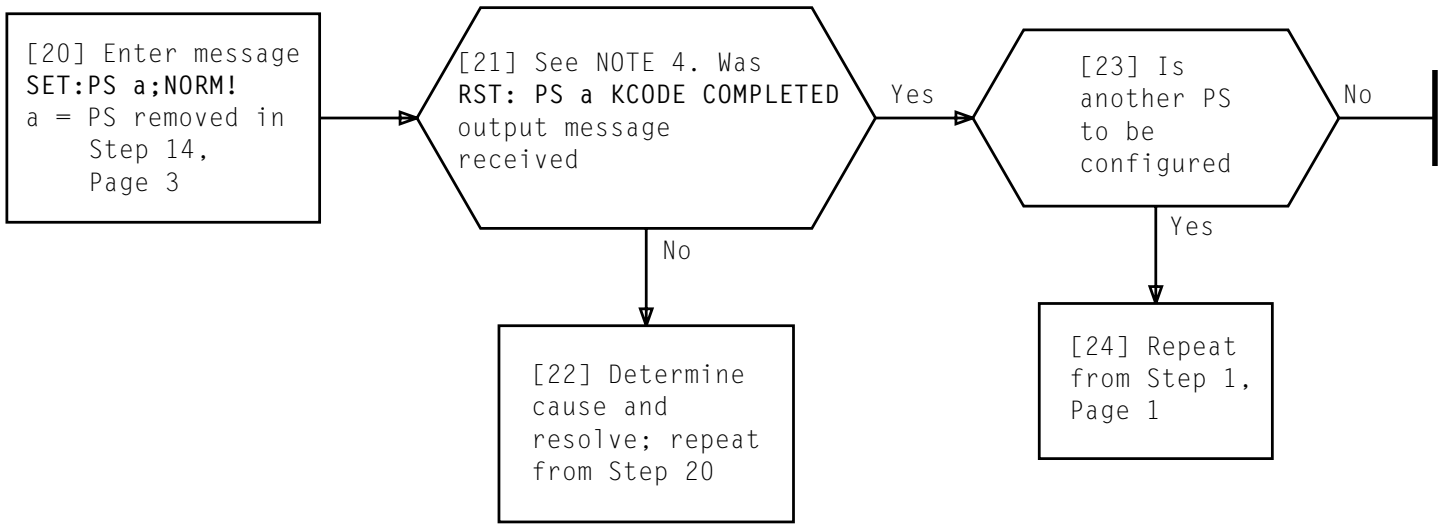


CONFIGURE PS TO K-CODE



NOTE 3
CATP bit 15 will be received if standby CC is out-of-service

CONFIGURE PS TO K-CODE



NOTE 4
CATP bit 15 will be received if standby CC is out-of-service

CONFIGURE PS TO K-CODE

1. General

1.1 This test procedure concerns lamp switches on **SYSTEM REINITIALIZATION** and **MANUAL INTERRUPT PROGRAM REQUEST** panels.

1.2 Before this test procedure can be run, PC PS K-codes must be checked (Steps 2.3 and 2.7, Page 2). If PC PS K-codes are not set to an acceptable configuration, they must be reset: K-codes can be reset via DLP-514.

1.3 This test procedure is initiated by typing DGN:MCC O:PH 94! (Step 2.11, Page 2). After **37** is displayed on **NUMERIC DISPLAY** at **SYSTEM DISPLAY** panel, 20 seconds are allowed to set **DATA INSERT** keys (Step 2.12, Page 2). This program will then step to the first test (Step 2.13, Page 2). As each test number is displayed, 1 minute is allowed for the operator to perform actions related to that test. Actions to be performed are listed with test numbers in TABLE C, Pages 4 and 5.

1.4 In tests 44 through 80, the operator is asked to depress and hold **INVALID SELECTION** key at **SYSTEM REINITIALIZATION** panel; then while holding **INVALID SELECTION** key, depress and hold **DIRECT DATA INSERT 1** key at **MANUAL INTERRUPT PROGRAM REQUEST** panel until test number on **NUMERIC DISPLAY** changes. If **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys are not depressed in the right order or are not held until test number on **NUMERIC DISPLAY** changes, the processor will record a failure for test just completed.

1.5 After performing last action listed in TABLE C, test procedure is ended by setting **DATA INSERT 13** key (Step 2.14, Page 2). This test is repeated three times to test PC PSs under all three K-code configurations (Step 2.15, Page 2)

2. Test Sequence

2.1 Read CAUTION and NOTE

Caution: Read entire procedure and familiarize yourself with the MCC before performing this diagnostic. If this procedure is performed improperly, or **ACTIVATE OVERRIDE IN EFFECT**, **ACTIVATE PC** *or* **ACTIVATE PROGRAM REQUEST** *key is depressed, call processing will be lost.*

Note: Failure to set **DATA INSERT** keys within 20 seconds after first and last test numbers appear will result in the program stepping to next test and recording a failure for the missed test.

2.2 At TTY, enter message OP:PSSTATUS!

2.3 Using **PROGRAM STORE STATUS** printout, determine if two PC PSs (one combination per TABLE A) are configured to K-code 20

TABLE A

PC PS COMBINATIONS

256K START OFFICE	64K START OFFICE
0 and 2	18 and 20
0 and 4	18 and 22
2 and 4	20 and 22

RUN PHASE 94 SOFT A-LEVEL TESTS

2. Test Sequence (Contd)

2.4 If two PC PSs are configured to K-code 20, go to Step 2.8; otherwise, continue

2.5 Configure two PC PSs to K-code 20 via DLP-514

2.6 At MTC Terminal enter message **OP:PSSTATUS!**

2.7 Using **PROGRAM STORE STATUS** printout, determine if third PC PS is configured to K-code 24

2.8 If third PC PS is configured to K-code 24, go to Step 2.10; otherwise, continue

2.9 Configure third PC PS to K-code 24 via DLP-514

2.10 Ensure that all lamps listed in TABLE B, Page 3, are off

2.11 At MTC Terminal enter message **DGN:MCC 0:PH 94!**

Response: **37** displayed on **NUMERIC DISPLAY**

2.12 At **SYSTEM DISPLAY** panel:
(a) Depress to light **DATA INSERT 21** key
(b) Ensure that **DATA INSERT 22** and **23** keys are not lighted
(c) Depress **DATA INSERT 13** key to begin Soft A-Level tests

2.13 As each test number appears on **NUMERIC DISPLAY**:
(a) Ensure that **DIAGNOSIS IN PROGRESS** lamp flashes
(b) Perform action(s) listed in TABLE C, Pages 4 and 5

2.14 Depress to light **DATA INSERT 13** key. Read NOTE

Response: Printout indicating results of Soft A-Level tests

Note: Expect CATP with bit 20 set. If STF or CATP with any other bit set is received, do not continue Phase 94 testing until problems corrected.

2.15 If procedure has not been run for all three combinations of PC PSs (See TABLE A, Page 1), reconfigure PC PSs to a combination which has not been tested using DLP-595; then repeat procedure from Step 2.6

2.16 If Phase 94 testing is to be stopped:
at MTC Terminal enter message **RST:MCC 0!**

End of procedure

RUN PHASE 94 SOFT A-LEVEL TESTS

TABLE B	
LAMP/SWITCH	PANEL SECTION
NORMAL UPDATE	UPDATE
BLOCK 0 PS 0 VARIABLE PS 0 VARIABLE PS 1 AU BUS 0 AU BUS 1 PS BUS 0 PS BUS 1 CC0 CC1	OVERRIDE CONTROL
ENABLE DATA UNIT	SYSTEM REINITIALIZATION
DISABLE AUTO PC	PROCESSOR CONFIGURATION SEQUENCER
CLEAR UTILITY FUNCTION INHIBIT INTERRUPT RESTORE MTCE I/O MODIFY RECOVERY ACTIONS FULL CFG/EMER MODE MIN CFG/EMER MODE PHASE 6 IN PROG REQUEST PHASE 5 IN PROG REQUEST PHASE 4 IN PROG REQUEST PHASE 3 IN PROG REQUEST PHASE 2 IN PROG REQUEST PHASE 1 IN PROG REQUEST	MANUAL INTERRUPT PROGRAM REQUEST
MC 3 ACT/MC 3 DISAB	SYSTEM STATUS

TABLE C			
TEST NUMBER	**ACTIONS TO BE PERFORMED**	**TEST NUMBER**	**ACTIONS TO BE PERFORMED**
38	Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes	**62**	Depress **FULL CFG/EMER MODE** key (lamp off). Depress **MIN CFG/EMER MODE** key (**EMER MODE** lamp lights). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes
41	Depress **DIRECT DATA INSERT 1** key		
43	Observe **INVALID SELECTION** key. If lamp is lighted, depress **DIRECT DATA INSERT 1** key; otherwise, depress **DIRECT DATA INSERT 0** key	**65**	Depress **MIN CFG/EMER MODE** key (lamp off). Depress **PHASE 6** key (lamp lights). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes
44	Depress **CLEAR UTILITY FUNCTION** key (lamp lights). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes		
48	Depress **CLEAR UTILITY FUNCTION** key (lamp off). Depress **INHIBIT INTERRUPT** key (lamp lights). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes	**68**	Depress **PHASE 6** key (lamp off). Depress **PHASE 5** key (lamp lights). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes
53	Depress **INHIBIT INTERRUPT** key (lamp off). Depress **RESTORE MTCE I/O** key (lamp lights). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes	**71**	Depress **PHASE 5** key (lamp off). Depress **PHASE 4** key (lamp lights). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes
56	Depress **RESTORE MTCE I/O** key (lamp off). Depress **MODIFY RECOVERY ACTIONS** key (lamp lights). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes	**74**	Depress **PHASE 4** key (lamp off). Depress **PHASE 3** key (lamp lights). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes
59	Depress **MODIFY RECOVERY ACTIONS** key (lamp off). Depress **FULL CFG/EMER MODE** key (**EMER MODE** lamp lights). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes		

RUN PHASE 94 SOFT A-LEVEL TESTS

TABLE C (Contd)	
TEST NUMBER	**ACTIONS TO BE PERFORMED**
77	Depress **PHASE 3** key (lamp off). Depress **PHASE 2** key (lamp lights). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes
80	Depress **PHASE 2** key (lamp off). Depress **PHASE 1** key (lamp lights). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes
84	Depress **PHASE 1** key (lamp off). Depress **DATA INSERT 21**, **22**, and **23** keys (lamps light). Go to Step 2.14, Page 2

1. General

1.1 This test procedure concerns lamp switches on **OVERRIDE CONTROL** panel.

1.2 Before this test procedure can be run, PS K-codes must be checked (Steps 2.4 and 2.8, Page 2). If PS K-codes are not set to an acceptable configuration, they must be reset: K-codes can be reset via DLP-514.

1.3 This test procedure is initiated by typing DGN:MCC 0:PH 94! (Step 2.12, Page 2). After **37** is displayed on **NUMERIC DISPLAY** at **SYSTEM DISPLAY** panel, 20 seconds are allowed to set **DATA INSERT** keys (Step 2.13, Page 2). This program will then step to the first test (Step 2.14, Page 2). As each test number is displayed, 1 minute is allowed for the operator to perform actions related to that test. Actions to be performed are listed with test numbers in TABLE C, Pages 4 and 5

1.4 In tests 85 and 94 through 115, the operator is asked to depress and hold **INVALID SELECTION** key at **SYSTEM REINITIALIZATION** panel; then while holding **INVALID SELECTION** key, depress and hold the **DIRECT DATA INSERT 1** key at **MANUAL INTERRUPT PROGRAM REQUEST** panel until test number on **NUMERIC DISPLAY** changes. If **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys are not depressed in the right order, or are not held until test number changes, the processor will record a failure for test just completed

1.5 In tests 89 and 90, the operator is asked to depress and hold **INVALID SELECTION** key, then while holding **INVALID SELECTION** key, depress and hold **DIRECT DATA INSERT 0** or **DIRECT DATA INSERT 1** key until test number on **NUMERIC DISPLAY** changes. The **DIRECT DATA INSERT** key depressed (**0** and **1**) is determined by operator observations

1.6 After performing last action listed in TABLE C, test procedure is ended by setting the **DATA INSERT 13** key (Step 2.15, Page 2). This test procedure is repeated three times in order to test PC PSs under all three K-code configurations (Step 2.16, Page 2)

2. Test Sequence

2.1 Read CAUTION and NOTE

Caution: Read entire procedure and familiarize yourself with the MCC before performing this diagnostic. If this procedure is performed improperly, or **ACTIVATE OVERRIDE IN EFFECT**, **ACTIVATE PC**, *or* **ACTIVATE PROGRAM REQUEST** *key is depressed, call processing will be lost.*

Note: Failure to set **DATA INSERT** keys within 20 seconds after first and last test numbers appear will result in the program stepping to next test and recording a failure for the missed test.

2.2 At TTY, enter message OP:PSSTATUS!

2.3 Using **PROGRAM STORE STATUS** printout, determine which CC (0 or 1) is active

2.4 Using **PROGRAM STORE STATUS** printout, determine if two PC PSs (one combination per TABLE A) are configured to K-code 20

TABLE A

PC PS COMBINATIONS

256K START OFFICE	64K START OFFICE
0 and 2	18 and 20
0 and 4	18 and 22
2 and 4	20 and 22

RUN PHASE 94 HARD A-LEVEL TESTS

2. Test Sequence (Contd)

2.5 If two PC PSs are configured to K-code 20, go to Step 2.8; otherwise, continue

2.6 Configure two PC PSs to K-code 20 via DLP-514

2.7 At MTC Terminal enter message **OP:PSSTATUS!**

2.8 Using **PROGRAM STORE STATUS** printout, determine if third PC PS is configured to K-code 24

2.9 If third PC PS is configured to K-code 24, go to Step 2.11; otherwise, continue

2.10 Configure third PC PS to K-code 24 via DLP-514

2.11 Ensure that all lamps listed in TABLE B, Page 3 are off

2.12 At MTC Terminal enter message **DGN:MCC 0:PH 94!**

Response: **37** displayed on **NUMERIC DISPLAY**

2.13 At **SYSTEM DISPLAY** panel:
(a) Depress to light **DATA INSERT 22** key
(b) Ensure that **DATA INSERT 21** and **23** keys are not lighted
(c) Depress **DATA INSERT 13** key to begin Hard A-Level tests

2.14 As each test number appears on **NUMERIC DISPLAY**:
(a) Ensure that **DIAGNOSIS IN PROGRESS** lamp flashes
(b) Perform action(s) listed in TABLE C, Pages 4 and 5

2.15 Depress to light **DATA INSERT 13** key. Read NOTE

Response: Printout indicating results of Hard A-Level tests

Note: Expect CATP with bits 19 and 23 set. If STF or CATP with any other bit set is received, do not continue Phase 94 testing until problems corrected.

2.16 If procedure has not been run for all three combinations of PC PSs (See TABLE A, Page 1), reconfigure PC PSs to a combination which has not been tested using DLP-595; then repeat procedure from Step 2.7

2.17 If Phase 94 testing is to be stopped: at MTC Terminal enter message **RST:MCC 0!**

End of procedure

TABLE B	
LAMP/SWITCH	PANEL SECTION
NORMAL UPDATE	UPDATE
BLOCK 0 PS 0 VARIABLE PS 0 VARIABLE PS 1 AU BUS 0 AU BUS 1 PS BUS 0 PS BUS 1 CC0 CC1	OVERRIDE CONTROL
ENABLE DATA UNIT	SYSTEM REINITIALIZATION
DISABLE AUTO PC	PROCESSOR CONFIGURATION SEQUENCER
CLEAR UTILITY FUNCTION INHIBIT INTERRUPT RESTORE MTCE I/O MODIFY RECOVERY ACTIONS FULL CFG/EMER MODE MIN CFG/EMER MODE PHASE 6 IN PROG REQUEST PHASE 5 IN PROG REQUEST PHASE 4 IN PROG REQUEST PHASE 3 IN PROG REQUEST PHASE 2 IN PROG REQUEST PHASE 1 IN PROG REQUEST	MANUAL INTERRUPT PROGRAM REQUEST
MC 3 ACT/MC 3 DISAB	SYSTEM STATUS

TABLE C			
TEST NUMBER	**ACTIONS TO BE PERFORMED**	**TEST NUMBER**	**ACTIONS TO BE PERFORMED**
85	Depress **CC0** or **CC1** (corresponding to active CC) key (lamp lights). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes.	**91**	Depress **CC0** or **CC1** (corresponding to active CC) key (lamp off). Depress **CC0** or **CC1** (corresponding to standby CC) key (lamp lights). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes.
89	Observe **ACTIVATE OVERRIDE IN EFFECT** lamp. If lamp is on, depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes; otherwise, depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 0** keys until test number on **NUMERIC DISPLAY** changes.	**94**	Depress **CC0** or **CC1** (corresponding to standby CC) key (lamp off). Depress **BLOCK 0 PS 0**, **AU BUS 0**, **PS BUS 0**, and **CC0** or **CC1** (corresponding to active CC) keys (lamps light). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes.
90	Observe **ACTIVATE OVERRIDE IN EFFECT** lamp. If lamp is off, depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes; otherwise, depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 0** keys until test number on **NUMERIC DISPLAY** changes.	**101**	Depress **BLOCK 0 PS 0**, **AU BUS 0**, **PS BUS 0**, and **CC0** or **CC1** (corresponding to active CC) keys (lamps off). Depress **VARIABLE PS 0**, **AU BUS 1**, **PS BUS 1**, and **CC0** or **CC1** (corresponding to active CC) keys (lamps light). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes.

TABLE C (Contd)	
TEST NUMBER	**ACTIONS TO BE PERFORMED**
108	Depress **VARIABLE PS 0**, **AU BUS 1**, **PS BUS 1**, and **CC0** or **CC1** (corresponding to active CC) keys (lamps off). Depress **VARIABLE PS 1**, **AU BUS 0**, **PS BUS 0**, and **CC0** or **CC1** (corresponding to active CC) keys (lamps light). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes.
115	Depress **VARIABLE PS 1**, **AU BUS 0**, **PS BUS 0**, and **CC0** or **CC1** (corresponding to active CC) keys (lamps off). Depress **BLOCK 0 PS 0**, **AU BUS 1**, **PS BUS 1**, and **CC0** or **CC1** (corresponding to active CC) keys (lamps light). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes.
123	Depress **BLOCK 0 PS 0**, **AU BUS 1**, **PS BUS 1**, and **CC0** or **CC1** (corresponding to active CC) keys (lamps off). Depress **DATA INSERT 21**, **22**, and **23** (lamps light). Go to Step 2.15, Page 2

1. General

1.1 This test procedure concerns lamp switches on **PROCESSOR CONFIGURATION SEQUENCER**, **OVERRIDE CONTROL**, and **UPDATE** panels.

1.2 Before this test procedure can be run, PC PS K-codes must be checked (Steps 2.4 and 2.8, Page 2). If PC PS K-codes are not set to an acceptable configuration, they must be reset: K-codes can be reset via DLP-514.

1.3 This test procedure is initiated by typing DGN:MCC 0:PH 94! (Step 2.12, Page 2). After **37** is displayed on **NUMERIC DISPLAY** at **SYSTEM DISPLAY** panel, 20 seconds are allowed to set **DATA INSERT** keys (Step 2.13, Page 2). This program will then step to the first test (Step 2.14, Page 2). As each test number is displayed, 1 minute is allowed for the operator to perform actions related to that test. Actions to be performed are listed with test numbers in TABLE C, Pages 4 and 5.

1.4 In these tests the operator is asked to depress and hold **INVALID SELECTION** key at **SYSTEM REINITIALIZATION** panel; then while holding **INVALID SELECTION** key, depress and hold **DIRECT DATA INSERT 1** or **DIRECT DATA INSERT 0** key at **MANUAL INTERRUPT PROGRAM REQUEST** panel until test number on **NUMERIC DISPLAY** changes. If **INVALID SELECTION** key and **DIRECT DATA INSERT 1** key are not depressed in the right order or are not held until test number changes, the processor will record a failure for the test just completed.

1.5 After performing last action listed in TABLE C, test results are printed out. This test procedure is repeated three times in order to test PC PSs under all three K-codes configurations (Step 2.16, Page 2).

2. Test Sequence

2.1 Read CAUTION and NOTE

Caution: Read entire procedure and familiarize yourself with the MCC before performing this diagnostic. If this procedure is performed improperly, or **ACTIVATE OVERRIDE IN EFFECT**, **ACTIVATE PC**, *or* **ACTIVATE PROGRAM REQUEST** *key is depressed, call processing will be lost.*

Note: Failure to set **DATA INSERT** keys within 20 seconds after the first and last test numbers appear on **NUMERIC DISPLAY** will result in the program stepping to next test and recording a failure for the missed test.

RUN PHASE 94 PC B-LEVEL TESTS

2. Test Sequence (Contd)

2.2 At MTC Terminal enter message **OP:PSSTATUS!**

2.3 Using **PROGRAM STORE STATUS** printout, determine which CC (0 or 1) is active.

2.4 Using **PROGRAM STORE STATUS** printout, determine if two PC PSs (one combination per TABLE A) are configured to K-code 20.

2.5 If two PC PSs are configured to K-code 20, go to Step 2.8; otherwise, continue.

2.6 Configure two PC PSs to K-code 20 via DLP-514

2.7 At MTC Terminal enter message **OP:PSSTATUS!**

2.8 Using **PROGRAM STORE STATUS** printout, determine if third PC PS is configured to K-code 24.

2.9 If third PC PS is configured to K-code 24, go to Step 2.11; otherwise, continue.

2.10 Configure third PC PS to K-code 24 via DLP-514.

2.11 Ensure that all lamps listed in TABLE B, Page 3, are off.

2.12 At MTC Terminal enter message **DGN:MCC 0:PH 94!**

Response: **37** displayed on **NUMERIC DISPLAY**

2.13 At **SYSTEM DISPLAY** panel:
(a) Depress to light **DATA INSERT 21** and **22** keys
(b) Insure that **DATA INSERT 23** key is not lighted
(c) Depress **DATA INSERT 13** key to begin PC B-Level tests.

2.14 As each test number appears on **NUMERIC DISPLAY**:
(a) Ensure that **DIAGNOSIS IN PROGRESS** lamp flashes
(b) Perform action(s) listed in TABLE C, Pages 4 and 5.

2.15 Expect CATP with bit 18 set. If STF or CATP with any other bit set is received, do not continue until problems corrected.

2.16 If procedure has not been run for all three combinations of PC PSs (See TABLE A), reconfigure PC PSs to a combination which has not been tested using DLP-595; then repeat procedure from Step 2.7.

2.17 At MTC Terminal enter message **RST:MCC 0!**

End of procedure

TABLE A

PC PS COMBINATIONS

256K START OFFICE	64K START OFFICE
0 and 2	18 and 20
0 and 4	18 and 22
2 and 4	20 and 22

TABLE B	
LAMP/SWITCH	PANEL SECTION
NORMAL UPDATE	UPDATE
BLOCK 0 PS 0 VARIABLE PS 0 VARIABLE PS 1 AU BUS 0 AU BUS 1 PS BUS 0 PS BUS 1 CC0 CC1	OVERRIDE CONTROL
ENABLE DATA UNIT	SYSTEM REINITIALIZATION
DISABLE AUTO PC	PROCESSOR CONFIGURATION SEQUENCER
CLEAR UTILITY FUNCTION INHIBIT INTERRUPT RESTORE MTCE I/O MODIFY RECOVERY ACTIONS FULL CFG/EMER MODE MIN CFG/EMER MODE PHASE 6 IN PROG REQUEST PHASE 5 IN PROG REQUEST PHASE 4 IN PROG REQUEST PHASE 3 IN PROG REQUEST PHASE 2 IN PROG REQUEST PHASE 1 IN PROG REQUEST	MANUAL INTERRUPT PROGRAM REQUEST
MC 3 ACT/MC 3 DISAB	SYSTEM STATUS

TABLE C			
TEST NUMBER	**ACTIONS TO BE PERFORMED**	**TEST NUMBER**	**ACTIONS TO BE PERFORMED**
124	Observe **PROCESSOR CONFIGURATION SEQUENCER 1** lamp. If lamp is on, depress **DIRECT DATA INSERT 1** key; otherwise, depress **DIRECT DATA INSERT 0** key.	**136**	Depress **DISABLE AUTO PC** key (lamp off). Observe all 6 **PROCESSOR CONFIGURATION SEQUENCER** lamps. If **PROCESSOR CONFIGURATION SEQUENCER** lamps are off, depress **DIRECT DATA INSERT 1** key; otherwise, depress **DIRECT DATA INSERT 0** key. *Response:* Some **PROCESSOR CONFIGURATION SEQUENCER** lamps will light
125	Observe **PROCESSOR CONFIGURATION SEQUENCER 2** lamp. If lamp is on, depress **DIRECT DATA INSERT 1** key; otherwise, depress **DIRECT DATA INSERT 0** key.	**147**	Depress **NORMAL** key (lamp lights). Depress **DISABLE AUTO PC** key (lamp lights). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes.
126	Observe **PROCESSOR CONFIGURATION SEQUENCER 4** lamp. If lamp is on, depress **DIRECT DATA INSERT 1** key; otherwise, depress **DIRECT DATA INSERT 0** key.	**151**	Depress **NORMAL** key (lamp off). Depress **UPDATE** key (lamp lights). Ensure that **DISABLE AUTO PC** lamp is lighted. Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes.
127	Observe **PROCESSOR CONFIGURATION SEQUENCER 8** lamp. If lamp is on, depress **DIRECT DATA INSERT 1** key; otherwise, depress **DIRECT DATA INSERT 0** key.	**155**	Depress **UPDATE** key (lamp off). Depress **DISABLE AUTO PC** key (lamp off). Depress **BLOCK 0 PS 0**, **AU BUS 0**, **PS BUS 0**, and **CC0** or **CC1** (corresponding to active CC) keys (lamp lights). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes. *Note:* When this test is run with PSs 2 and 4 or 20 and 22 configured to K-code 20, the remaining tests in this phase will be skipped and results of PC B-level test will be received. If the tests are skipped, after results received, depress **BLOCK 0 PS 0**, **AU BUS 0**, **PS BUS 0**, and **CC0** or **CC1** (corresponding to active CC) keys to off; then go to Step 2.15, Page 2.
128	Observe **PROCESSOR CONFIGURATION SEQUENCER PUMP UP 16** lamp. If lamp is on, depress **DIRECT DATA INSERT 1** key; otherwise, depress **DIRECT DATA INSERT 0** key.		
129	Observe **PROCESSOR CONFIGURATION SEQUENCER PUMP UP 32** lamp. If lamp is on, depress **DIRECT DATA INSERT 1** key; otherwise, depress **DIRECT DATA INSERT 0** key.		
130	Depress **RESET COUNTER** and **DIRECT DATA INSERT 1** keys *simultaneously*. *Response:* **INVALID SELECTION** lamp lights		
131	Observe all 6 **PROCESSOR CONFIGURATION SEQUENCER** lamps. If lamps are on, depress **DIRECT DATA INSERT 1** key; otherwise, depress **DIRECT DATA INSERT 0** key.		
133	Depress **DISABLE AUTO PC** key (lamp lights). Depress **DIRECT DATA INSERT 1** key.		
135	Depress **RESET COUNTER** and **DIRECT DATA INSERT 1** keys *simultaneously*.		

RUN PHASE 94 PC B-LEVEL TESTS

TABLE C (Contd)	
TEST NUMBER	**ACTIONS TO BE PERFORMED**
157	Depress **BLOCK 0 PS 0**, **AU BUS 0**, **PS BUS 0**, and **CC0** or **CC1** (corresponding to active CC) keys (lamps off). Depress **DISABLE AUTO PC** key (lamp lights). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes.
159	Depress **DISABLE AUTO PC** key (lamp off). Observe **PC ATTEMPT** key. If lamp is off, depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes; otherwise, depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 0** keys until test number on **NUMERIC DISPLAY** changes.
160	Depress **BLOCK 0 PS 0**, **AU BUS 0**, **PS BUS 0**, and **CC0** or **CC1** (corresponding to active CC) keys (lamps light). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until test number on **NUMERIC DISPLAY** changes.
162	Depress **BLOCK 0 PS 0**, **AU BUS 0**, **PS BUS 0**, and **CC0** or **CC1** (corresponding to active CC) keys (lamps off). Depress **DISABLE AUTO PC** key (lamp lights). Depress and hold **INVALID SELECTION** and **DIRECT DATA INSERT 1** keys until **NUMERIC DISPLAY** goes blank. *Response:* After test 162 completes, results of PC B-Level test will be received Depress **DISABLE AUTO PC** key (lamp off). Ensure that all lamps on **OVERRIDE CONTROL** panel are off. Go to Step 2.15, Page 2.

1. General:

1.1 If any lamp or switch faults are detected during execution of these tests, refer to trouble analysis procedures in TOP 234-151-006 for repair.

1.2 To avoid interference with other office work activity, suspend activities (for example, Recent Change, Library Programs, etc.) until this procedure is completed.

1.3 This procedure causes two expected A-level interrupts and one expected B-level interrupt per CC.

1.4 Tests in this procedure are to be run following successful completion of MCC demand diagnostic phases 91 and 92.

1.5 If a failure is detected in a test group, complete remaining steps in that group and then clear fault. Repeat group under test before continuing with tests in next group.

Caution 1: Prior to starting these tests, ensure that recent change processing is not restricted (At MCC **SYSTEM STATUS** *panel,* **RECENT CHANGE — RESTRICT RECENT CHANGES** *key lamp is* **OFF**.*)*

Caution 2: If an equipment unit (that is, CC, CSB or PSB, etc.) is left in an out-of-service state following the execution of any test group, restore the unit to service before continuing with tests in the next test group.

2. Test procedure:

2.1. TEST GROUP 1

1. At MCC **SYSTEM DISPLAY** panel:
   Depress **DATA INSERT** keys (**0**,**1**), (**3**,**4**), (**6**,**7**), (**10**,**11**), and (**21**,**23**).

   Response: Each key lamp lighted WHITE

2. Depress **SCAN POINT READING** key

   Response: Key lamp lighted WHITE
   BINARY DISPLAY lamp **12** may be lighted

2.2 TEST GROUP 2

1. At MCC **OVERRIDE CONTROL** panel:
   Depress **CC0/CC1** key associated with presently active CC.

   Response: Key lamp lighted WHITE
   BINARY DISPLAY lamp **4** lighted if **CC0** selected or lamp **5** if **CC1** selected
   NO OVERRIDE lamp lighted RED

2. Depress **ACTIVATE-OVERRIDE IN EFFECT** key

   Response: Key lamp lighted WHITE
   A-level interrupt printout received
   BINARY DISPLAY lamps **4** and **11** lighted if **CCO** selected or lamps **5** and **11** if **CC1** selected
   BINARY DISPLAY lamp **12** OFF

3. Depress **ACTIVATE-OVERRIDE IN EFFECT** key.

   Response: **OVERRIDE IN EFFECT** lamp OFF
   BINARY DISPLAY lamp **11** OFF

4. Depress **CC0/CC1** key selected in Step 2.2.1.

   Response: Key lamp OFF
   NO OVERRIDE lamp OFF

2.3 TEST GROUP 3

1. At MCC **MANUAL INTERRUPT PROGRAM REQUEST** panel:
   Depress **RESTORE MTCE I/O** key.

   Response: Key lamp lighted WHITE

2. Depress **ACTIVATE-PROGRAM REQUEST** key.

   Response: A-level interrupt printout received
   Maintenance I/O terminal cleared
   BINARY DISPLAY lamp **12** lighted

3. Depress **RESTORE MTCE I/O** key.

   Response: Key lamp OFF
   At **SYSTEM STATUS** panel:
   INTERRUPT INHIBITED lamp lighted AMBER
   [NOTE]

   Note: Response may not be received if test is repeated within an hour.

4. Enter message `ALW:IOUS 0,KCODE!`

   Response: At **SYSTEM STATUS** panel:
   INTERRUPT INHIBITED lamp OFF

2.4 TEST GROUP 4

1. At MCC **MANUAL INTERRUPT PROGRAM REQUEST** panel:
   Depress **CLEAR UTILITY FUNCTION** key.

   Response: Key lamp lighted WHITE

2. At **PROCESSOR CONFIGURATION SEQUENCER** panel:
   Depress **DISABLE AUTO PC** key.

   Response: Key lamp lighted RED
   BINARY DISPLAY lamp **3** lighted

3. Depress **RESET COUNTER** key.

   Response: All PC STATE COUNTER lamps OFF

4. Depress **ACTIVATE-PC** key.

   Response: PC STATE COUNTER **1** lamp lighted,
   B-LEVEL interrupt printout received,
   At MCC **SYSTEM DISPLAY** panel:
   PHASE PROGRESS lamp lighted
   SCAN POINT READING lamp OFF
   BINARY DISPLAY lamps **3** and **12** OFF

5. Depress **RESET COUNTER** key.

   Response: All PC STATE COUNTER lamps OFF

6. At **SYSTEM DISPLAY** panel:
   Depress **PHASE PROGRESS** key.

   Response: Key lamp OFF

7. Depress **SCAN POINT READING** key.

   Response: Key lamp and **BINARY DISPLAY** lamps **3** and **12** lighted

8. At **PROCESSOR CONFIGURATION SEQUENCER** panel:
   Depress **DISABLE AUTO PC** key.

   Response: Key lamp and **BINARY DISPLAY** lamp **3** OFF

9. If standby CC is out of service, enter message to restore standby CC to service (`RST:CC a!`)

   Response: Standby CC restored to service after diagnostic completed

10. At **MANUAL INTERRUPT PROGRAM REQUEST** panel:
    Depress **CLEAR UTILITY FUNCTION** key.

    Response: Key lamp OFF

2.5 TEST GROUP 5

1. At MCC **PROCESSOR CONFIGURATION SEQUENCER** panel:
   Depress **DISABLE AUTO PC** key.

   Response: Key lamp lighted RED
   BINARY DISPLAY lamp **3** lighted

2. At TUC (any available):
   Mount scratch tape without a write protect ring
   (use different TUC when tests are repeated).

3. Depress **SR** key on TUC.

   Response: Key lamp lighted WHITE
   At MCC **SYSTEM REINITIALIZATION** panel:
   READY lamp lighted

4. At MCC **SYSTEM REINITIALIZATION** panel:
   Depress **ENABLE DATA UNIT** key to light lamp,
   then *immediately* depress key again to
   extinguish lamp.

   Response: First time lamp is depressed:
   Key lamp lighted WHITE
   BINARY DISPLAY lamp **10** lighted

   Second time lamp is depressed:
   Key lamp goes OFF
   BINARY DISPLAY lamp **10** OFF

5. At TUC frame selected in Step 2.5.2:
   Demount scratch tape from tape transport.

   Response: At TUC:
   SR lap OFF
   At MCC **SYSTEM REINITIALIZATION** panel:
   READY lamp OFF

2.6 RESTORE CONTROLS USED FOR TEST

1. At MCC **PROCESSOR CONFIGURATION SEQUENCER** panel:
   Depress **DISABLE AUTO PC** key.

   Response: Key lamp and **BINARY DISPLAY** lamp **3** OFF

2. At MCC **SYSTEM DISPLAY** panel:
   Depress **SCAN POINT READING** key.

   Response: Key lamp and **BINARY DISPLAY** lamp **12** OFF

3. Depress **DATA INSERT** keys (**0**,**1**), (**3**,**4**), (**6**,**7**),
   (**10**,**11**), and (**21**,**23**).

   Response: Key lamps OFF

4. Enter message `OP:OOSUNITS!`

5. Restore to service any units which are in
   out-of-service state as a result of executing
   this procedure.

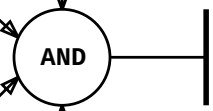
End of procedure

[1] Refer to TABLE A, Page 2, for minimum hardware in-service requirements for update

[2] At MTC terminal, enter message to obtain list of out-of-service units, OP:OOSUNITS!

[3] Conditionally restore each unit on out-of-service list required for update, using restore message

[4] See Note 1. Remove power from any operational unit which fails diagnostics



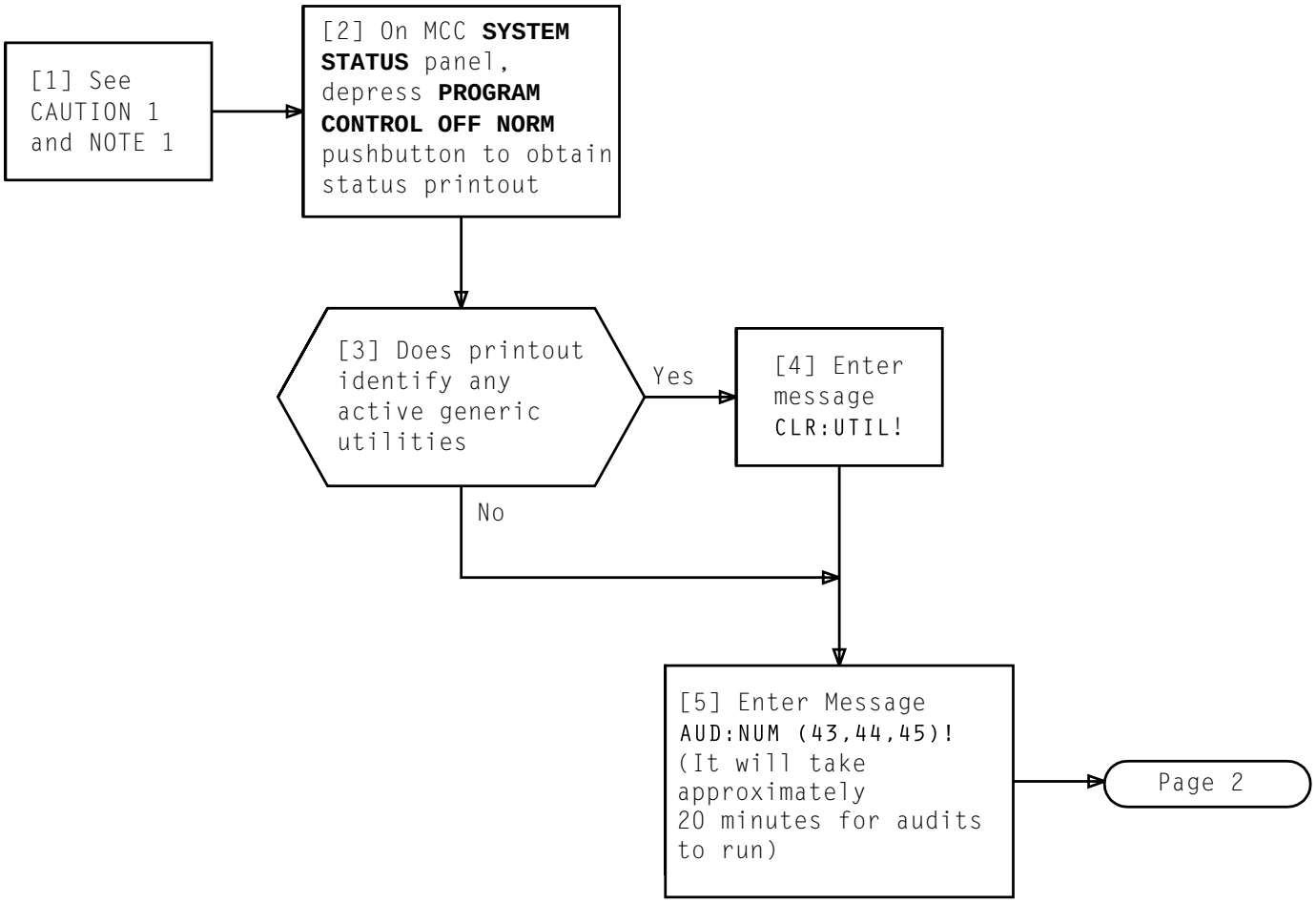
NOTE 1
If an actual update, only remove power from units in trouble. When verifying tape compatibility, do not remove power from out-of-service units

ESTABLISH FRAME HARDWARE STATUS REQUIRED FOR 1B PROCESSOR UPDATE

TABLE A

UNIT	MINIMUM REQUIREMENTS*	UNIT	MINIMUM REQUIREMENTS*
CC	Operating full duplex	SP	Base SPs operating full duplex. All other SPs in service with no more than one controller out of service
PS	All in service		
CS	No more than one store out of service	TSI	Dedicated TSI operating duplex. All other TSIs in service with no more than one controller out of service
DUS	DUS 0 and 1 in service. Must have run diagnostics ATP including system reinitialization phase	TMS	All in service operating in duplex
		PUB	Both peripheral unit buses in service
IOUS	All IOUSs and all essential I/O channels in service	NCLK	All four clock chains in service
TUC	Office requirements plus two available for update	VIF/DT/ DIF	All in service. No more than one VIF/DT/DIF controller out of service (excluding TSI caused). No more than one VIU/DTU/DIU out of service in any one VIF/DT/DIF
BUSES	All buses in service operating in duplex	NM	The network management function must be fully operational (to be used as a tool for evaluating office performance in new generic issue).
API	APIs duplex and in service		
SCS	All controllers and service circuit units available for service	EST	All ESTs in service and operating duplex
		TGR	All TGRs in service and operating duplex

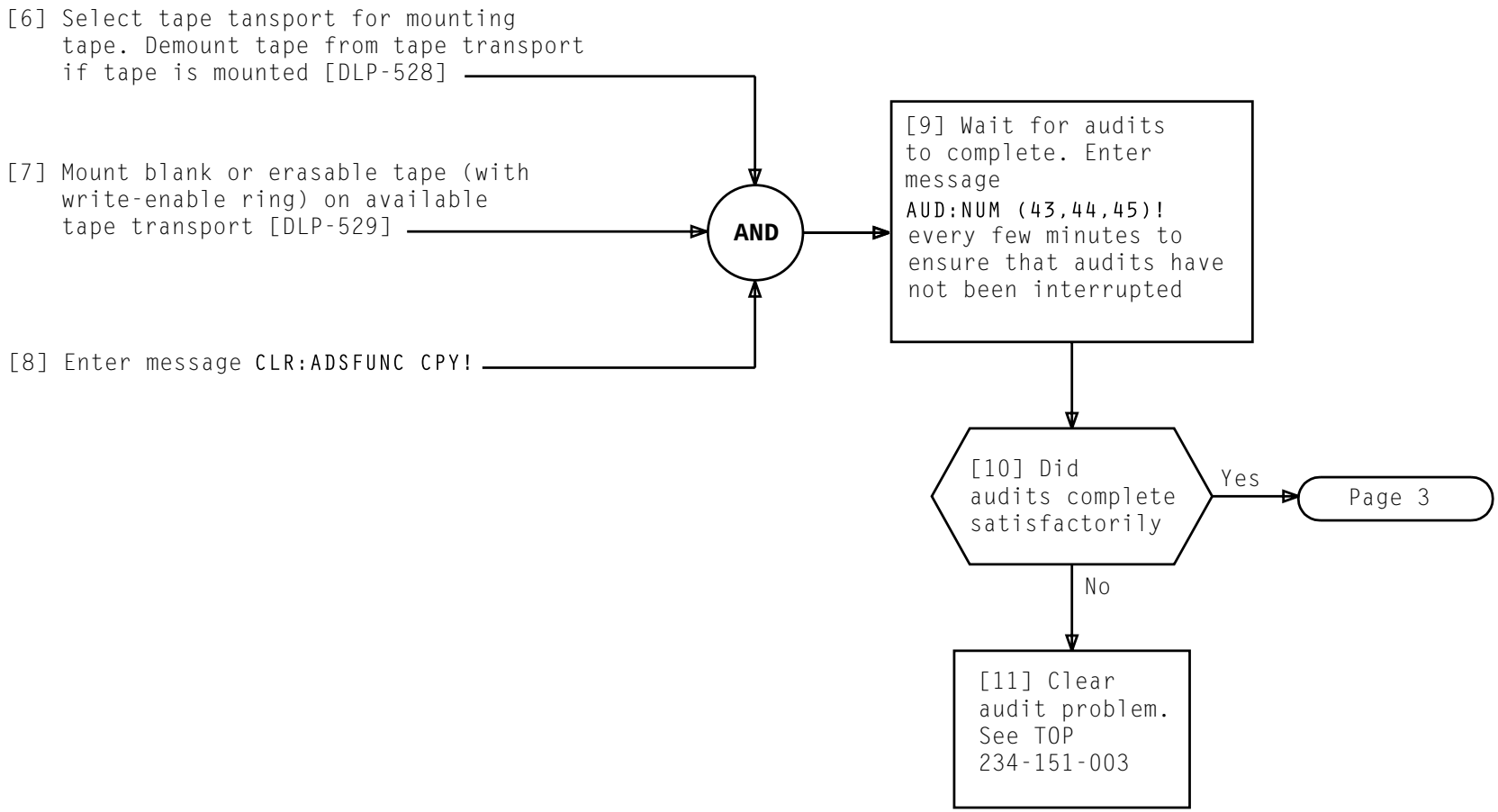
*Any operational unit which fails diagnostics must be powered down



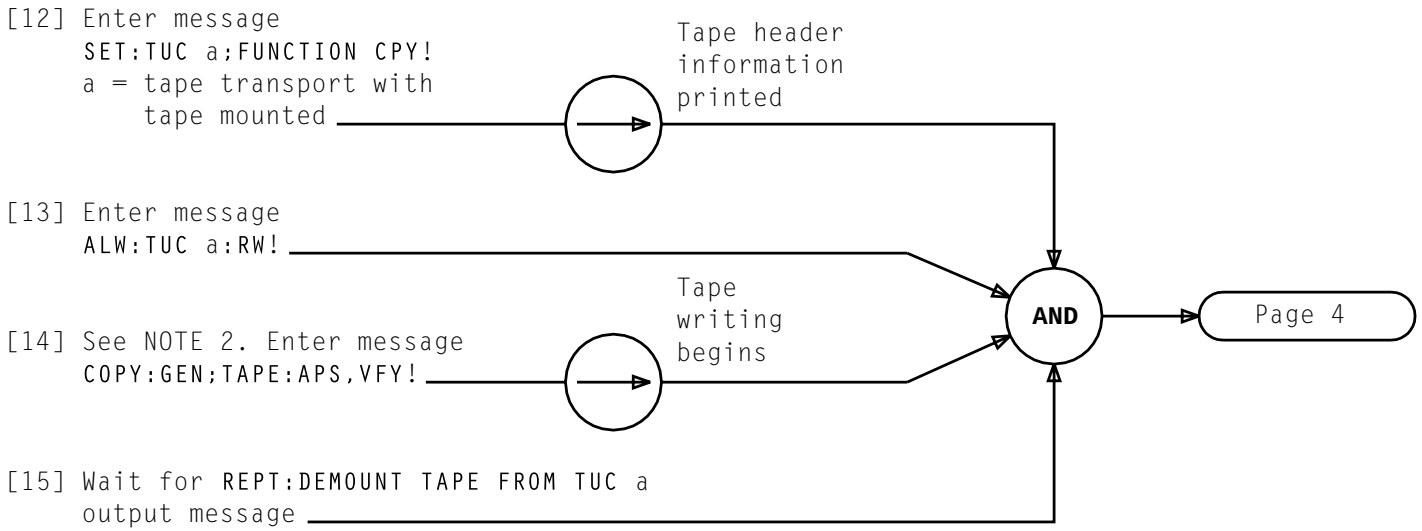
WRITE GENERIC TAPE(S) (TWRP WRITE – 800 BPI)

NOTE 1
If necessary, AT&T Practice 234-020-010 should be referenced to for tape storage requirements and procedures

CAUTION 1
Certain system audits are inhibited during tape writing; therefore, tape writing should be done during light traffic periods

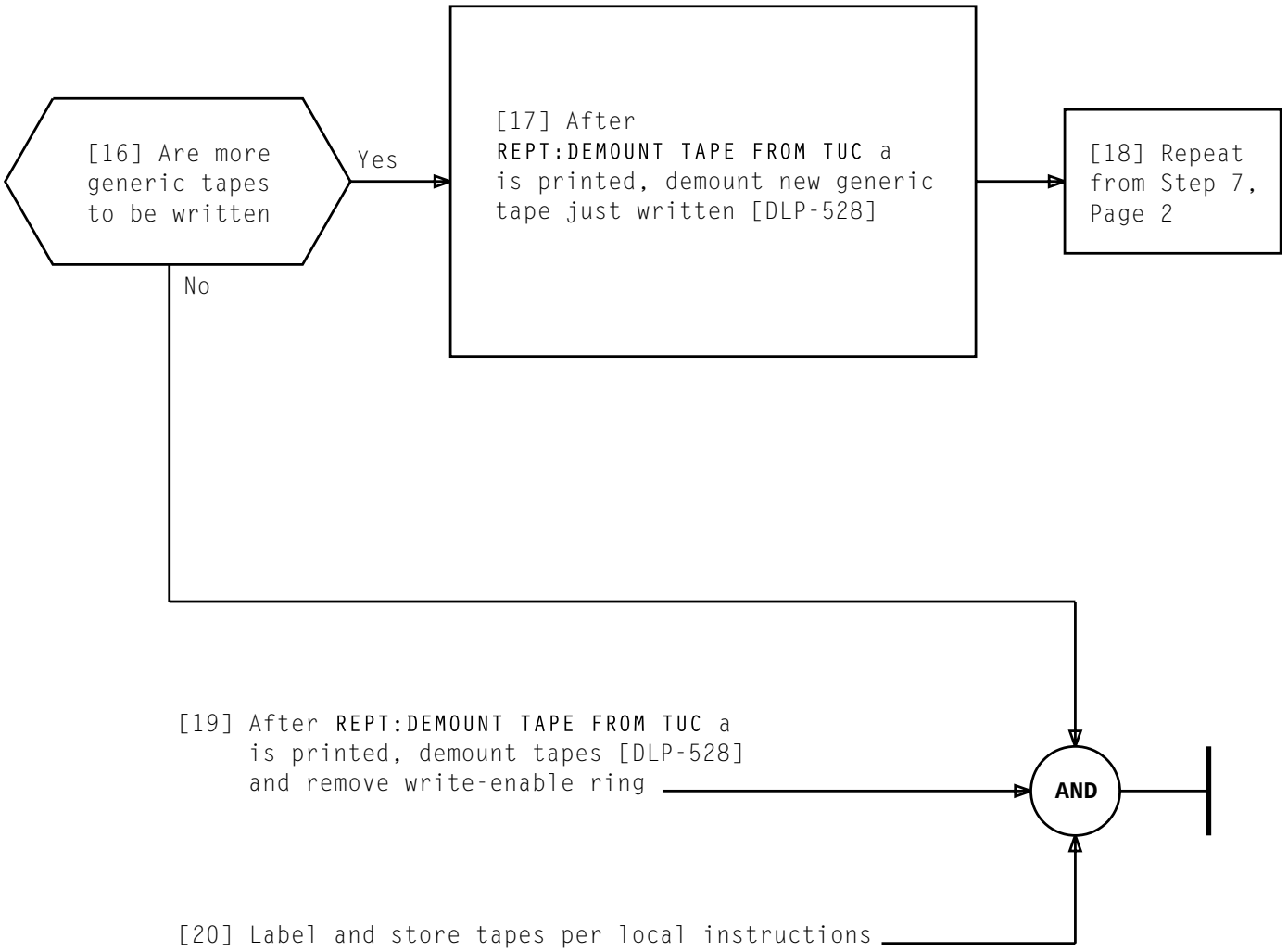


WRITE GENERIC TAPE(S) (TWRP WRITE – 800 BPI)

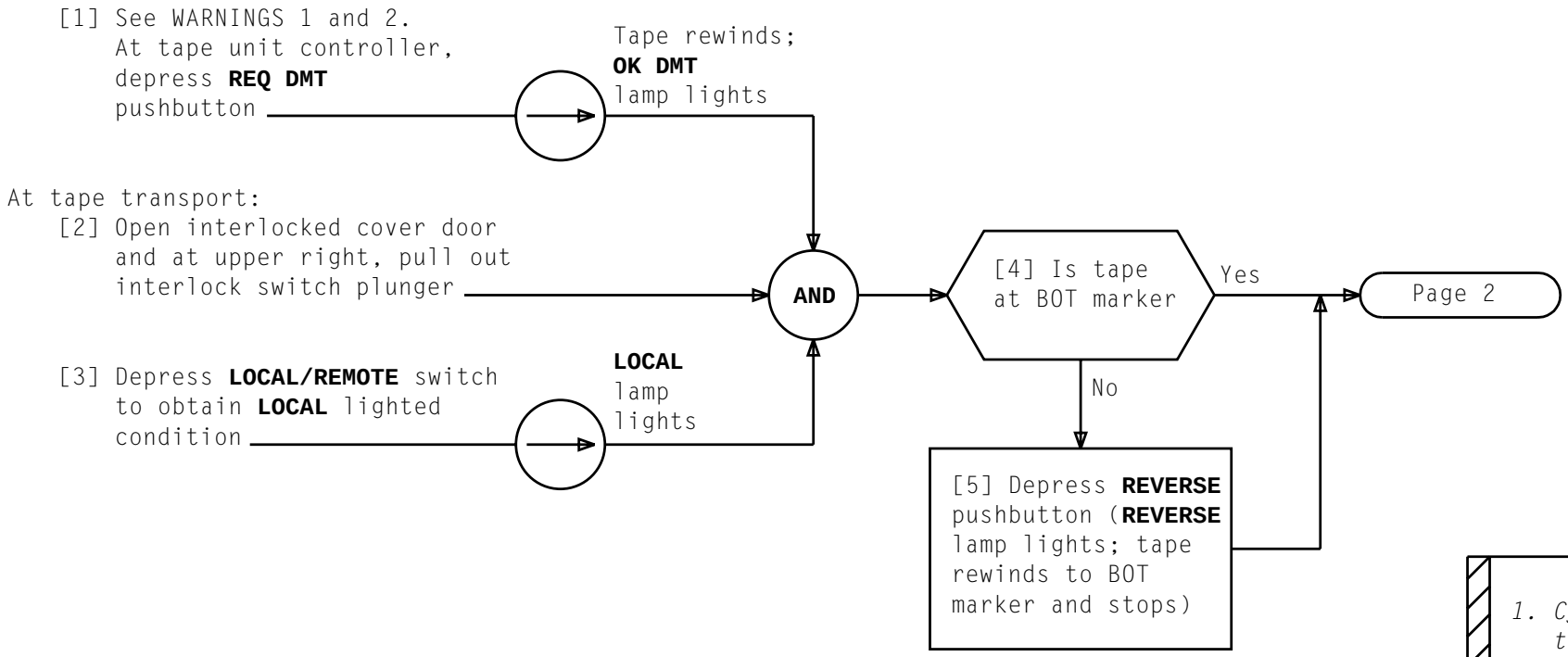


NOTE 2
After generic tape is written, tape will rewind and be verified. After verification has been completed, REPT:DEMOUNT TAPE FROM TUC a message is received

WRITE GENERIC TAPE(S) (TWRP WRITE – 800 BPI)



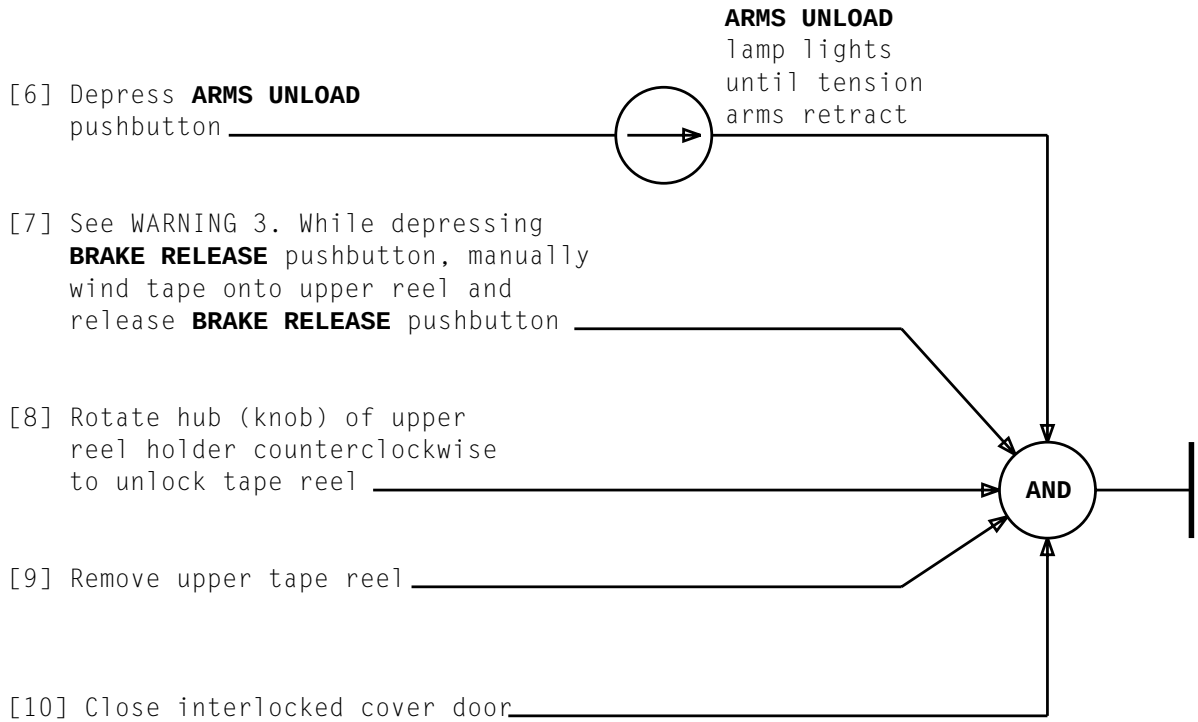
WRITE GENERIC TAPE(S) (TWRP WRITE – 800 BPI)



WARNINGS

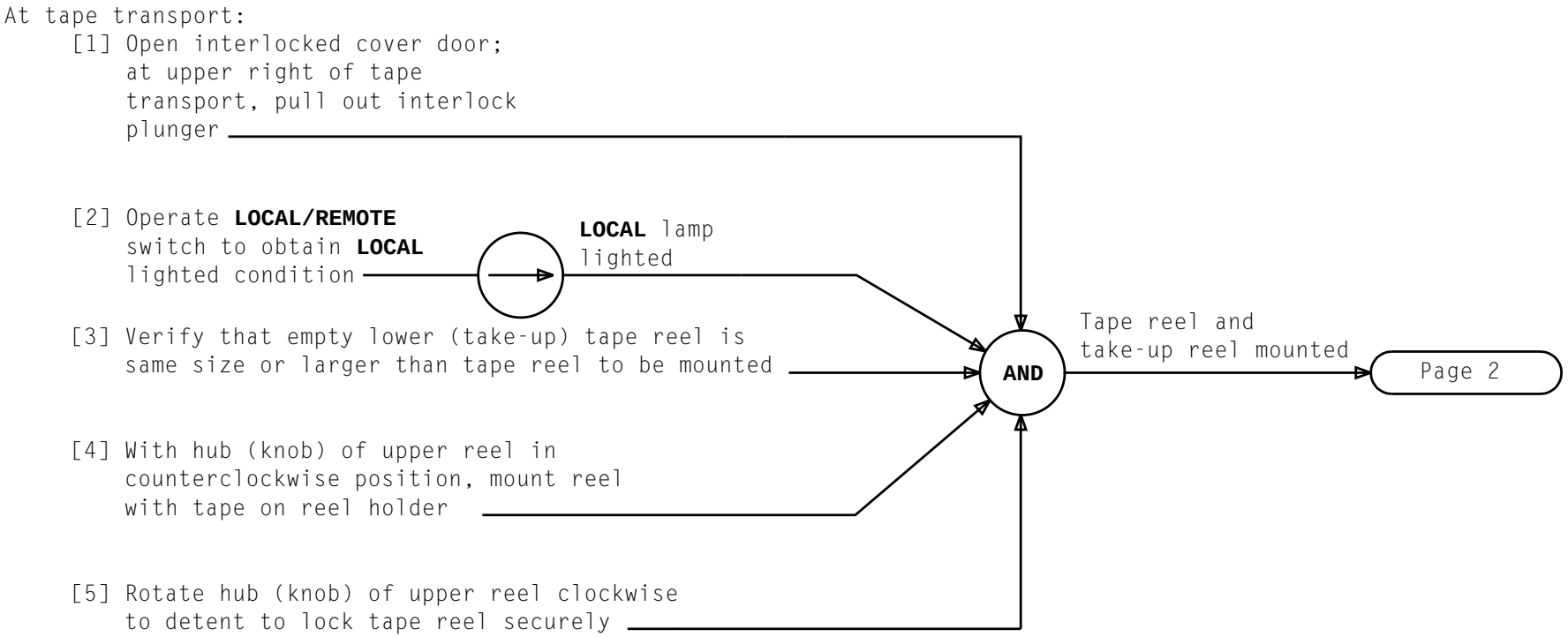
1. *Cycling tape transport or tape unit controller with tape over read/write heads may garbage tape*
2. *If tape is being demounted due to faulty tape unit, proper tape unit maintenance documentation should be used*

DEMOUNT TAPE ON TAPE TRANSPORT

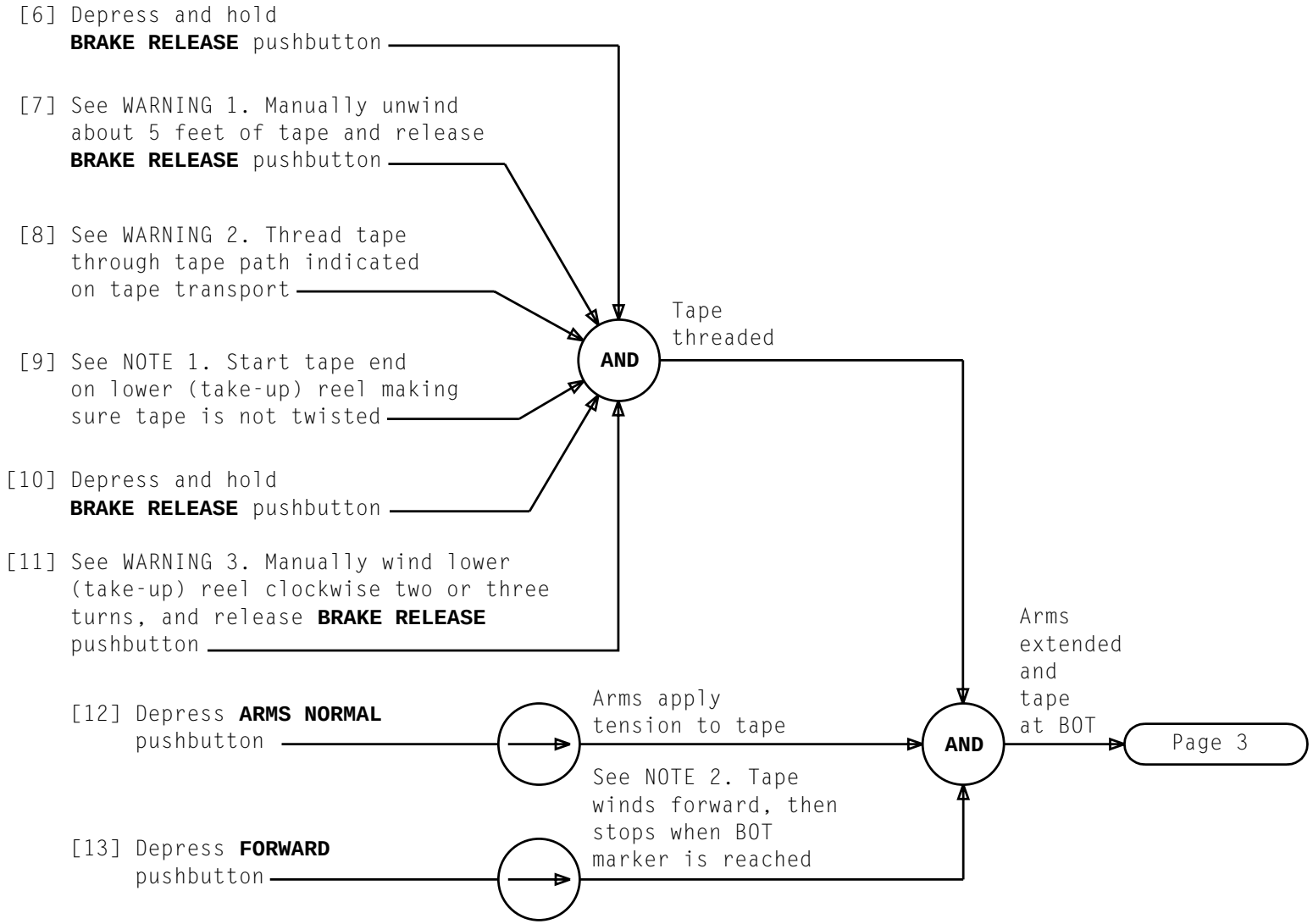


DEMOUNT TAPE ON TAPE TRANSPORT

WARNING 3
Pulling or dragging last 2 feet of tape across heads may contaminate heads



MOUNT TAPE ON TAPE TRANSPORT



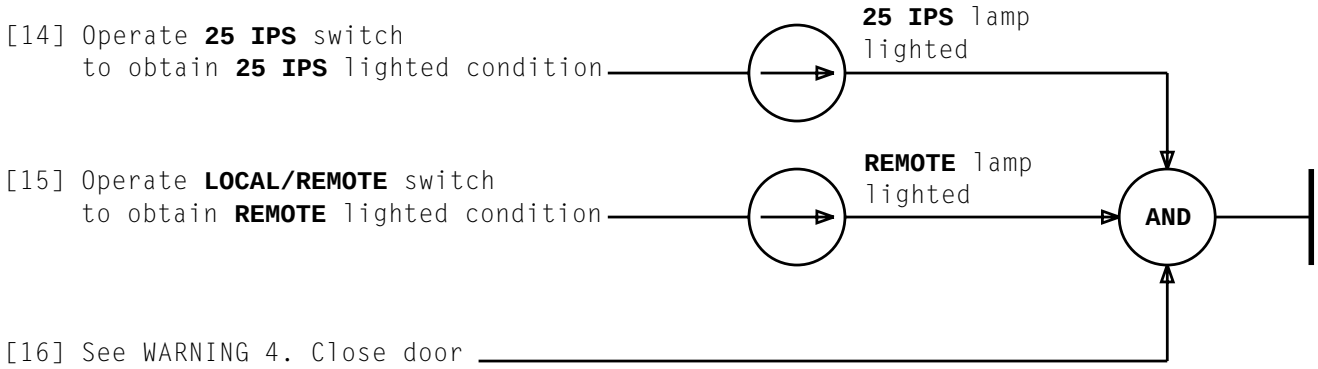
NOTES

1. To start tape on take-up reel, it may help to moisten tape end (moistened fingers) and stick it to reel axle
2. Tape may not stop at BOT marker if fast forward is depressed

WARNINGS

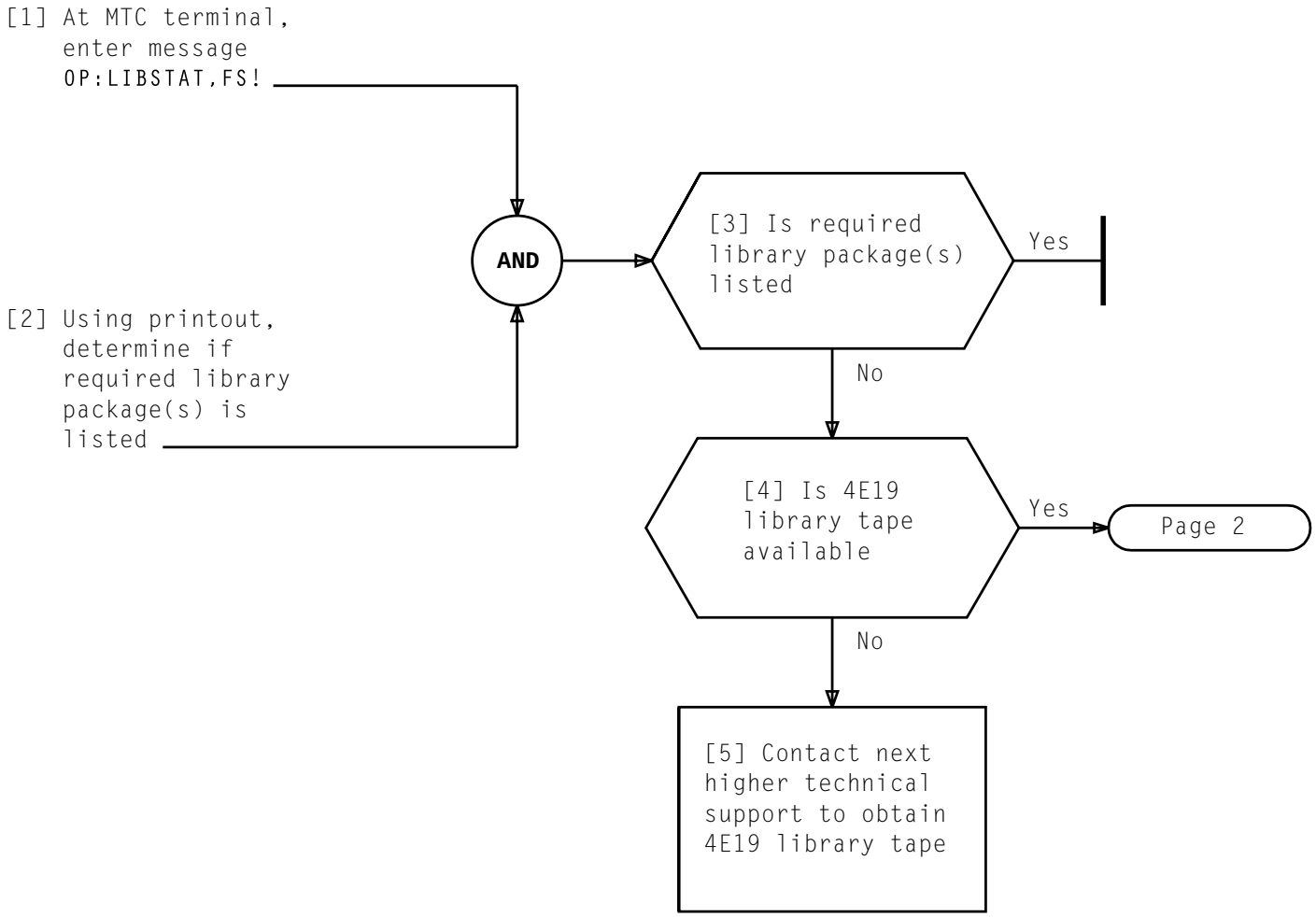
1. *Contamination of tape by contact with floor will damage tape heads*
2. *Do not touch tape head surfaces; body oils will contaminate tape*
3. *If tape is not properly aligned along rollers and guides or is too loose, it may be damaged*

MOUNT TAPE ON TAPE TRANSPORT

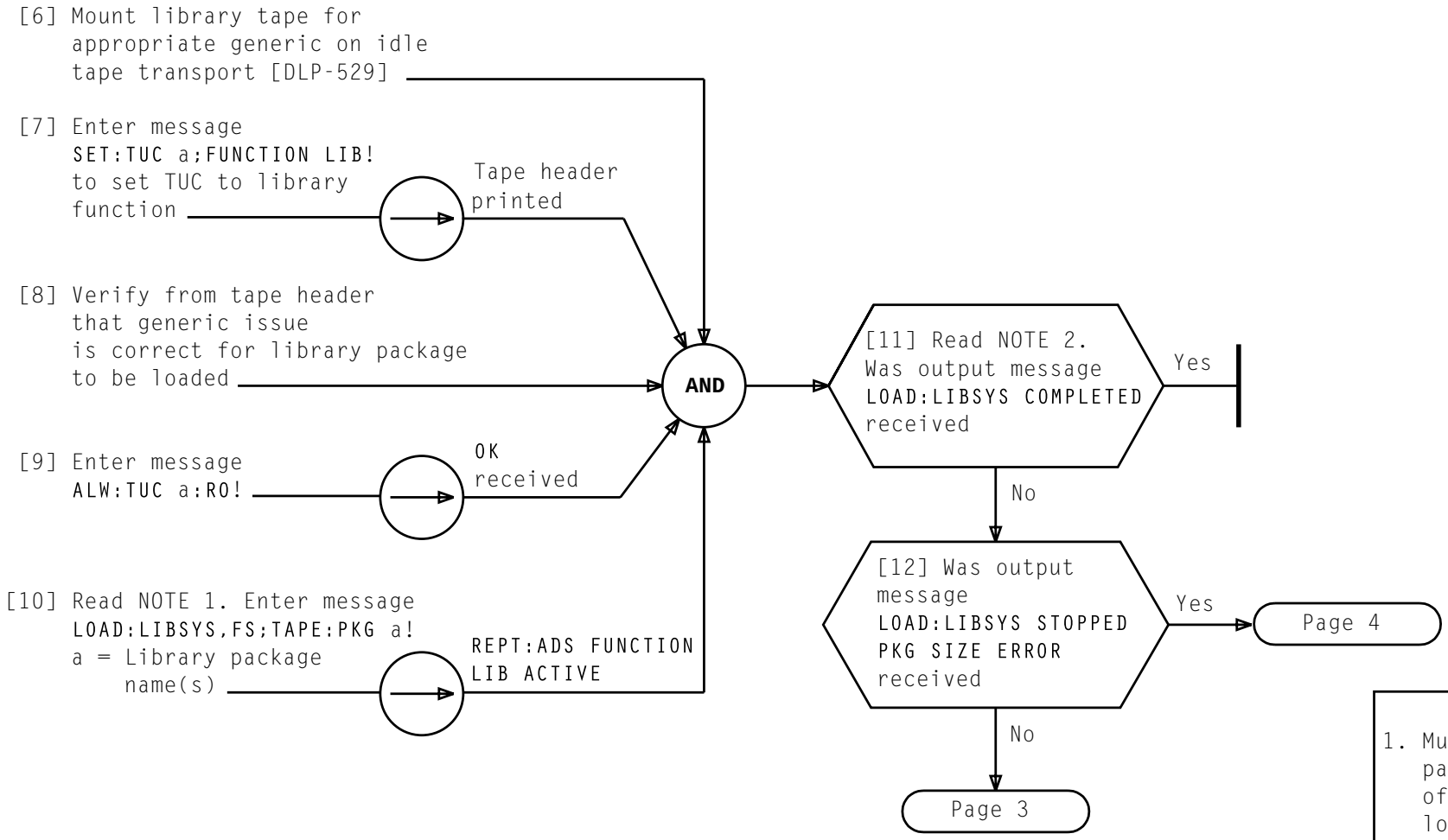


WARNING 4
Closing tape transport door in harsh manner may upset alignment

MOUNT TAPE ON TAPE TRANSPORT



LOAD LIBRARY PROGRAM PACKAGE(S) FROM TAPE ONTO DISK



NOTES

1. Multiple library packages (maximum of 4) may be loaded at one time by separating with commas and enclosing in parentheses
2. System will not respond COMPLETED until tape is loaded

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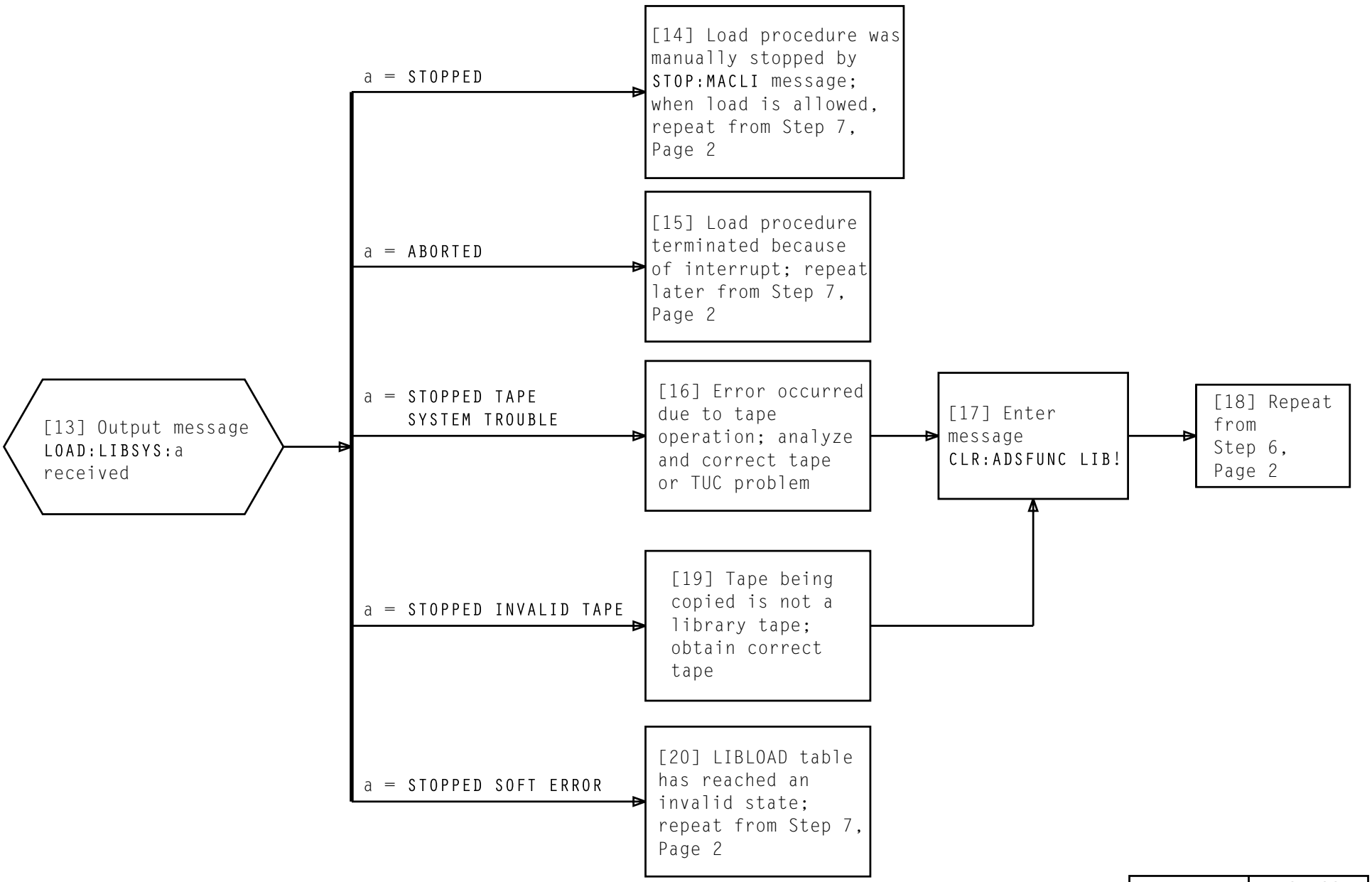
LOAD LIBRARY PROGRAM PACKAGE(S) FROM TAPE ONTO DISK

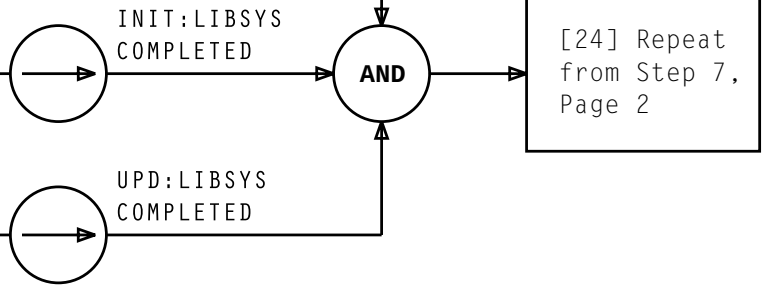


LOAD LIBRARY PROGRAM PACKAGE(S) FROM TAPE ONTO DISK

[21] Enter message
OP:LIBSTAT,FS! and
identify library packages that
will not be required for retrofit
or ODA update processes

[22] Enter message
INIT:LIBSYS,PKG a!
to remove a library package
a = library package identified
in previous step

[23] Enter message
UPD:LIBSYS!
to repack library packages



LOAD LIBRARY PROGRAM PACKAGE(S) FROM TAPE ONTO DISK

[1] Office has

Model 2/3 3B computer → Page 3

Model 1 3B computer

[2] Open tape unit dust cover

[3] Lift supply (upper) reel hub tab. Place tape reel onto supply (upper) reel hub. See FIG. 1

[4] While holding tape reel, secure tape reel by returning supply hub tab to normal locked down position

[5] Thread tape along tape path as shown in FIG. 1

[6] Hold end of tape against take-up reel and wrap several turns clockwise by rotating reel

AND → Page 2

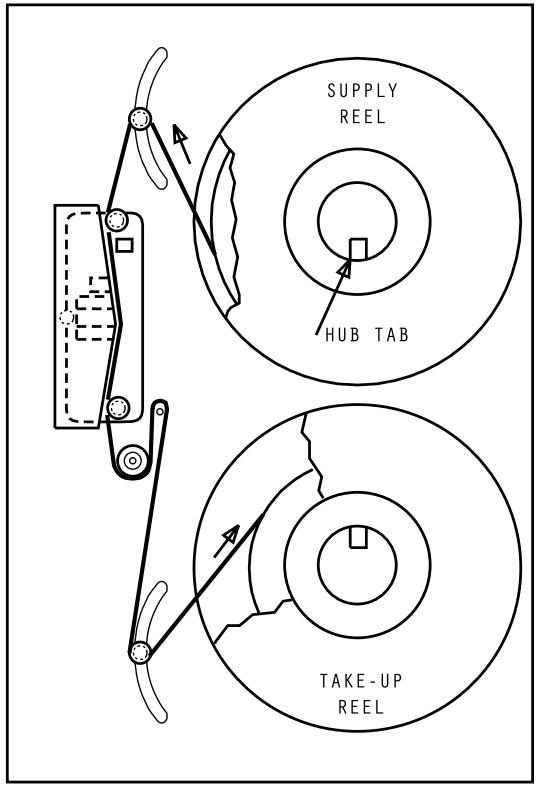
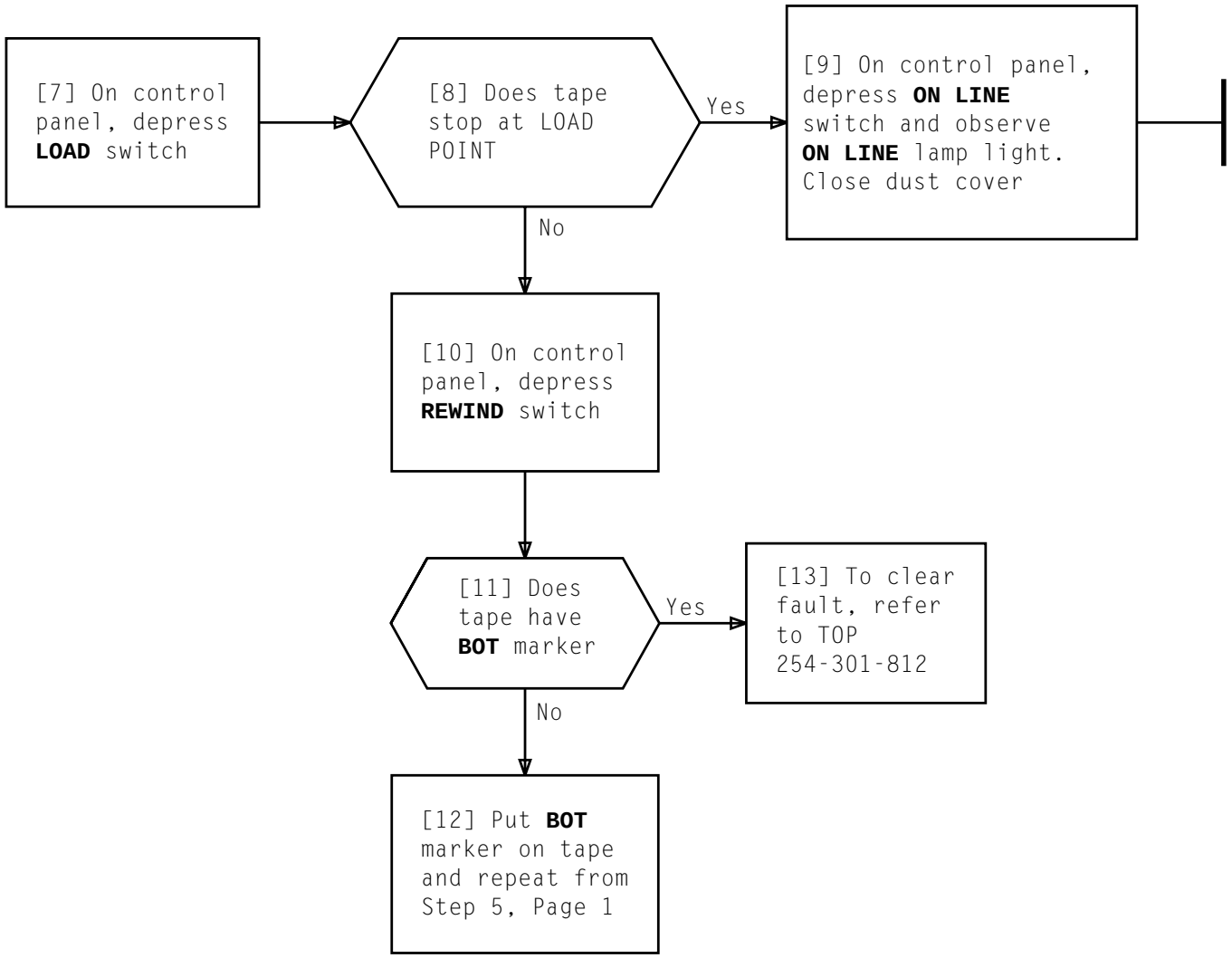


FIG. 1

MOUNT TAPE ON TAPE UNIT



MOUNT TAPE ON TAPE UNIT

[14] If tape is to be written, attach write enable ring on supply reel

[15] If **LOGIC OFF** LED lighted, touch **LOGIC ON** switch

[16] Open dust cover and verify circuit breaker at side 1

[17] See FIG. 2. Place supply reel on hub and depress hub latch

[18] Thread tape from bottom of supply reel along path as shown in FIG. 2

[19] Hold end of tape against take-up reel and wrap several turns clockwise by rotating reel; then close dust cover

[20] At control panel, touch **LOAD/REWIND** switch

AND

[21] Does tape move and stop and is **BOT** LED lighted

Yes

[24] Touch **ON LINE** switch

No

[22] Touch **RESET** switch, attach beginning of tape (BOT) marker, and repeat from Step 18

No

[23] To clear fault, refer to TOP 254-301-812

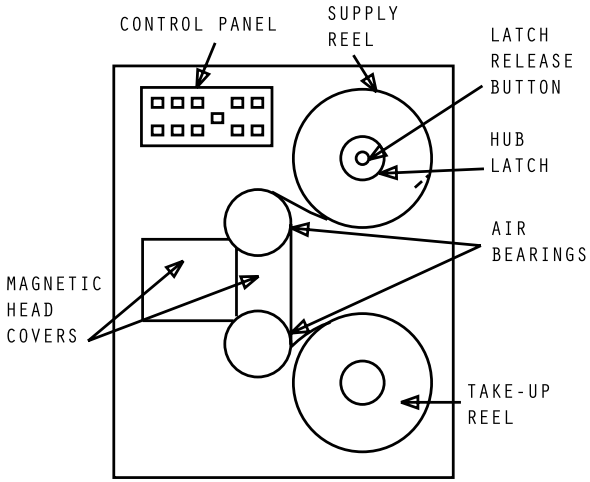
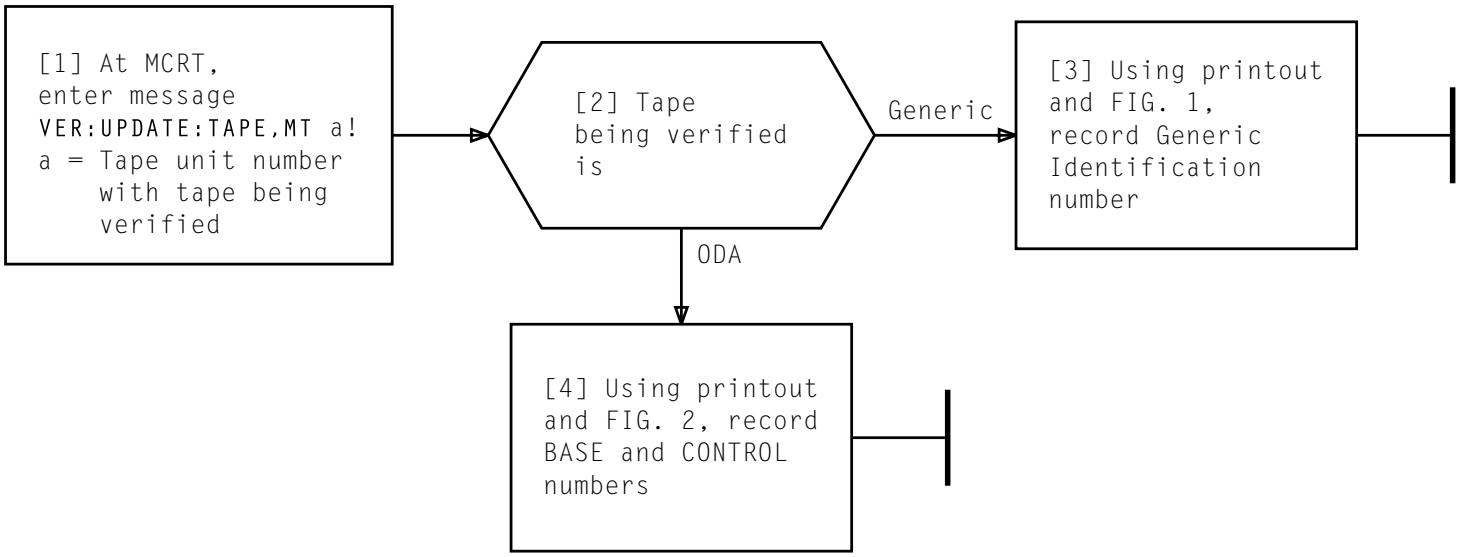


FIG. 2

MOUNT TAPE ON TAPE UNIT




```
TAPE TYPE: GEN
GENERIC 4E<19>5A.01 R1   <-- Record This Value
MOST RECENT OFL GENERATION: YR 94,MON 10,DAY 04 AT 11:28
THIS TAPE WRITTEN: YR 94,MON 11,DAY 04 AT 17:19
FS IDS: 0000000000000010,TAPE IDS: 0000000011111111
PARTL UPD FLG: 0,PHASE REQD: 0001000
```

FIG. 1 — Sample Generic Tape Header Printout

```
TAPE TYPE: ODA
BASE 908F,CONTROL H0   <-- Record These Values
ORIGINAL GENERIC 4E<G19>.5R
MOST RECENT OFL GENERATION: YR 94,MON 10,DAY 05 AT 16:23
THIS TAPE WRITTEN: YR 94,MON 11,DAY 09 AT 08:23
FS IDS: 0000000000001000,TAPE IDS: 0000000011110100
PRTL UPD FLG: 0,PHASE REQD: 0001000
```

FIG. 2 — Sample ODA Tape Header Printout

RECORD TAPE HEADER INFORMATION

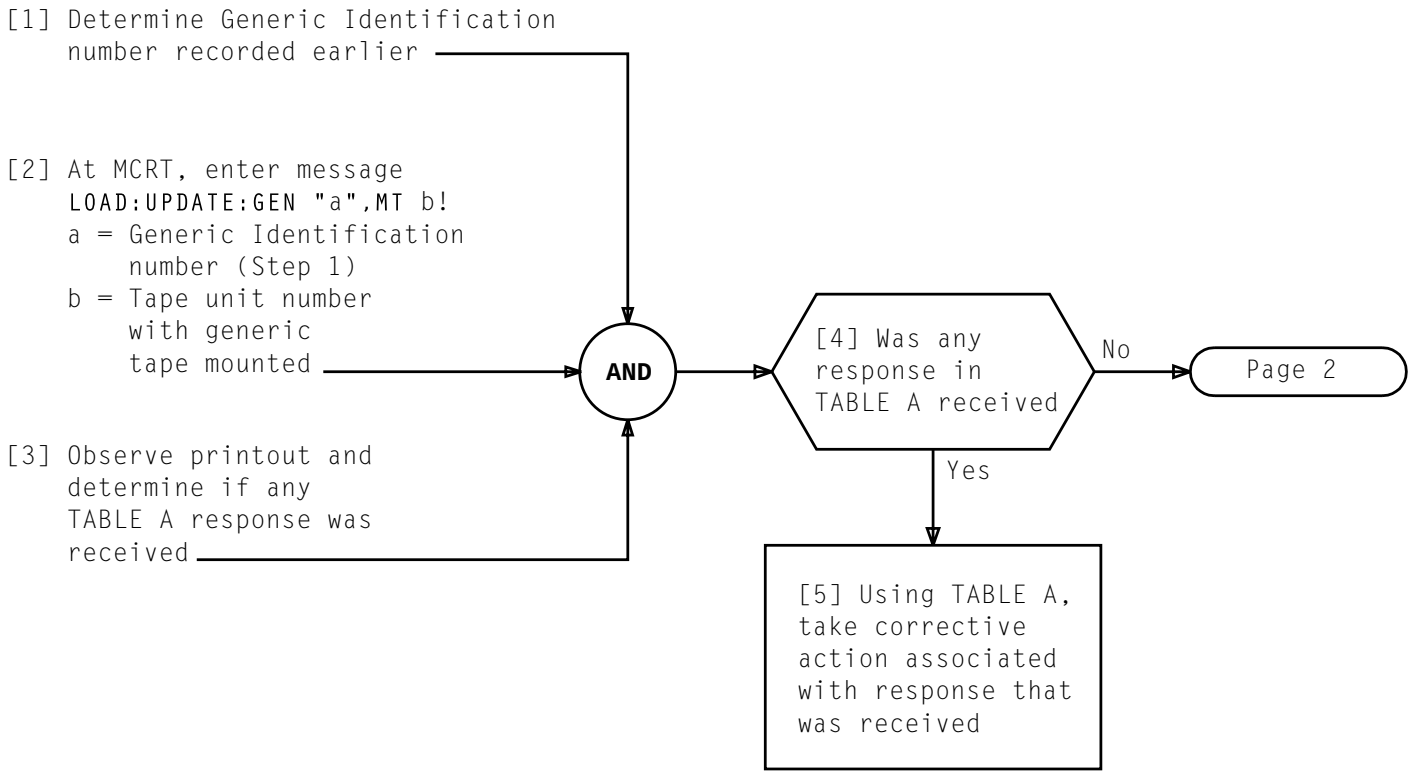
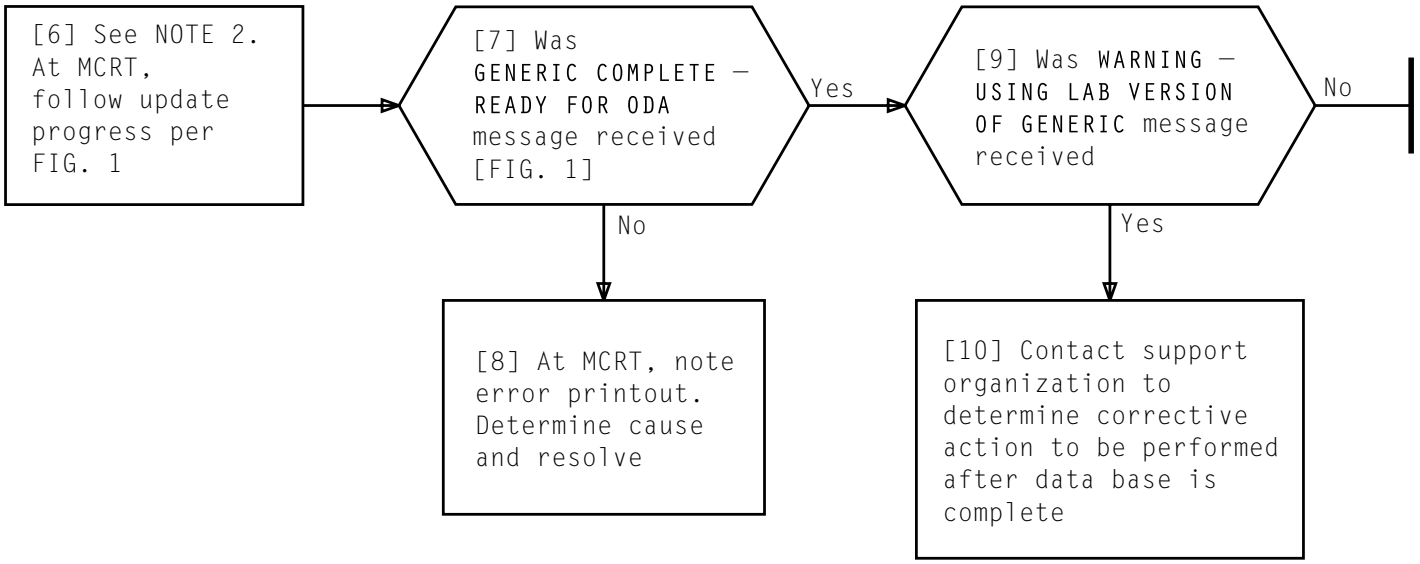


TABLE A

RESPONSE	CORRECTIVE ACTION
INVALID TAPE ID - ENTER AGAIN	Repeat from Step 2 with correct Generic Identification number
TAPE DRIVE NOT READY - CORRECT AND ENTER AGAIN	Correct tape drive problem and repeat from Step 2

LOAD NEW GENERIC ON DISK

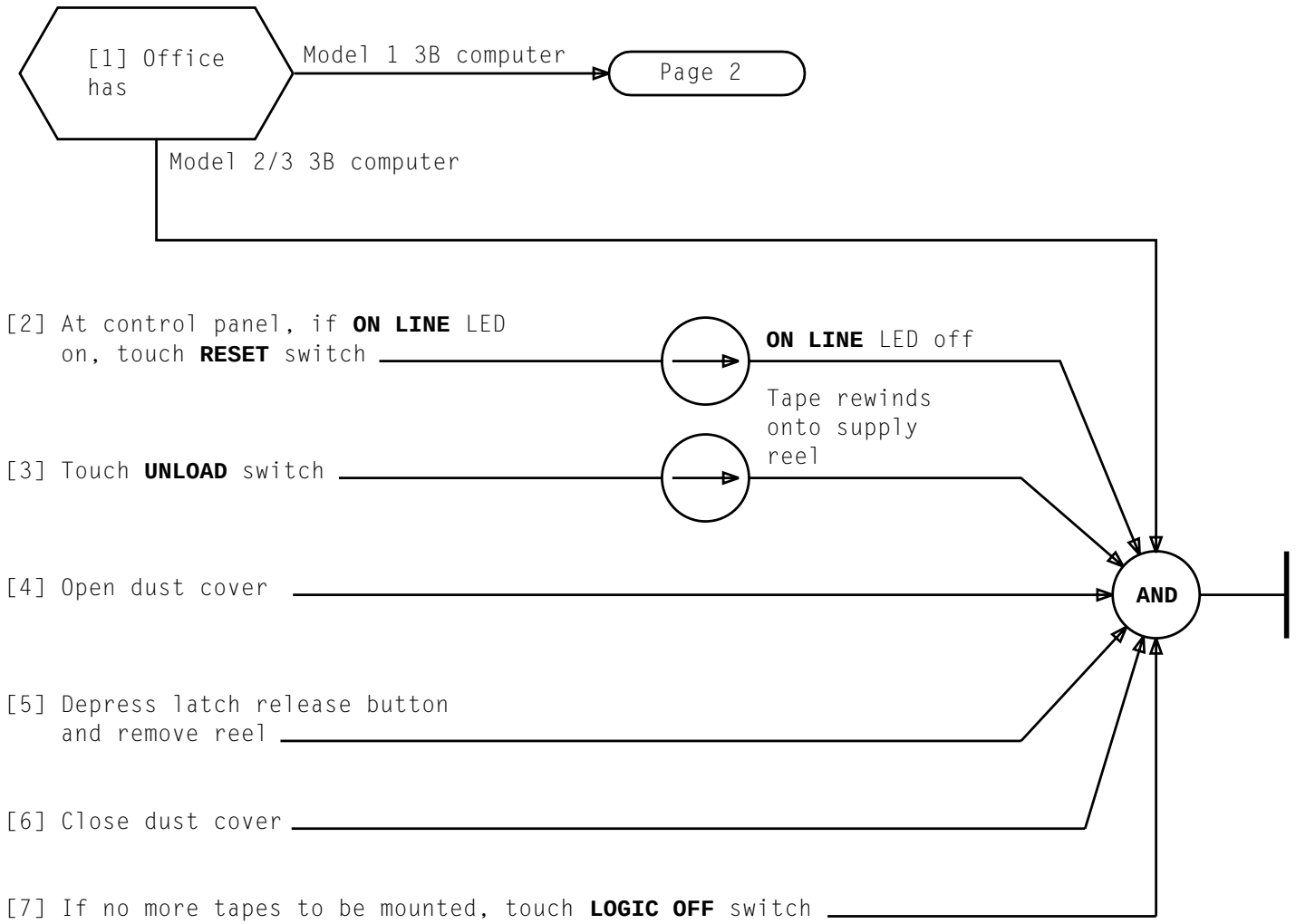



```
GENERIC RETROFIT

TAPE HEADER
              .
              .
              .
TAPE FILE 10 LOADED TO FS

TAPE FILE 20 LOADED TO FS

TAPE FILE 30 LOADED TO FS
              .
              .
              .
TAPE FILE n LOADED TO FS

GENERIC COMPLETE - READY FOR ODA
```

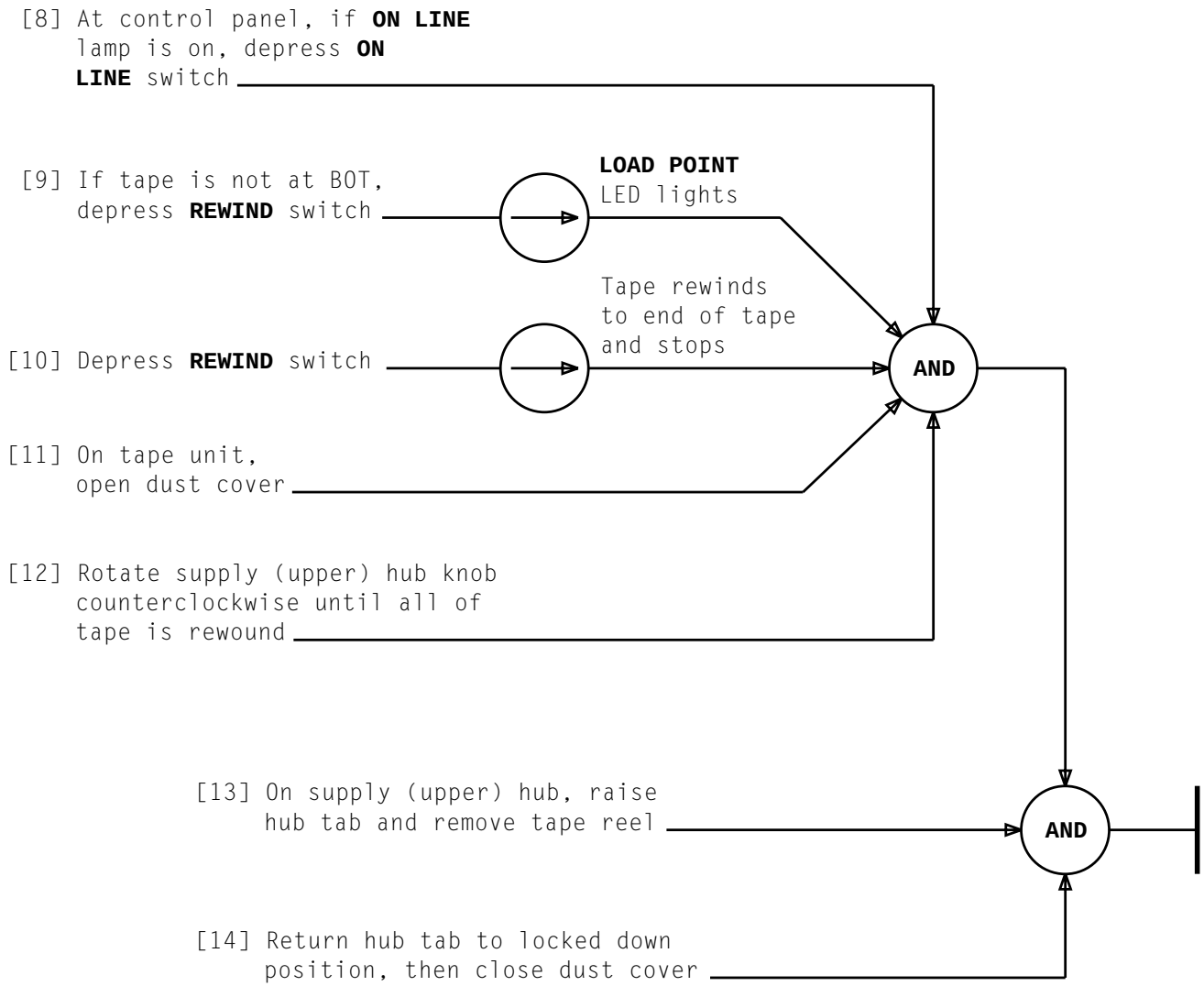
FIG. 1 — Sample Generic Load Printout

NOTE 2
WARNING — USING LAB VERSION OF GENERIC message may be received after tape header information

LOAD NEW GENERIC ON DISK



DEMOUNT TAPE ON TAPE UNIT



DEMOUNT TAPE ON TAPE UNIT

[1] Determine BASE and CONTROL numbers recorded earlier

[2] At MCRT, enter message
LOAD:UPDATE:CONT "ab",MT c!
a = BASE number (Step 1). Must be 4 characters long. Spaces are used after BASE number if not 4 characters long
b = CONTROL number (Step 1). Must be 2 characters long. Space is used after CONTROL number if not 2 characters long
c = Tape unit number with ODA tape mounted

[3] Observe printout and determine if any TABLE A response was received

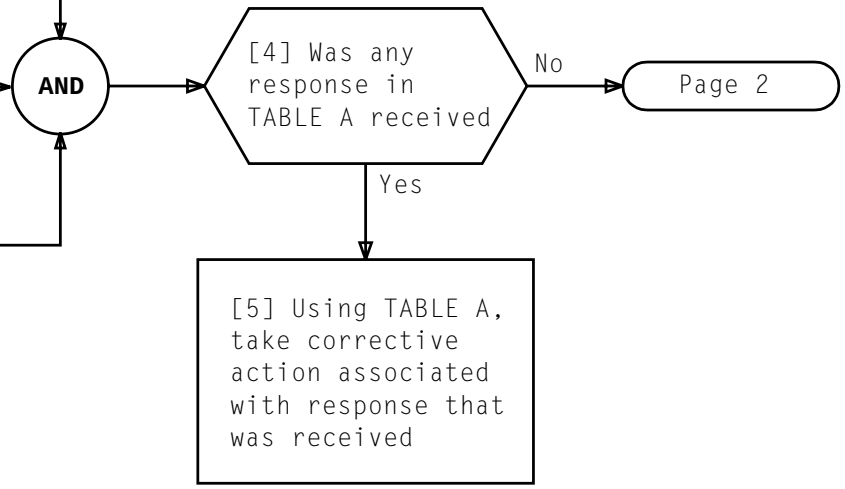
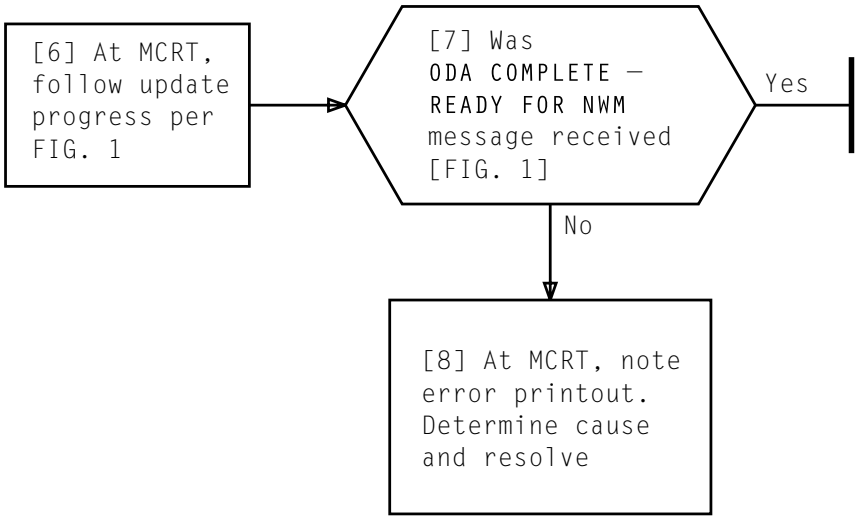


TABLE A

RESPONSE	CORRECTIVE ACTION
INVALID TAPE ID - ENTER AGAIN	Repeat from Step 2 with correct BASE and CONTROL numbers
TAPE DRIVE NOT READY - CORRECT AND ENTER AGAIN	Correct tape drive problem and repeat from Step 2
WRONG GENERIC — CHANGE TAPE AND ENTER AGAIN	Demount wrong ODA tape. Obtain correct tape and mount on tape drive. Repeat from Step 2

LOAD NEW ODA ON DISK FOR GENERIC RETROFIT




```
TAPE HEADER
          .
          .
          .
TAPE FILE 10 LOADED TO FS
          .
TAPE FILE n LOADED TO FS

ODA COMPLETE - READY FOR NWM
```

FIG. 1 — Sample ODA Load Printout

LOAD NEW ODA ON DISK FOR GENERIC RETROFIT

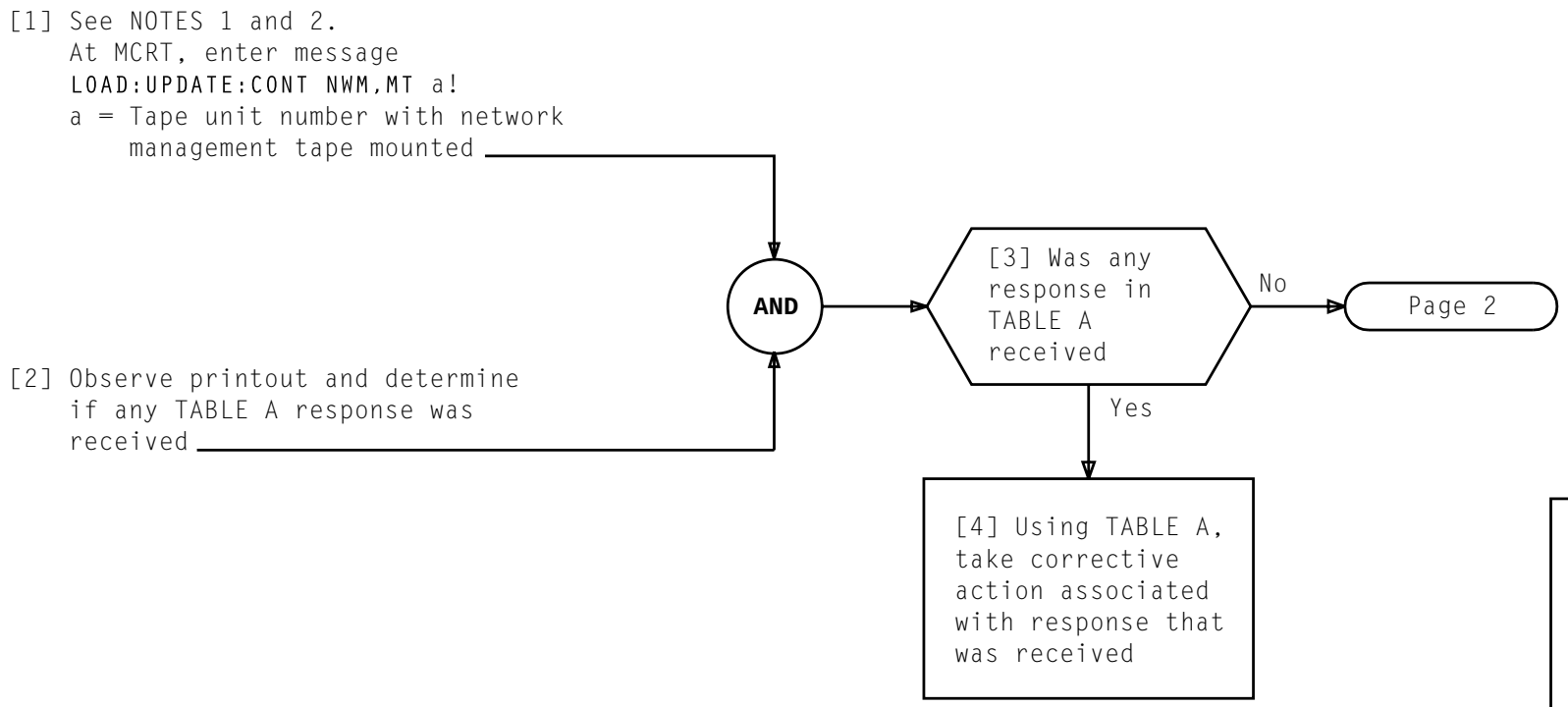


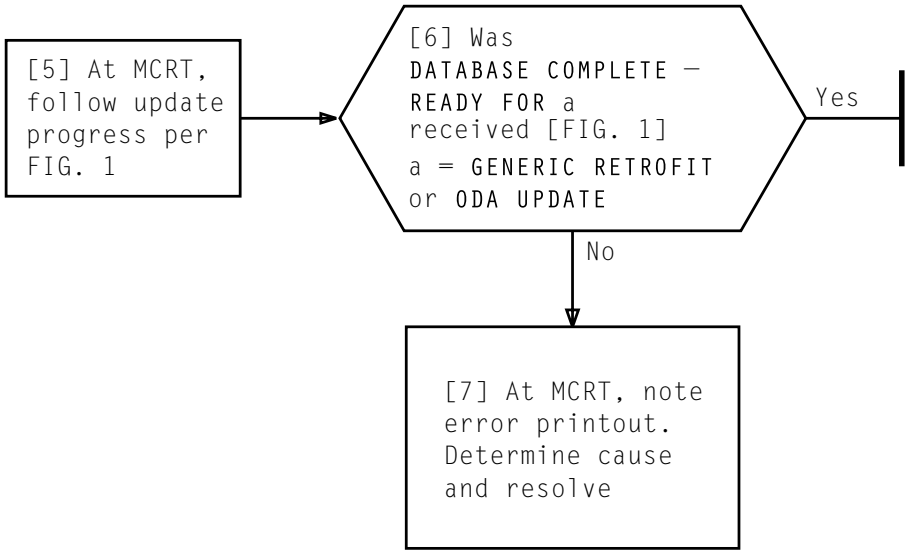
TABLE A

RESPONSE	CORRECTIVE ACTION
TAPE DRIVE NOT READY — CORRECT AND ENTER AGAIN	Correct tape drive problem and repeat from Step 2
WRONG GENERIC — CHANGE TAPE AND ENTER AGAIN	Demount wrong network management tape. Obtain correct tape and mount on tape drive. Repeat from Step 2
INVALID COMMAND - ENTER AGAIN	Repeat from Step 2

NOTES

1. When network management is loaded satisfactorily, system will complete building data base
2. After receiving MAPPING DYNAMIC DATA FROM NORMAL FILE output message, WAITING FOR 4 TO 13 MINUTES PAST QUARTER HOUR may be received. System will automatically map dynamic data when in proper window

LOAD NETWORK MANAGEMENT ON DISK AND COMPLETE DATA BASE




```
TAPE HEADER
      .
      .
      .
TAPE FILE 10 LOADED TO FS

NWM COMPLETE

WRITE MERGE DATA AND ZERO FS AREAS

MAPPING DYNAMIC DATA FROM NORMAL FILE

DATABASE COMPLETE – READY FOR a
```

FIG. 1 – Sample Network Management Load Printout

LOAD NETWORK MANAGEMENT ON DISK AND COMPLETE DATA BASE

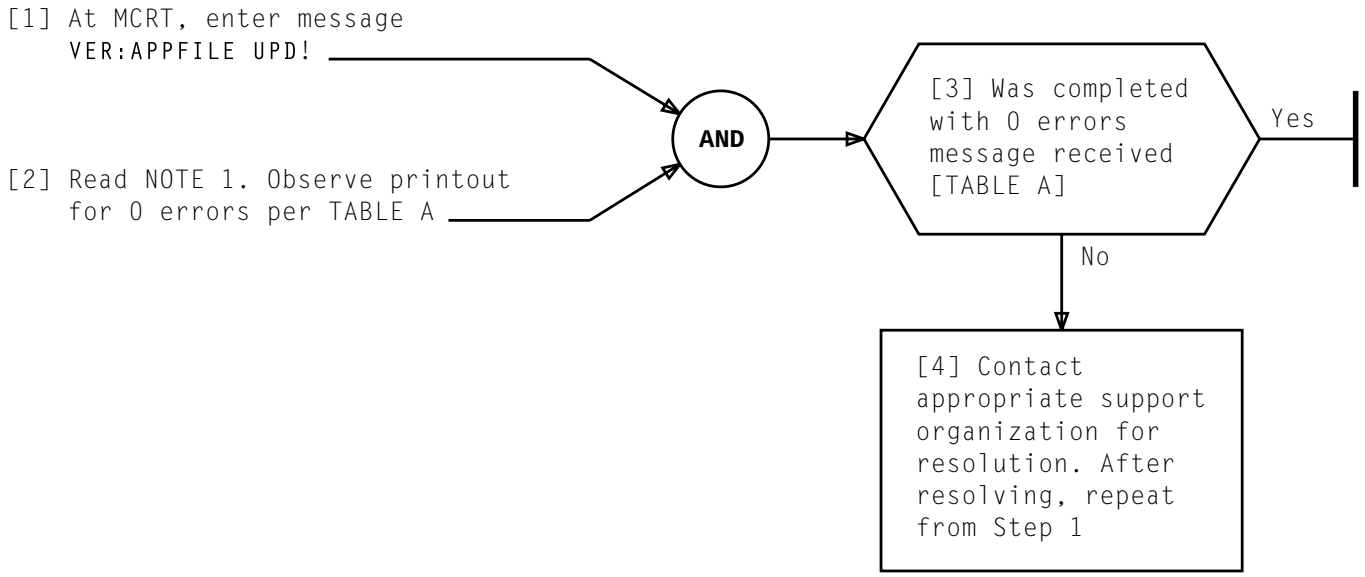
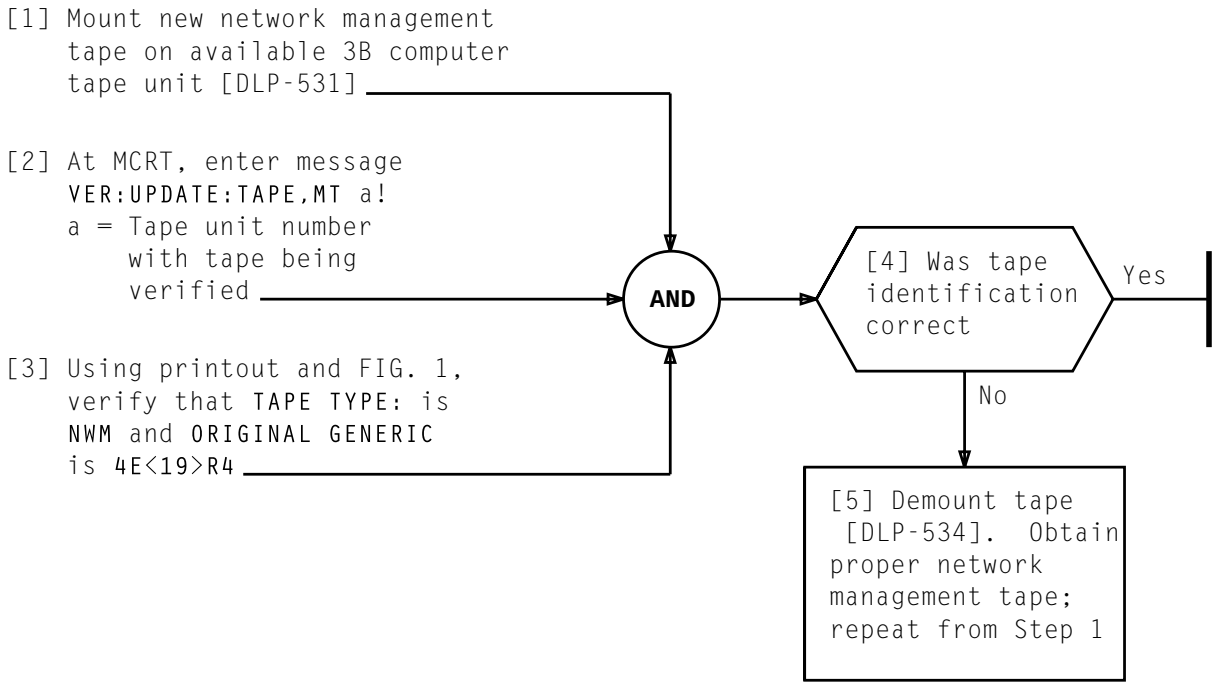


TABLE A

MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:APPFILE STARTED, /dev/1afileX (X = 0 or 1)
	VER:APPFILE /dev/1afileX MERGE AREA, MSG IP, 0 ERRORS DETECTED
	VER:APPFILE /dev/1afileX ID 1, MSG IP, 0 ERRORS DETECTED (Generic Area)
	VER:APPFILE /dev/1afileX ID 2, MSG IP, 0 ERRORS DETECTED (Library Area)
	VER:APPFILE /dev/1afileX ID 3, MSG IP, 0 ERRORS DETECTED (ODA Area)
	VER:APPFILE /dev/1afileX ID 7, MSG IP, 0 ERRORS DETECTED (Network Management Area)
	VER:APPFILE /dev/1afileX ID 11, MSG IP, 0 ERRORS DETECTED (RC Rollback Area)
	VER:APPFILE /dev/1afileX ID 12, MSG IP, 0 ERRORS DETECTED (Traffic and Plant Management Area)
	VER:APPFILE /dev/1afileX COMPLETED, 0 ERRORS DETECTED

NOTE 1
It takes approximately 35 minutes for verify to complete

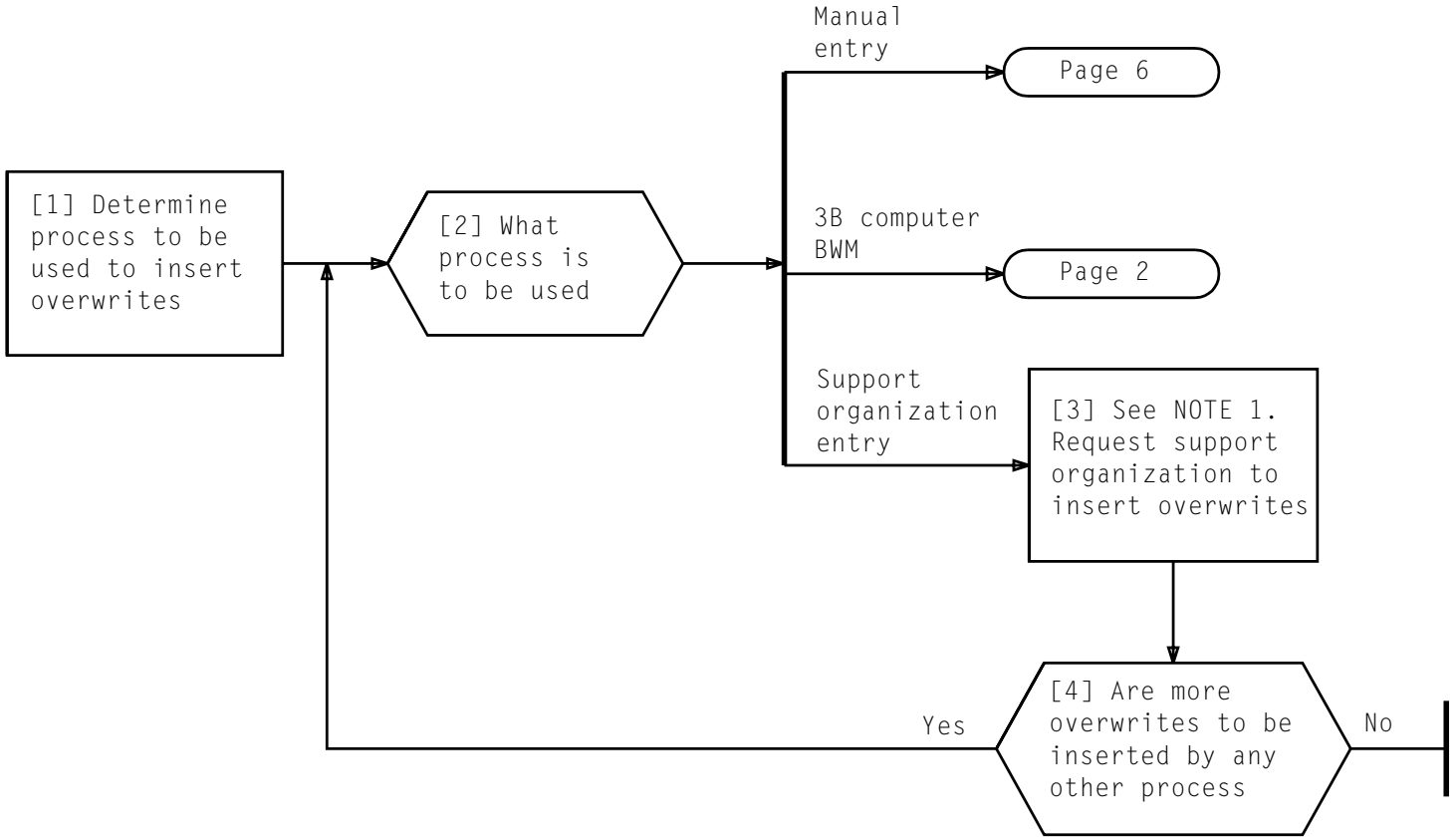
VERIFY 1AFILE HASHED AREAS




```
TAPE TYPE: NWM
ORIGINAL GENERIC 4E<19>4R
MOST RECENT OFL GENERATION: YR 94,MON 10,DAY 06 AT 08:30
THIS TAPE WRITTEN: YR 94,MON 10,DAY 06 AT 12:40
FS IDS: 0000000010000000,TAPE IDS: 0000000011110100
PRTL UPD FLG: 0,PHASE REQD: 0000000
```

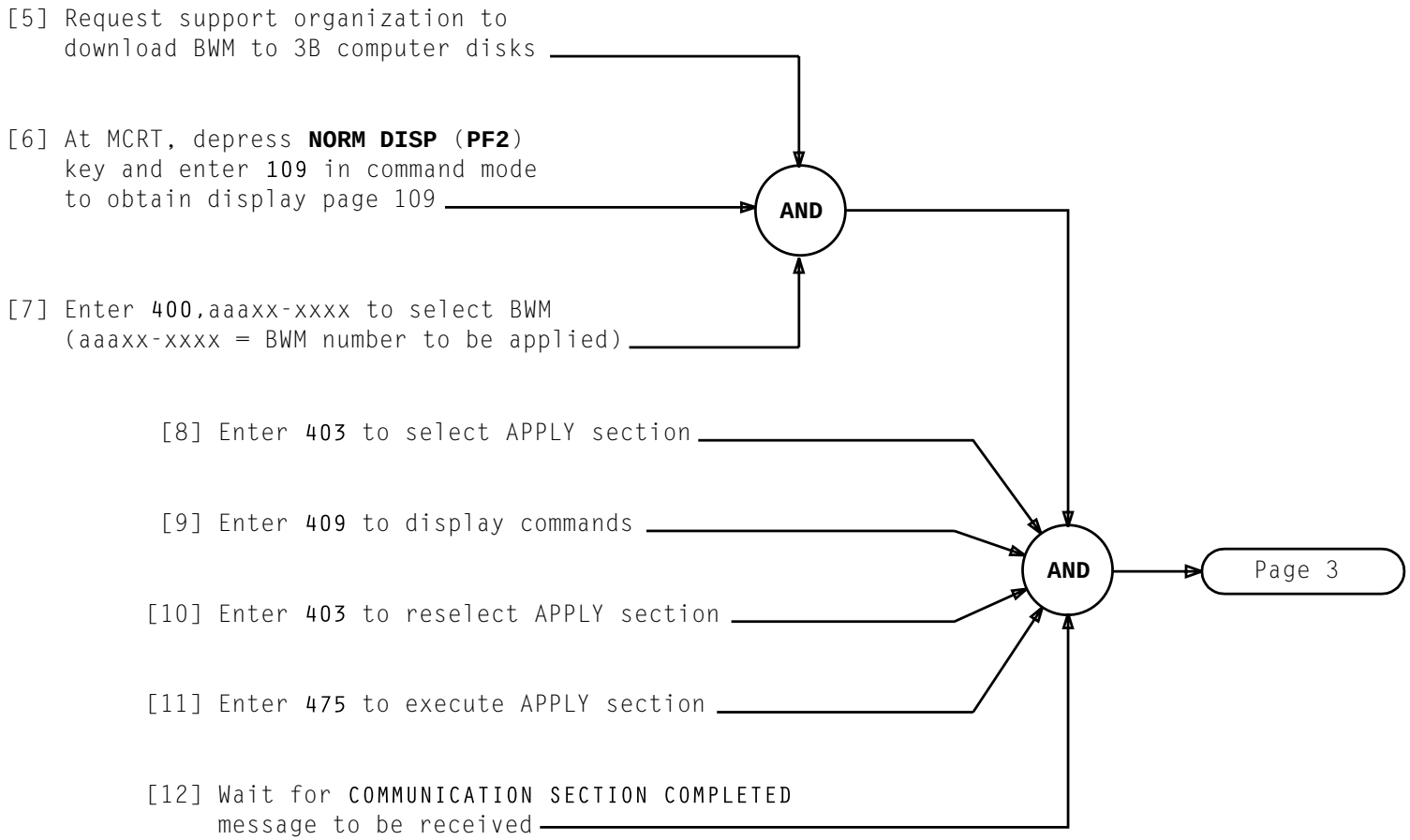
FIG. 1 — Sample Network Management Tape Header Printout

VERIFY NETWORK MANAGEMENT TAPE IDENTIFICATION



NOTE 1
Overwrites from support organization must be in form of TABLE B or TABLE C, Page 6

INSERT CRITICAL OVERWRITES INTO UPDATE FILE



INSERT CRITICAL OVERWRITES INTO UPDATE FILE

[13] Enter **406** to select PERM section

[14] Enter **409** to display commands

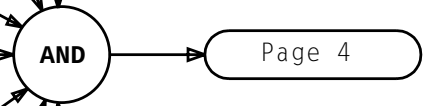
[15] Enter **406** to reselect PERM section

[16] Enter **475** to execute PERM section

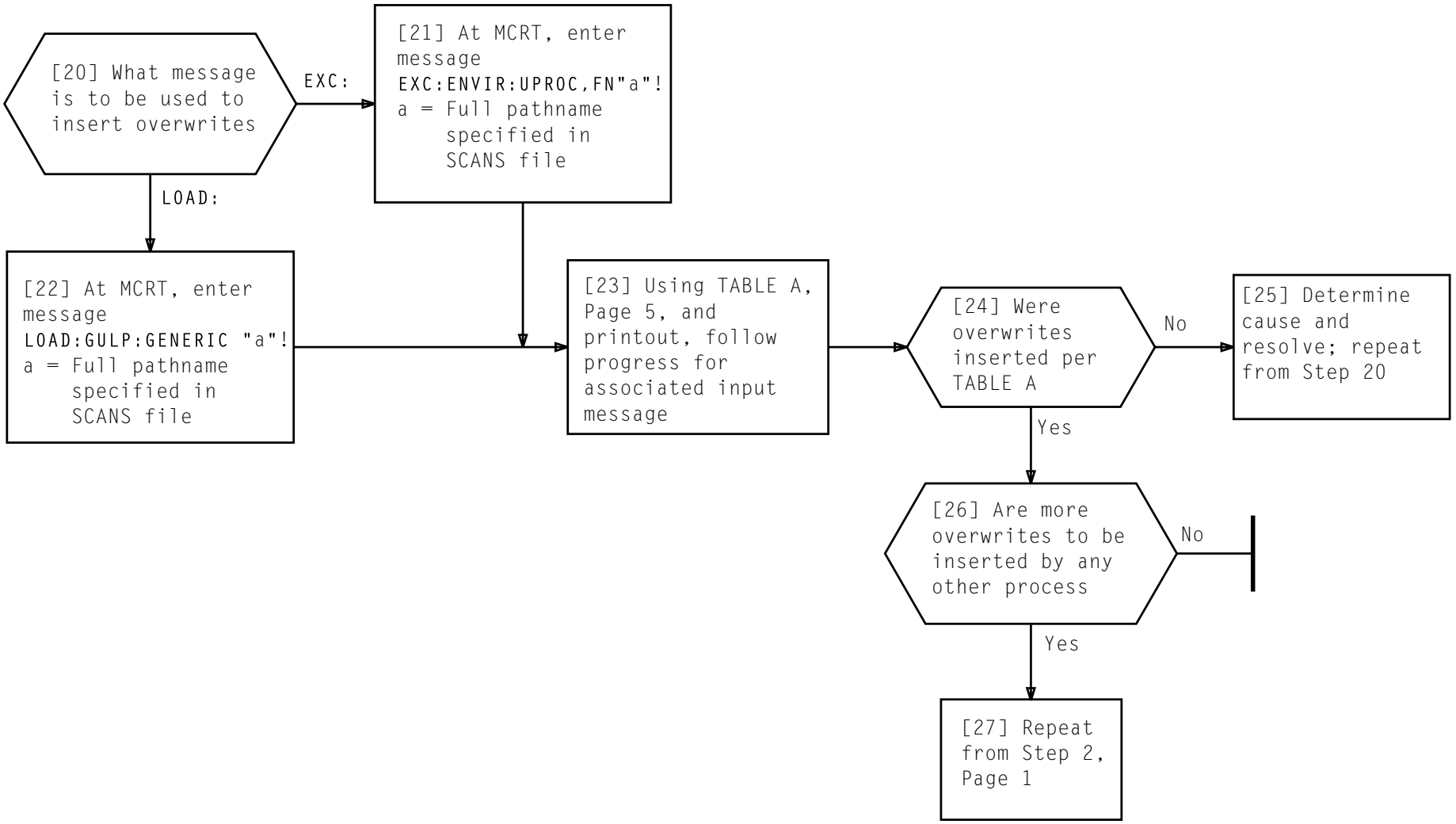
[17] Wait for **COMMUNICATION SECTION COMPLETED**
message to be received

[18] Enter message
DUMP:FILE:ALL,FN"/etc/bwm/aaaxx-xxxx/**SCANS"!**
(aaaxx-xxxx = BWM number being applied)

[19] Using printout, determine if overwrites are
to be inserted by **LOAD:** or **EXC:** message



INSERT CRITICAL OVERWRITES INTO UPDATE FILE



INSERT CRITICAL OVERWRITES INTO UPDATE FILE

TABLE A

EXC: INPUT MESSAGE OUTPUT MESSAGE	LOAD: INPUT MESSAGE OUTPUT MESSAGE
IN:OSOW:START! READY FOR OVERWRITE DATA IN:OSOW:a b,DATA c! IN:OSOW COMPLETED MM ADR FS ADR ID OLD DATA NEW DATA vvvvvvvv wwwwwwww xx yyyyyyyy zzzzzzzz READY FOR OVERWRITE DATA • • • IN:OSOW:UPD[,HASHSUM d]! EXC ENV UPROC COMPLETED OVERWRITE DATA WRITTEN TO UPDATE FILE	BUILDING OW BUFFER — OW BLOCK 1 BUILDING OW BUFFER — OW BLOCK 2 • • • DATABASE UPDATED WITH OVERWRITES

a = MMADR or FSADR
b = Main memory or disk address for data being changed
c = Data being changed
d = Hashsum value
v = Main memory address
w = Translated file system address
x = ID
y = Old data
z = New data

INSERT CRITICAL OVERWRITES INTO UPDATE FILE

[28] Collect and list overwrite(s) to be inserted into 4E19 generic or ODA loaded in update file

[29] At MCRT, enter message IN:OSOW:START! [NOTE 2]

READY FOR OVERWRITE DATA message received

AND

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[30] At MCRT, insert overwrite(s) into buffer area using input message in TABLE B (main memory overwrite) or TABLE C (FS only overwrite) [NOTE 3]

TABLE B

MESSAGE NUMBER	INPUT MESSAGE
1	IN:OSOW:MMADR a,DATA b[,OLDDATA c]! a = Main memory address (octal) for data to be changed b = Data (octal) to be changed, or if a list, then enclose with parentheses and separate with commas c = Expected value in octal of old data; if b is a list, then c must be a list of same format and size

TABLE C

MESSAGE NUMBER	INPUT MESSAGE
1	IN:OSOW:FSADR a,DATA b[,OLDDATA c]! a = Disk address (octal) for data to be changed b = Data (octal) to be changed, or if a list, then enclose with parentheses and separate with commas c = Expected value in octal of old data; if b is a list, then c must be a list of same format and size

NOTES

2. Overwrite process will time out after 20 minutes of inactivity
3. OLDDATA is not required to be inputted, but if information is available, it should be entered to ensure that right data is being changed

INSERT CRITICAL OVERWRITES INTO UPDATE FILE

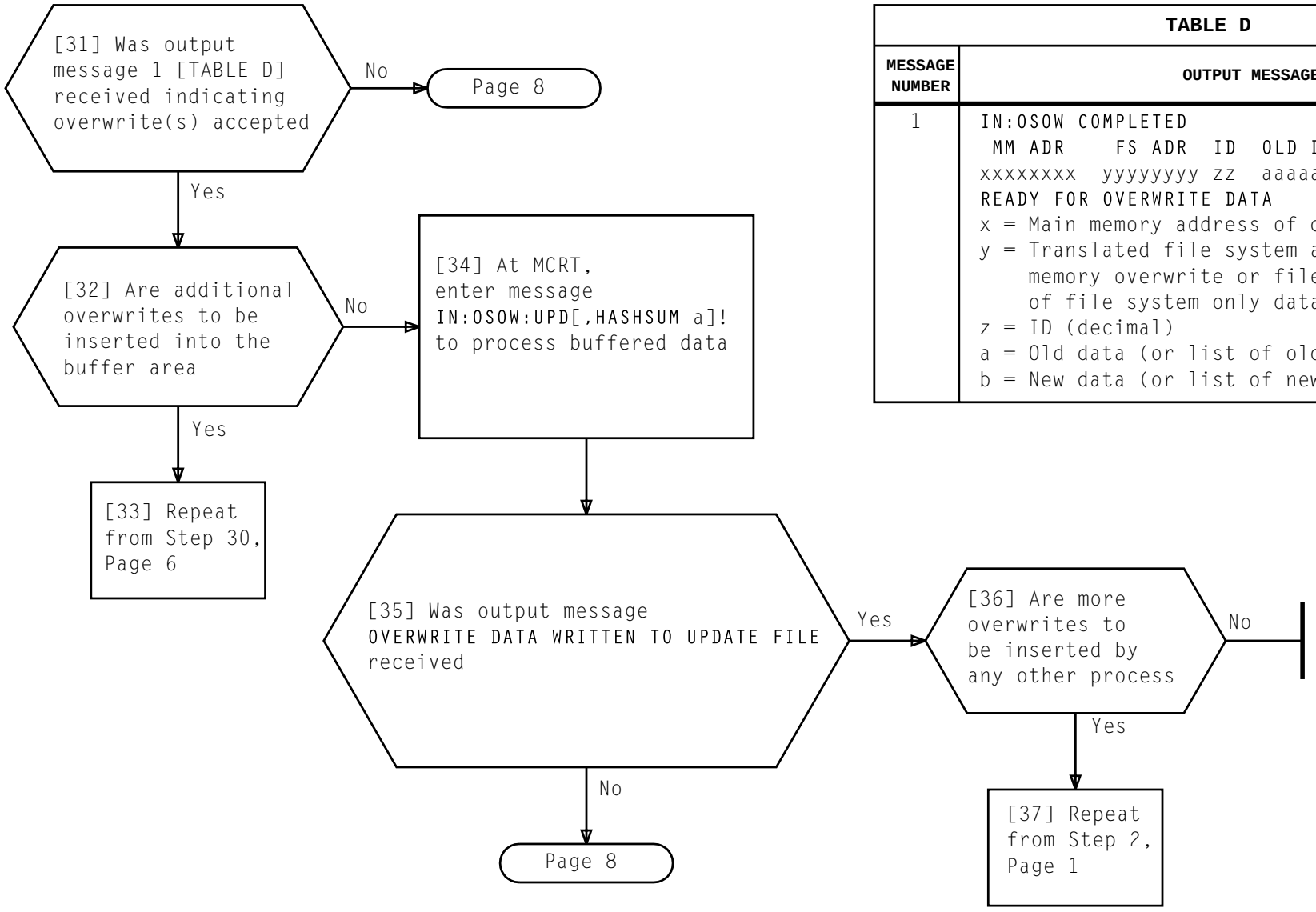
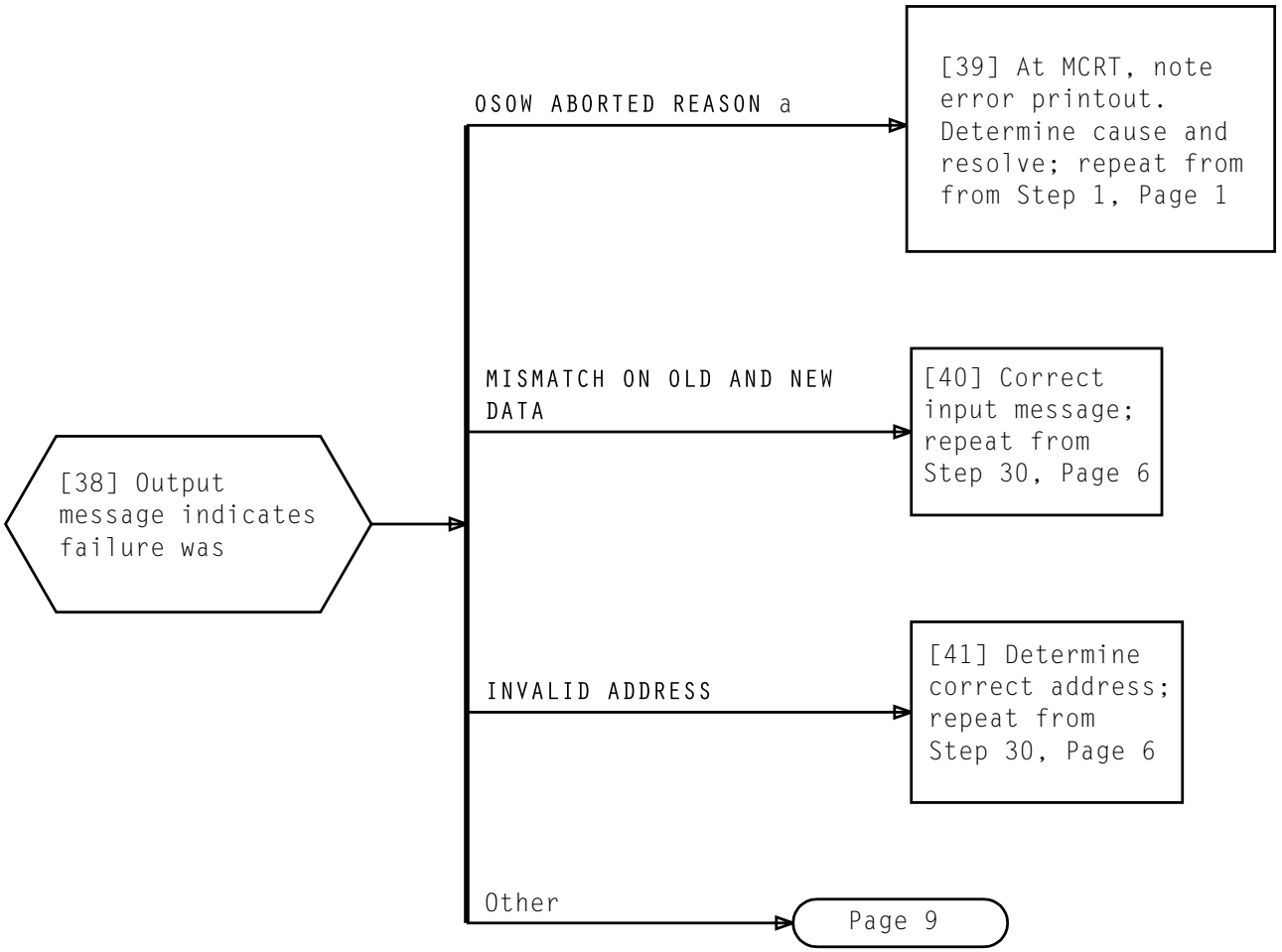


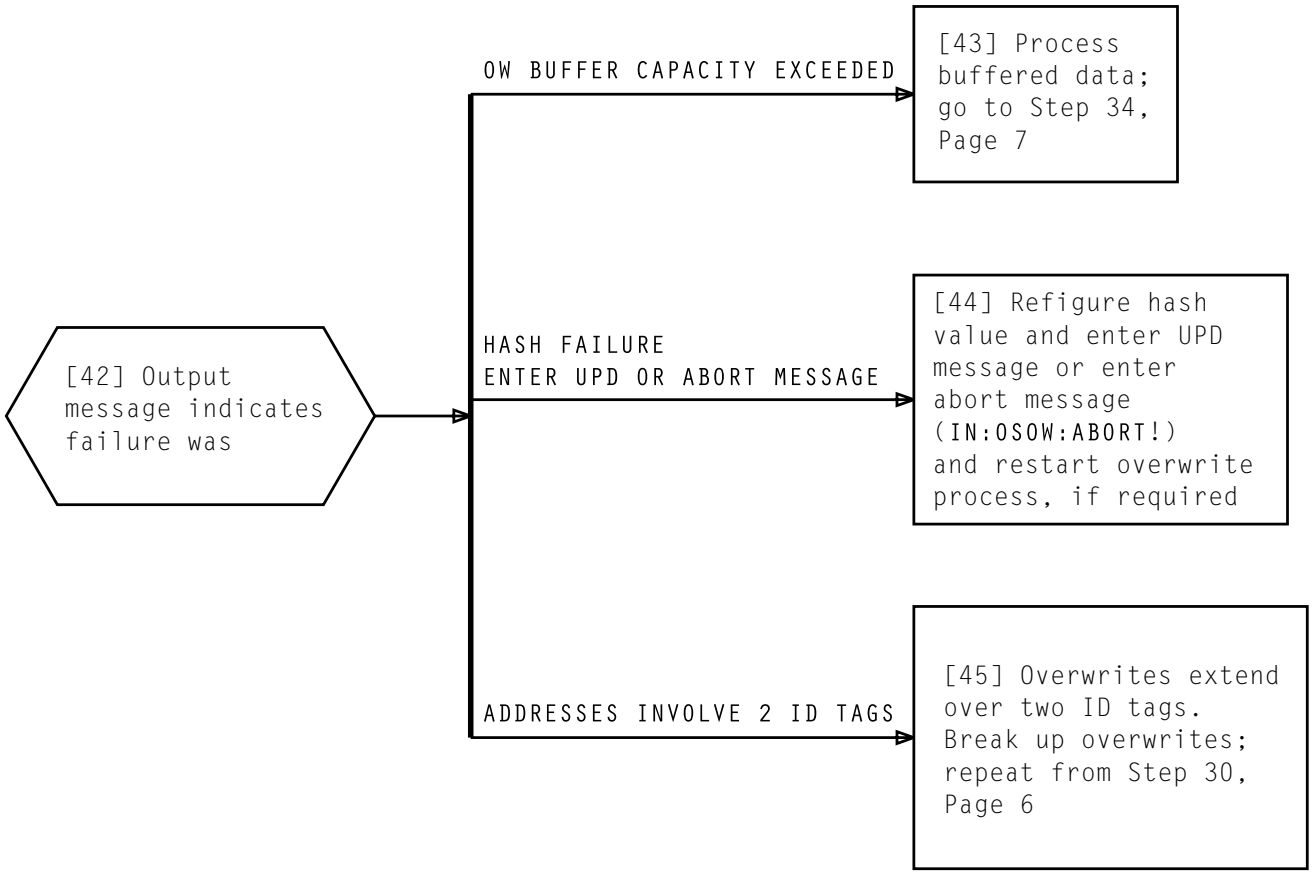
TABLE D

MESSAGE NUMBER	OUTPUT MESSAGE
1	IN:OSOW COMPLETED MM ADR FS ADR ID OLD DATA NEW DATA xxxxxxxx yyyyyyyy zz aaaaaaaa bbbbbbbb READY FOR OVERWRITE DATA x = Main memory address of data to be changed y = Translated file system address for main memory overwrite or file system address of file system only data being changed z = ID (decimal) a = Old data (or list of old data) b = New data (or list of new data)

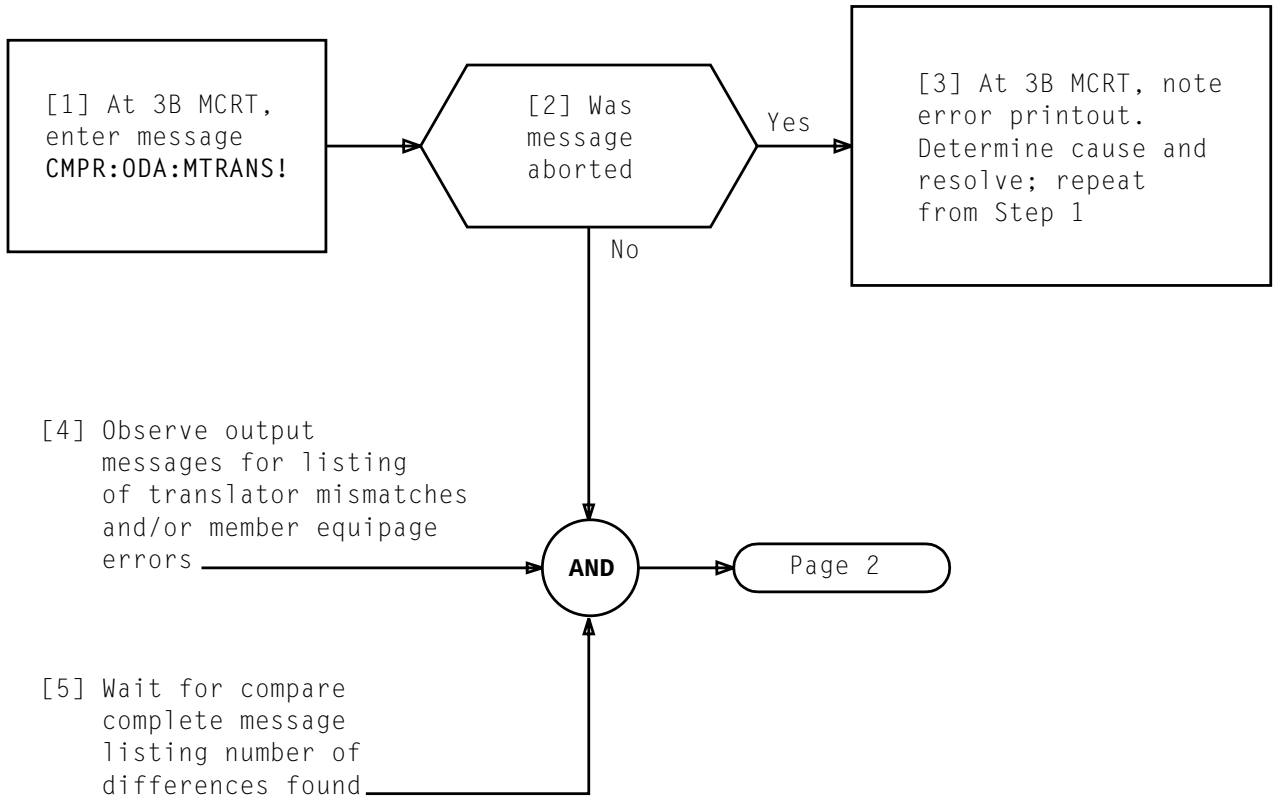
INSERT CRITICAL OVERWRITES INTO UPDATE FILE



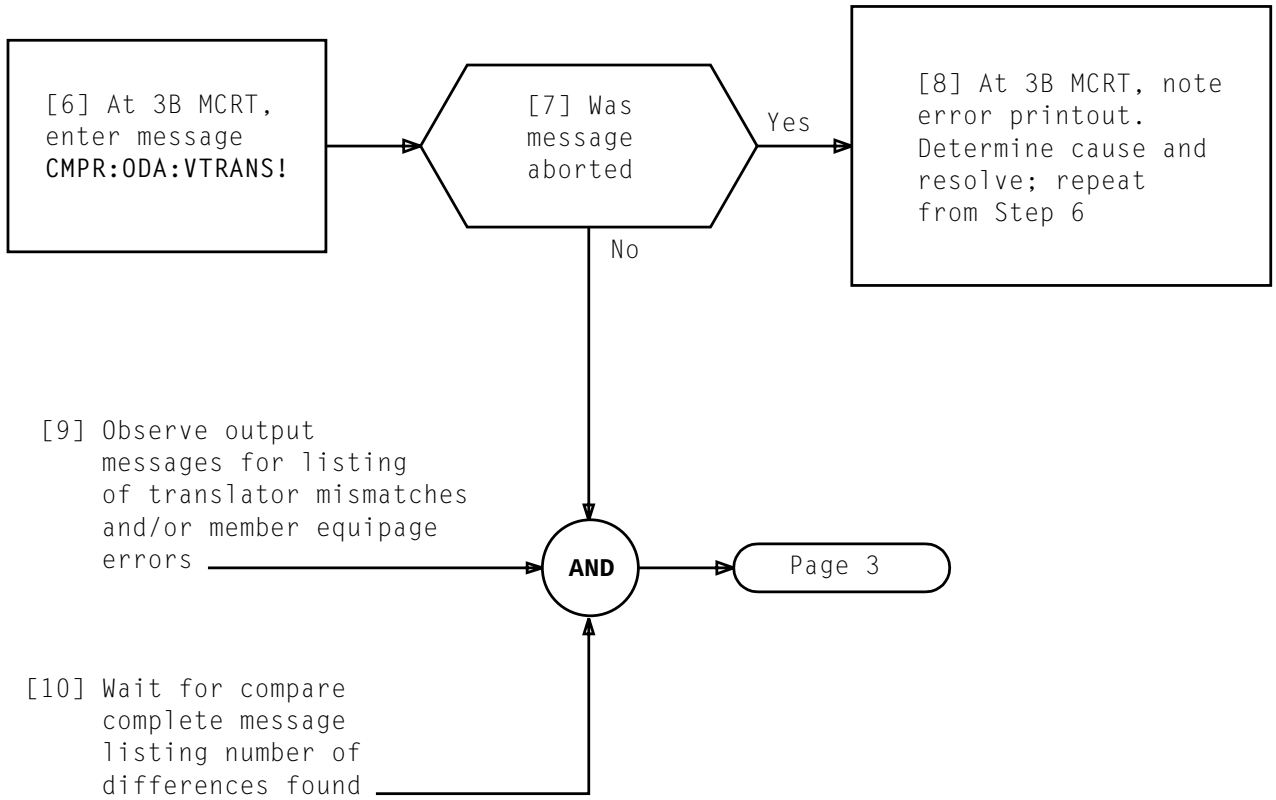
INSERT CRITICAL OVERWRITES INTO UPDATE FILE



INSERT CRITICAL OVERWRITES INTO UPDATE FILE



RUN CROSS TRANSLATIONS COMPARE PROGRAM



RUN CROSS TRANSLATIONS COMPARE PROGRAM

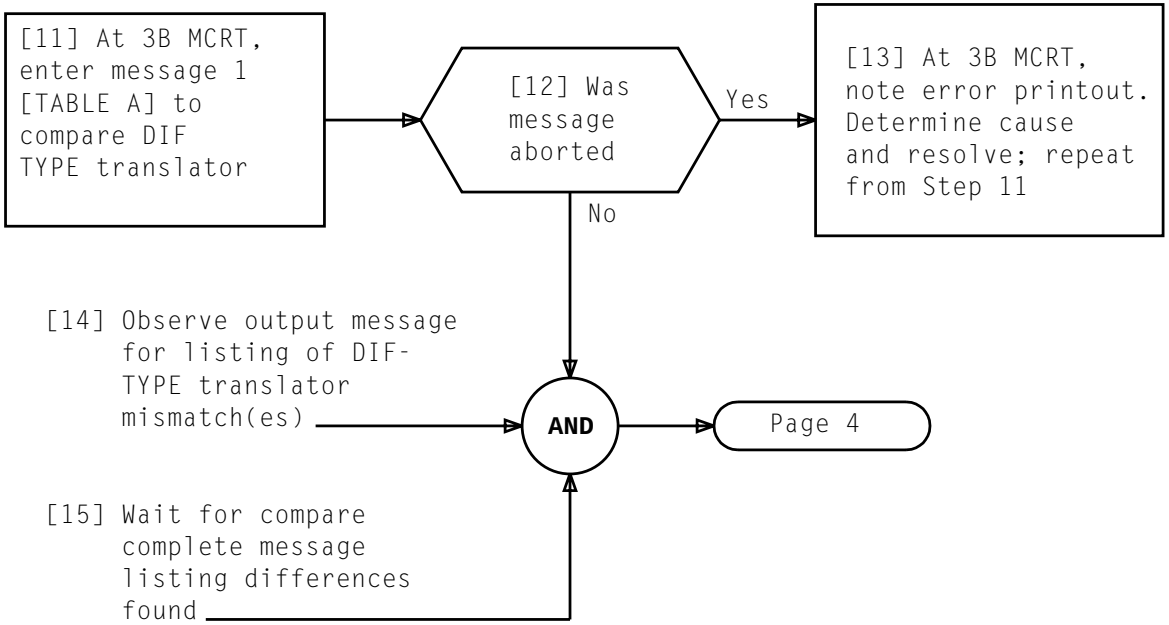


TABLE A	
MESSAGE NUMBER	**INPUT MESSAGE**
1	CMPR:ODA:SPCL,ACTADR a,OOSADR 6745102,L 32! a = 7465021 (for generic retrofit) or 6745102 (for ODA update)

RUN CROSS TRANSLATIONS COMPARE PROGRAM

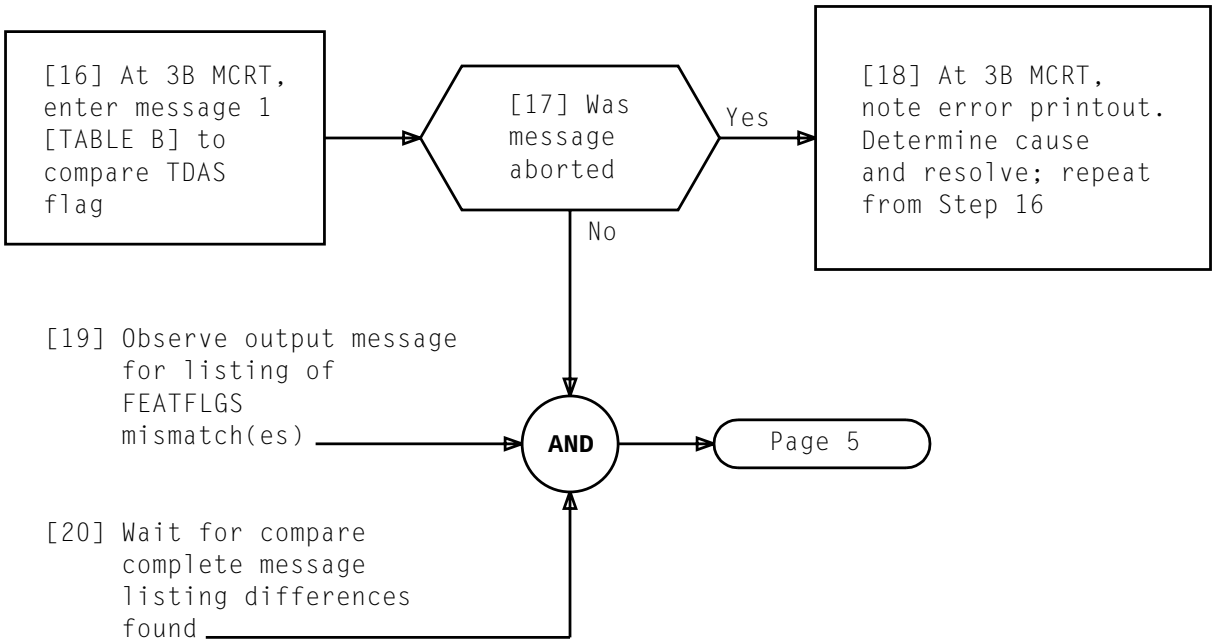


TABLE B

MESSAGE NUMBER	INPUT MESSAGE
1	CMPR:ODA:SPCL,ACTADR a,OOSADR 6660000,MASK 2! a = 7400000 (for generic retrofit) or 6660000 (for ODA update)

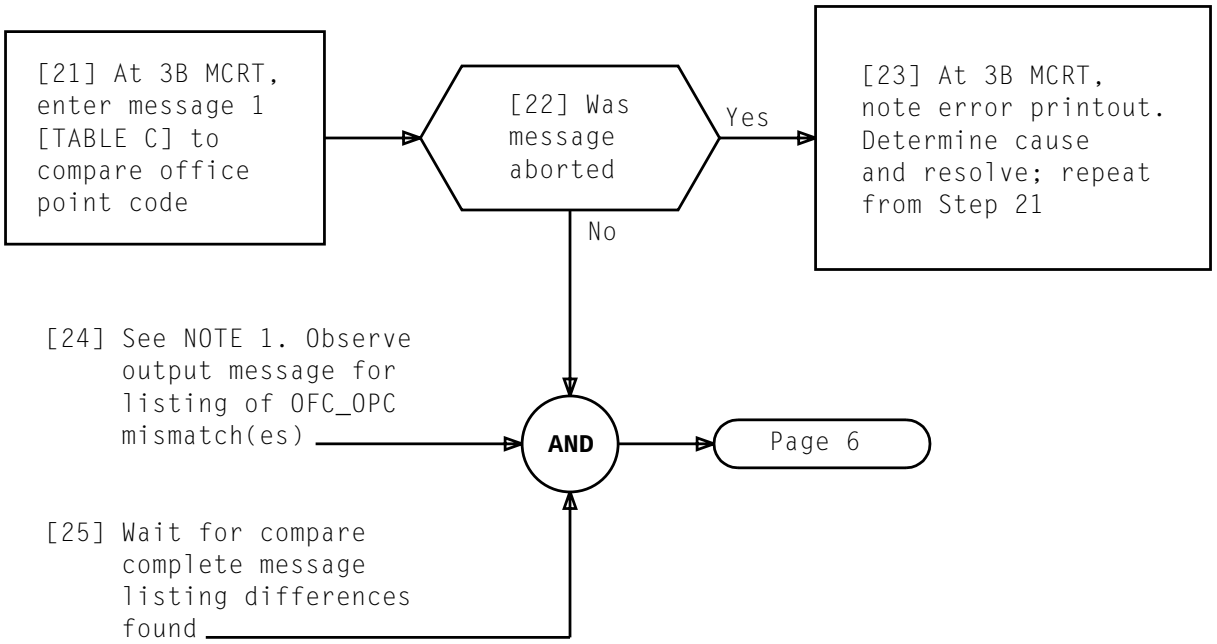


TABLE C	
MESSAGE NUMBER	**INPUT MESSAGE**
1	CMPR:ODA:SPCL,ACTADR a,OOSADR 6673137! a = 7413057 (for generic retrofit) or 6673137 (for ODA update)

NOTE 1
Expect mismatch if point code is being changed

RUN CROSS TRANSLATIONS COMPARE PROGRAM

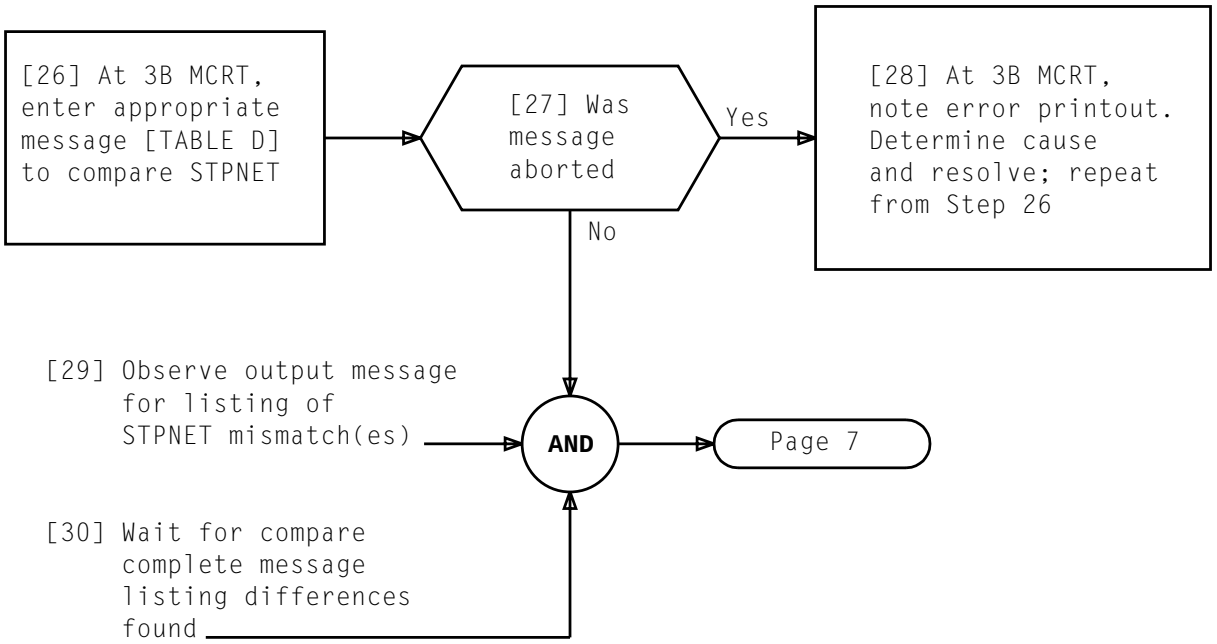


TABLE D	
MESSAGE NUMBER	**INPUT MESSAGE**
1	CMPR:ODA:SPCL,ACTADR 7465425,OOSADR 6745506,MASK 37777! (for generic retrofit)
2	CMPR:ODA:SPCL,ACTADR 6745506,OOSADR 6745506! (for oda update)

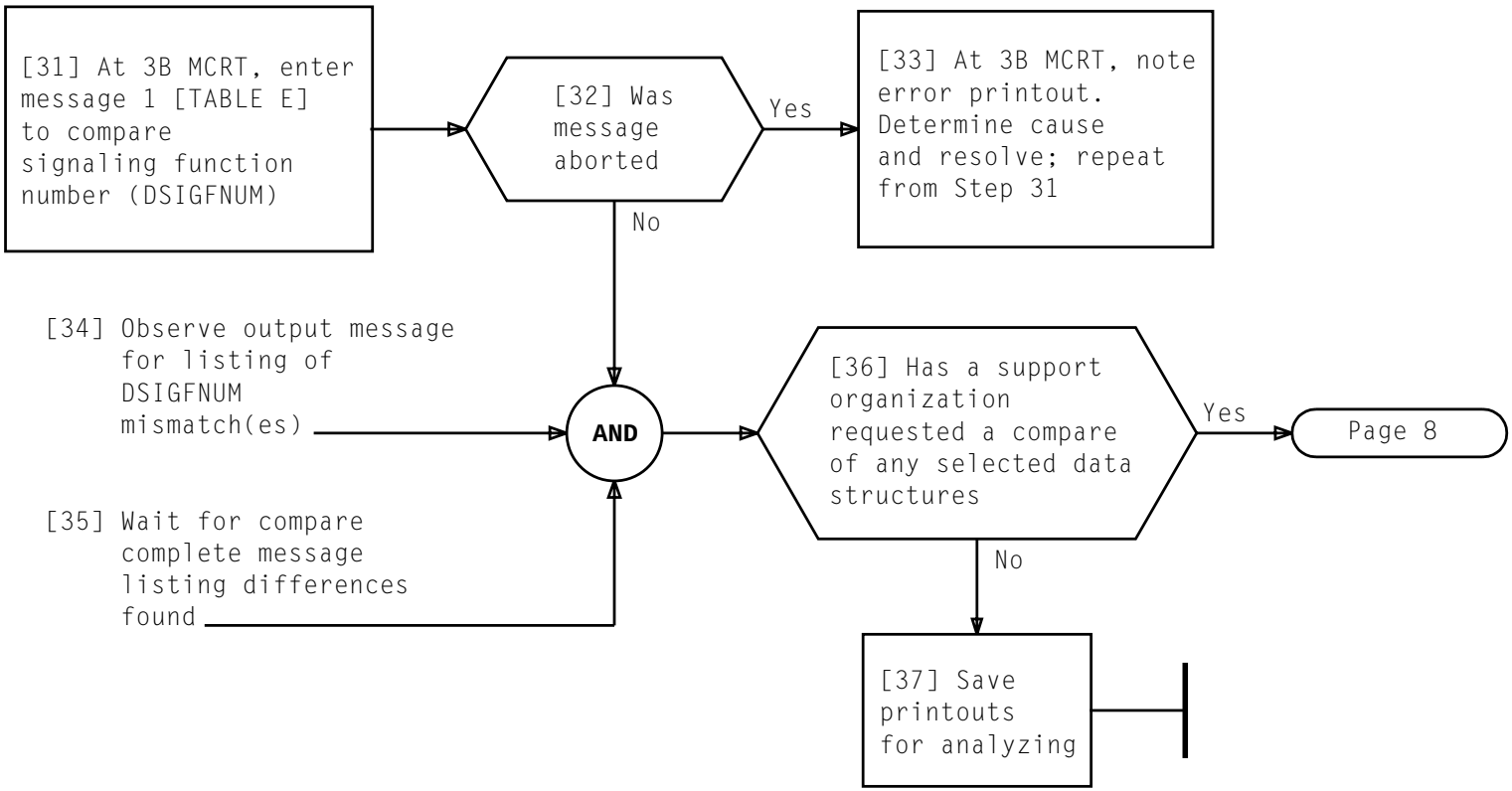


TABLE E	
MESSAGE NUMBER	**INPUT MESSAGE**
1	CMPR:ODA:SPCL,ACTADR a,OOSADR 6673136! a = 7413056 (for generic retrofit) or 6673136 (for ODA update)

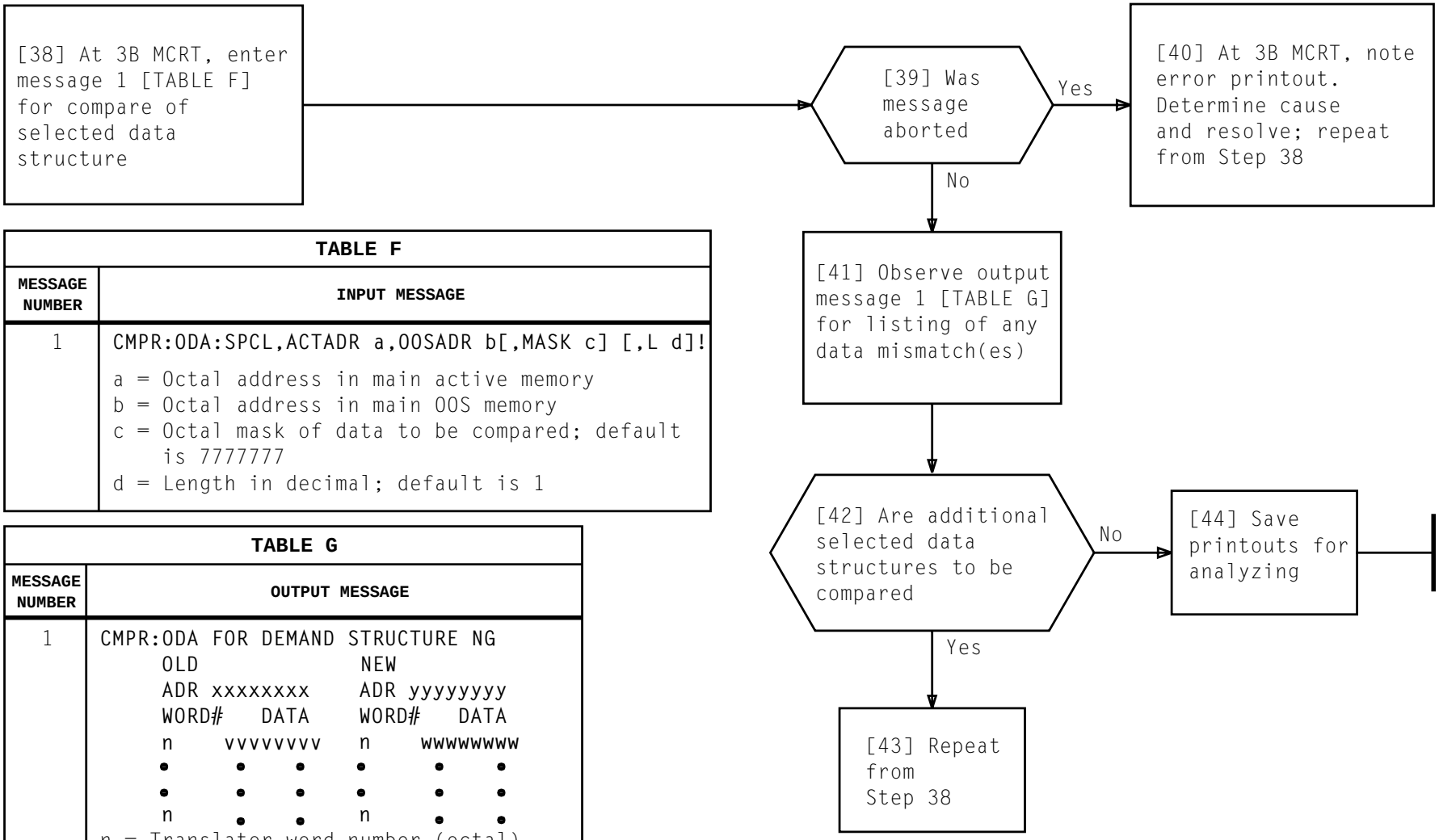


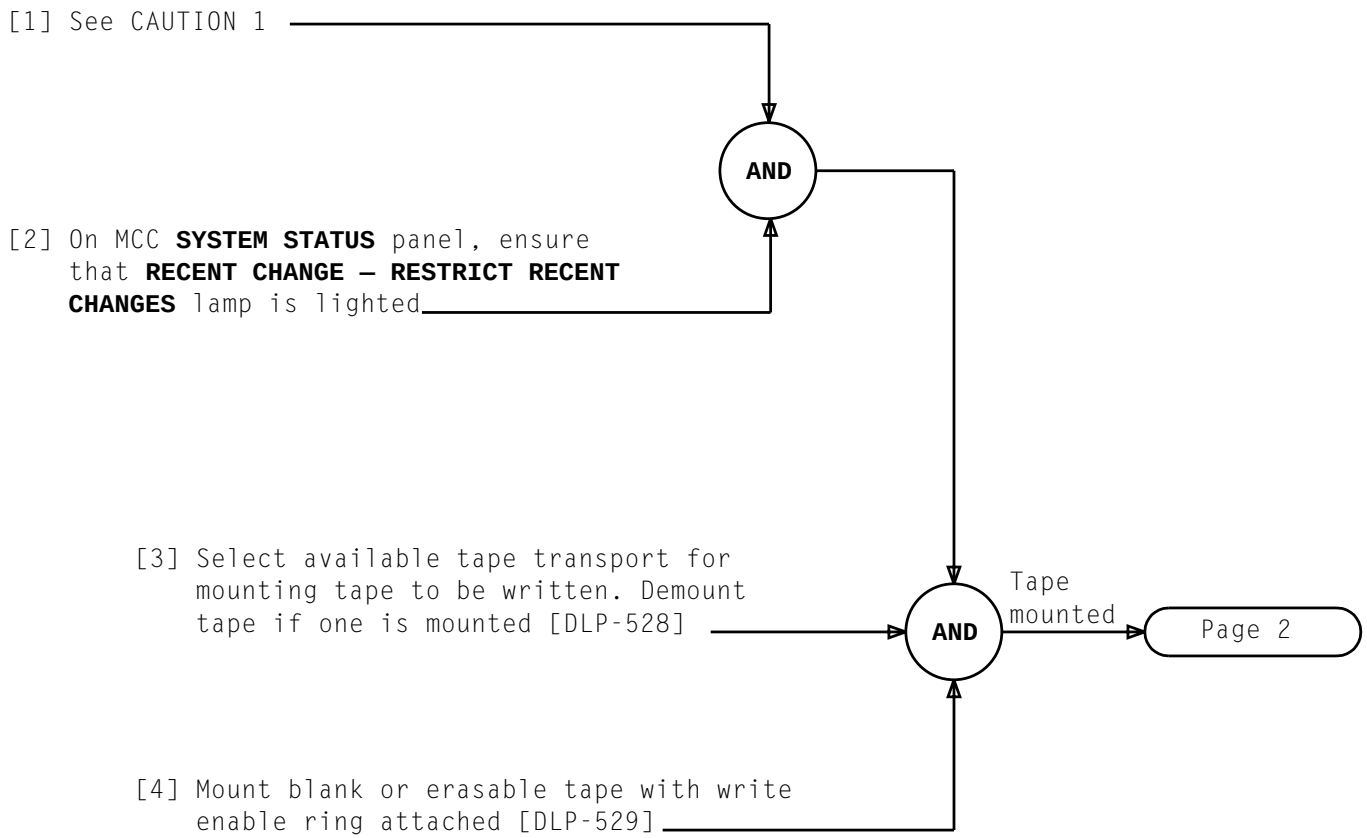
TABLE F

MESSAGE NUMBER	INPUT MESSAGE
1	CMPR:ODA:SPCL,ACTADR a,OOSADR b[,MASK c] [,L d]! a = Octal address in main active memory b = Octal address in main OOS memory c = Octal mask of data to be compared; default is 7777777 d = Length in decimal; default is 1

TABLE G

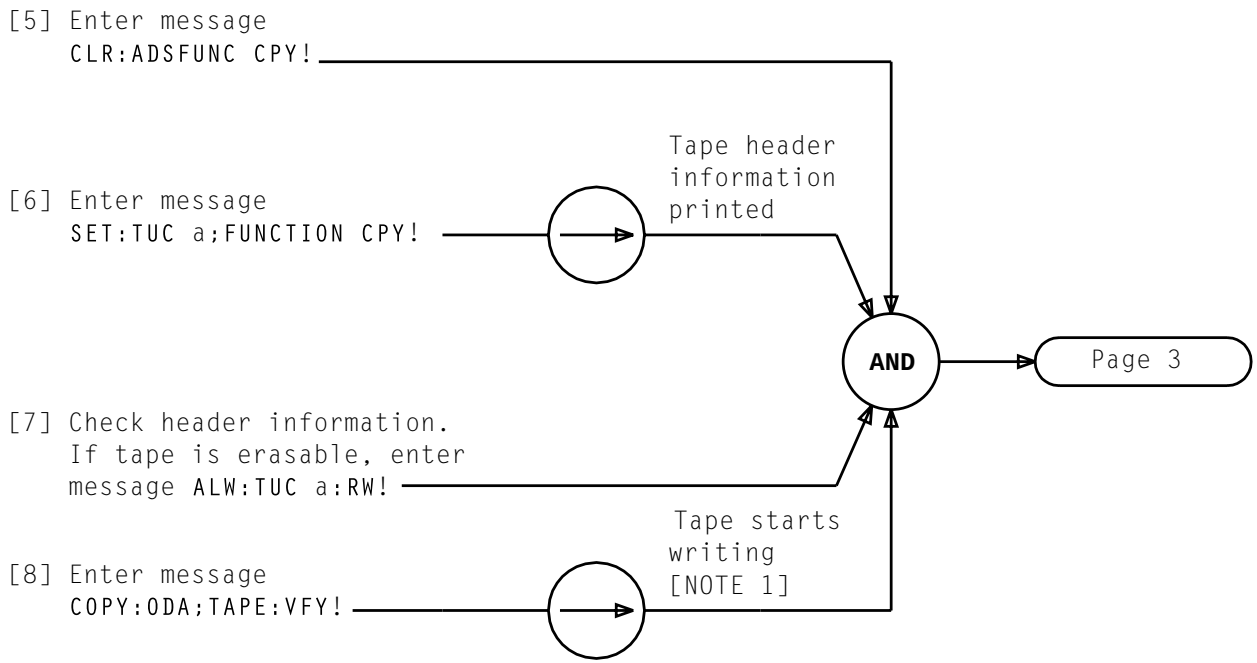
MESSAGE NUMBER	OUTPUT MESSAGE
1	CMPR:ODA FOR DEMAND STRUCTURE NG OLD NEW ADR xxxxxxxx ADR yyyyyyyy WORD# DATA WORD# DATA n vvvvvvvv n wwwwwwww • • • • • • • • • • • • n • • n • • n = Translator word number (octal) v = Data being compared in old ODA w = Data being compared in new ODA x = Address being compared in old ODA y = Address being compared in new ODA

RUN CROSS TRANSLATIONS COMPARE PROGRAM



WRITE BACKUP ODA TAPE (800 BPI)

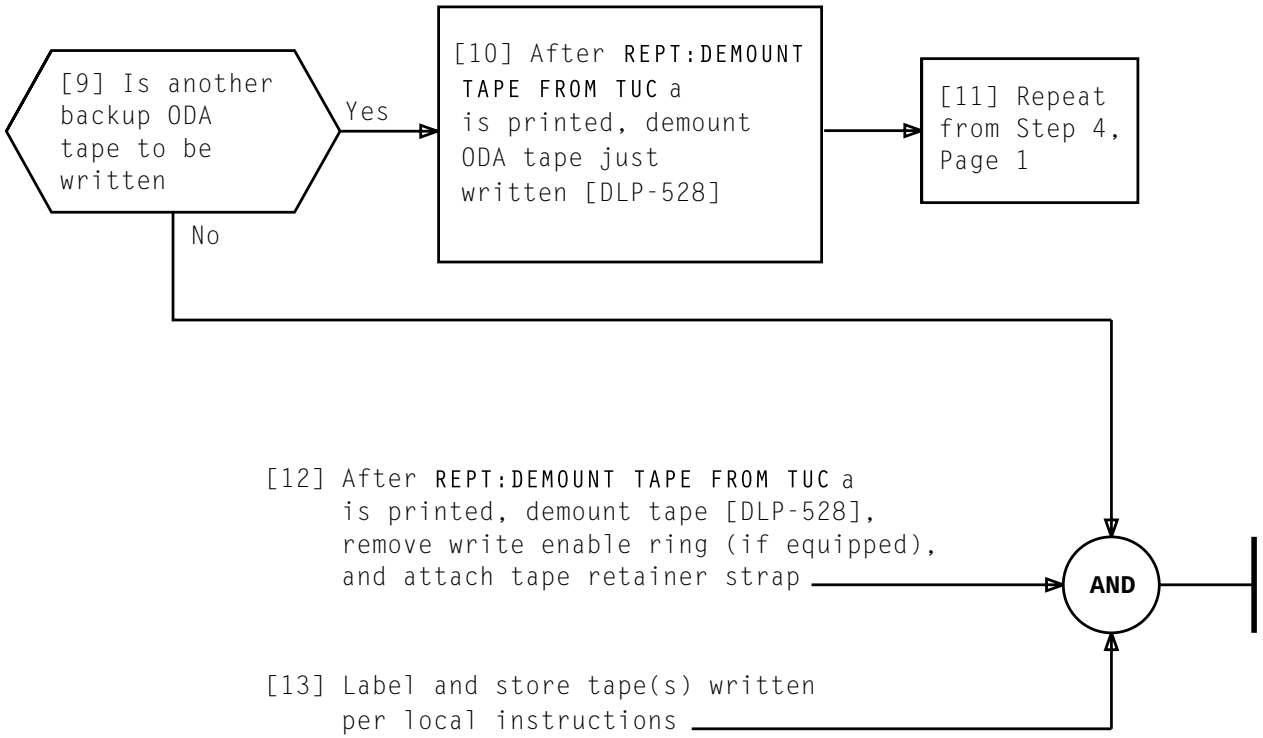
CAUTION 1
Certain system audits are inhibited during tape writing; therefore, tape writing should be done during light traffic periods



NOTE 1

After ODA tape is written, COPY:ODA;TAPE COMPL date and time are printed. Tape will then rewind and be verified. After verification has been completed, COPY:VFY;TAPE COMPL is printed followed by REPT:DEMOUNT TAPE FROM TUC a

WRITE BACKUP ODA TAPE (800 BPI)



WRITE BACKUP ODA TAPE (800 BPI)

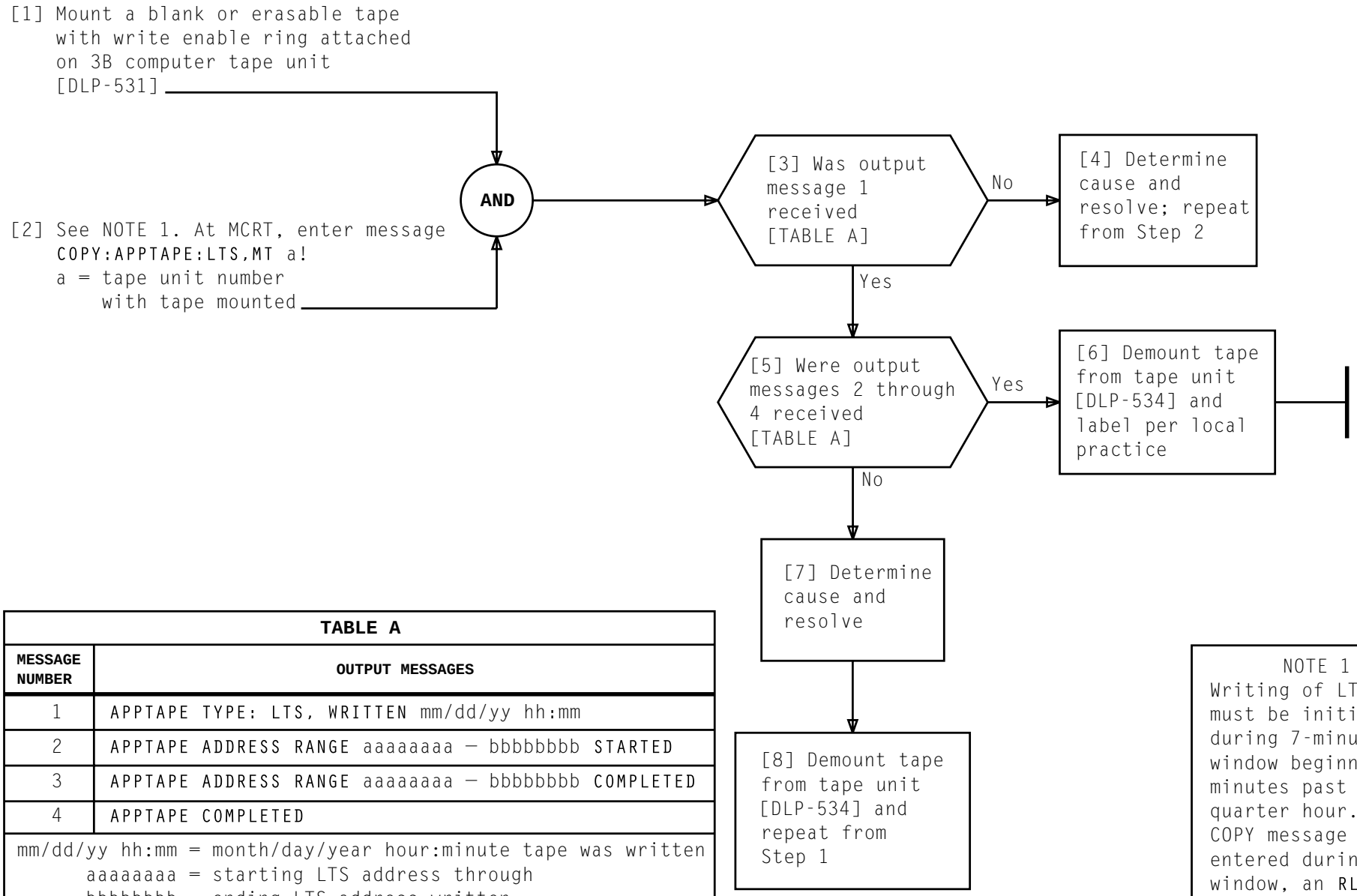


TABLE A

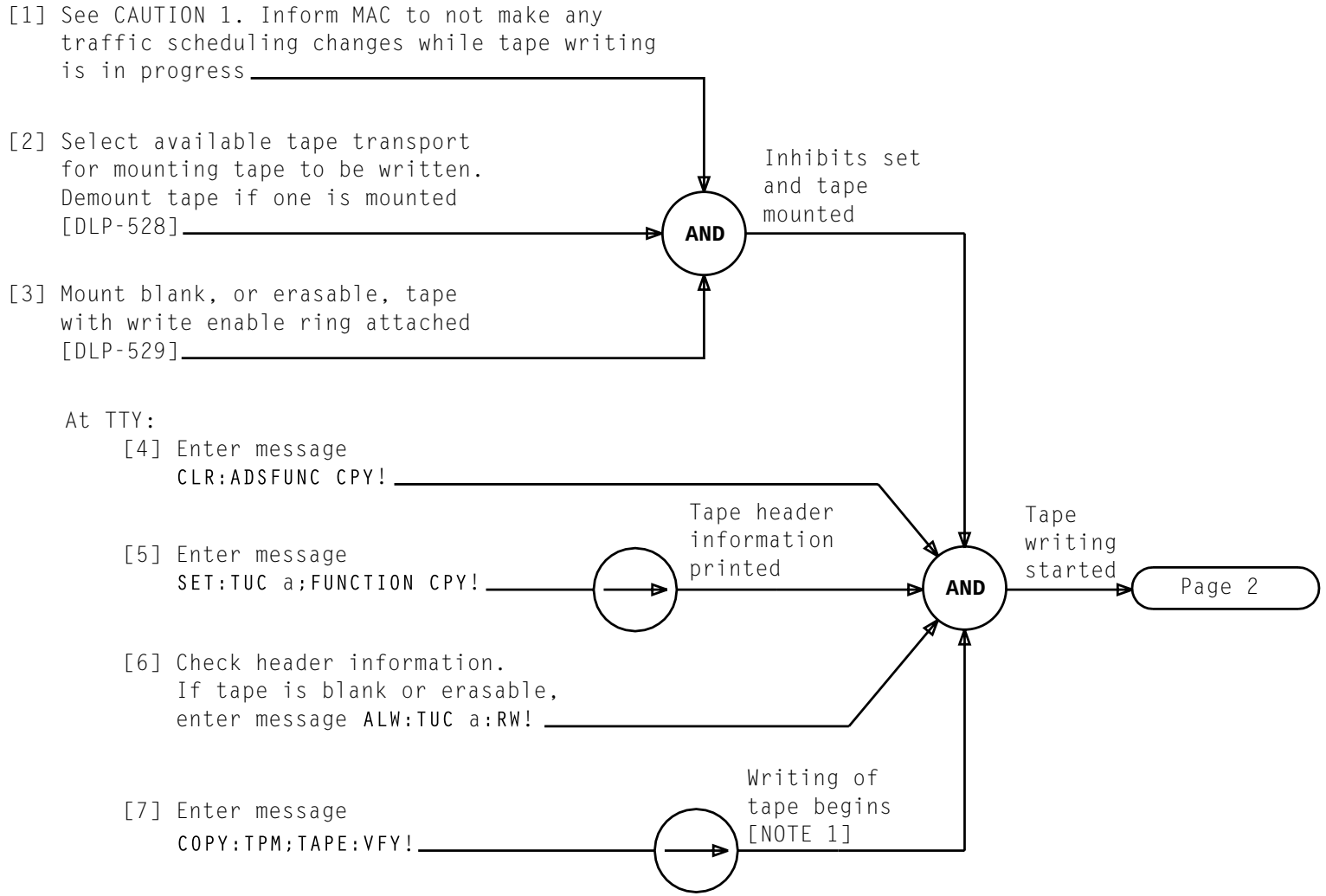
MESSAGE NUMBER	OUTPUT MESSAGES
1	APPTAPE TYPE: LTS, WRITTEN mm/dd/yy hh:mm
2	APPTAPE ADDRESS RANGE aaaaaaaa – bbbbbbbb STARTED
3	APPTAPE ADDRESS RANGE aaaaaaaa – bbbbbbbb COMPLETED
4	APPTAPE COMPLETED

mm/dd/yy hh:mm = month/day/year hour:minute tape was written
aaaaaaaa = starting LTS address through
bbbbbbbb = ending LTS address written

NOTE 1
Writing of LTS tape must be initiated during 7-minute window beginning 4 minutes past any quarter hour. If COPY message is not entered during this window, an RL will be received

WRITE BACKUP LONG-TERM STORAGE (LTS) TAPE

WRITE BACKUP TRAFFIC AND PLANT MEASUREMENT (TPM) TAPE



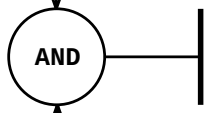
NOTE 1

After TPM tape is written, COPY:TPM;TAPE COMPL date and time are printed. Tape will then rewind and be verified. After verification has been completed, COPY:VFY;TAPE COMPL is printed followed by REPT: DEMOUNT TAPE FROM TUC a

CAUTION 1

Certain system audits are inhibited during tape writing; therefore, tape *writing should be done during light traffic periods*

[8] After tape has been written and verified and **REPT:DEMOUNT TAPE FROM TUC** a is printed, demount tape just written [DLP-528] and remove write enable ring



[9] Label and store tape per local instructions

WRITE BACKUP TRAFFIC AND PLANT MEASUREMENT (TPM) TAPE

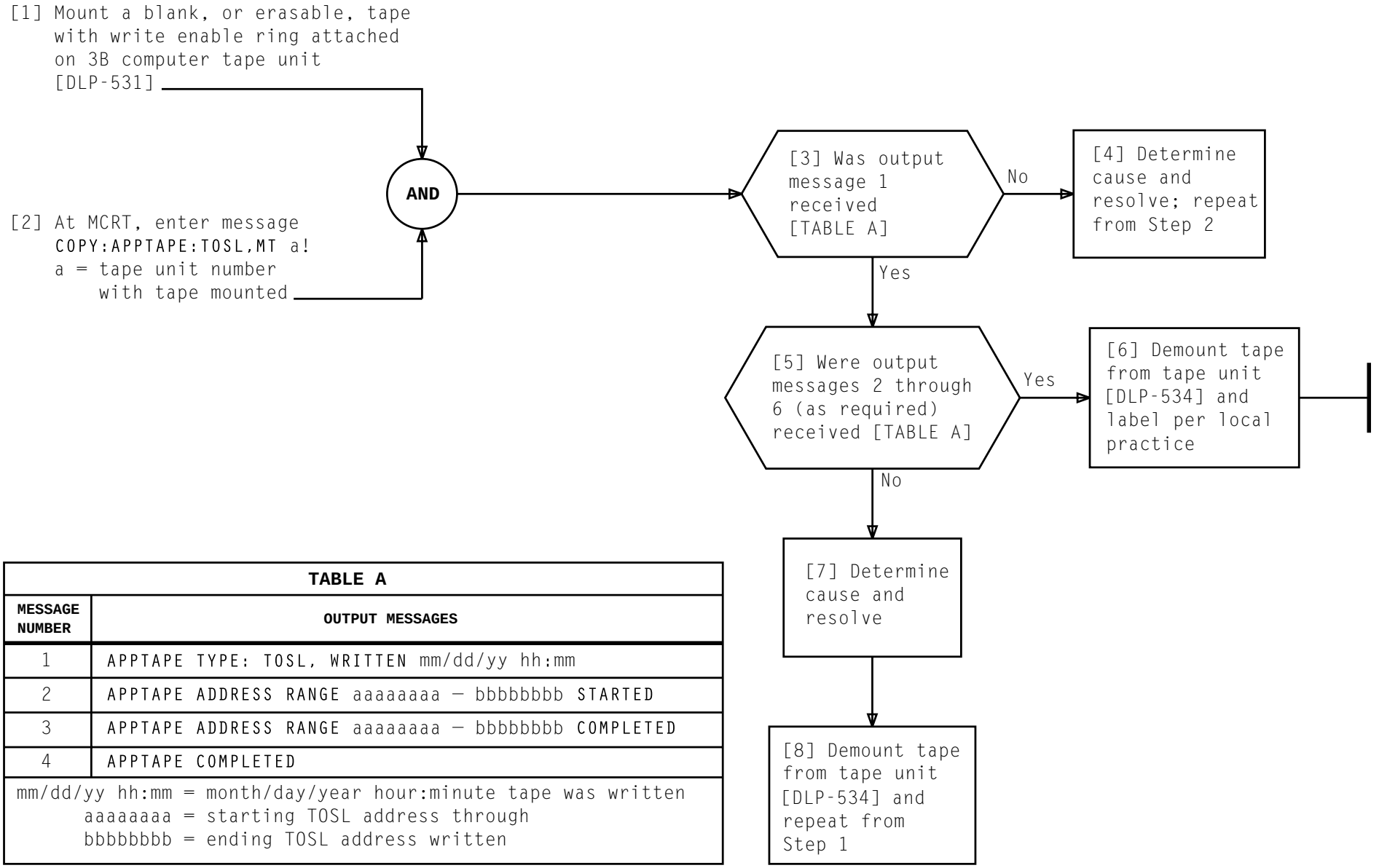


TABLE A

MESSAGE NUMBER	OUTPUT MESSAGES
1	APPTAPE TYPE: TOSL, WRITTEN mm/dd/yy hh:mm
2	APPTAPE ADDRESS RANGE aaaaaaaa – bbbbbbbb STARTED
3	APPTAPE ADDRESS RANGE aaaaaaaa – bbbbbbbb COMPLETED
4	APPTAPE COMPLETED

mm/dd/yy hh:mm = month/day/year hour:minute tape was written
aaaaaaaa = starting TOSL address through
bbbbbbbb = ending TOSL address written

WRITE BACKUP TRUNK OUT-OF-SERVICE LIST (TOSL) TAPE

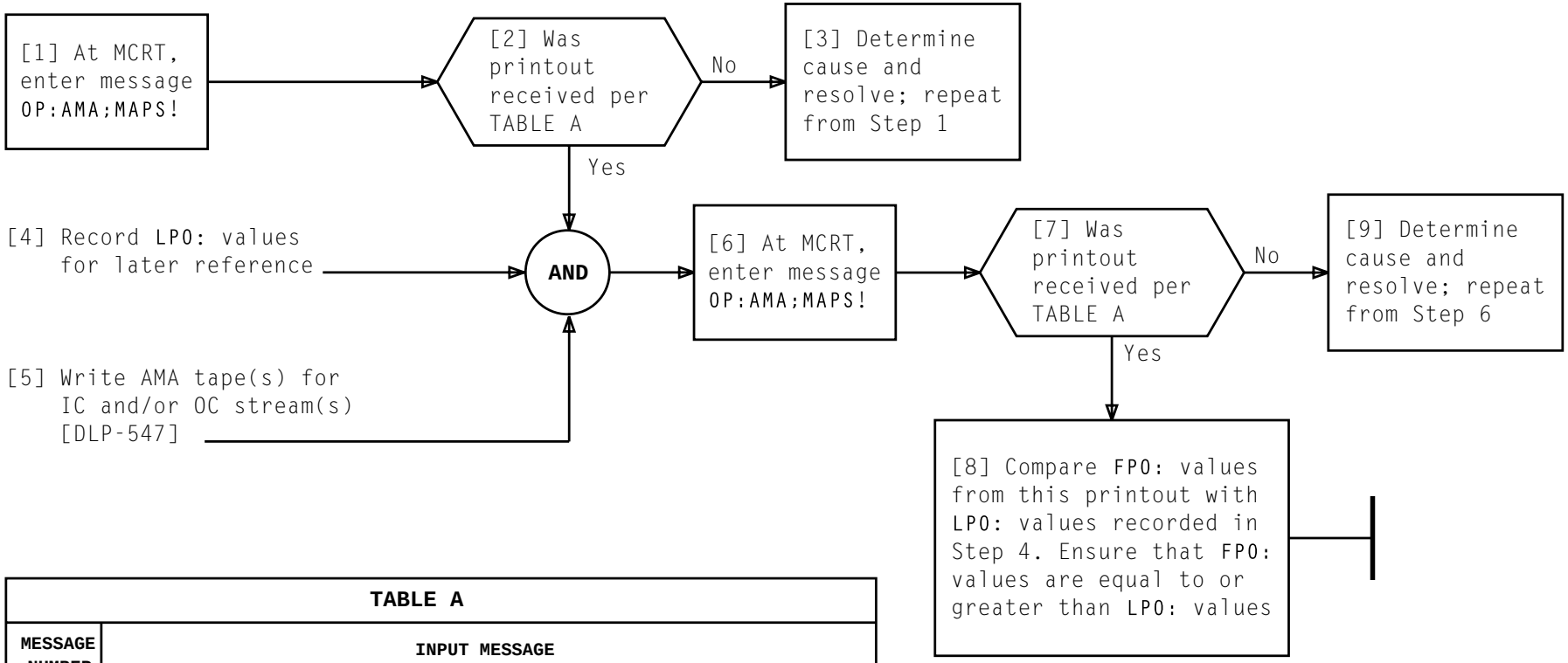


TABLE A

MESSAGE NUMBER	INPUT MESSAGE
1	REPT AMA DISK MAPS WRITE PARTITION a READ PARTITION a = Partition number AMA data being written
2	PARTITION b DISK MAP: FPO: c LPO: d FPS: _____ LPS: _____ FSO: _____ LSO: _____ FSS: _____ LSS: _____ FBO: _____ LBO: _____ FBS: _____ LBS: _____ b = Equipped partition number c = Read value to be recorded after AMA write d = Write value to be recorded before AMA write
3	Message 2 is repeated for each equipped partition

SAVE PRIMARY AMA DATA ON TAPE

[1] Mount AMA tape, supplied by RAO, with write ring attached on in-service 3B computer tape drive [DLP-531]

[2] At MCRT, enter message for appropriate stream
VER:AMATAPE;MT a:b!
a = Tape drive number
b = IC or OC

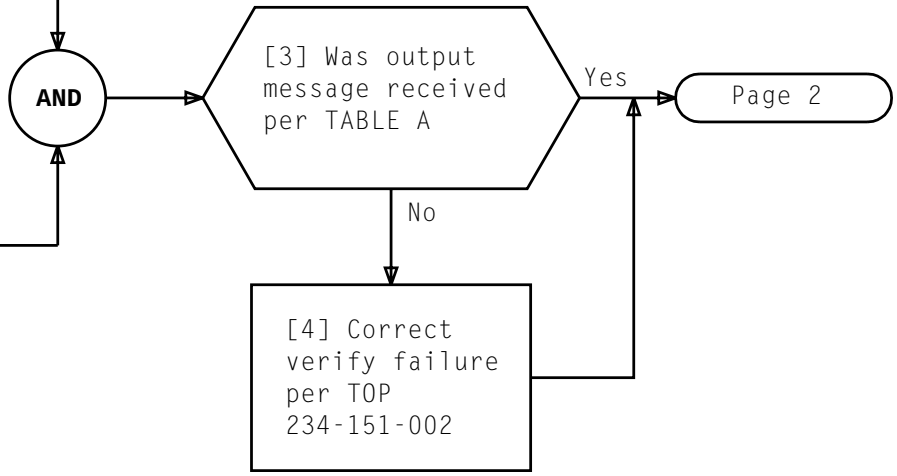
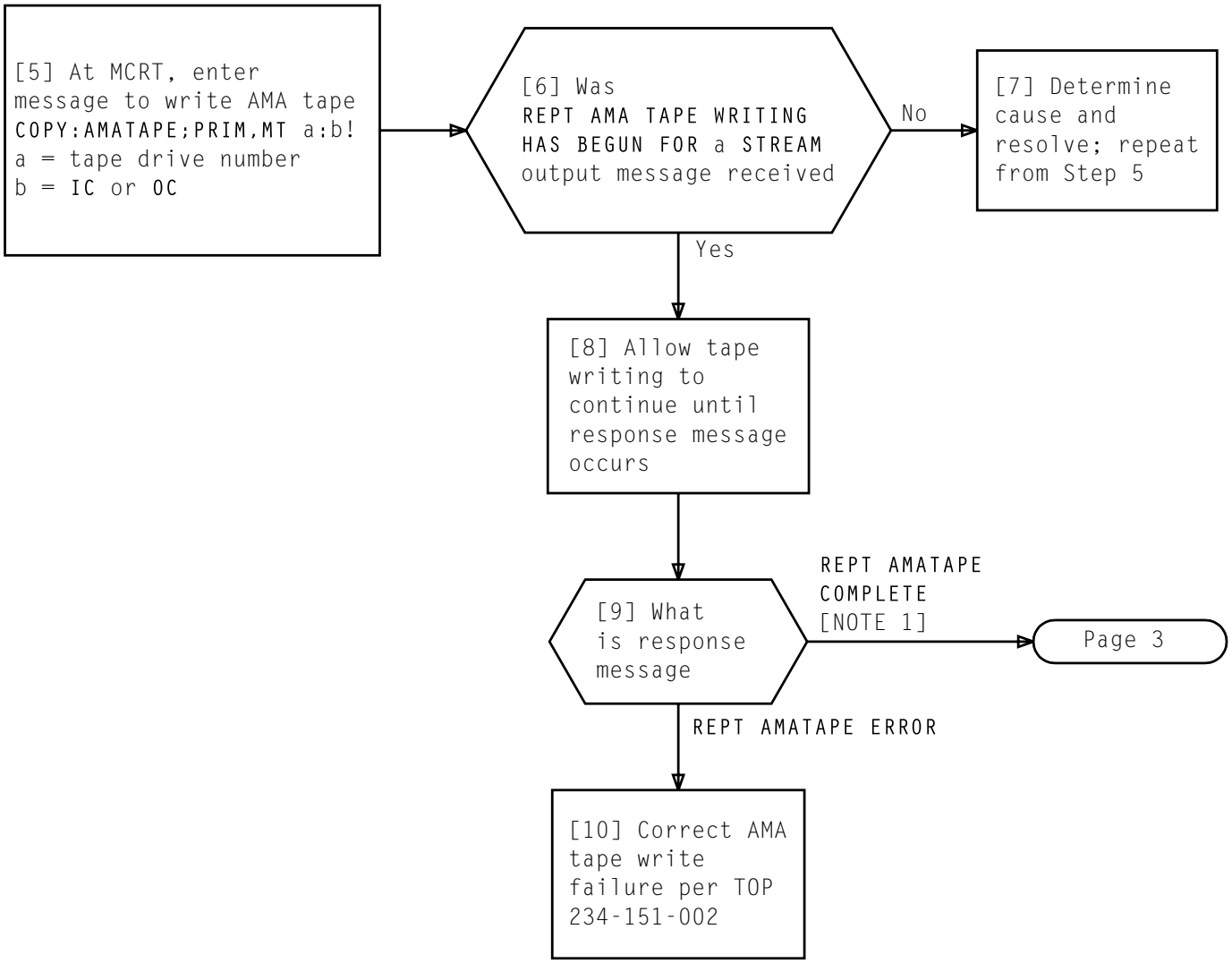


TABLE A

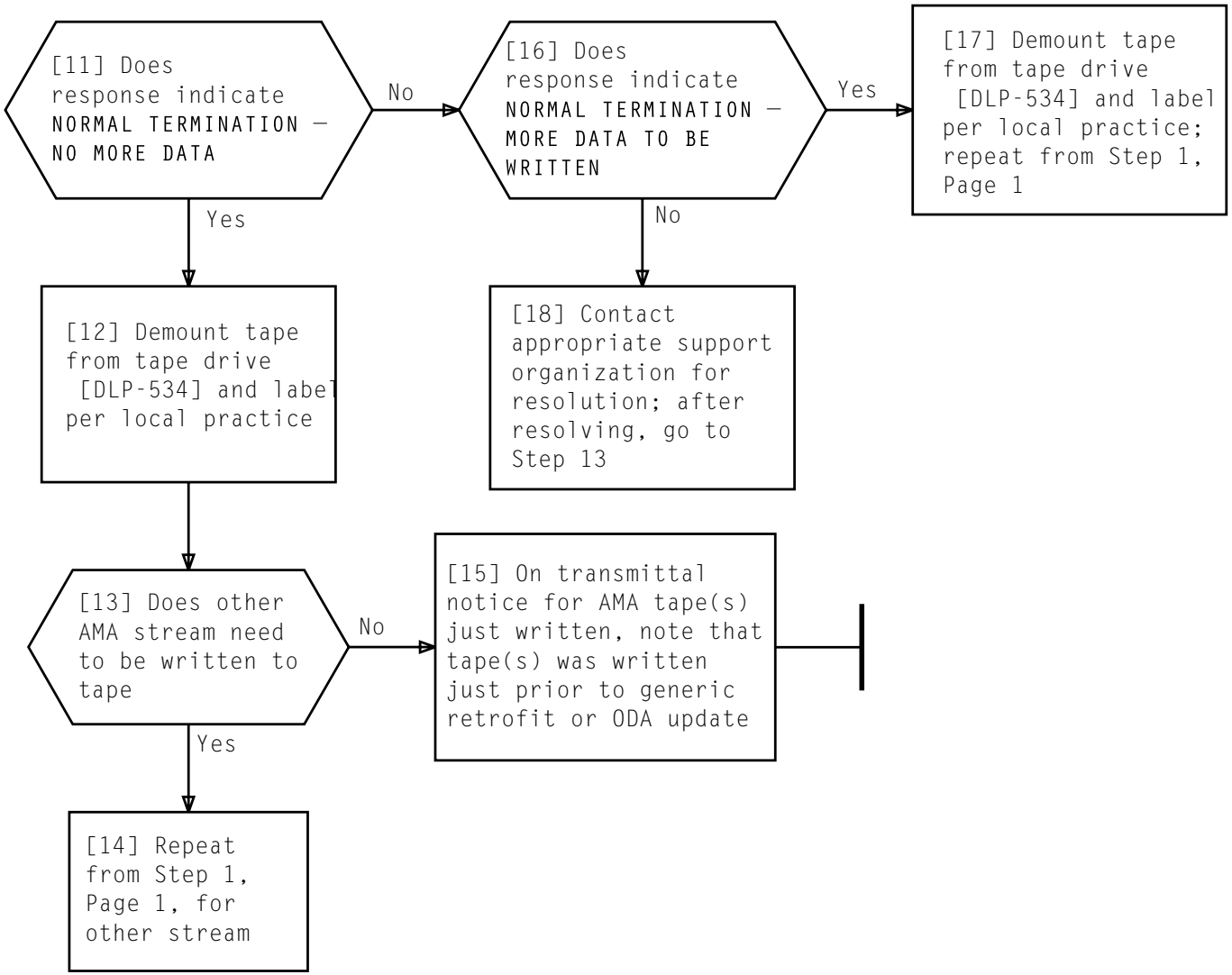
MESSAGE NUMBER	OUTPUT MESSAGE
1	REPT AMATAPE VERIFY FOR a STREAM VOL SER NUMBER b DATA SET ID c EXPIRATION DATE d-e TAPE DRIVE NUMBER f AMA TAPE CAN BE WRITTEN a = IC or OC b = Tape serial number c = Data set ID d = Year of expiration date e = Day of expiration (1 through 365) f = Tape drive number

WRITE AMA TAPE(S)



NOTE 1
Output message contains detailed data of AMA tape

WRITE AMA TAPE(S)



WRITE AMA TAPE(S)

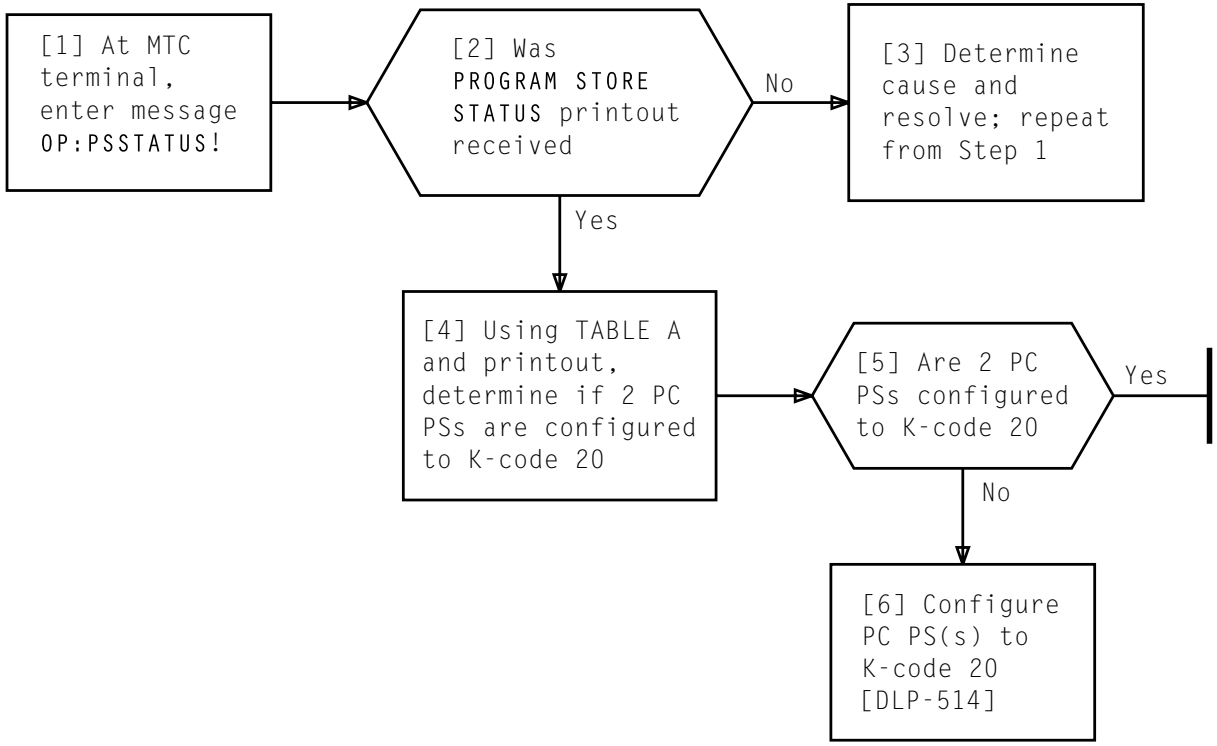
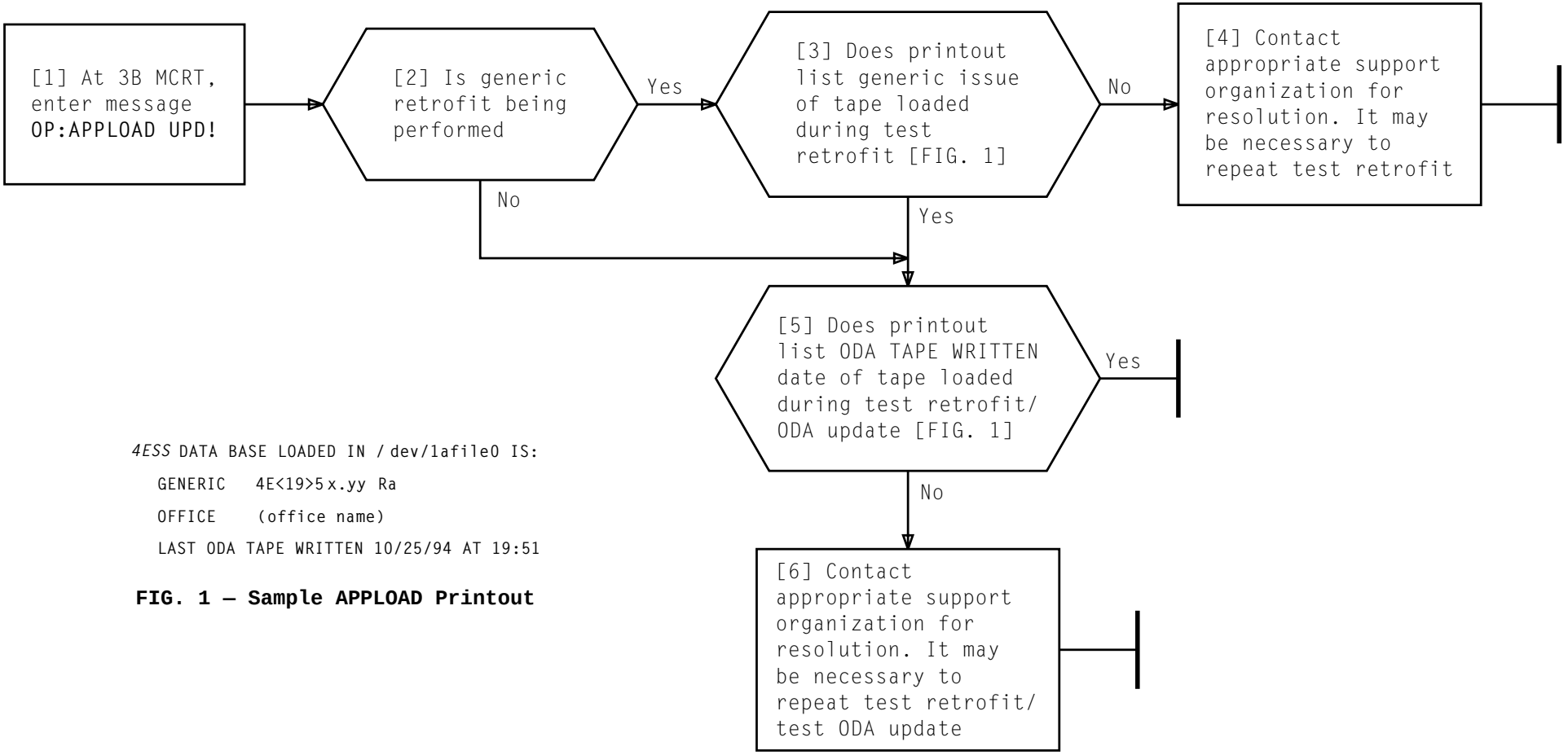


TABLE A

PC PS COMBINATIONS

256K START OFFICE	64K START OFFICE
0 and 2	18 and 20
0 and 4	18 and 22
2 and 4	20 and 22

ENSURE THAT TWO PC PROGRAM STORES ARE CONFIGURED TO K-CODE 20



4ESS DATA BASE LOADED IN / dev/1afile0 IS:

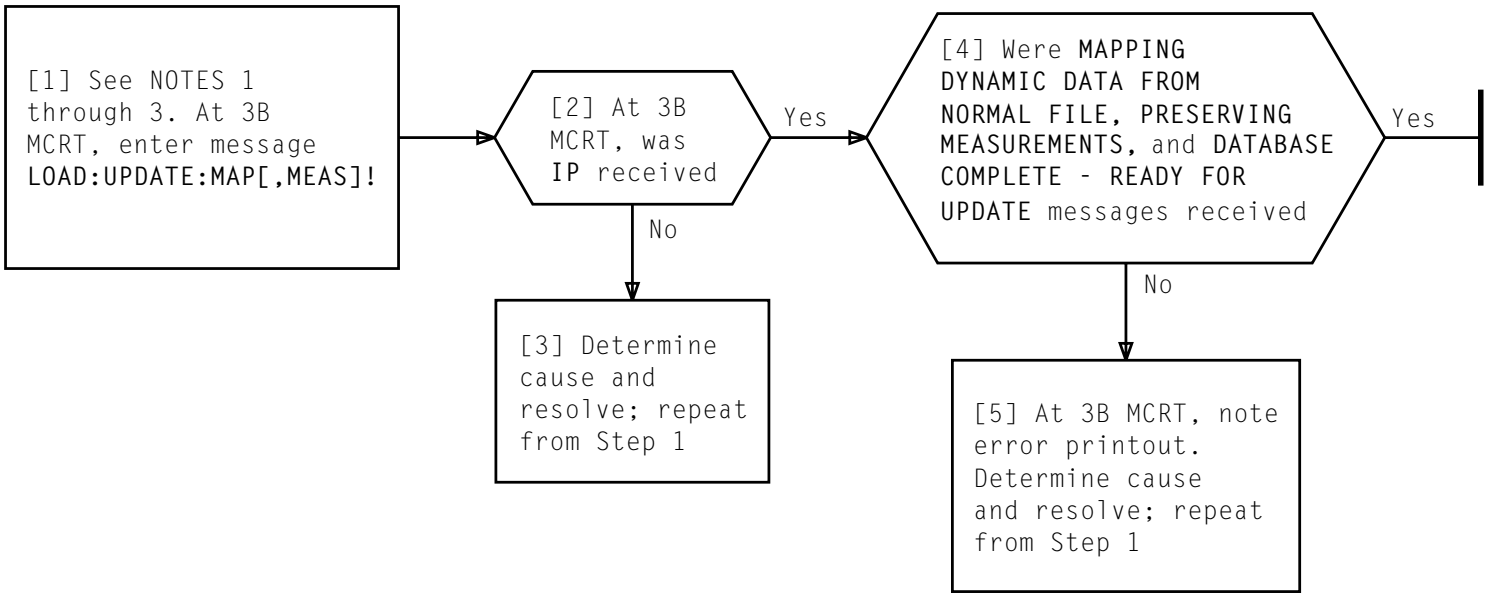
GENERIC 4E<19>5 x.yy Ra

OFFICE (office name)

LAST ODA TAPE WRITTEN 10/25/94 AT 19:51

FIG. 1 — Sample APPLOAD Printout

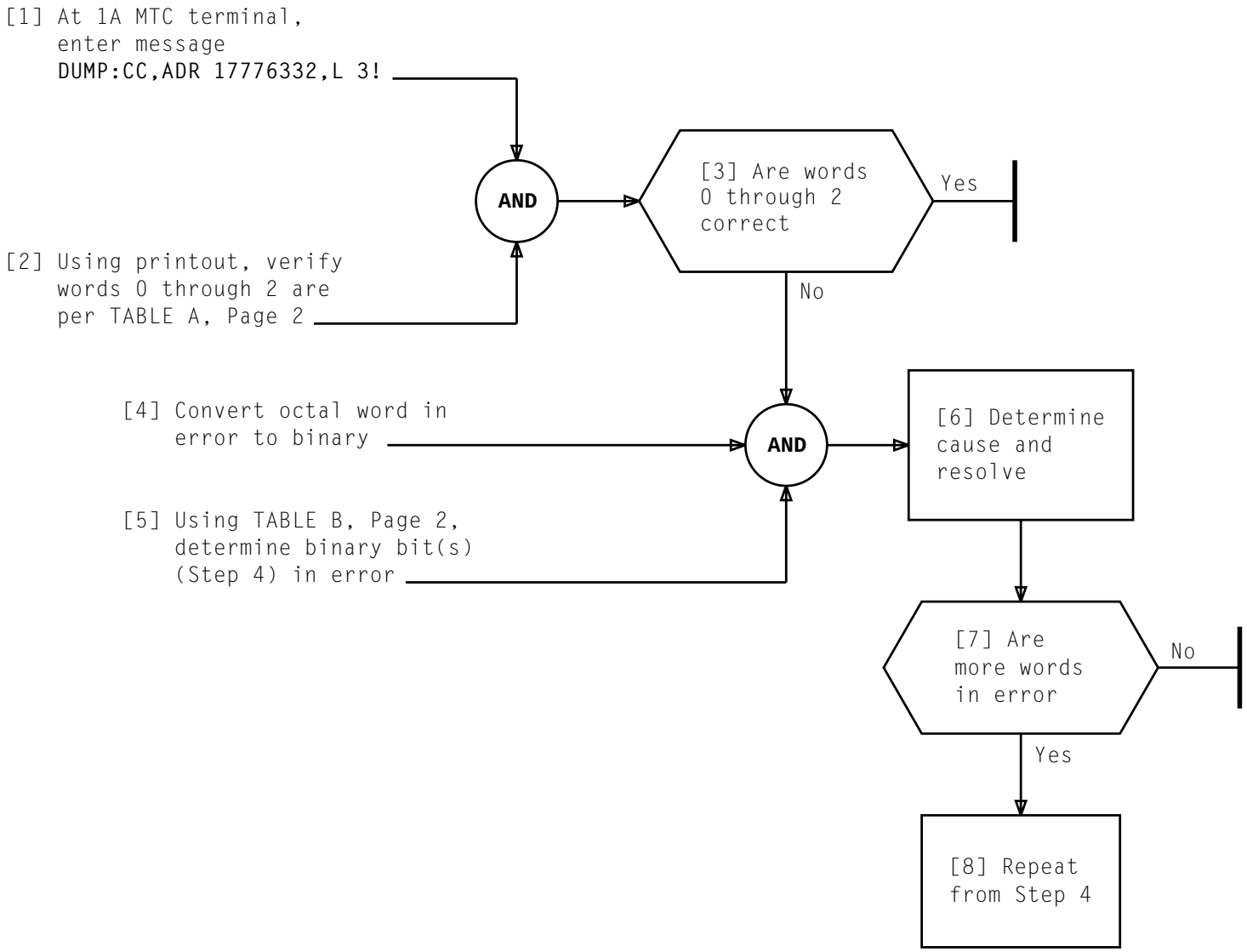
VERIFY DATA BASE



NOTES

1. If schedules that are entered by **SCHED:MEAS** input message are to be retained for update, include **MEAS** option in LOAD message (AT&T offices should use MEAS option)
2. **WAITING FOR 4 TO 13 MINUTES PAST QUARTER HOUR** output message may be received. System will automatically map dynamic data when in proper window
3. Dynamic data being mapped is TOSL and long-term storage

MAP DYNAMIC DATA FROM NORMAL FILE TO UPDATE FILE



VERIFY MCC SWITCH STATUS

TABLE A	
MESSAGE NUMBER	**OUTPUT MESSAGE**
1	DUMP:CC,INDIR 0,ADR 17776332,INC +0 COMPLETED 17776332 06010000 000a0010 00040000 ↖WORD 0↗ ↖WORD 1↗ ↖WORD 2↗
a = 0 or 1 (Do Not Care)	

TABLE B			
WORD	**BINARY BIT**	**PUSHBUTTON SWITCH**	**MCC PANELS**
0	12	**MODIFY RECOVERY ACTIONS**	**MANUAL INTERRUPT PROGRAM REQUEST**
1	3	**DISABLE AUTO PC**	**PROCESSOR CONFIGURATION SEQUENCER**
2	14	**DIRECT DATA INSERT - 14**	**MANUAL INTERRUPT PROGRAM REQUEST**

VERIFY MCC SWITCH STATUS

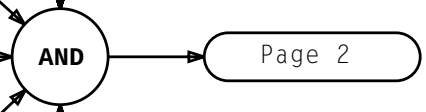
[1] This procedure is to be performed by AT&T offices only. Review and become familiar with this procedure. If something is NOT understood, contact next higher technical support group for assistance. Read NOTE 3, Page 5 to become familiar with what is happening on EAI Page during pump and what to look for. *Put some type of book marker at Pages 11 and 20 in case backout is required.*

[2] Ensure CAR field on UCD displays **PCRVBOOT.AA+2.** If CAR field does not display **PCRVBOOT.AA+2,** 1B Processor will need to be suspended (701), **FORCE FNCT** selections reset and Hard A (01) entered

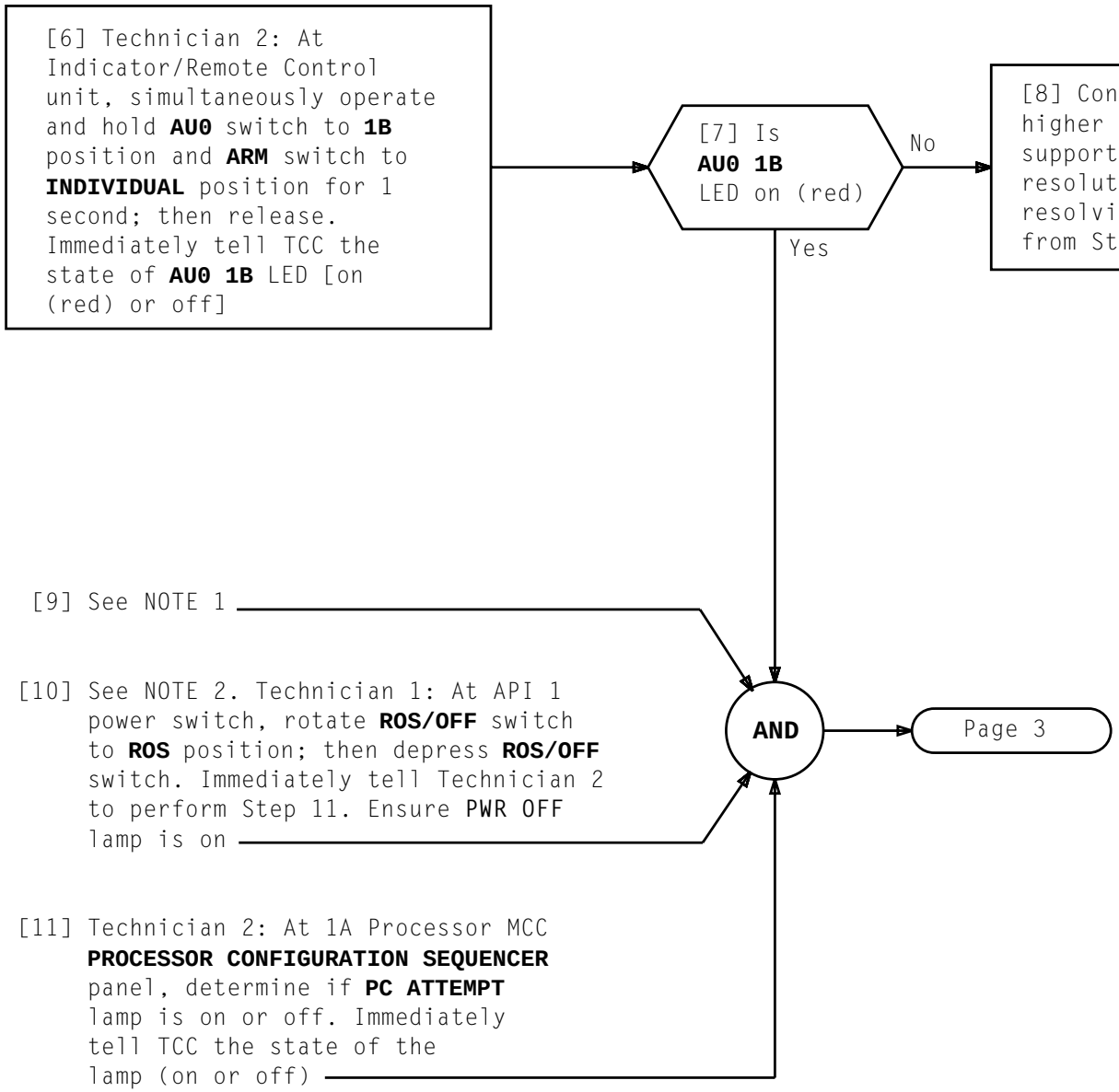
[3] At 1B Processor remote MCC terminal, if EAI page is not displayed, depress **EA DISP** key

[4] Technician 2: At Indicator/Remote Control unit, set rotary bus selector to **AU0**

[5] Two technicians will be required to assist when performing Steps 6 through 13 (Pages 2 and 3). Become familiar with this Step sequence before performing. Steps 10 through 12 (Pages 2 and 3) must be performed without interruption

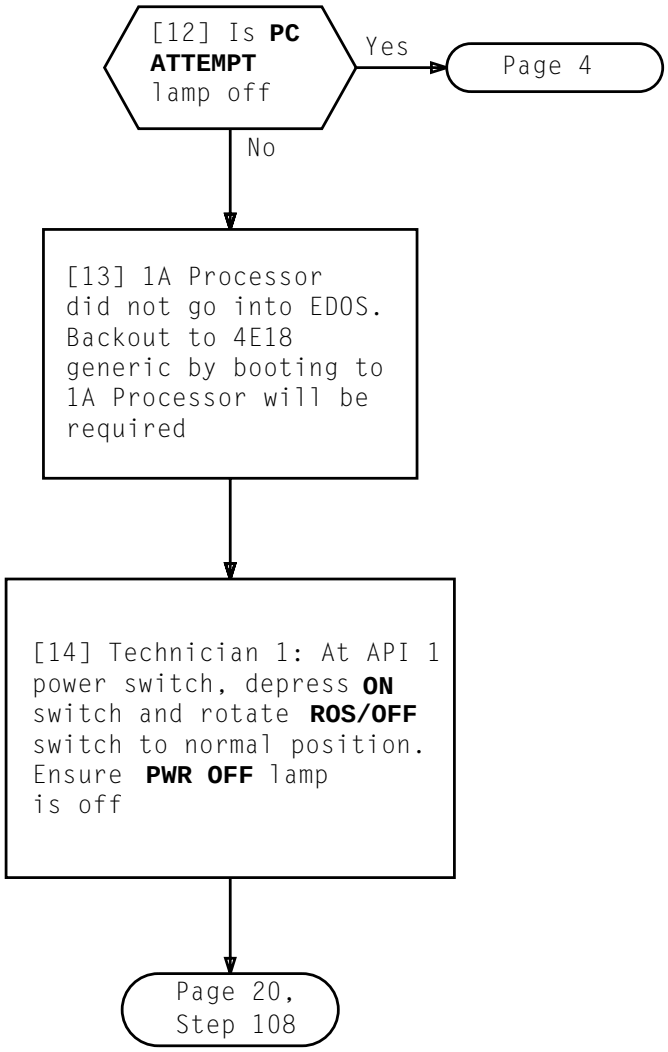


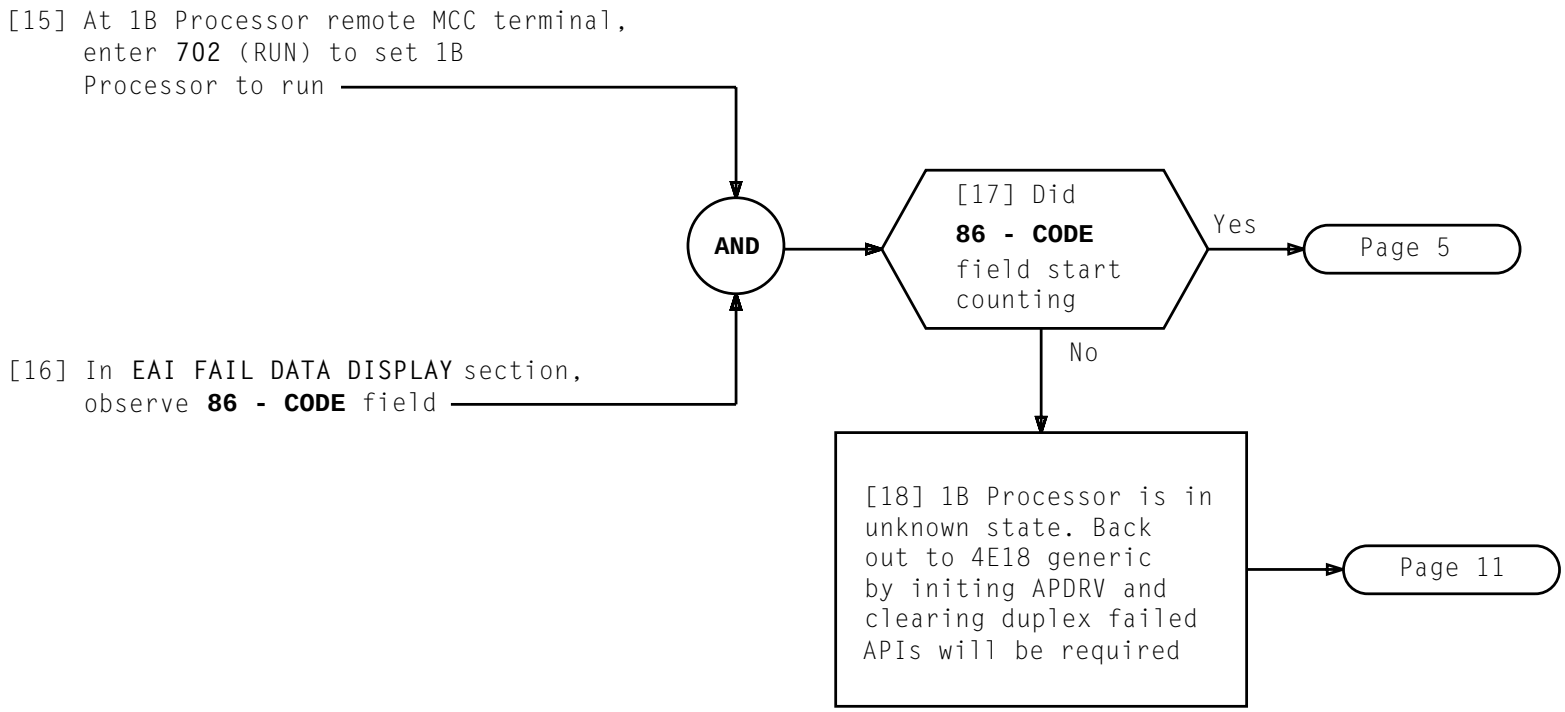
RETROFIT TO 1B PROCESSOR

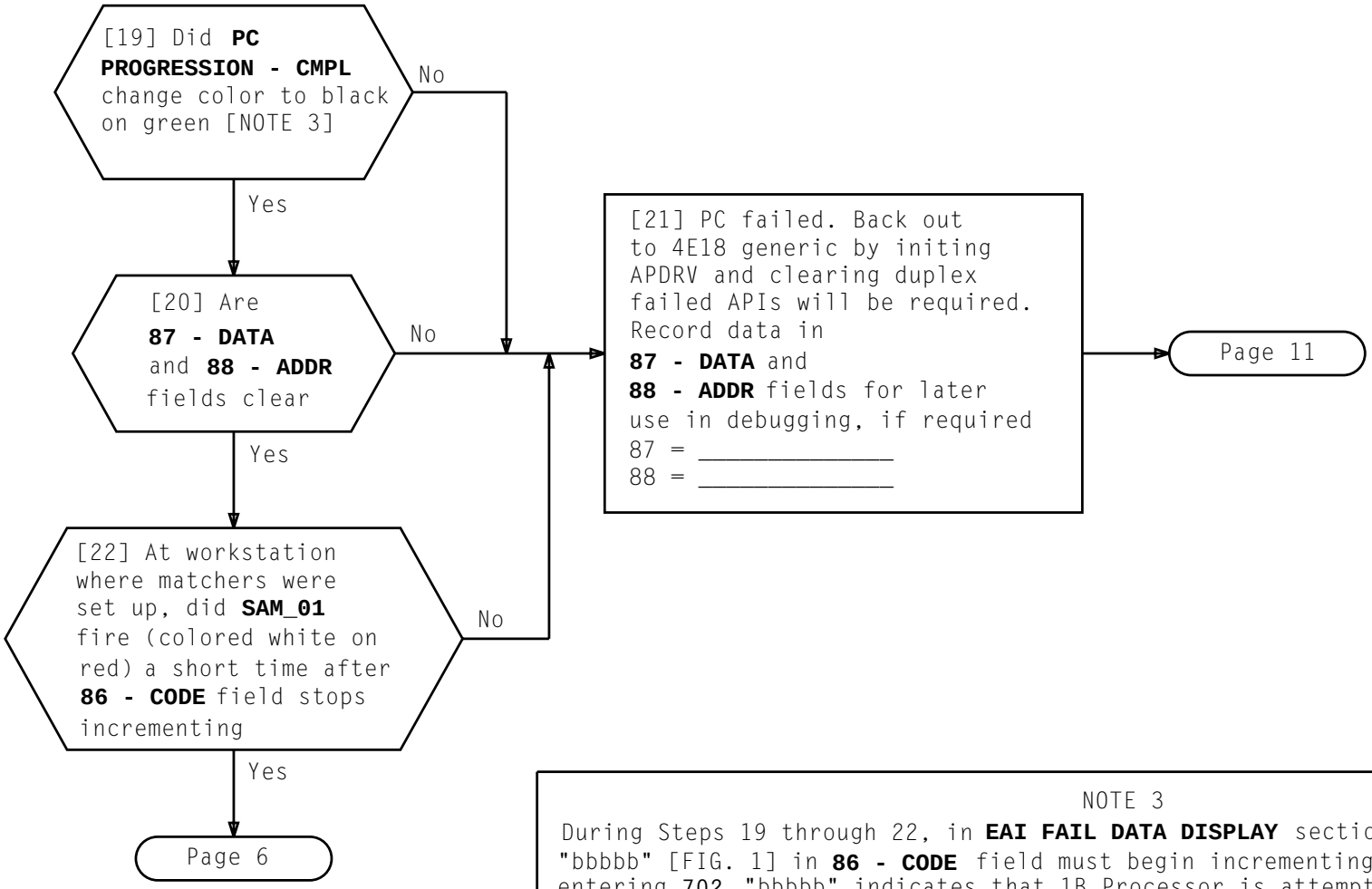


NOTES

1. If system does not respond to commands during Steps 15 through 22 (Pages 4 and 5), procedure must be stopped and backout will be required. If backout is required, perform procedure at Step 54, Page 11
2. Step 10 is being performed to duplex fail the APIs. Duplex-failed APIs will cause 1A Processor to go into EDOS. AMA billing stops when 1A Processor is in EDOS


[12] Is **PC ATTEMPT** lamp off
Yes
Page 4
No
[13] 1A Processor did not go into EDOS. Backout to 4E18 generic by booting to 1A Processor will be required
[14] Technician 1: At API 1 power switch, depress **ON** switch and rotate **ROS/OFF** switch to normal position. Ensure **PWR OFF** lamp is off
Page 20, Step 108


[15] At 1B Processor remote MCC terminal, enter 702 (RUN) to set 1B Processor to run
[16] In EAI FAIL DATA DISPLAY section, observe 86 - CODE field
AND
[17] Did 86 - CODE field start counting
Yes
Page 5
No
[18] 1B Processor is in unknown state. Back out to 4E18 generic by initing APDRV and clearing duplex failed APIs will be required
Page 11



86 - CODE: O'000aaabbbbb
87 - DATA:
88 - ADDR:

FIG. 1 - 86 - CODE Field Layout

NOTE 3

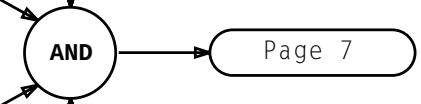
During Steps 19 through 22, in **EAI FAIL DATA DISPLAY** section, octal digits "aaa" and "bbbbb" [FIG. 1] in **86 - CODE** field must begin incrementing within 10 seconds after entering 702. "bbbbb" indicates that 1B Processor is attempting to pump, and "aaa" indicates memory range that is being pumped. "aaa" and "bbbbb" will continue to increment until **PC PROGRESSION - CMPL** colors black on green and **SAM_01** fires (color white on red), approximately 2 minutes after entering 702. If "aaa" does not begin to increment and "bbbbb" does begin to increment, this is a failure. If at any time "aaa" stops incrementing while "bbbbb" continues to increment, this is a failure. If "aaa" and "bbbbb" stop incrementing and a value is found in **87 - DATA** field, this is a failure.

[23] *If system does not respond to commands during Steps 24 through 53 (Page 10) procedure must be stopped and backout will be required. If backout is required, perform procedure at Step 104, Page 20*

[24] Technician 2: At Indicator/Remote Control unit, operate **ALL-1B** key counterclockwise to **ON** position; then operate **ARM** switch down to **ALL** position. Wait for **PUB0** and/or **PUB1** to go RED; then tell TCC that Step 25 can be performed

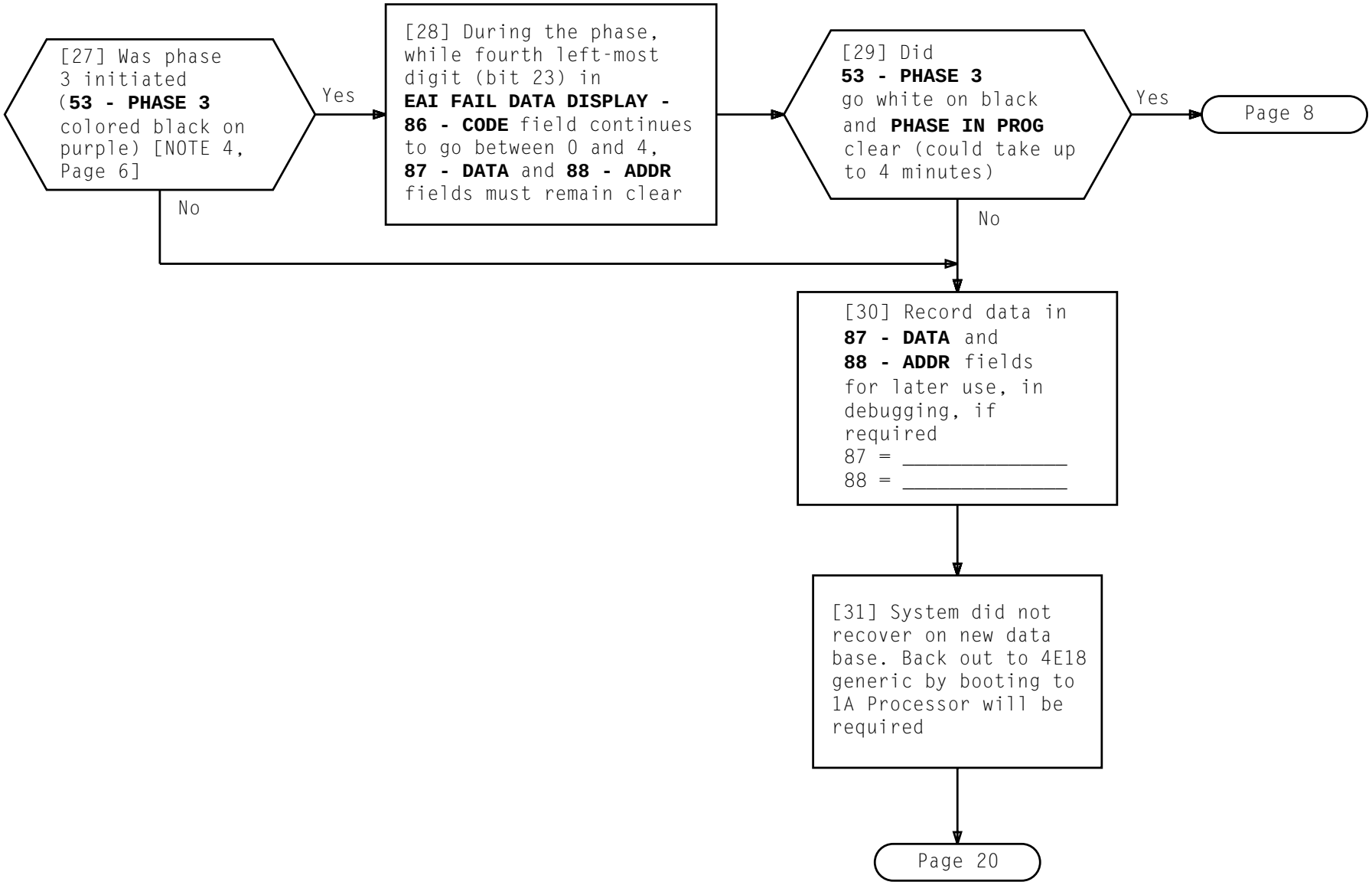
[25] At 1B Processor remote MCC terminal, enter 702 (RUN) to set 1B Processor to run. Tell Technician 1 to perform Step 26; then look for phase 3 indication [NOTE 4]

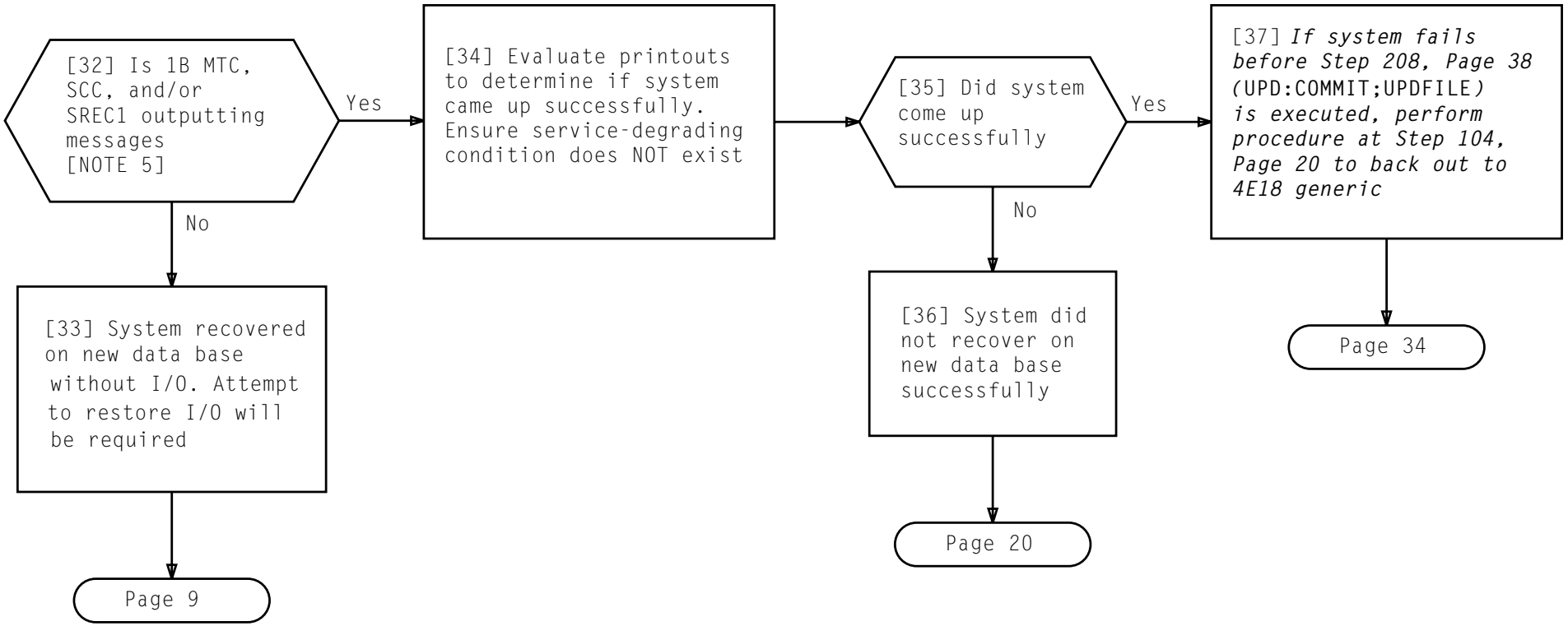
[26] Technician 1: Set UAS switches in 1B Processor Cabinets 0 and 1 to **UTIL INH** to eliminate the ability of 1B Processor to suspend if **SAM_01** fires



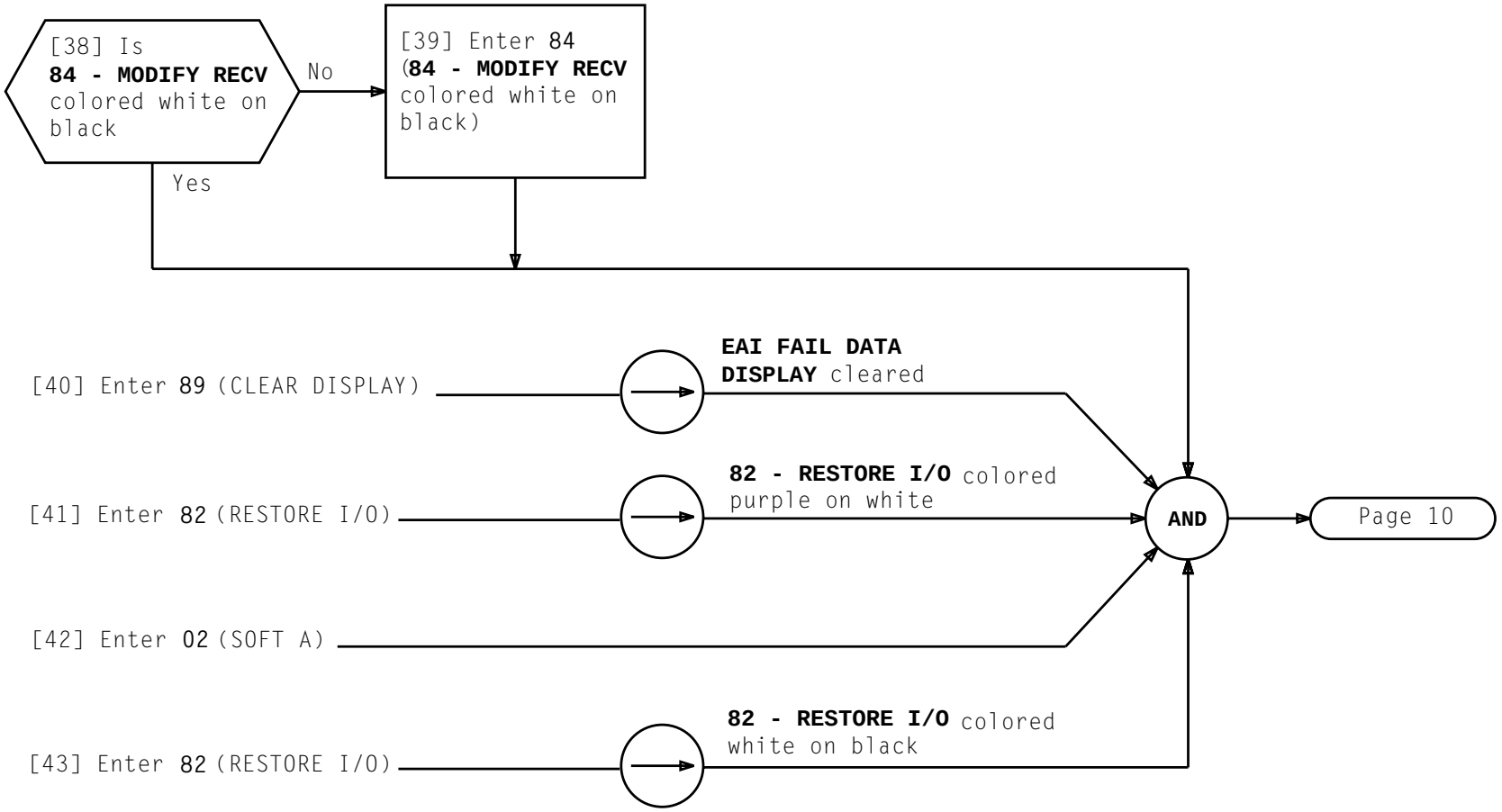
NOTE 4

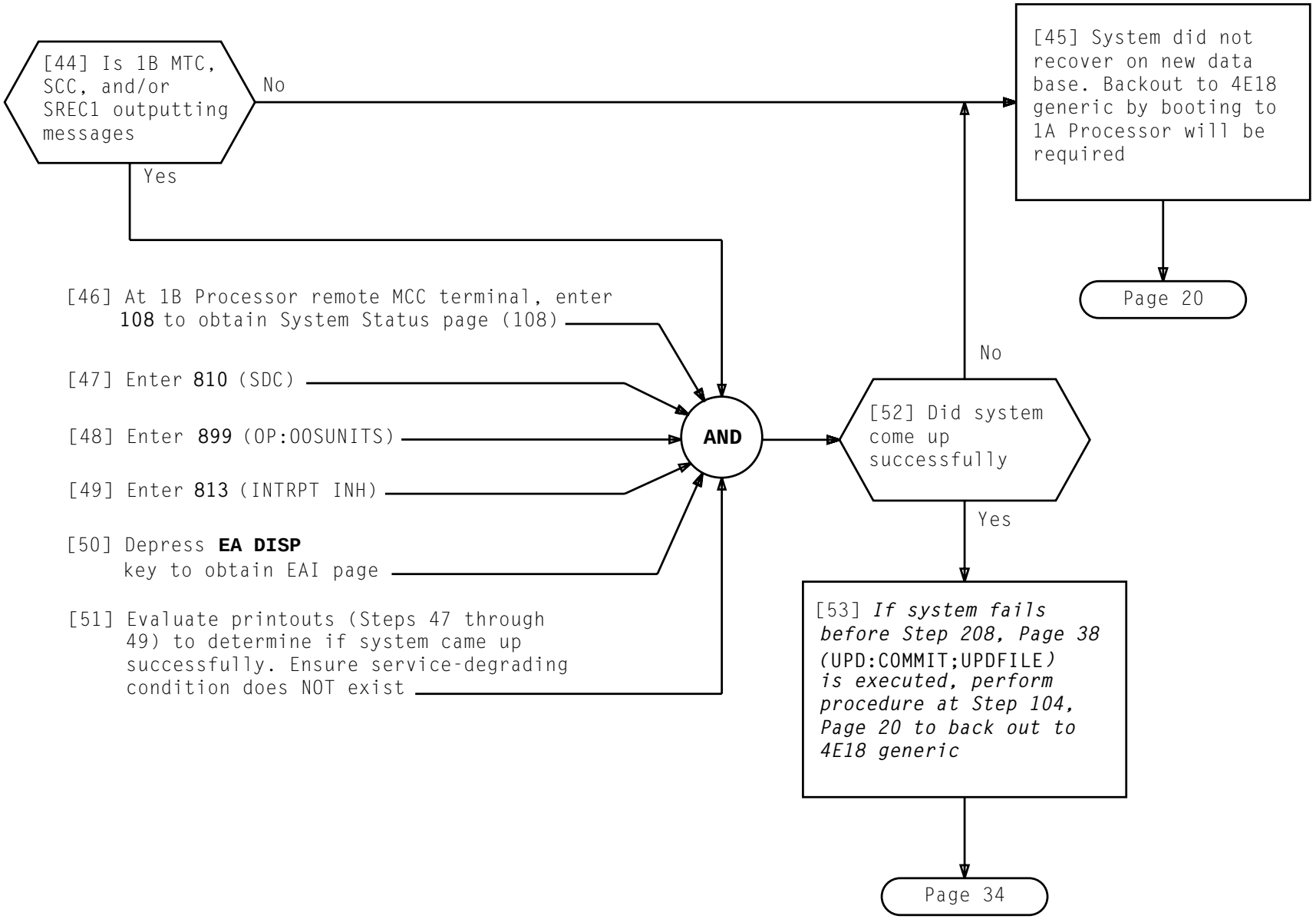
When a phase 3 is initiated, at 1B Processor MCC terminal, fourth left-most digit (bit 23) in **EAI FAIL DATA DISPLAY - 86 - CODE** field will go between **3** and **4.** **53 - PHASE 3** colored black on purple. In lower right-hand corner **PHASE IN PROG** colored white on red. **PC PROGRESSION - CMPL** continues to be colored black on green


[27] Was phase 3 initiated (**53 - PHASE 3** colored black on purple) [NOTE 4, Page 6]
Yes
No
[28] During the phase, while fourth left-most digit (bit 23) in **EAI FAIL DATA DISPLAY - 86 - CODE** field continues to go between 0 and 4, **87 - DATA** and **88 - ADDR** fields must remain clear
[29] Did **53 - PHASE 3** go white on black and **PHASE IN PROG** clear (could take up to 4 minutes)
Yes
Page 8
No
[30] Record data in **87 - DATA** and **88 - ADDR** fields for later use, in debugging, if required
87 = _____
88 = _____
[31] System did not recover on new data base. Back out to 4E18 generic by booting to 1A Processor will be required
Page 20



NOTE 5
1A MTC terminal will now be 1B MTC terminal


[38] Is **84 - MODIFY RECV** colored white on black
No
[39] Enter 84 (**84 - MODIFY RECV** colored white on black)
Yes
[40] Enter 89 (CLEAR DISPLAY)
EAI FAIL DATA DISPLAY cleared
[41] Enter 82 (RESTORE I/O)
82 - RESTORE I/O colored purple on white
AND
Page 10
[42] Enter 02 (SOFT A)
[43] Enter 82 (RESTORE I/O)
82 - RESTORE I/O colored white on black


[44] Is 1B MTC, SCC, and/or SREC1 outputting messages
No
Yes
[45] System did not recover on new data base. Backout to 4E18 generic by booting to 1A Processor will be required
Page 20
[46] At 1B Processor remote MCC terminal, enter 108 to obtain System Status page (108)
[47] Enter 810 (SDC)
[48] Enter 899 (OP:OOSUNITS)
[49] Enter 813 (INTRPT INH)
[50] Depress EA DISP key to obtain EAI page
[51] Evaluate printouts (Steps 47 through 49) to determine if system came up successfully. Ensure service-degrading condition does NOT exist
AND
[52] Did system come up successfully
No
Yes
[53] If system fails before Step 208, Page 38 (UPD:COMMIT;UPDFILE) is executed, perform procedure at Step 104, Page 20 to back out to 4E18 generic
Page 34

[54] **THIS IS START OF BACKOUT PROCEDURE (1A PROCESSOR IS CURRENTLY OPERATING IN EDOS).**
Notify next higher technical support group that **AU0** Conversion Switch Unit will be switched back to 1A Processor bus access

[55] At API 0 power switch, rotate **ROS/OFF** switch to **ROS** position; then depress **ROS/OFF** switch. Ensure **PWR OFF** lamp is on

[56] At 1B Processor remote MCC terminal, enter **1990** to obtain Dead Start page (1990)

AND

UAS: INTERFERING colored white on red

[57] Enter **613** (UAS INTF ALW)

701 - SUSPEND colored white on red

[58] Enter **701** (SUSPEND) to stop 1B Processor

[59] At 3B MCRT, enter message
OP:APPLOAD NORM!

AND

Page 12

[60] See NOTE 6. Using printout and FIG. 2, determine what 1afile is NORMAL file

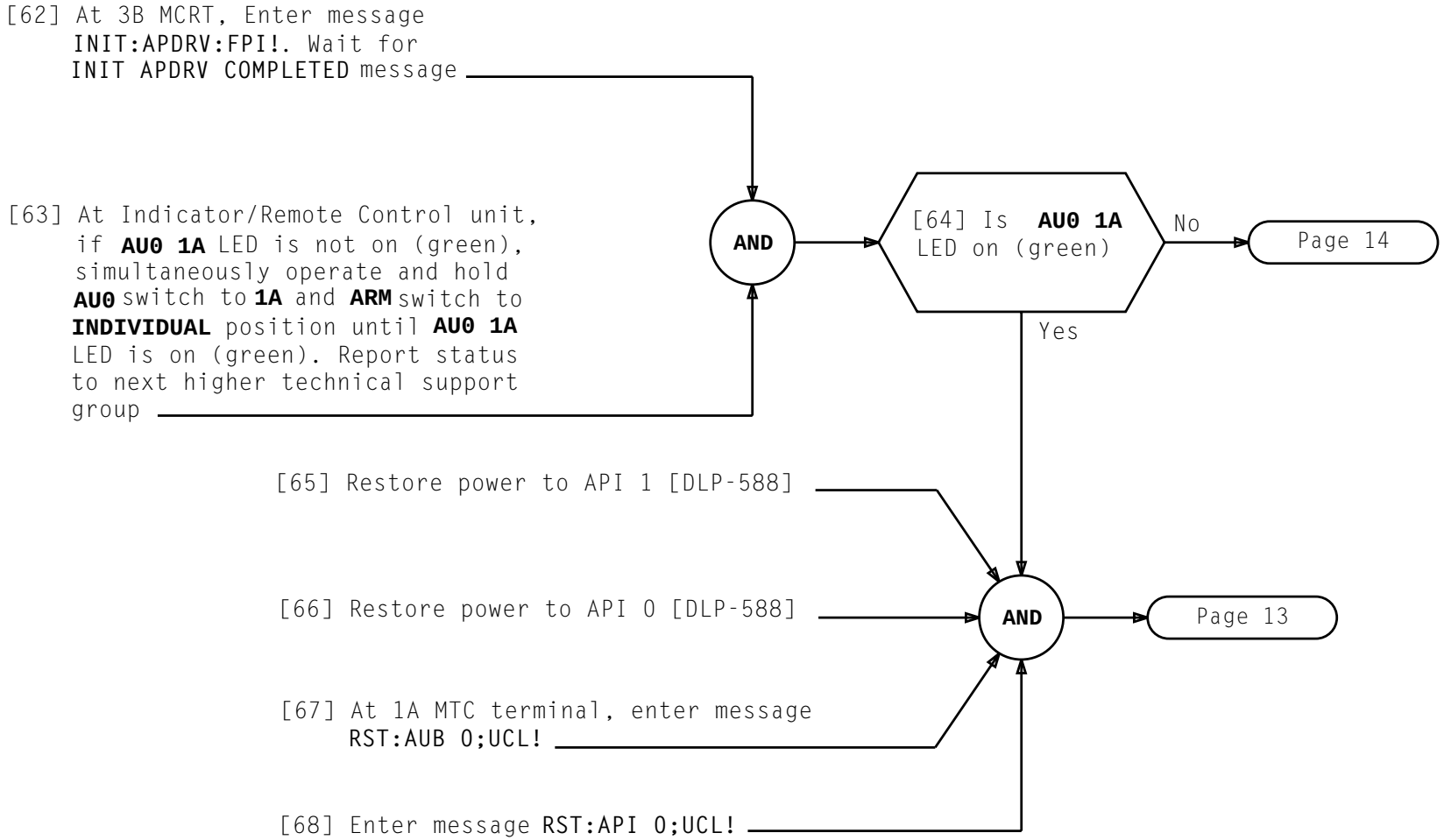
[61] At 3B MCRT, enter message
EXC:ENVIR:UPROC,FN"/bin/sh",ARGS("-c","cp /tools/1astatX /dev/1astat")!
X = recorded 1afile. Wait for **EXC ENVIR UPROC /bin/sh COMPLETED** message

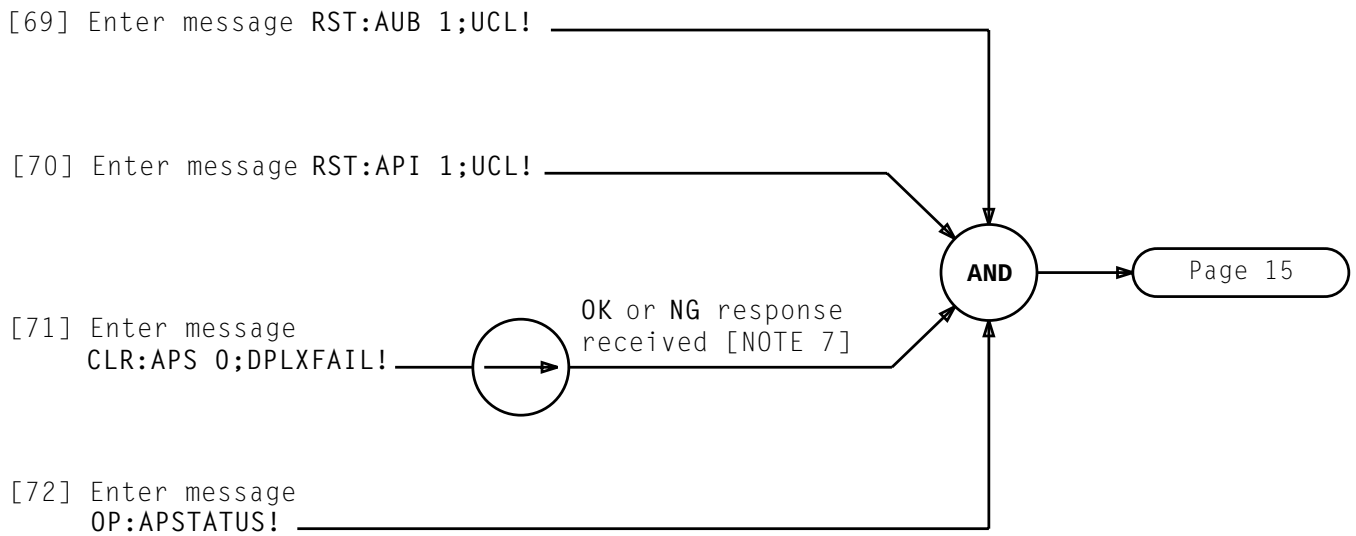
4ESS DATA BASE LOADED IN /dev/1afileX

Record this value

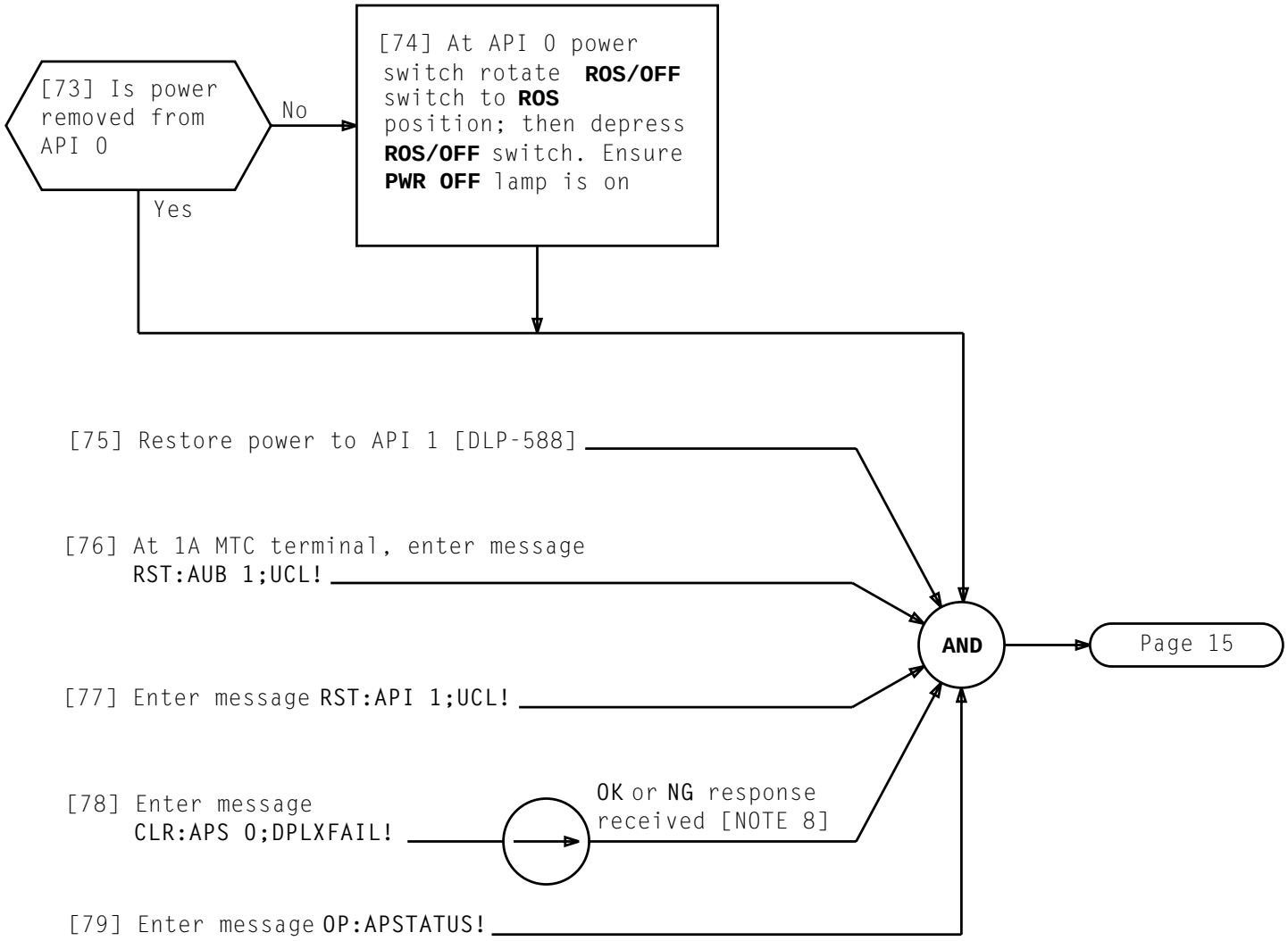
FIG. 2 - Sample of OP:APPLOAD Printout

NOTE 6
It may take a short time before response is received


[62] At 3B MCRT, Enter message INIT:APDRV:FPI!. Wait for INIT APDRV COMPLETED message
[63] At Indicator/Remote Control unit, if AU0 1A LED is not on (green), simultaneously operate and hold AU0 switch to 1A and ARM switch to INDIVIDUAL position until AU0 1A LED is on (green). Report status to next higher technical support group
AND
[64] Is AU0 1A LED on (green)
No
Page 14
Yes
[65] Restore power to API 1 [DLP-588]
[66] Restore power to API 0 [DLP-588]
AND
Page 13
[67] At 1A MTC terminal, enter message RST:AUB 0;UCL!
[68] Enter message RST:API 0;UCL!

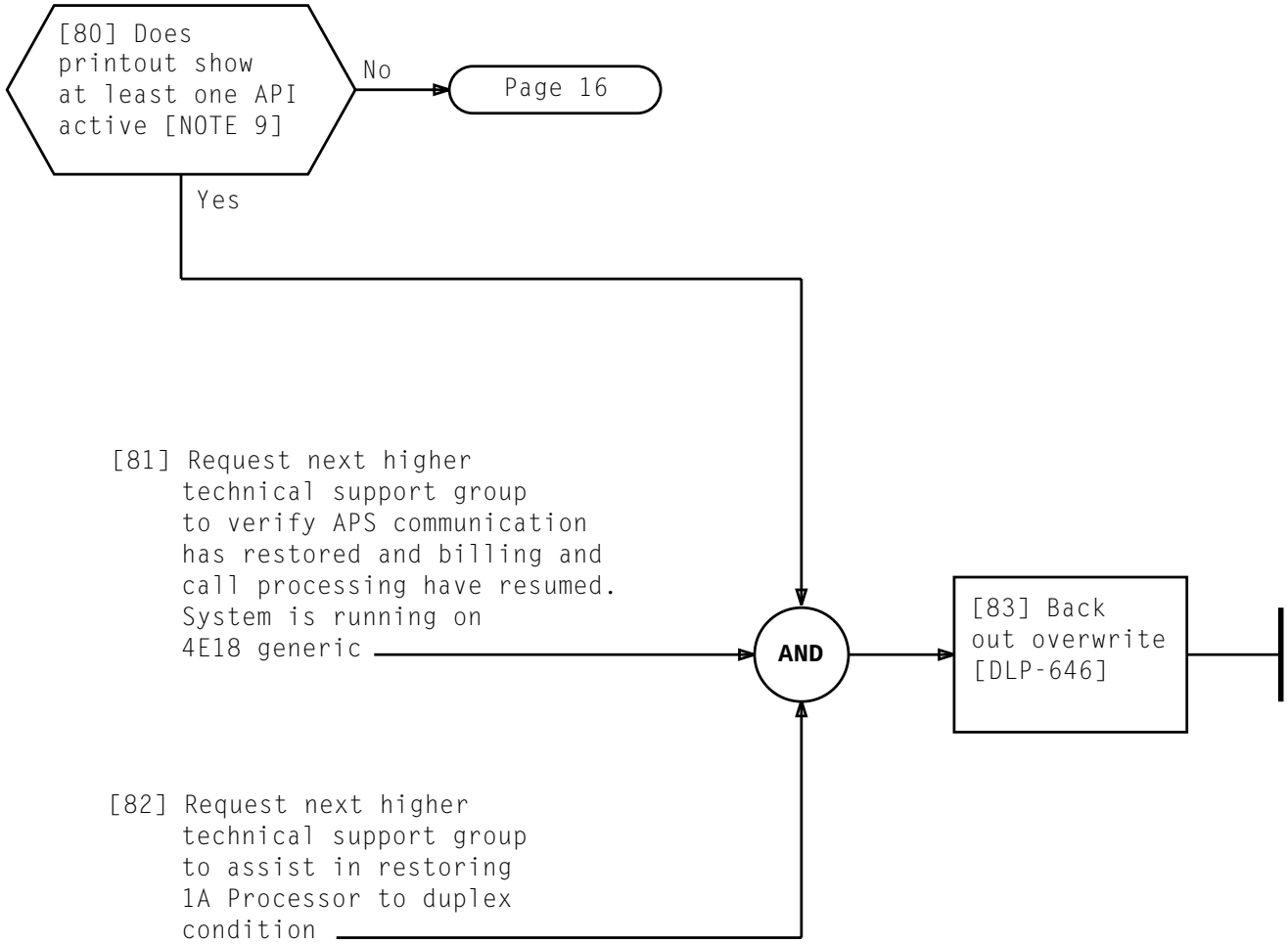


NOTE 7
NG response will be received if 1afiles are not duplex failed



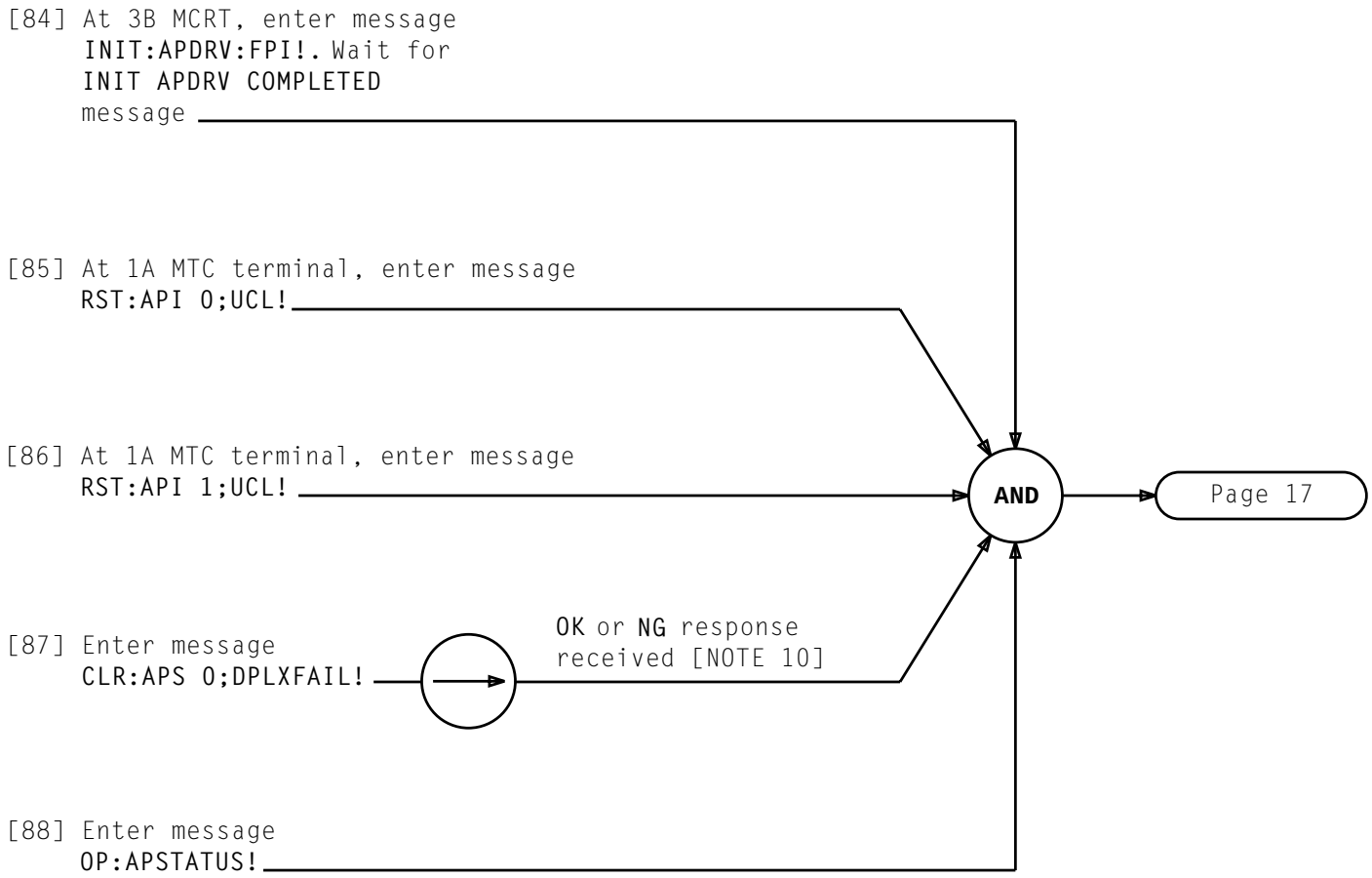
NOTE 8
NG response will be received if 1afiles are not duplex failed

RETROFIT TO 1B PROCESSOR



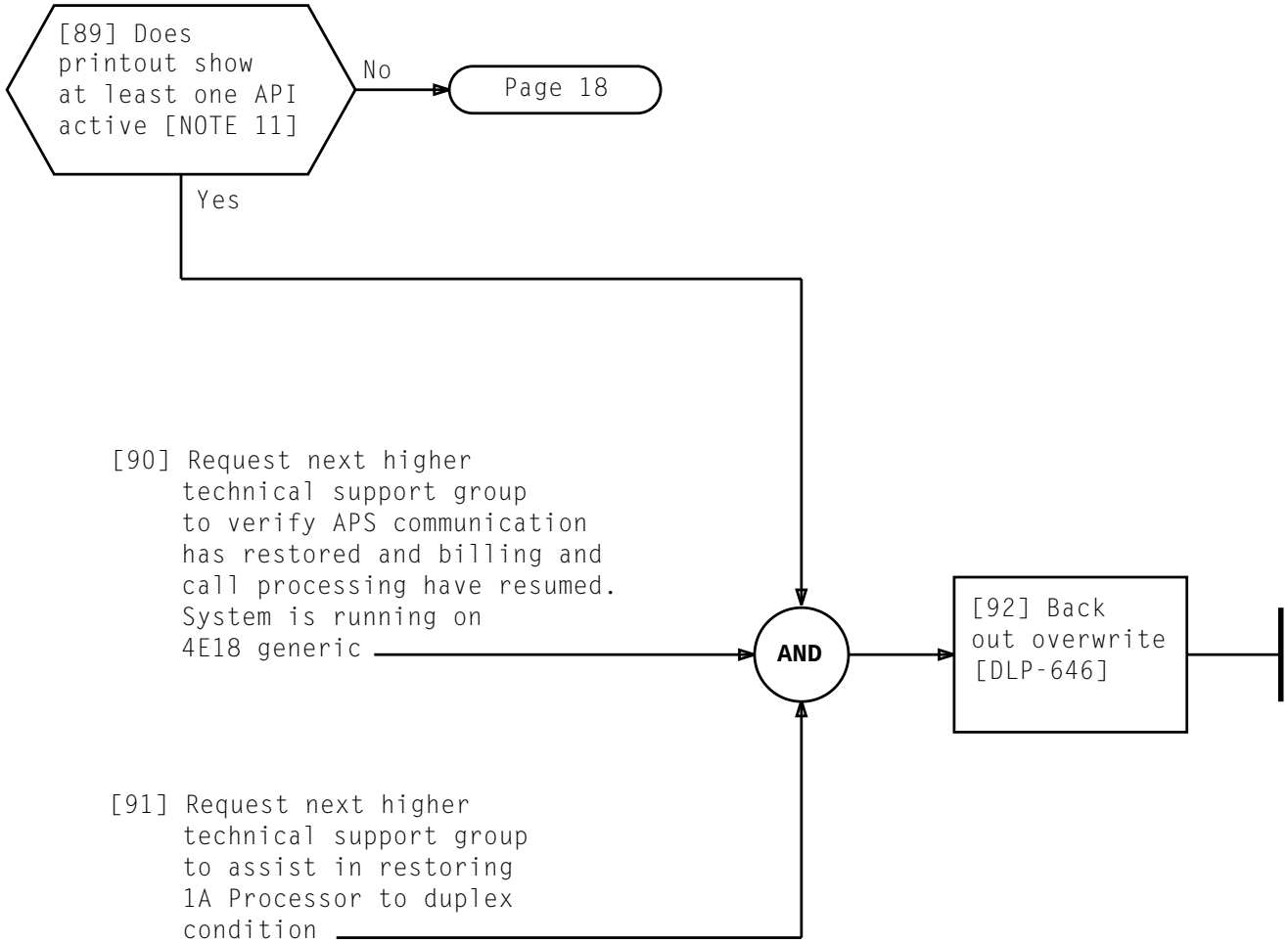
NOTE 9

It will take a short time before response is received



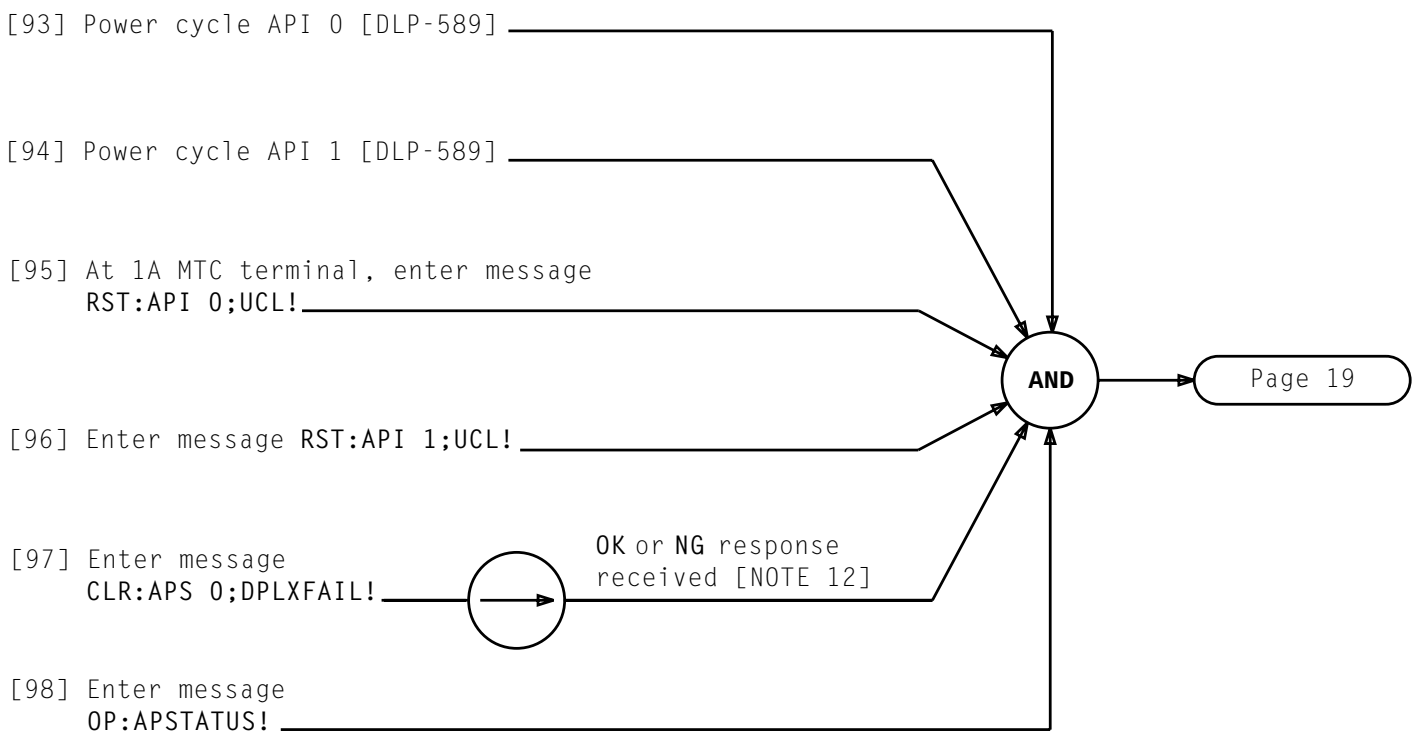
NOTE 10

It will take a short time before response is received



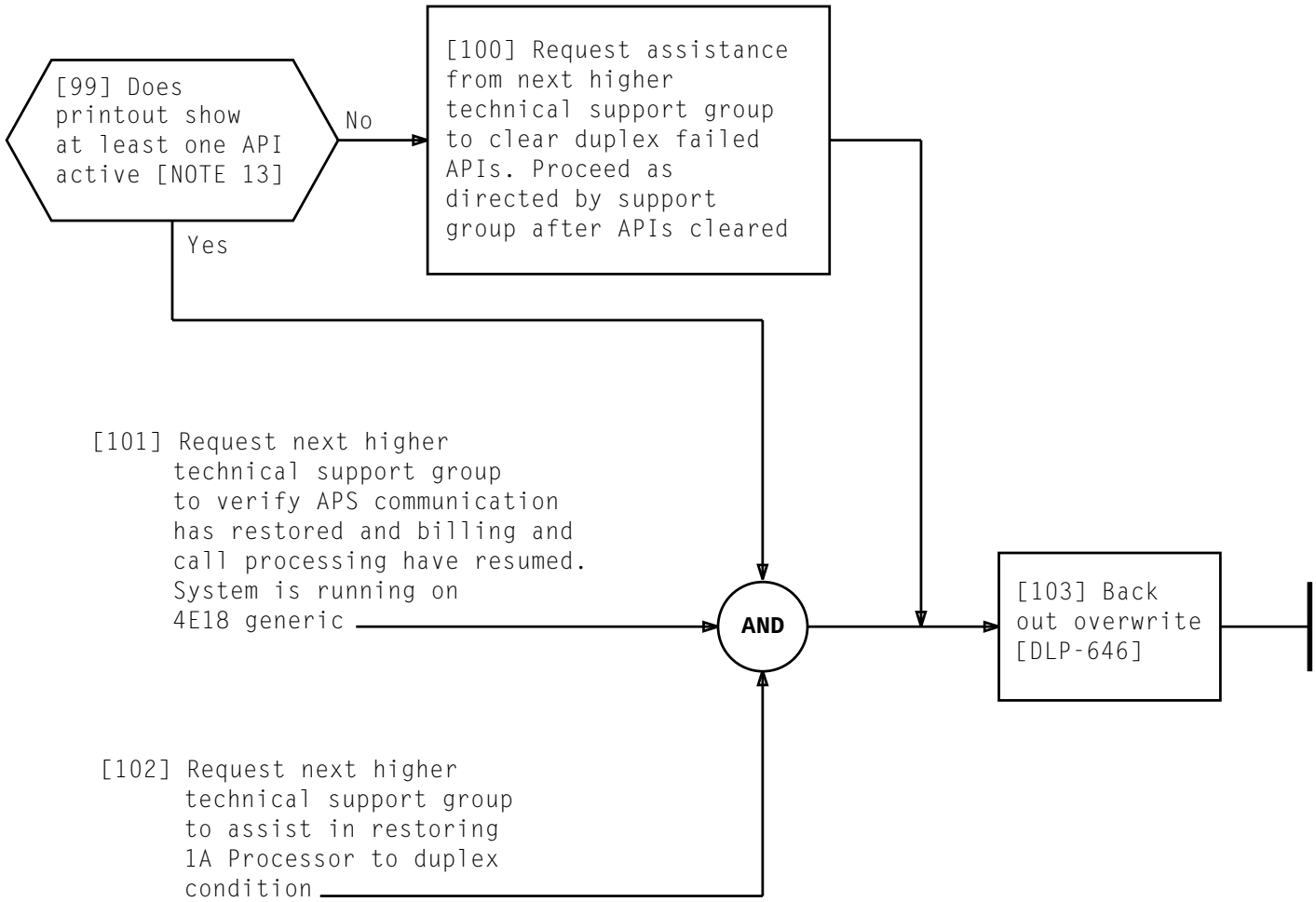
NOTE 11

It will take a short time before response is received



NOTE 12

NG response will be received if 1afiles are not duplex failed



NOTE 13	
It will take a short time before response is received	
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[104] **BACK OUT PROCESSOR TO 1A (1A PROCESSOR IS CURRENTLY IN STAND-ALONE MODE WITH CONVERSION SWITCH UNITS SET TO 1B BUS ACCESS [RED]).** Notify next higher technical support group that attempt to recover on 1A Processor will be made

[105] Technician 1: Allow utility-interfering actions [DLP-585]

[106] At 1B Processor remote MCC terminal, enter **1990** to obtain Dead Start page (1990); then enter **613** (UAS INTF ALW)

AND

[107] Enter **701** (SUSPEND)

701 - SUSPEND colored white on red

[108] Technician 2: Perform Steps 109 through 114, Page 21. Ensure power is restored to API 1, and power switch is in normal position

[109] At 1A Processor MCC **UPDATE** panel, depress **NORMAL** key

Lamp lights

AND

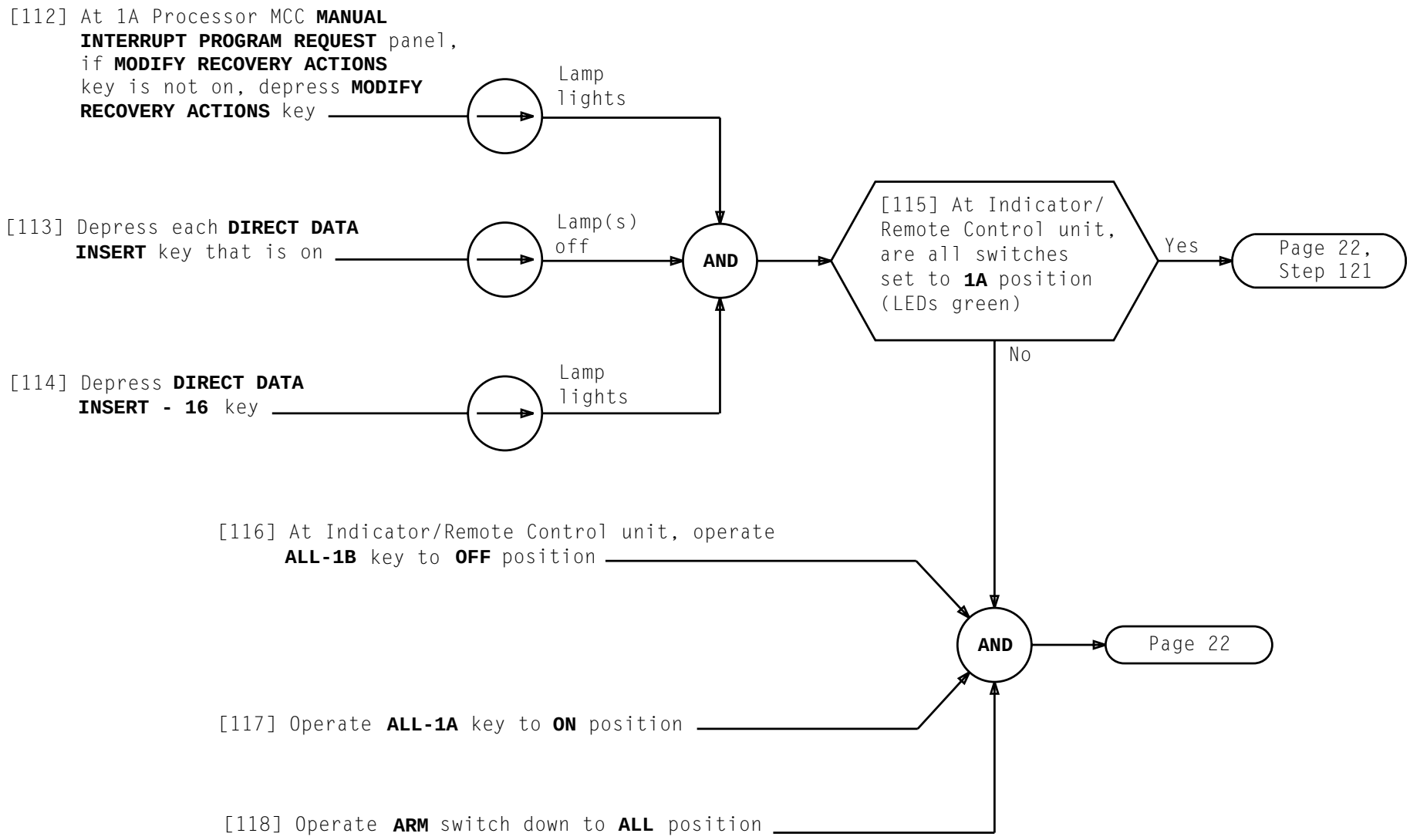
Page 21

[110] At 1A Processor MCC **OVERRIDE CONTROL** panel, depress **BLOCK 0 PS 0, AU BUS 0, PS BUS 0**, and **CC 0** keys

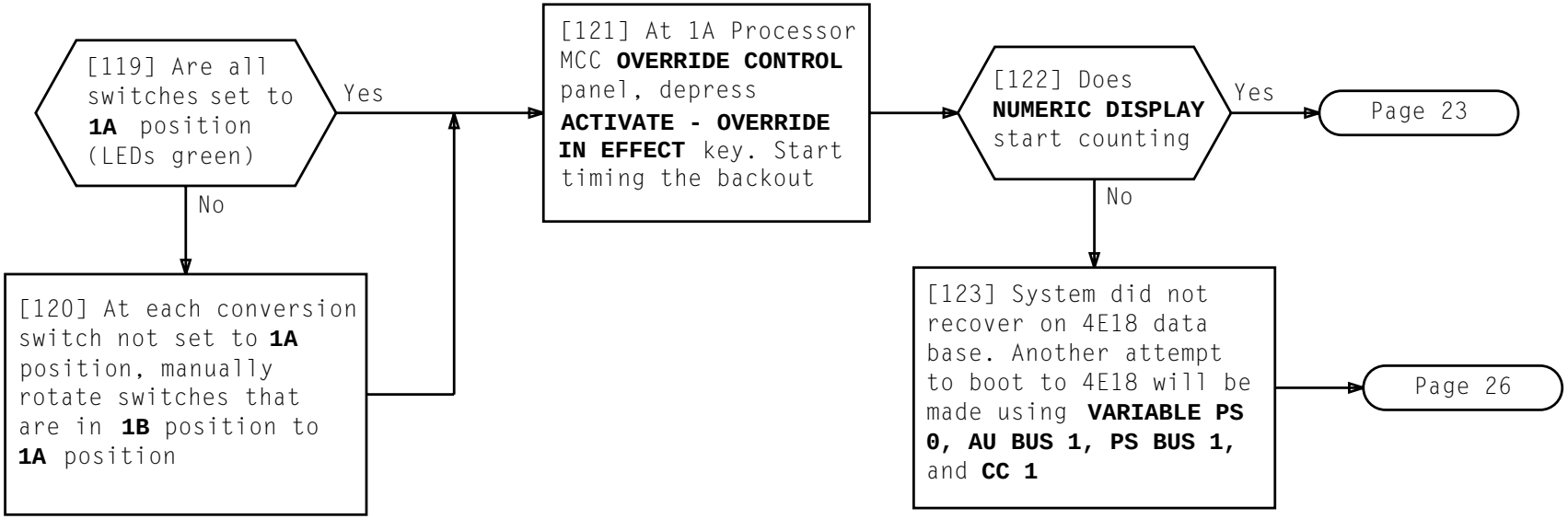
Lamps light

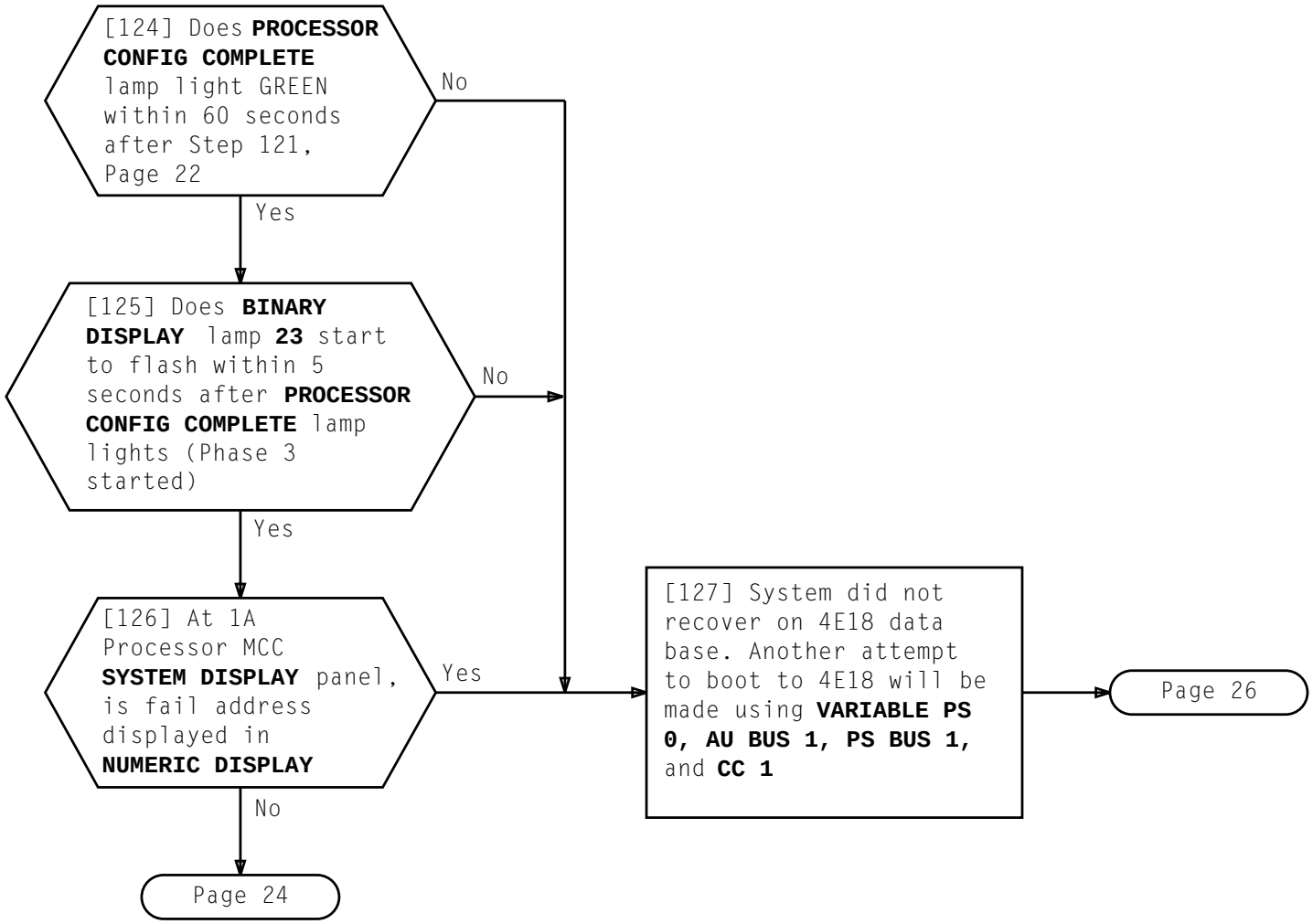
[111] At 1A Processor MCC **PROCESSOR CONFIGURATION SEQUENCER** panel, if **DISABLE AUTO PC** lamp is not on, depress **DISABLE AUTO PC** key

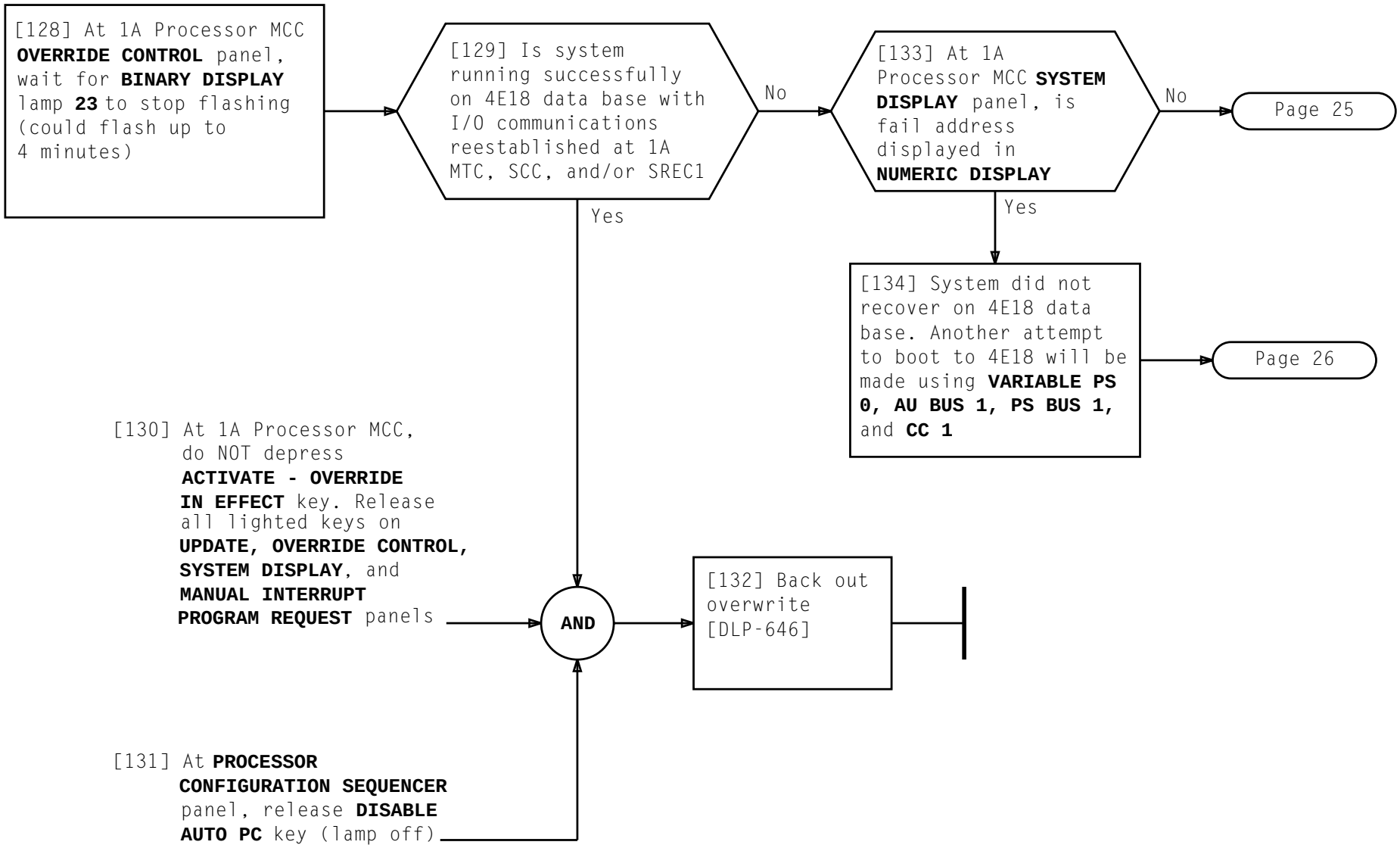
Lamp lights

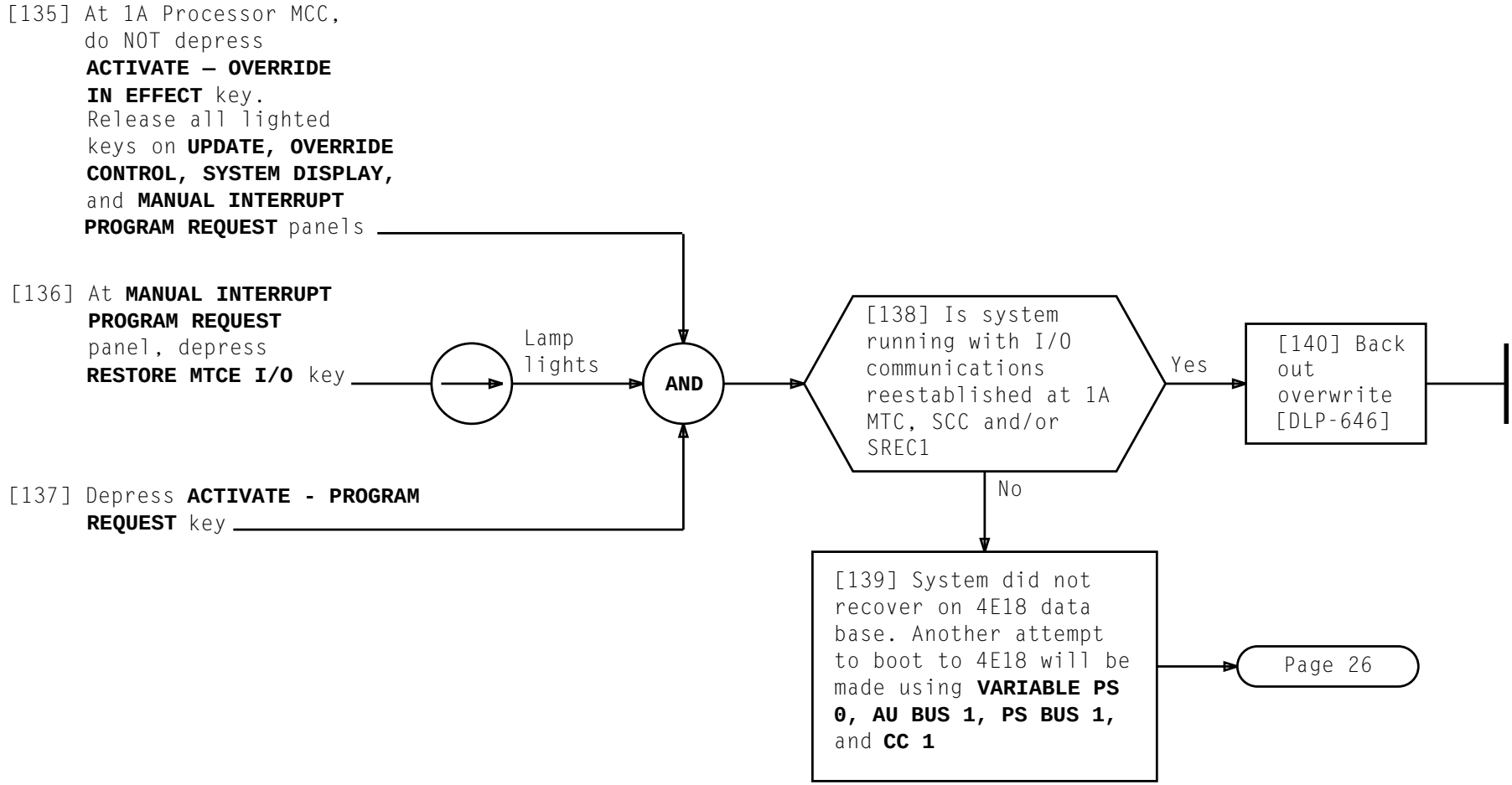


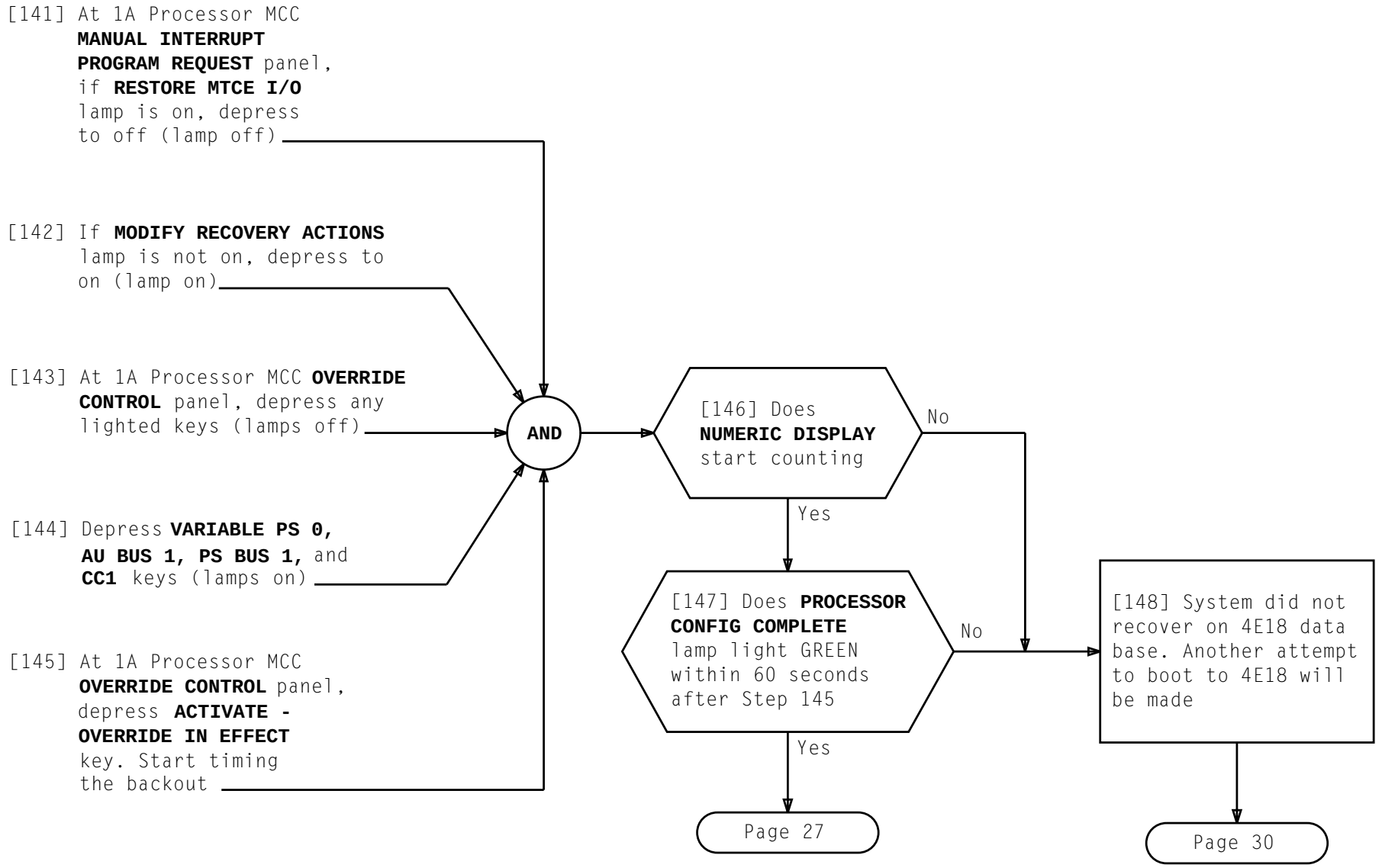
RETROFIT TO 1B PROCESSOR

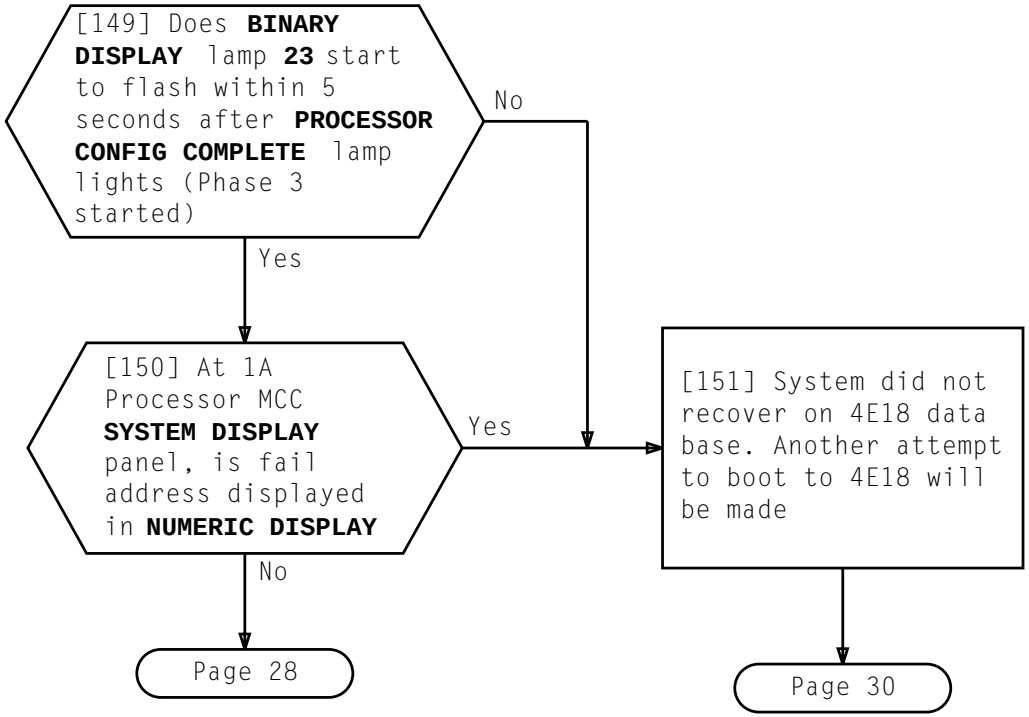

[119] Are all switches set to **1A** position (LEDs green)
Yes
No
[120] At each conversion switch not set to **1A** position, manually rotate switches that are in **1B** position to **1A** position
[121] At 1A Processor MCC **OVERRIDE CONTROL** panel, depress **ACTIVATE - OVERRIDE IN EFFECT** key. Start timing the backout
[122] Does **NUMERIC DISPLAY** start counting
Yes
Page 23
No
[123] System did not recover on 4E18 data base. Another attempt to boot to 4E18 will be made using **VARIABLE PS 0, AU BUS 1, PS BUS 1,** and **CC 1**
Page 26

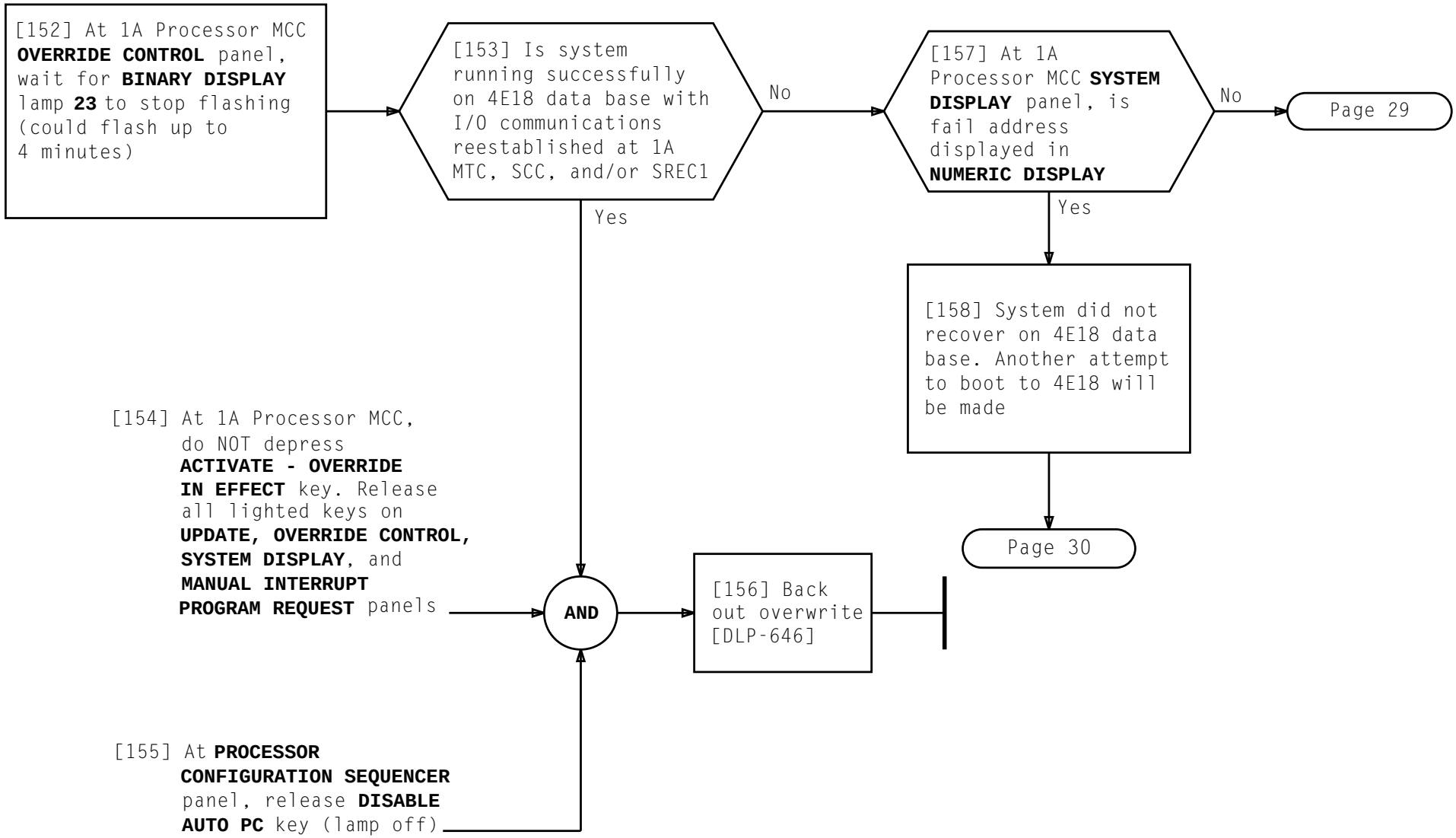

[124] Does **PROCESSOR CONFIG COMPLETE** lamp light GREEN within 60 seconds after Step 121, Page 22
No
Yes
[125] Does **BINARY DISPLAY** lamp **23** start to flash within 5 seconds after **PROCESSOR CONFIG COMPLETE** lamp lights (Phase 3 started)
No
Yes
[126] At 1A Processor MCC **SYSTEM DISPLAY** panel, is fail address displayed in **NUMERIC DISPLAY**
Yes
No
Page 24
[127] System did not recover on 4E18 data base. Another attempt to boot to 4E18 will be made using **VARIABLE PS 0, AU BUS 1, PS BUS 1,** and **CC 1**
Page 26


[128] At 1A Processor MCC **OVERRIDE CONTROL** panel, wait for **BINARY DISPLAY** lamp **23** to stop flashing (could flash up to 4 minutes)
[129] Is system running successfully on 4E18 data base with I/O communications reestablished at 1A MTC, SCC, and/or SREC1
No
[133] At 1A Processor MCC **SYSTEM DISPLAY** panel, is fail address displayed in **NUMERIC DISPLAY**
No
Page 25
Yes
[134] System did not recover on 4E18 data base. Another attempt to boot to 4E18 will be made using **VARIABLE PS 0, AU BUS 1, PS BUS 1,** and **CC 1**
Page 26
Yes
[130] At 1A Processor MCC, do NOT depress **ACTIVATE - OVERRIDE IN EFFECT** key. Release all lighted keys on **UPDATE, OVERRIDE CONTROL, SYSTEM DISPLAY**, and **MANUAL INTERRUPT PROGRAM REQUEST** panels
AND
[132] Back out overwrite [DLP-646]
[131] At **PROCESSOR CONFIGURATION SEQUENCER** panel, release **DISABLE AUTO PC** key (lamp off)


[135] At 1A Processor MCC, do NOT depress **ACTIVATE – OVERRIDE IN EFFECT** key. Release all lighted keys on **UPDATE, OVERRIDE CONTROL, SYSTEM DISPLAY,** and **MANUAL INTERRUPT PROGRAM REQUEST** panels
[136] At **MANUAL INTERRUPT PROGRAM REQUEST** panel, depress **RESTORE MTCE I/O** key
Lamp lights
AND
[137] Depress **ACTIVATE - PROGRAM REQUEST** key
[138] Is system running with I/O communications reestablished at 1A MTC, SCC and/or SREC1
Yes
[140] Back out overwrite [DLP-646]
No
[139] System did not recover on 4E18 data base. Another attempt to boot to 4E18 will be made using **VARIABLE PS 0, AU BUS 1, PS BUS 1,** and **CC 1**
Page 26


[141] At 1A Processor MCC **MANUAL INTERRUPT PROGRAM REQUEST** panel, if **RESTORE MTCE I/O** lamp is on, depress to off (lamp off)
[142] If **MODIFY RECOVERY ACTIONS** lamp is not on, depress to on (lamp on)
[143] At 1A Processor MCC **OVERRIDE CONTROL** panel, depress any lighted keys (lamps off)
[144] Depress **VARIABLE PS 0, AU BUS 1, PS BUS 1,** and **CC1** keys (lamps on)
[145] At 1A Processor MCC **OVERRIDE CONTROL** panel, depress **ACTIVATE - OVERRIDE IN EFFECT** key. Start timing the backout
AND
[146] Does **NUMERIC DISPLAY** start counting
No
Yes
[147] Does **PROCESSOR CONFIG COMPLETE** lamp light GREEN within 60 seconds after Step 145
No
Yes
[148] System did not recover on 4E18 data base. Another attempt to boot to 4E18 will be made
Page 27
Page 30


[149] Does **BINARY DISPLAY** lamp **23** start to flash within 5 seconds after **PROCESSOR CONFIG COMPLETE** lamp lights (Phase 3 started)
No
Yes
[150] At 1A Processor MCC **SYSTEM DISPLAY** panel, is fail address displayed in **NUMERIC DISPLAY**
Yes
No
[151] System did not recover on 4E18 data base. Another attempt to boot to 4E18 will be made
Page 28
Page 30


[152] At 1A Processor MCC **OVERRIDE CONTROL** panel, wait for **BINARY DISPLAY** lamp **23** to stop flashing (could flash up to 4 minutes)
[153] Is system running successfully on 4E18 data base with I/O communications reestablished at 1A MTC, SCC, and/or SREC1
No
[157] At 1A Processor MCC **SYSTEM DISPLAY** panel, is fail address displayed in **NUMERIC DISPLAY**
No
Page 29
Yes
Yes
[158] System did not recover on 4E18 data base. Another attempt to boot to 4E18 will be made
Page 30
[154] At 1A Processor MCC, do NOT depress **ACTIVATE - OVERRIDE IN EFFECT** key. Release all lighted keys on **UPDATE, OVERRIDE CONTROL, SYSTEM DISPLAY**, and **MANUAL INTERRUPT PROGRAM REQUEST** panels
AND
[156] Back out overwrite [DLP-646]
[155] At **PROCESSOR CONFIGURATION SEQUENCER** panel, release **DISABLE AUTO PC** key (lamp off)

[159] At 1A Processor MCC, do NOT depress **ACTIVATE - OVERRIDE IN EFFECT** key. Release all lighted keys on **UPDATE, OVERRIDE CONTROL, SYSTEM DISPLAY,** and **MANUAL INTERRUPT PROGRAM REQUEST** panels

[160] At **MANUAL INTERRUPT PROGRAM REQUEST** panel, depress **RESTORE MTCE I/O** key

Lamp lights

AND

[161] Depress **ACTIVATE - PROGRAM REQUEST** key

[162] Is system running with I/O communications reestablished at 1A MTC, SCC and/or SREC1

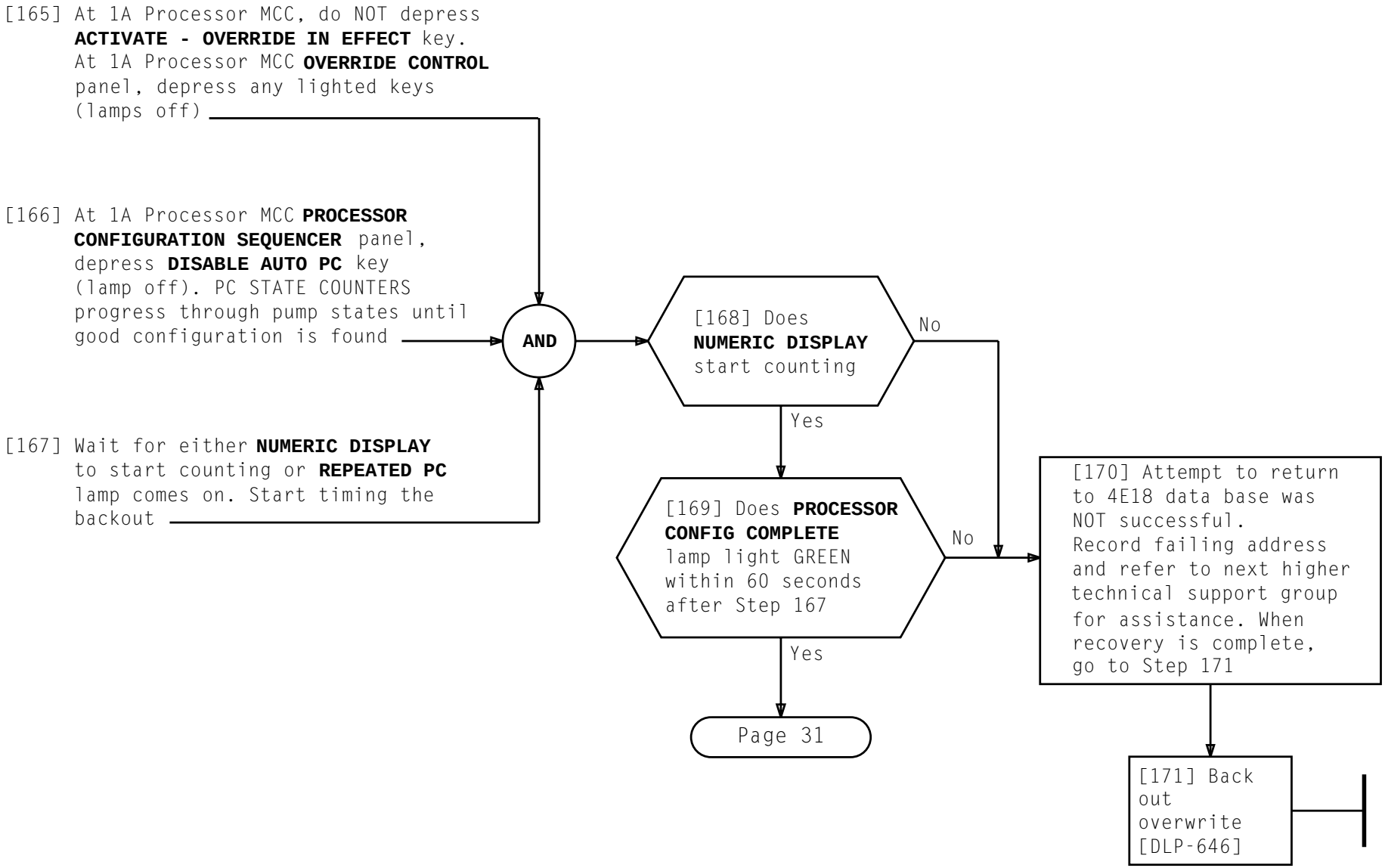
Yes

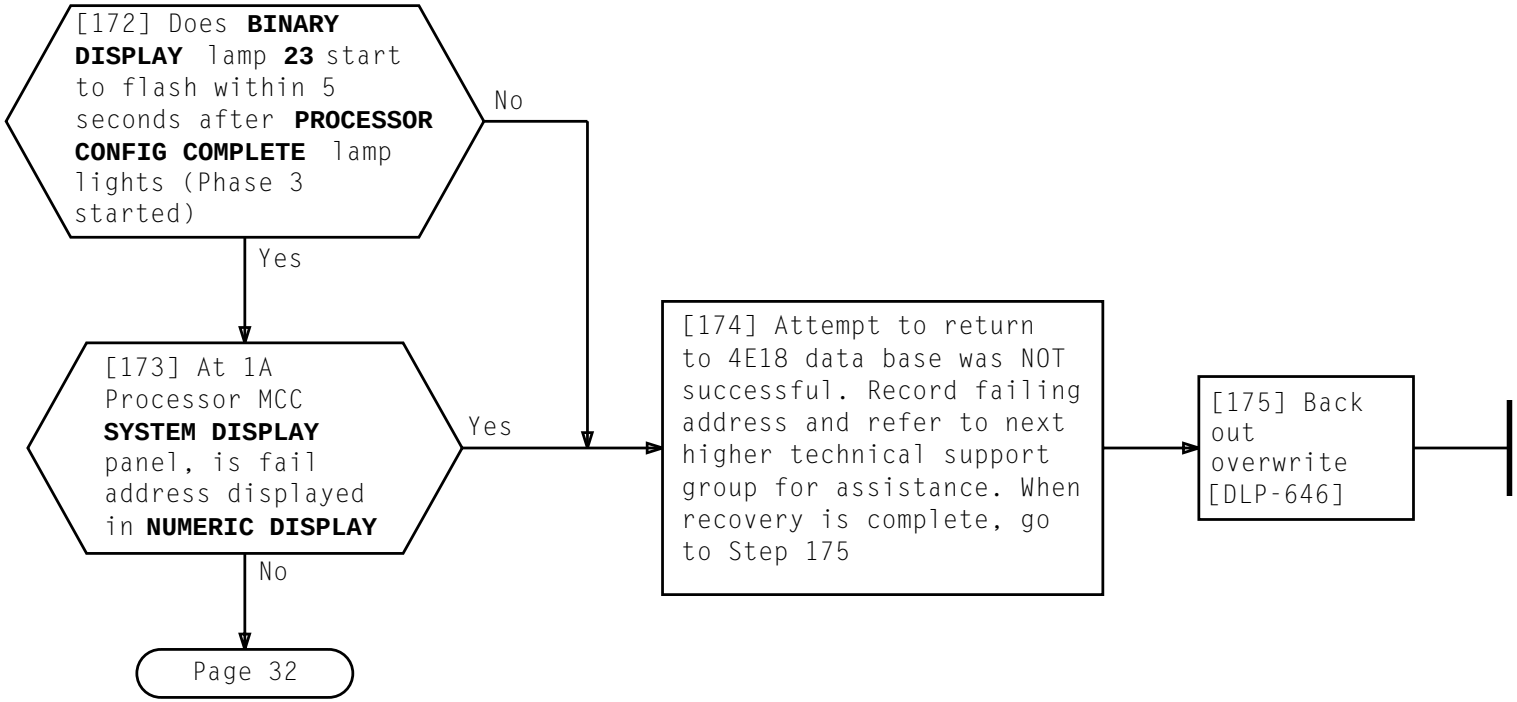
[164] Back out overwrite [DLP-646]

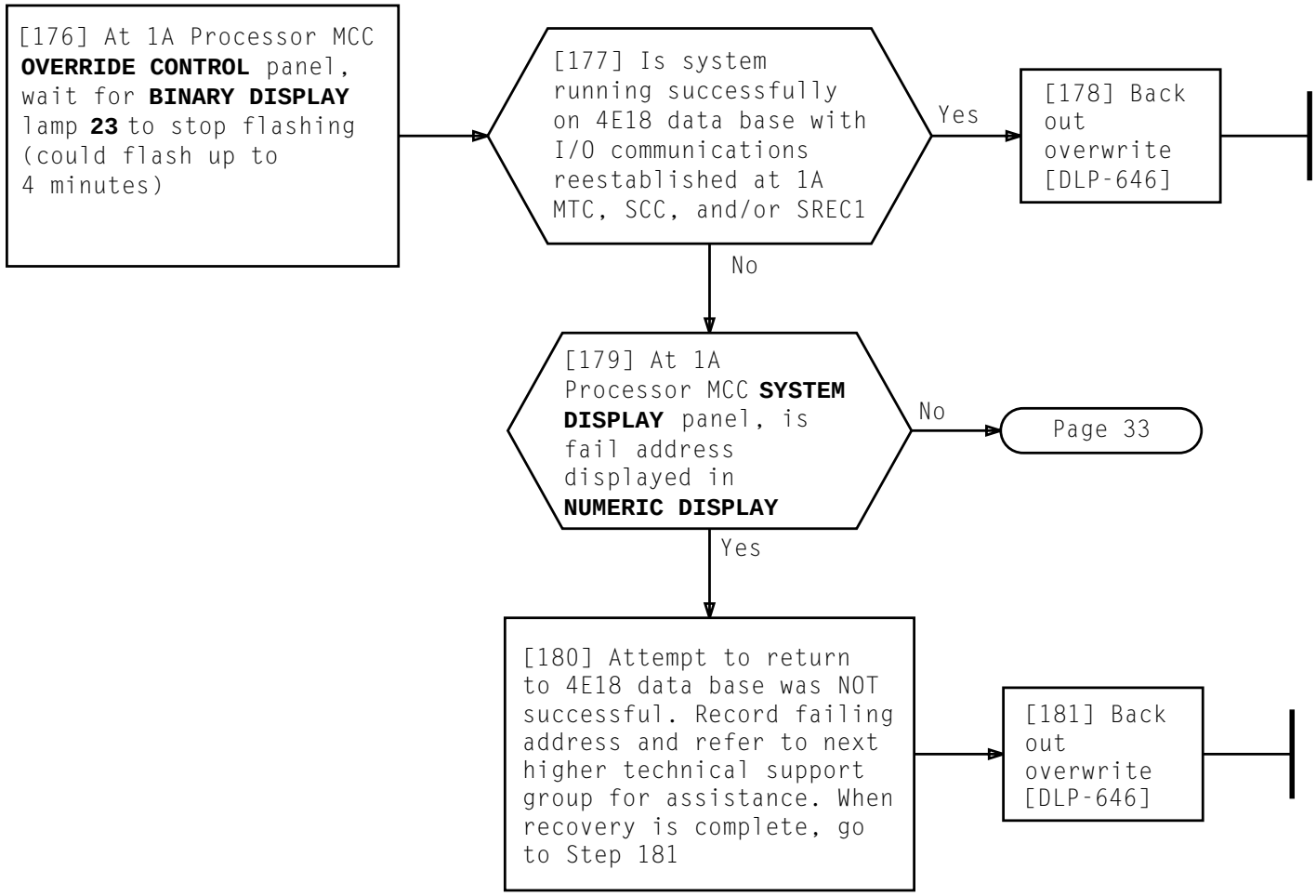
No

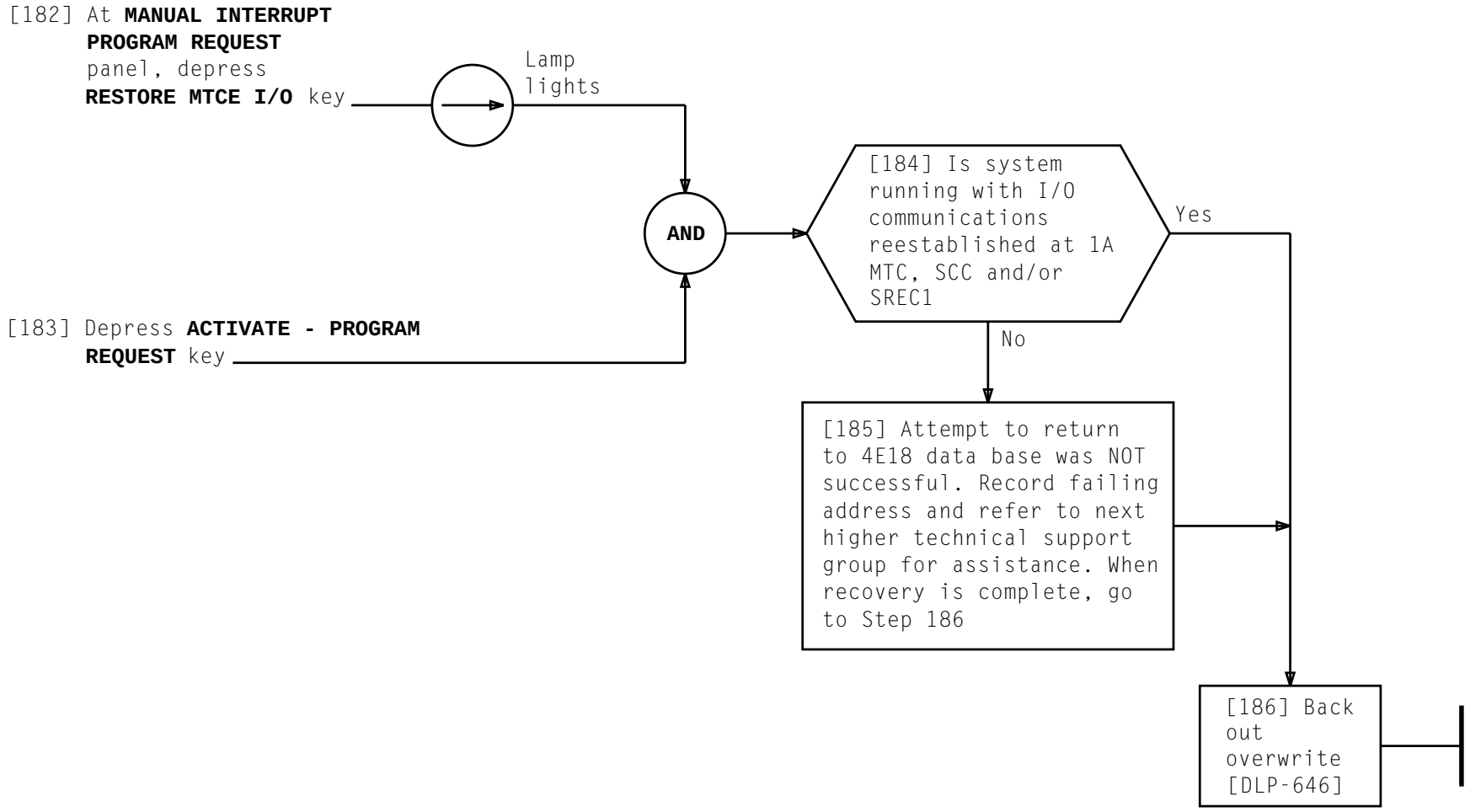
[163] System did not recover on 4E18 data base. Another attempt to boot to 4E18 will be made

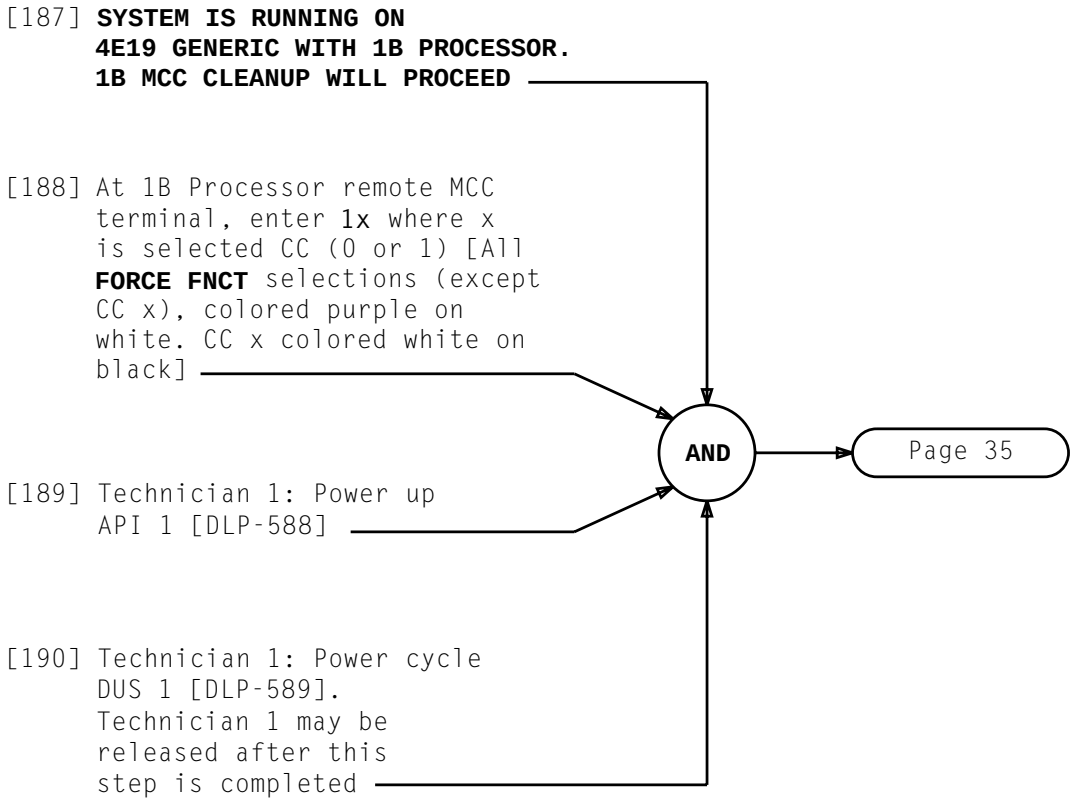
Page 30


[165] At 1A Processor MCC, do NOT depress **ACTIVATE - OVERRIDE IN EFFECT** key. At 1A Processor MCC **OVERRIDE CONTROL** panel, depress any lighted keys (lamps off)
[166] At 1A Processor MCC **PROCESSOR CONFIGURATION SEQUENCER** panel, depress **DISABLE AUTO PC** key (lamp off). PC STATE COUNTERS progress through pump states until good configuration is found
[167] Wait for either **NUMERIC DISPLAY** to start counting or **REPEATED PC** lamp comes on. Start timing the backout
AND
[168] Does **NUMERIC DISPLAY** start counting
No
Yes
[169] Does **PROCESSOR CONFIG COMPLETE** lamp light GREEN within 60 seconds after Step 167
No
Yes
Page 31
[170] Attempt to return to 4E18 data base was NOT successful. Record failing address and refer to next higher technical support group for assistance. When recovery is complete, go to Step 171
[171] Back out overwrite [DLP-646]

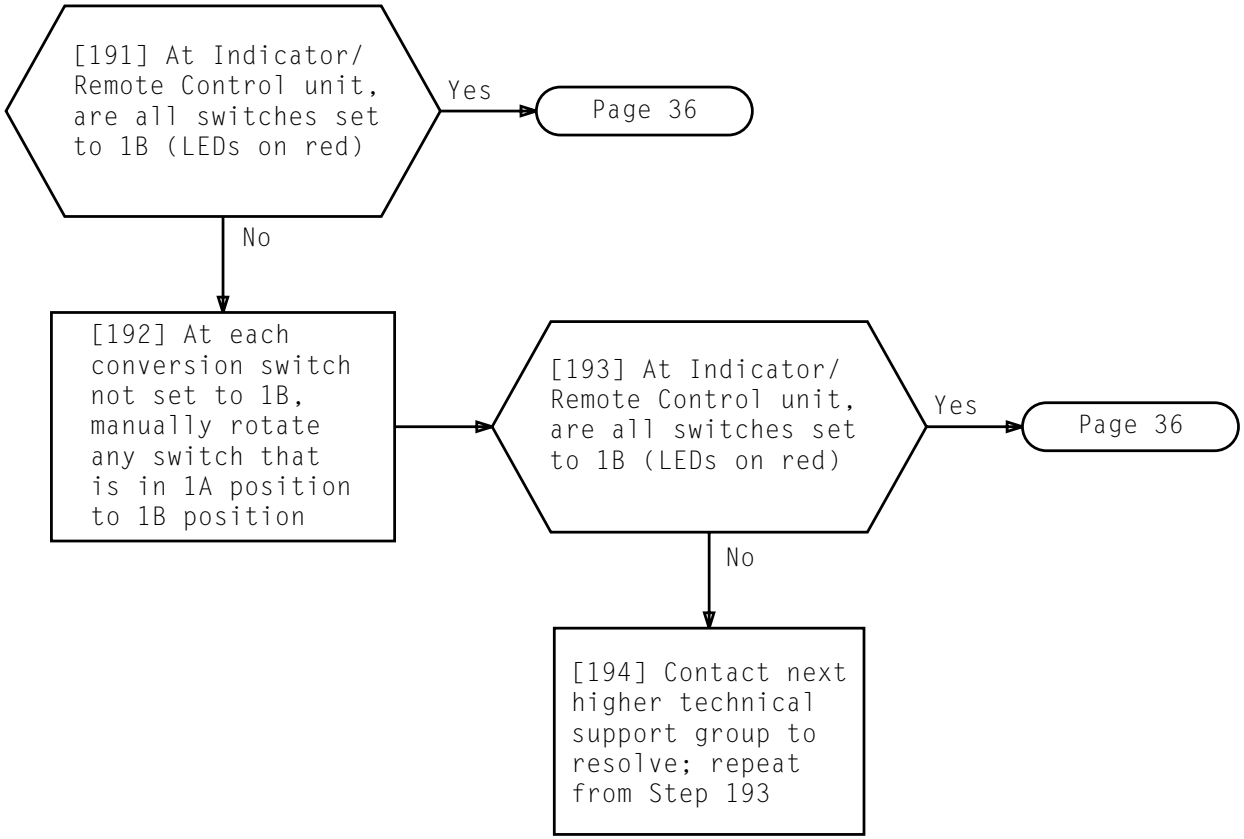

[172] Does **BINARY DISPLAY** lamp **23** start to flash within 5 seconds after **PROCESSOR CONFIG COMPLETE** lamp lights (Phase 3 started)
No
Yes
[173] At 1A Processor MCC **SYSTEM DISPLAY** panel, is fail address displayed in **NUMERIC DISPLAY**
Yes
No
Page 32
[174] Attempt to return to 4E18 data base was NOT successful. Record failing address and refer to next higher technical support group for assistance. When recovery is complete, go to Step 175
[175] Back out overwrite [DLP-646]

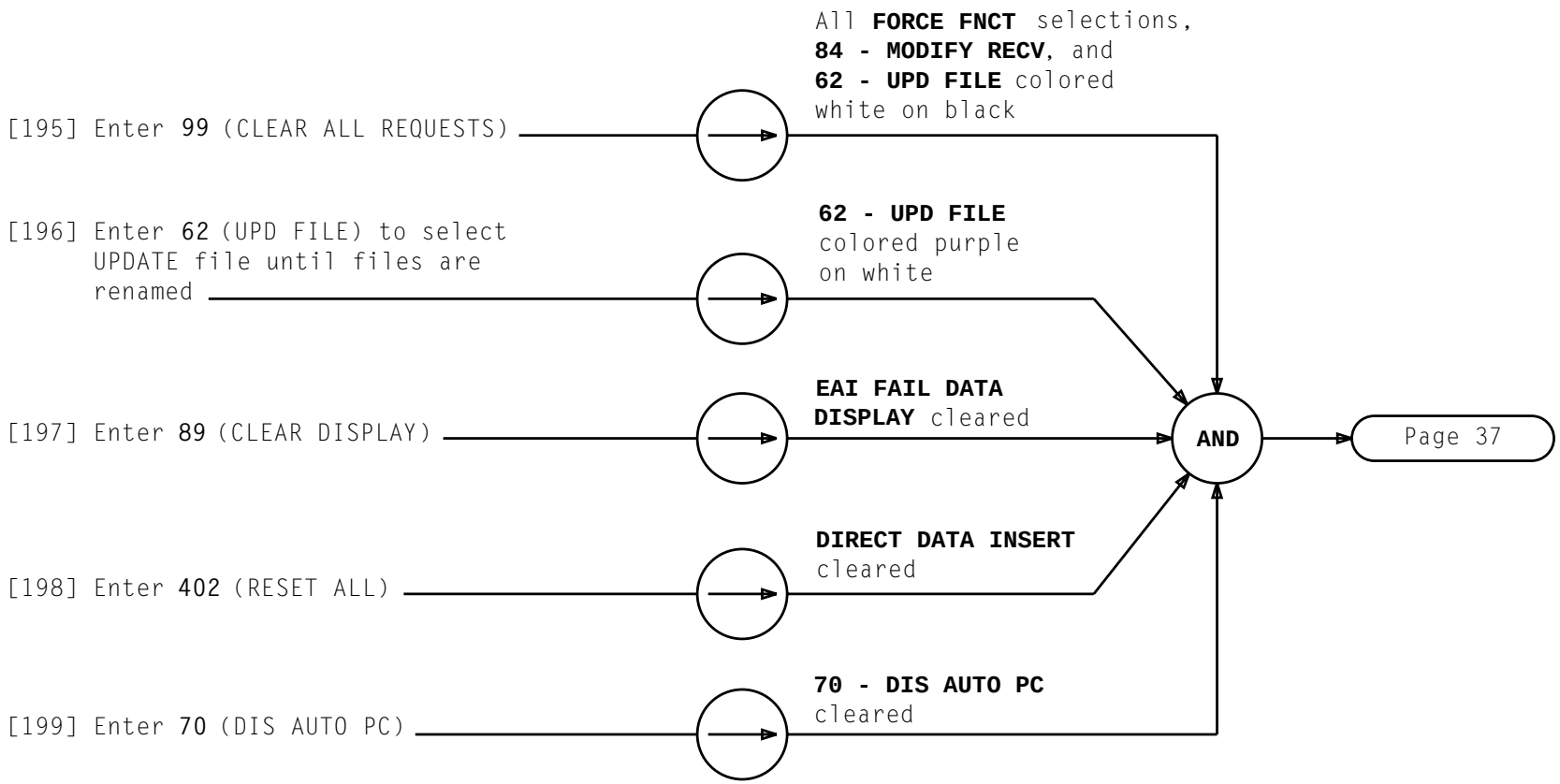

[176] At 1A Processor MCC **OVERRIDE CONTROL** panel, wait for **BINARY DISPLAY** lamp **23** to stop flashing (could flash up to 4 minutes)
[177] Is system running successfully on 4E18 data base with I/O communications reestablished at 1A MTC, SCC, and/or SREC1
Yes
[178] Back out overwrite [DLP-646]
No
[179] At 1A Processor MCC **SYSTEM DISPLAY** panel, is fail address displayed in **NUMERIC DISPLAY**
No
Page 33
Yes
[180] Attempt to return to 4E18 data base was NOT successful. Record failing address and refer to next higher technical support group for assistance. When recovery is complete, go to Step 181
[181] Back out overwrite [DLP-646]

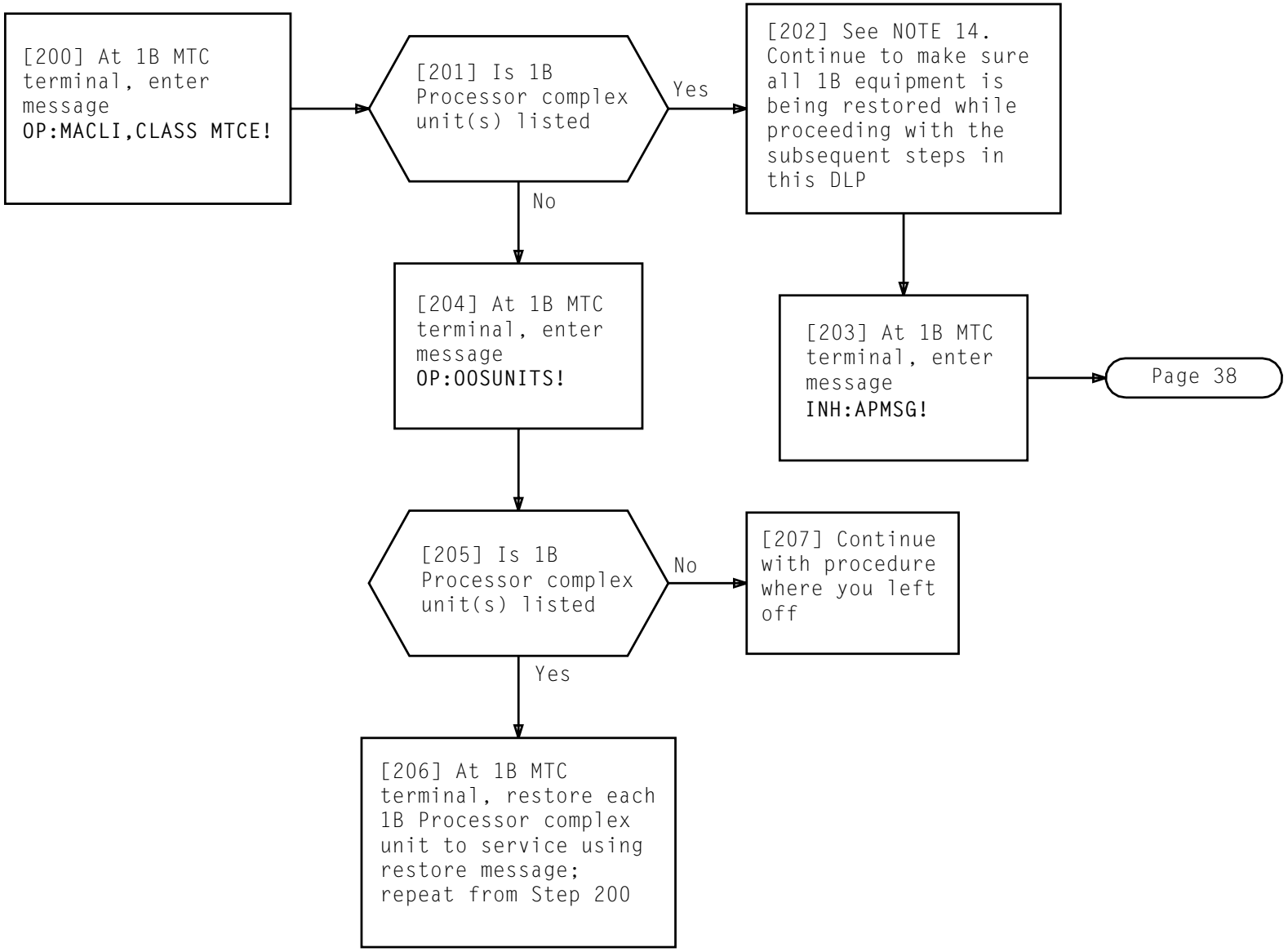

[182] At **MANUAL INTERRUPT PROGRAM REQUEST** panel, depress **RESTORE MTCE I/O** key
Lamp lights
AND
[183] Depress **ACTIVATE - PROGRAM REQUEST** key
[184] Is system running with I/O communications reestablished at 1A MTC, SCC and/or SREC1
Yes
No
[185] Attempt to return to 4E18 data base was NOT successful. Record failing address and refer to next higher technical support group for assistance. When recovery is complete, go to Step 186
[186] Back out overwrite [DLP-646]



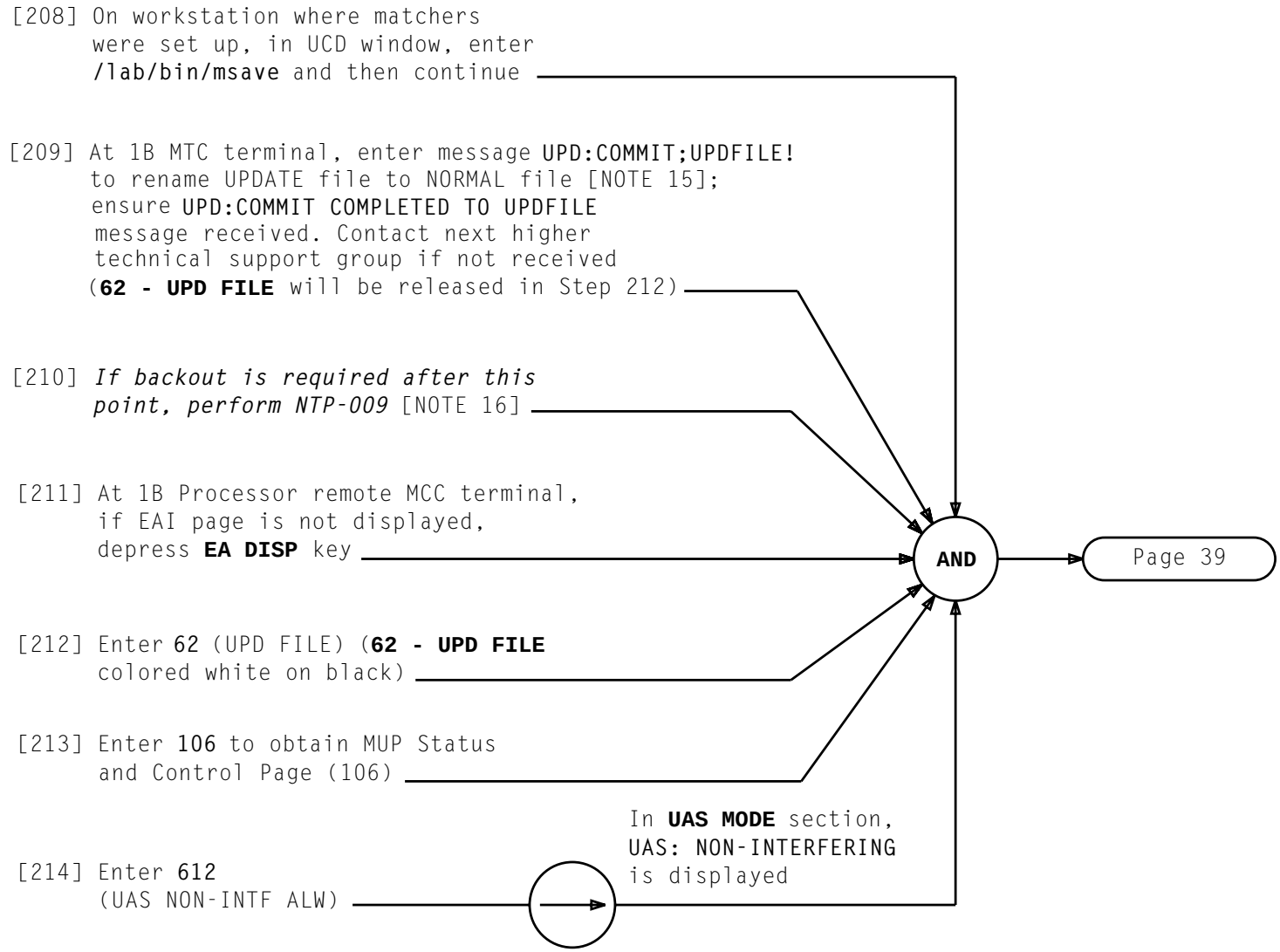
RETROFIT TO 1B PROCESSOR


[191] At Indicator/ Remote Control unit, are all switches set to 1B (LEDs on red)
Yes
Page 36
No
[192] At each conversion switch not set to 1B, manually rotate any switch that is in 1A position to 1B position
[193] At Indicator/ Remote Control unit, are all switches set to 1B (LEDs on red)
Yes
Page 36
No
[194] Contact next higher technical support group to resolve; repeat from Step 193


All **FORCE FNCT** selections, **84 - MODIFY RECV**, and **62 - UPD FILE** colored white on black
[195] Enter **99** (CLEAR ALL REQUESTS)
62 - UPD FILE colored purple on white
[196] Enter **62** (UPD FILE) to select UPDATE file until files are renamed
EAI FAIL DATA DISPLAY cleared
[197] Enter **89** (CLEAR DISPLAY)
AND
Page 37
DIRECT DATA INSERT cleared
[198] Enter **402** (RESET ALL)
70 - DIS AUTO PC cleared
[199] Enter **70** (DIS AUTO PC)



NOTE 14
It is important to get 1B Processor units restored to service as soon as possible while the remainder of the retrofit procedure is being continued



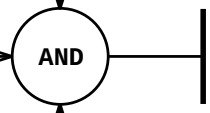
NOTES

15. Step 208 is being performed to rename UPDATE file to NORMAL file and precedes the actual commitment to 1B Processor
16. Commitment to 1B Processor takes place when the NORMAL file is written to the UPDATE file

[215] See NOTE 17. Enter **118** to obtain 1B Processor System Display page (118)

[216] At workstation where **/lab/bin/msave** command was entered, ensure **(msave): Dump Completed** message was received

[217] At 1A Processor MCC **SYSTEM DISPLAY** panel, depress **NUMERIC DISPLAY SELECTION - CONTENTS OF MEMORY** and/or **BINARY DISPLAY SELECTION – CONTENTS OF MEMORY** key(s) [lamp(s) on]. Report if 1A Processor did or did not go into stand-alone mode to next higher technical support group. This is for information only [NOTE 18]



NOTES

17. 118 page is to be used to monitor system operation and must NOT be covered by any other screen
18. Counting in **NUMERIC DISPLAY** indicates 1A Processor is cycling. If counting, 1A Processor is in stand-alone mode. If not counting, 1A Processor is not in stand-alone mode. If **NUMERIC DISPLAY** does not count or stops counting later, do not attempt to restart

[1] At MTC terminal, type, but do not send,
partially completed message
SET:CLK:DAY a,**DATE** b,**TIME** ccdd!
(Complete everything except minutes and seconds)
a = day (SUN, MON, TUE, etc.)
b = date (6-digit number — mmddyy)
cc = hour
dd = minute

OK

[2] Call U. S. Bureau of Standards Time Announcement,
303-499-7111, and listen for time announcement [NOTE 1]

[3] At next time announcement, complete message (but do not
send) by adding minute announced plus 1

AND

[4] Return cursor to start of message

[5] At next time announcement, instant tone is heard;
depress **SEND** key

NOTE 1	
Time announcements are made every minute on the minute. Hours announced are in Greenwich Mean Time	
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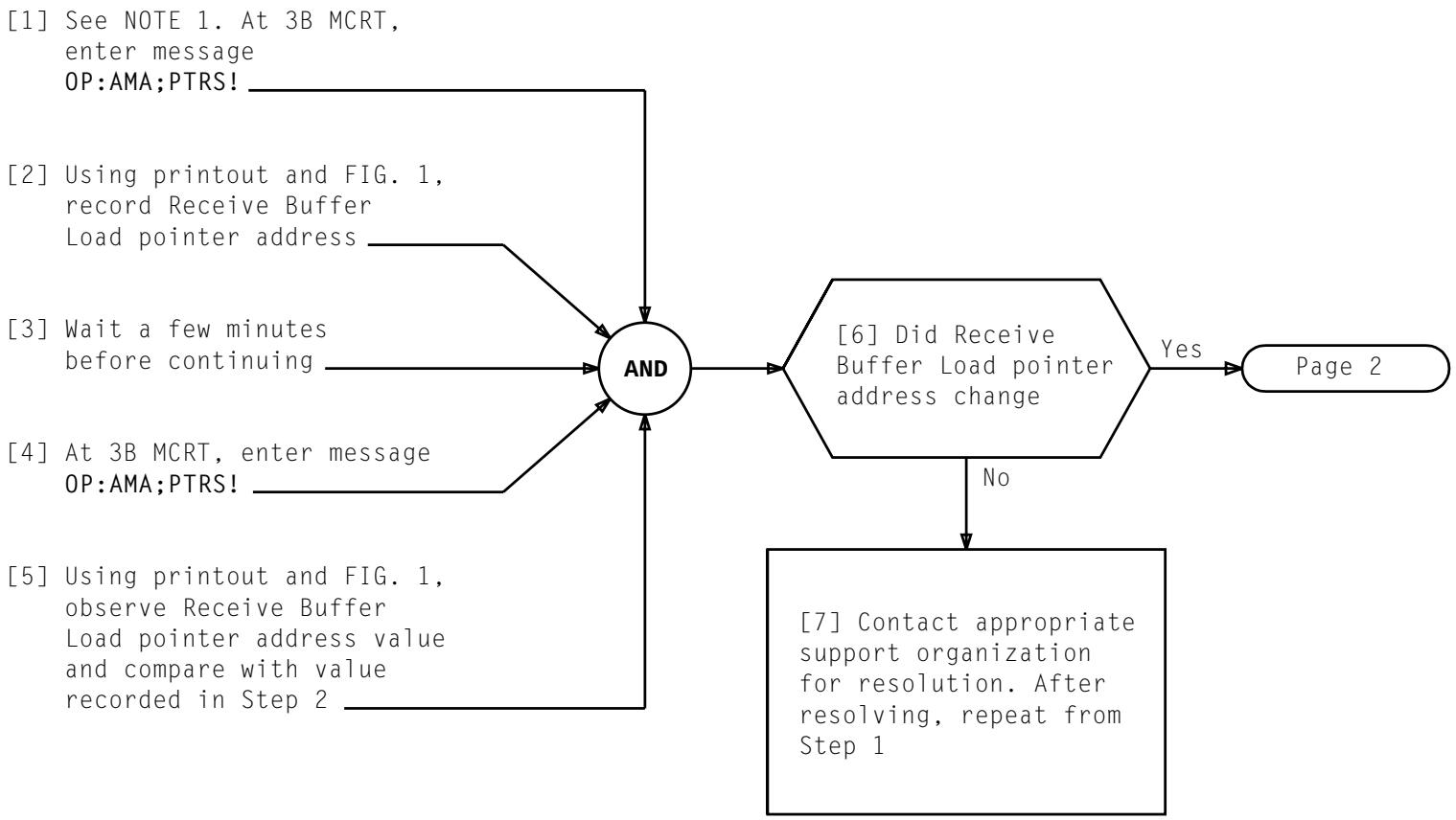
SET SYSTEM CLOCK




```
REPT AMA POINTERS INFORMATION
   Receive Buffer Unload pointer:
    DMAnum 0  offset 52284  address 508988
   Receive Buffer Load pointer:
    DMAnum 0  offset 50008 address 506712   <- Record This Value
    •
    •
```

FIG. 1 — Sample Output Message

NOTE 1

OP: input message in Steps 1 and 4 must be entered during an 11-minute window starting 2 minutes past any quarter hour. Tracer records are sent on the quarter hour

CHECK CAMA AND/OR ICDR OPERATION

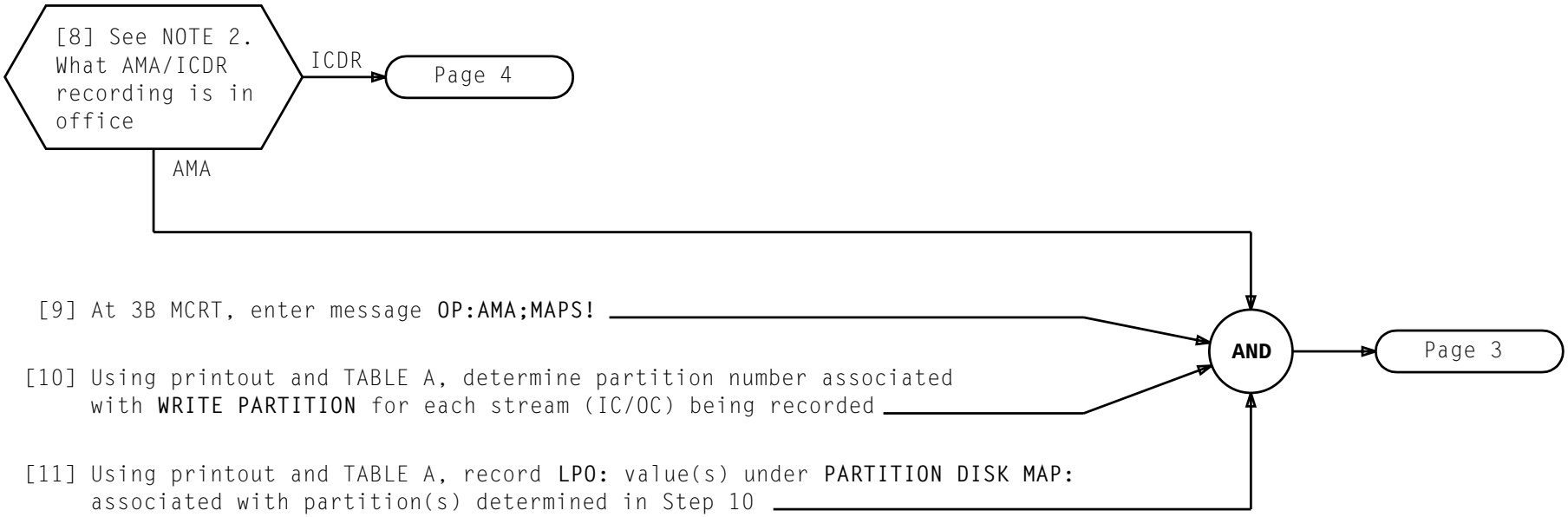
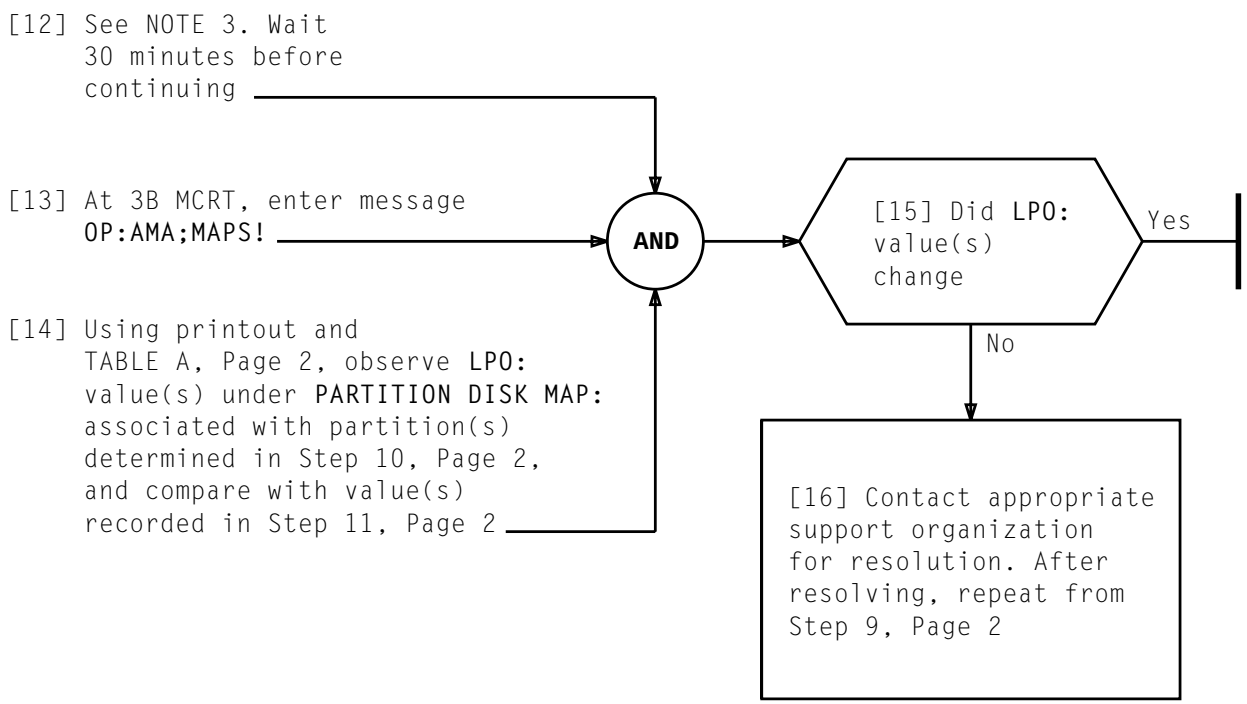


TABLE A

MESSAGE NUMBER	OUTPUT MESSAGE
1	REPT AMA DISK MAPS FOR a STREAM WRITE PARTITION b READ PARTITION a = IC or OC b = Partition number AMA data being written
2	Message 1 is repeated for each stream
3	PARTITION c DISK MAP: FPO: _____ LPO: d FPS: _____ LPS: _____ FSO: _____ LSO: _____ FSS: _____ LSS: _____ FBO: _____ LBO: _____ FBS: _____ LBS: _____ c = Equipped partition number d = AMA record count
4	Message 3 is repeated for each equipped partition

NOTE 2
If AMA and ICDR data is being recorded, Steps 9 through 16 and Steps 17 through 24 can be performed simultaneously

CHECK CAMA AND/OR ICDR OPERATION



NOTE 3

Data accumulates in a big buffer before it is split and written to disk. If only tracer records are being recorded, it would take approximately 2 hours before LPO: value would change. If a lot of AMA data is recorded, 30-minute wait may not be necessary. Other post retrofit activities can be performed during wait period

CHECK CAMA AND/OR ICDR OPERATION

[17] At 3B MCRT, enter message **OP:ICDR;MAPS!**

[18] Using printout and TABLE A, Page 2, determine partition number associated with **WRITE PARTITION**

[19] Using printout and TABLE B, record **LPO:** value under **PARTITION DISK MAP:** associated with partition determined in Step 18

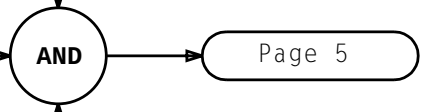
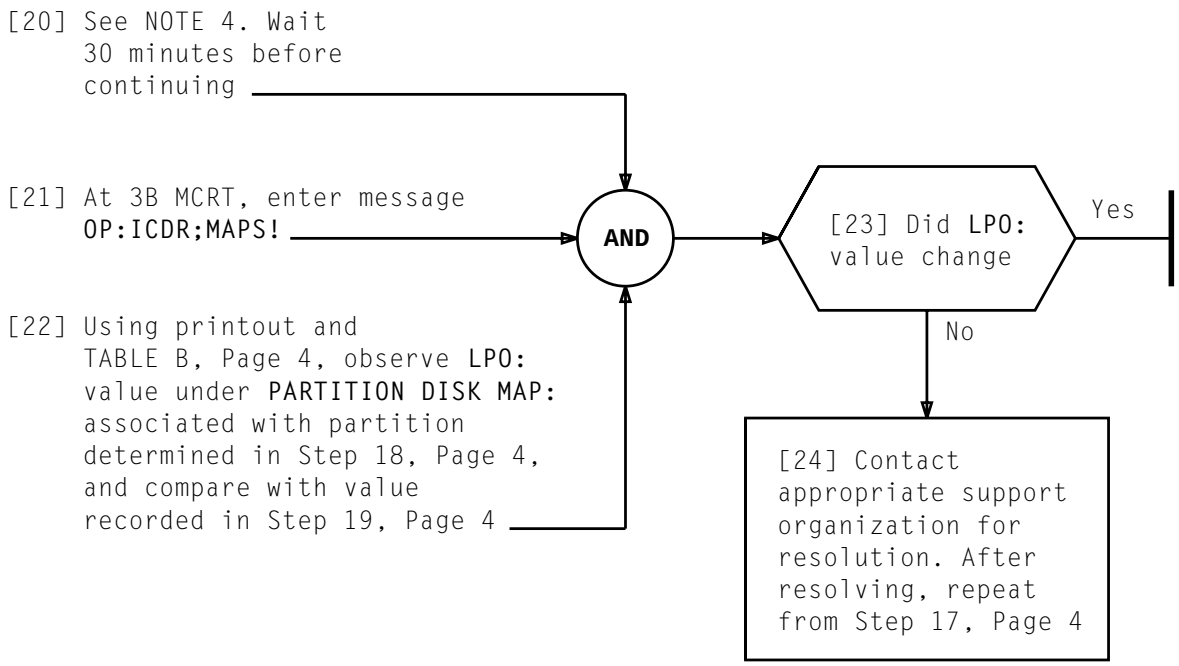


TABLE B

MESSAGE NUMBER	OUTPUT MESSAGE
1	REPT ICDR DISK MAPS WRITE PARTITION a READ PARTITION a = Partition number ICDR data being written
2	PARTITION b DISK MAP: FPO: _____ LPO: c FPS: _____ LPS: _____ FSO: _____ LSO: _____ FSS: _____ LSS: _____ FBO: _____ LBO: _____ FBS: _____ LBS: _____ b = Equipped partition number c = ICDR record count
3	Message 2 is repeated for each equipped partition

CHECK CAMA AND/OR ICDR OPERATION



NOTE 4

Data accumulates in a big buffer before it is split and written to disk. If only tracer records are being recorded, it would take approximately 2 hours before **LPO:** value would change. If a lot of ICDR data is recorded, 30-minute wait may not be necessary. Other post retrofit activities can be performed during wait period

CHECK CAMA AND/OR ICDR OPERATION

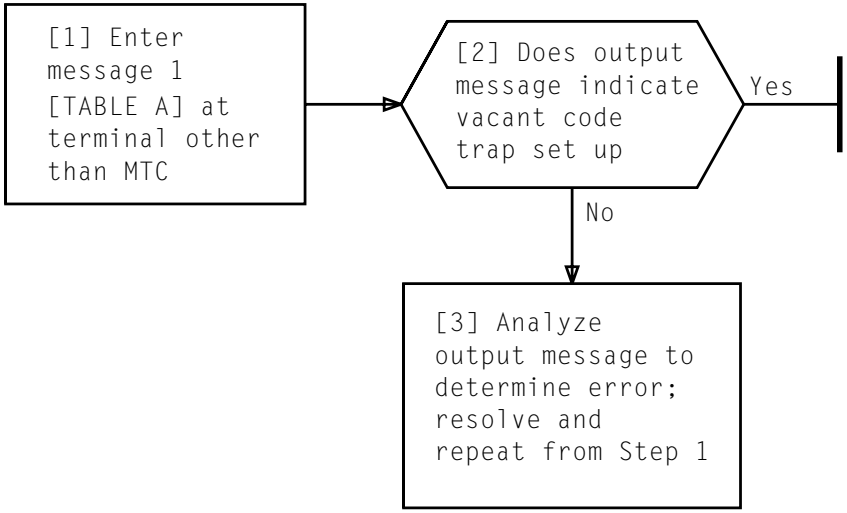
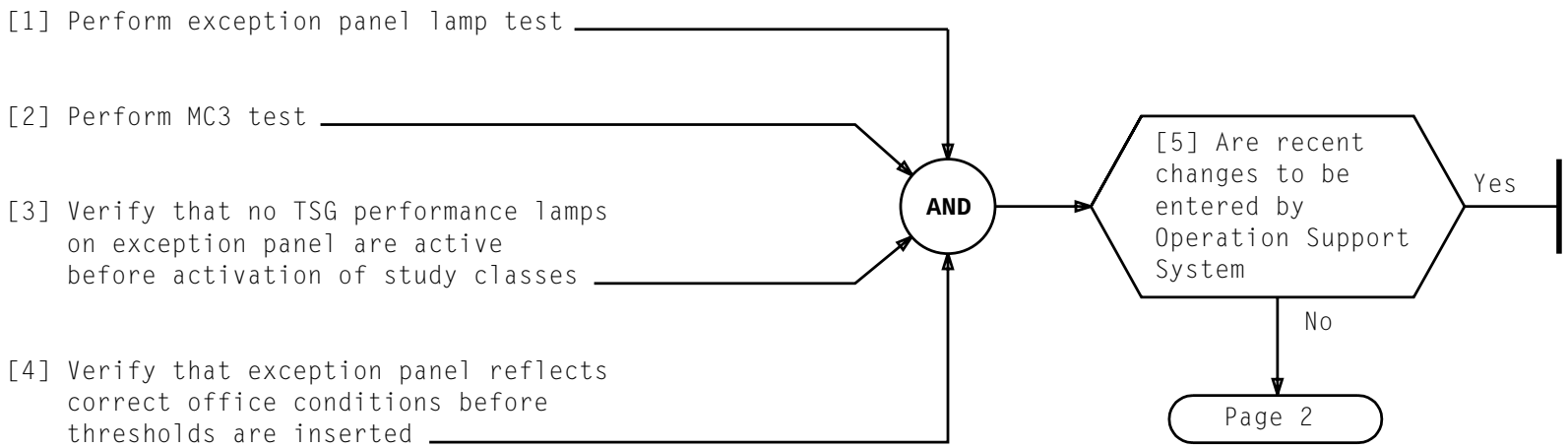


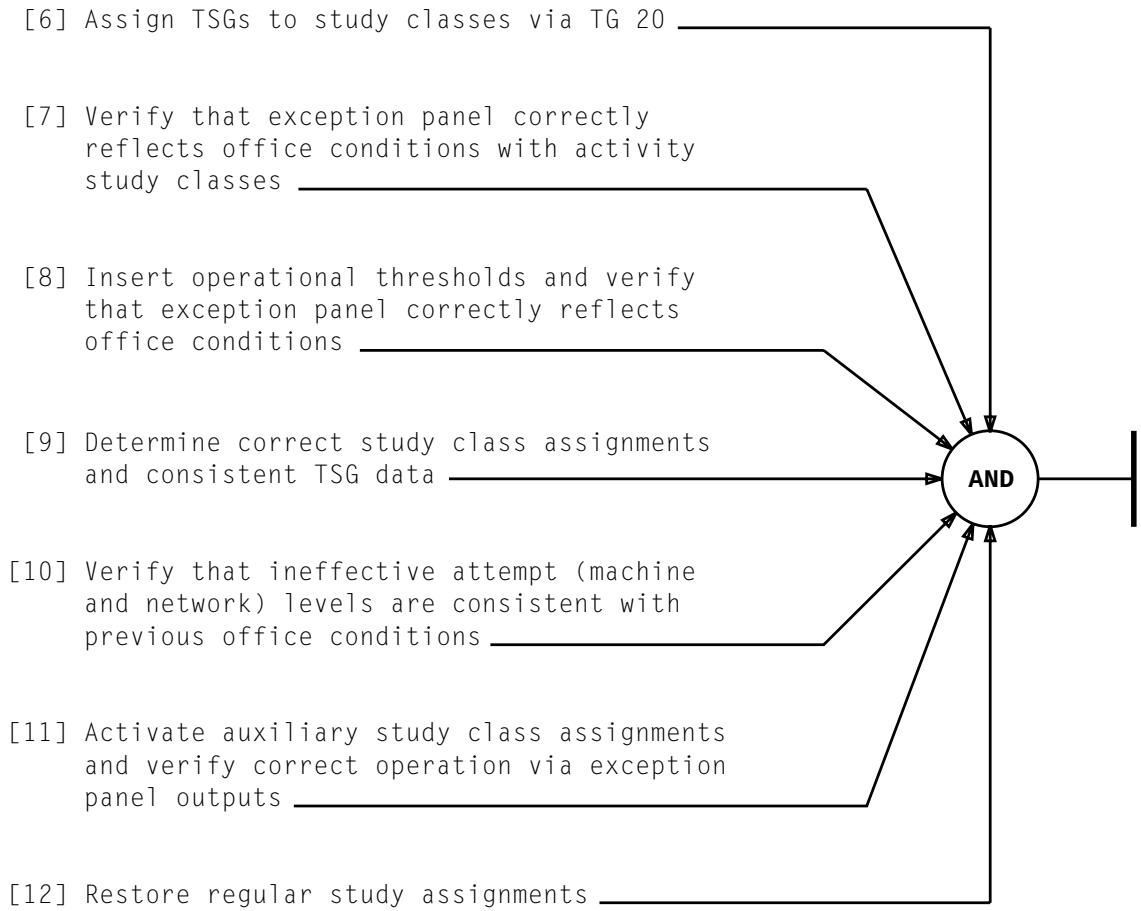
TABLE A

MESSAGE NUMBER	INPUT MESSAGE
1	MON:IAOFC,NEW;ADD:IA (VCA,NCA,PDA,PER),TIMEON hhmm,COUT! hhmm = Hour (00 to 23) and minute (00 to 59) which specifies time trap is to start collecting data

SET UP VACANT CODE TRAPS



CHECK OUT NETWORK MANAGEMENT SYSTEM



CHECK OUT NETWORK MANAGEMENT SYSTEM

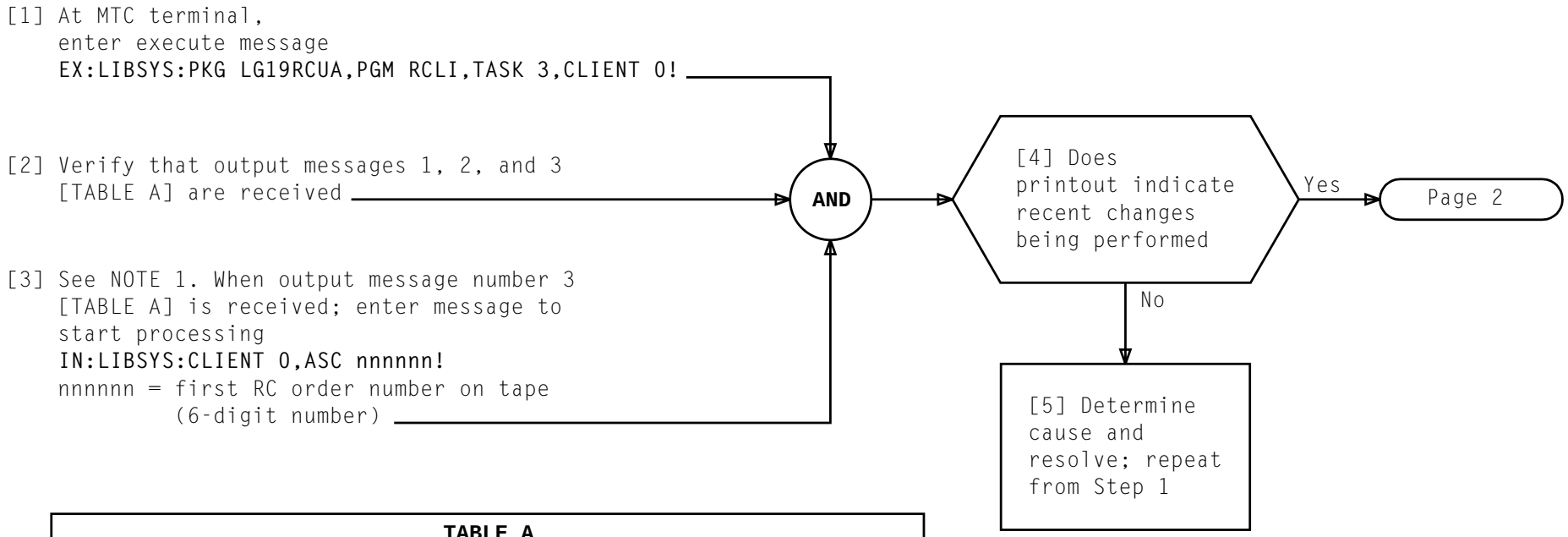


TABLE A

MESSAGE NUMBER	OUTPUT MESSAGE
1	EX:LIBSYS:PKG LG19RCUA,PGM RCLI,TASK 3,CLIENT 0 STARTED
2	REPT:RCLI,PROCESSING INPUT FILE RCLIMnyymmddhhmm n = 1 or 2 yymmddhhmm = Date and time Task 3 Tape created
3	REPT:RCLI,ENTER MSG FOR TASK 3 - ORNU TO START PROCESSING

NOTE 1
All Large Scale Nailup Capability is mapped over during update. RCLI will not process associated 205 and 206 forms entered after final ODA TWRP (deleted during Task 0 processing)

EXECUTE RC UPDATE LIBRARY PROGRAM TASK 3 TO REENTER RECENT CHANGES INTO SYSTEM

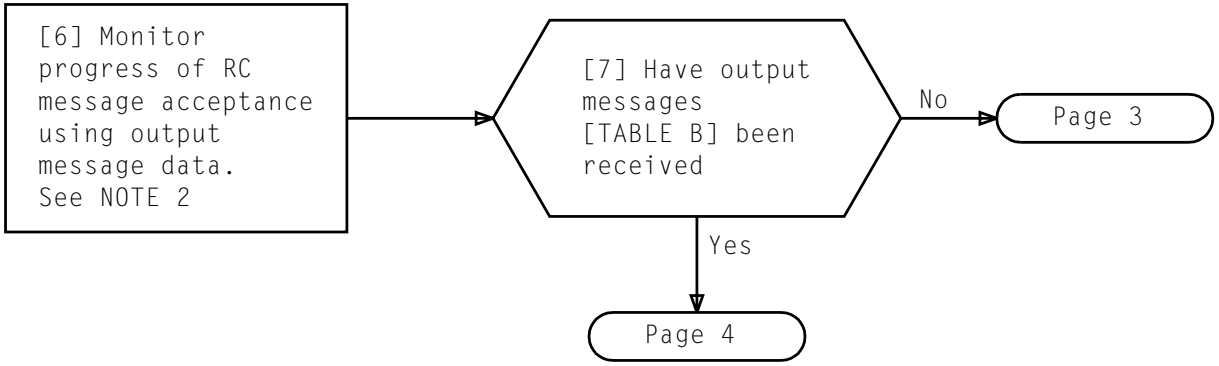


TABLE B

MESSAGE NUMBER	OUTPUT MESSAGE
1	REPT:RCLI,RC ROLLBACK AREA 90% FULL,ORNU nnnnnn LAST ORNU PROCESSED
2	REPT:RCLI, ENTER MSG FOR TASK 3-ABORT OR OVERWRITE ROLLBACK AREA

NOTE 2
If error is detected during processing, normal RC error messages will be received and normal RC processing will take over. Library Program will be in wait mode and will abort in 30 minutes if not restarted

EXECUTE RC UPDATE LIBRARY PROGRAM TASK 3 TO REENTER RECENT CHANGES INTO SYSTEM

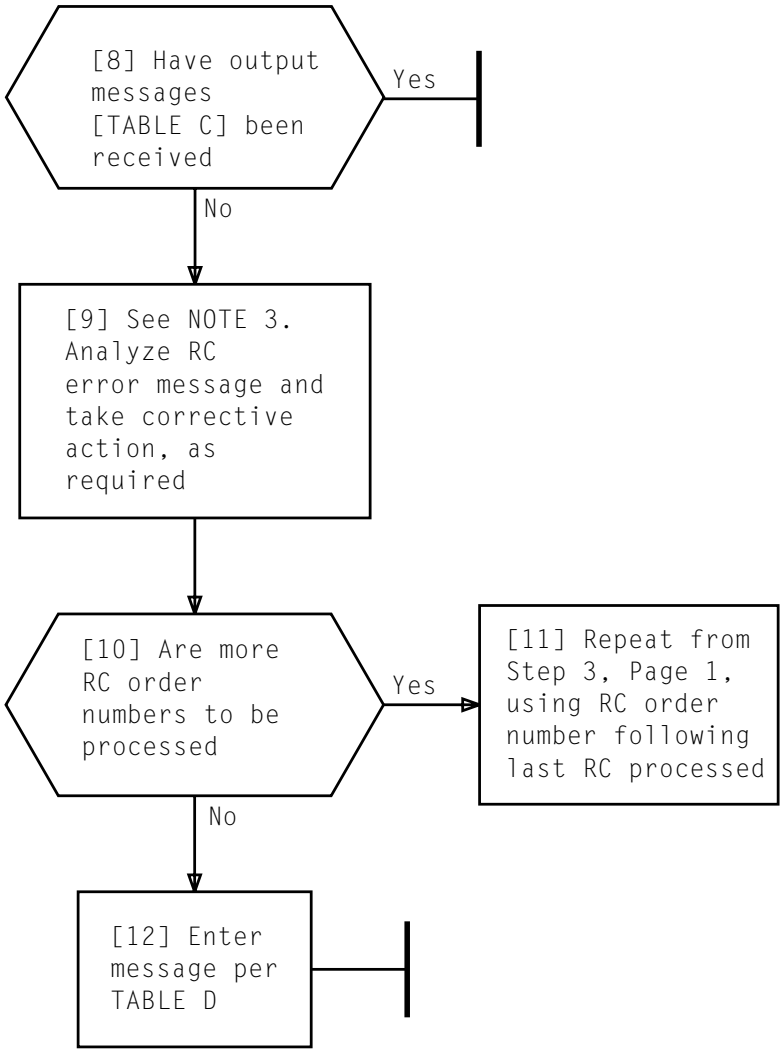


TABLE C

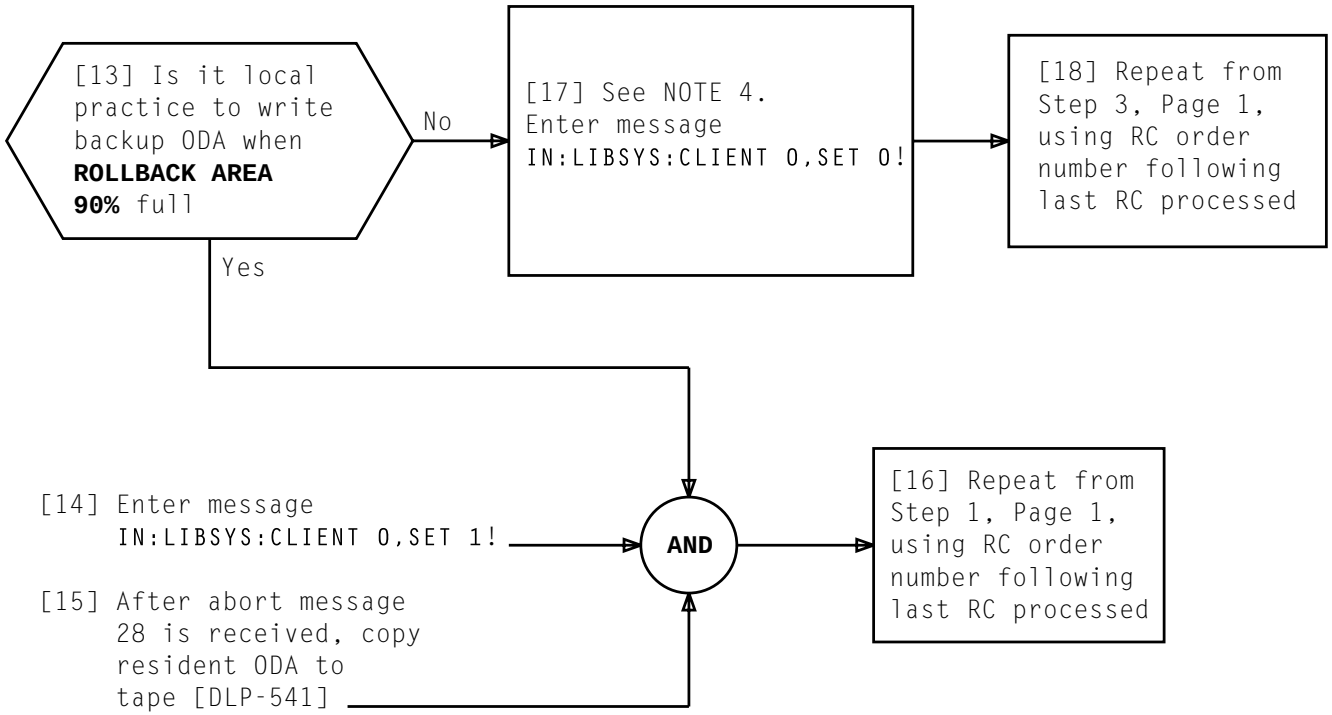
MESSAGE NUMBER	OUTPUT MESSAGE
1	REPT:RCLI CONTROL REPORT TASK NUMBER 3 COUNT OF RCDM MESSAGES ON INPUT TAPE (RCLIMnyymmddhhmm):nnnn COUNT OF RCDM MESSAGES SENT TO RC GENERIC PGM:nnnn COUNT OF UNIT TYPE MESSAGES ACTIVATED:nnnn nnnn = Number of messages nyymmddhhmm = Part of Tape filename
2	REPT:RCLI,TASK COMPLETED SUCCESSFULLY
3	EX:LIBSYS:PKG LG19RCUA,PGM RCLI,TASK 3,CLIENT 0 COMPLETED REPT:DEMOUNT TAPE FROM TUC a

TABLE D

OUTPUT MESSAGE	INPUT MESSAGE
1	STOP:LIBSYS:PKG LG19RCUA,PGM RCLI,TASK 3,CLIENT 0!

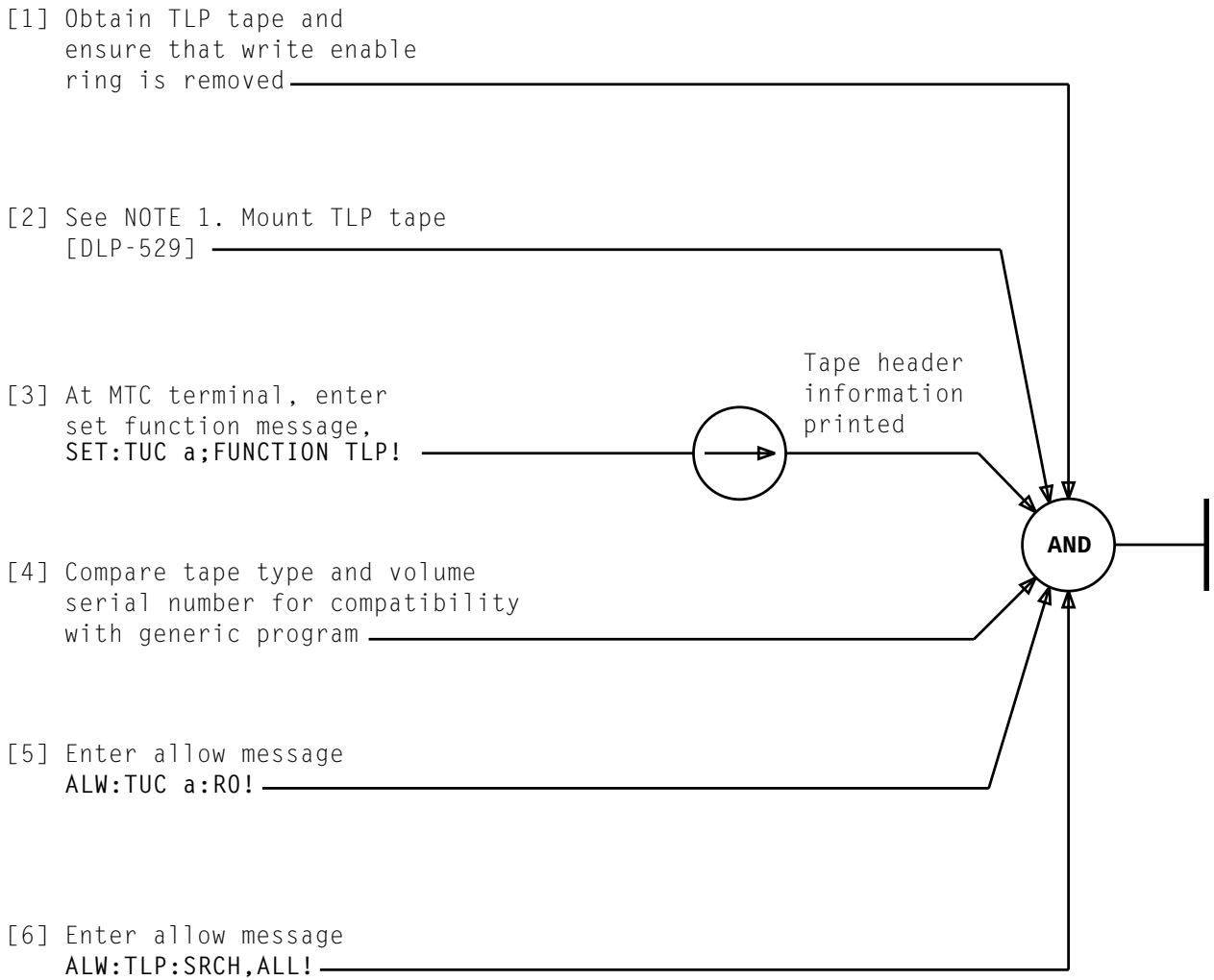
NOTE 3
Recent change in error must be entered manually, if required

EXECUTE RC UPDATE LIBRARY PROGRAM TASK 3 TO REENTER RECENT CHANGES INTO SYSTEM



EXECUTE RC UPDATE LIBRARY PROGRAM TASK 3 TO REENTER RECENT CHANGES INTO SYSTEM

NOTE 4
SET message will cause recent changes to overwrite rollback area

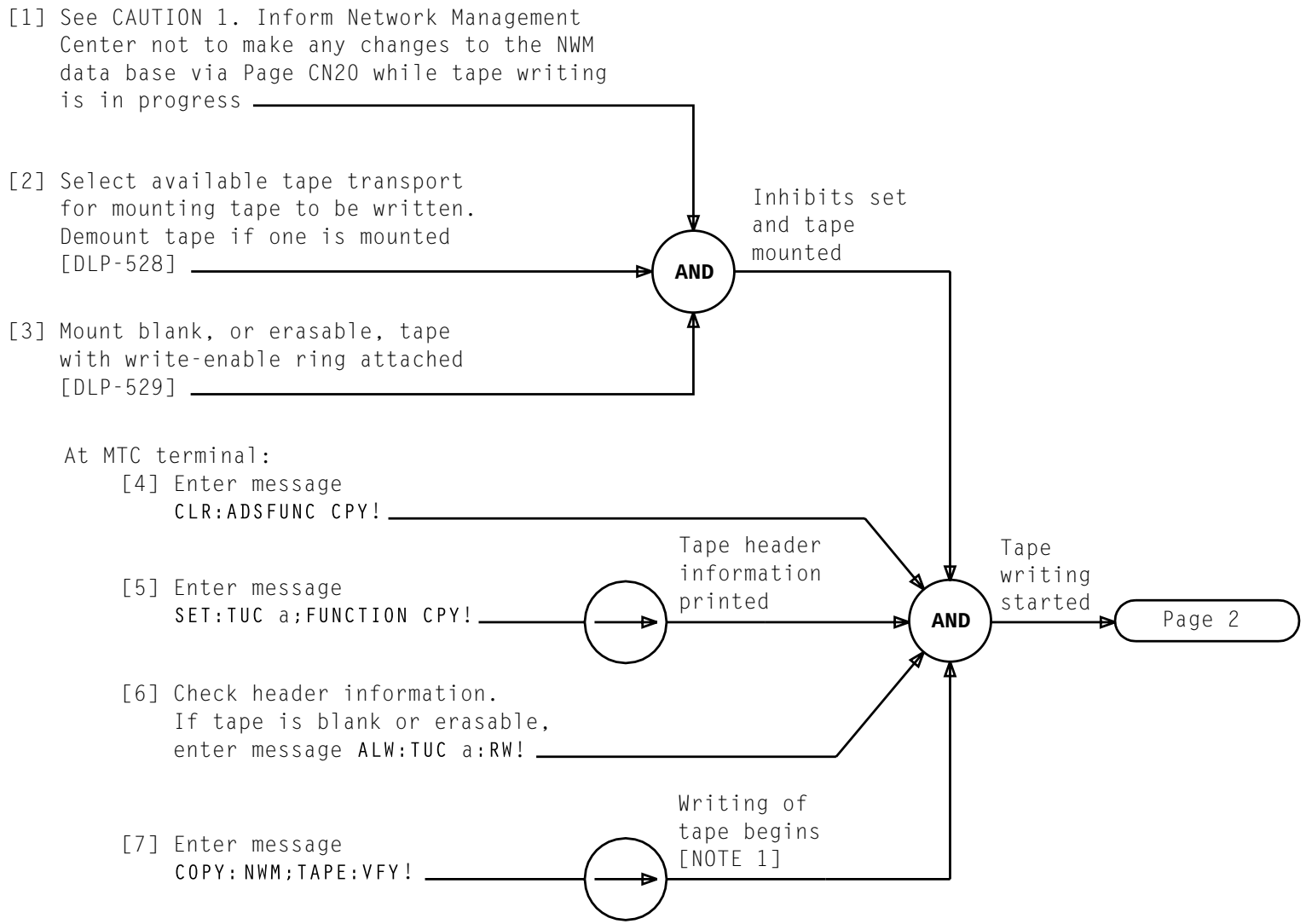


PLACE TLP TAPE IN SERVICE

NOTE 1

Local procedures will dictate tape units on which TLP tape can be mounted

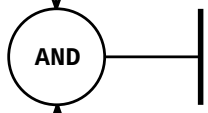
WRITE BACKUP NETWORK MANAGEMENT (NWM) TAPE (800 BPI)



NOTE 1
After network management tape is written, COPY:NWM;TAPE COMPL date and time are printed. Tape will then rewind and be verified. After verification has been completed, COPY:VFY;TAPE COMPL is printed followed by REPT:DEMOUNT TAPE FROM TUC a

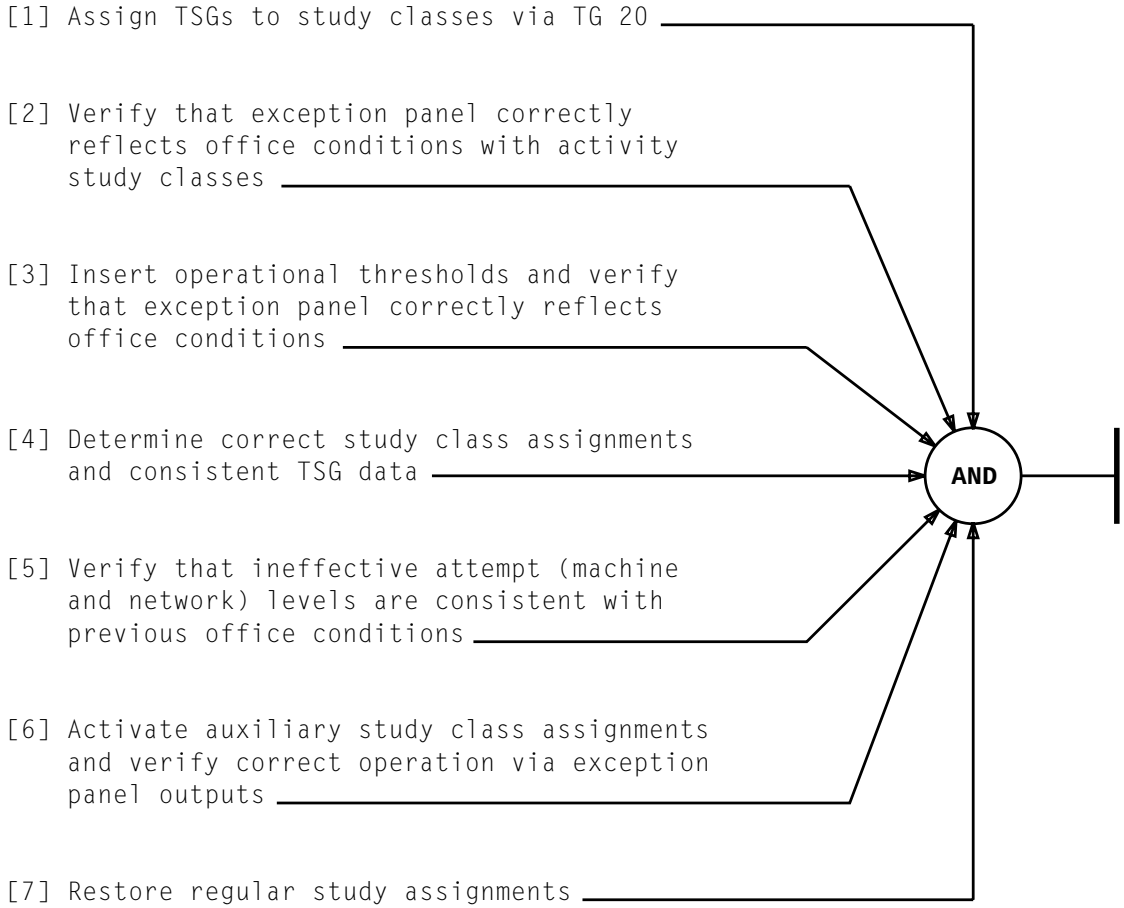
CAUTION 1
Certain system audits are inhibited during tape writing. Therefore, tape writing should be done during light traffic periods

[8] After tape has been written and verified and **REPT:DEMOUNT TAPE FROM TUC** a is printed, demount tape just written [DLP-528] and remove write-enable ring

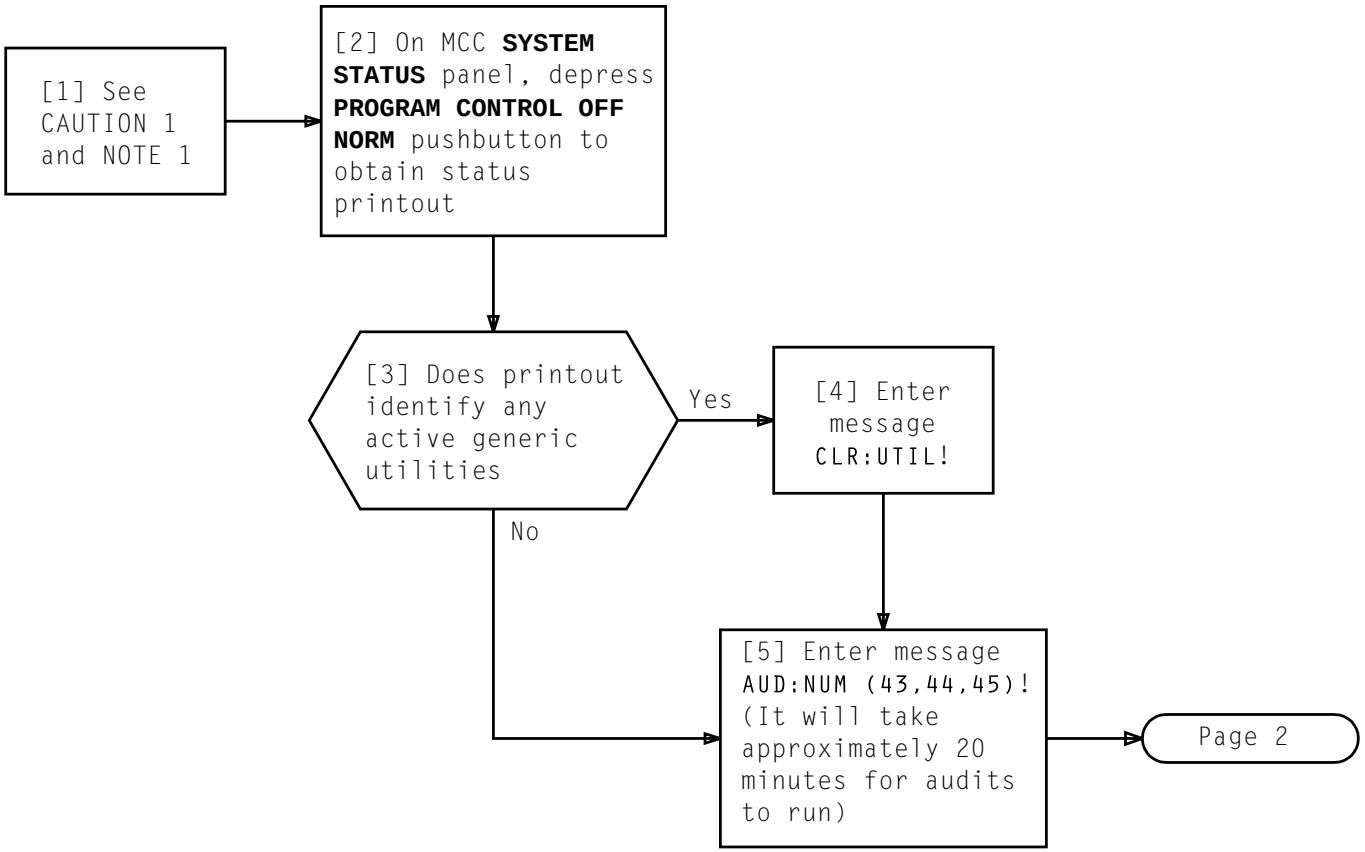


[9] Label and store tape per local instructions

WRITE BACKUP NETWORK MANAGEMENT (NWM) TAPE (800 BPI)



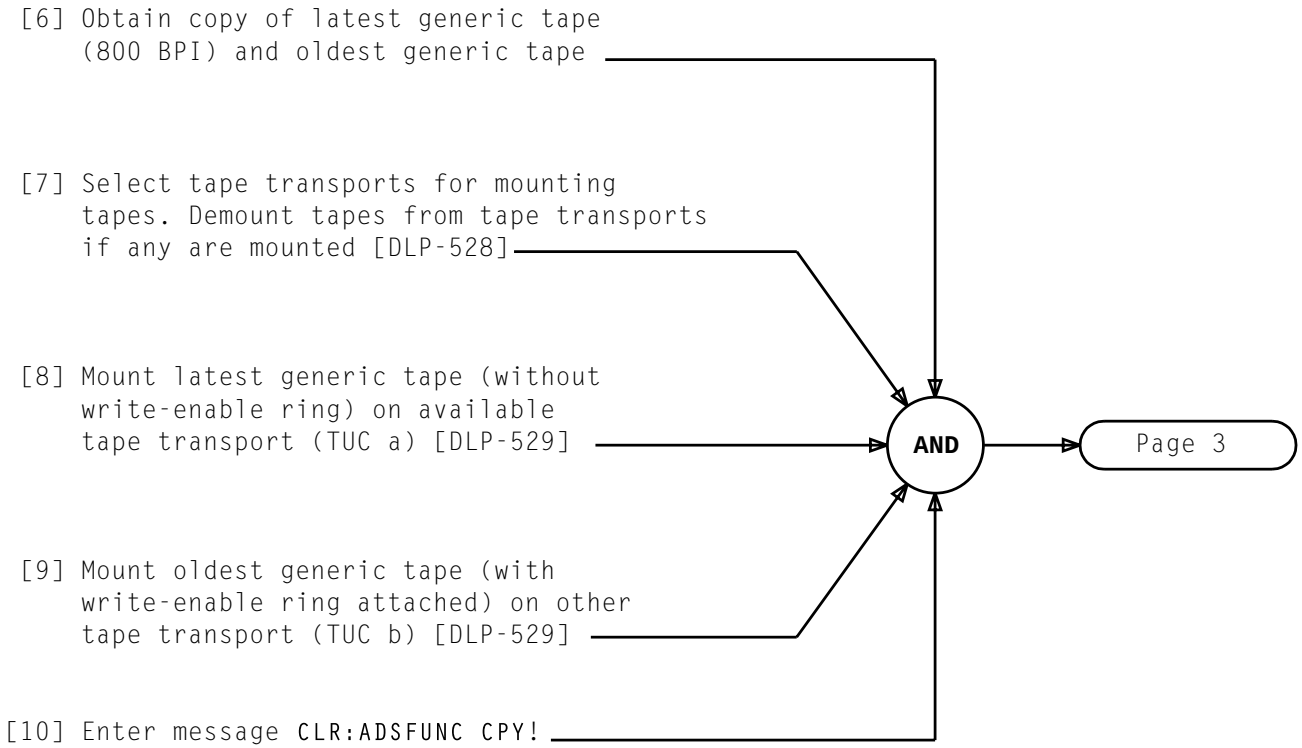
COMPLETE NETWORK MANAGEMENT SYSTEM CHECKOUT



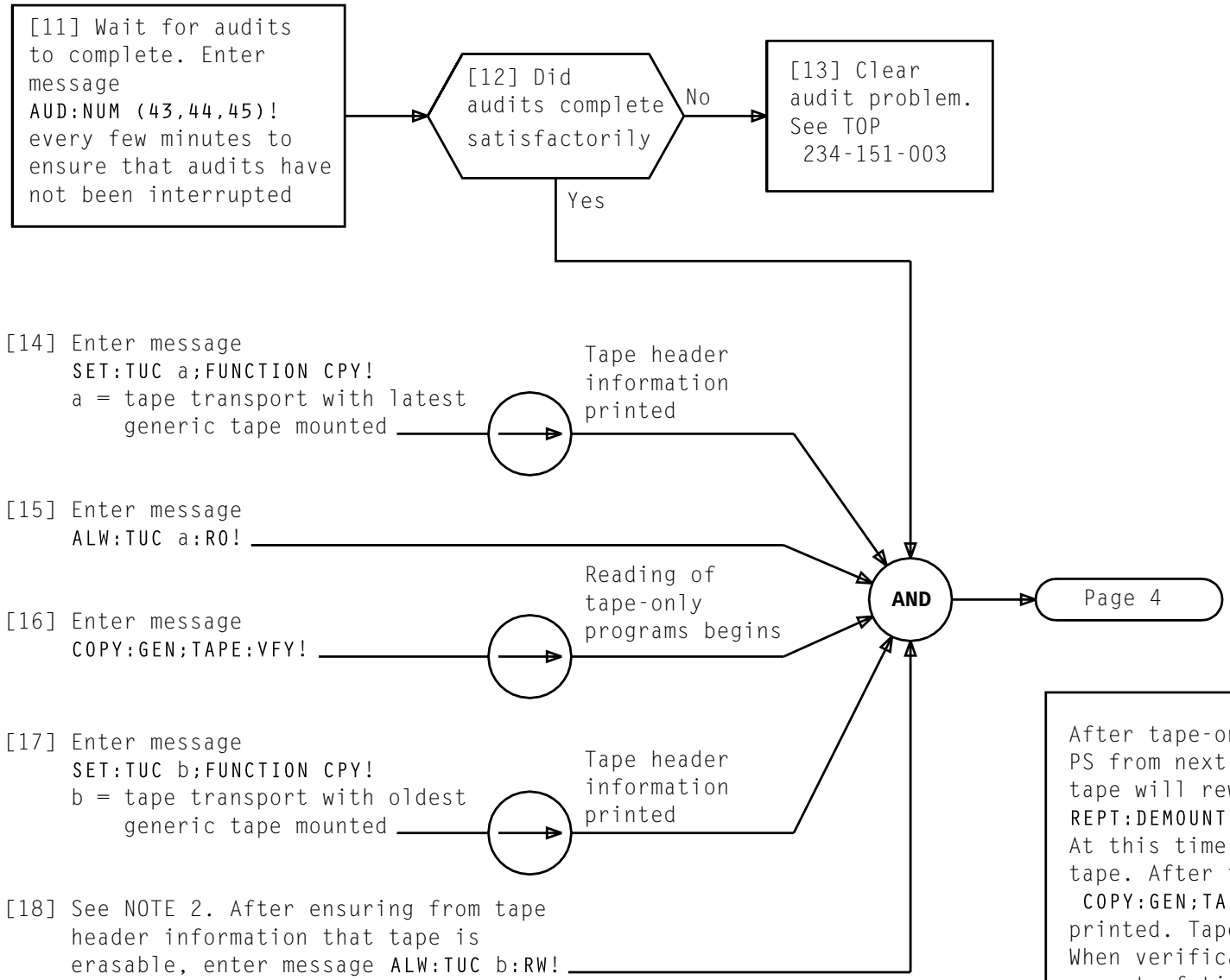
WRITE GENERIC TAPE(S) (TWRP WRITE - 800 BPI)

NOTE 1
If necessary, AT&T Practice 234-020-010 should be referenced for tape storage requirements and procedures

CAUTION 1
Certain system audits are inhibited during tape writing; therefore, tape writing should be done during light traffic periods



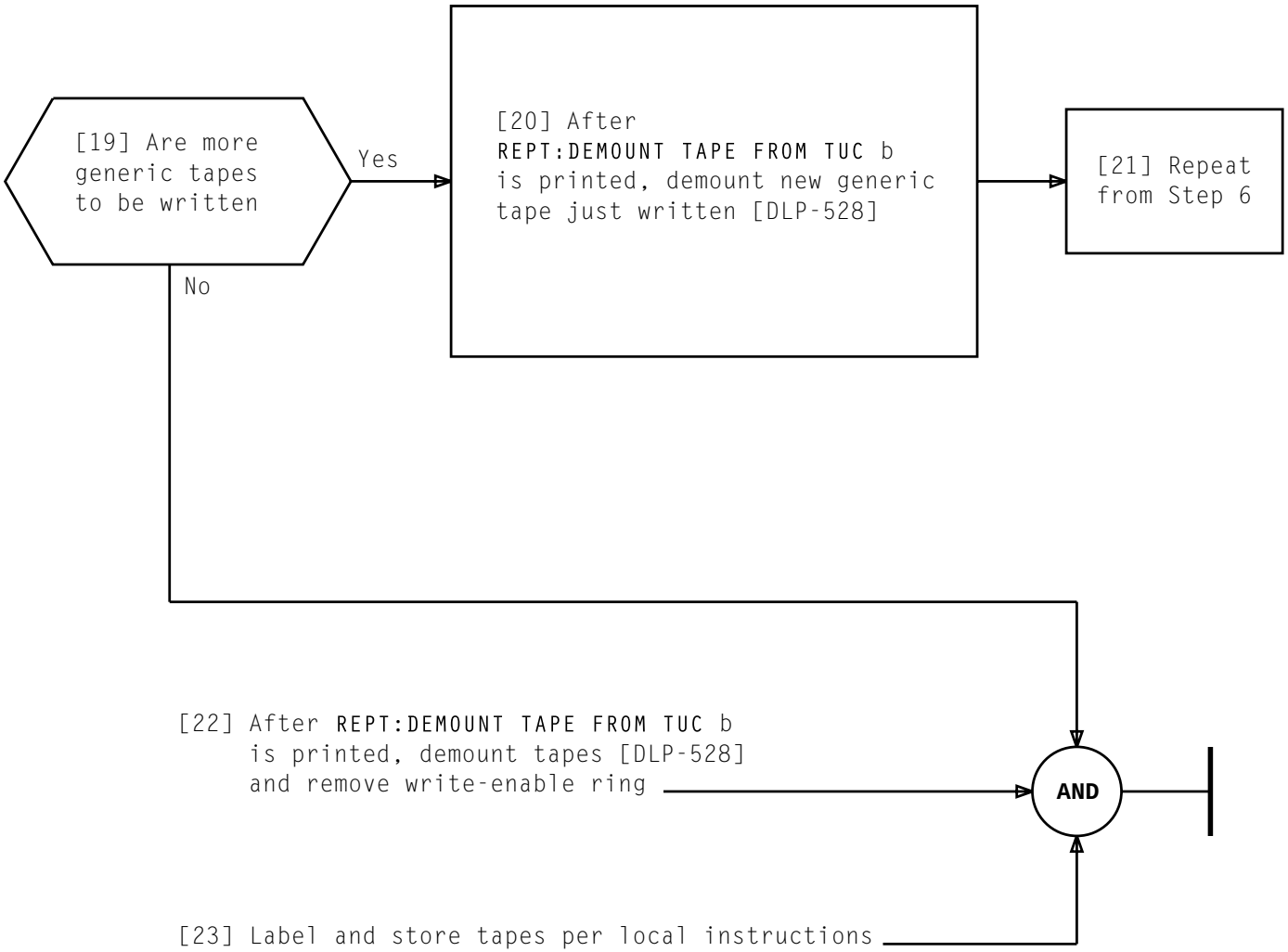
WRITE GENERIC TAPE(S) (TWRP WRITE - 800 BPI)



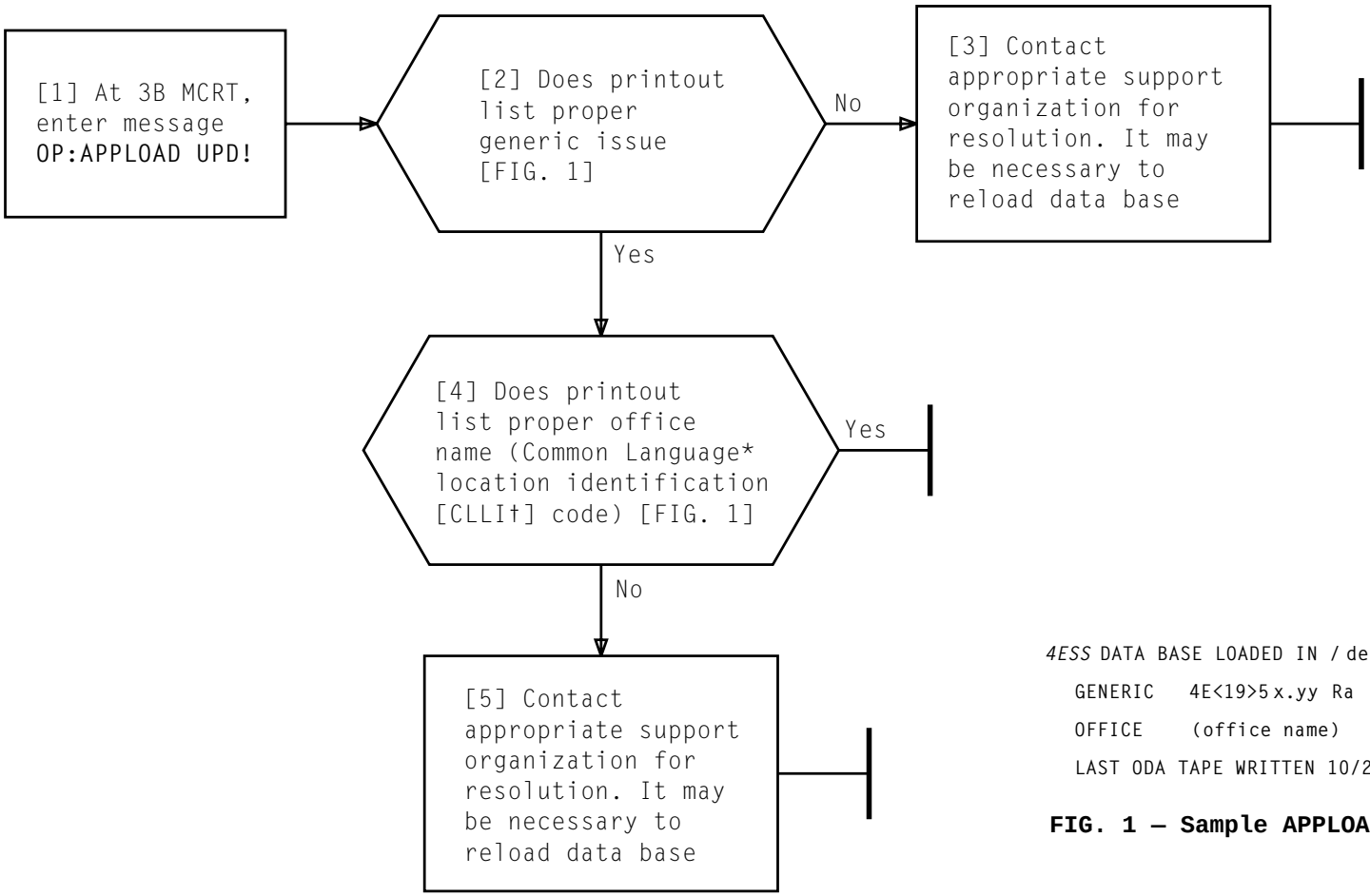
NOTE 2

After tape-only programs are copied into PS from next to oldest generic tape, tape will rewind and REPT:DEMOUNT TAPE FROM TUC a is printed. At this time, writing starts on oldest tape. After tape is written (5-10 minutes), COPY:GEN;TAPE COMPLdate and time are printed. Tape rewinds and is verified. When verification has completed (same amount of time as it took to write), COPY:VFY;TAPE COMPLis printed followed by REPT:DEMOUNT TAPE FROM TUCb

WRITE GENERIC TAPE(S) (TWRP WRITE - 800 BPI)



WRITE GENERIC TAPE(S) (TWRP WRITE - 800 BPI)



4ESS DATA BASE LOADED IN / dev/1afile0 IS:

GENERIC 4E<19>5 x.yy Ra

OFFICE (office name)

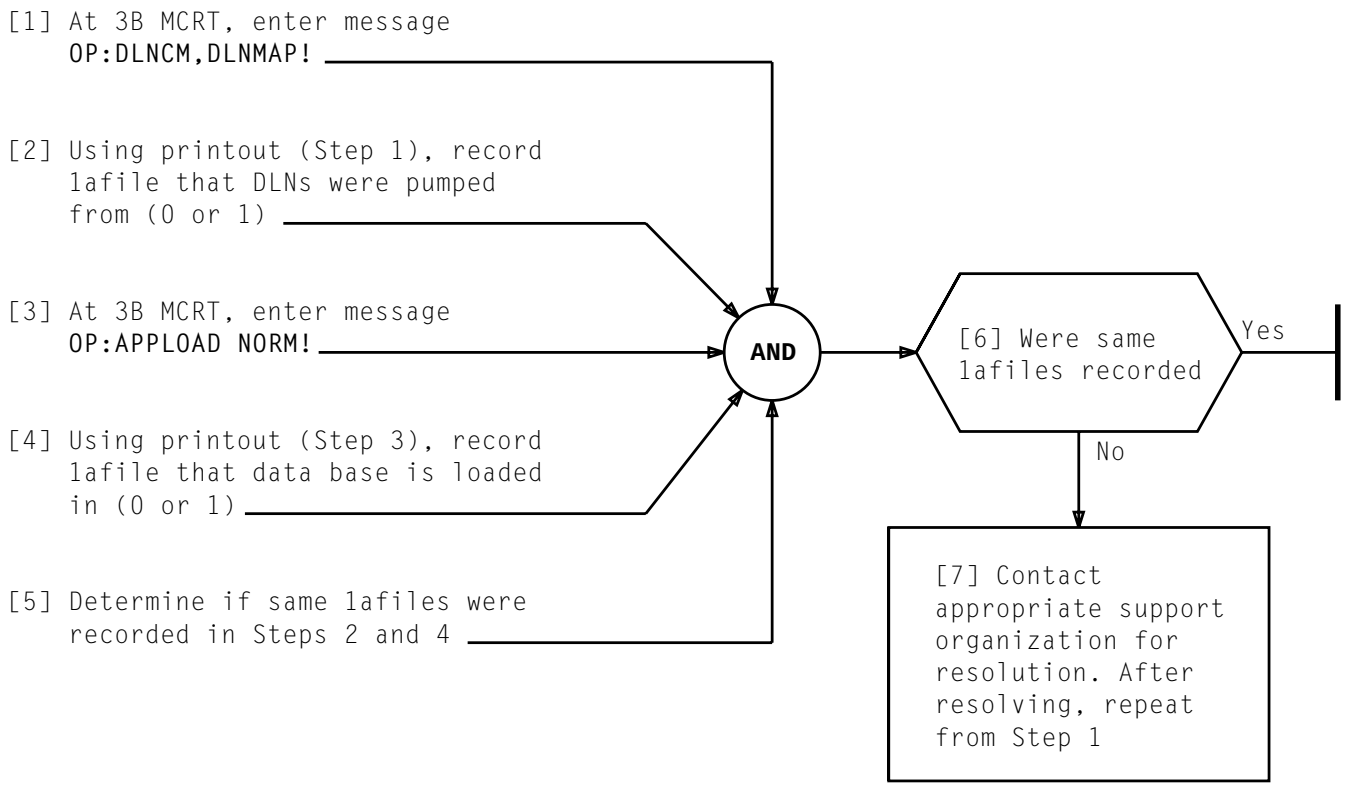
LAST ODA TAPE WRITTEN 10/25/94 AT 19:51

FIG. 1 — Sample APPLOAD Printout

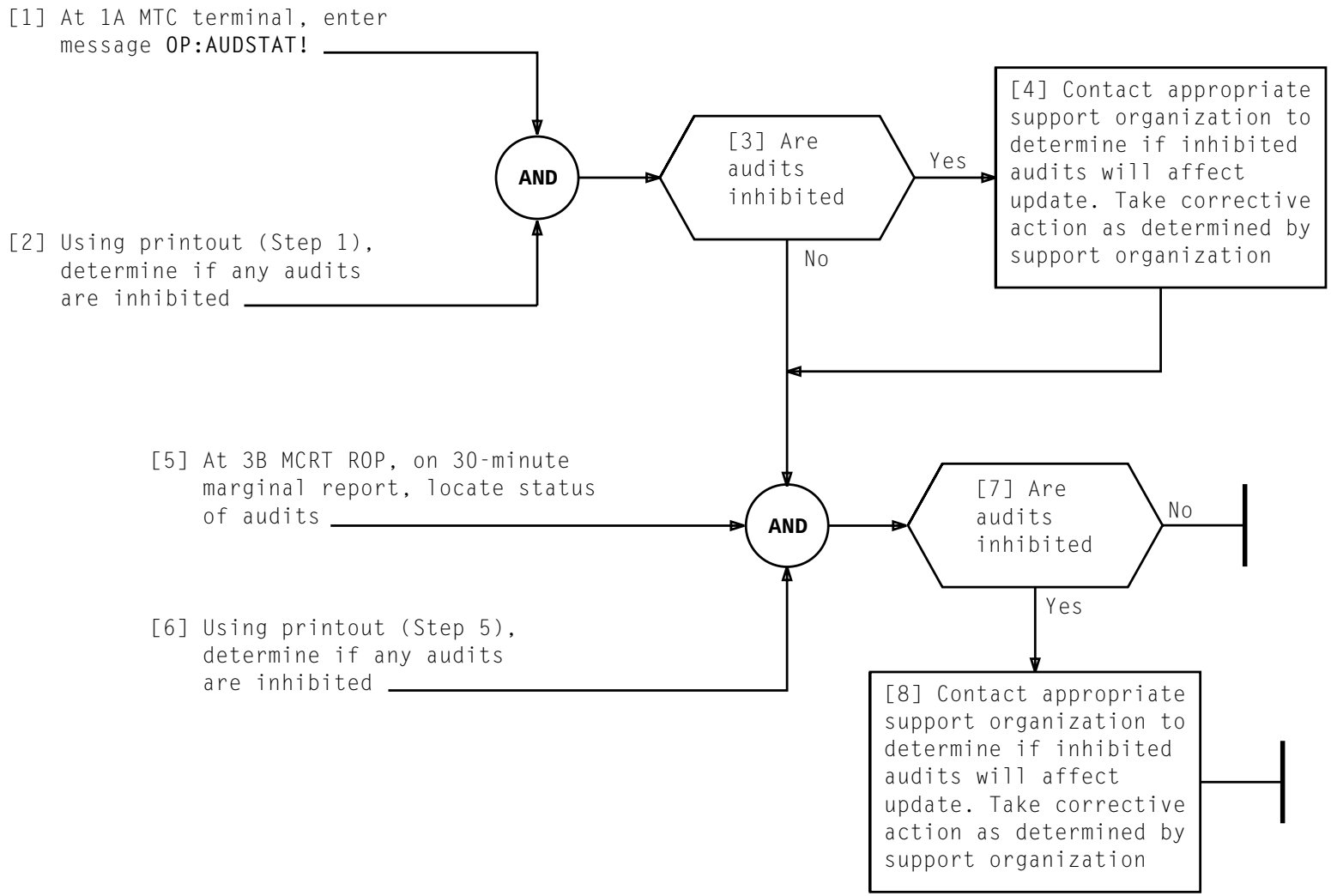
* Registered trademark of Bell Communications Research, Inc.

† Trademark of Bell Communications Research, Inc.

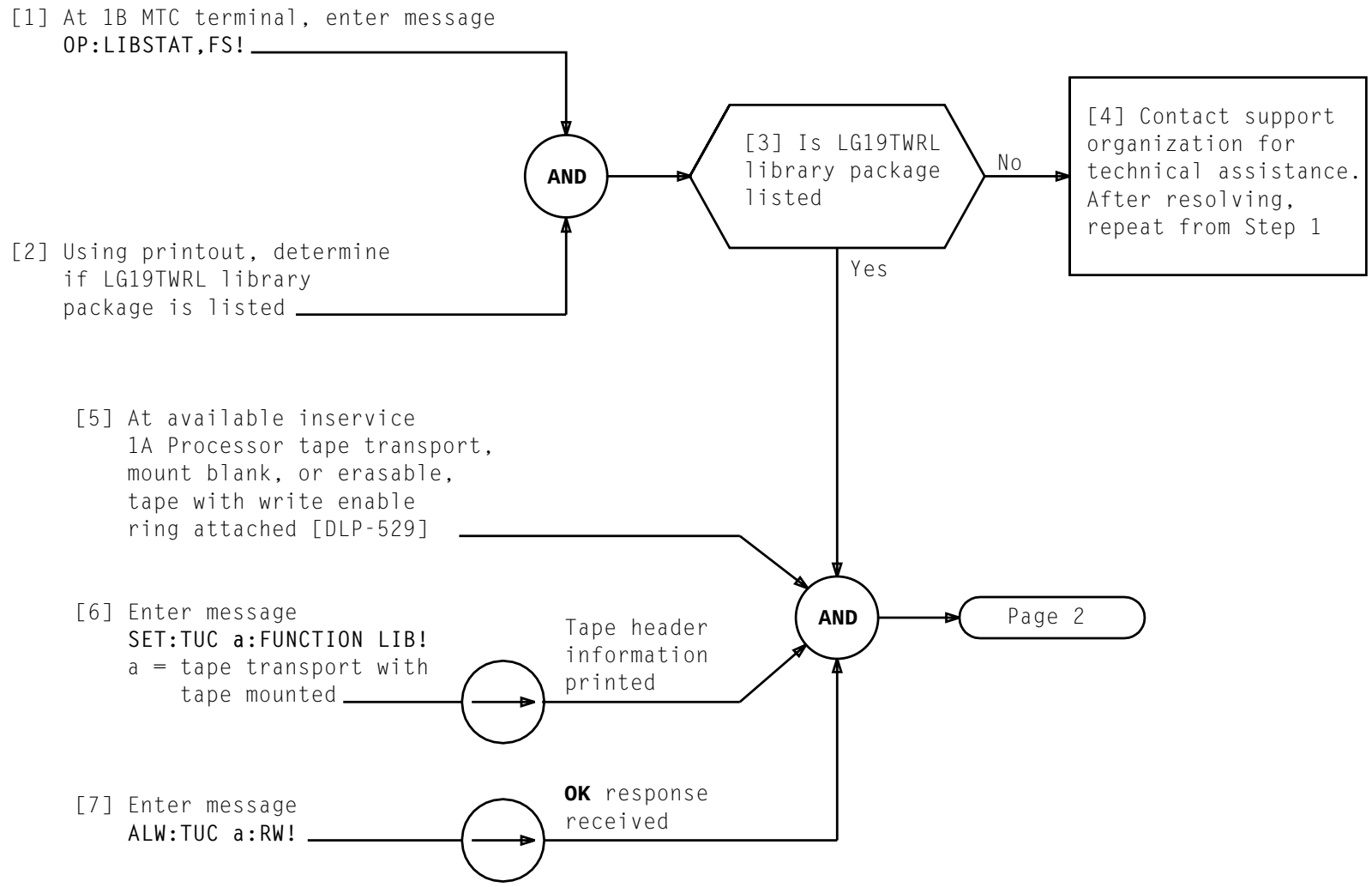
VERIFY DATA BASE



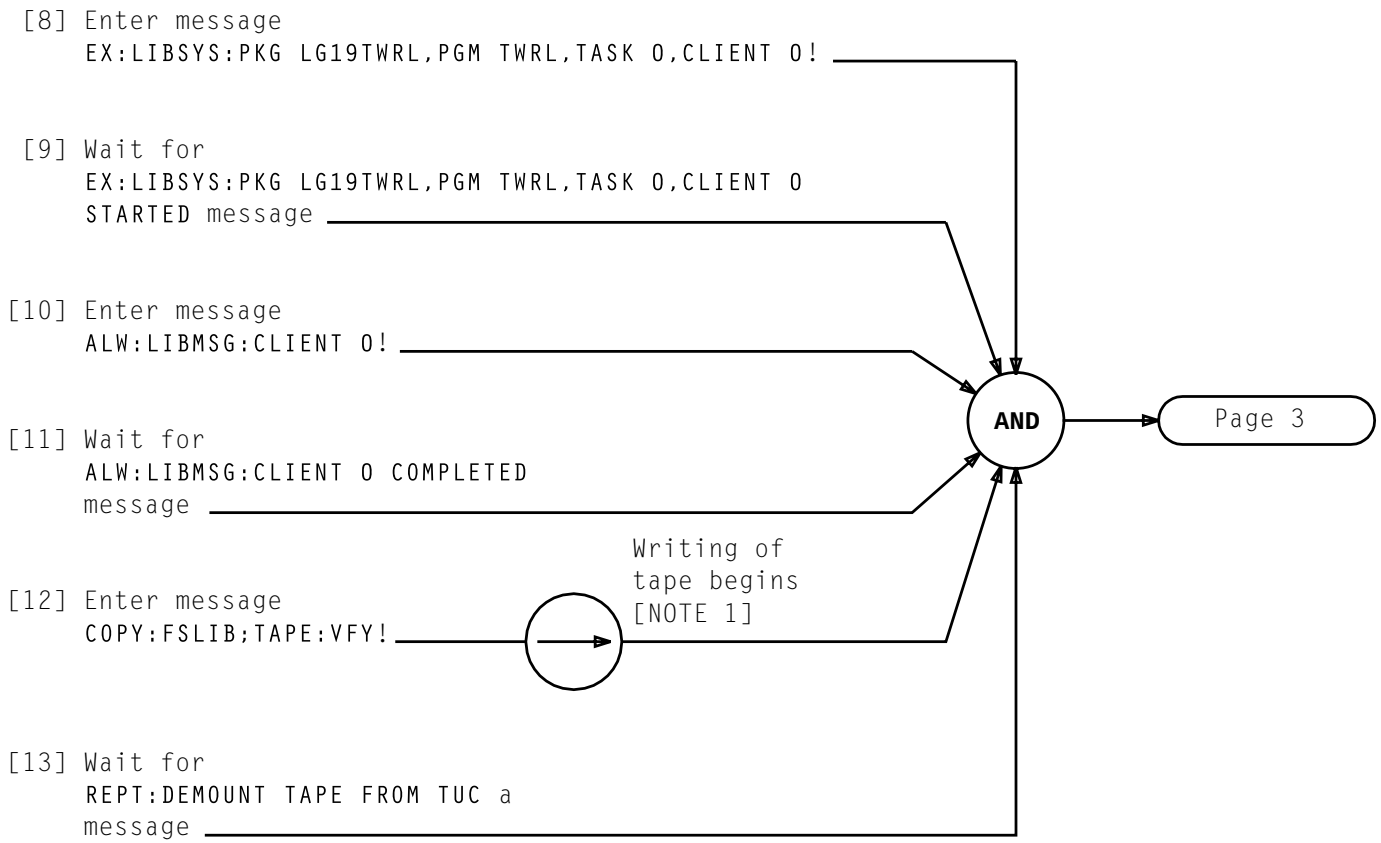
VERIFY DLNs PUMPED FROM PROPER 1AFILE



VERIFY NO AUDITS INHIBITED



WRITE 4E19 LIBRARY TAPE(S) USING TWRL LIBRARY PROGRAM



NOTE 1
After library tape is written, tape will rewind and be verified. After verification has been completed, COPY:FSLIB COMPLETED with date and time are printed. Library program COMPLETED message and list of library packages are received followed by REPT: DEMOUNT TAPE FROM TUC a

WRITE 4E19 LIBRARY TAPE(S) USING TWRL LIBRARY PROGRAM

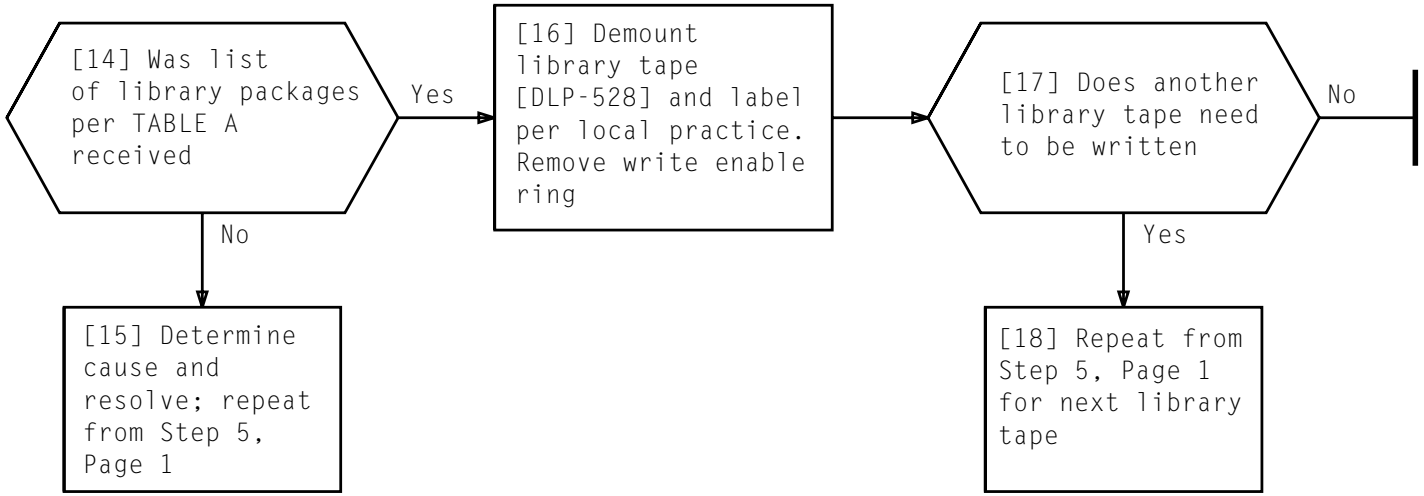
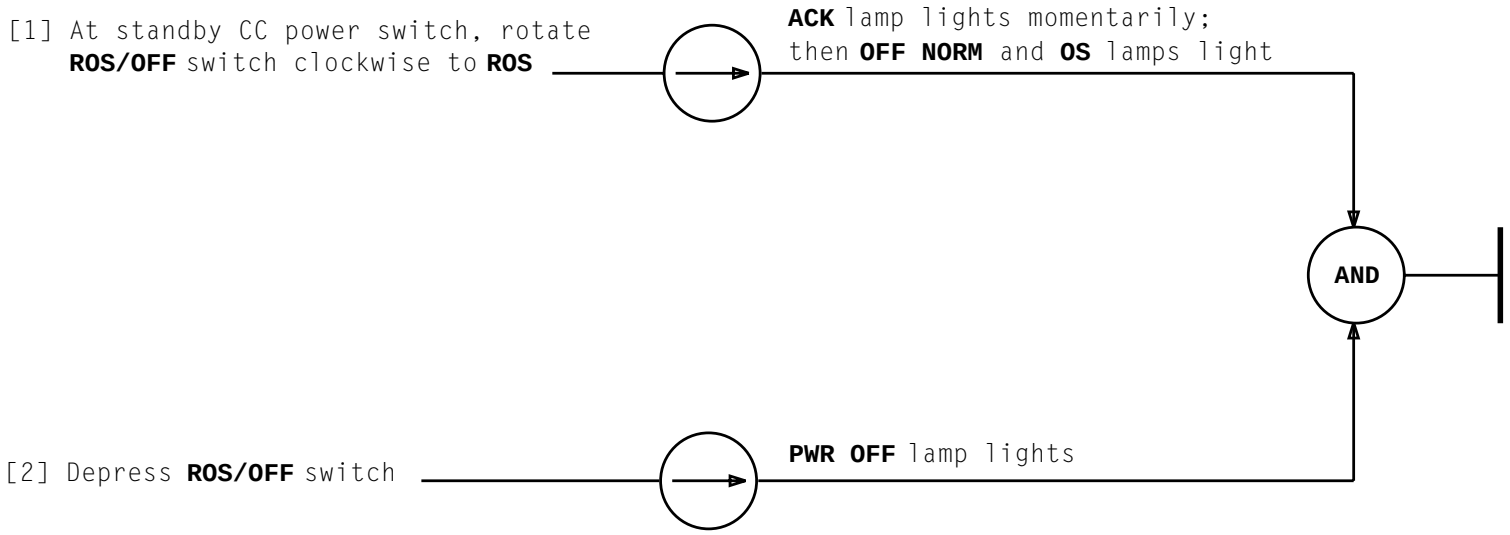


TABLE A

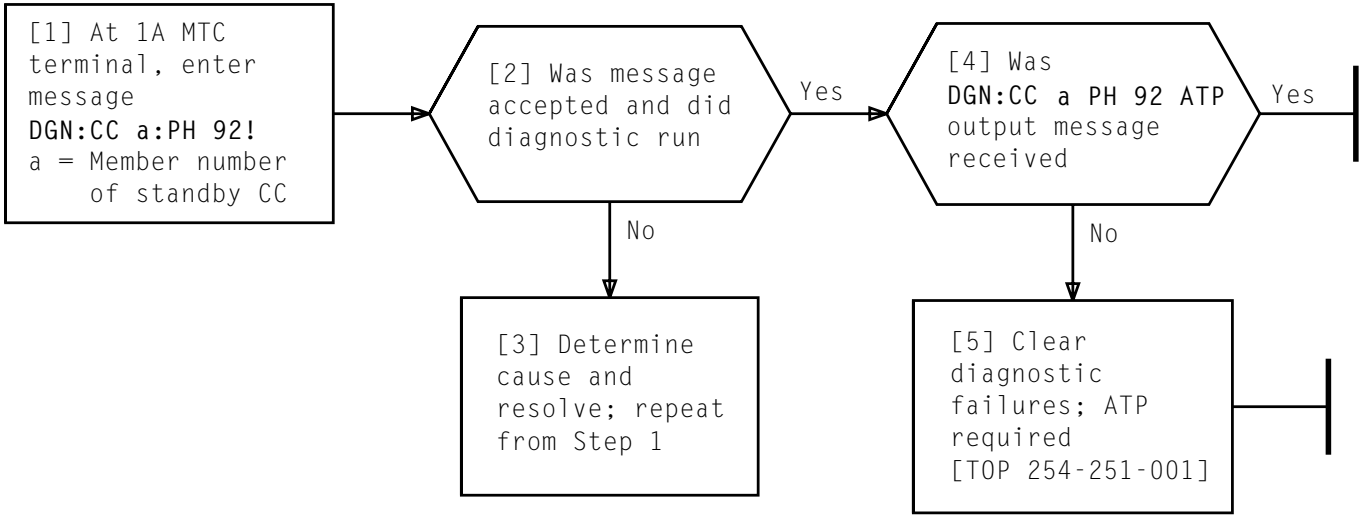
LIBRARY PACKAGES

LG19TPAD	LG19PKG1
LG19FLDS	LG19RCUA
LG19NETX	LG19TMSG
LG19PGRO	LG19TWRL

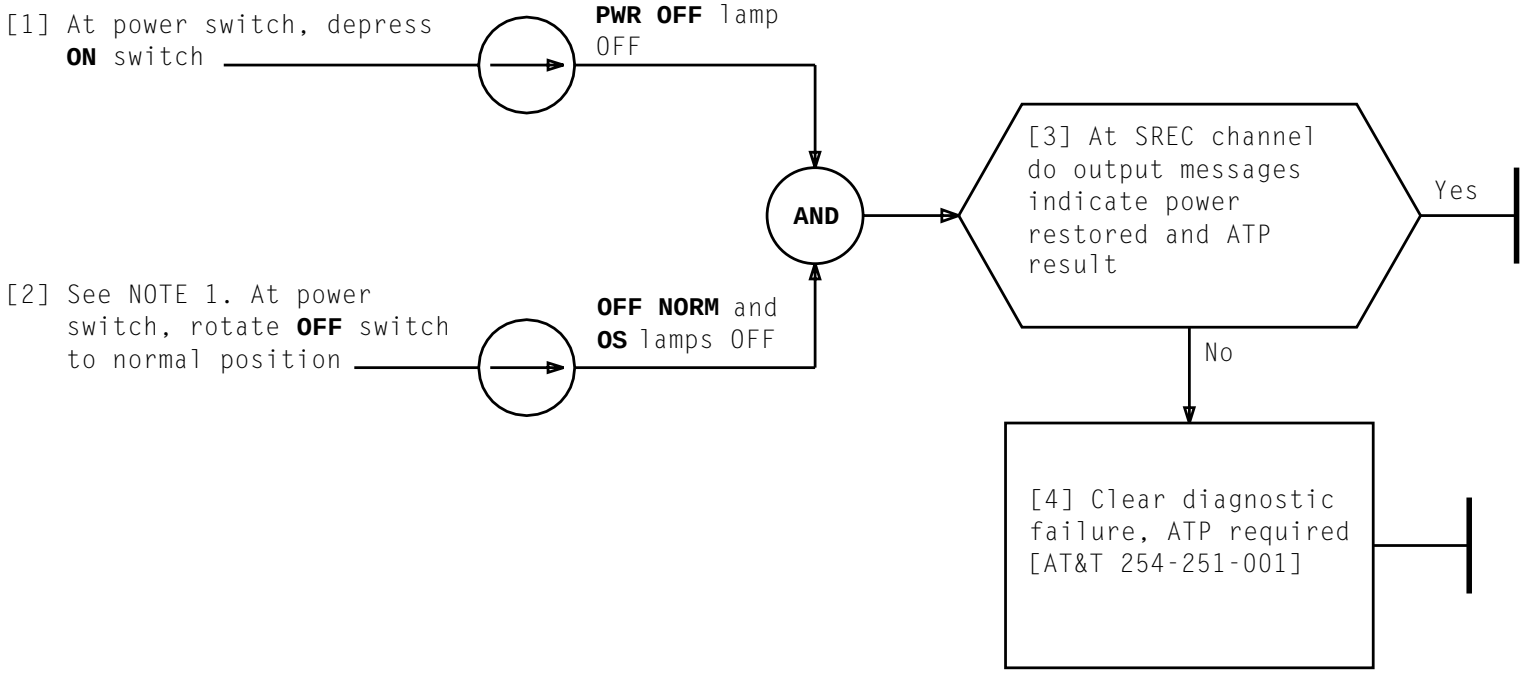
WRITE 4E19 LIBRARY TAPE(S) USING TWRL LIBRARY PROGRAM



REMOVE POWER FROM STANDBY CC UNIT USING POWER SWITCH



DIAGNOSE STANDBY CENTRAL CONTROL — PHASE 92



NOTE 1
Operation of **OFF** switch will cause diagnostic to be run

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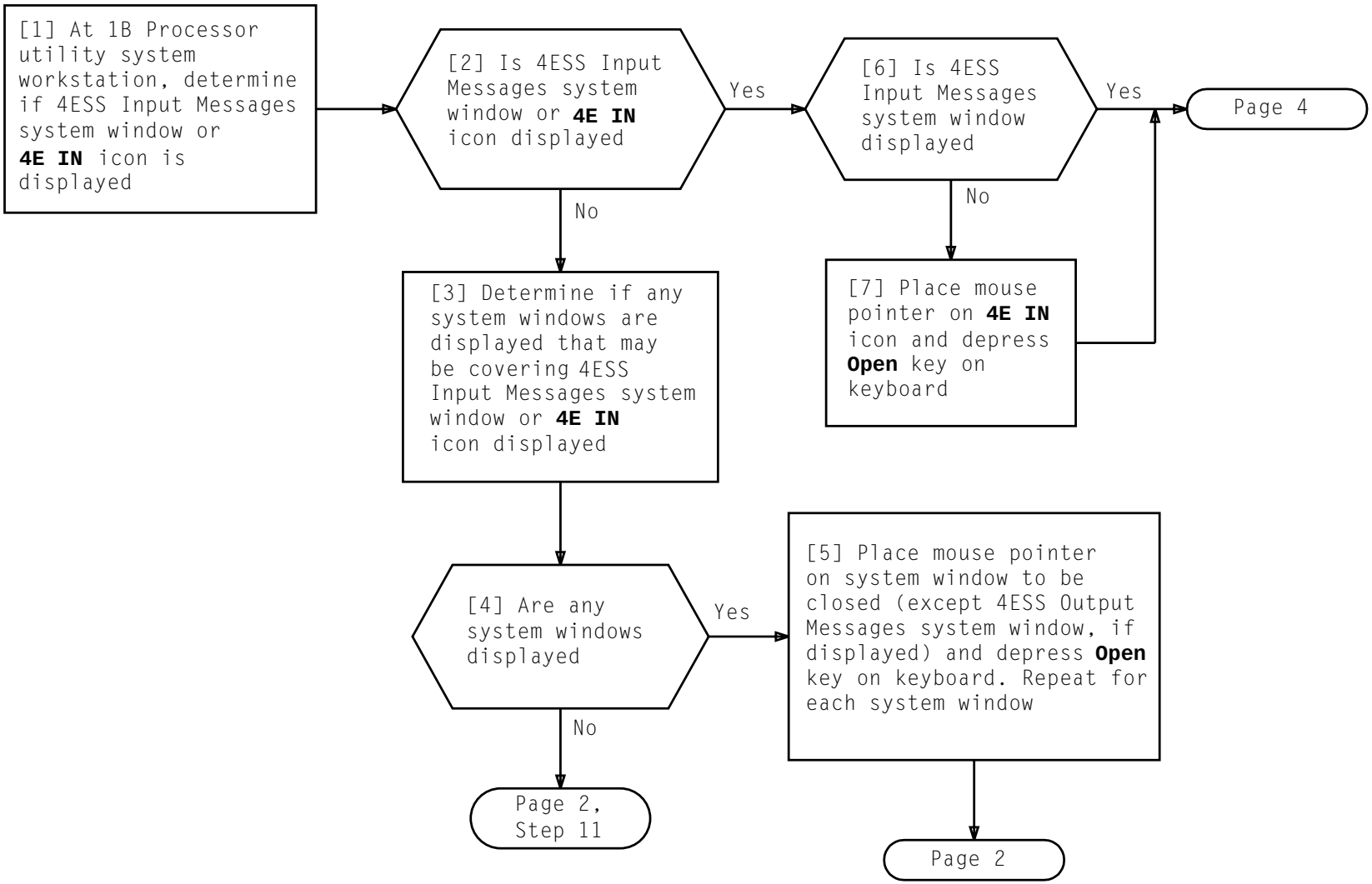
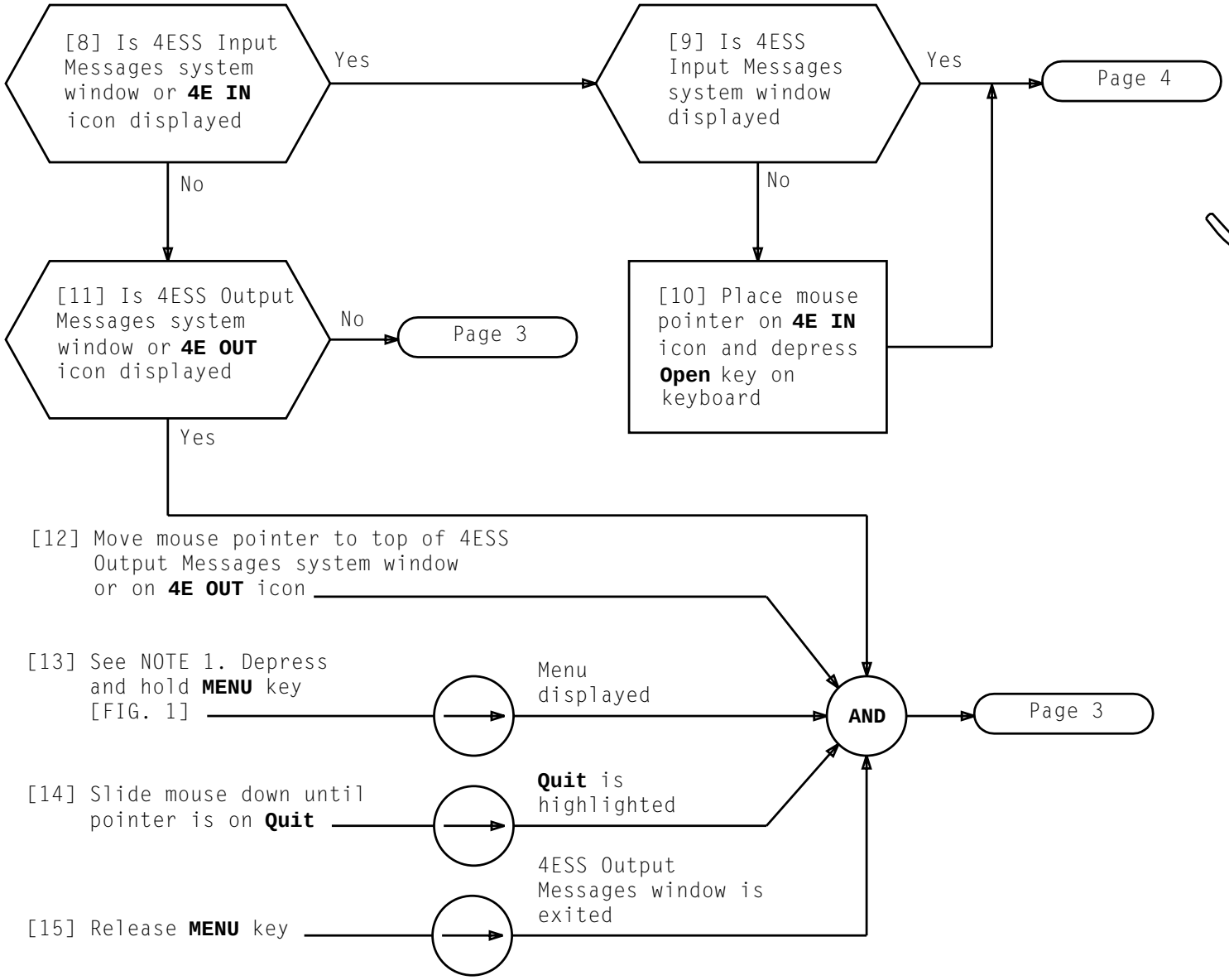
RESTORE POWER WITH POWER SWITCH



START I/O MESSAGE PROCESS



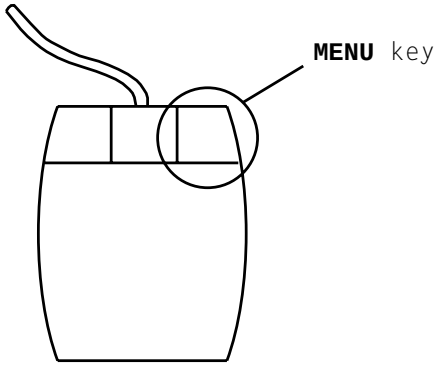
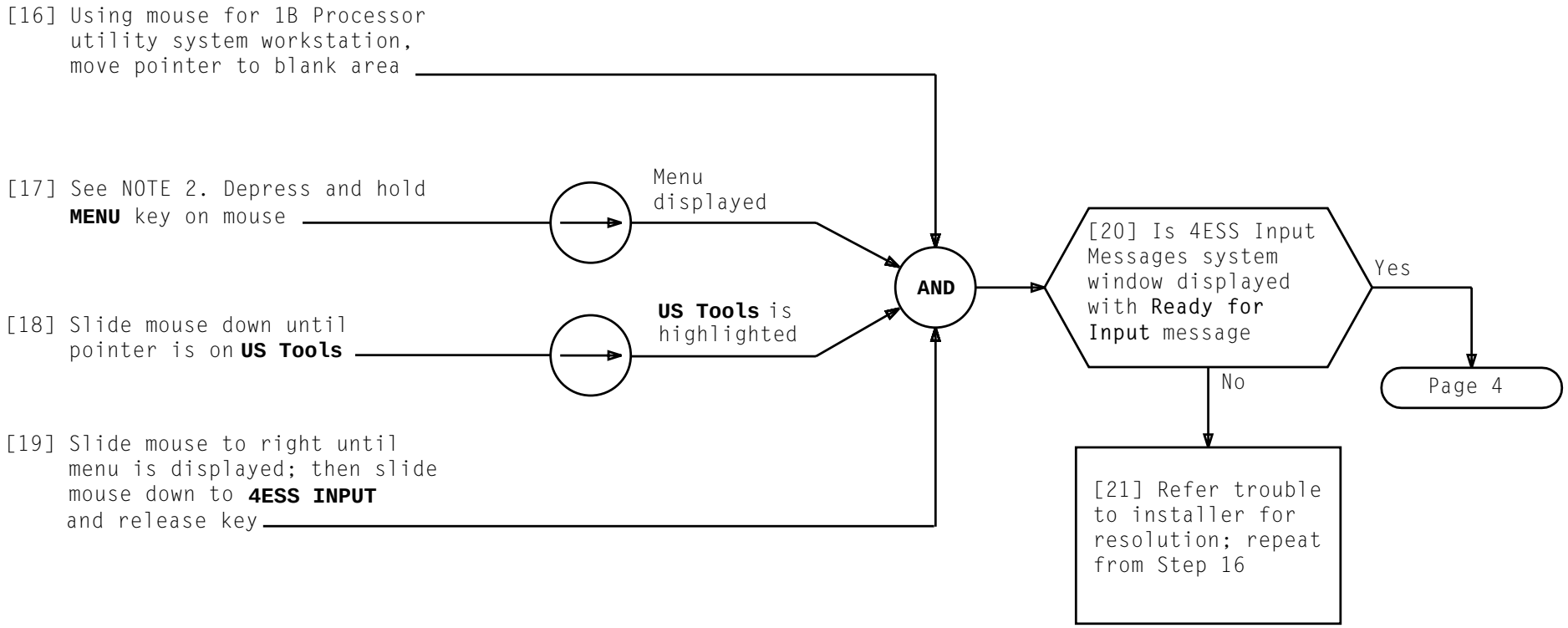


FIG. 1 - Mouse Layout

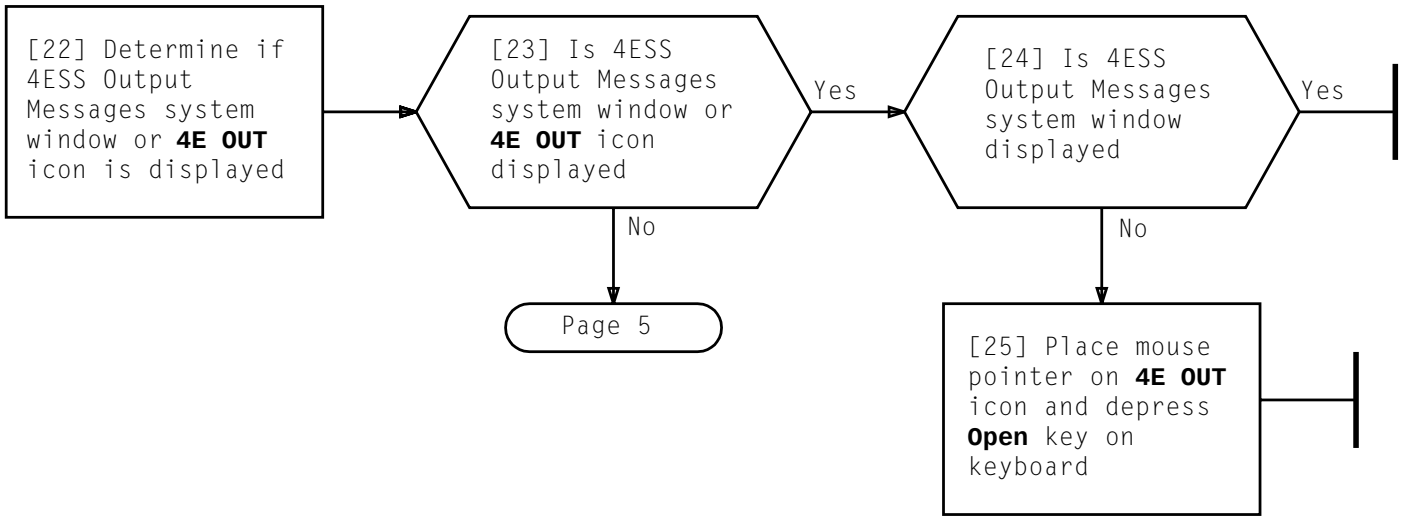
NOTE 1
MENU key on mouse must be depressed and held for Steps 13 and 14

START I/O MESSAGE PROCESS



NOTE 2
MENU key on mouse must be depressed and held for Steps 18 and 19

START I/O MESSAGE PROCESS



START I/O MESSAGE PROCESS

[26] Using mouse for 1B Processor utility system workstation, move pointer to blank area

[27] See NOTE 3. Depress and hold **MENU** key on mouse [FIG. 2]

Menu displayed

[28] Slide mouse down until pointer is on **US Tools**

US Tools is highlighted

[29] Slide mouse to right until **US Tools** menu is displayed; then slide mouse down to **4ESS OUTPUT** and release key

AND

[30] Is 4ESS Output Messages system window displayed

Yes

[32] Enter message INH:APS 0;AUTORCVY!

No

[31] Refer trouble to installer for resolution; repeat from Step 26

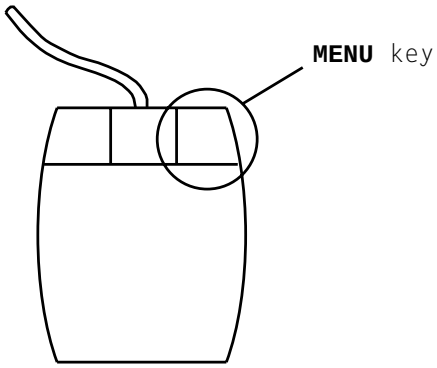


FIG. 2 - Mouse Layout

NOTE 3
MENU key on mouse must be depressed and held for Steps 25 and 26

START I/O MESSAGE PROCESS

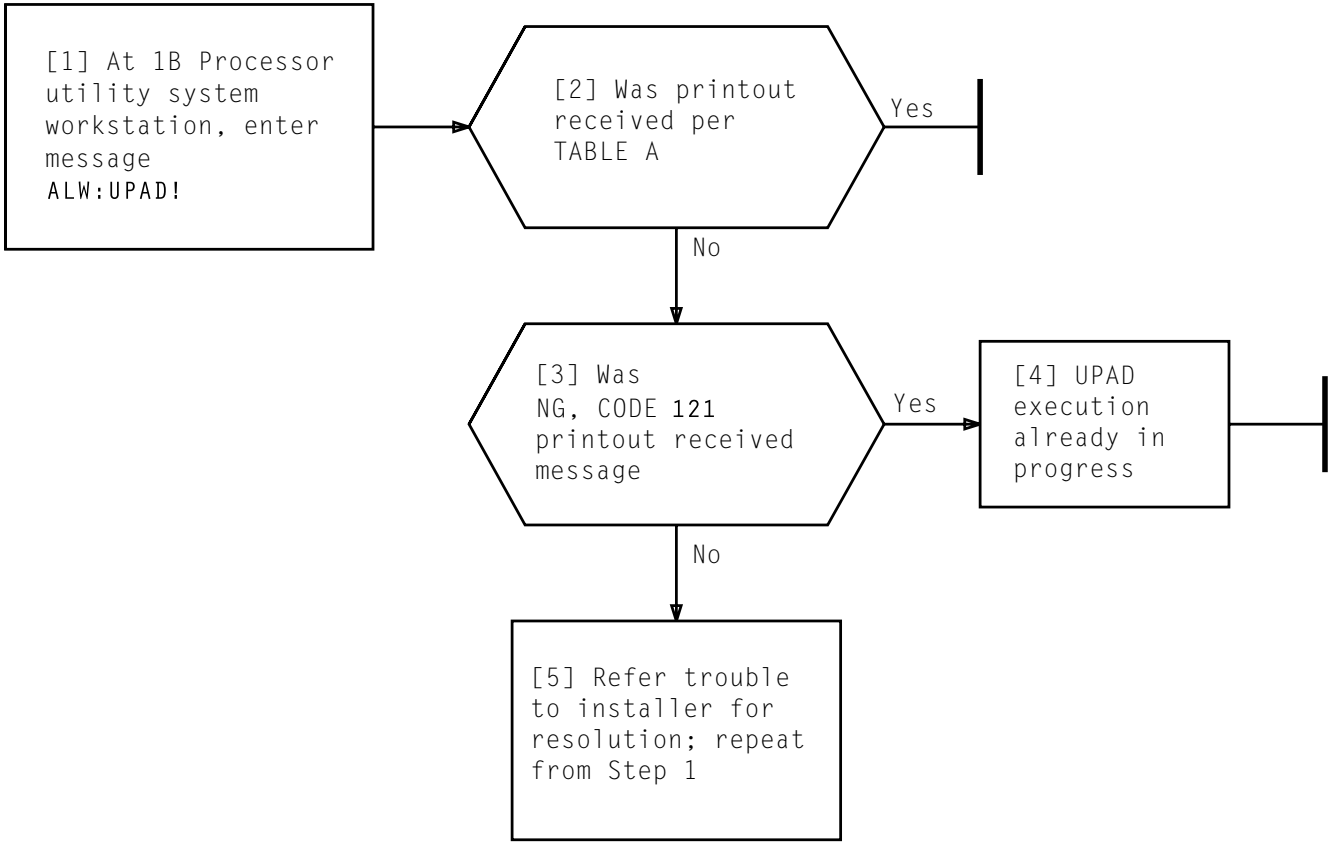


TABLE A	
MESSAGE NUMBER	**OUTPUT MESSAGE**
1	REPT:UPAD INITIALIZING ENTIRE LBKC MEMORY (CS35) ANY PREVIOUS UPAD DATA HAS BEEN REINITIALIZED

ENABLE 1B PROCESSOR UPAD PROCESSES

VERIFY ALL 1B PROCESSOR UNITS ARE IN-SERVICE

[1] At 1B Processor utility system workstation enter message
OP:OOSUNITS!

[2] Using printout, determine if any units in 1B Processor Cabinets are listed as out-of-service [TABLE A]

AND

[3] Are any units in 1B Processor Cabinets out-of-service

No → Page 2

Yes

[4] See NOTE 1. At 1B Processor utility system workstation, enter message
RST: a b!
a = Unit type
b = Member number

[5] Using printout, determine if **RST:** a b **COMPLETED** message was received

AND

[6] Was **RST:** a b **COMPLETED** message

No → [7] Refer trouble to installer for resolution; repeat from Step 4

Yes

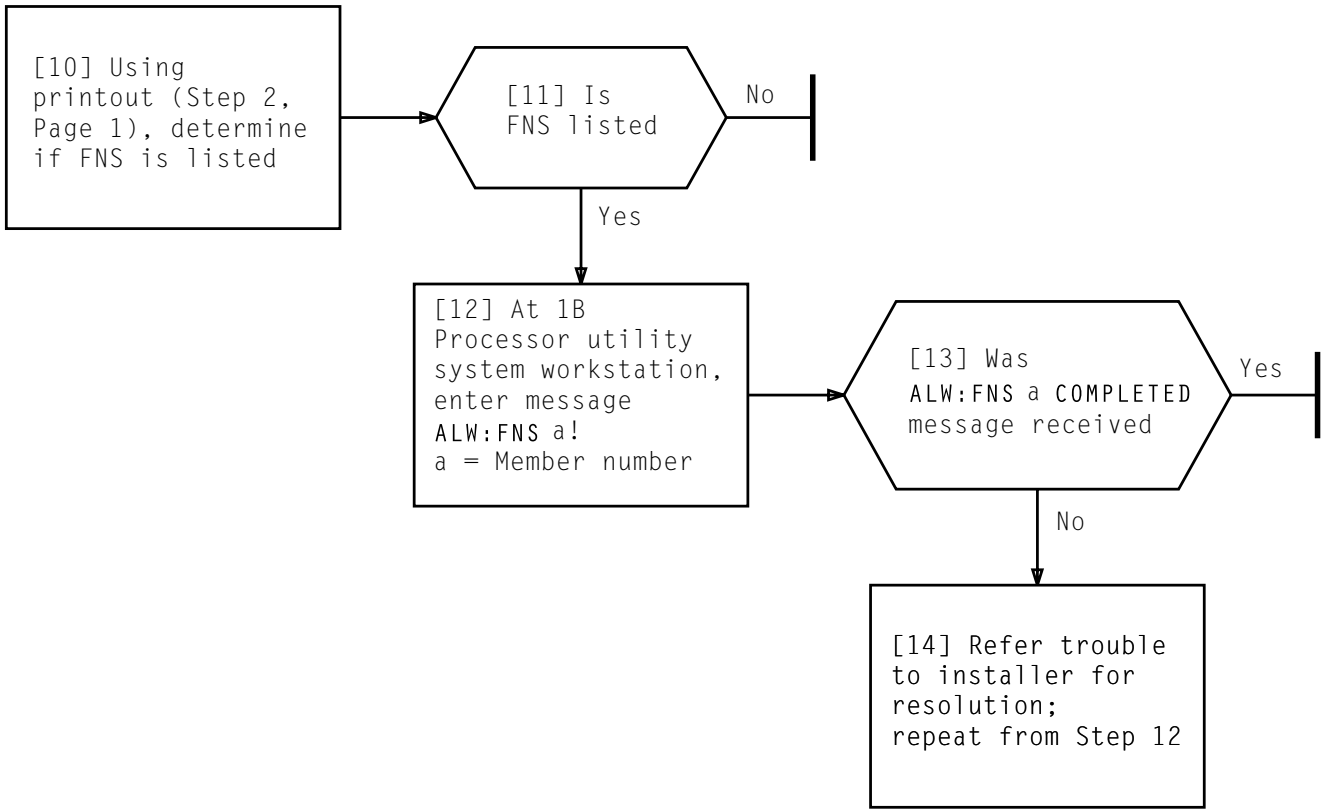
[8] Are more units listed in printout (Step 2)

Yes → [9] Repeat from Step 4 for next unit

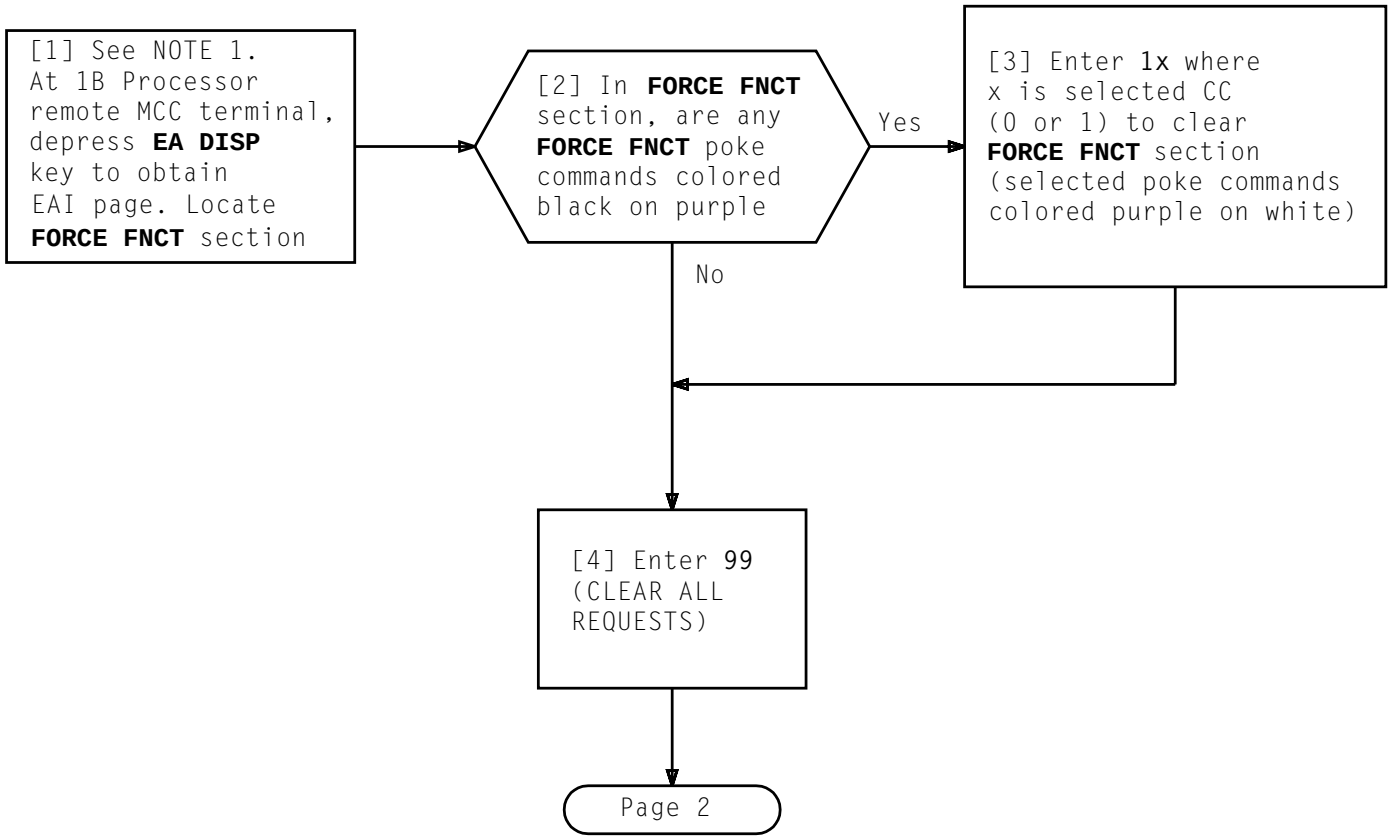
No → Page 2

TABLE A	
AUI	MUP
CC	PS
CS	PSB
CSB	SSD
IFB	XPWR

NOTE 1
IFB must be restored before restoring AUI, MUP, or SSD

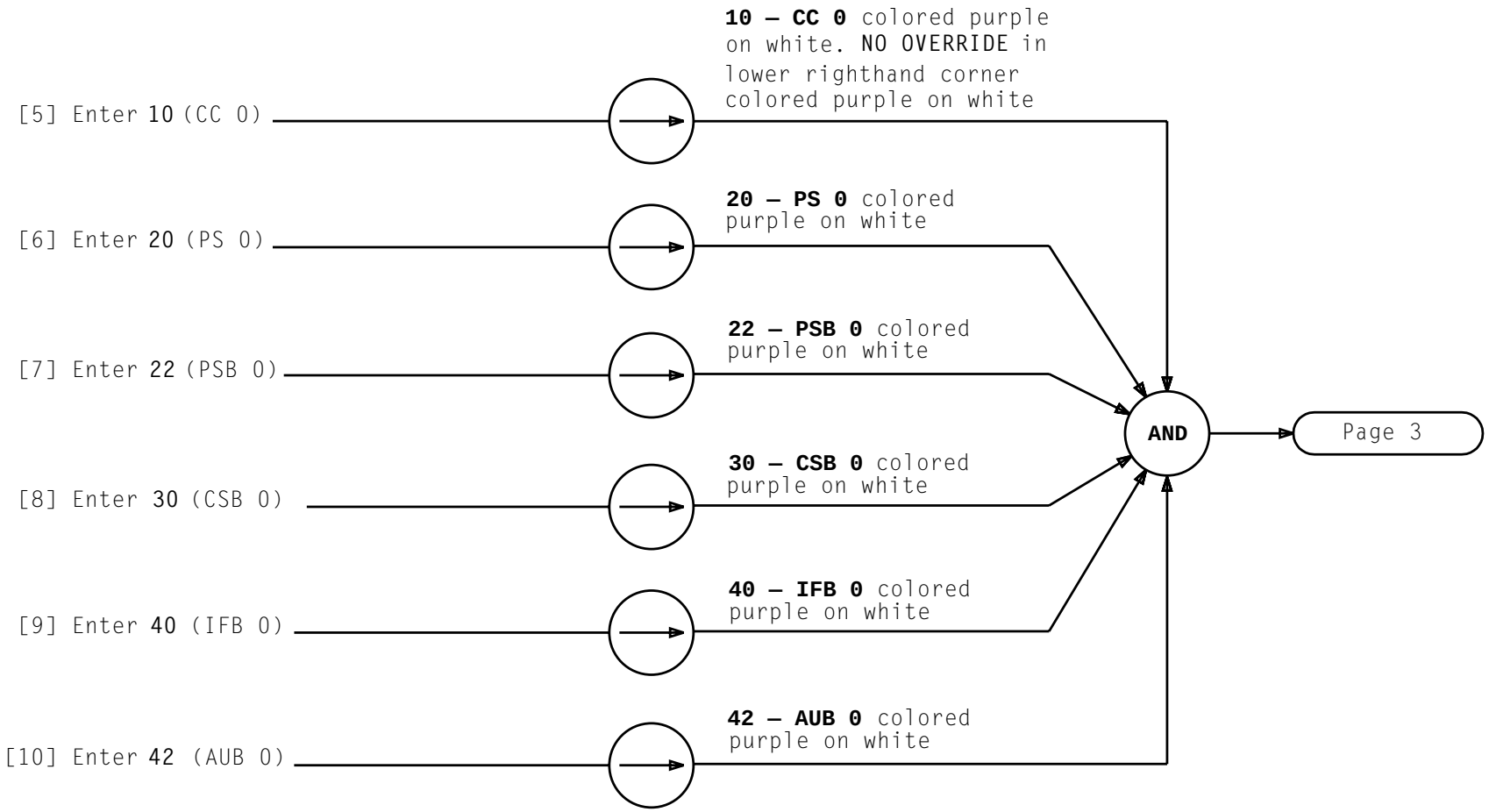


VERIFY ALL 1B PROCESSOR UNITS ARE IN-SERVICE

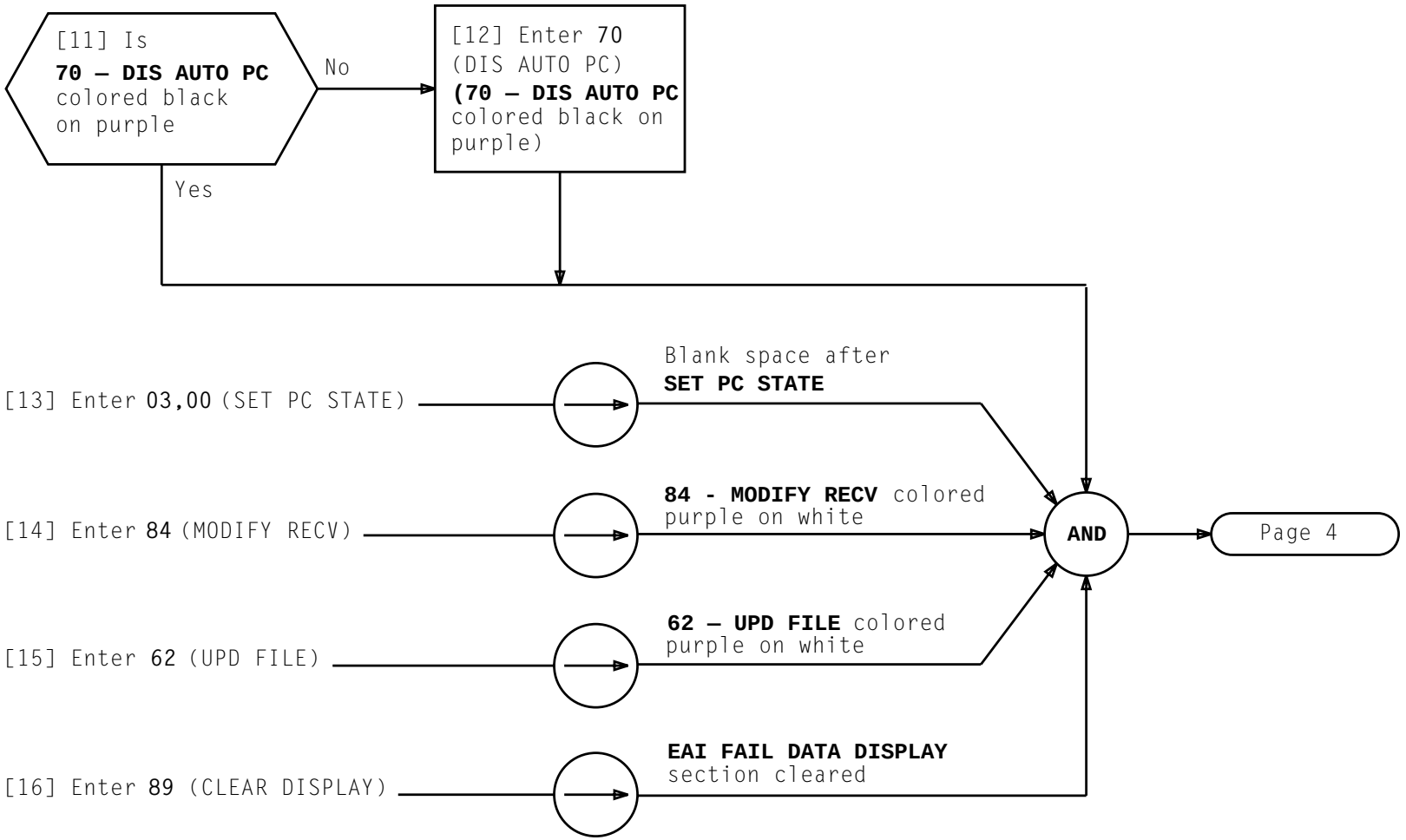


NOTE 1
In AT&T offices, Steps 1 through 27 (Pages 1-5) are to be done at TCC and Step 28, Page 5 is to be done on-site

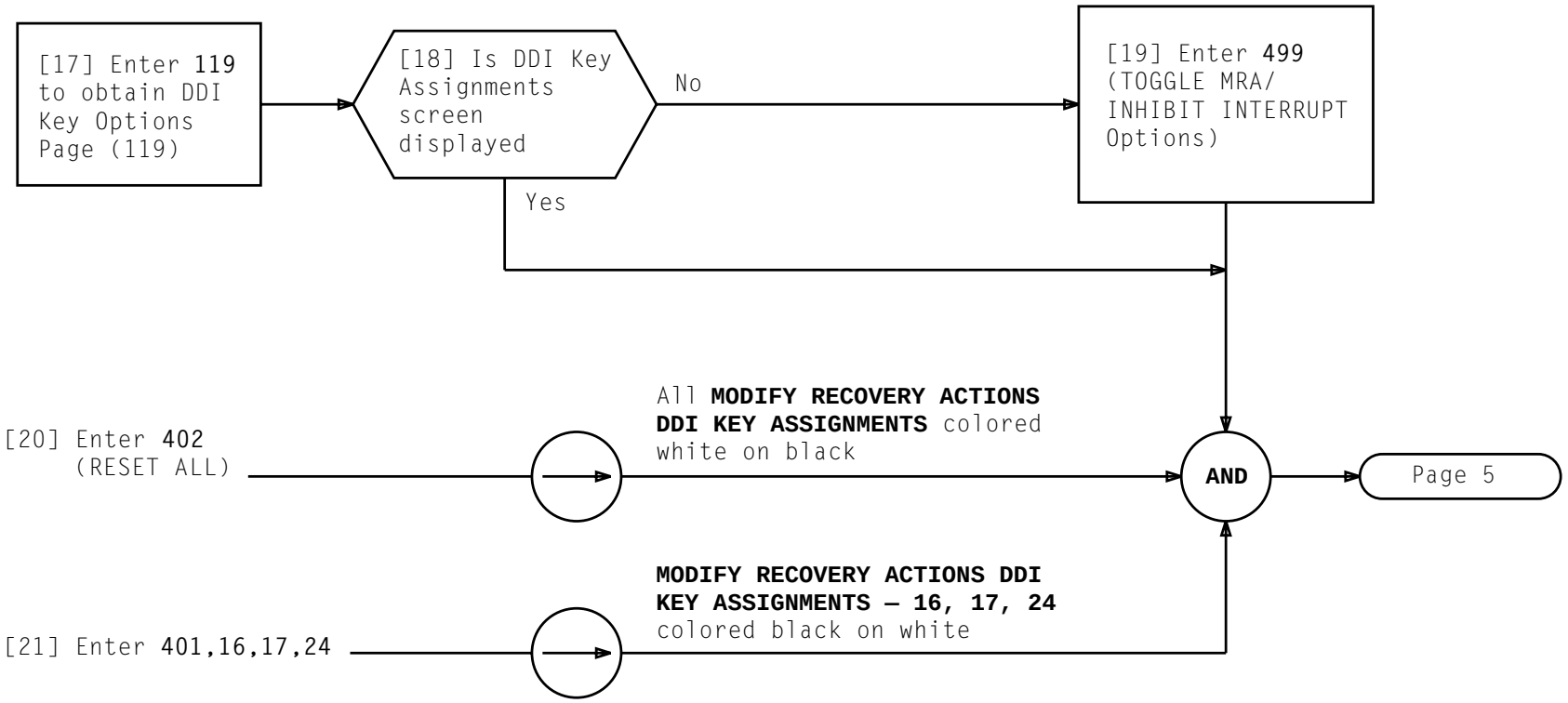
PREPARE 1B PROCESSOR FOR MANUAL RECOVERY - PRIOR TO UPDATE



PREPARE 1B PROCESSOR FOR MANUAL RECOVERY - PRIOR TO UPDATE



PREPARE 1B PROCESSOR FOR MANUAL RECOVERY - PRIOR TO UPDATE



PREPARE 1B PROCESSOR FOR MANUAL RECOVERY — PRIOR TO UPDATE

[22] At 1B Processor remote MCC terminal, enter **1990** to obtain Dead Start page (1990)

[23] Enter **613**

UAS:INTERFERING colored white on red

[24] Enter **701** (SUSPEND)

701 - SUSPEND colored white on red

[25] Depress **EA DISP** key to obtain EAI page

AND

All **FORCE FNCT** selections colored black on purple. All PC PROGRESSION states colored white on red

[26] Enter **01** (HARD A)

[27] In UCD window, using **SELECT** key on mouse, click on **UPDATE ALL** icon [FIG. 1]

PCRVBOOT.AA+2 displayed in CAR field

[28] At 1A MTC terminal, form enter each input message per TABLE A. ***DO NOT ENTER AT THIS TIME.*** These messages may be used if backout is required

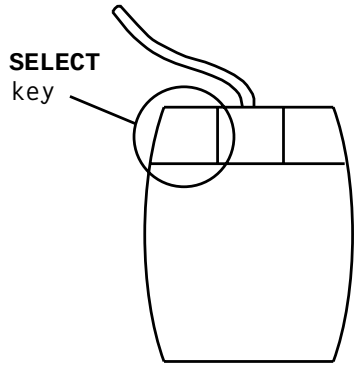


FIG. 1 - Mouse Layout

TABLE A

MESSAGE NUMBER	INPUT MESSAGES
1	RST:AUB 0;UCL!
2	RST:API 0;UCL!
3	RST:AUB 1;UCL!
4	RST:API 1;UCL!
5	CLR:APS 0;DPLXFAIL!
6	OP:APSTATUS!

PREPARE 1B PROCESSOR FOR MANUAL RECOVERY - PRIOR TO UPDATE

EXIT I/O MESSAGE PROCESS

[1] At 1B Processor utility system workstation, enter **exit** in 4ESS Input Messages window

4ESS Input Messages window is exited

[2] Move pointer to top of 4ESS Output Messages window

[3] See NOTE 1. Depress and hold **MENU** key [FIG. 1]

Menu displayed

AND

Page 2

[4] Slide mouse down until pointer is on **Quit**

Quit is highlighted

[5] Release **MENU** key

4ESS Output Messages window is exited

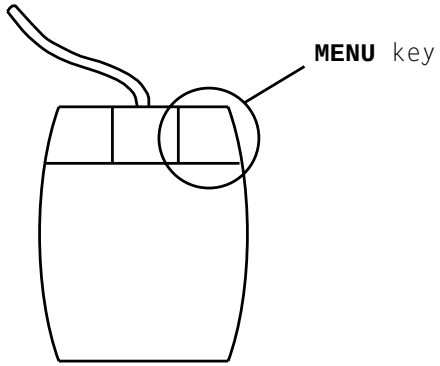


FIG. 1 - Mouse Layout

NOTE 1
MENU key on mouse must be depressed and held for Steps 3 and 4

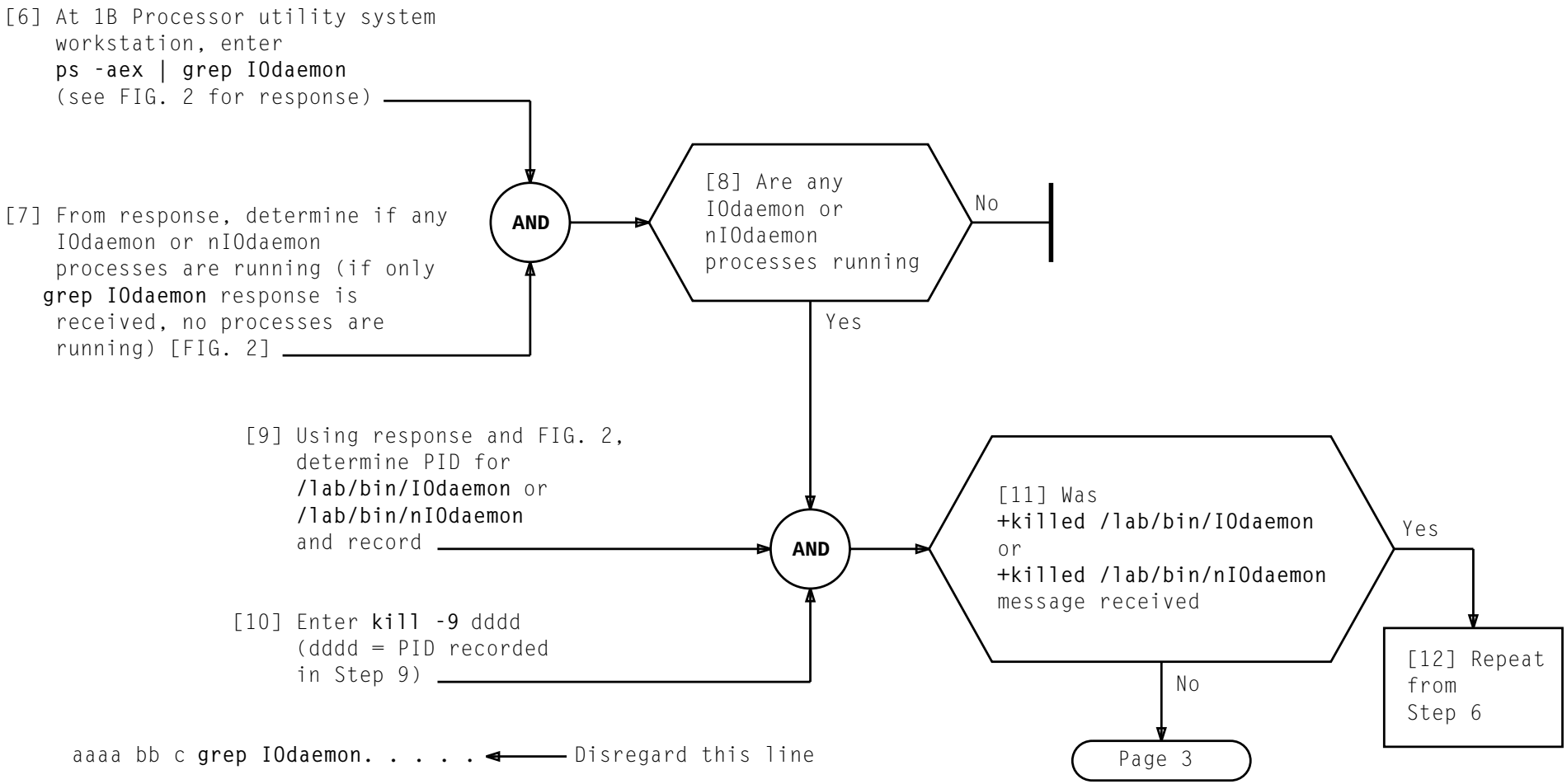
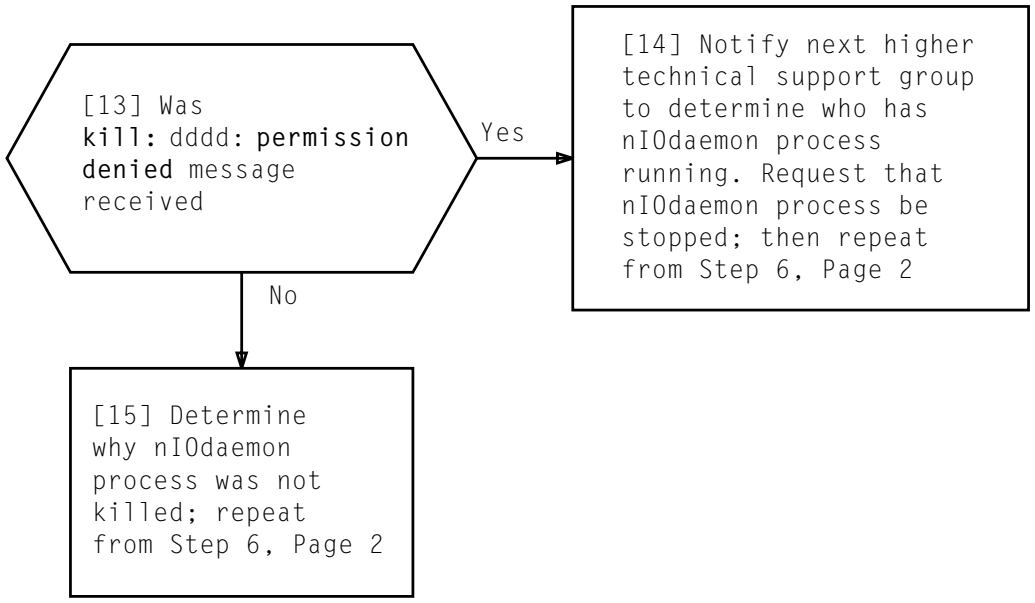
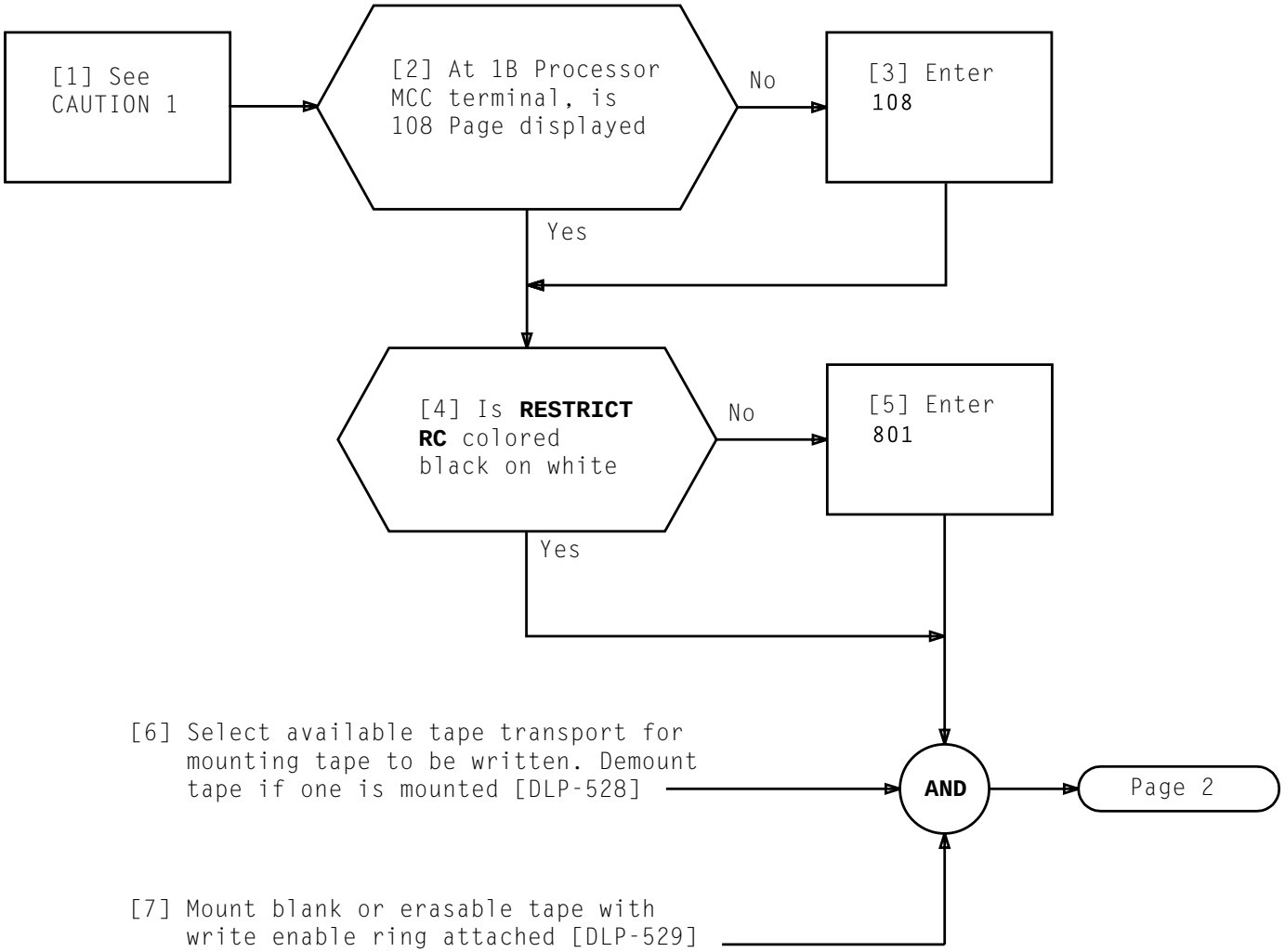


FIG. 2 – PID Format

EXIT I/O MESSAGE PROCESS



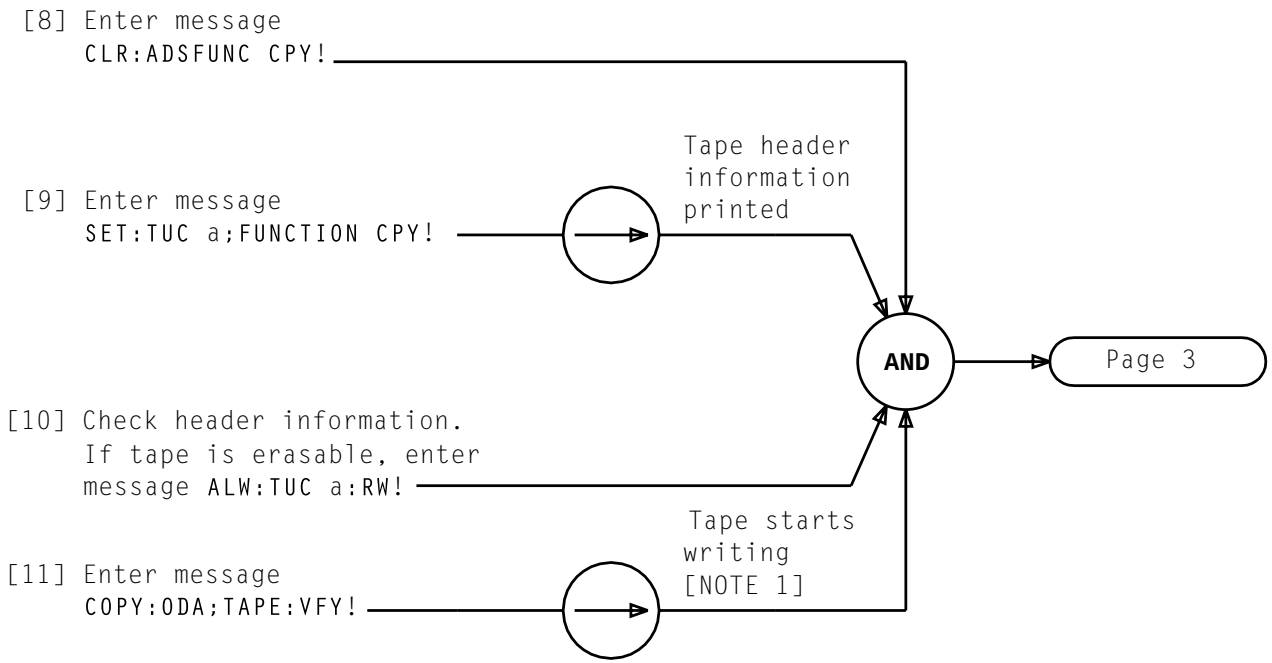
EXIT I/O MESSAGE PROCESS



CAUTION 1

Certain system audits are inhibited during tape writing; therefore, tape writing should be done during light traffic periods

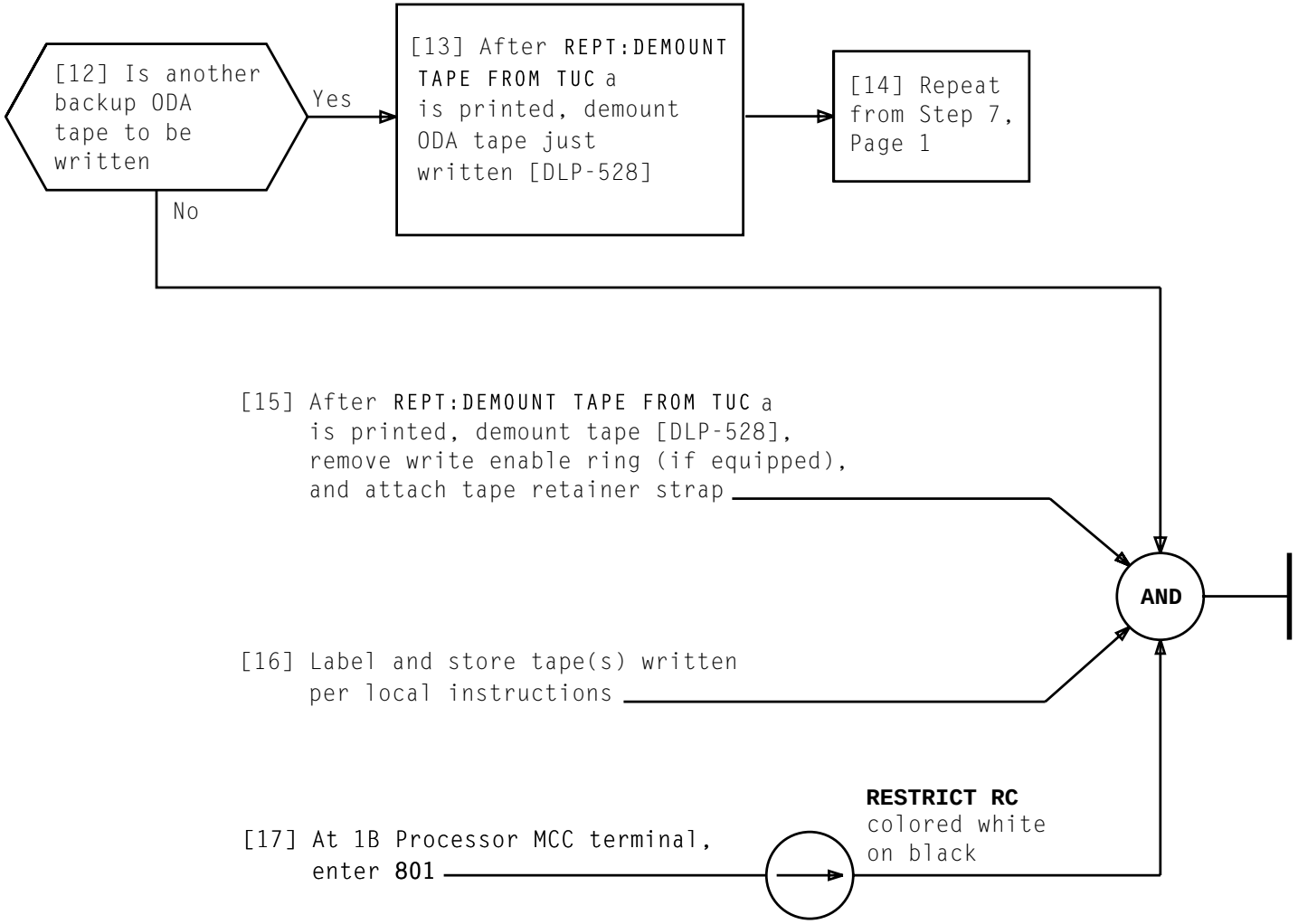
WRITE BACKUP 1B PROCESSOR ODA TAPE (800 BPI)



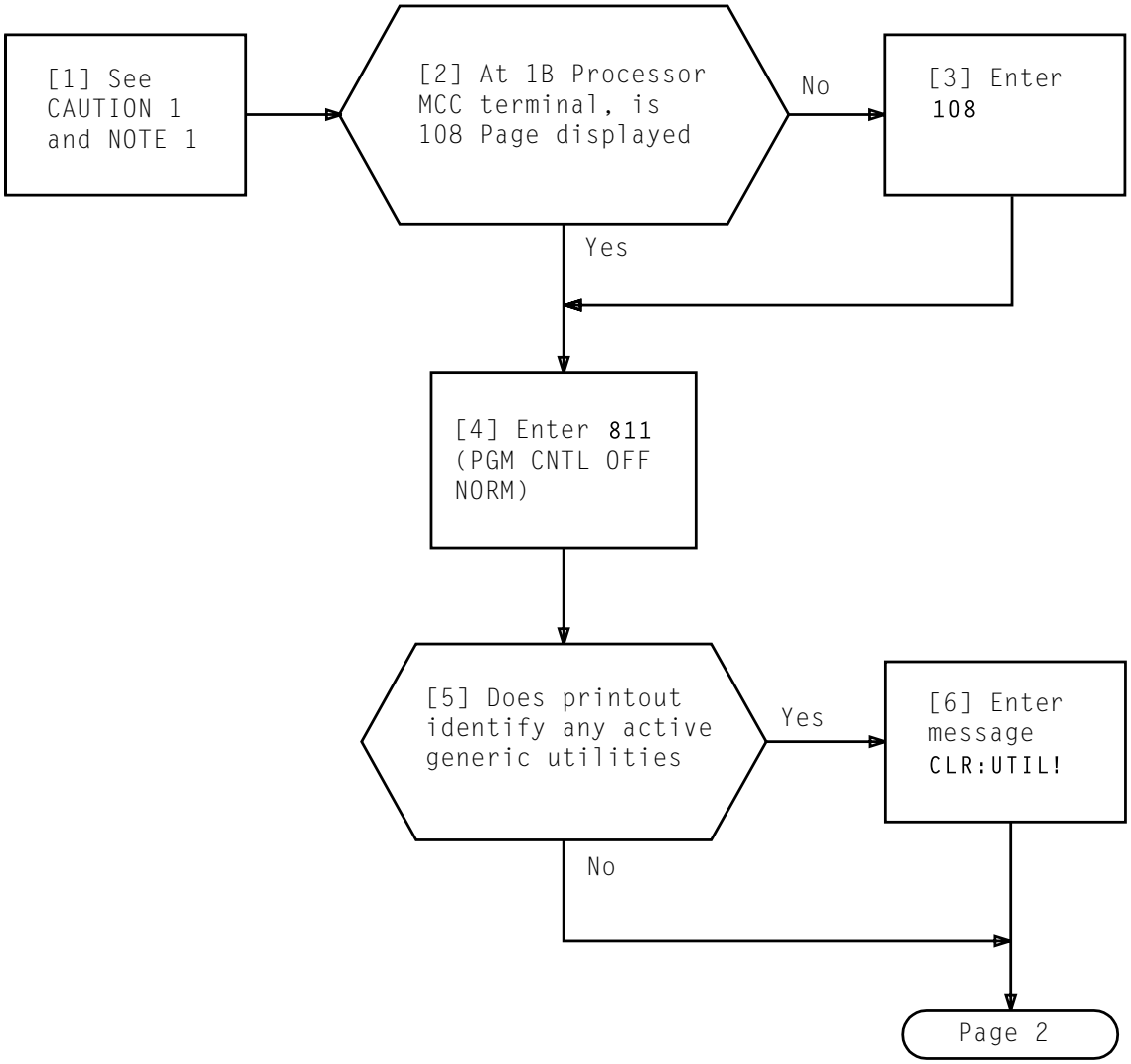
NOTE 1

After ODA tape is written, COPY:ODA;TAPE COMPL date and time are printed. Tape will then rewind and be verified. After verification has been completed, COPY:VFY;TAPE COMPL is printed followed by REPT:DEMOUNT TAPE FROM TUC a

WRITE BACKUP 1B PROCESSOR ODA TAPE (800 BPI)



WRITE BACKUP 1B PROCESSOR ODA TAPE (800 BPI)



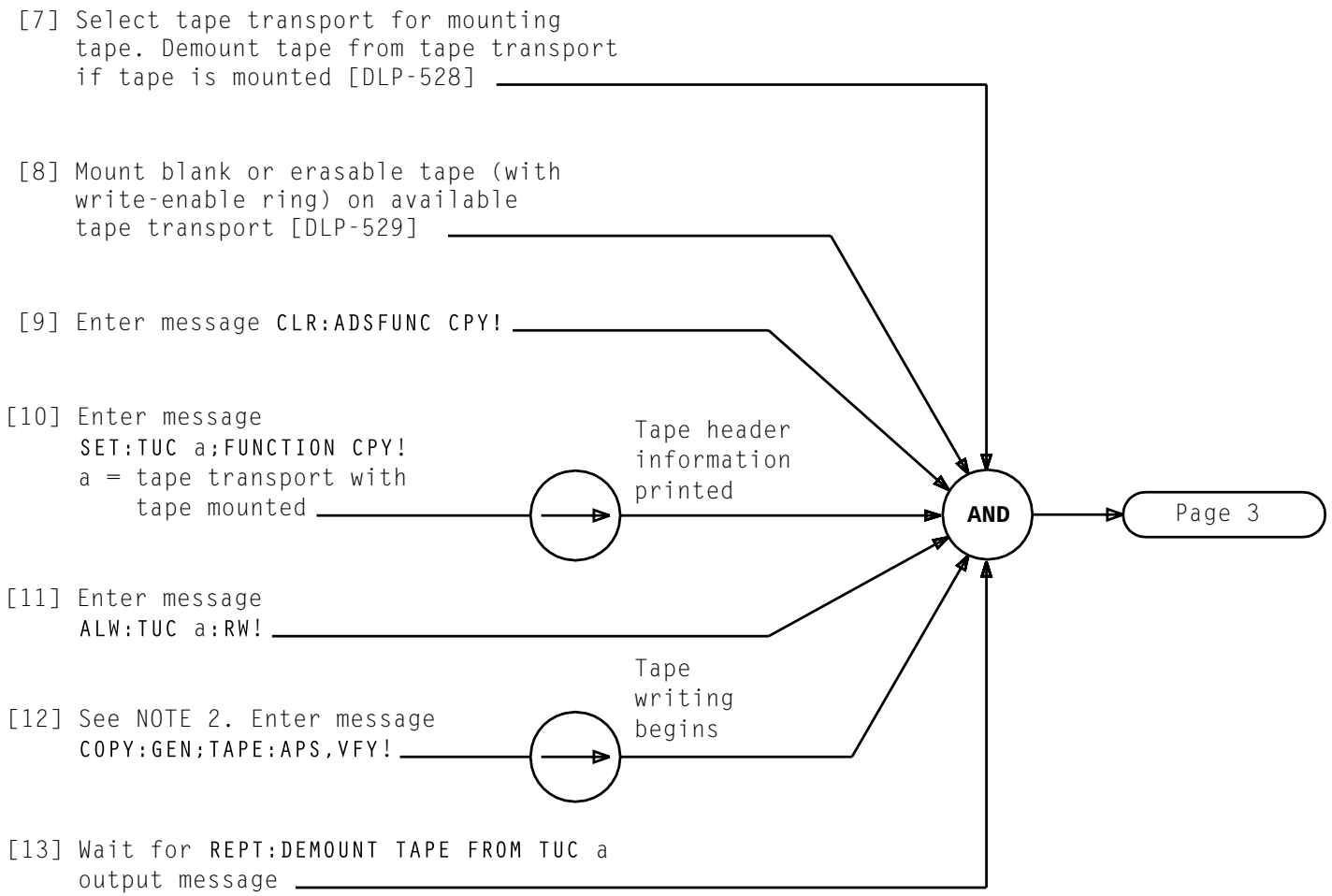
NOTE 1

If necessary, AT&T Practice 234-020-010 should be referenced to for tape storage requirements and procedures

CAUTION 1

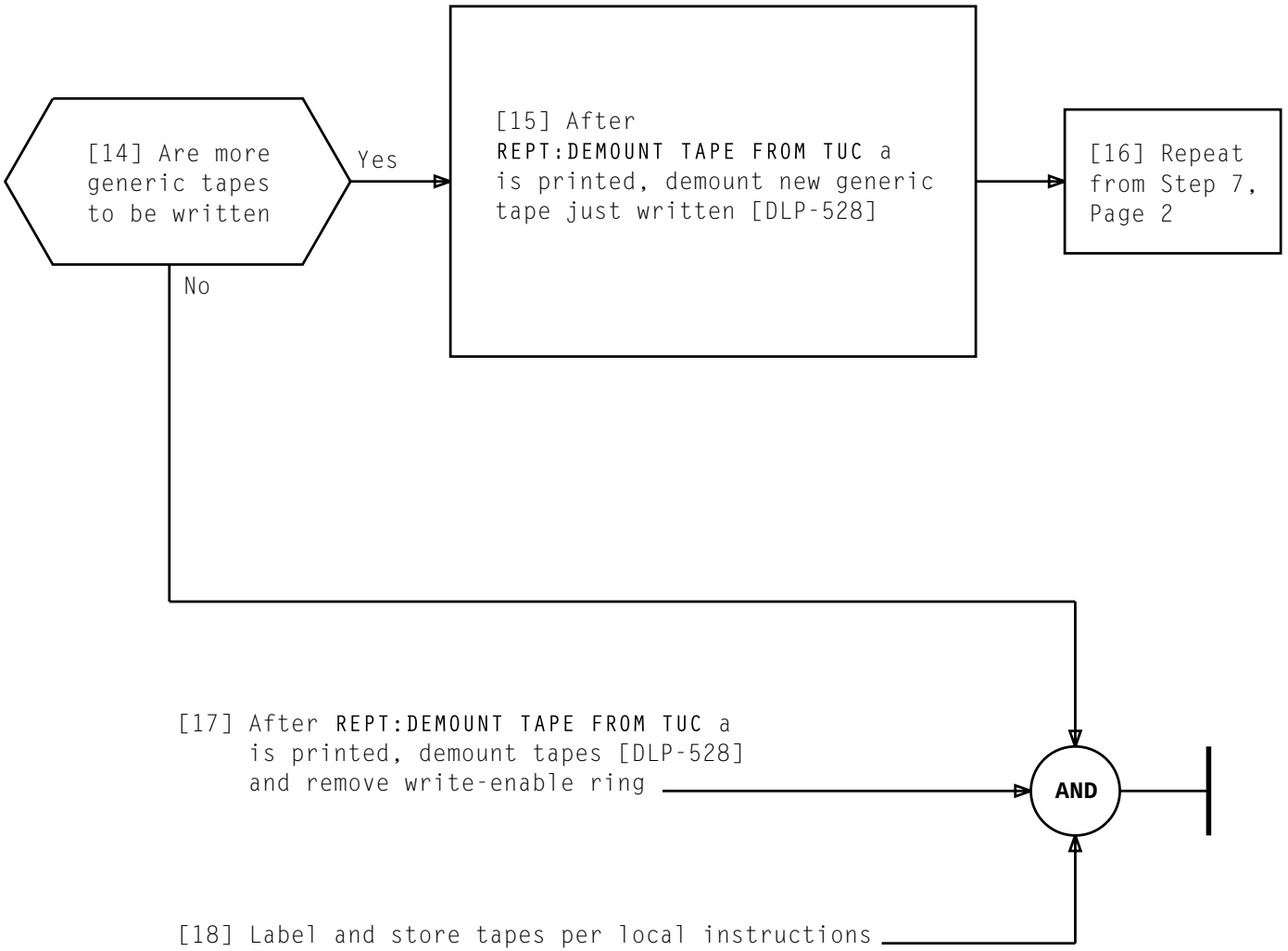
Certain system audits are inhibited during tape writing; therefore, tape writing should be done during light traffic periods

WRITE 1B PROCESSOR GENERIC TAPE(S) (TWRP WRITE - 800 BPI)

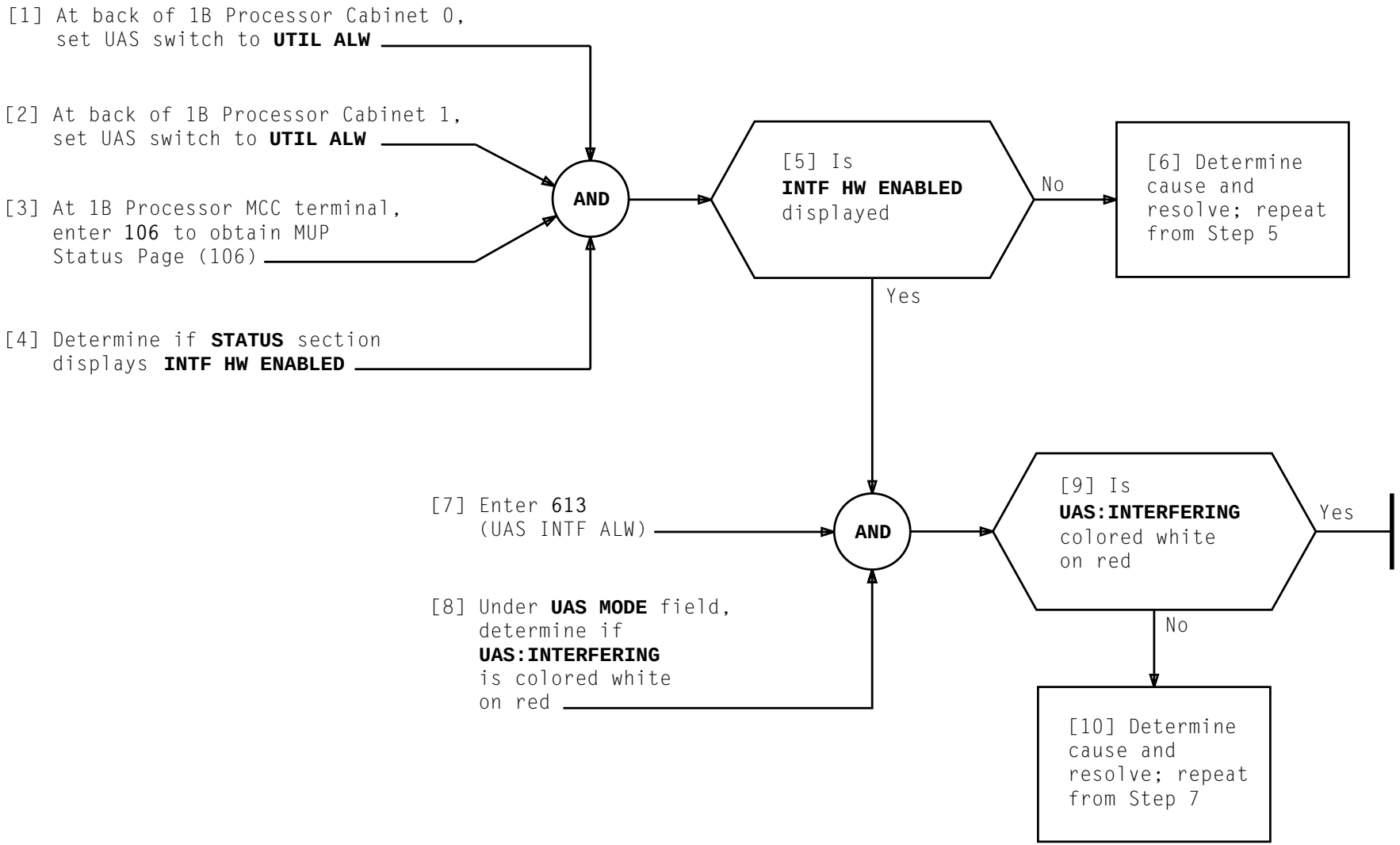


NOTE 2
After generic tape is written, tape will rewind and be verified. After verification has been completed, REPT:DEMOUNT TAPE FROM TUC a message is received

WRITE 1B PROCESSOR GENERIC TAPE(S) (TWRP WRITE – 800 BPI)



WRITE 1B PROCESSOR GENERIC TAPE(S) (TWRP WRITE – 800 BPI)



ALLOW UTILITY INTERFERING ACTIONS

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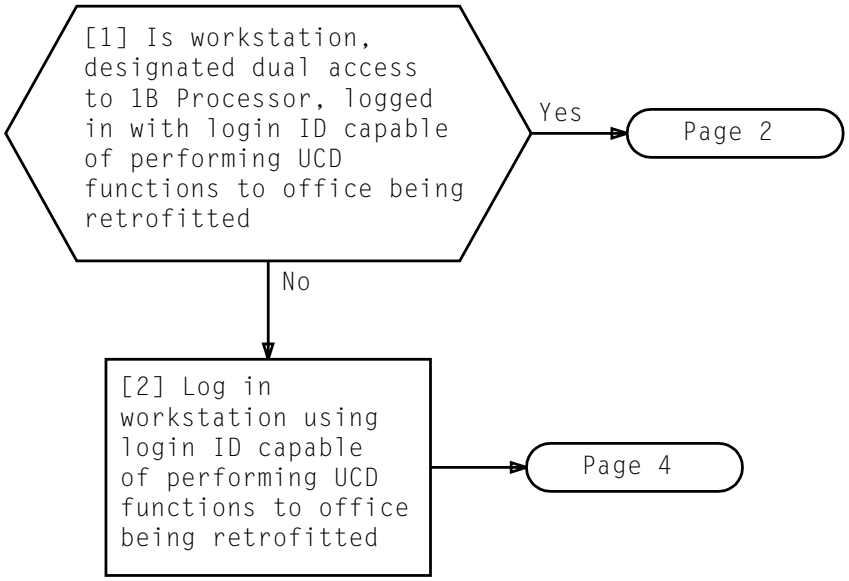
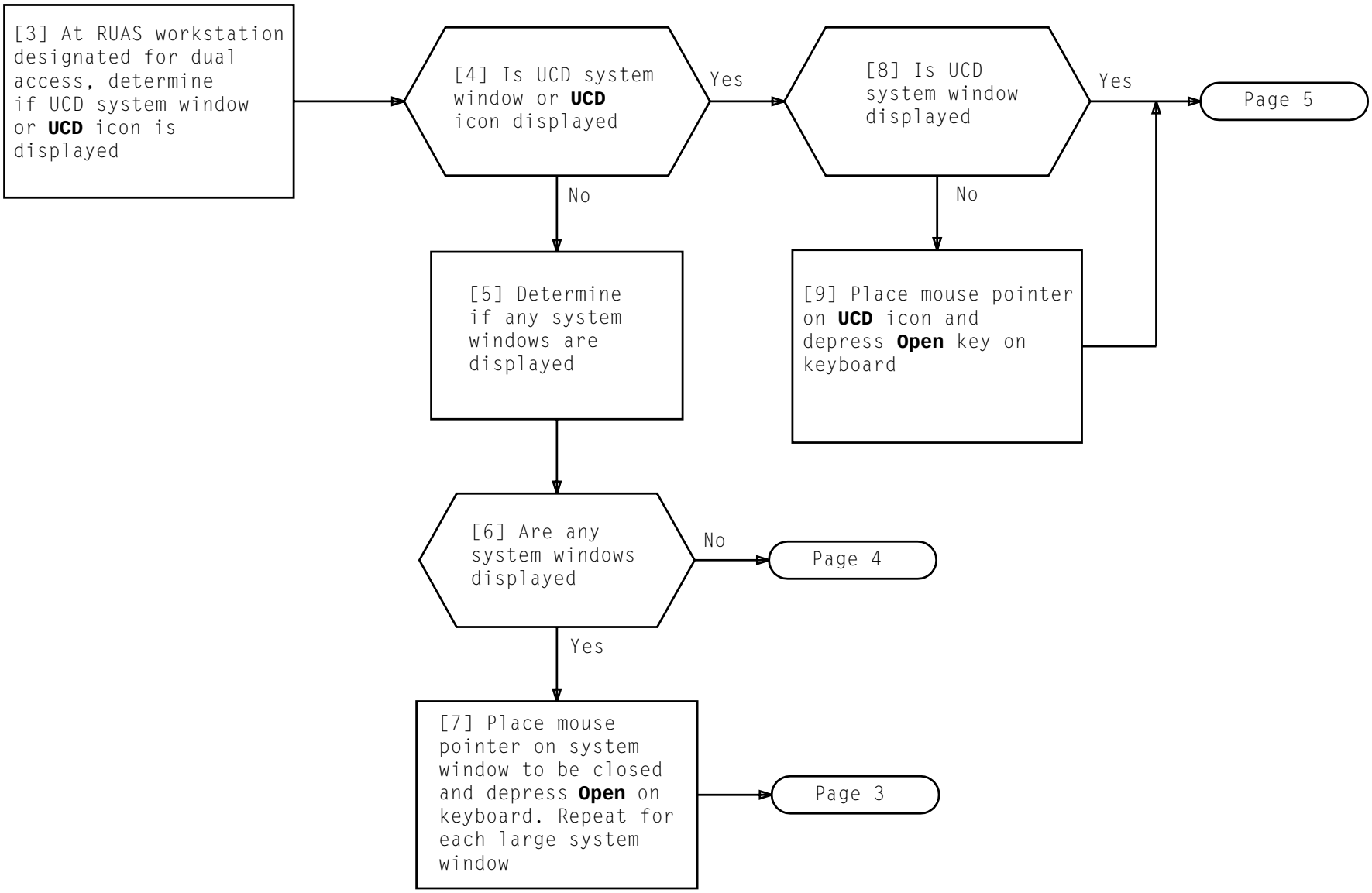
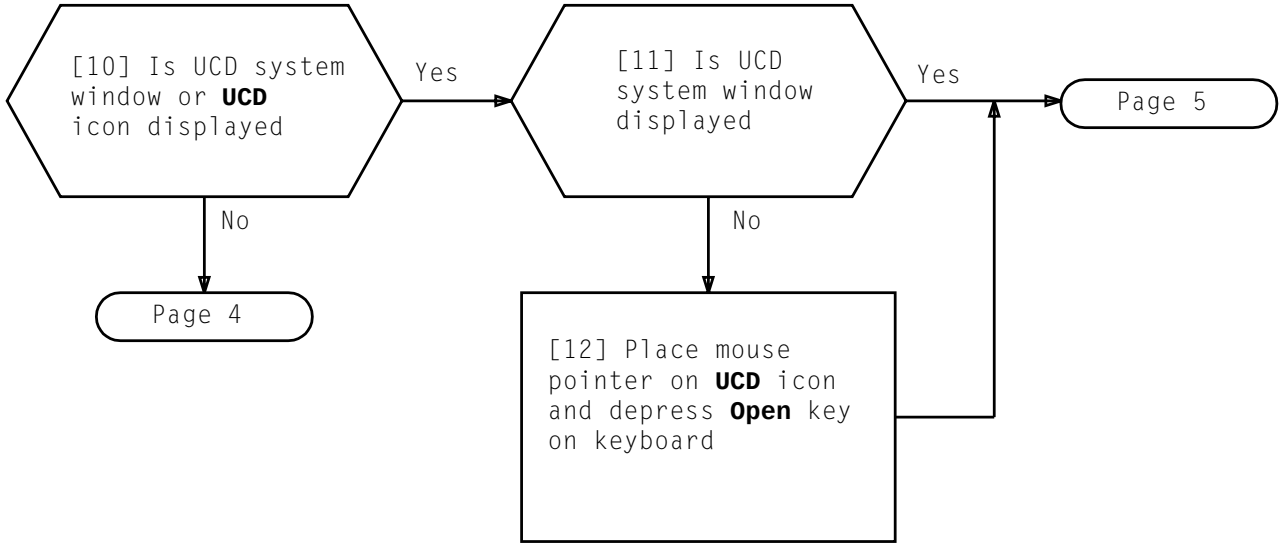


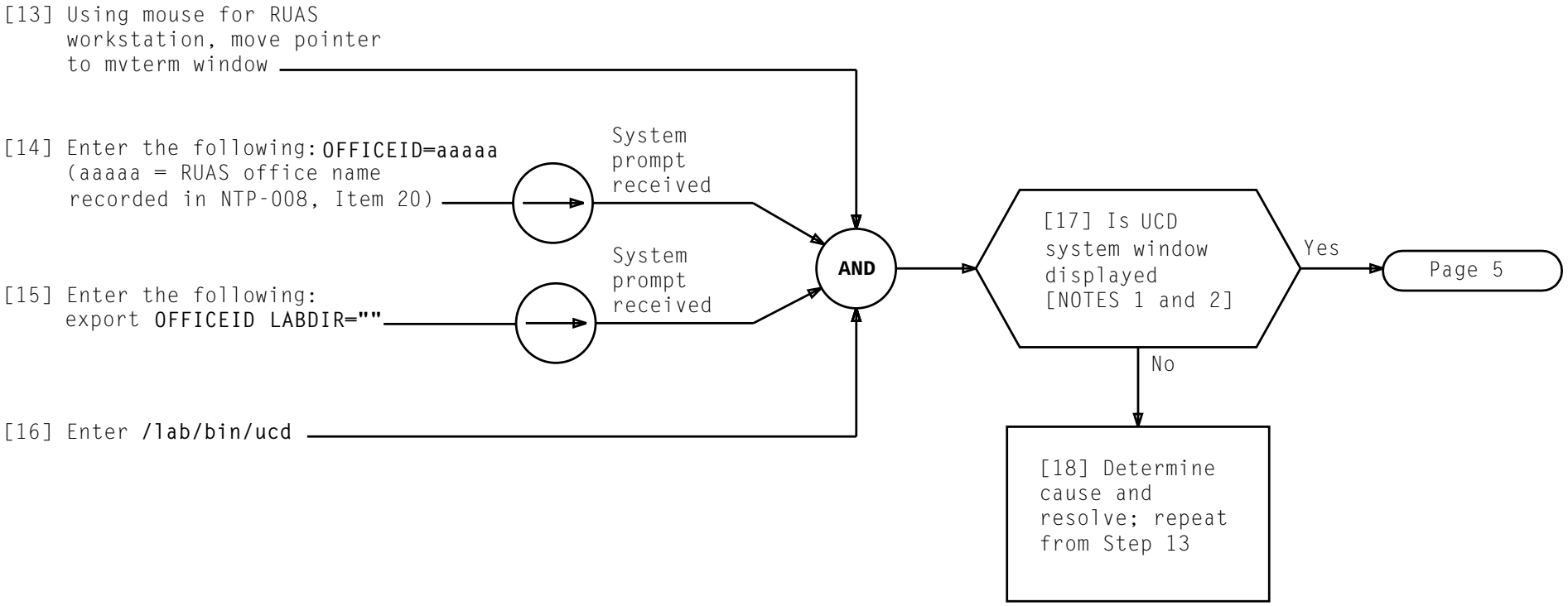
SET UP 1B PROCESSOR UTILITY SYSTEM WORKSTATION TO MATCH AND STOP AT END OF 1B PROCESSOR PUMP



SET UP 1B PROCESSOR UTILITY SYSTEM WORKSTATION TO MATCH AND STOP AT END OF 1B PROCESSOR PUMP



SET UP 1B PROCESSOR UTILITY SYSTEM WORKSTATION TO MATCH AND STOP AT END OF 1B PROCESSOR PUMP



NOTES

1. It will take a short time before UCD window is received
2. **OFFICEID** field on first line of UCD screen should be set to office ID set in Step 14

SET UP 1B PROCESSOR UTILITY SYSTEM WORKSTATION TO MATCH AND STOP AT END OF 1B PROCESSOR PUMP

[19] See NOTE 3.
In UCD window,
click on **INIT US**
icon [FIG. 2, Page 6]

Initialize Utility System
window displayed

[20] Click on
INIT ALL icon

Are you sure...
message received

UAS was initialized
message received
[NOTE 4]

[21] Click on **YES** icon

Initialize Utility
System window
clears

[22] Click on **QUIT** icon

AND

[23] In UCD window,
is **BB ACCESS** icon
[FIG. 2, Page 6]
set to PERMIT
(white on red)

Yes

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No

[24] Click on
BB ACCESS icon
[**BB ACCESS** set
to **PERMIT** (white
on red)]

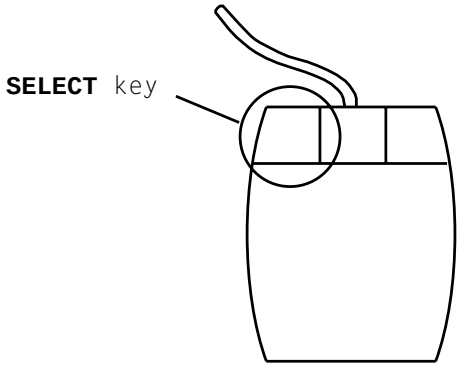


FIG. 1 - Mouse Layout

NOTES
3. Use **SELECT** key on mouse to click for Steps 19 through 22 and 24 [FIG. 1]
4. It will take short time before response is received

SET UP 1B PROCESSOR UTILITY SYSTEM WORKSTATION TO MATCH AND STOP AT END OF 1B PROCESSOR PUMP

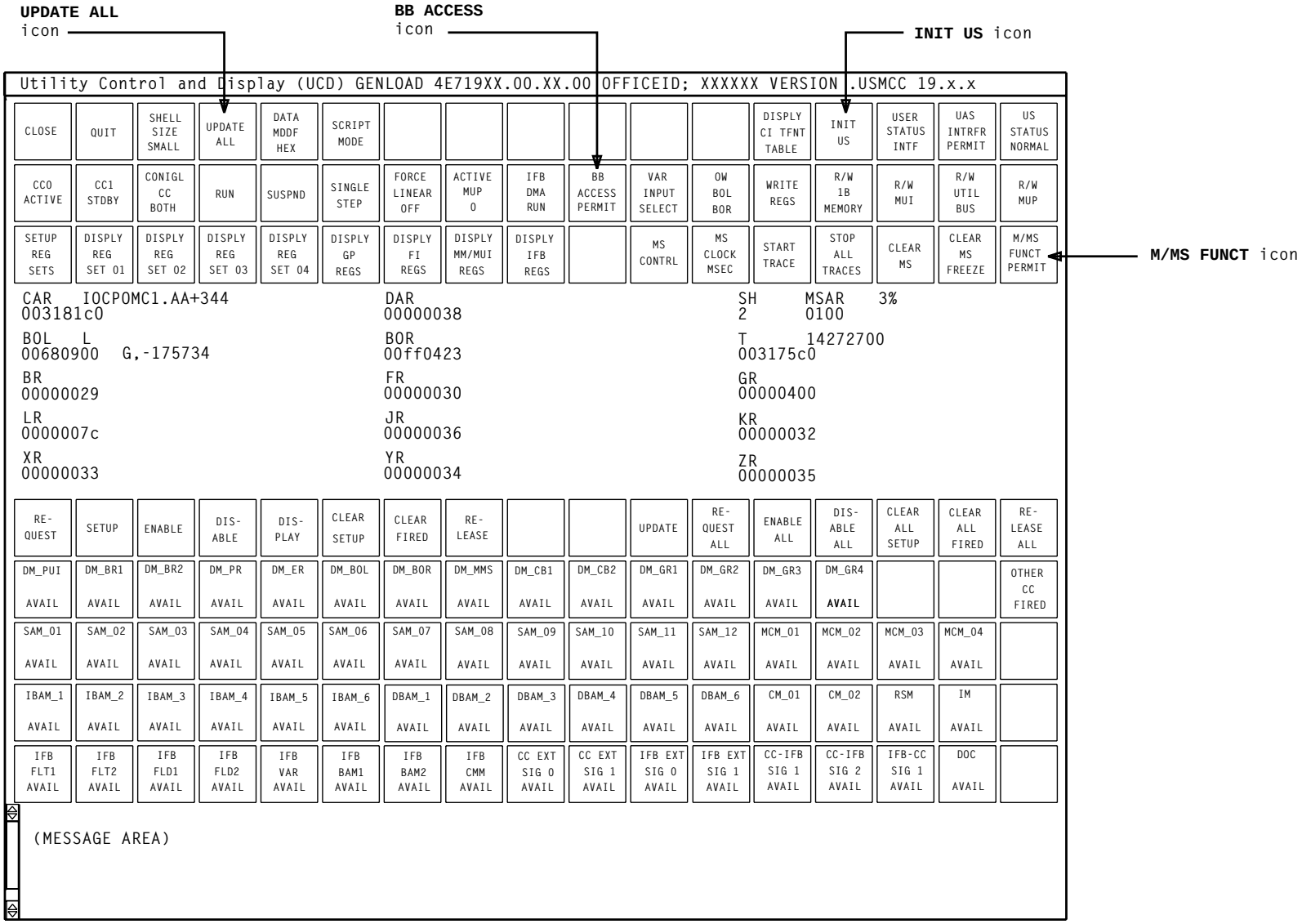
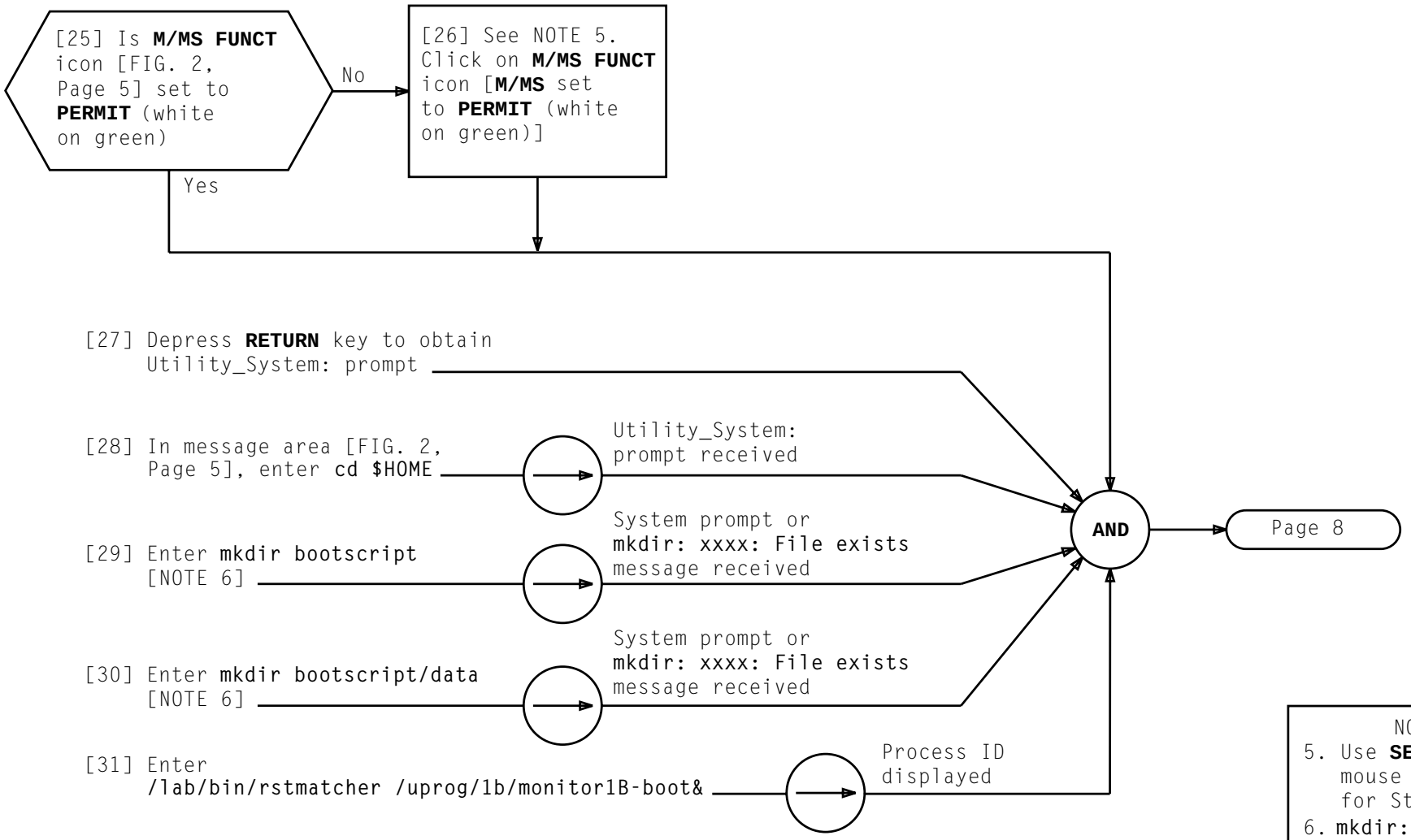


FIG. 2 - Unit and Control Display Window

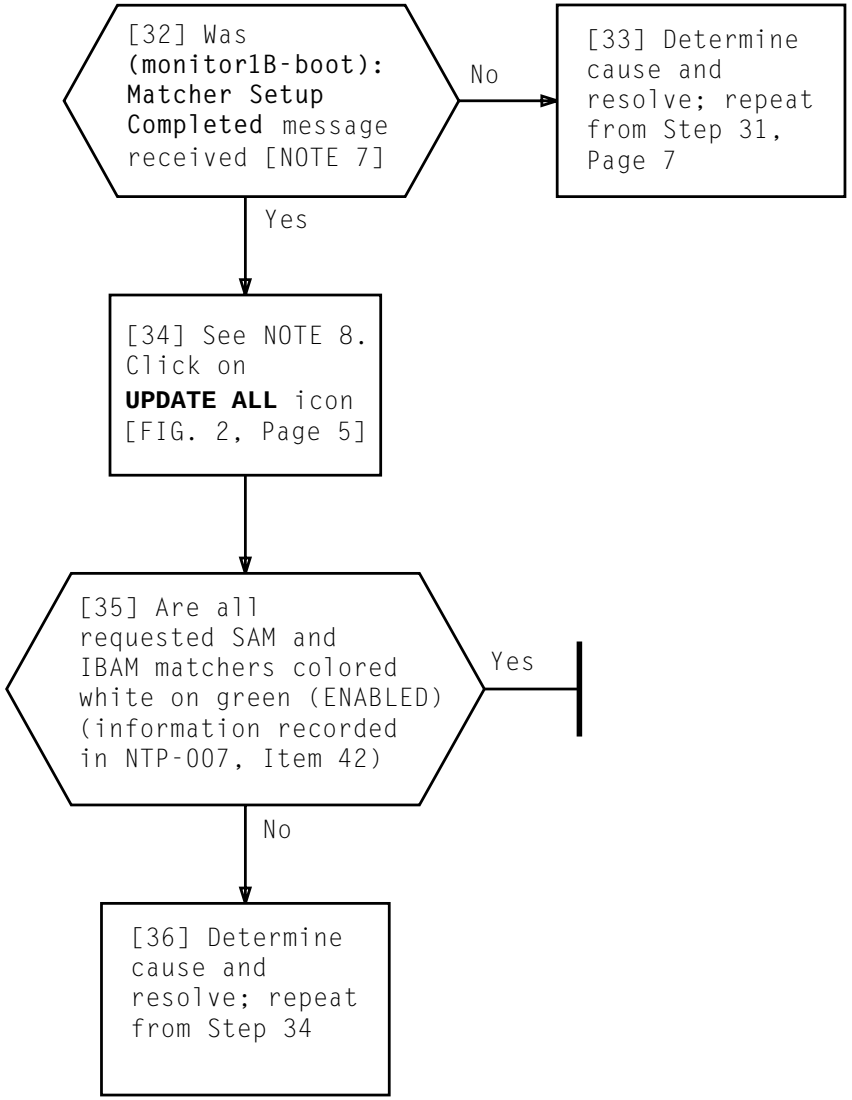
SET UP 1B PROCESSOR UTILITY SYSTEM WORKSTATION TO MATCH AND STOP AT END OF 1B PROCESSOR PUMP



NOTES

5. Use **SELECT** key on mouse to click for Step 26
6. **mkdir: xxxx: File exists** message may be received. This is a valid response since directory is already created

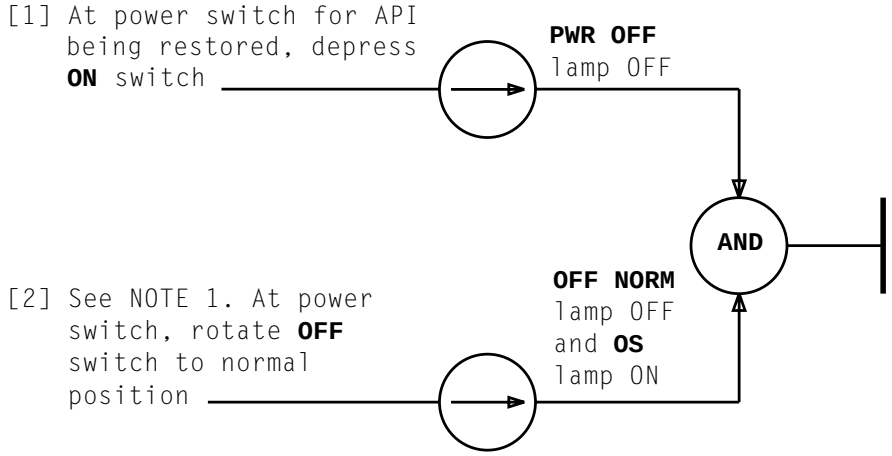
SET UP 1B PROCESSOR UTILITY SYSTEM WORKSTATION TO MATCH AND STOP AT END OF 1B PROCESSOR PUMP



NOTES

7. It will take a short time for response to be received
8. Use **SELECT** key on mouse to click for Step 34

SET UP 1B PROCESSOR UTILITY SYSTEM WORKSTATION TO MATCH AND STOP AT END OF 1B PROCESSOR PUMP



RESTORE POWER TO API USING POWER SWITCH

NOTE 1 Operation of **OFF** switch will cause diagnostic to be run	
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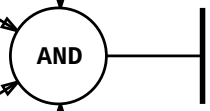
[1] At power switch being power cycled, rotate **ROS/OFF** switch clockwise to **ROS**

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

[3] Depress **ON** switch

[4] See NOTE 1. Rotate **OFF** switch to normal position



POWER CYCLE UNIT

NOTE 1
Operation of **OFF** switch will cause diagnostic to be run

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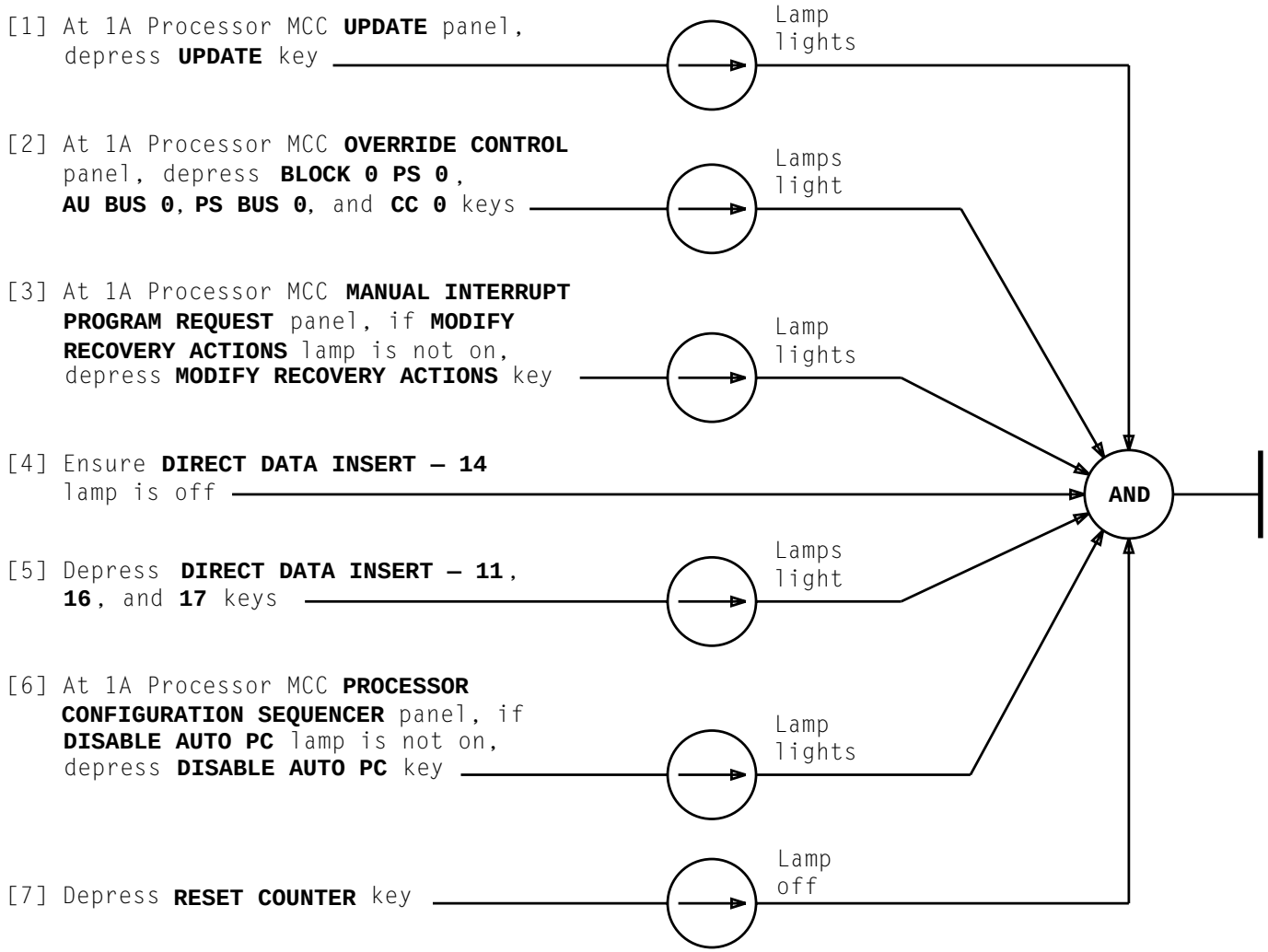


PREPARE 1A PROCESSOR MCC PANEL TO BACK-OUT TO 1A PROCESSOR AFTER UPD:COMMIT;UPDFILE MESSAGE ENTERED

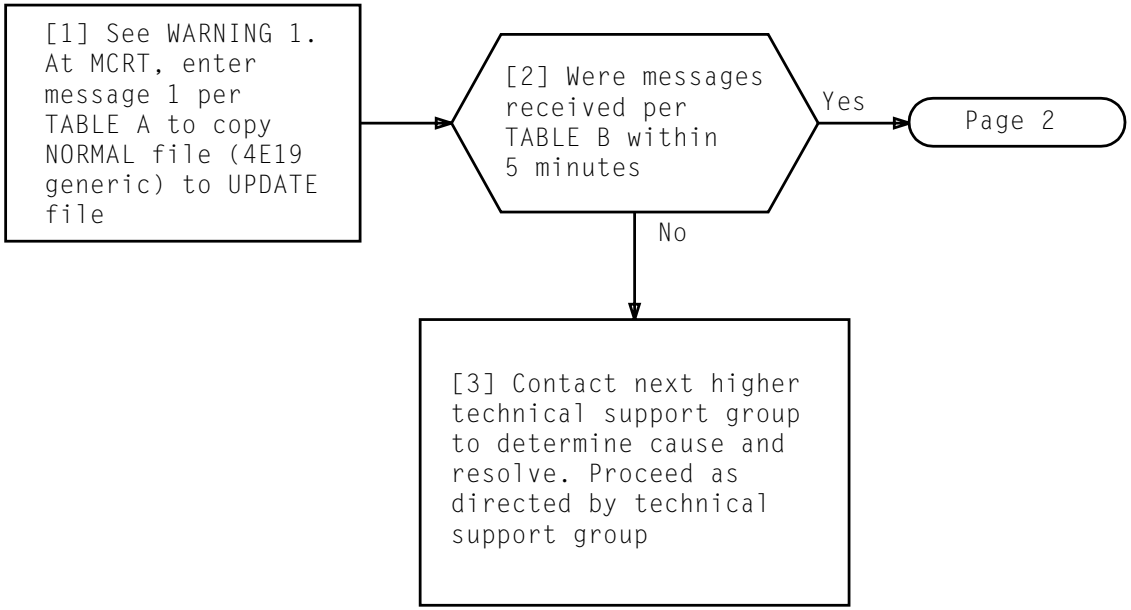


TABLE A

MESSAGE NUMBER	INPUT MESSAGE
1	COPY:APPFILE NORM;UCL!

TABLE B

MESSAGE NUMBER	OUTPUT MESSAGES
1	/etc/vcp /dev/lafileX /dev/1afileY 65536 >/dev/null STARTED COPY:APPFILE COMPLETED

WARNING 1
Care must be taken to ensure proper message is entered to prevent service interruption

COMMIT TO 1B PROCESSOR

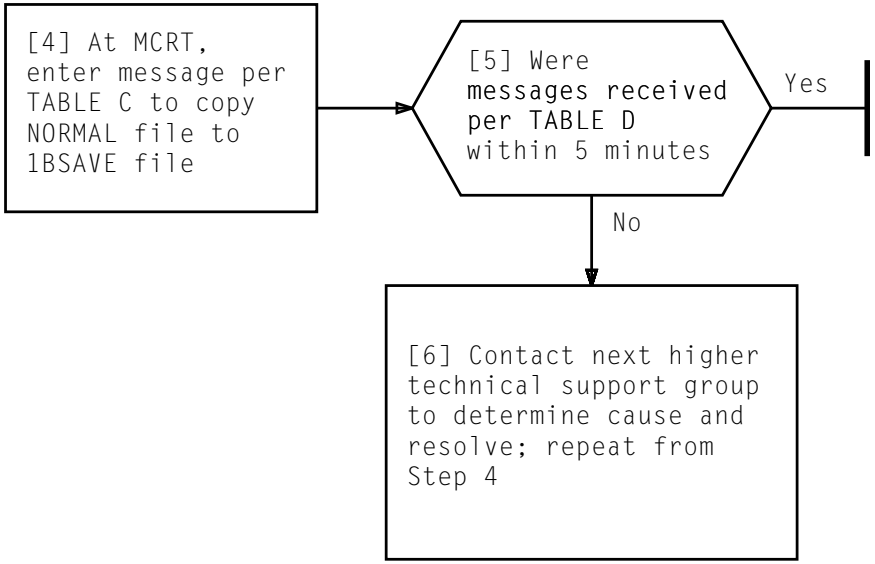


TABLE C

MESSAGE NUMBER	INPUT MESSAGE
1	COPY:APPFILE NORM:DEST 1BSAVE!

TABLE D

MESSAGE NUMBER	OUTPUT MESSAGES
1	/etc/vcp /dev/lafileX /dev/1bextra 65536 >/dev/null STARTED COPY:APPFILE COMPLETED

COMMIT TO 1B PROCESSOR

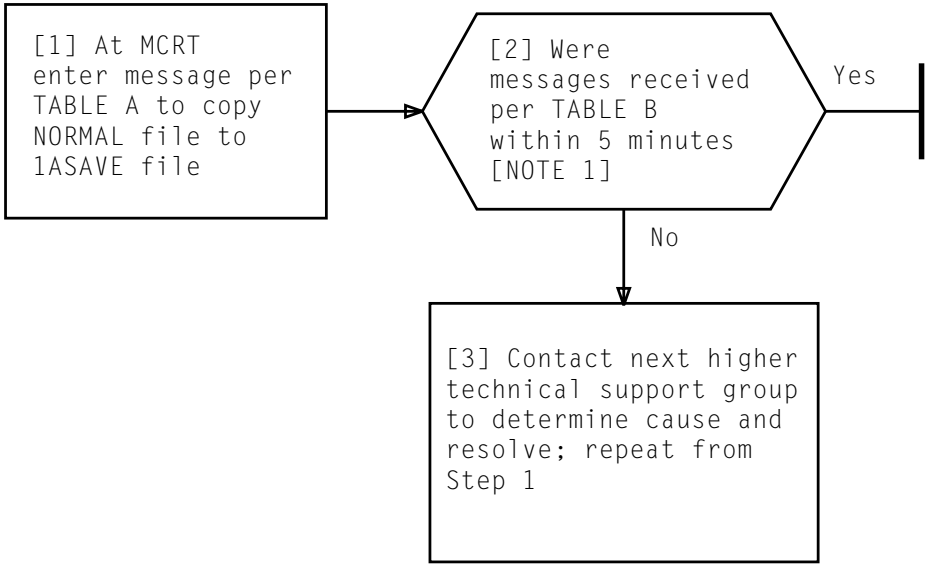


TABLE A

MESSAGE NUMBER	INPUT MESSAGE
1	COPY:APPFILE NORM:DEST 1ASAVE!

TABLE B

MESSAGE NUMBER	OUTPUT MESSAGES
1	/etc/vcp /dev/lafileX /dev/1afile.save 65536 >/dev/null STARTED COPY:APPFILE COMPLETED

NOTE 1
It may take longer than 5 minutes to copy NORMAL file to 1ASAVE file if office has heavy call load

COPY NORMAL FILE TO 1ASAVE FILE

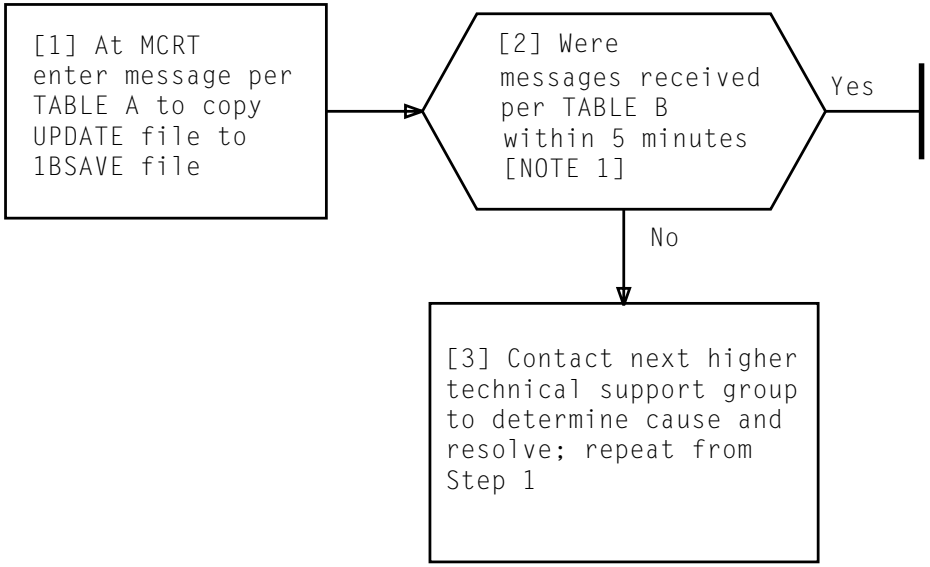


TABLE A

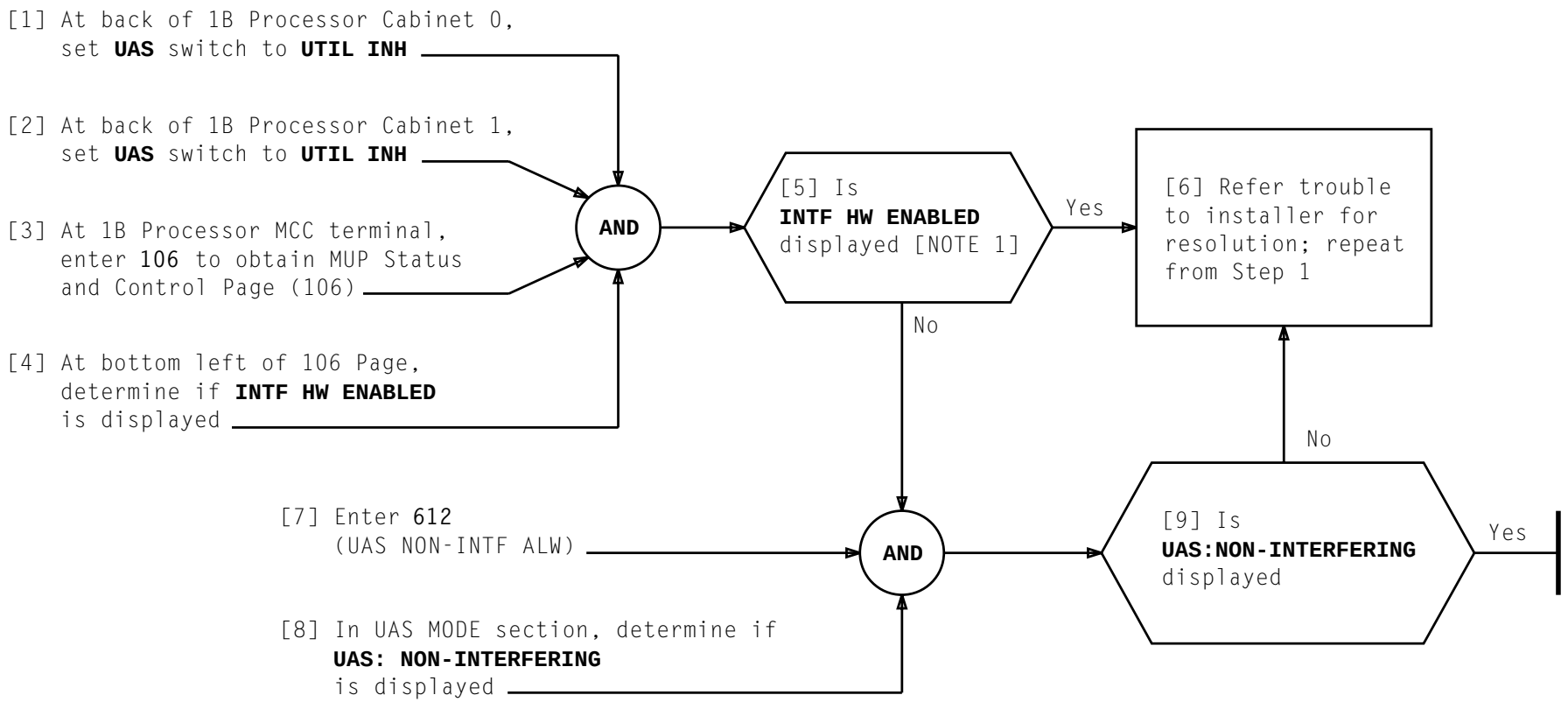
MESSAGE NUMBER	INPUT MESSAGE
1	COPY:APPFILE UPD:DEST 1BSAVE!

TABLE B

MESSAGE NUMBER	OUTPUT MESSAGES
1	/etc/vcp /dev/lafileX /dev/1bextra 65536 >/dev/null STARTED COPY:APPFILE COMPLETED

NOTE 1
It may take longer than 5 minutes to copy UPDATE file to 1BSAVE file if office has heavy call load

COPY UPDATE FILE TO 1BSAVE FILE



SET MUP TO NON-INTERFERING

NOTE 1	
Normal indication when **INTF HW ENABLED** not displayed	
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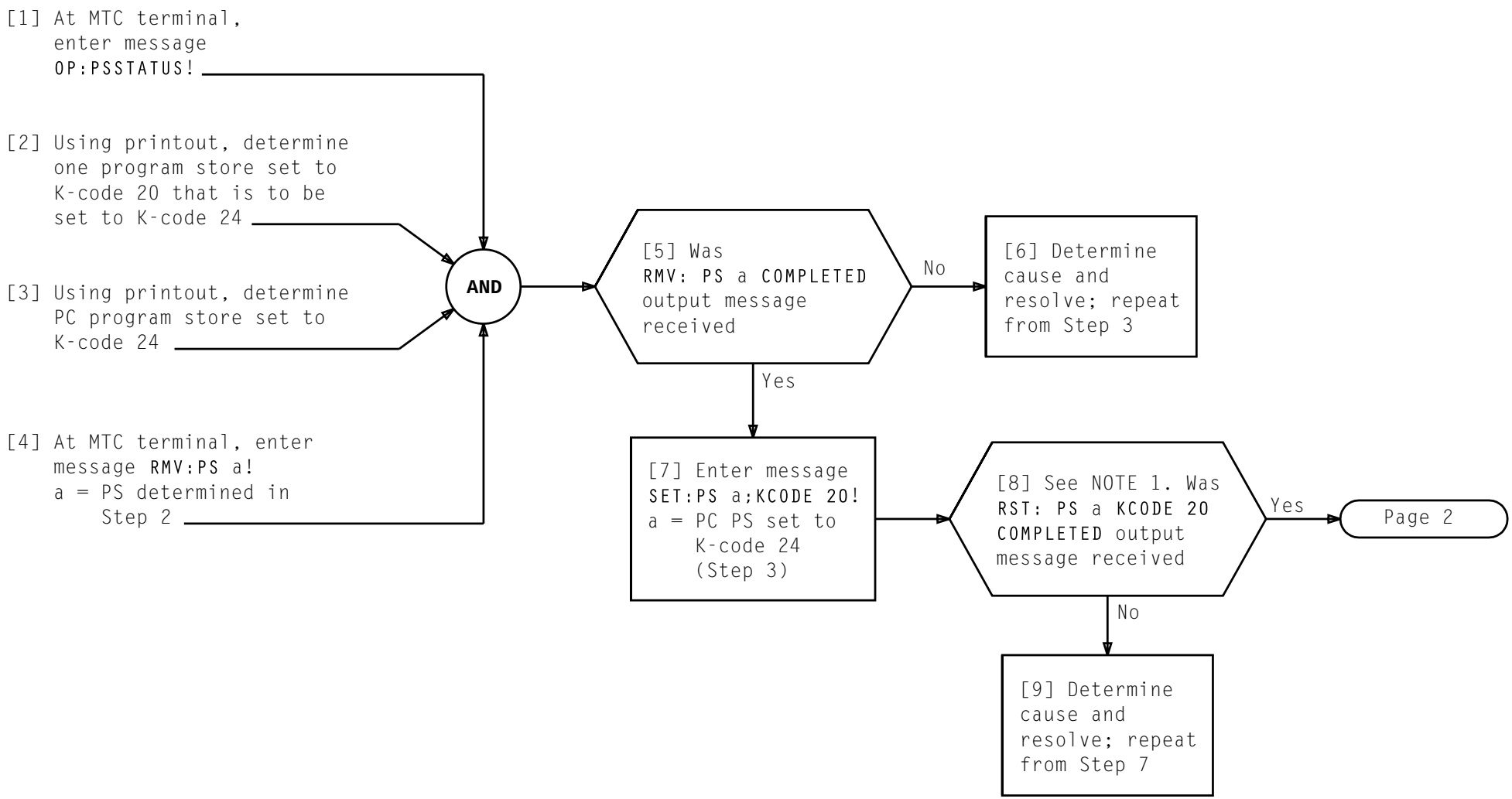
CONFIGURE PS TO K-CODE AFTER INITIAL SETTING



NOTE 1
CATP bit 15 will be received if standby CC is out-of-service

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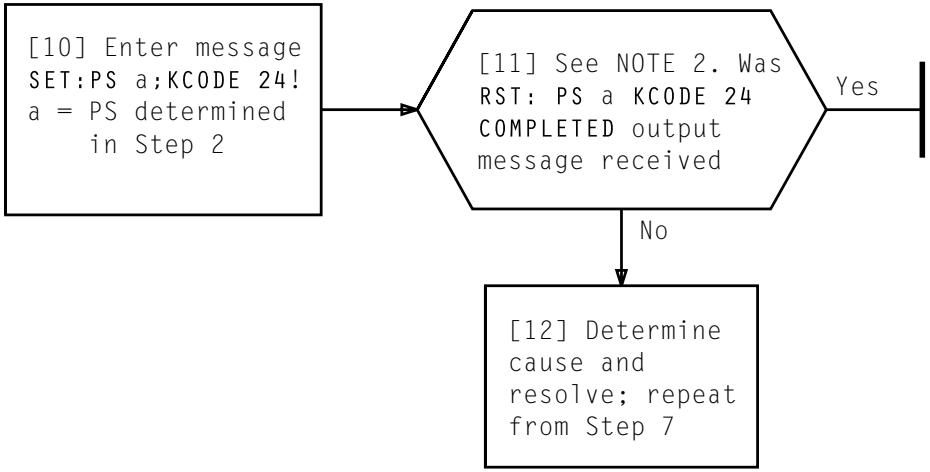

CONFIGURE PS TO K-CODE AFTER INITIAL SETTING

NOTE 2 CATP bit 15 will be received if standby CC is out-of-service	
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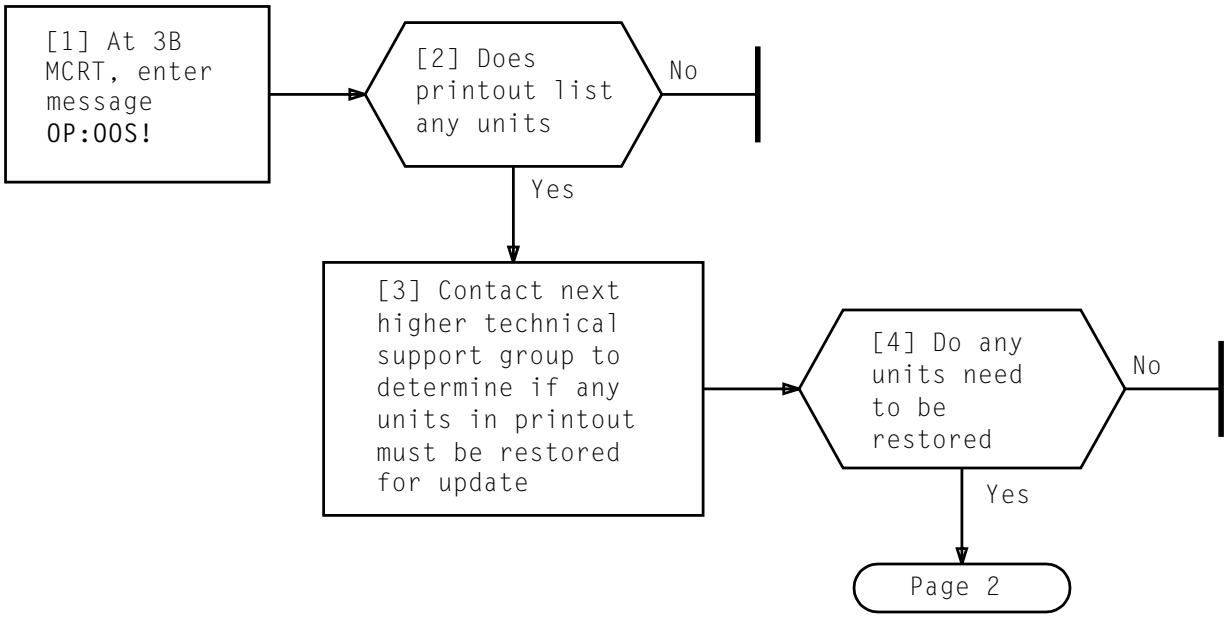


ENSURE 3B COMPUTER UNITS ARE IN-SERVICE

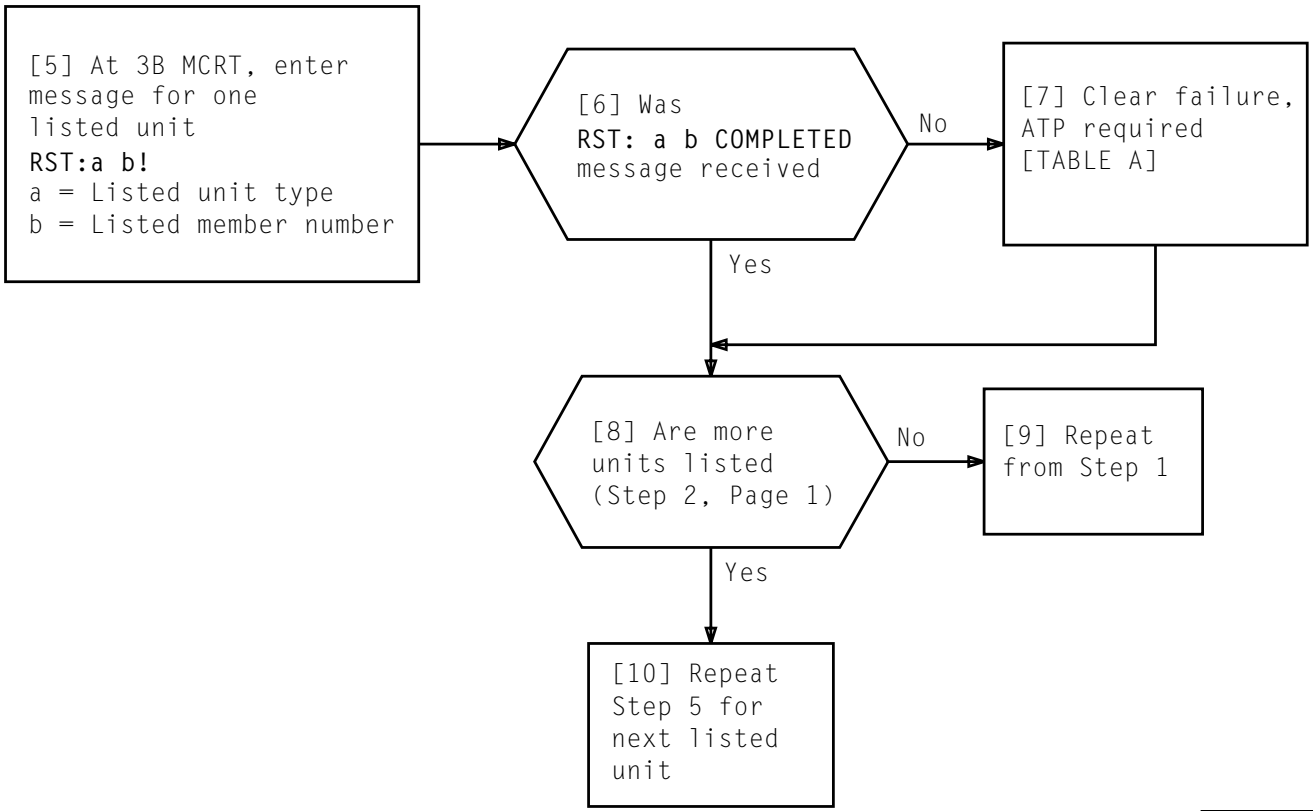


TABLE A

UNIT TYPE	TROUBLE-CLEARING VOLUME
3B Computer Model 1	254-301-812 254-301-813
3B Computer Model 2/3	254-302-812

ENSURE 3B COMPUTER UNITS ARE IN-SERVICE

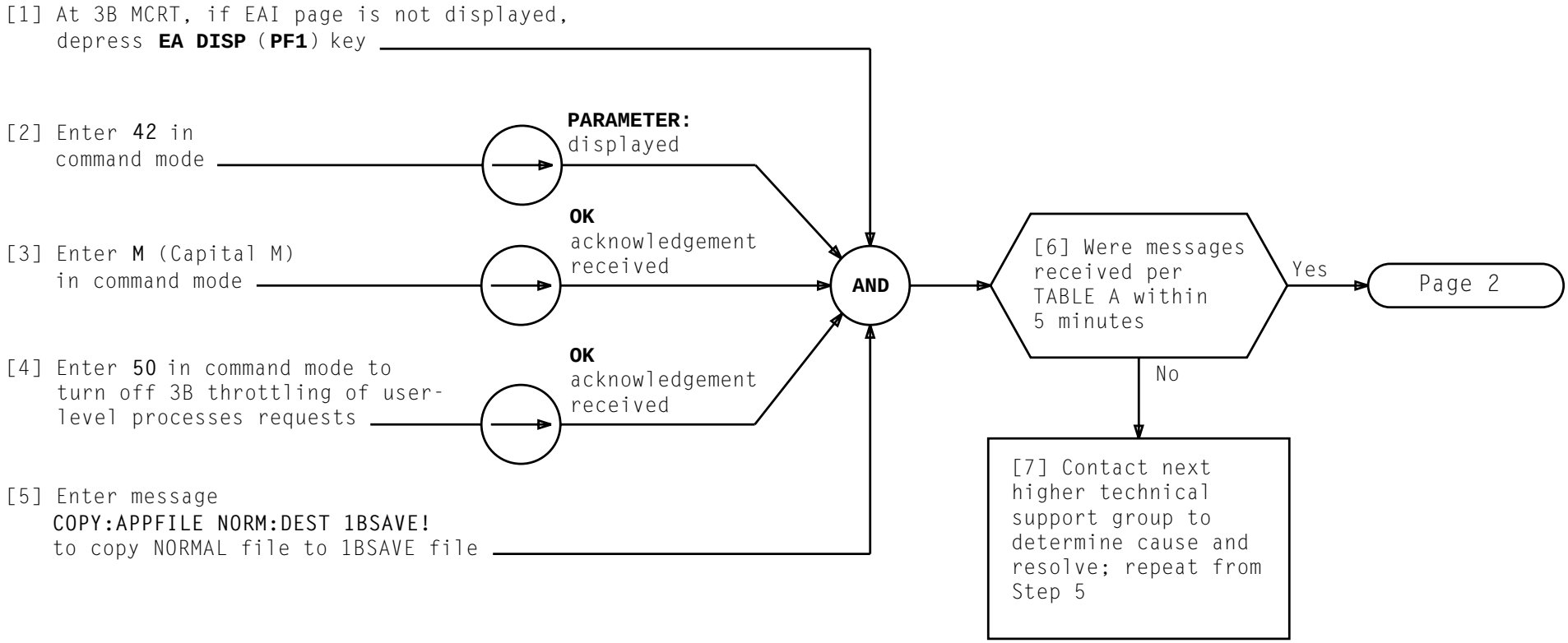


TABLE A

MESSAGE NUMBER	OUTPUT MESSAGES
1	/etc/vcp /dev/1afileX /dev/1bextra 65536 >/dev/null STARTED COPY:APPFILE COMPLETED

PREPARE TO BACKOUT TO 1A PROCESSOR AFTER COMMITTING TO 1B PROCESSOR

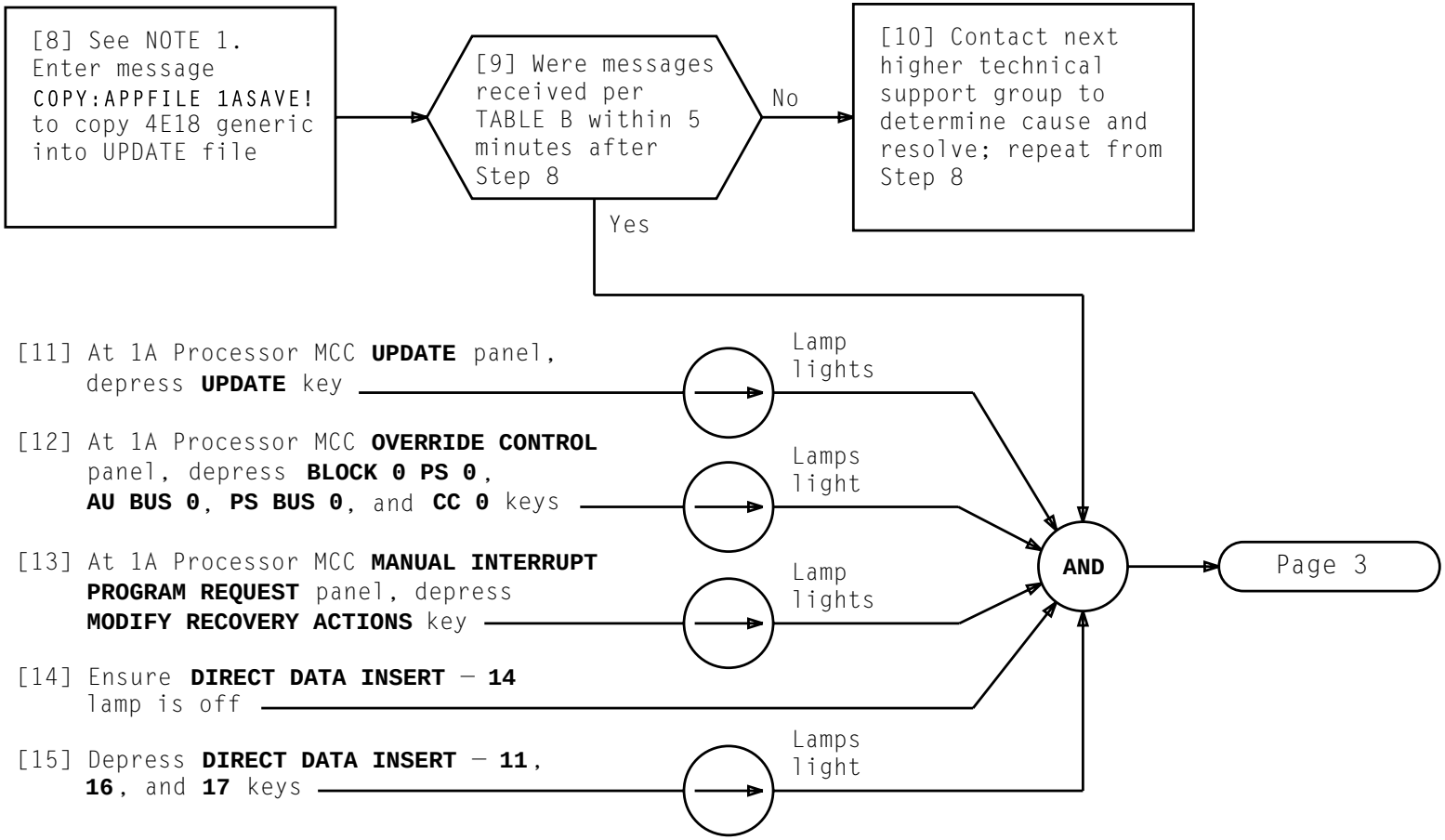
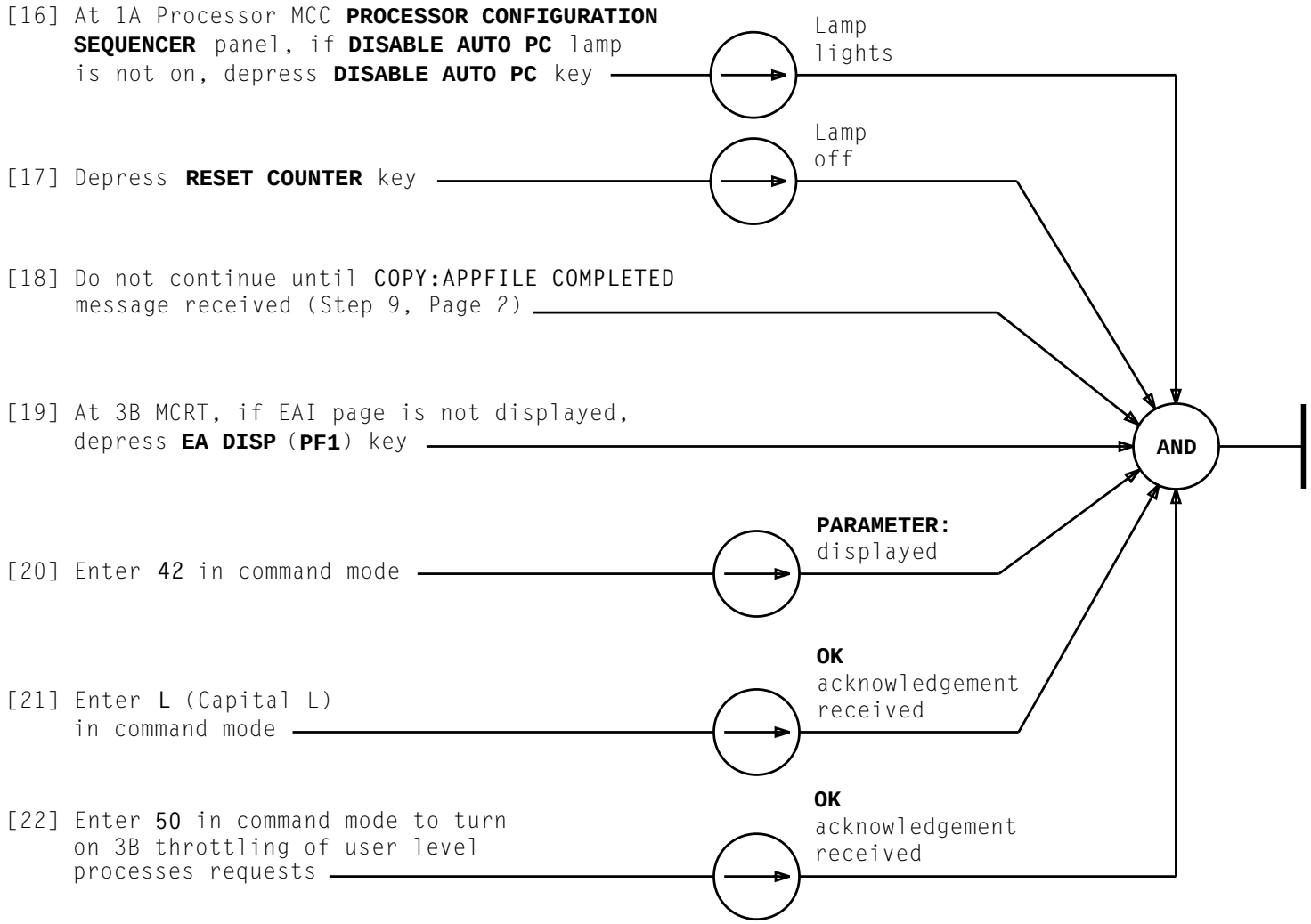


TABLE B

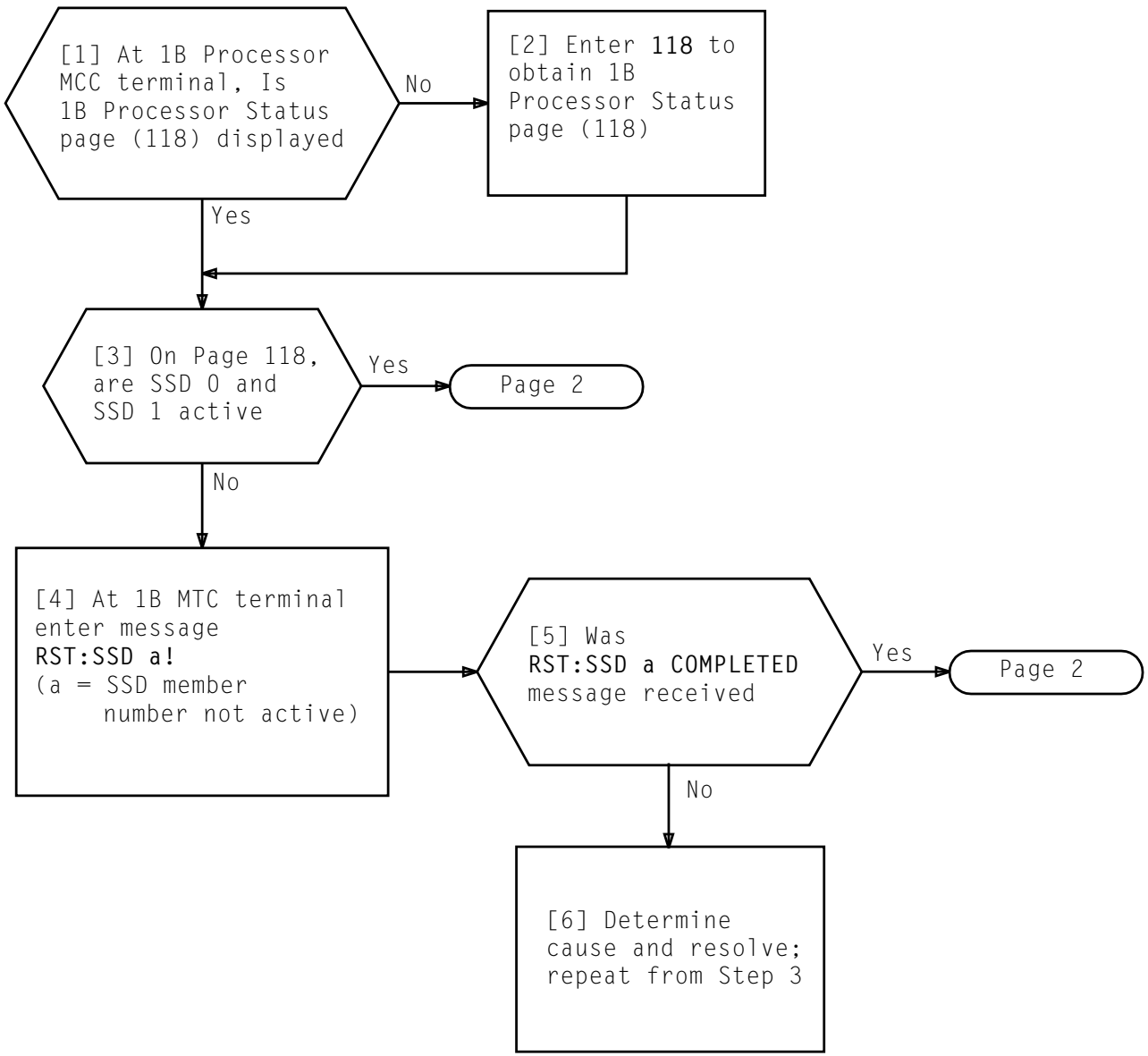
MESSAGE NUMBER	OUTPUT MESSAGES
1	/etc/vcp /dev/1afile.save /dev/1afileX 65536 >/dev/null STARTED COPY:APPFILE COMPLETED

NOTE 1
While waiting for COPY to complete, Steps 11 through 16 can be performed

PREPARE TO BACK-OUT TO 1A PROCESSOR AFTER COMMITTING TO 1B PROCESSOR



PREPARE TO BACKOUT TO 1A PROCESSOR AFTER COMMITTING TO 1B PROCESSOR



TEST SCAN AND SD POINTS

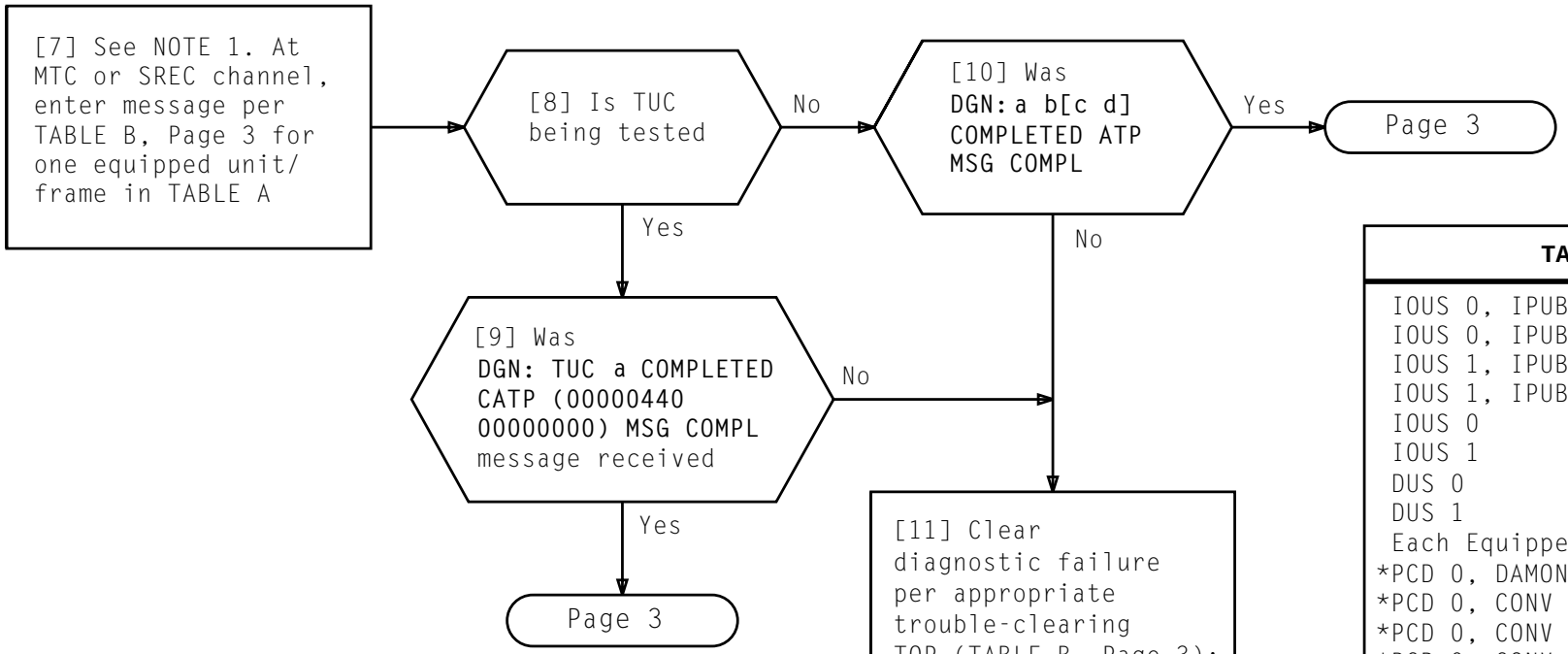


TABLE A

IOUS 0, IPUB 0
IOUS 0, IPUB 1
IOUS 1, IPUB 0
IOUS 1, IPUB 1
IOUS 0
IOUS 1
DUS 0
DUS 1
Each Equipped TUC (0, 1...n)
*PCD 0, DAMON 0
*PCD 0, CONV 0
*PCD 0, CONV 1
*PCD 0, CONV 2
*PCD 1, DAMON 0
*PCD 1, CONV 0
*PCD 1, CONV 1
*PCD 1, CONV 2

* PCD may not be equipped in office

NOTE 1
When testing IOUS 0, RST message must be entered from SREC channel. When testing IOUS 1, RST message must be entered from MTC channel

TEST SCAN AND SD POINTS

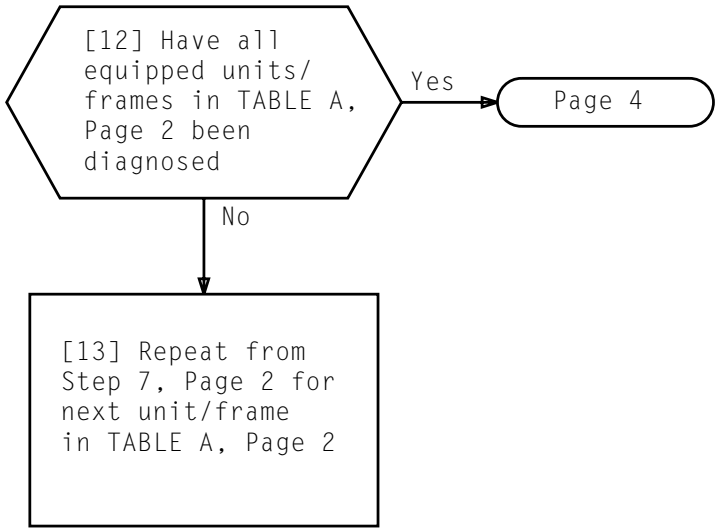
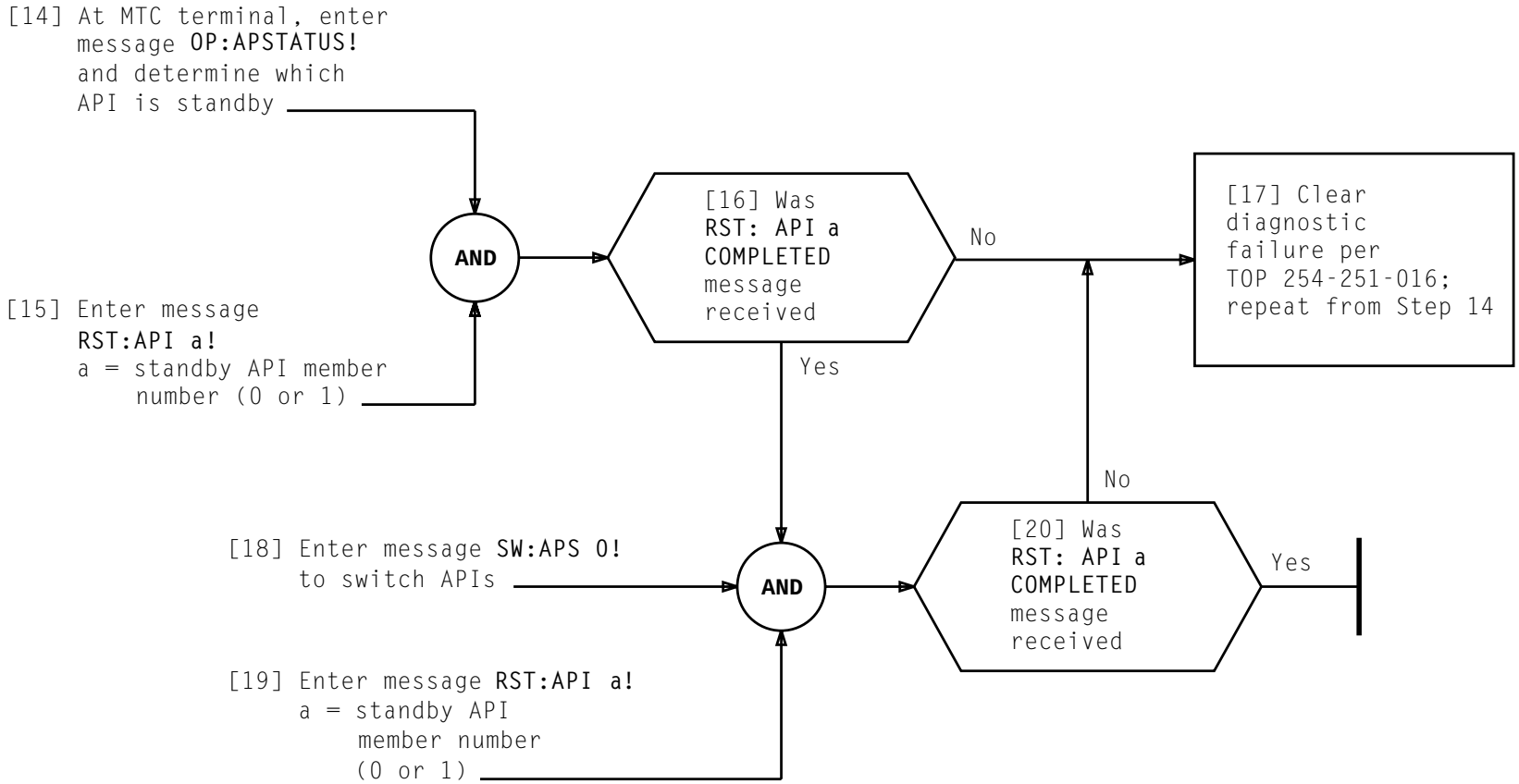


TABLE B

MESSAGE NUMBER	INPUT MESSAGE	TROUBLE-CLEARING VOLUME
1	RST:IOUS f,IPUB g! f = IOUS number (0 or 1) g = IPUB number (0 or 1)	J5A006A = 254-251-020 J5A006C = 254-251-021 J5A006D = 254-251-022
2	RST:IOUS f! f = IOUS number (0 or 1)	
3	RST:DUS d! d = DUS member number (0 or 1)	254-251-010
4	RST:TUC c! c = TUC member number	
5	RST:PCD a,DAMON 0! a = PCD number (0 or 1)	J5A007B = 254-251-025 J5A007C = 254-251-026
6	RST:PCD a,CONV b! a = PCD number (0 or 1) b = Converter number (0, 1, or 2)	



TEST SCAN AND SD POINTS

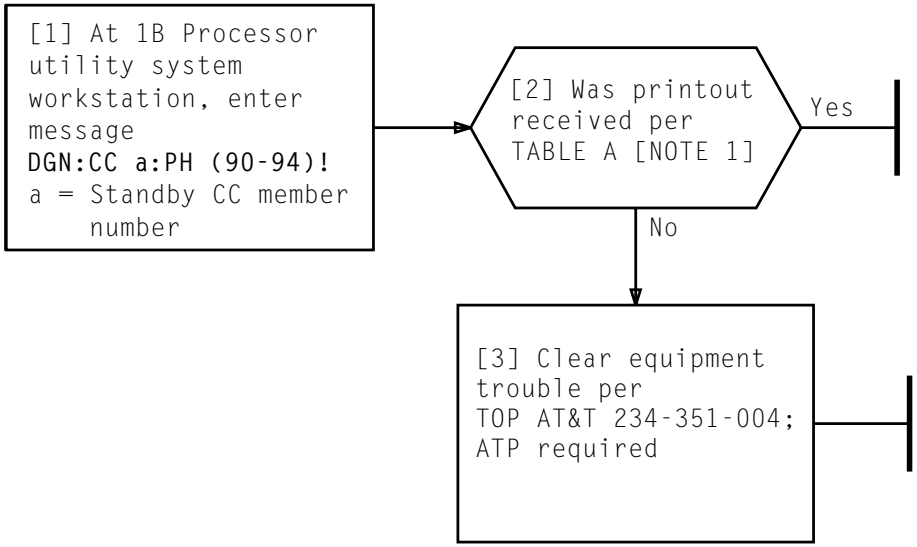


TABLE A

MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN:CC a PH 90 ATP DGN:CC a PH 91 ATP DGN:CC a PH 92 ATP DGN:CC a PH 93 ATP DGN:CC a PH 94 ATP DGN:CC a COMPLETED ATP MSG COMPL TEST:CC a DFR ATP

NOTE 1
Diagnostics will take approximately 1 hour to complete

RUN 1B PROCESSOR CC DEMAND DIAGNOSTICS PHASES 90 THROUGH 94

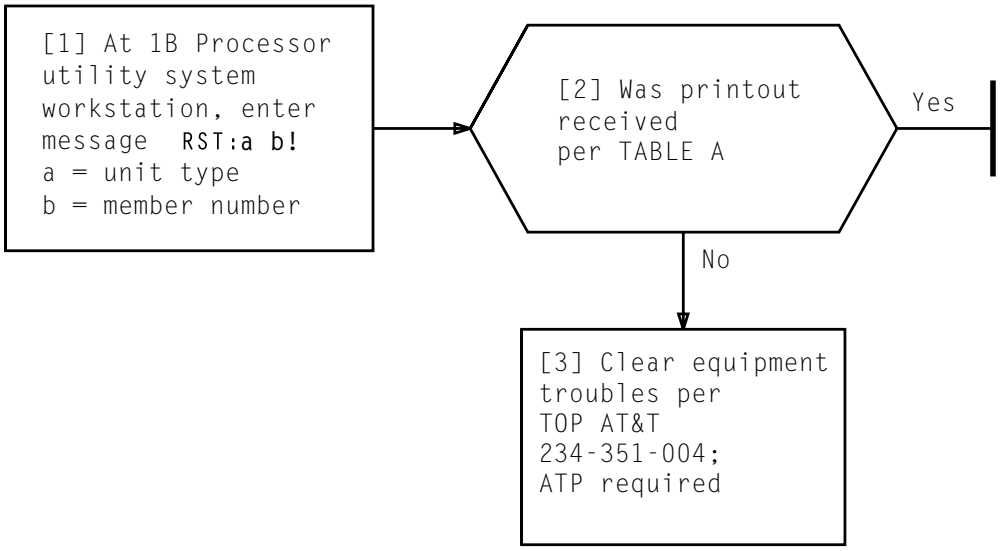
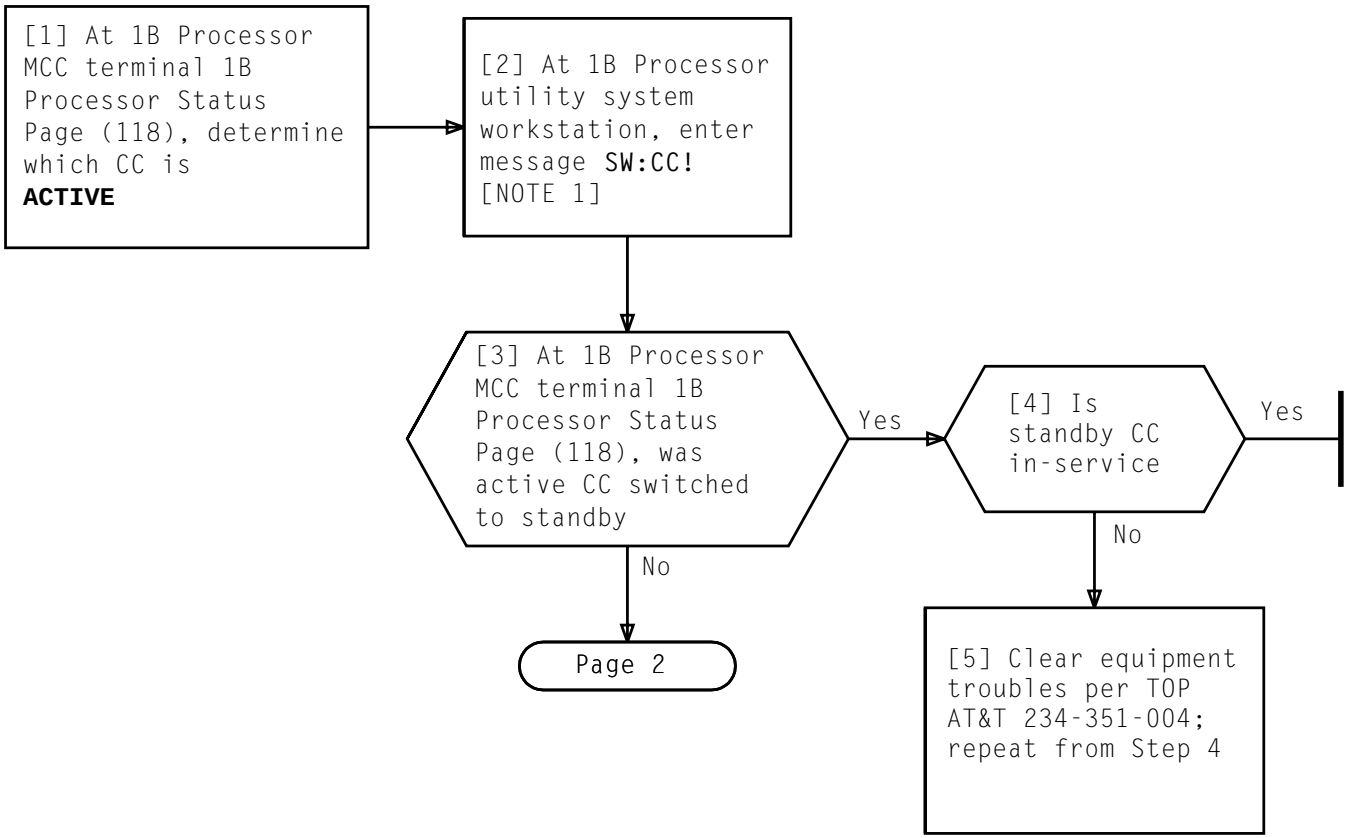


TABLE A

MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN: a b COMPLETED c* MSG COMPL TEST: a b ATP** RST: a b COMPLETED RST: a b MCODE c**

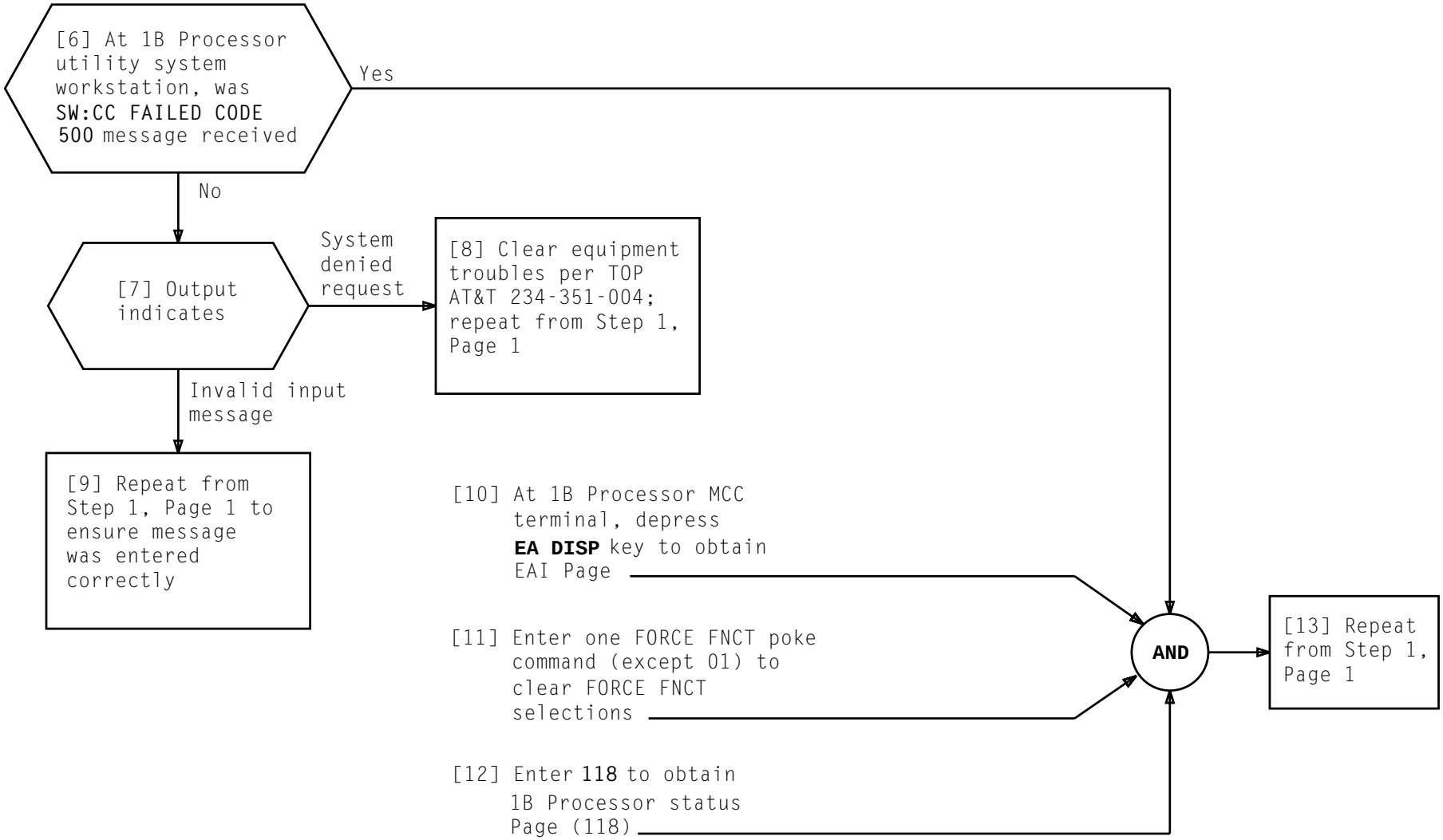
* CATP results will be received for AUB
** This message will not be received for some units
a = unit type
b = member number
c = MCODE assigned to store

RESTORE 1B PROCESSOR API, AUB, AUI, CC, CS, CSB, IFB, MUP, PS, PSB, PUB, SSD, OR XPWR



NOTE 1
It will take approximately 3 minutes for CCs to switch

SWITCH 1B PROCESSOR CENTRAL CONTROLS (CCs)



SWITCH 1B PROCESSOR CENTRAL CONTROLS (CCs)

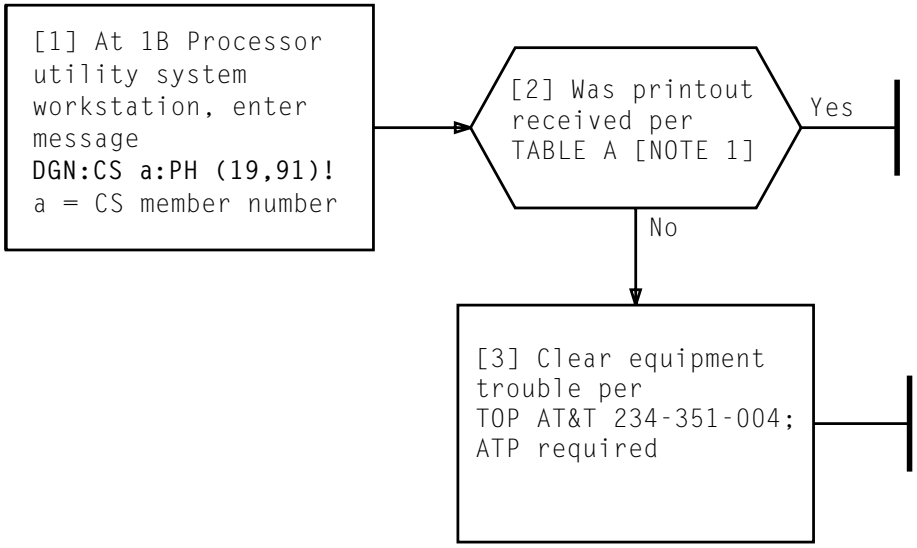


TABLE A

MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN:CS a PH 19 ATP DGN:CS a PH 91 ATP DGN:CS a COMPLETED ATP MSG COMPL

NOTE 1
Diagnostic will take approximately 8 minutes to complete

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RUN 1B PROCESSOR CS DEMAND DIAGNOSTICS PHASES 19 AND 91

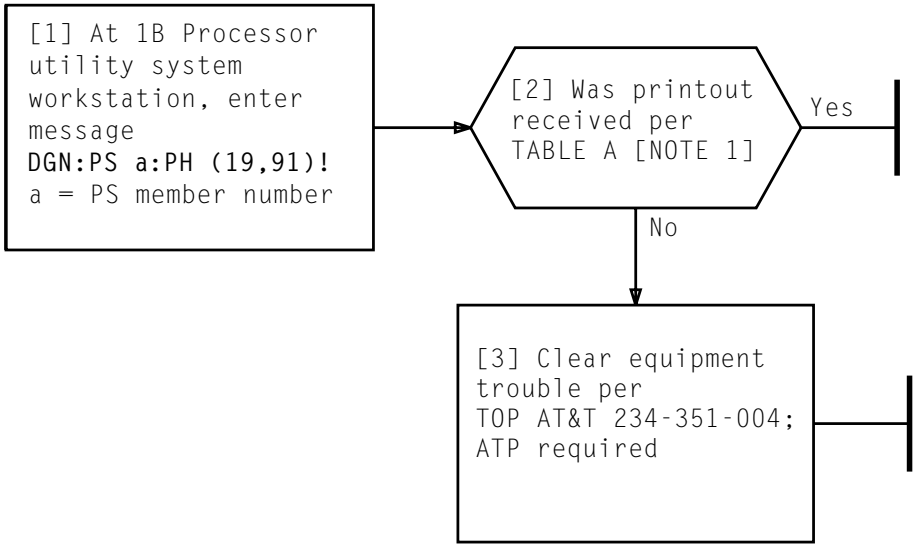


TABLE A

MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN:PS a PH 19 ATP DGN:PS a PH 91 ATP DGN:PS a COMPLETED ATP MSG COMPL

NOTE 1
Diagnostic will take approximately 8 minutes to complete

RUN 1B PROCESSOR PS DEMAND DIAGNOSTICS PHASES 19 AND 91

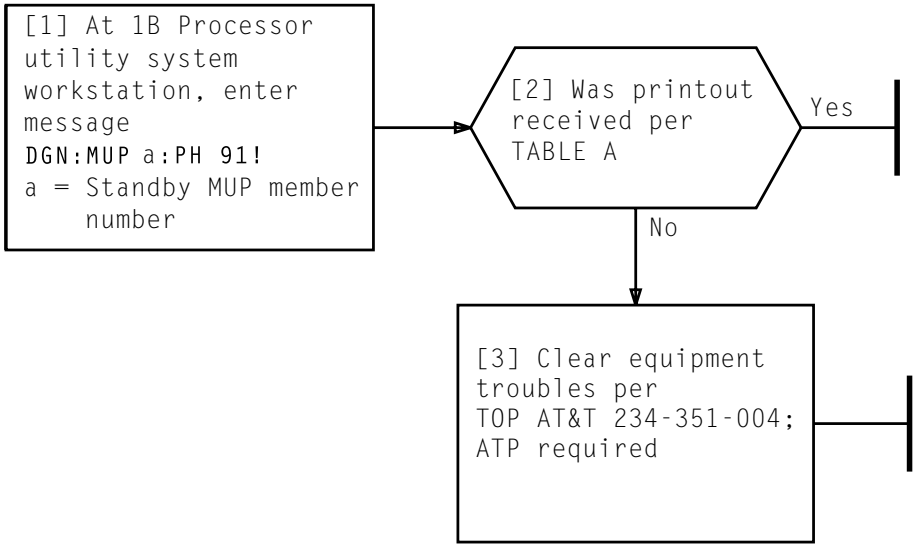
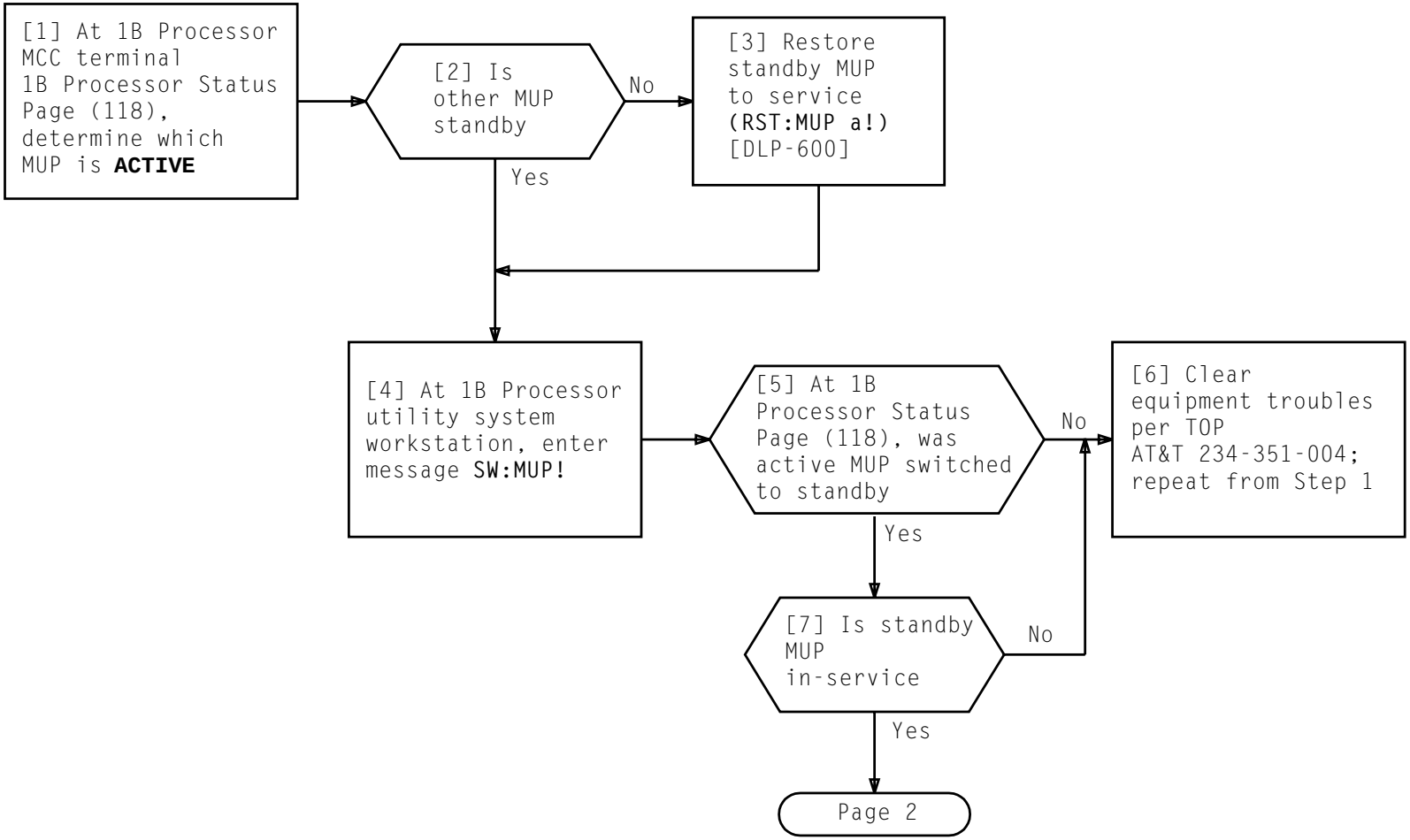


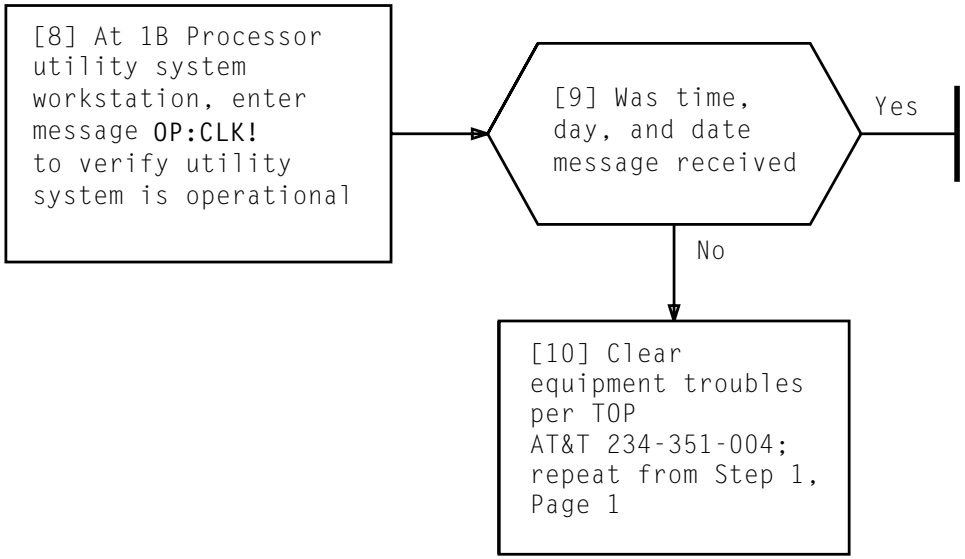
TABLE A

MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN:MUP a PH 91 ATP DGN:MUP a COMPLETED ATP MSG COMPL

RUN 1B PROCESSOR MUP DEMAND DIAGNOSTIC PHASE 91


[1] At 1B Processor MCC terminal 1B Processor Status Page (118), determine which MUP is **ACTIVE**
[2] Is other MUP standby
No
[3] Restore standby MUP to service **(RST:MUP a!)** [DLP-600]
Yes
[4] At 1B Processor utility system workstation, enter message **SW:MUP!**
[5] At 1B Processor Status Page (118), was active MUP switched to standby
No
[6] Clear equipment troubles per TOP AT&T 234-351-004; repeat from Step 1
Yes
[7] Is standby MUP in-service
No
Yes
Page 2

SWITCH MUPs


[8] At 1B Processor utility system workstation, enter message OP:CLK! to verify utility system is operational
[9] Was time, day, and date message received
Yes
No
[10] Clear equipment troubles per TOP AT&T 234-351-004; repeat from Step 1, Page 1

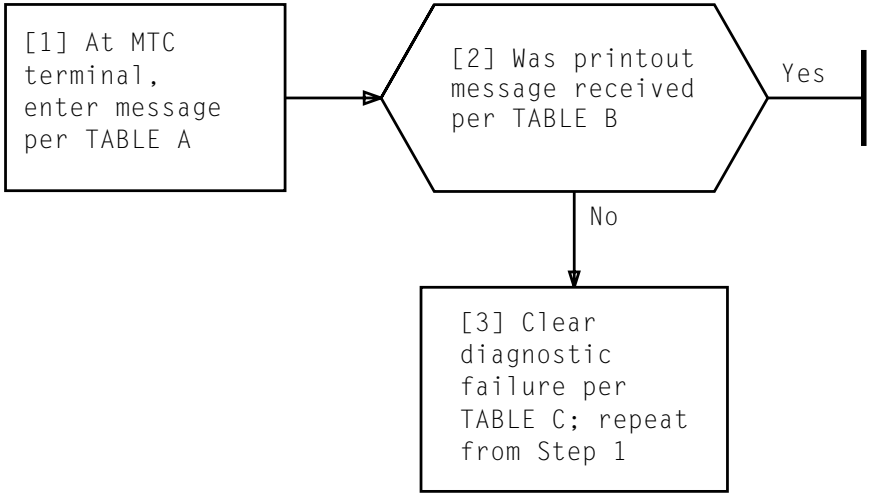


TABLE A

MESSAGE NUMBER	INPUT MESSAGE
1	RST:a b!

a = API or AUB or CC or PUB or TUC
b = Member number

TABLE B

MESSAGE NUMBER	OUTPUT MESSAGE
1	RST: a b COMPLETED OR RST: a b COMPL

a = API or AUB or CC or PUB or TUC
b = Member number

TABLE C

UNIT TYPE	TROUBLE-CLEARING VOLUME
API	254-251-016
AUB	254-251-010
CC	254-251-001
PUB	234-151-015
TUC	254-251-010

RESTORE 1A PROCESSOR API, AUB, CC, PUB, OR TUC TO SERVICE

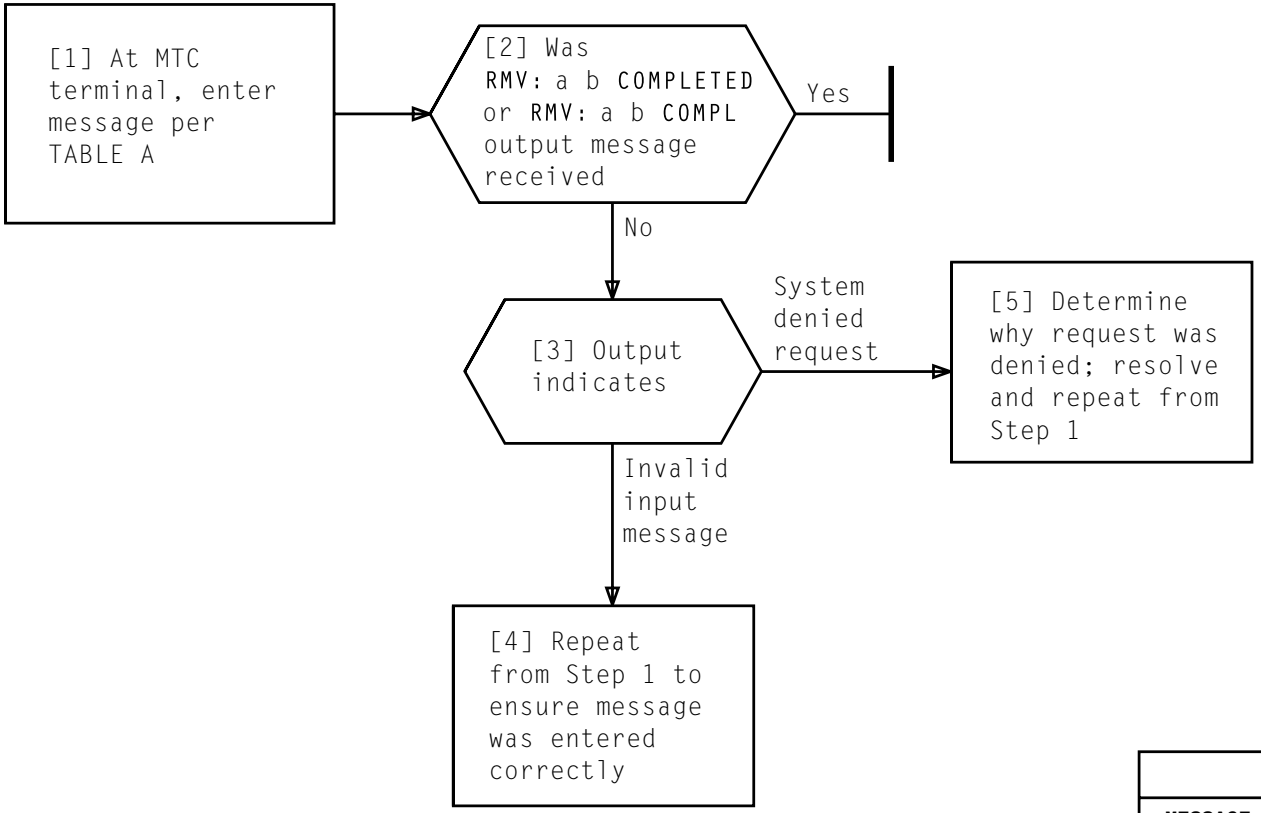
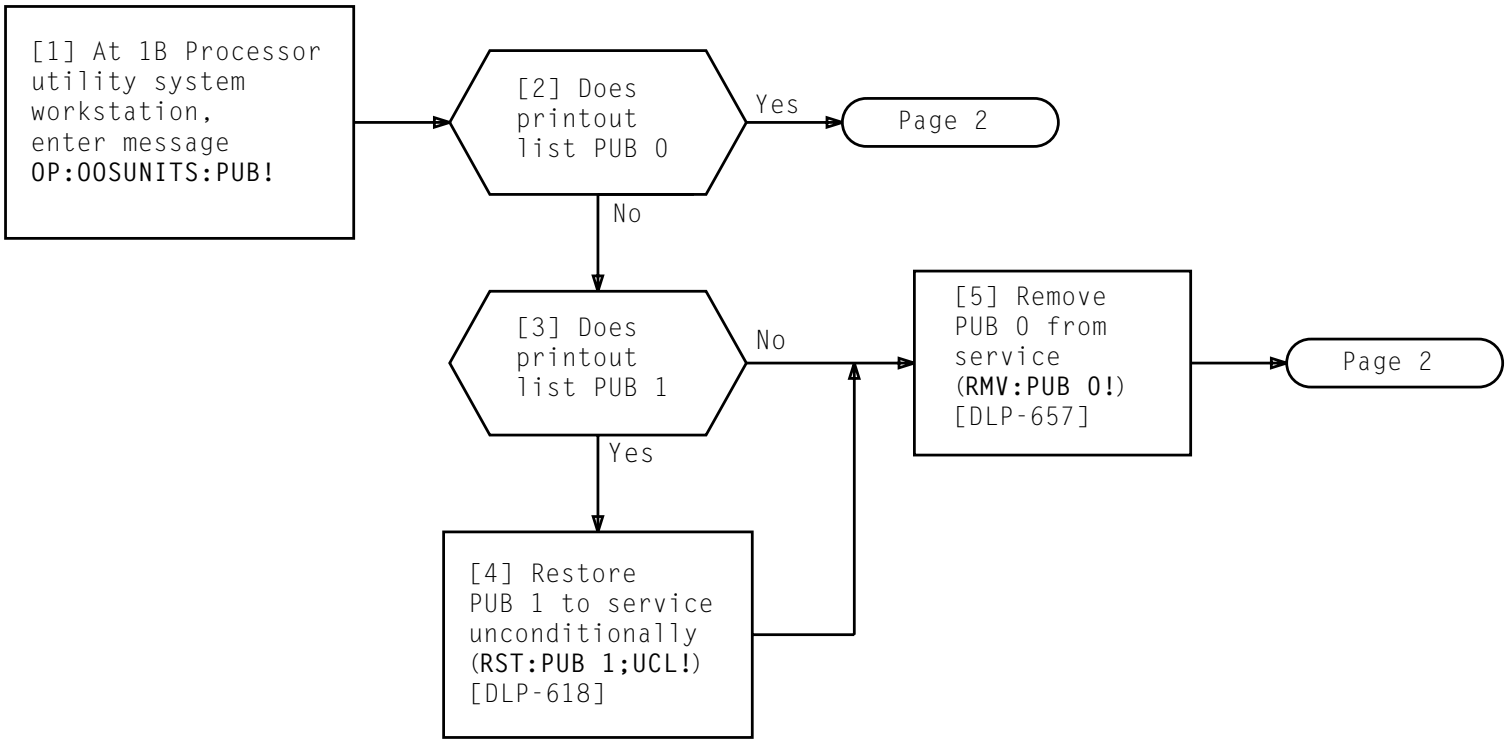


TABLE A

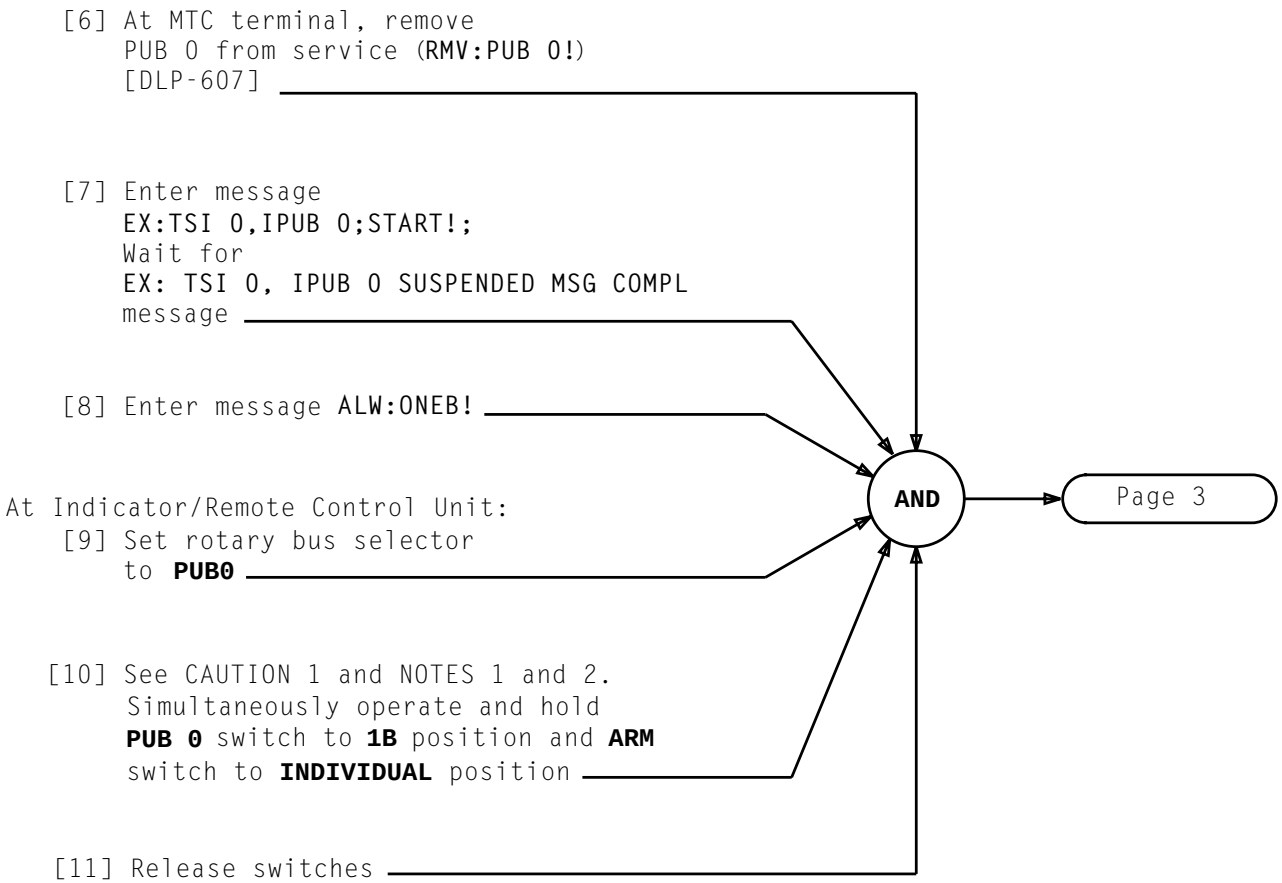
MESSAGE NUMBER	INPUT MESSAGE
1	RMV:a b!

a = API or AUB or CC or DUS or PUB or TUC
b = Member number

REMOVE API, AUB, CC, DUS, PUB, OR TUC FROM SERVICE



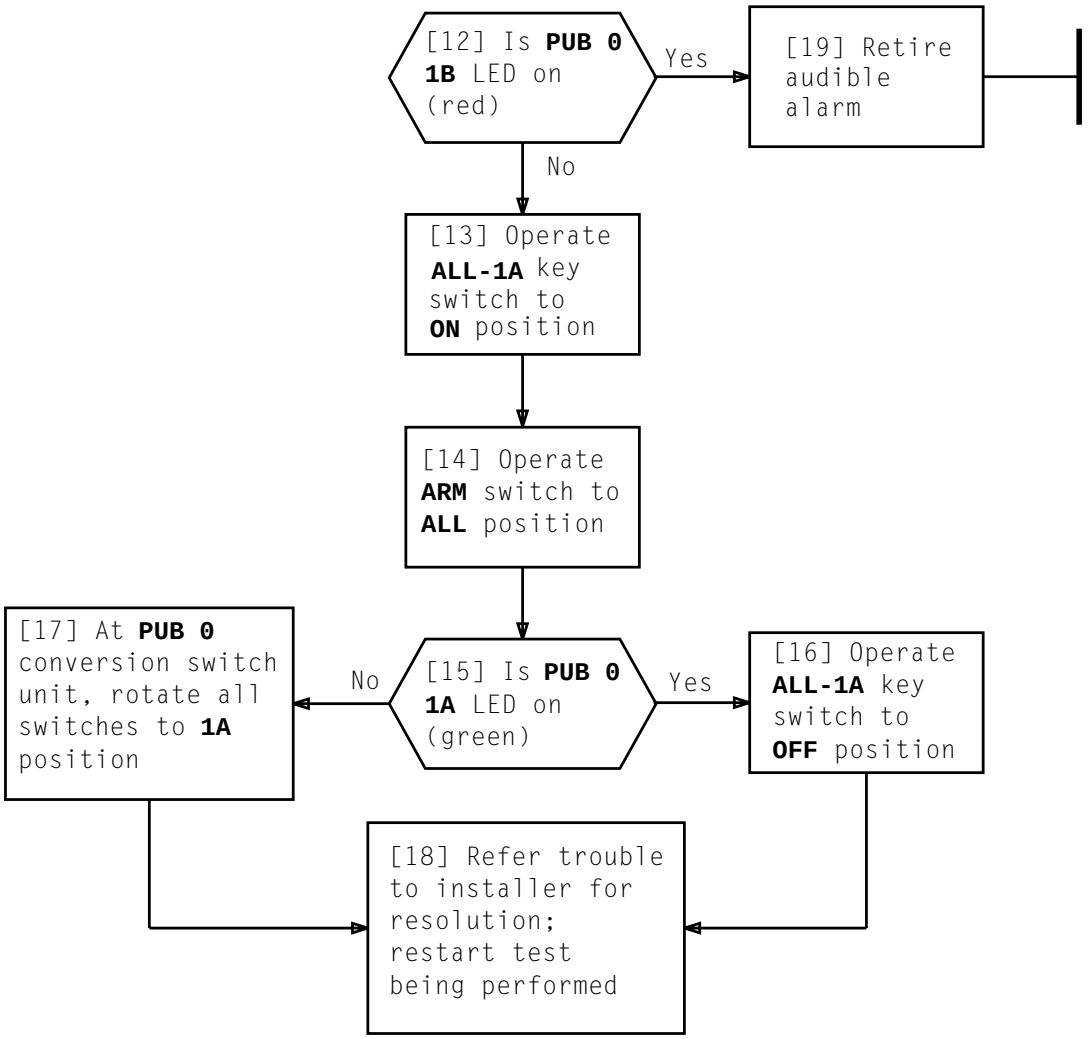
SWITCH PUB 0 CONVERSION SWITCH FROM 1A PROCESSOR BUS ACCESS TO 1B PROCESSOR BUS ACCESS



NOTES
1. Audible alarm will be received
2. REPT: OA xx 1B CVSW OFNL ACTIVATED, FLOOR x message will be received at MTC terminal

CAUTION 1
Care must be taken to ensure that only **PUB 0** *and* **ARM** *switches are being operated*

SWITCH PUB 0 CONVERSION SWITCH FROM 1A PROCESSOR BUS ACCESS TO 1B PROCESSOR BUS ACCESS



SWITCH PUB 0 CONVERSION SWITCH FROM 1A PROCESSOR BUS ACCESS TO 1B PROCESSOR BUS ACCESS

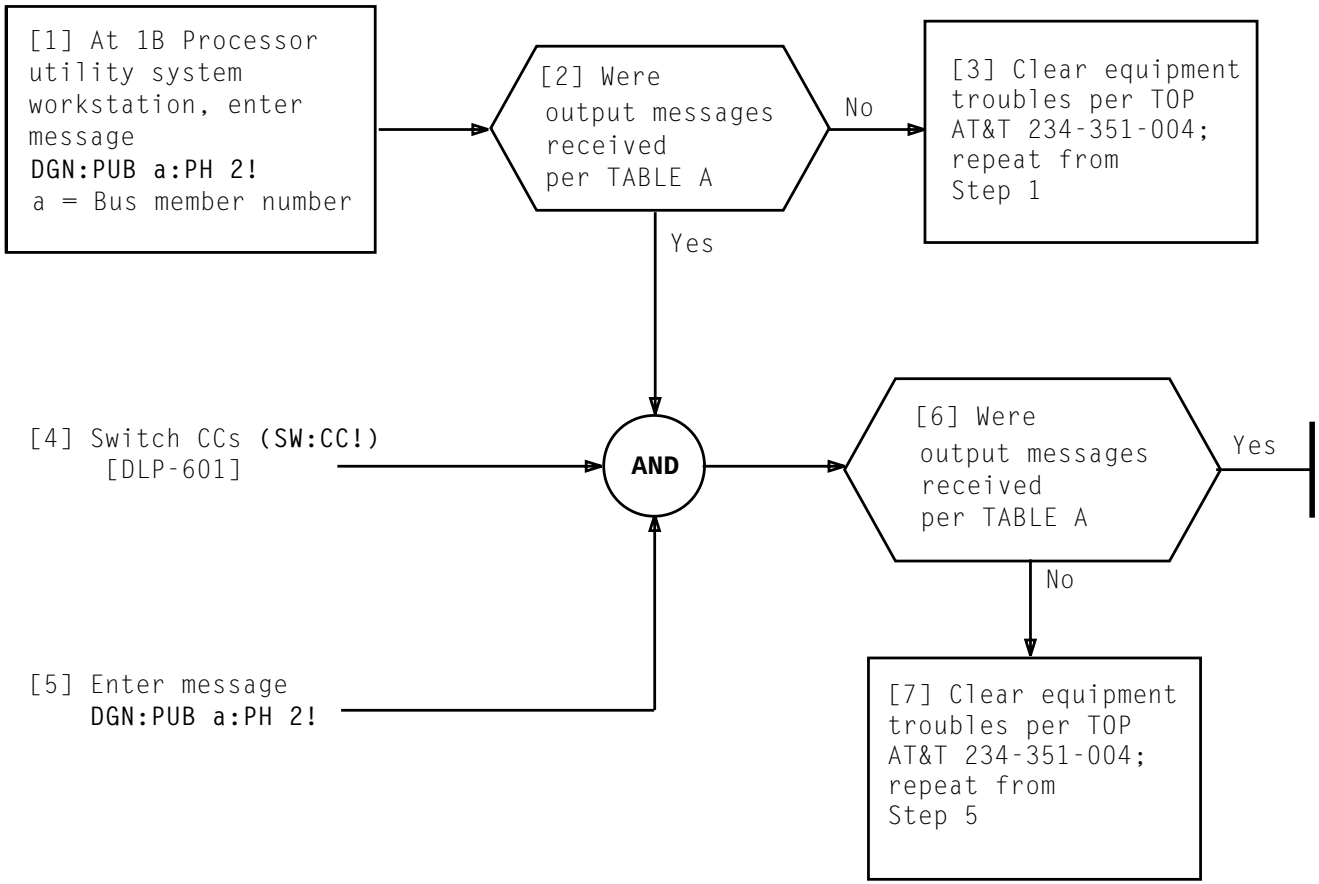
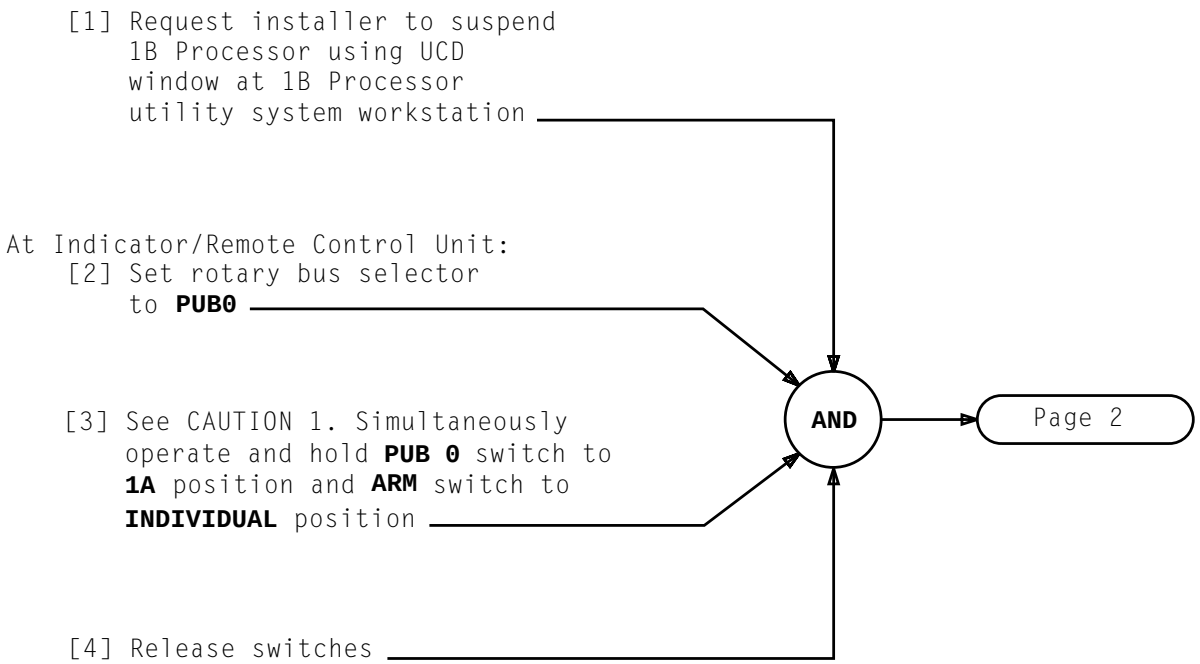


TABLE A

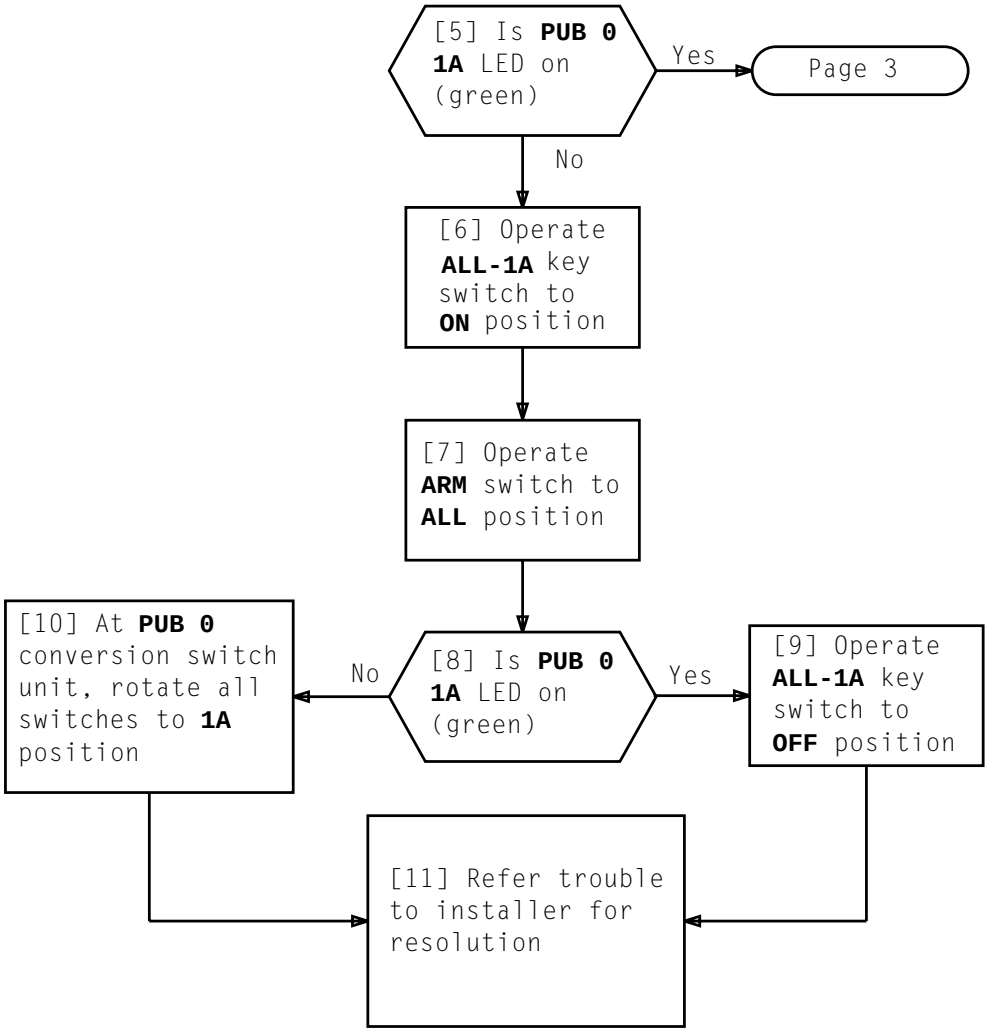
MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN: PUB a PH 2 ATP MSG STARTED DGN: PUB a COMPLETED ATP MSG COMPL

DIAGNOSE PERIPHERAL UNIT BUS FROM 1B PROCESSOR SPECIFYING PHASE 2



CAUTION 1
Care must be taken to ensure that only **PUB 0** *and* **ARM** *switches are being operated*

SWITCH PUB 0 CONVERSION SWITCH FROM 1B PROCESSOR BUS ACCESS TO 1A PROCESSOR BUS ACCESS



SWITCH PUB 0 CONVERSION SWITCH FROM 1B PROCESSOR BUS ACCESS TO 1A PROCESSOR BUS ACCESS

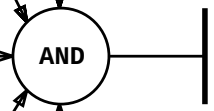
[12] At MTC terminal, enter message
OP:MACLI,CLASS MTCE!

[13] Using printout (Step 12), determine subclass number for TSI looping

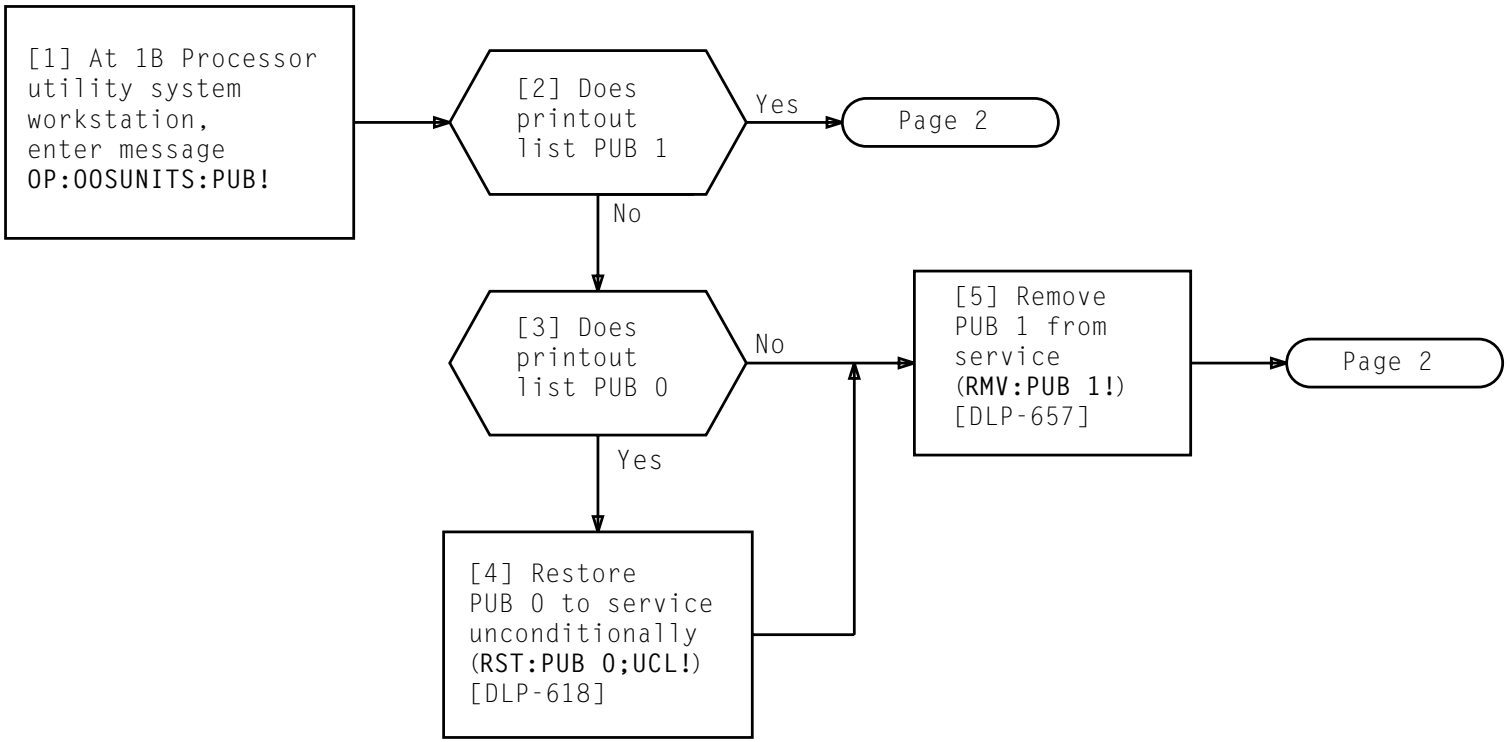
[14] At MTC terminal, enter message
STOP:MACLI,CLASS MTCE,SUBCLASS a!;
Wait for
EX: TSI 0, IPUB 0 ABORTED NTR
MSG COMPL message

[15] Enter message RST:TSI 0,IPUB 0!;
Wait for RST: TSI 0, IPUB 0 COMPLETED message (CATP message will be received with bit 25 set)

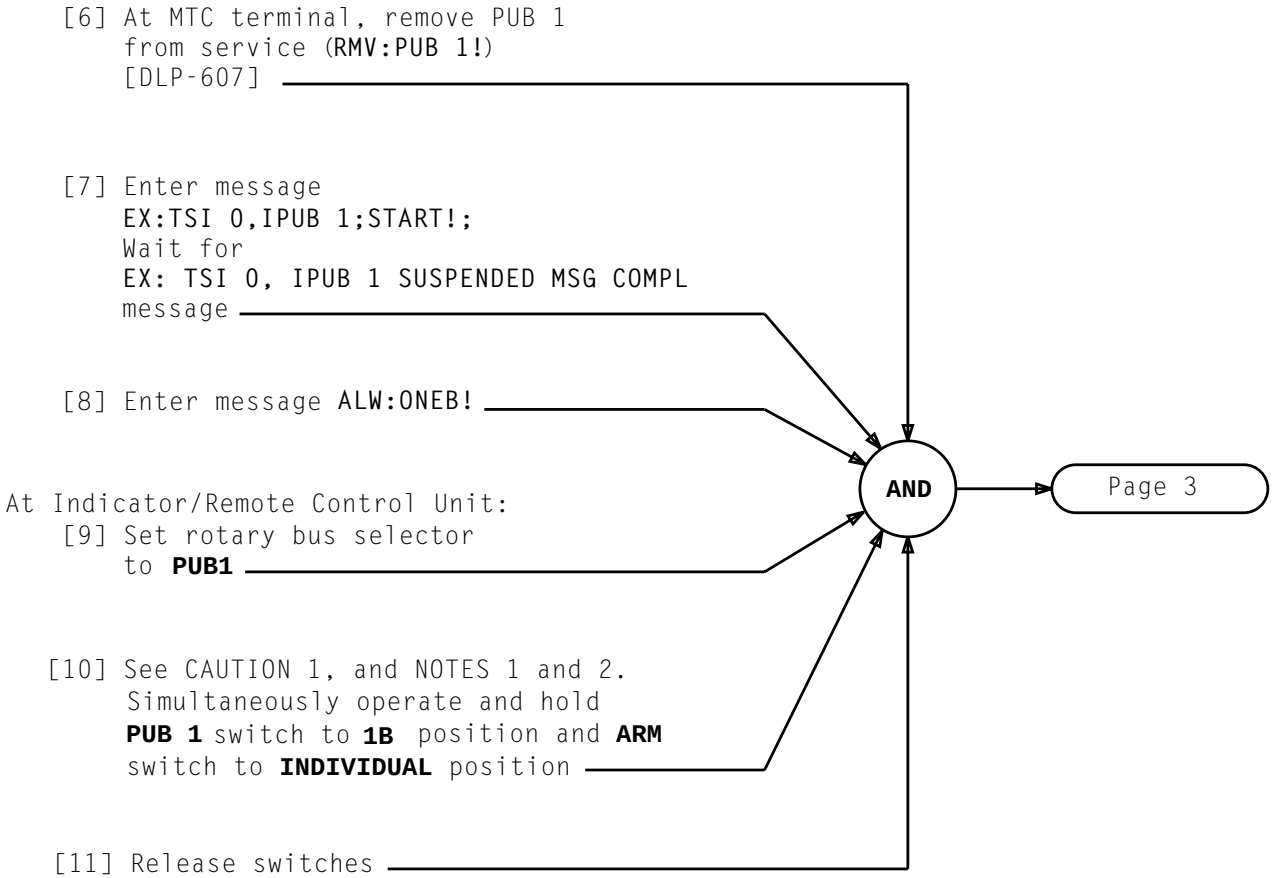
[16] Request installer to restart 1B Processor using UCD window at 1B Processor utility system workstation; then quit UCD window



SWITCH PUB 0 CONVERSION SWITCH FROM 1B PROCESSOR BUS ACCESS TO 1A PROCESSOR BUS ACCESS



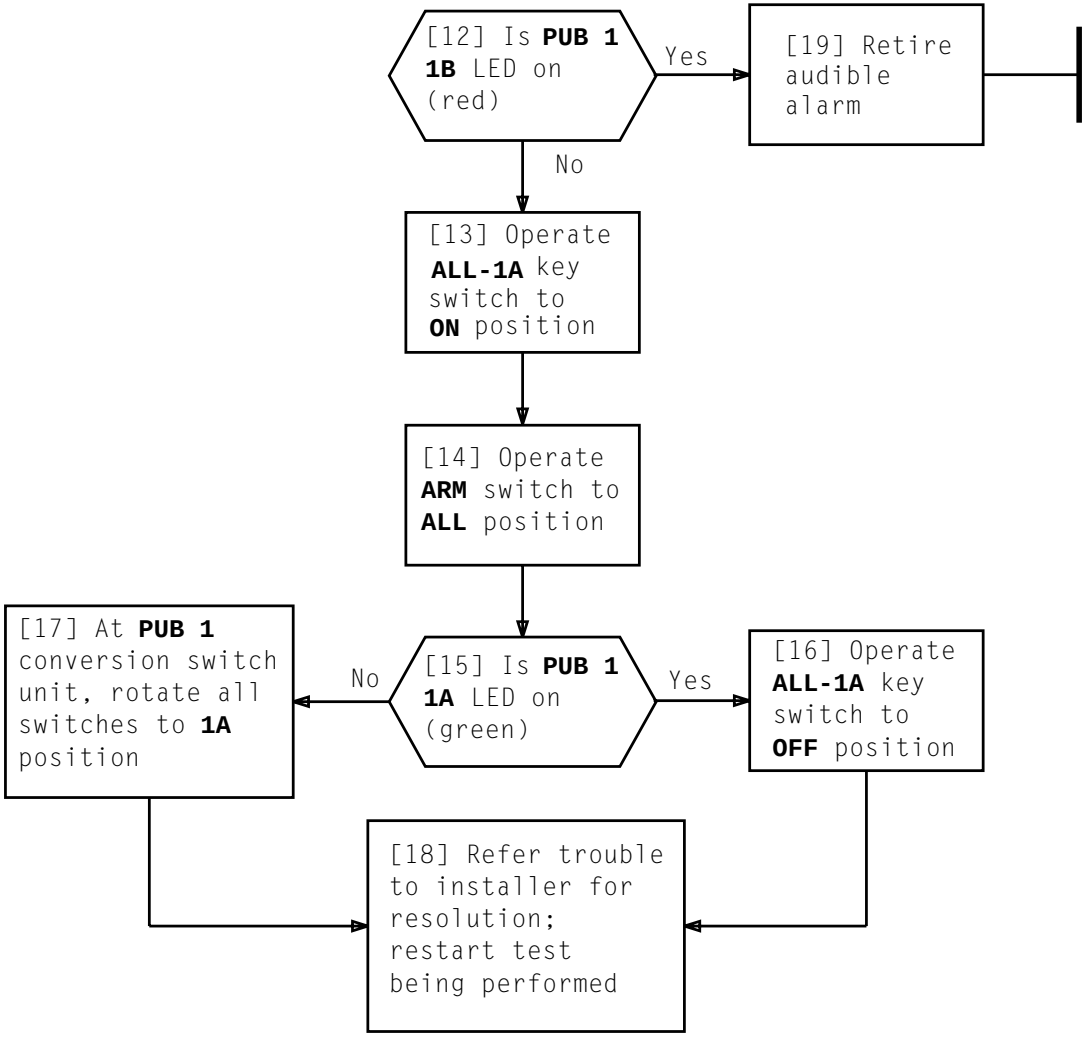
SWITCH PUB 1 CONVERSION SWITCH FROM 1A PROCESSOR BUS ACCESS TO 1B PROCESSOR BUS ACCESS



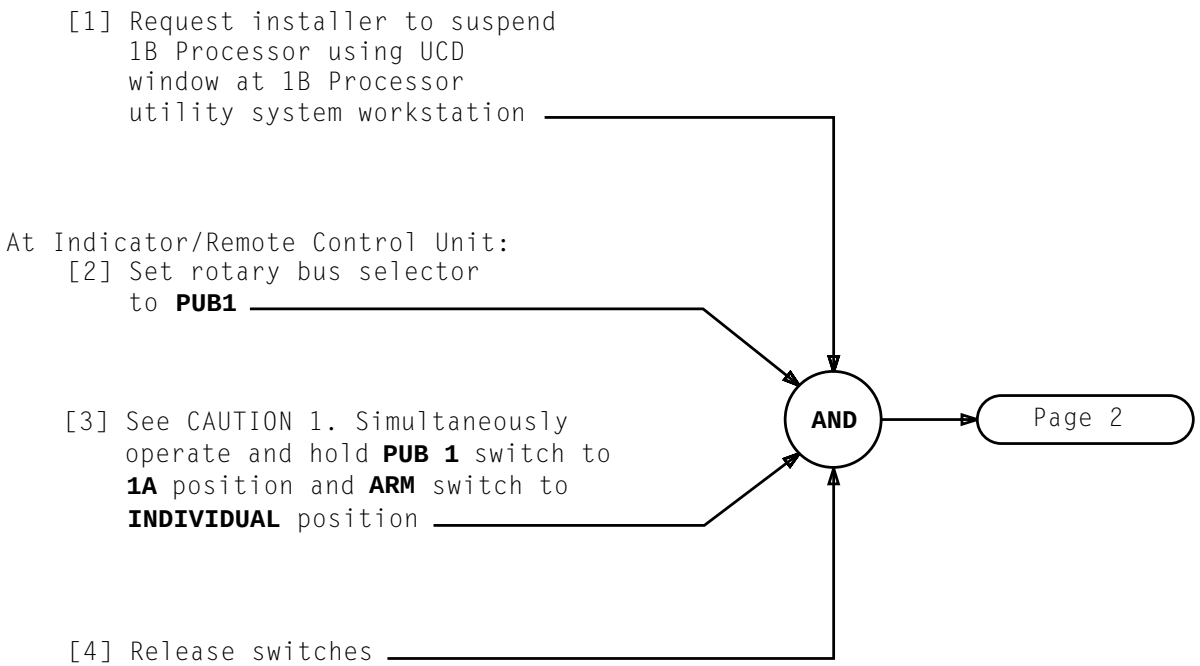
NOTES
1. Audible alarm will be received
2. REPT: OA xx 1B CVSW OFNL ACTIVATED, FLOOR x message will be received at MTC terminal

CAUTION 1
Care must be taken to ensure that only **PUB 1** *and* **ARM** *switches are being operated*

SWITCH PUB 1 CONVERSION SWITCH FROM 1A PROCESSOR BUS ACCESS TO 1B PROCESSOR BUS ACCESS

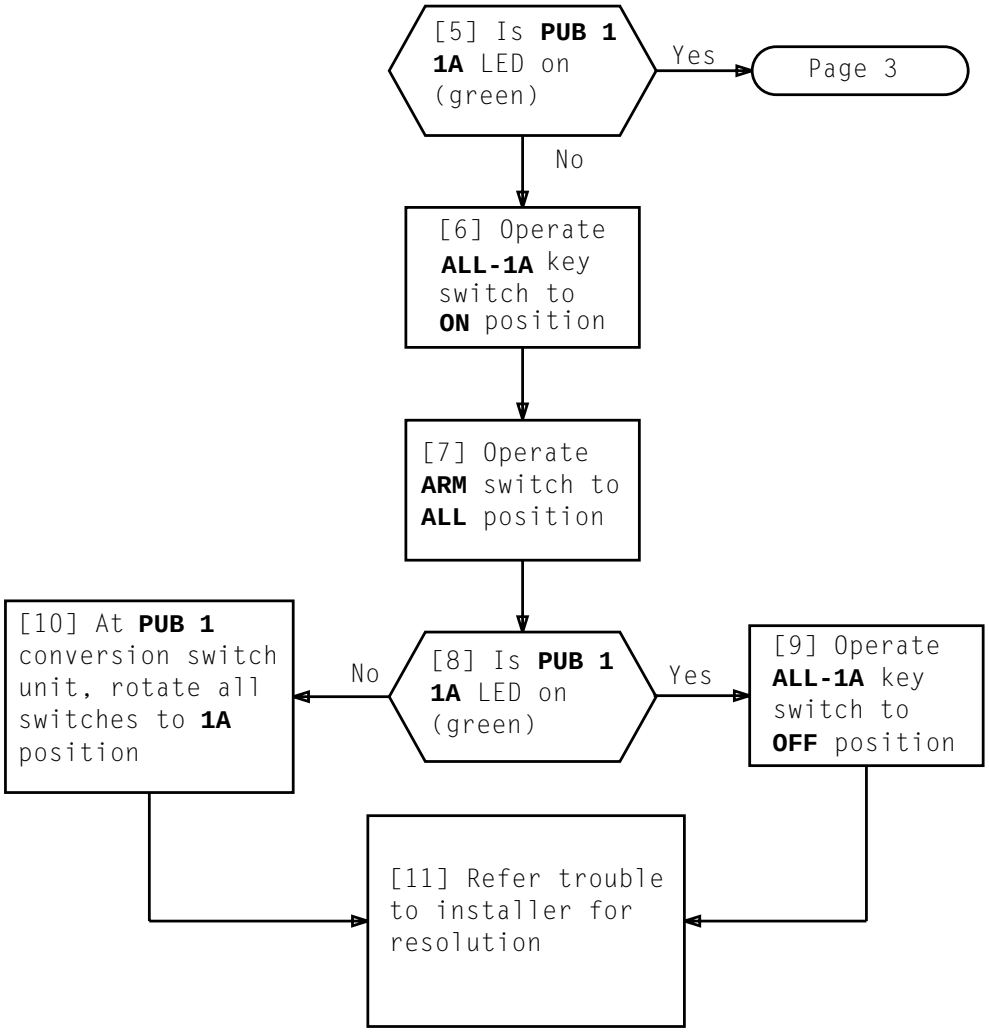


SWITCH PUB 1 CONVERSION SWITCH FROM 1A PROCESSOR BUS ACCESS TO 1B PROCESSOR BUS ACCESS



CAUTION 1
Care must be taken to ensure that only **PUB 1** *and* **ARM** *switches are being operated*

SWITCH PUB 1 CONVERSION SWITCH FROM 1B PROCESSOR BUS ACCESS TO 1A PROCESSOR BUS ACCESS



SWITCH PUB 1 CONVERSION SWITCH FROM 1B PROCESSOR BUS ACCESS TO 1A PROCESSOR BUS ACCESS

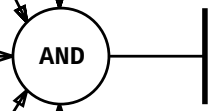
[12] At MTC terminal, enter message
OP:MACLI,CLASS MTCE!

[13] Using printout (Step 12), determine subclass number for TSI looping

[14] At MTC terminal, enter message
STOP:MACLI,CLASS MTCE,SUBCLASS a!;
Wait for
EX: TSI 0, IPUB 1 ABORTED NTR
MSG COMPL message

[15] Enter message RST:TSI 0,IPUB 1!;
Wait for RST: TSI 0, IPUB 1 COMPLETED message (CATP message may be received with bit 25 set)

[16] Request installer to restart 1B Processor using UCD window at 1B Processor utility system workstation; then quit UCD window



SWITCH PUB 1 CONVERSION SWITCH FROM 1B PROCESSOR BUS ACCESS TO 1A PROCESSOR BUS ACCESS

[1] Notify next higher technical support group that conversion switches will be switched back to 1A Processor bus access

[2] At Indicator/Remote Control unit, ensure **ALL-1B** key is set to **OFF**

[3] At 1A Processor **MCC SYSTEM DISPLAY** panel, release **NUMERIC DISPLAY SELECTION — CONTENTS OF MEMORY** and **BINARY DISPLAY SELECTION — CONTENTS OF MEMORY** keys

Lamps off

[4] Rotate **ALL-1A** key to **ON**

All 1A LEDs on (green)

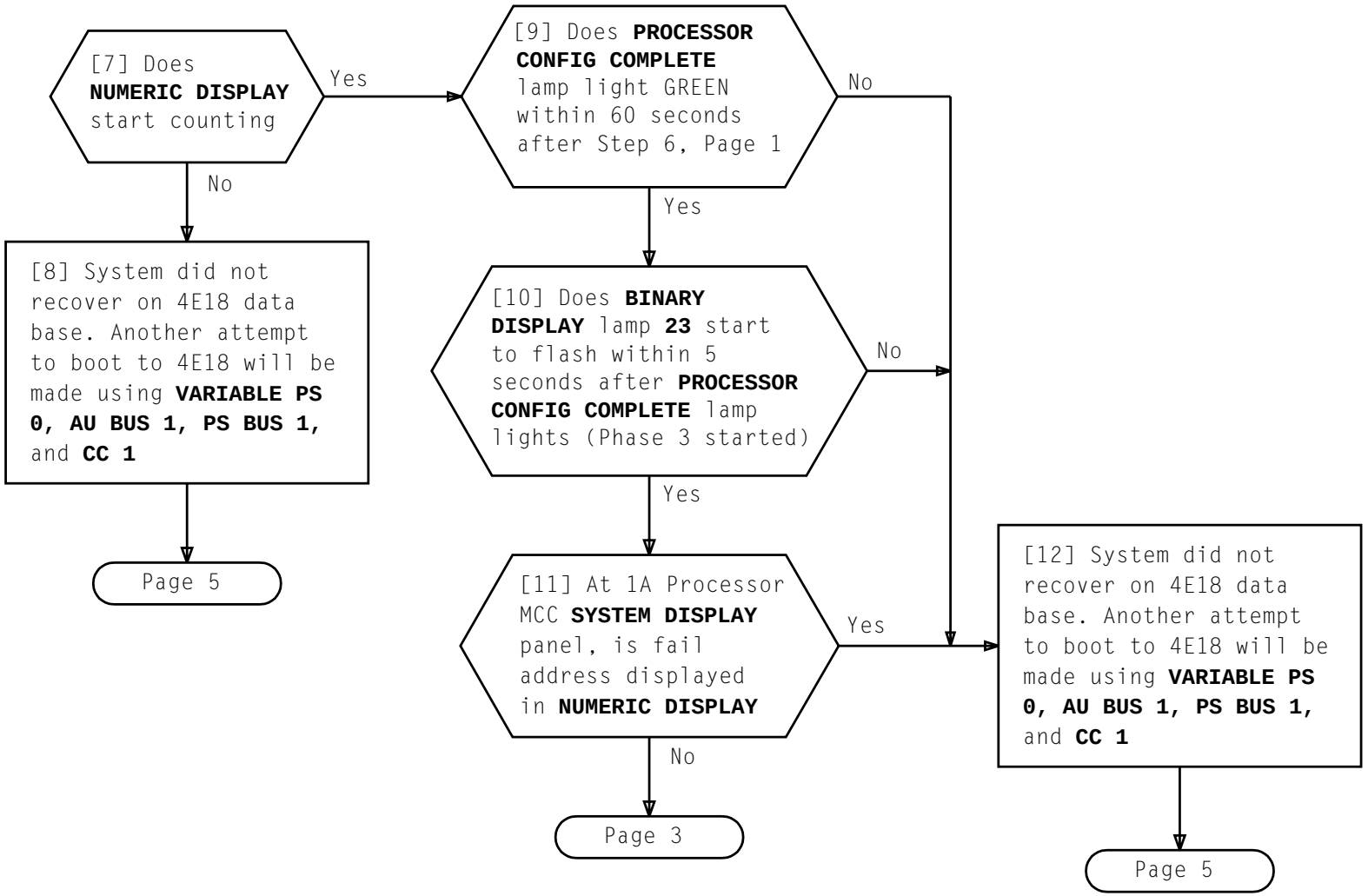
[5] Operate **ARM** switch to **ALL**

[6] At 1A Processor MCC **OVERRIDE CONTROL** panel, depress **ACTIVATE — OVERRIDE IN EFFECT** key (lamp **ON**)

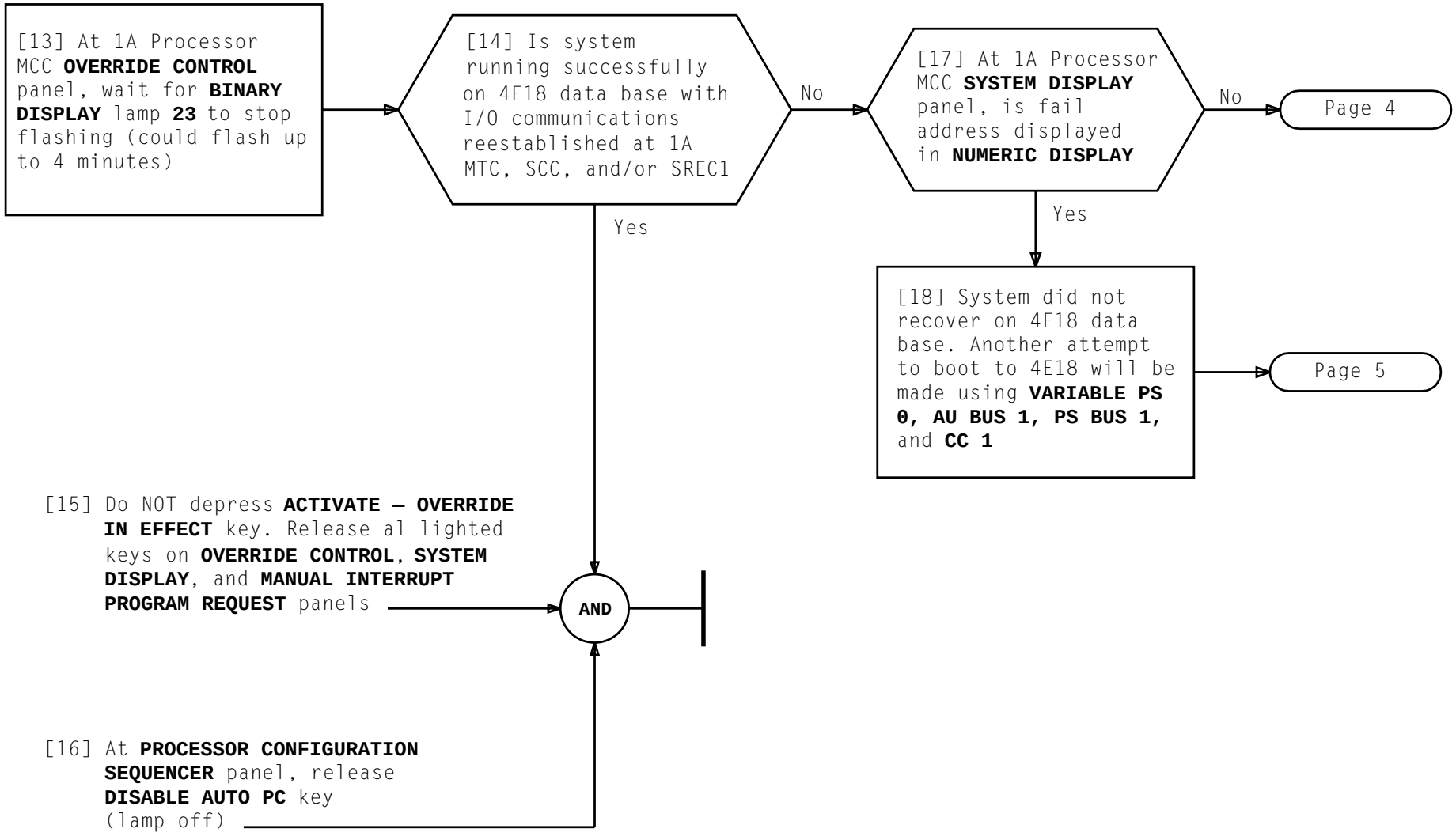
AND

Page 2

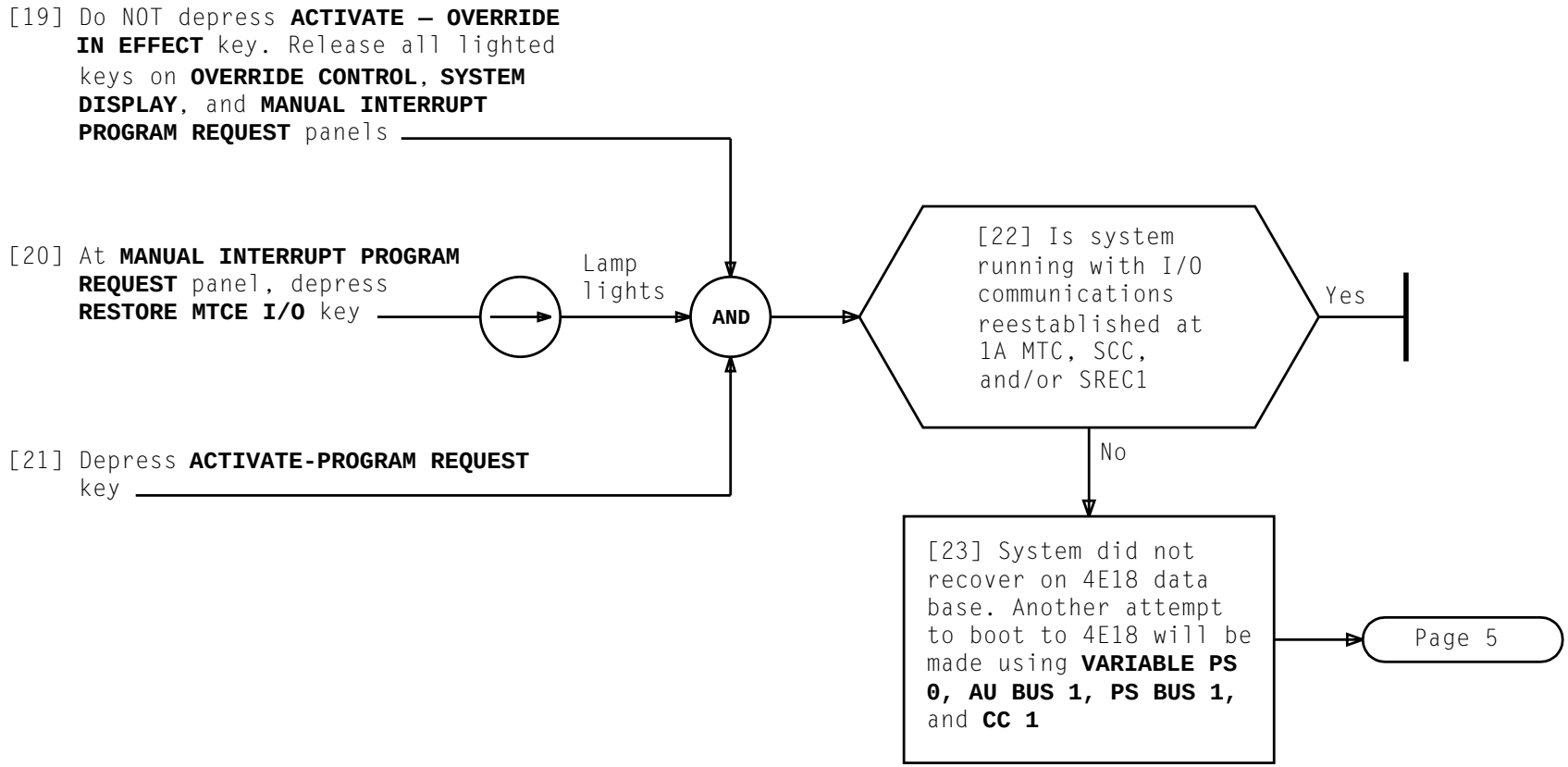
BACK-OUT TO 1A PROCESSOR (4E18 GENERIC)



BACK-OUT TO 1A PROCESSOR (4E18 GENERIC)



BACK-OUT TO 1A PROCESSOR (4E18 GENERIC)



BACK-OUT TO 1A PROCESSOR (4E18 GENERIC)

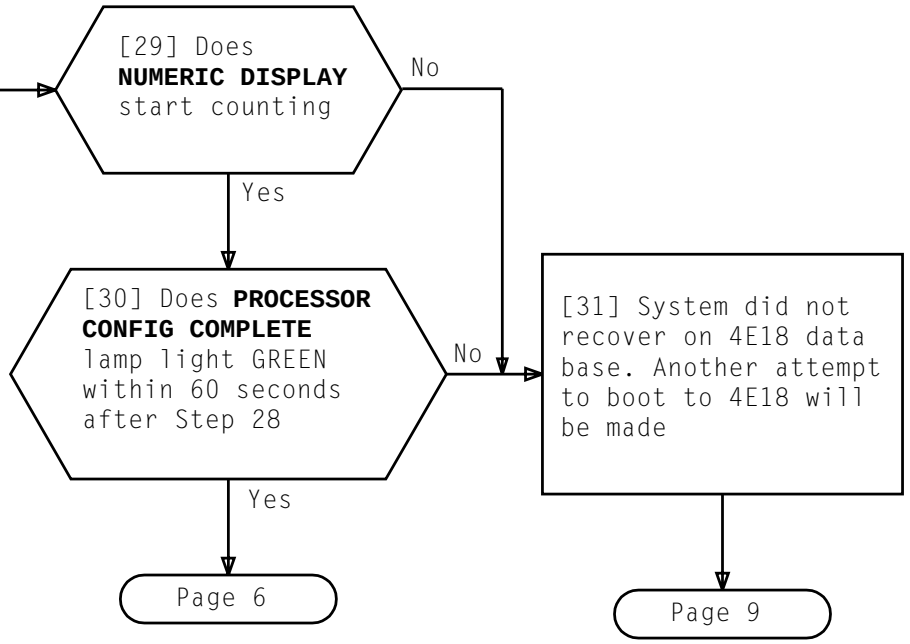
[24] At 1A Processor MCC **MANUAL INTERRUPT PROGRAM REQUEST** panel, if **RESTORE MTCE I/O** lamp is on, depress to off (lamp off)

[25] If **MODIFY RECOVERY ACTIONS** lamp is not on, depress to on (lamp on)

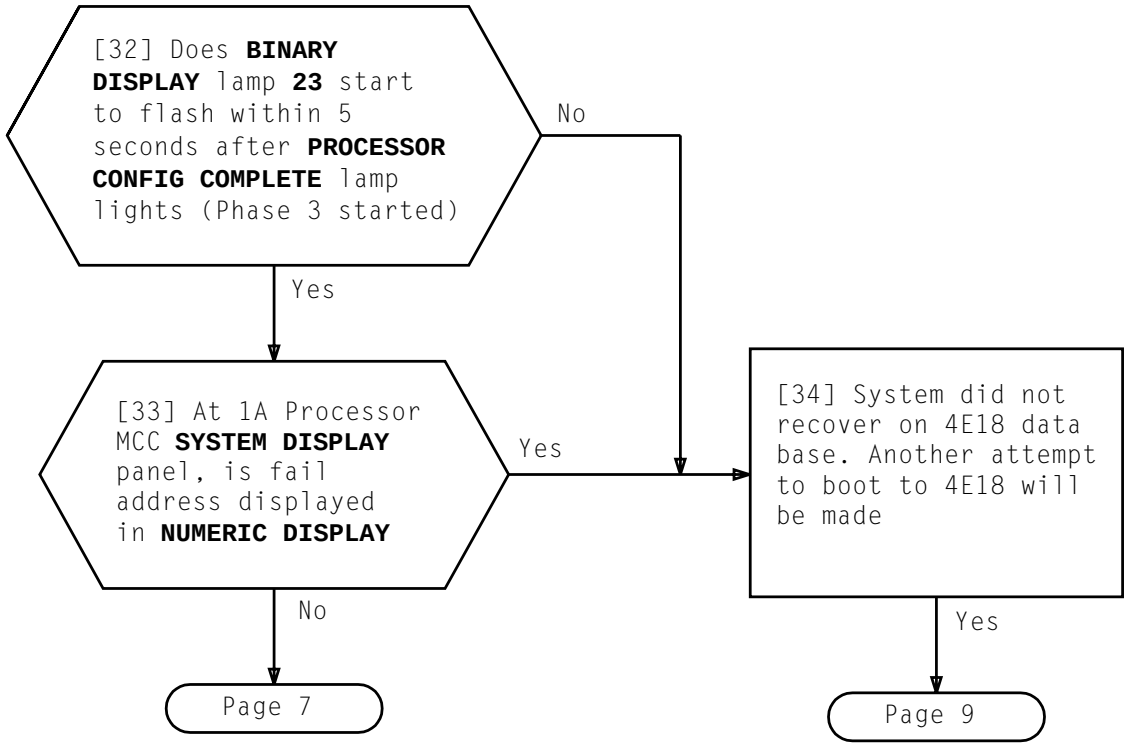
[26] At 1A Processor MCC **OVERRIDE CONTROL** panel, depress any lighted keys (lamps off)

[27] Depress **VARIABLE PS 0, AU BUS 1, PS BUS 1**, and **CC1** keys (lamps on)

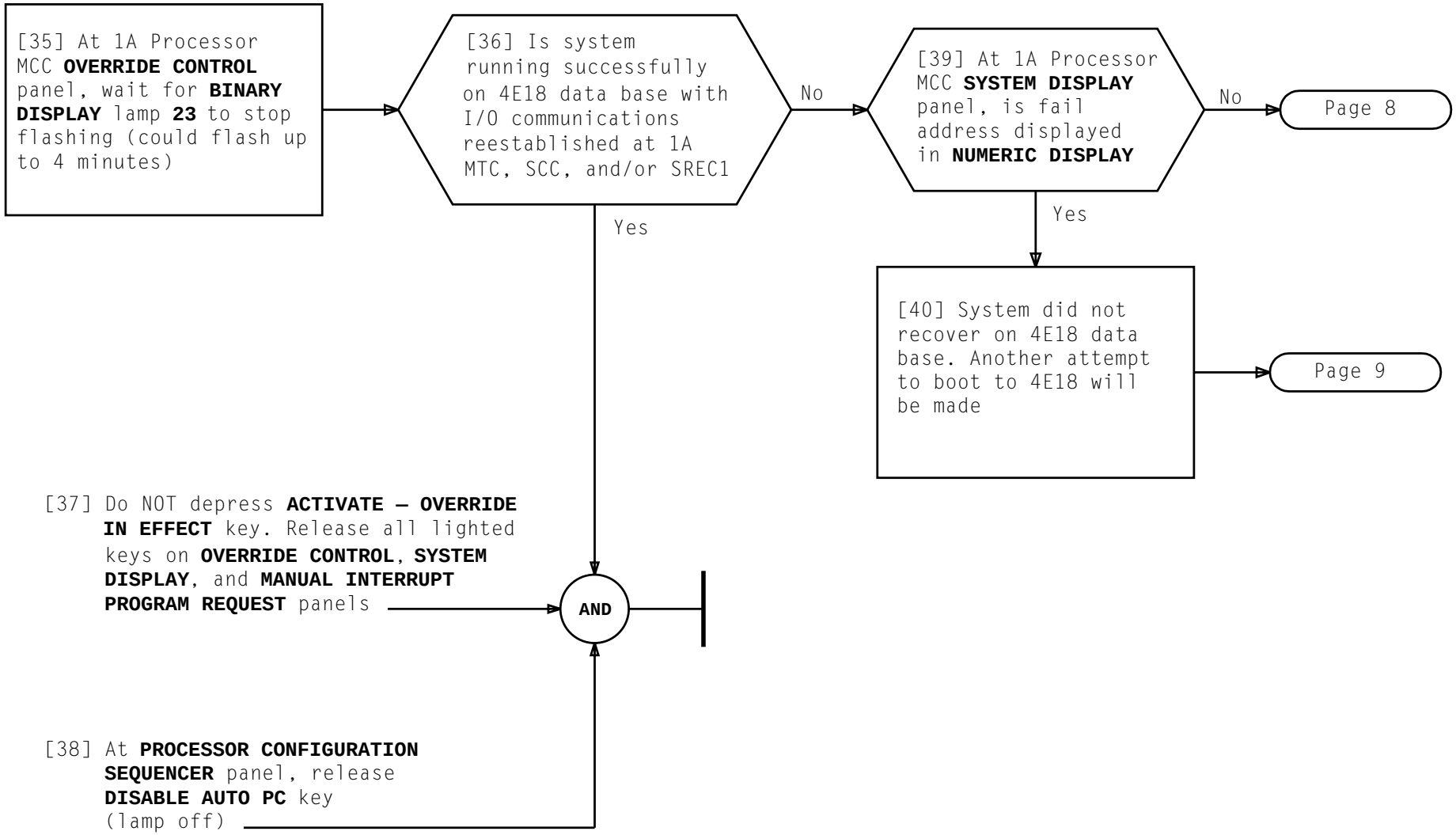
[28] At 1A Processor MCC **OVERRIDE CONTROL** panel, depress **ACTIVATE-OVERRIDE IN EFFECT** key. Start timing the back out



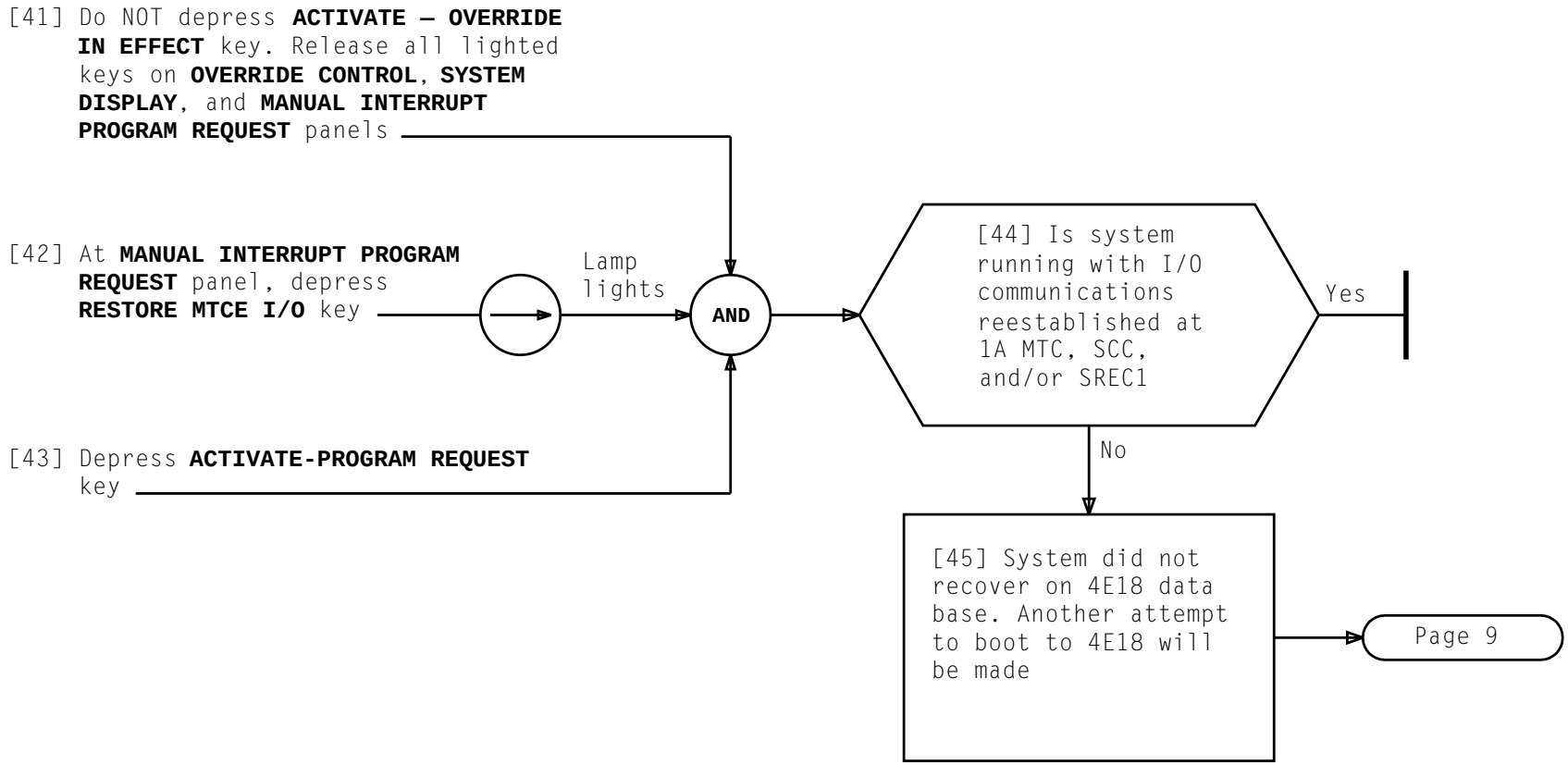
BACK-OUT TO 1A PROCESSOR (4E18 GENERIC)



BACK-OUT TO 1A PROCESSOR (4E18 GENERIC)



BACK-OUT TO 1A PROCESSOR (4E18 GENERIC)

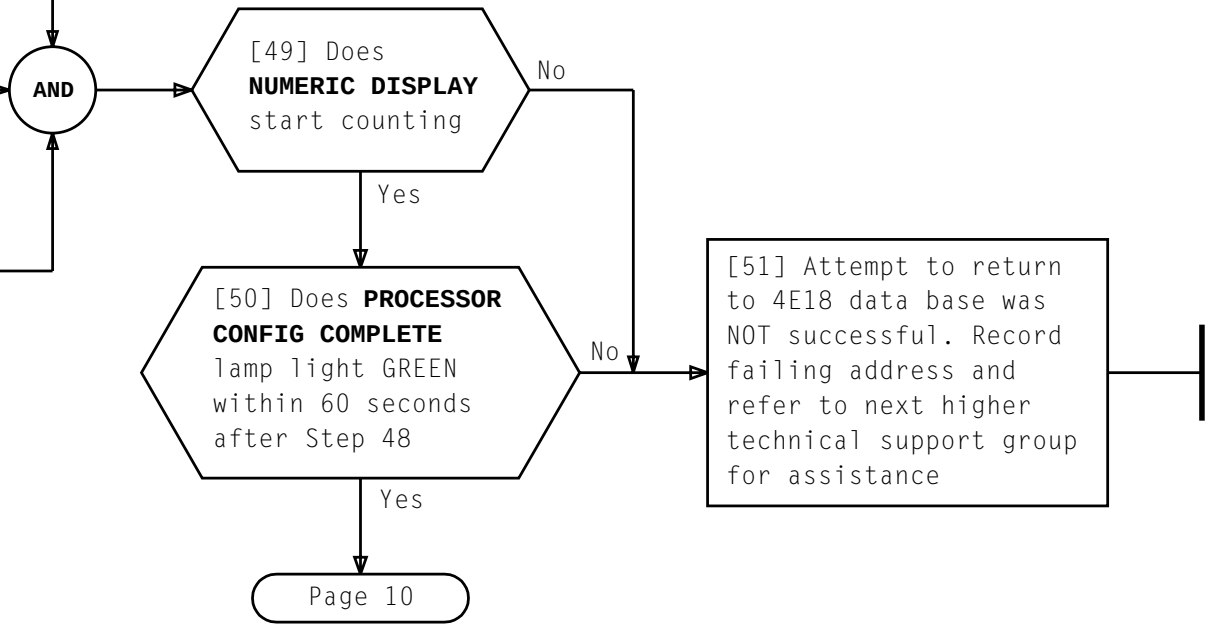


BACK-OUT TO 1A PROCESSOR (4E18 GENERIC)

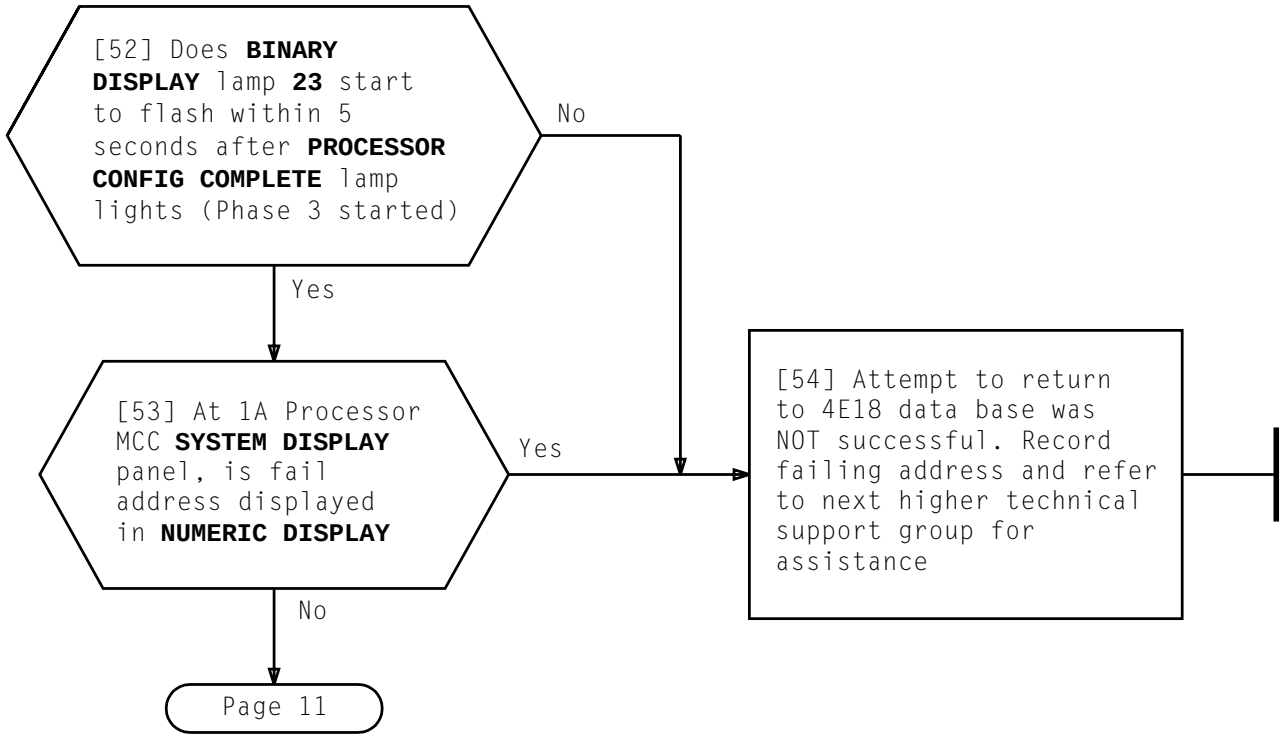
[46] Do NOT depress **ACTIVATE — OVERRIDE IN EFFECT** key. At 1A Processor MCC **OVERRIDE CONTROL** panel, depress any lighted keys (lamps off)

[47] At 1A Processor MCC **PROCESSOR CONFIGURATION SEQUENCER** panel, depress **DISABLE AUTO PC** key (lamp off). PC STATE COUNTERS progress through pump states until good configuration is found. Start timing the back out

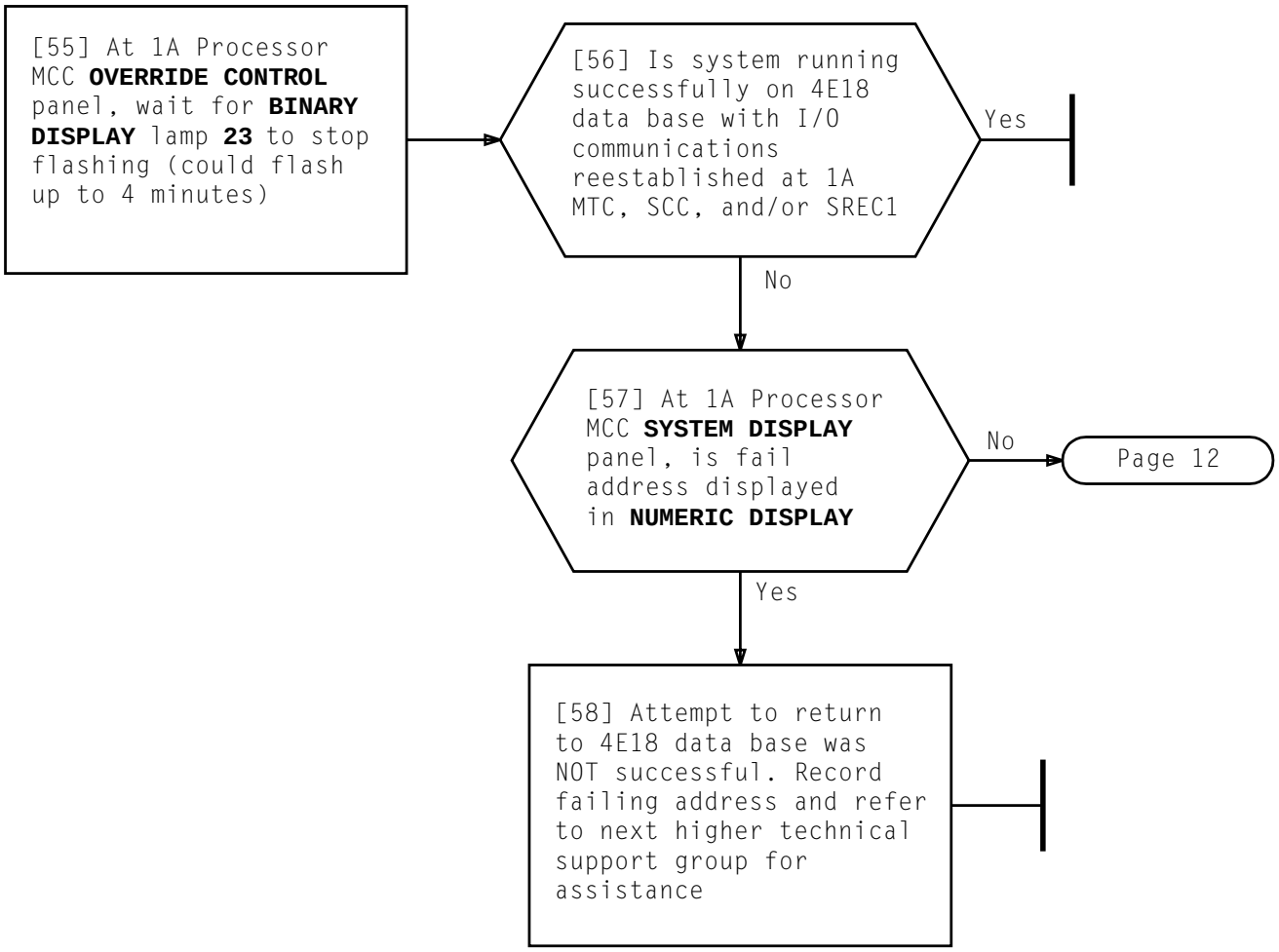
[48] Wait for either **NUMERIC DISPLAY** to start counting or **REPEATED PC** lamp comes on



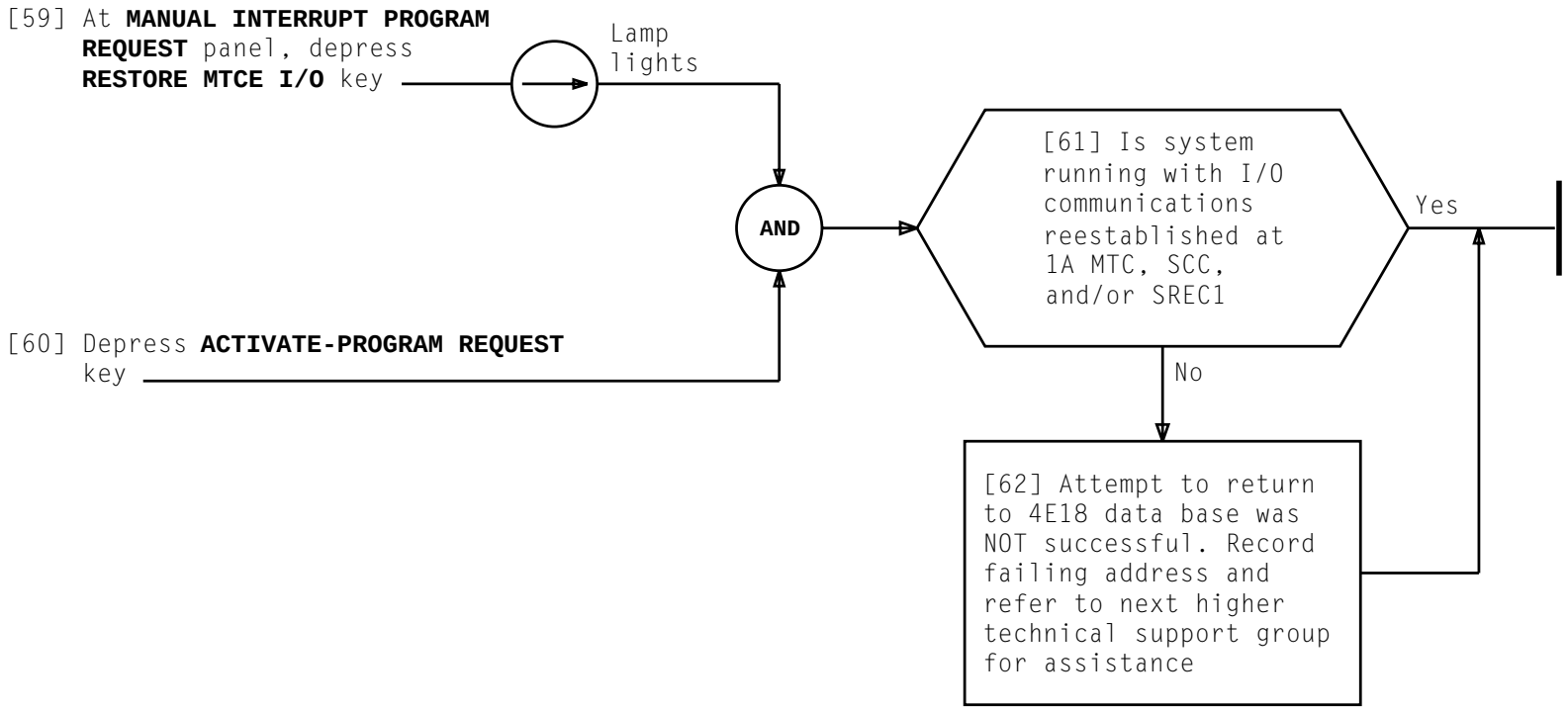
BACK-OUT TO 1A PROCESSOR (4E18 GENERIC)



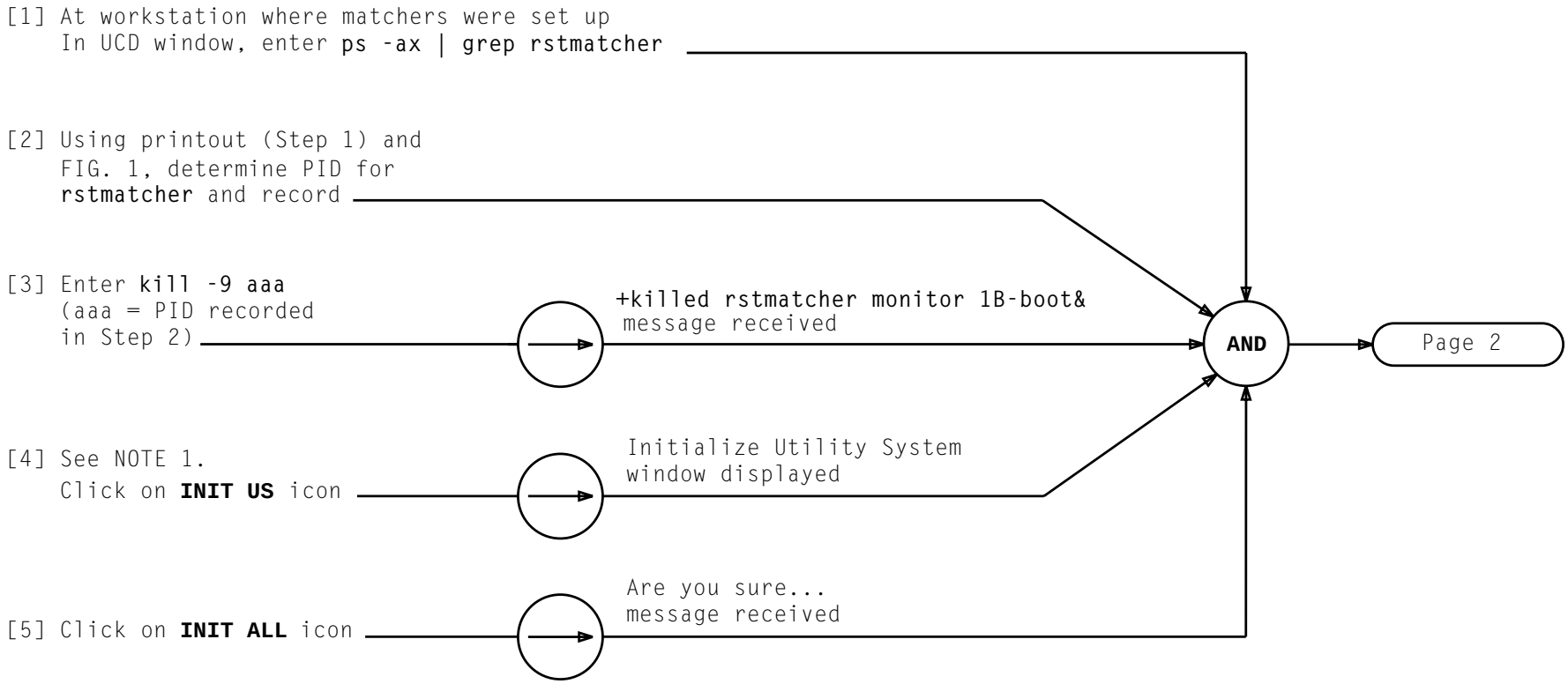
BACK-OUT TO 1A PROCESSOR (4E18 GENERIC)



BACK-OUT TO 1A PROCESSOR (4E18 GENERIC)



BACK-OUT TO 1A PROCESSOR (4E18 GENERIC)



aaa bb c d ee:ff rstmatcher /uprog/1b/monitor1B-boot&

Record this value

FIG. 1 — PID Format

NOTE 1
Use **SELECT** key on mouse to click for Steps 4 through 10

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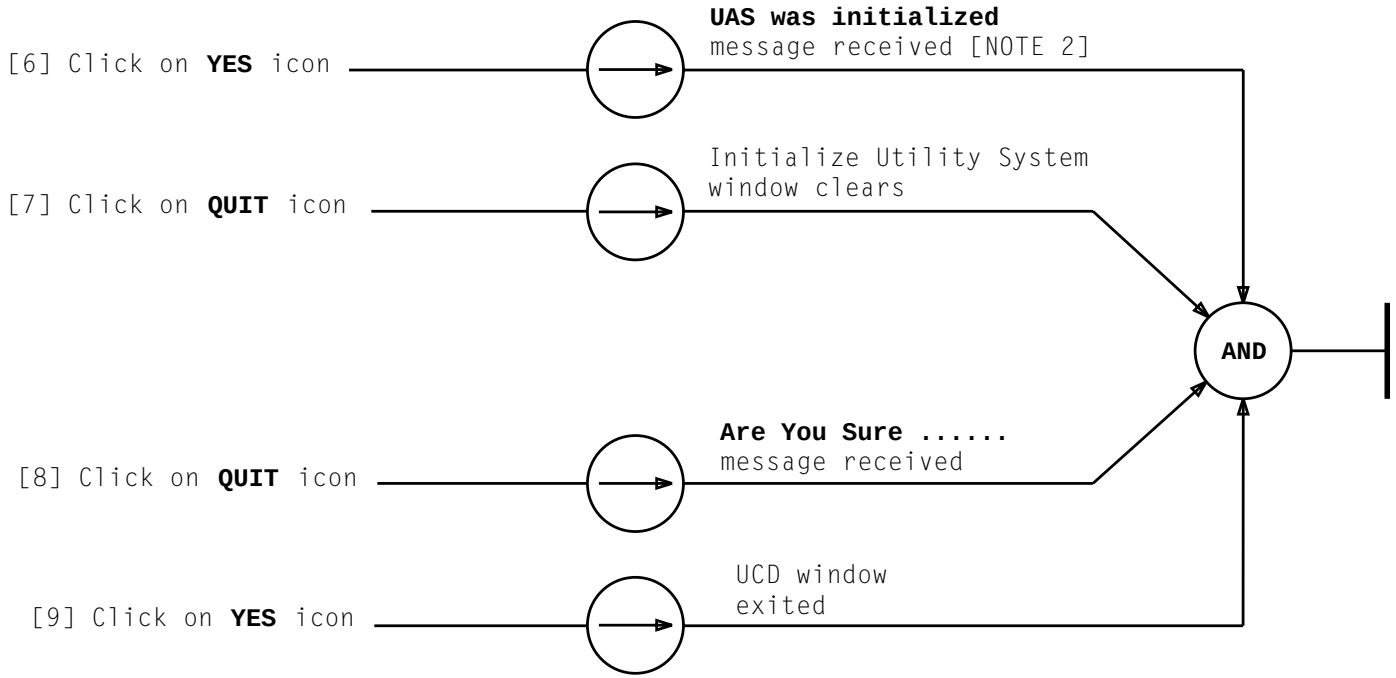
STOP 1B PROCESSOR UTILITY SYSTEM WORKSTATION UCD MATCHERS



STOP 1B PROCESSOR UTILITY SYSTEM WORKSTATION UCD MATCHERS

NOTE 2
It will take short time before response is received

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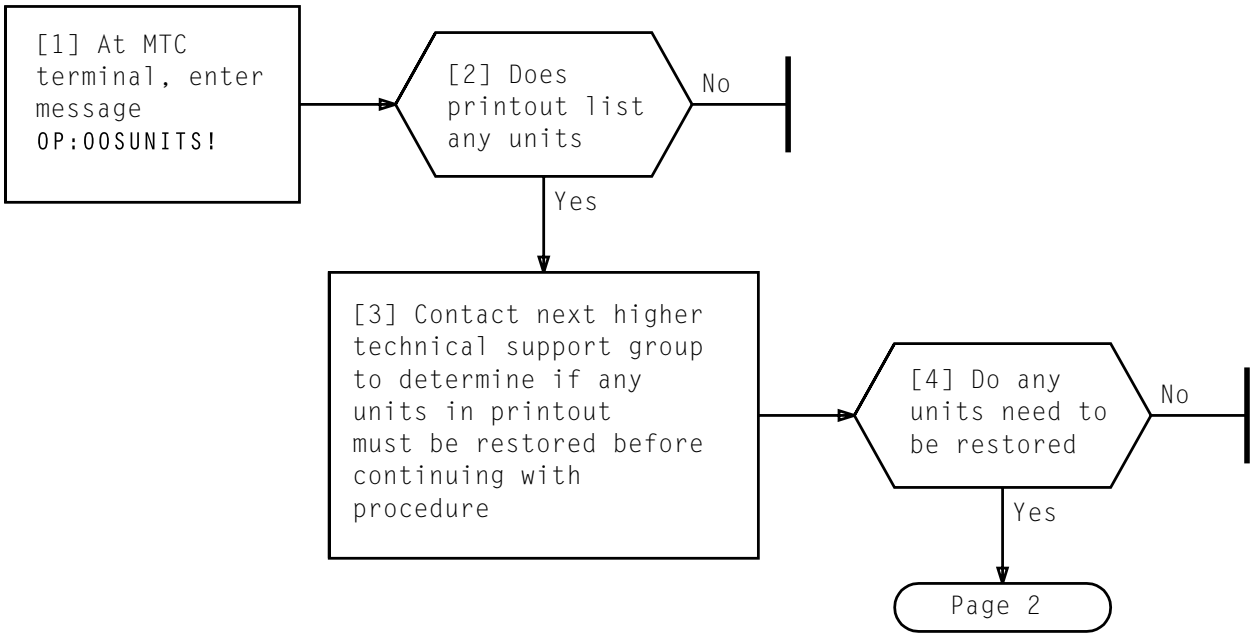
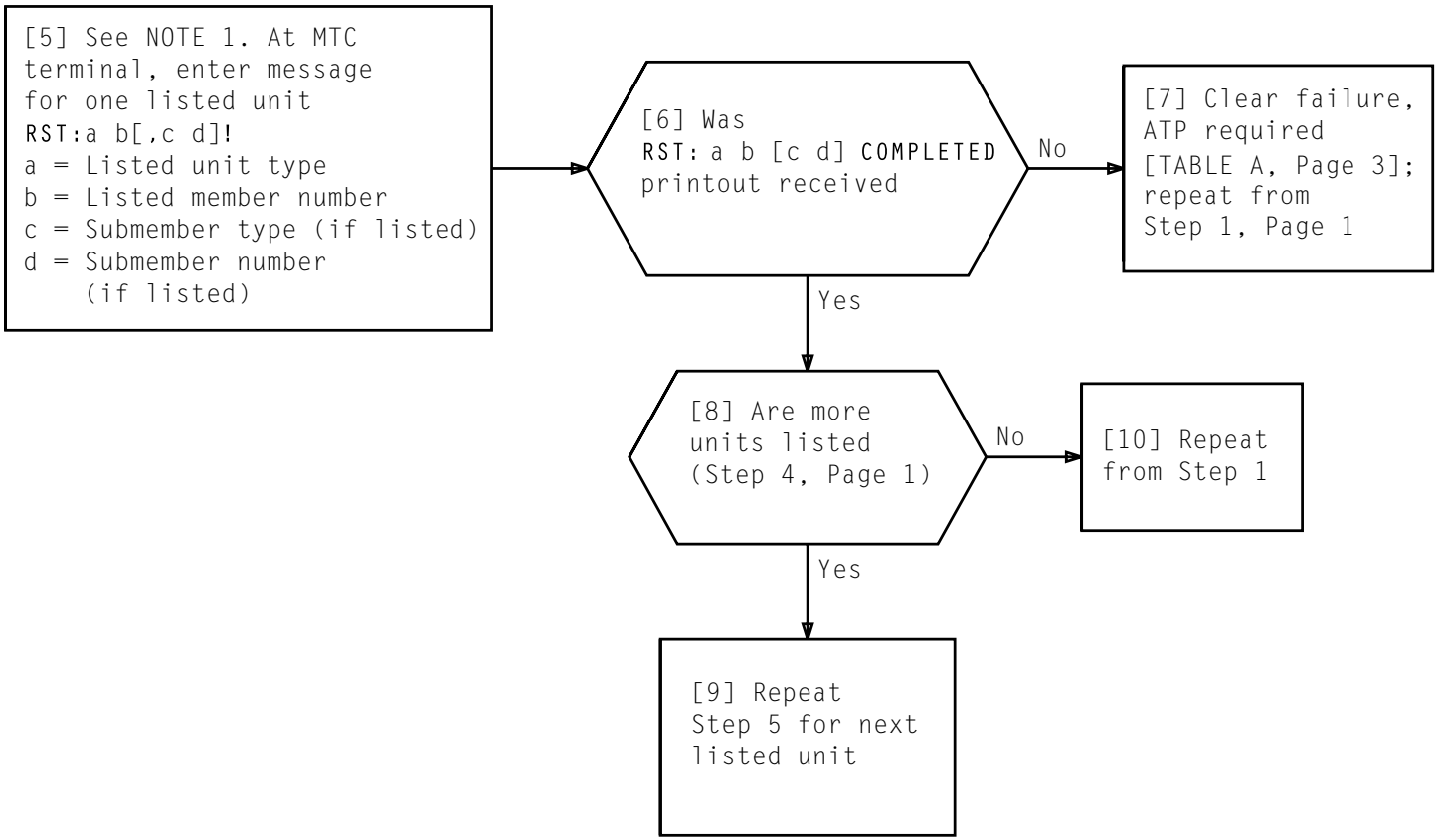


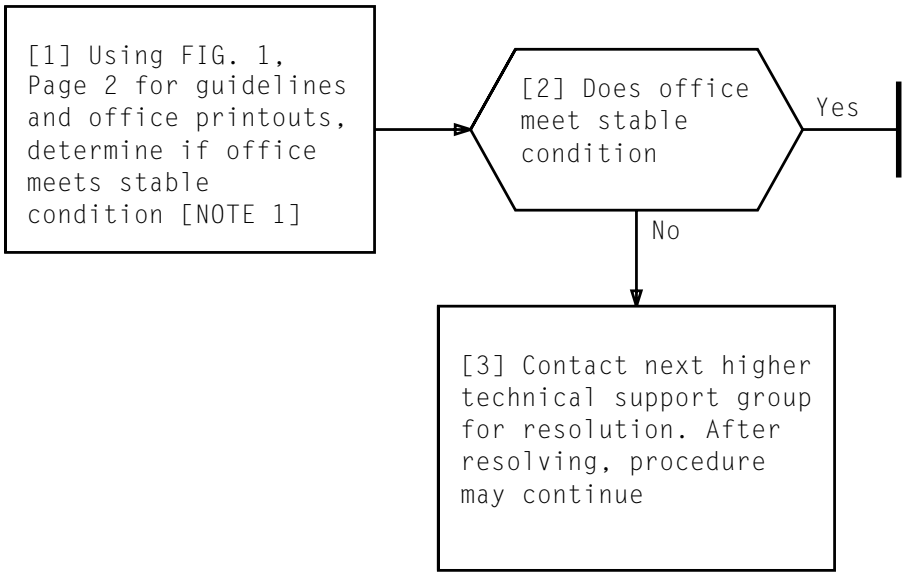
ENSURE 1A PROCESSOR UNITS ARE IN-SERVICE



NOTE 1
Variables c and d are only to be used if submember is listed

ENSURE 1A PROCESSOR UNITS ARE IN-SERVICE

TABLE A			
UNIT TYPE	**TROUBLE CLEARING VOLUME**	**UNIT TYPE**	**TROUBLE CLEARING VOLUME**
ADS (TUC and DUS)	254-251-010	MISC A, B, C	234-151-043
API	254-251-016	NCLK	234-151-013
AUB	254-251-010	PCDF J5A007B	254-251-025
CC	254-251-001	PCDF J5A007C	254-251-026
CNI	234-151-120	PS	254-251-005
CS and ECS	254-251-005	PUBB	234-151-015
DIF	234-151-055	SCS	234-151-077
DT	234-151-045	SP1	234-151-031
EST	234-151-050	SP2	234-151-032
IO J5A006A	254-251-020	TGR	234-151-033
IO J5A006C	254-251-021	TMS	234-151-011
IO J5A006D	254-251-022	TSI	234-151-012
MCC/PPI	234-151-006	VIF	234-151-025
MFS	234-151-041		



NOTE 1

FIG. 1 is based on 7-day rolling average for all per-day measures; all other measures are as indicated. All resolved troubles are discounted from measures

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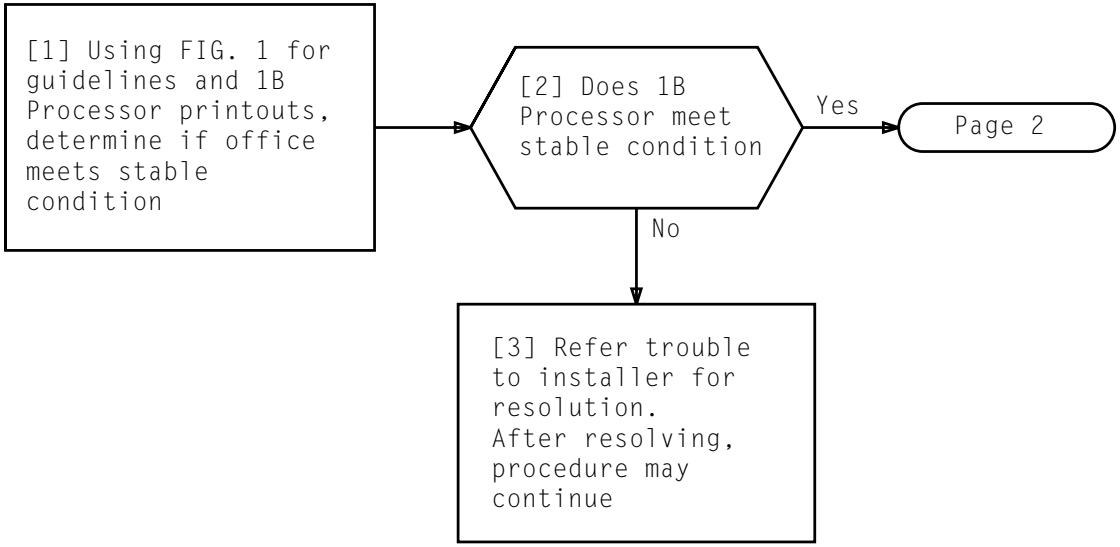
DETERMINE IF OFFICE IS STABLE

• INTERRUPTS	
1A PROCESSOR	≤ 1 PER MEMBER NUMBER PER DAY ≤ 3 PER DAY TOTAL
TMS, NC, PUB, IO, CCIS	≤ 2 PER MEMBER NUMBER PER DAY ≤ 4 PER DAY TOTAL
PERIPHERY, PER OPERATIONAL SP CORE (SP, DT, TSI) OR DIF (DIF, TSI COMPLEX) (THE ALLOWABLE DAILY INTERRUPT COUNT SHALL NOT EXCEED 25, REGARDLESS OF OFFICE SIZE)	≤ 3 PER DAY
PBFRs	≤ 1 PER DAY
• INTERJECTS	≤ 2 PER MEMBER NUMBER PER DAY ≤ 5 PER DAY TOTAL
• BASE LEVEL	
ANALYZED, CORRECTED AND/OR UNDERSTOOD	
• PHASES/DUPLEX FAILURES	
DIRECTED PHASE 1	≤ 1 IN 2 WEEKS
SYSTEM PHASE 1	≤ 1 IN 1 WEEK
PHASE 2 OR 3	≤ 1 IN 4 WEEKS
DT, VIF, OR EST	≤ 1 IN 4 WEEKS
TGR/TER LINK PAIR	≤ 1 IN 2 WEEKS
• OUT-OF-SERVICE UNITS	
NUMBER OUT-OF-SERVICE	≤ 5 AT ANYTIME
CRITICAL UNITS: CC DIF PS TMSP CS LN PUB TSI CU NCLK SP	
• 3B COMPUTER	
INTERRUPTS	≤ 3 PER DAY
PHASE 1	≤ 1 IN 4 WEEKS
PHASE 2 OR 3	≤ 1 IN 4 WEEKS
CNI RING INIT	≤ 1 IN 2 WEEKS
CNI RING TRANSPORT ERRORS	≤ 2 PER DAY
DLNE ERRORS	≤ 1 PER DAY

FIG. 1 - Office Stability Guidelines

DETERMINE IF OFFICE IS STABLE



- INTERRUPTS

(AUB, AUI, CC, CS, CSB, IFB, MUP, PS, PSB, SSD)	NONE ALLOWED [NOTE 1]

- PHASES, DUPLEX FAILURES, OR ZERO STARTS

1. PHASE 1	NONE ALLOWED
2. DIRECTED PHASE 1	NONE ALLOWED
3. PHASES 2 AND 3	NONE ALLOWED
4. MULTIPLE UNIT FAILURE	NONE ALLOWED
5. PHASE 4	NONE ALLOWED

NOTE 1: Interrupts caused by documented hardware/software-related problems or installer errors must be evaluated to determine if they can be deleted from stability requirements. Interrupts caused by documented, hardware-related problems which are a measure of equipment quality, cannot be deleted from stability requirements

FIG. 1 - 1B Processor Stability Guidelines

DETERMINE 1B PROCESSOR STABILITY AND CLOCK TIME

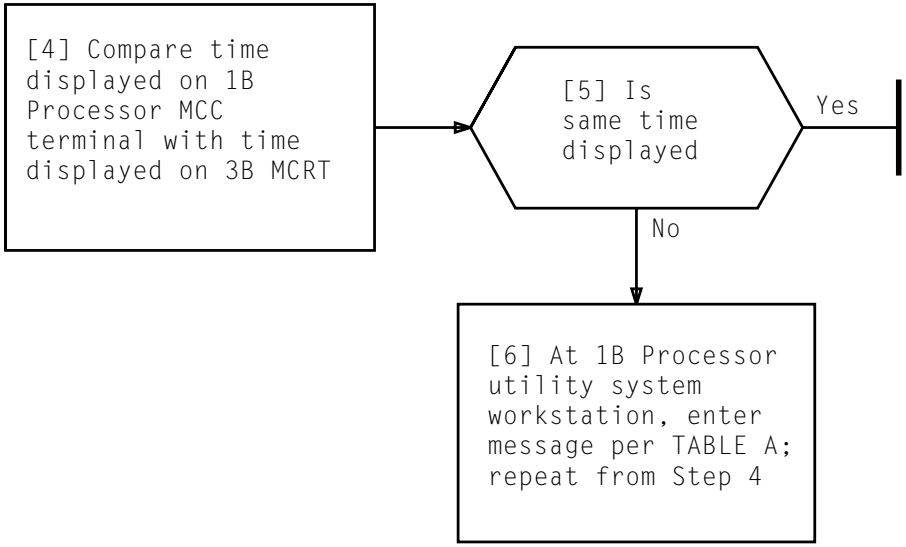
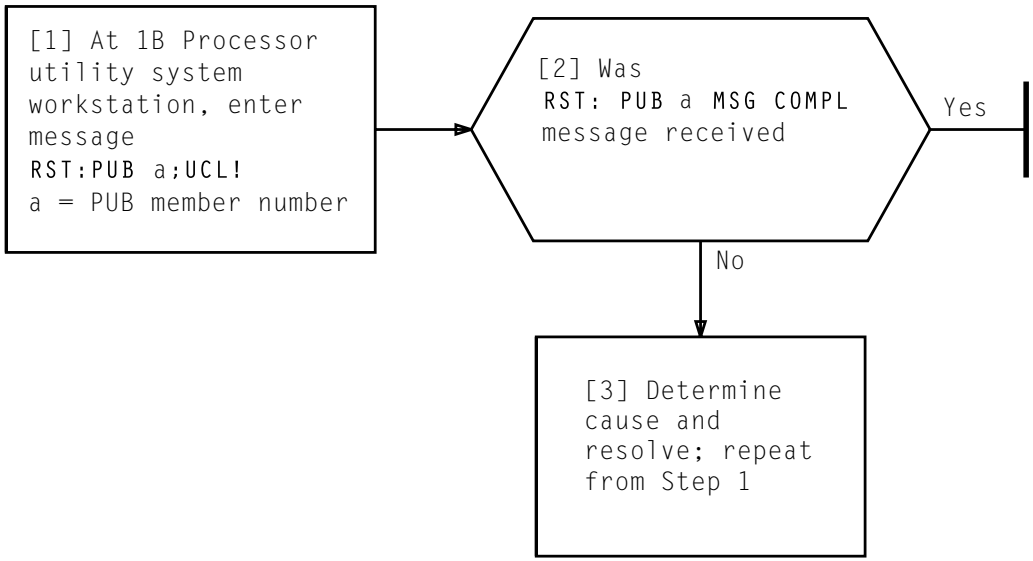


TABLE A

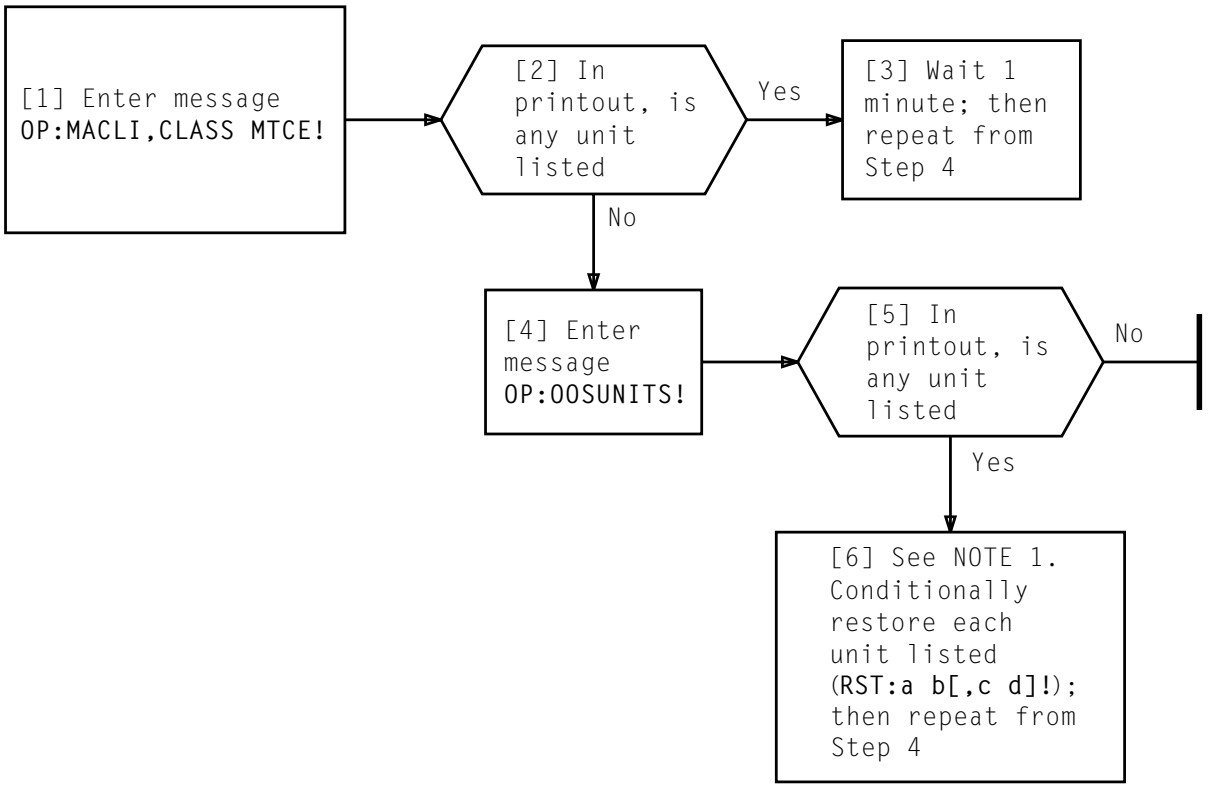
MESSAGE NUMBER	INPUT MESSAGE
1	SET:CLK:DAY a,DATE b,TIME ccdd!

a = day (MON, TUE, WED, and so on)
b = date (6-digit number - mmddyy)
cc = hour
dd = minute

DETERMINE 1B PROCESSOR STABILITY AND CLOCK TIME



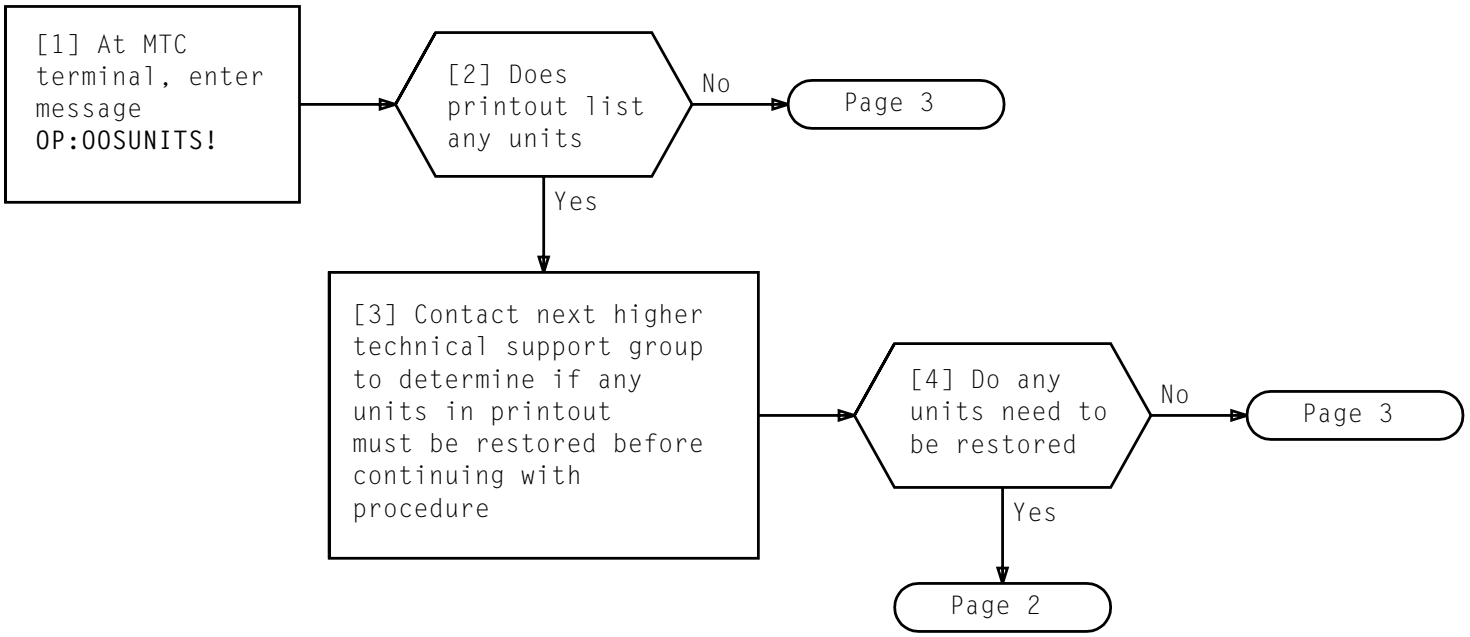
RESTORE PUB TO SERVICE UNCONDITIONALLY



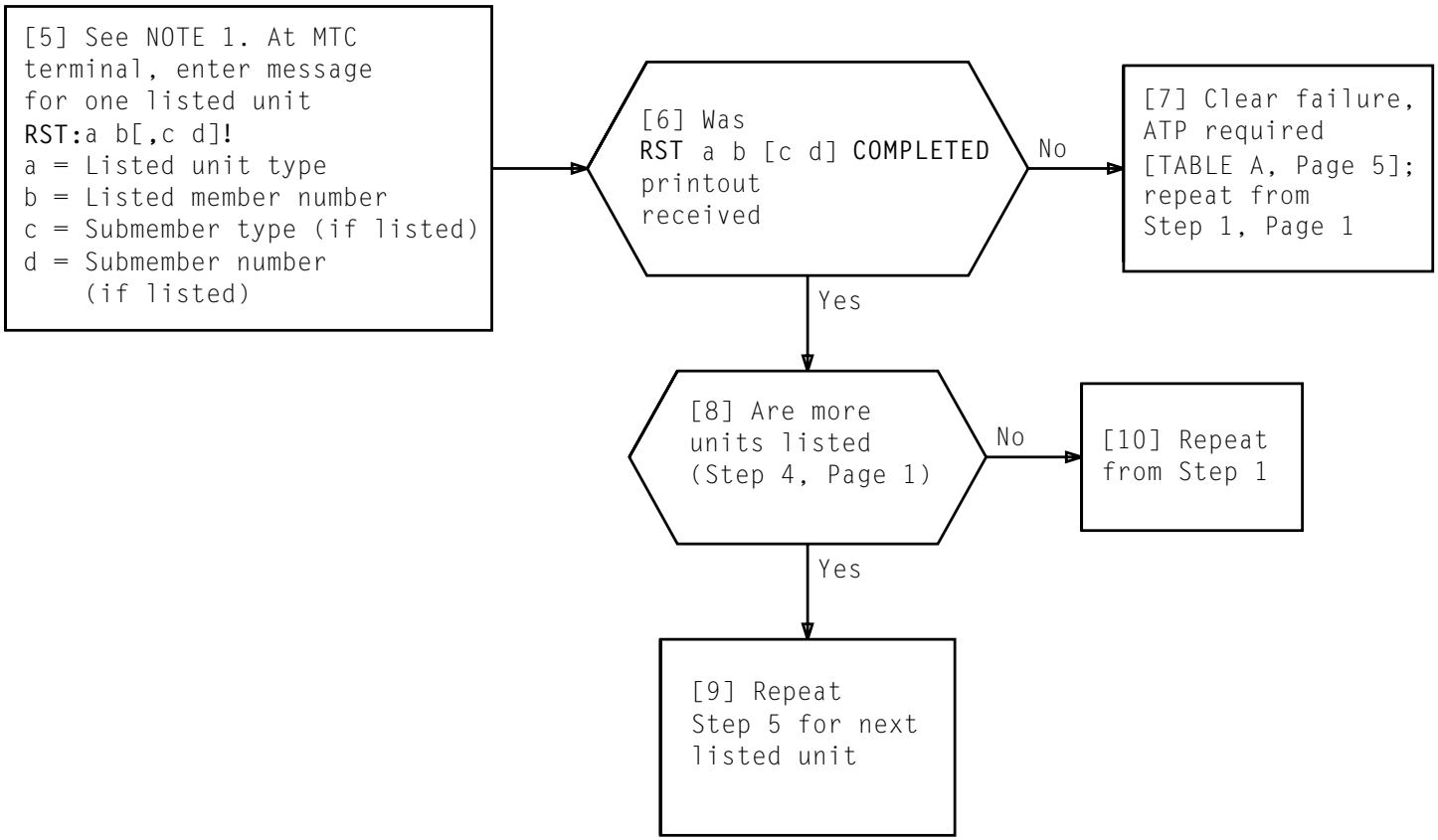
RESTORE OUT-OF-SERVICE UNITS AFTER UPDATE

NOTE 1

IFB must be restored before restoring MUP, AUI, or SSD. AUB must be restored before restoring API, DUS, or TUC

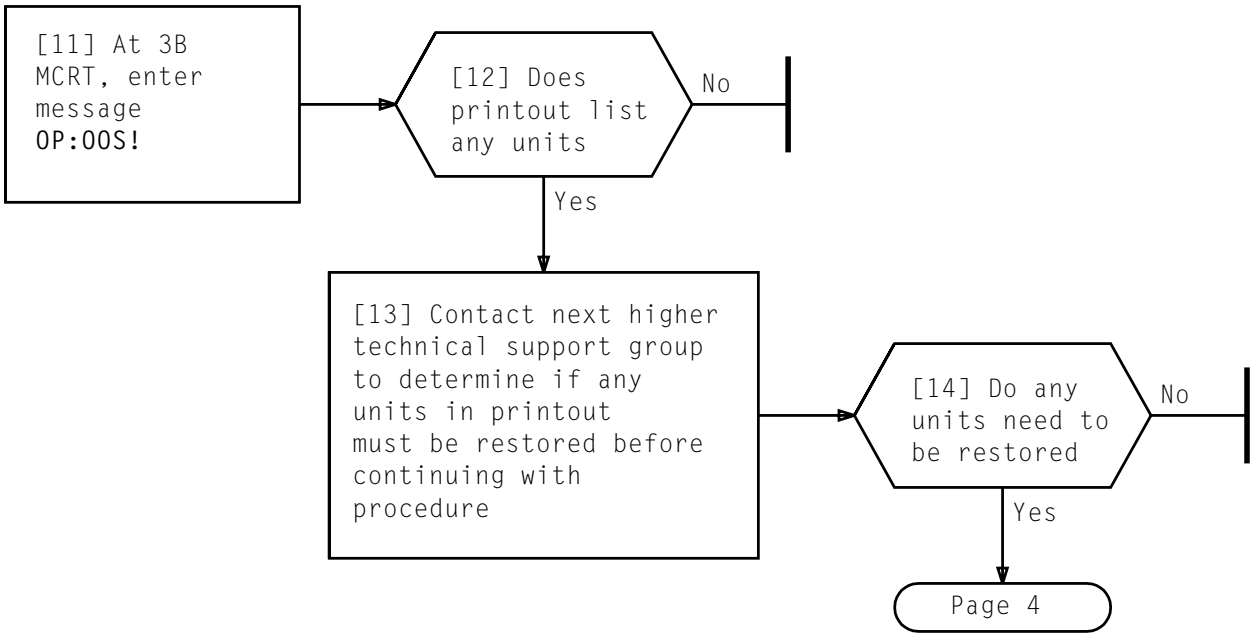


ENSURE ALL UNITS ARE IN-SERVICE

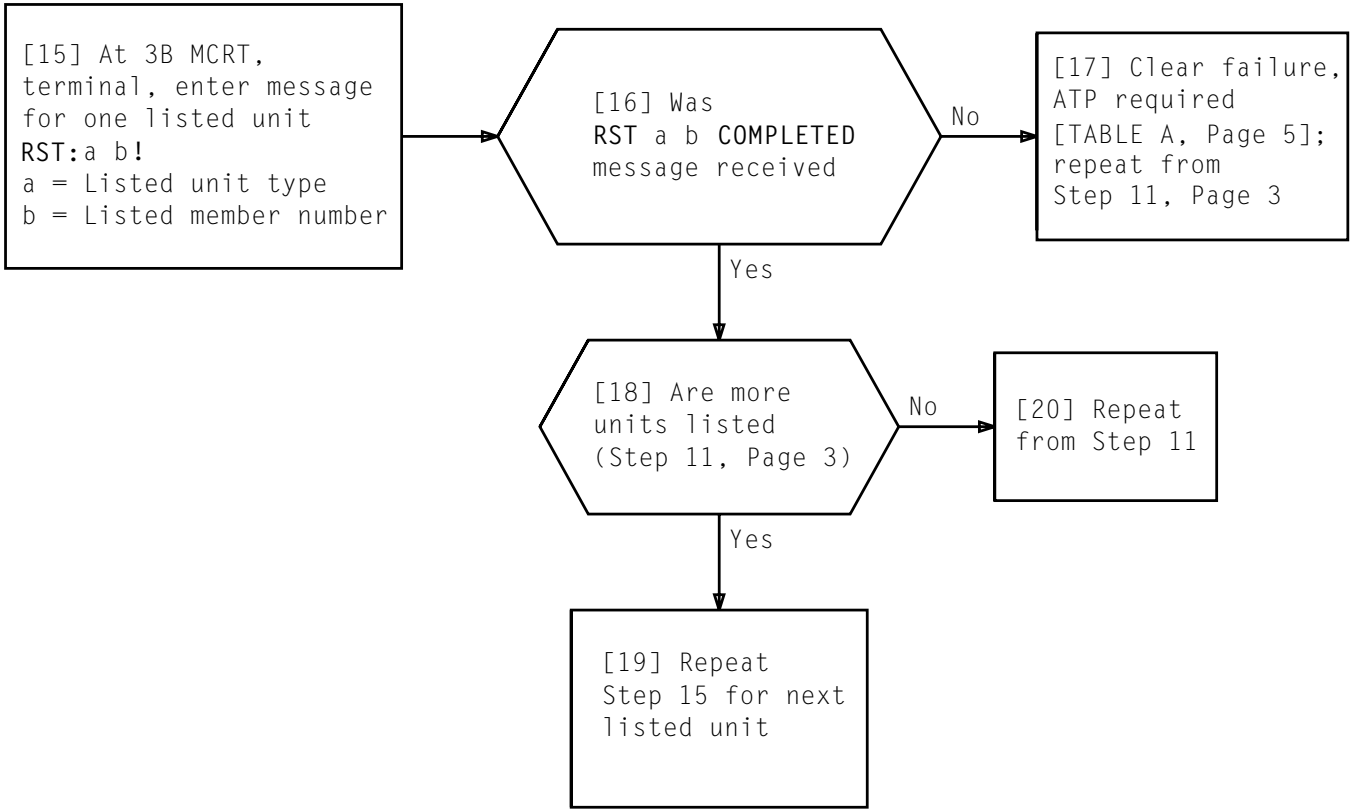


NOTE 1
Variables c and d are only to be used if submember is listed

ENSURE ALL UNITS ARE IN-SERVICE



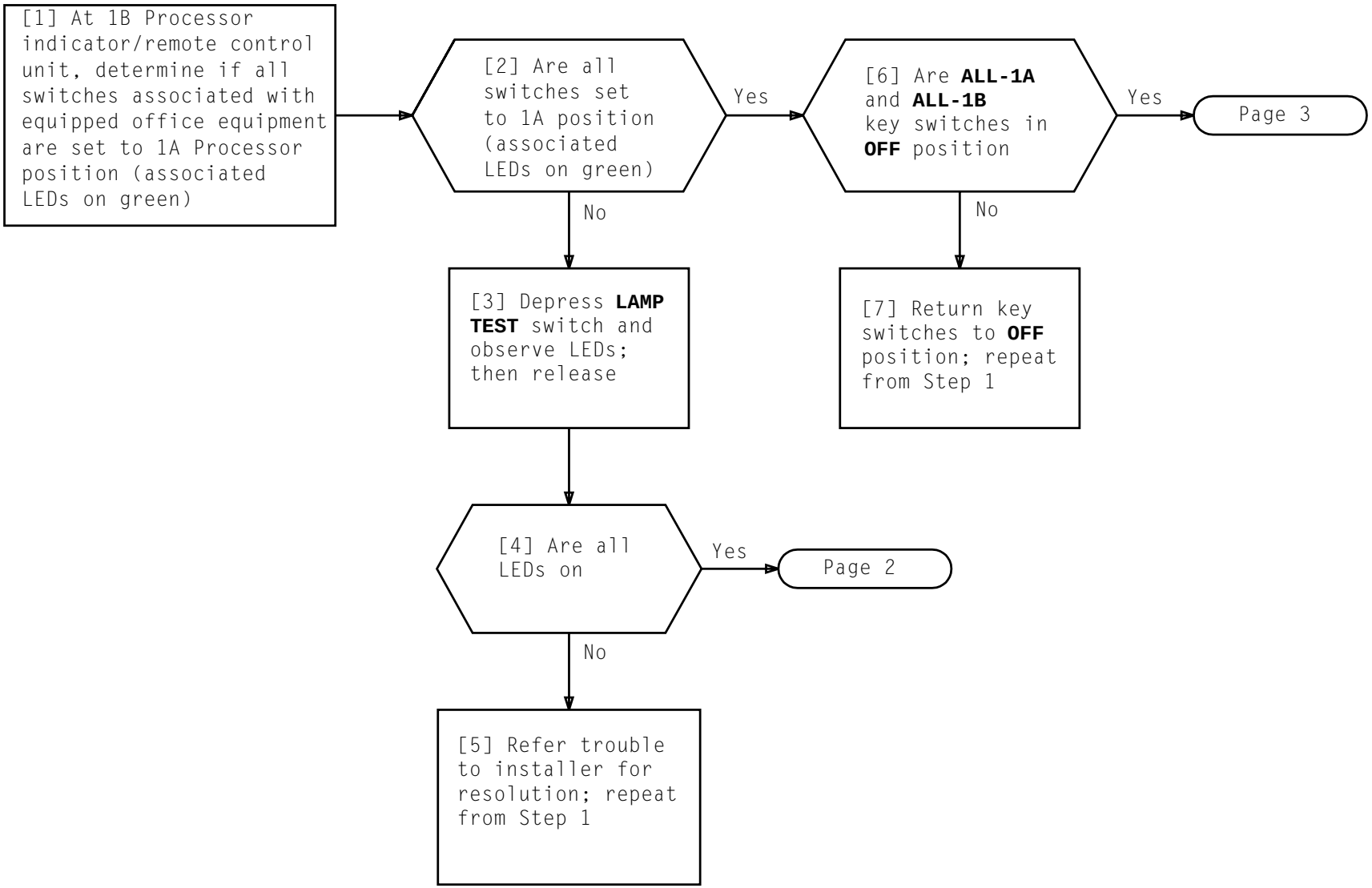
ENSURE ALL UNITS ARE IN-SERVICE



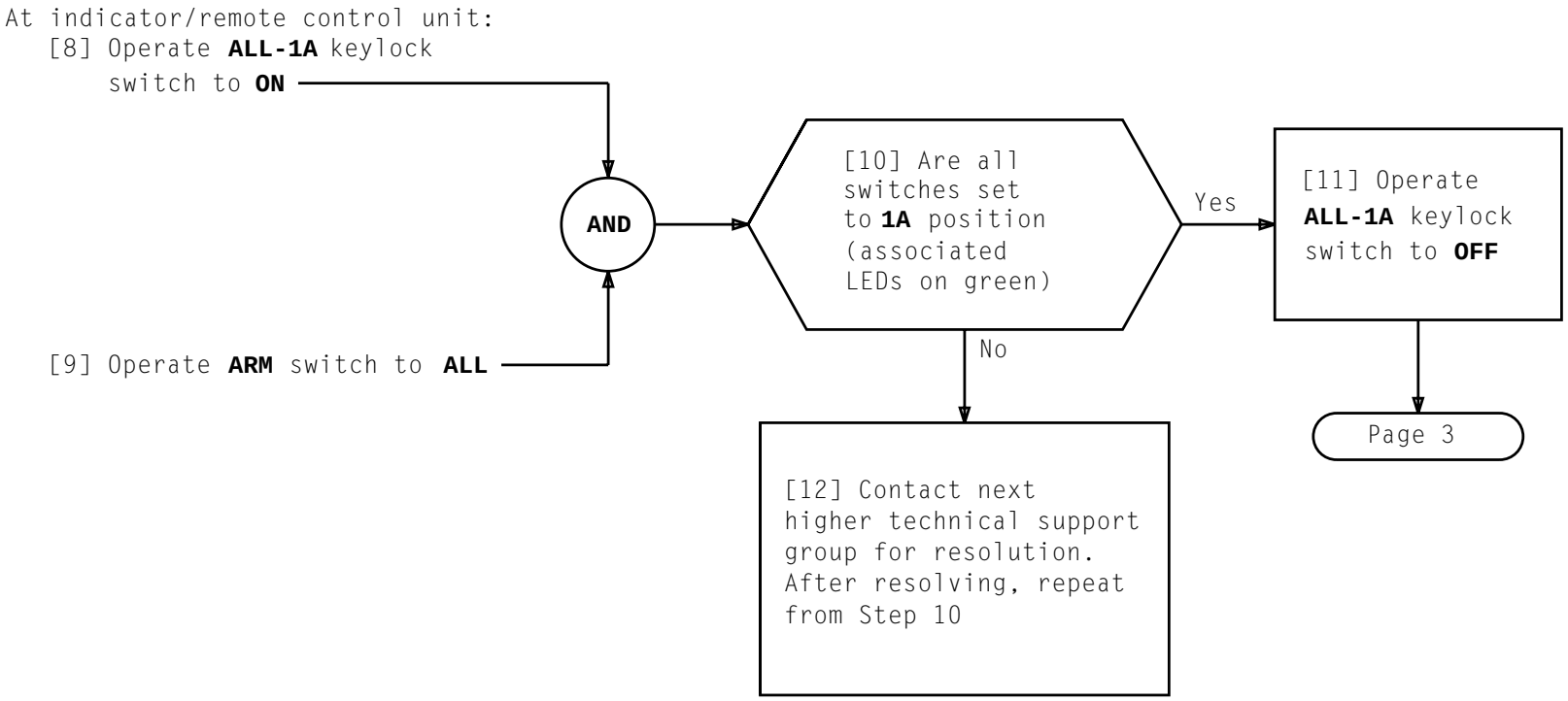
ENSURE ALL UNITS ARE IN-SERVICE

TABLE A			
UNIT TYPE	**TROUBLE CLEARING VOLUME**	**UNIT TYPE**	**TROUBLE CLEARING VOLUME**
3B Computer Model 1	254-301-812 254-301-813	MCC/PPI	234-151-006
		MFS	234-151-041
3B Computer Model 2/3	254-302-812	MISC A, B, C	234-151-043
ADS (TUC and DUS)	254-251-010	NCLK	234-151-013
API	254-251-016	PCDF J5A007B	254-251-025
AUB	254-251-010	PCDF J5A007C	254-251-026
CC	254-251-001	PS	254-251-005
CNI	234-151-120	PUBB	234-151-015
CS and ECS	254-251-005	SCS	234-151-077
DIF	234-151-055	SP1	234-151-031
DT	234-151-045	SP2	234-151-032
EST	234-151-050	TGR	234-151-033
IO J5A006A	254-251-020	TMS	234-151-011
IO J5A006C	254-251-021	TSI	234-151-012
IO J5A006D	254-251-022	VIF	234-151-025

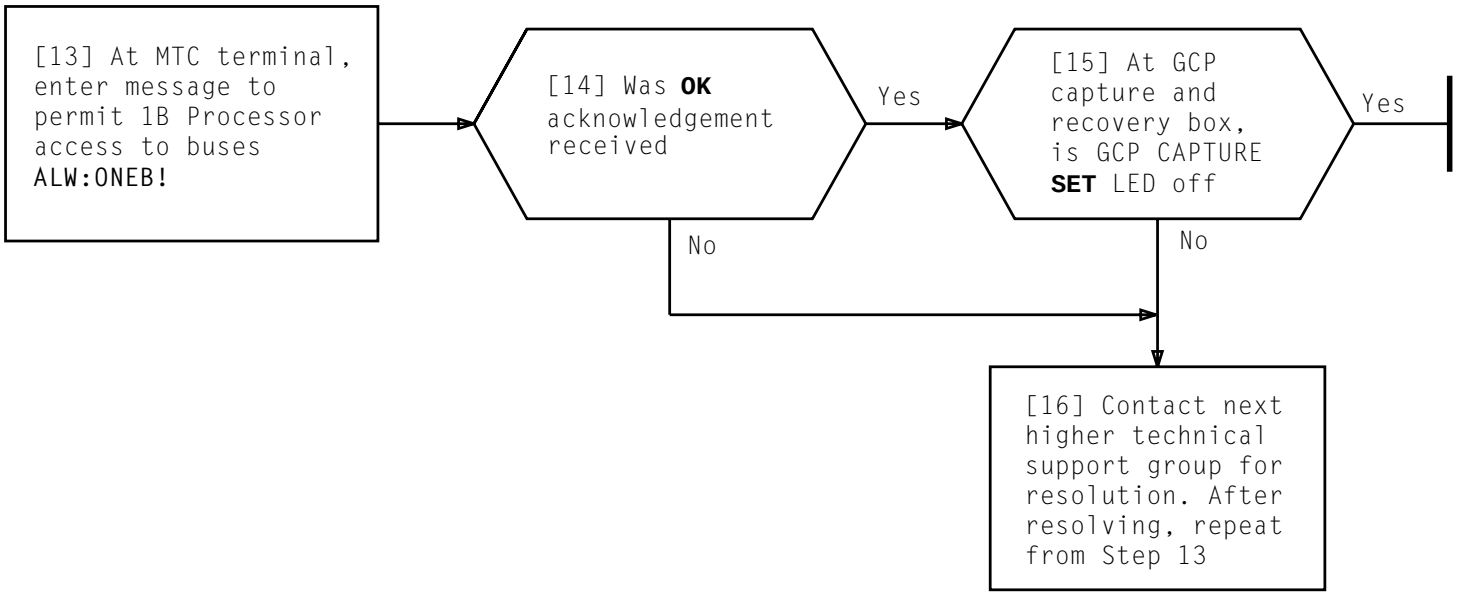
ENSURE ALL UNITS ARE IN-SERVICE



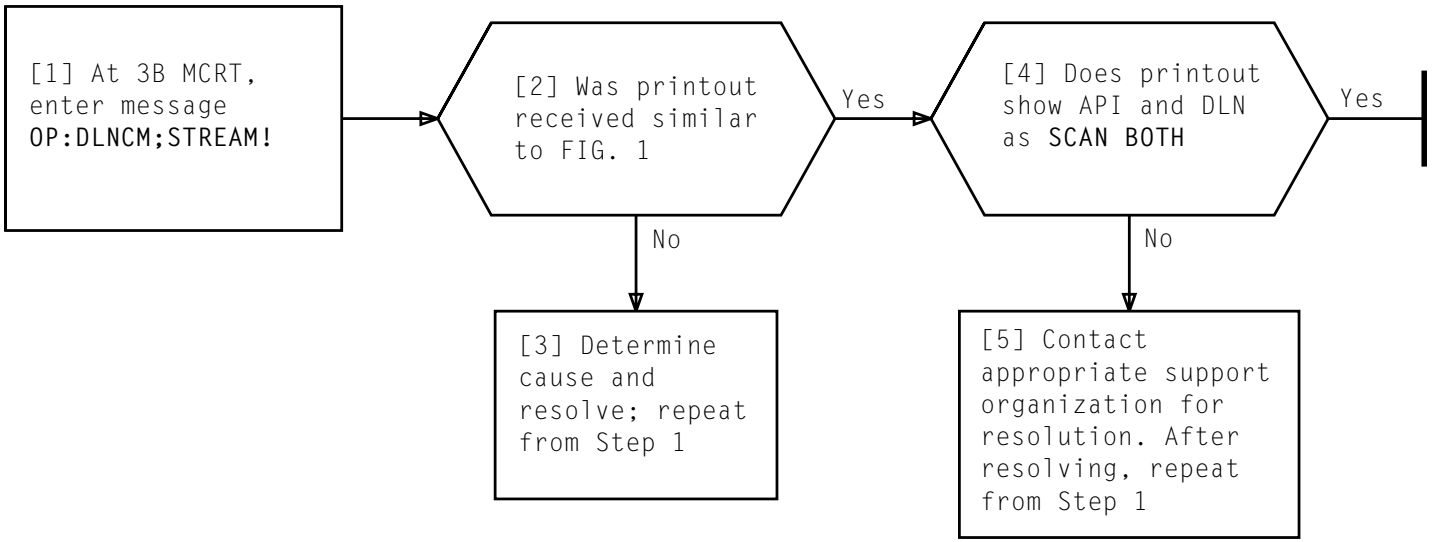
ENSURE 1B PROCESSOR INDICATOR/REMOTE CONTROL UNIT SWITCHES SET TO 1A PROCESSOR POSITION AND PERMIT BUS ACCESS



ENSURE 1B PROCESSOR INDICATOR/REMOTE CONTROL UNIT SWITCHES SET TO 1A PROCESSOR POSITION AND PERMIT BUS ACCESS



ENSURE 1B PROCESSOR INDICATOR/REMOTE CONTROL UNIT SWITCHES SET TO 1A PROCESSOR POSITION AND PERMIT BUS ACCESS

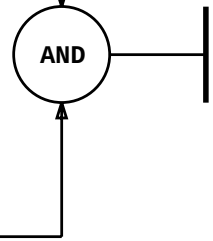



```
OP DLNCM STREAM COMPLETED

API-DLN STREAM STATUS

API: SCAN BOTH                      DLN: SCAN BOTH

INCOMING BUFFER                     OUTGOING BUFFER
   START             X'--------        START             X'--------
   END               X'--------        END               X'--------
   LOAD POINTER      X'--------        LOAD POINTER      X'--------
   UNLOAD POINTER    X'--------        UNLOAD POINTER    X'--------
   END POINTER       X'--------        END POINTER       X'--------
   -------- = VARIABLE HEX DATA
```

FIG. 1 — Sample OP:DLNCM Printout

VERIFY API-DLN STREAM STATUS

[1] At MTC terminal,
enter message
OP:APSTATUS!



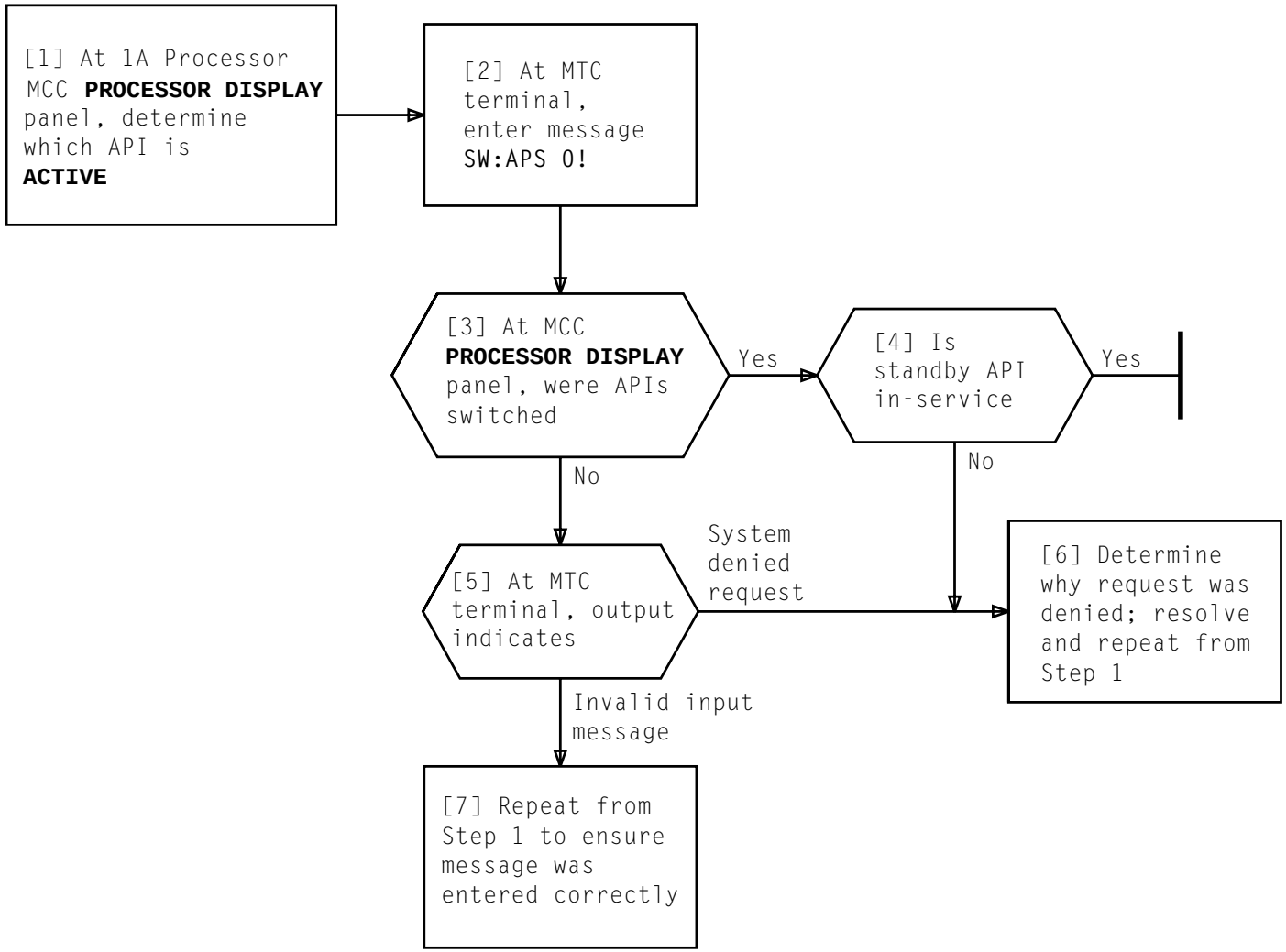
[2] Using printout and FIG. 1,
determine API member number
assigned SBY and record
as standby for later use

APS 0 API 0 a API 1 b

a = ACT or SBY
b = SBY or ACT

FIG. 1 - Sample OP:APSTATUS Printout

DETERMINE STANDBY API


[1] At 1A Processor MCC **PROCESSOR DISPLAY** panel, determine which API is **ACTIVE**
[2] At MTC terminal, enter message SW:APS 0!
[3] At MCC **PROCESSOR DISPLAY** panel, were APIs switched
Yes
[4] Is standby API in-service
Yes
No
No
System denied request
[5] At MTC terminal, output indicates
[6] Determine why request was denied; resolve and repeat from Step 1
Invalid input message
[7] Repeat from Step 1 to ensure message was entered correctly

SWITCH APIs

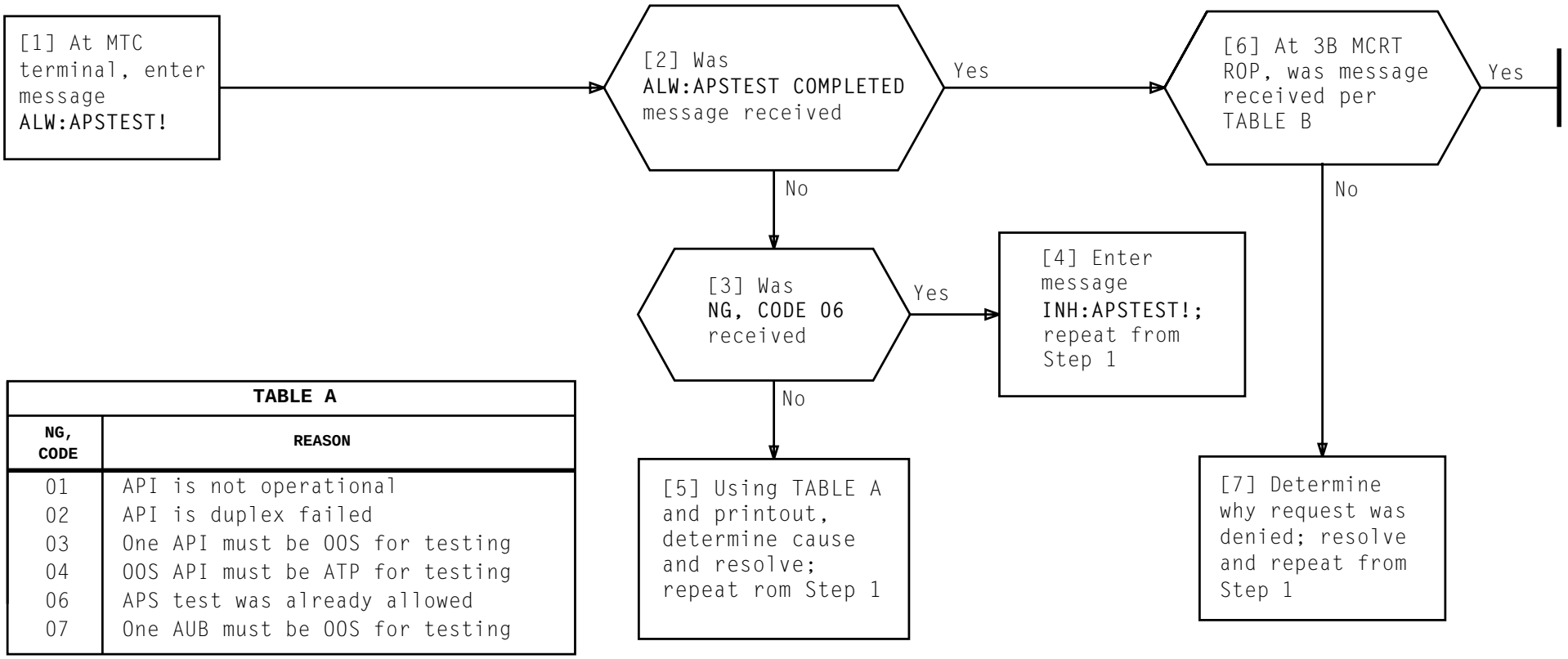


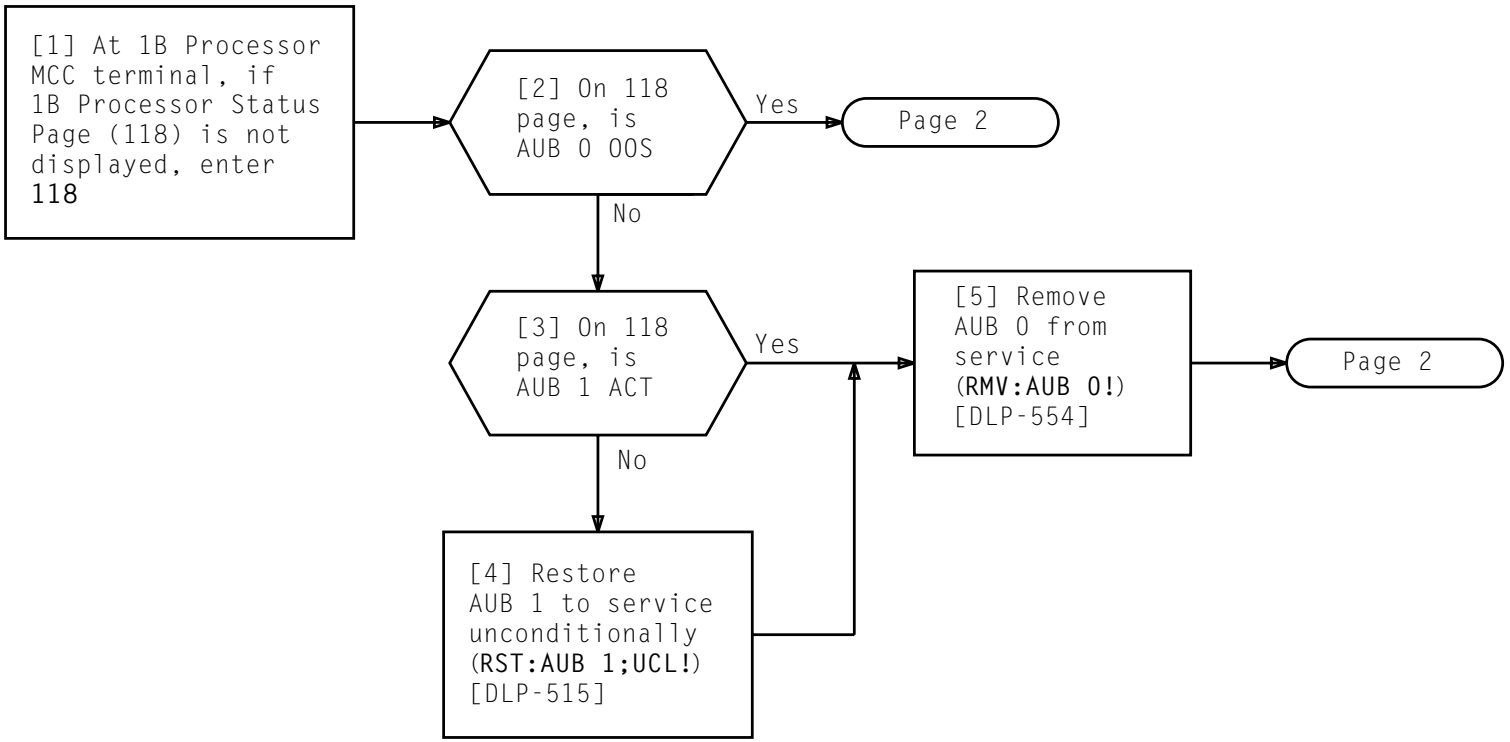
TABLE A

NG, CODE	REASON
01	API is not operational
02	API is duplex failed
03	One API must be OOS for testing
04	OOS API must be ATP for testing
06	APS test was already allowed
07	One AUB must be OOS for testing

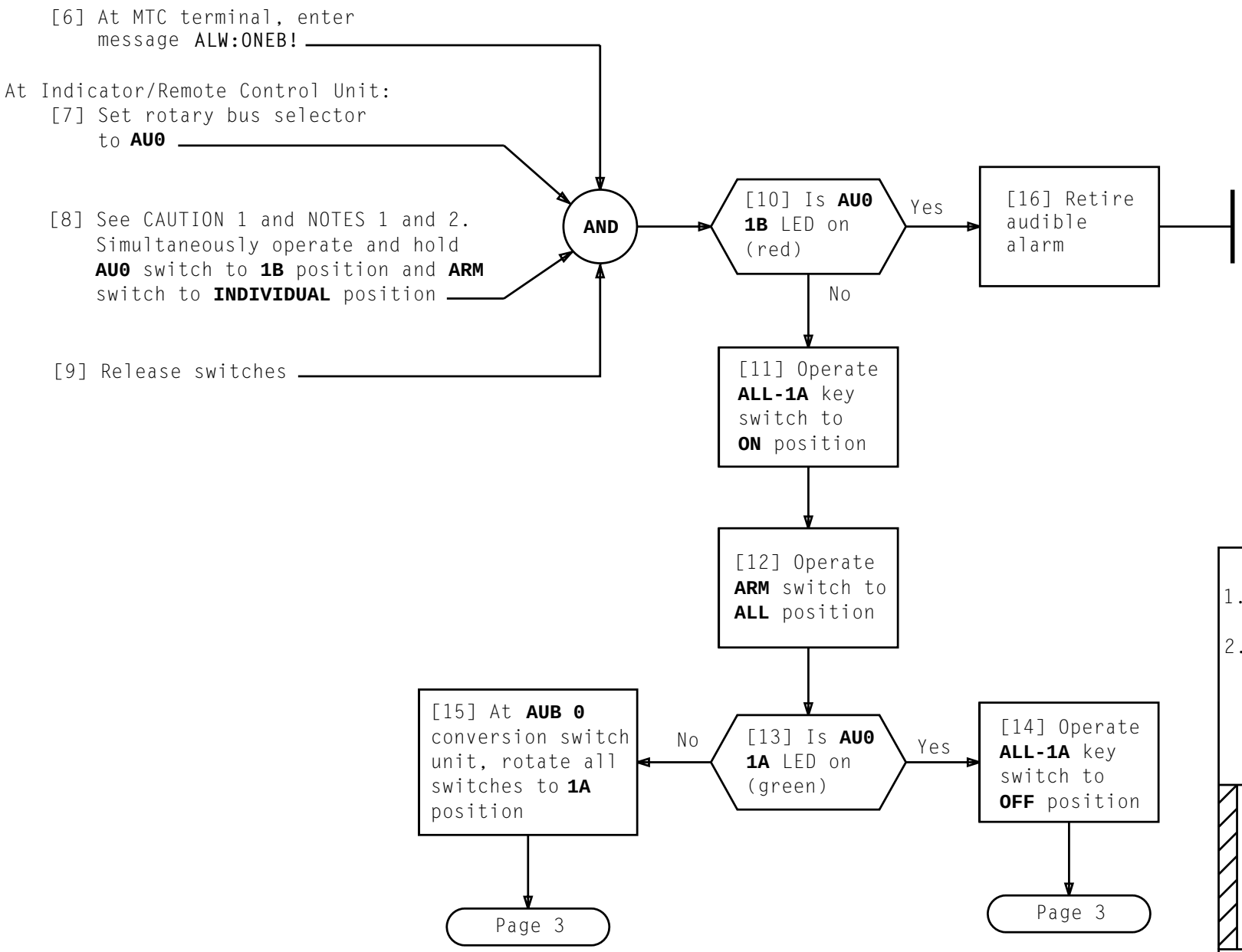
TABLE B

MESSAGE NUMBER	OUTPUT MESSAGE
1	REPT: APDRV STARTS STREAM EXERCISER TESTING - BSTATE: 4 RTC: xxxxxxxx REPT: TESTLOOP TO ACTIVATE NEW xxxxxx OF xxxx DO INIT CNI RTC: xxxxxxx REPT: APDRV CREATE TESTLOOP PROCESS BSTATE:4 RTC: xxxxxxxx

SET API BEING TESTED TO OFF-LINE STATE



SWITCH AUB 0 CONVERSION SWITCH FROM 1A PROCESSOR BUS ACCESS TO 1B PROCESSOR BUS ACCESS

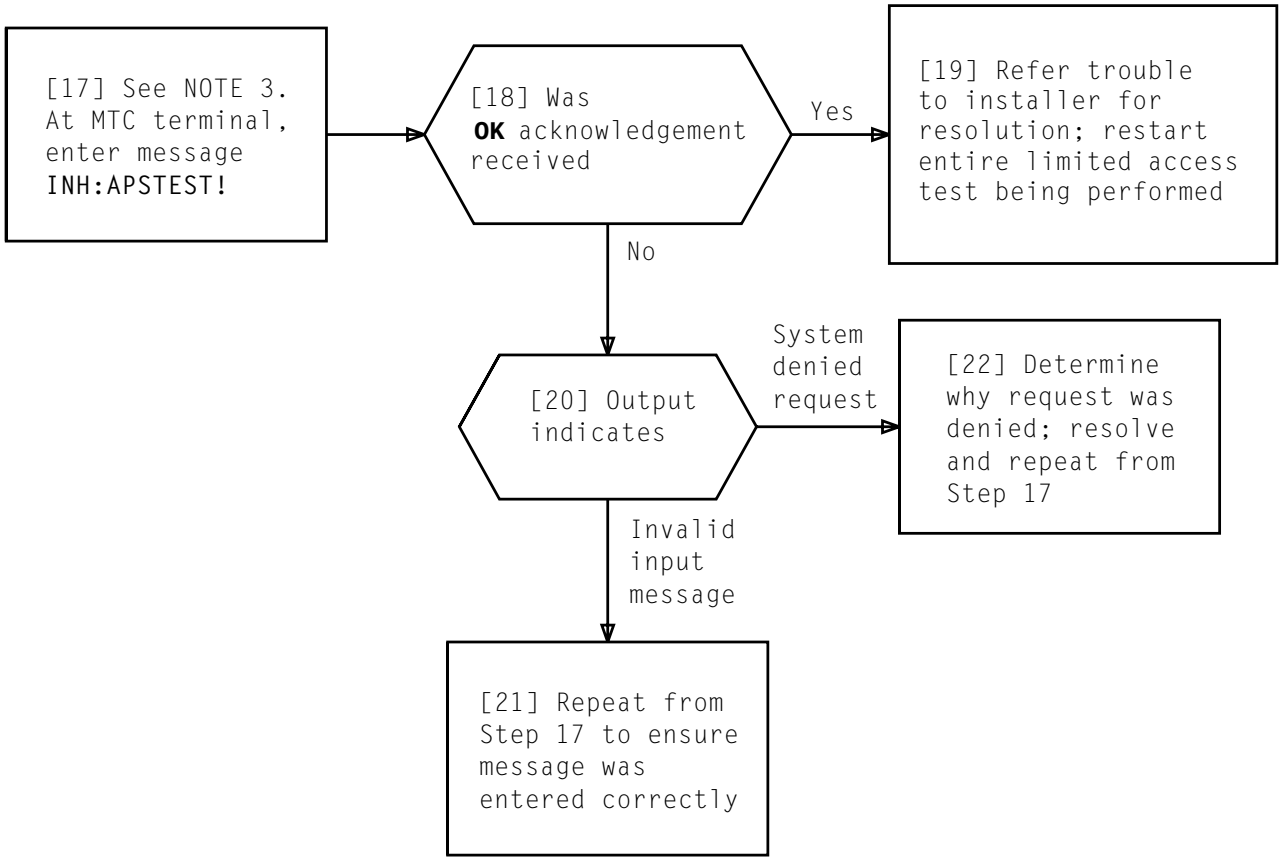


NOTES

1. Audible alarm will be received
2. REPT: OA xx 1B CVSW OFNL ACTIVATED, FLOOR x message will be received at MTC terminal

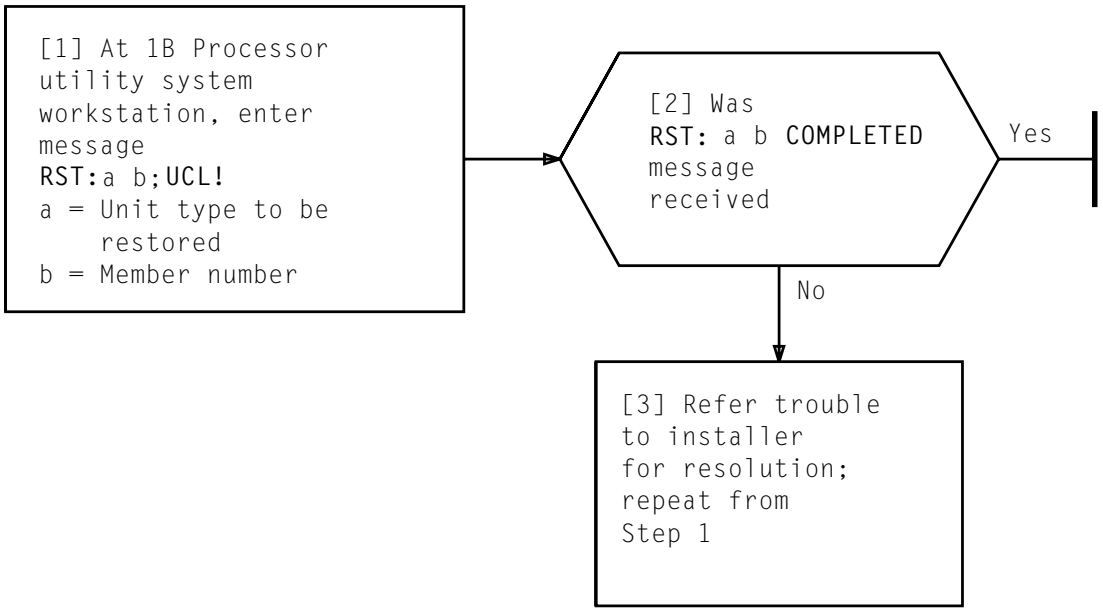
CAUTION 1
Care must be taken to ensure that only AU0 and ARM switches are being operated

SWITCH AUB 0 CONVERSION SWITCH FROM 1A PROCESSOR BUS ACCESS TO 1B PROCESSOR BUS ACCESS

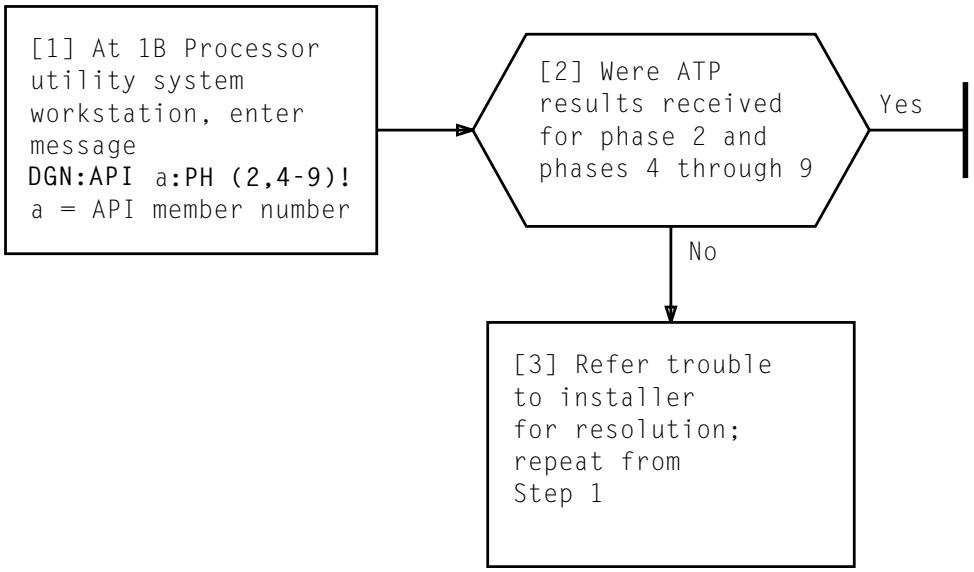


SWITCH AUB 0 CONVERSION SWITCH FROM 1A PROCESSOR BUS ACCESS TO 1B PROCESSOR BUS ACCESS

NOTE 3
After 1 minute, expect BLM messages from 1B processor and APIs to duplex fail



RESTORE UNIT UNCONDITIONALLY



DIAGNOSE API FROM 1B PROCESSOR

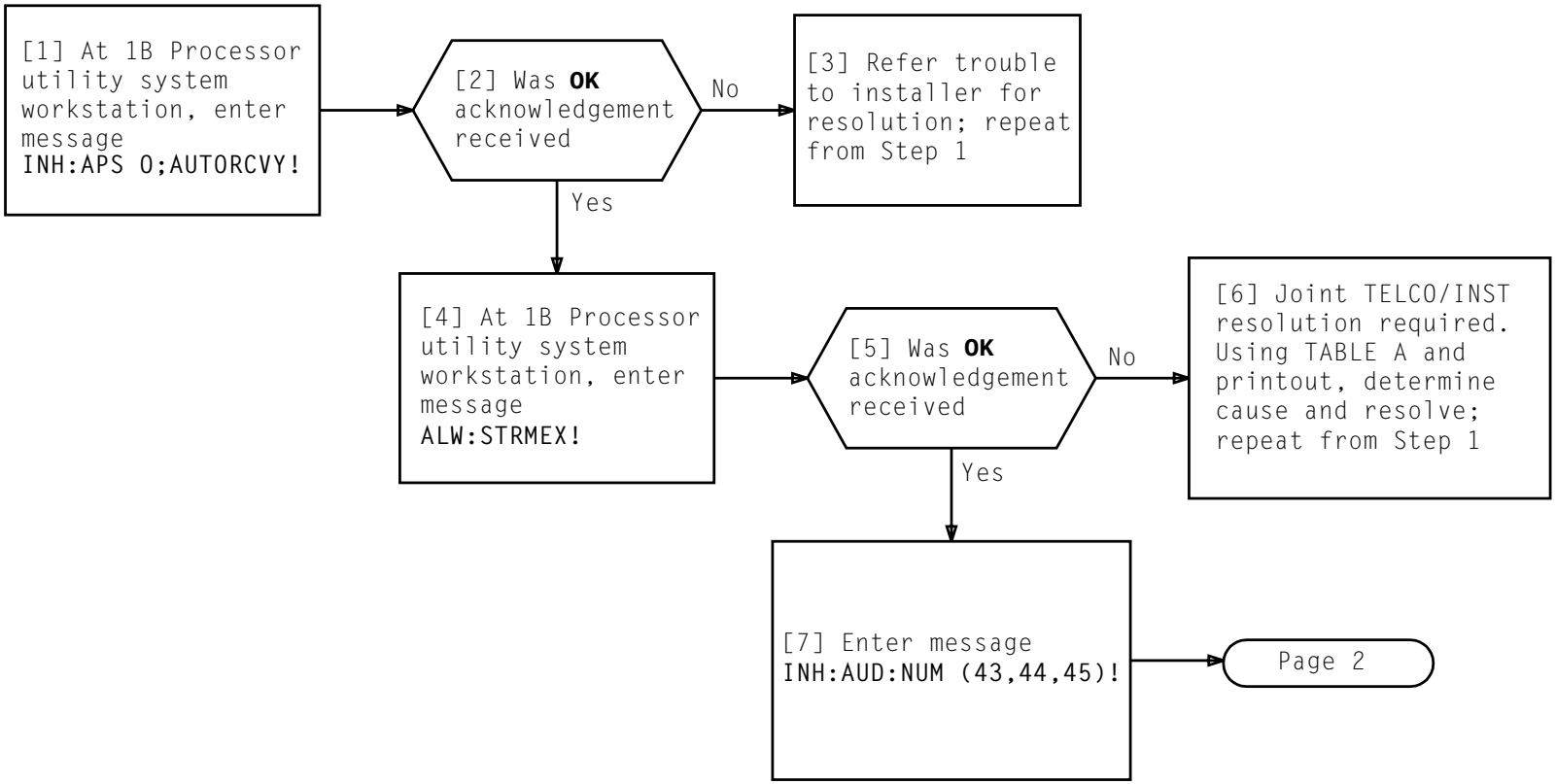


TABLE A

NG, CODE	REASON
01	API is OOS
02	CNI is not provided in office
03	API is not operational in office
04	Attempt to bring test stream up failed
09	Test stream already up. Test stream must be down to start test. Enter INH:STRMEX! and repeat from Step 4

PERFORM STREAM EXERCISER TEST

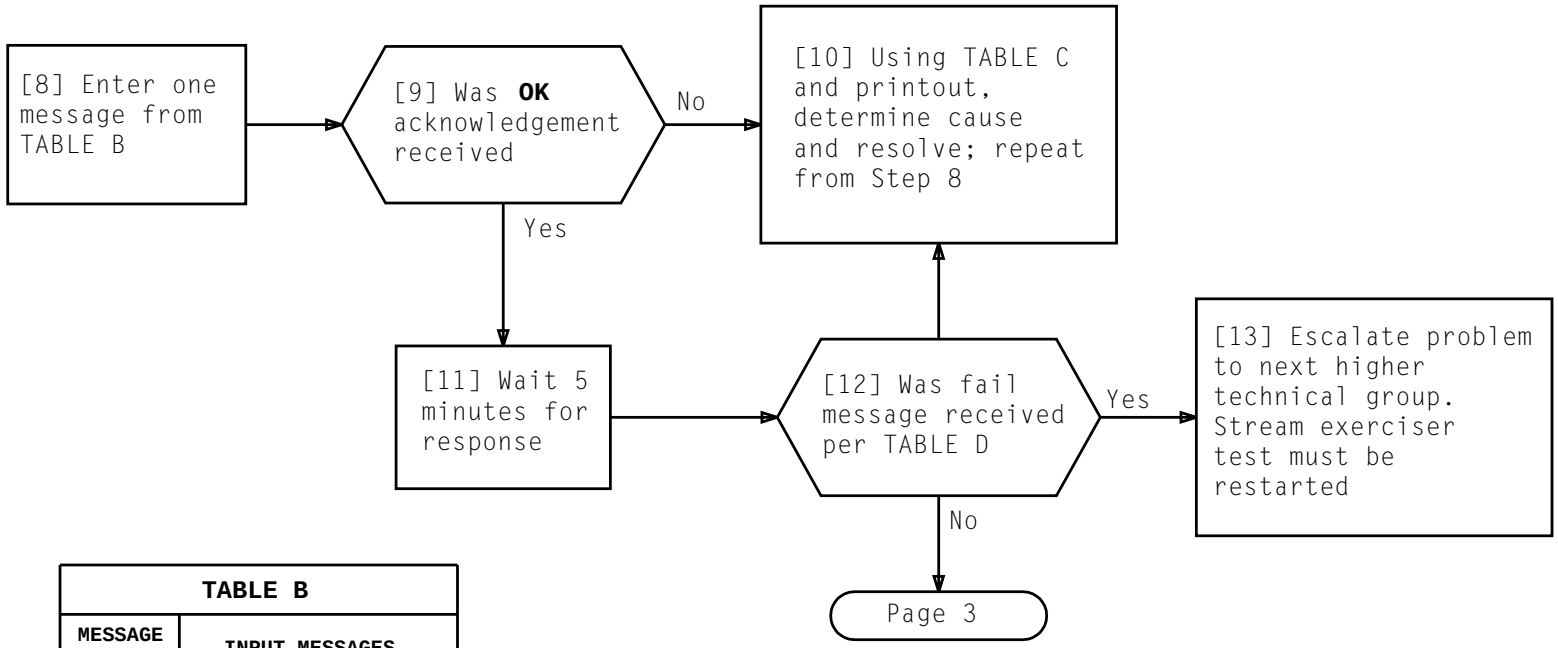


TABLE B

MESSAGE NUMBER	INPUT MESSAGES
1	SET:STRMEX 1!
2	SET:STRMEX 5!
3	SET:STRMEX 10!

TABLE C

NG, CODE	REASON
05	Stream exerciser was not enabled. ALW:STRMEX message must be used prior to this input message
10	Invalid input parameter. Valid values are 1 through 10

TABLE D

MESSAGE NUMBER	FAIL MESSAGES
1	REPT STRMEX PROGRAM FOUND INVALID . . . . .
2	REPT STRMEX LOST MSG
3	REPT STRMEX LOAD FAIL CODE

PERFORM STREAM EXERCISER TEST

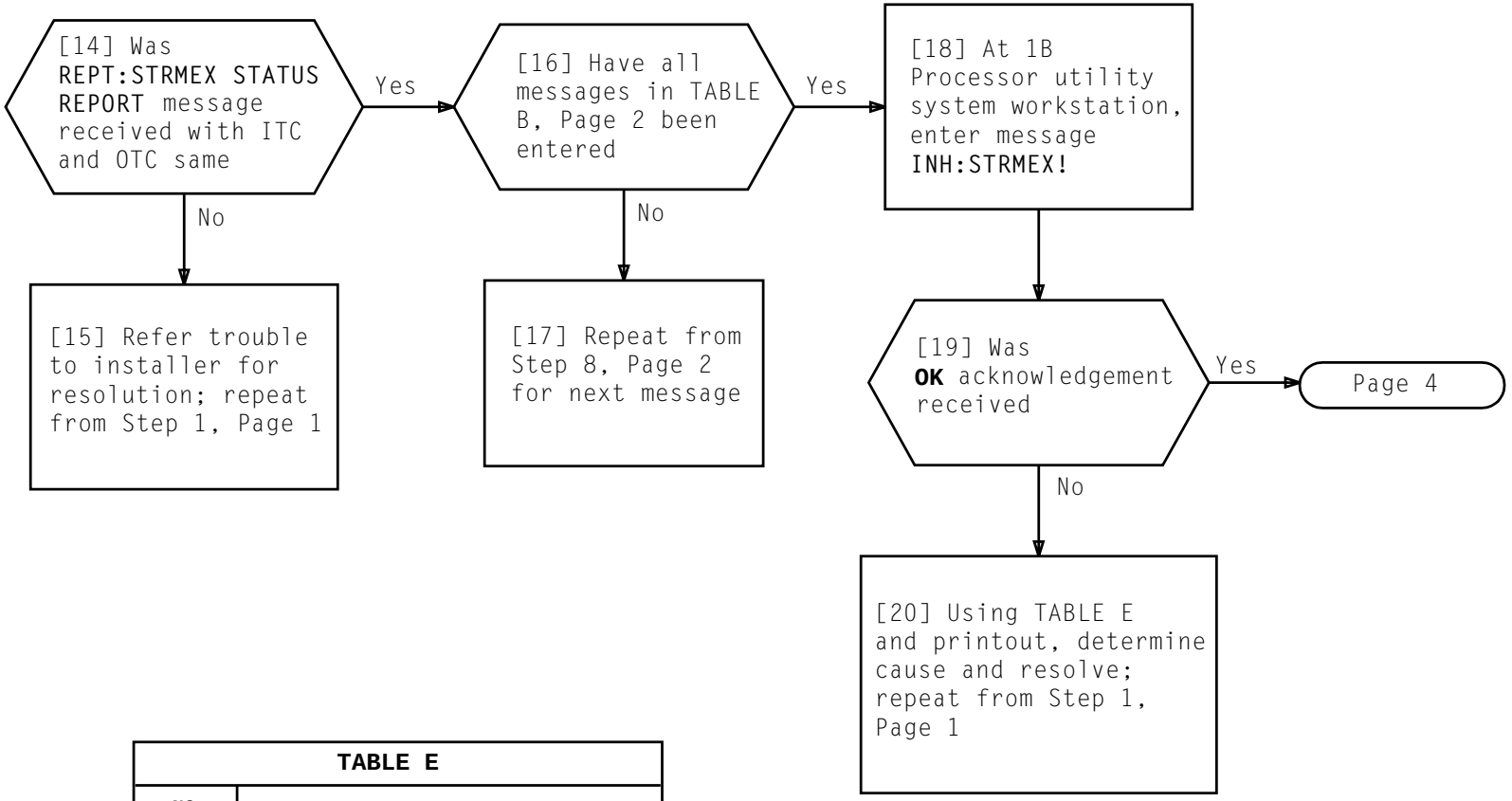
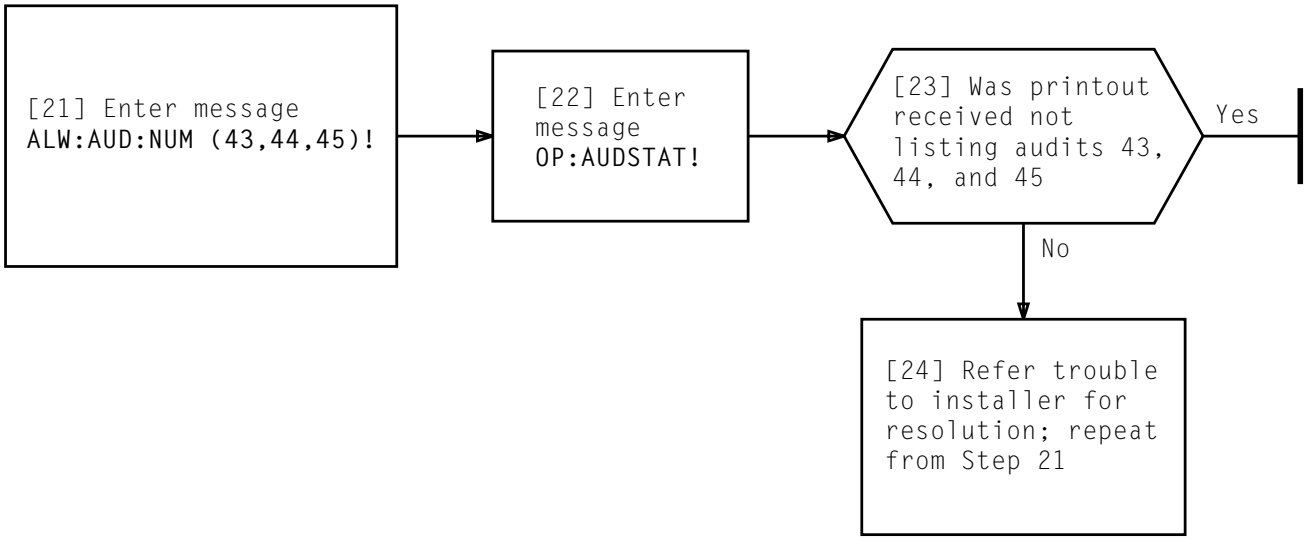


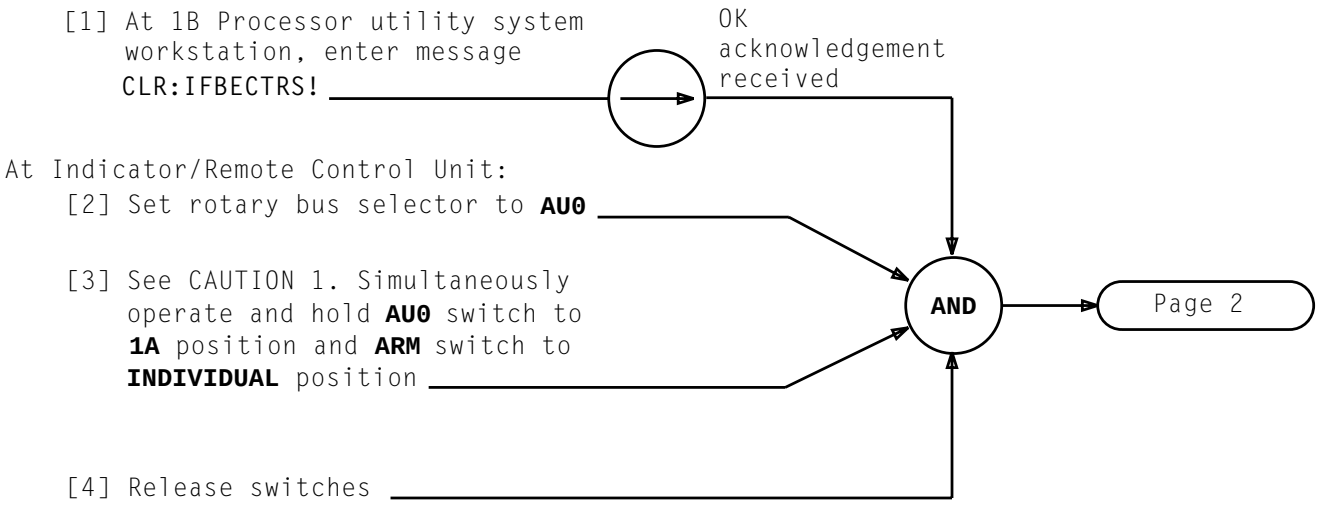
TABLE E

NG, CODE	REASON
07	Stream exerciser was not allowed to run
08	Stream exerciser has not finished sending messages

PERFORM STREAM EXERCISER TEST

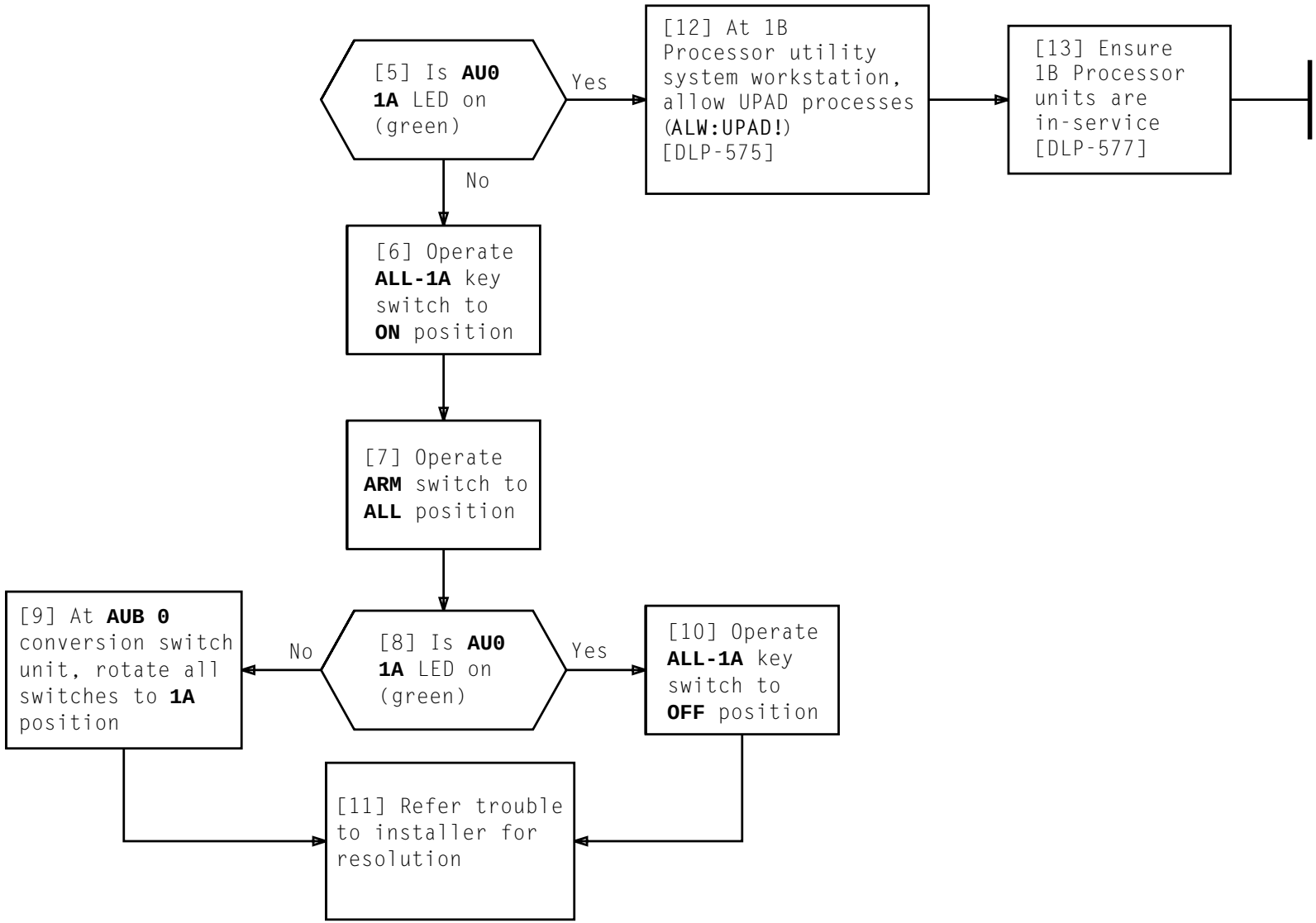


PERFORM STREAM EXERCISER TEST



CAUTION 1
Care must be taken to ensure that only AU0 and ARM switches are being operated

SWITCH AUB 0 CONVERSION SWITCH FROM 1B PROCESSOR BUS ACCESS TO 1A PROCESSOR BUS ACCESS



SWITCH AUB 0 CONVERSION SWITCH FROM 1B PROCESSOR BUS ACCESS TO 1A PROCESSOR BUS ACCESS

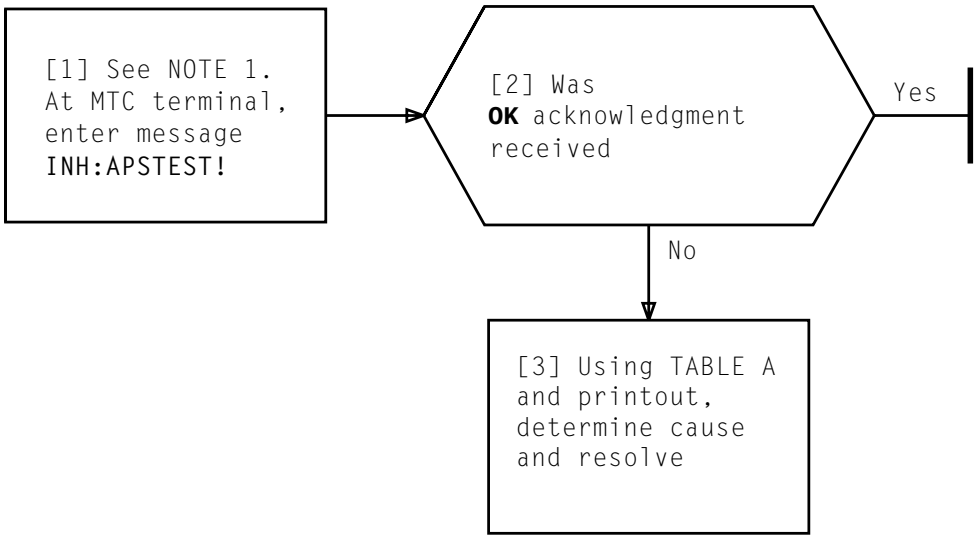
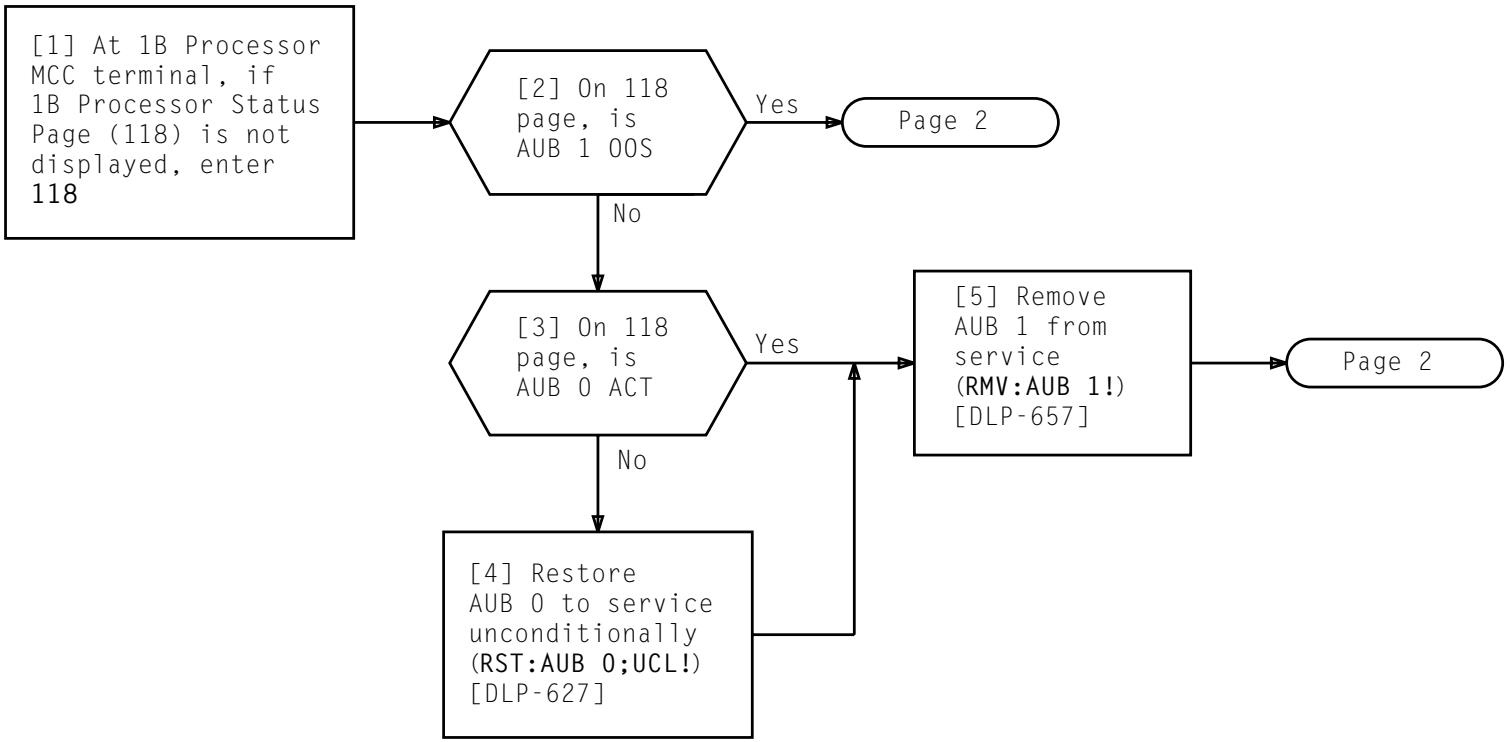


TABLE A

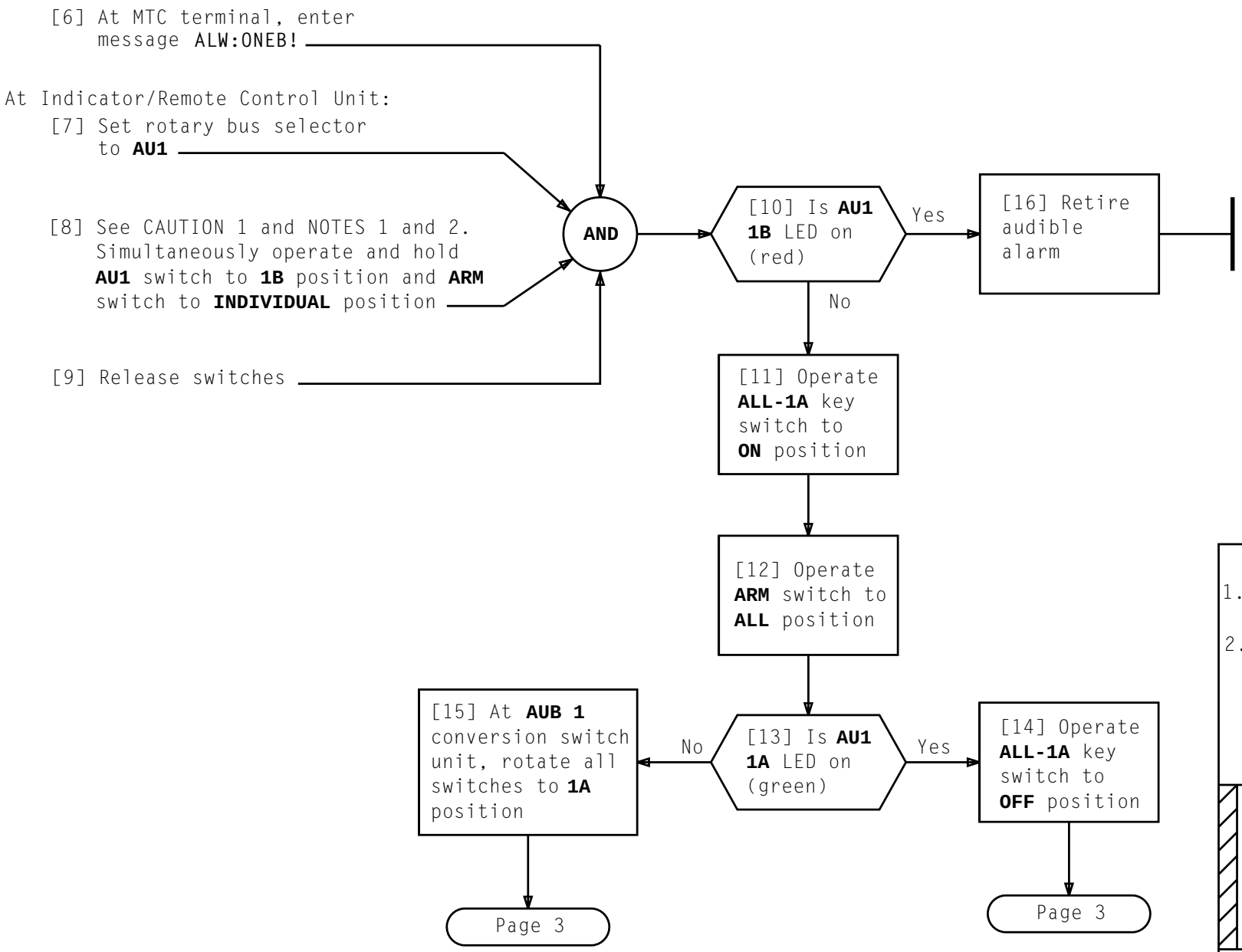
NG, CODE	REASON
05	APS test was not allowed to run. ALW:APSTEST message was not input or request could not be sent to APS to allow test. Since test was not previously allowed, INH:APSTEST does not need to be entered

NOTE 1
After 1 minute, expect BLM messages from 1B Processor and APIs to duplex fail

CLEAR API BEING TESTED FROM OFF-LINE STATE



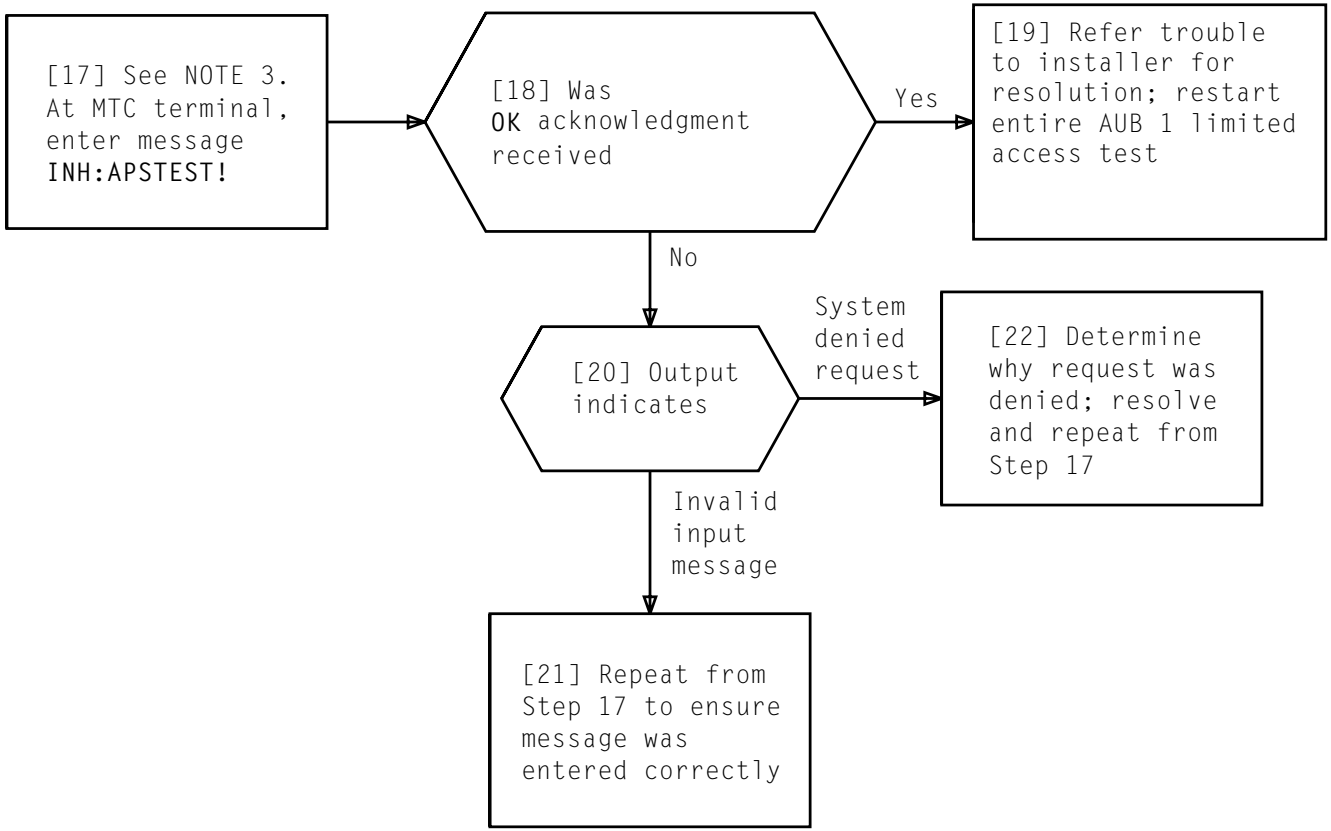
SWITCH AUB 1 CONVERSION SWITCH FROM 1A PROCESSOR BUS ACCESS TO 1B PROCESSOR BUS ACCESS



NOTES
1. Audible alarm will be received
2. REPT: OA xx 1B CVSW OFNL ACTIVATED, FLOOR x message will be received at MTC terminal

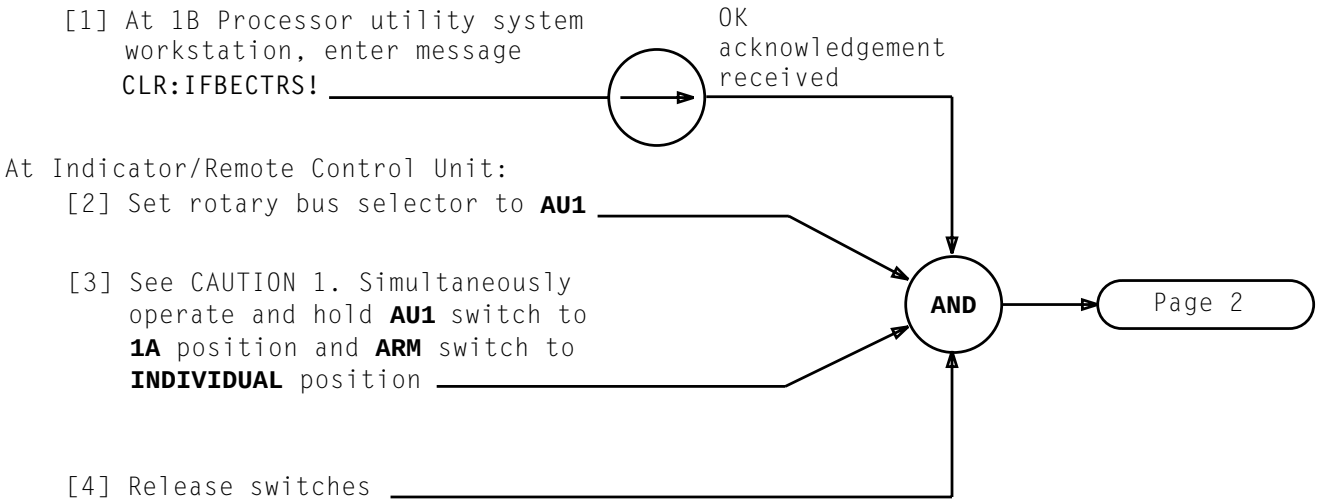
CAUTION 1
Care must be taken to ensure that only AU1 and ARM switches are being operated

SWITCH AUB 1 CONVERSION SWITCH FROM 1A PROCESSOR BUS ACCESS TO 1B PROCESSOR BUS ACCESS



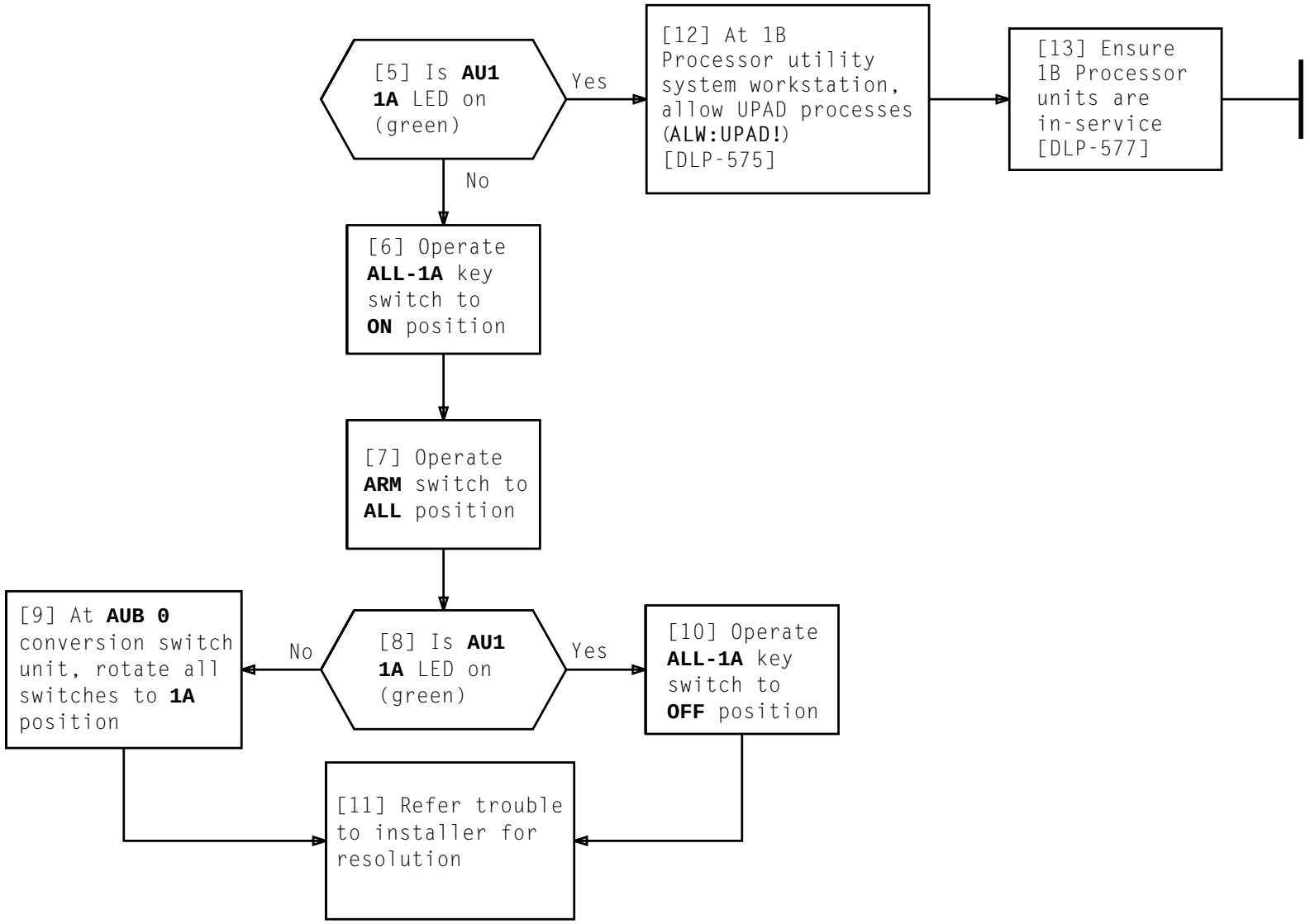
NOTE 3
After 1 minute, expect BLM messages from 1B Processor and APIs to duplex fail

SWITCH AUB 1 CONVERSION SWITCH FROM 1A PROCESSOR BUS ACCESS TO 1B PROCESSOR BUS ACCESS



CAUTION 1
Care must be taken to ensure that only AU1 and ARM switches are being operated

SWITCH AUB 1 CONVERSION SWITCH FROM 1B PROCESSOR BUS ACCESS TO 1A PROCESSOR BUS ACCESS



SWITCH AUB 1 CONVERSION SWITCH FROM 1B PROCESSOR BUS ACCESS TO 1A PROCESSOR BUS ACCESS

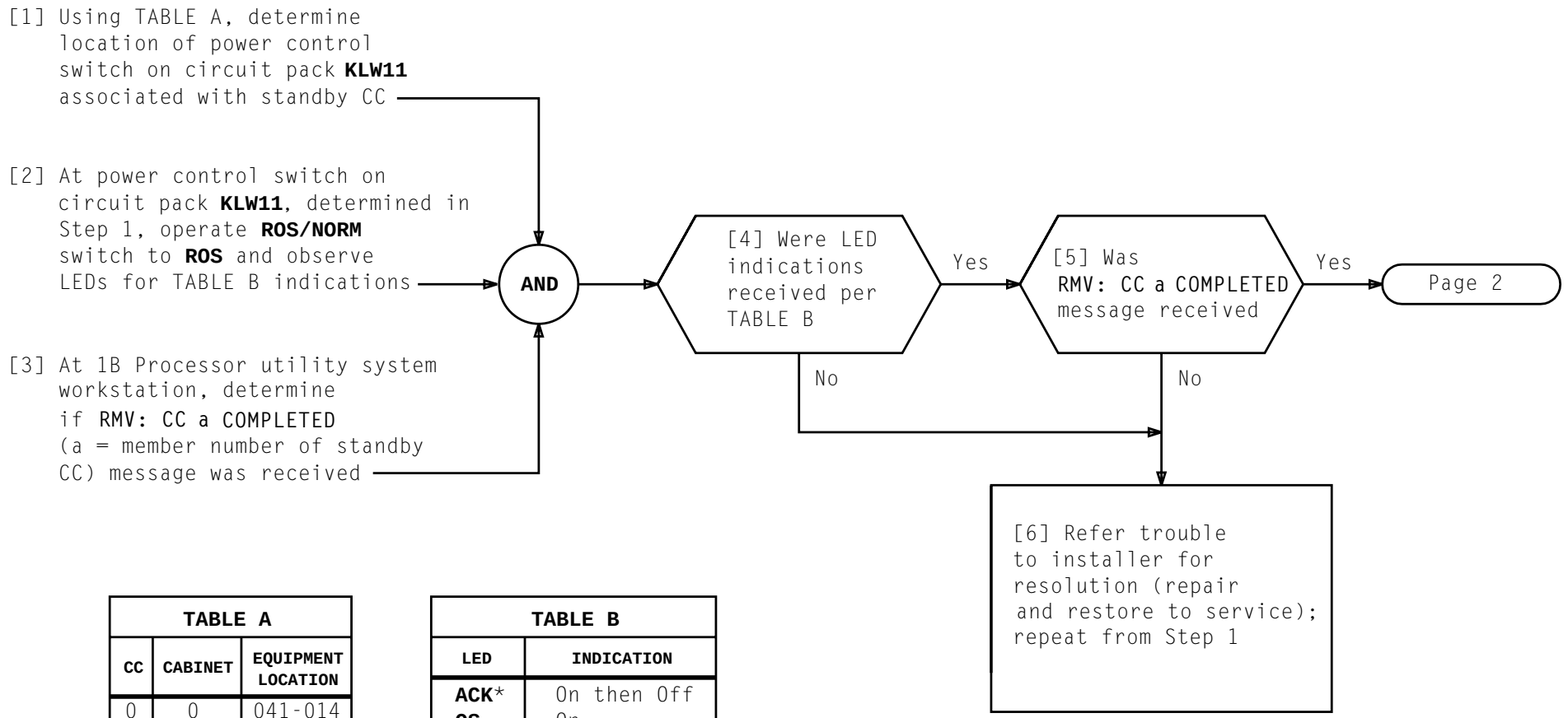


TABLE A

CC	CABINET	EQUIPMENT LOCATION
0	0	041-014
1	1	141-014

TABLE B

LED	INDICATION
ACK*	On then Off
OS	On

* expected indication may take a short period of time to be received

DIAGNOSE STANDBY 1B PROCESSOR CC

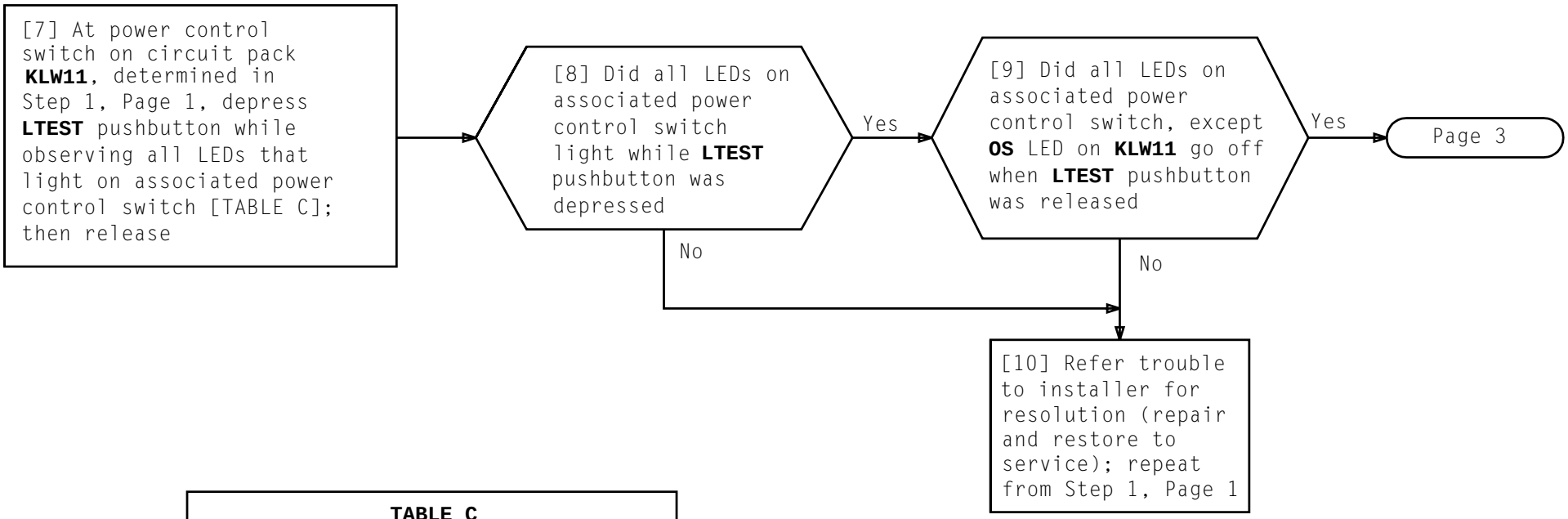
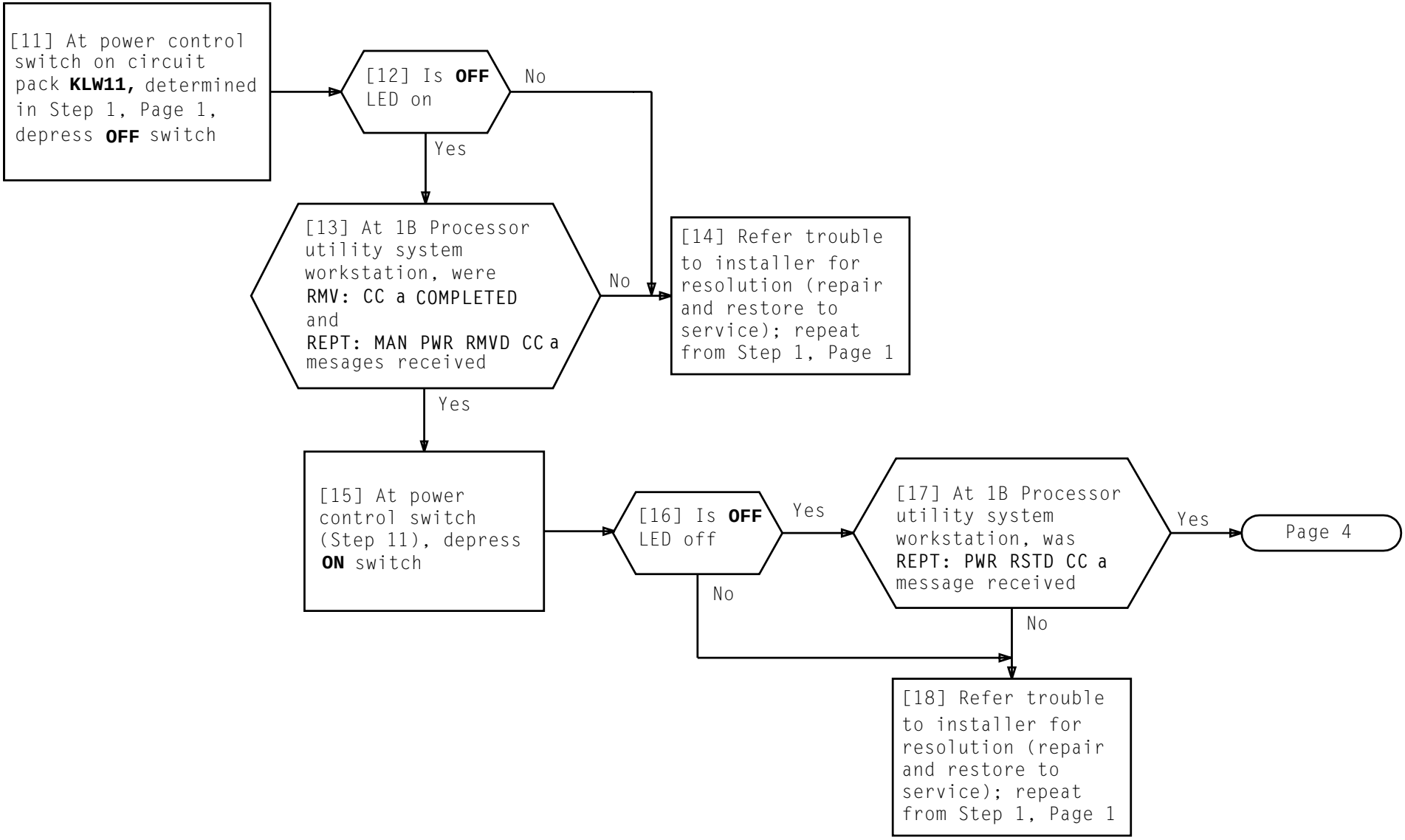


TABLE C

CIRCUIT PACK CONTAINING LEDS	CIRCUIT PACK LOCATION	NUMBER OF LEDS ON CIRCUIT PACK
KLW11	41-014	19
KLW12	58-014	16
KLW03	41-104	1
KLW04	41-112	1
KLW22	41-120	1

DIAGNOSE STANDBY 1B PROCESSOR CC



DIAGNOSE STANDBY 1B PROCESSOR CC

[19] At power control switch on circuit pack **KLW11**, determined in Step 1, Page 1, operate **ROS/NORM** switch to **NORM** and observe LEDs for TABLE D indications

[20] At 1B Processor utility system workstation, determine if printout was received per TABLE E

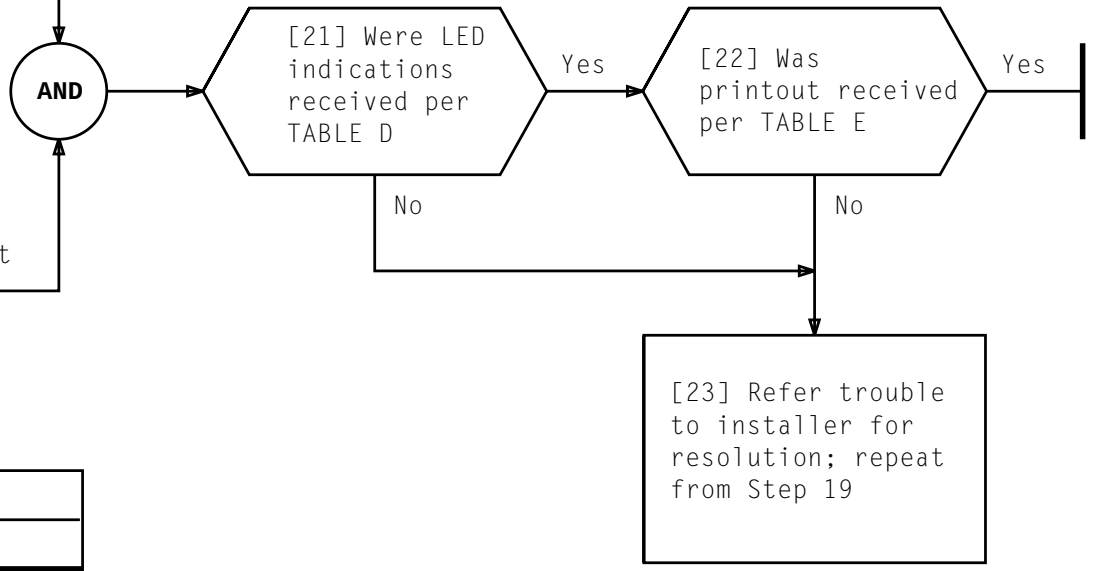


TABLE D	
LED	**INDICATION**
ACK*	On then Off
OS**	Off

* **ACK** LED will go off approximately 15 minutes after operating **ROS/NORM** switch

** this will not occur until restore is complete

TABLE E	
MESSAGE NUMBER	**OUTPUT MESSAGES**
1	DGN:CC a COMPLETED CATP (20000000 00000000) MSG COMPL TEST:CC a DFR ATP RST:CC a COMPLETED

a = member number of standby CC

DIAGNOSE STANDBY 1B PROCESSOR CC

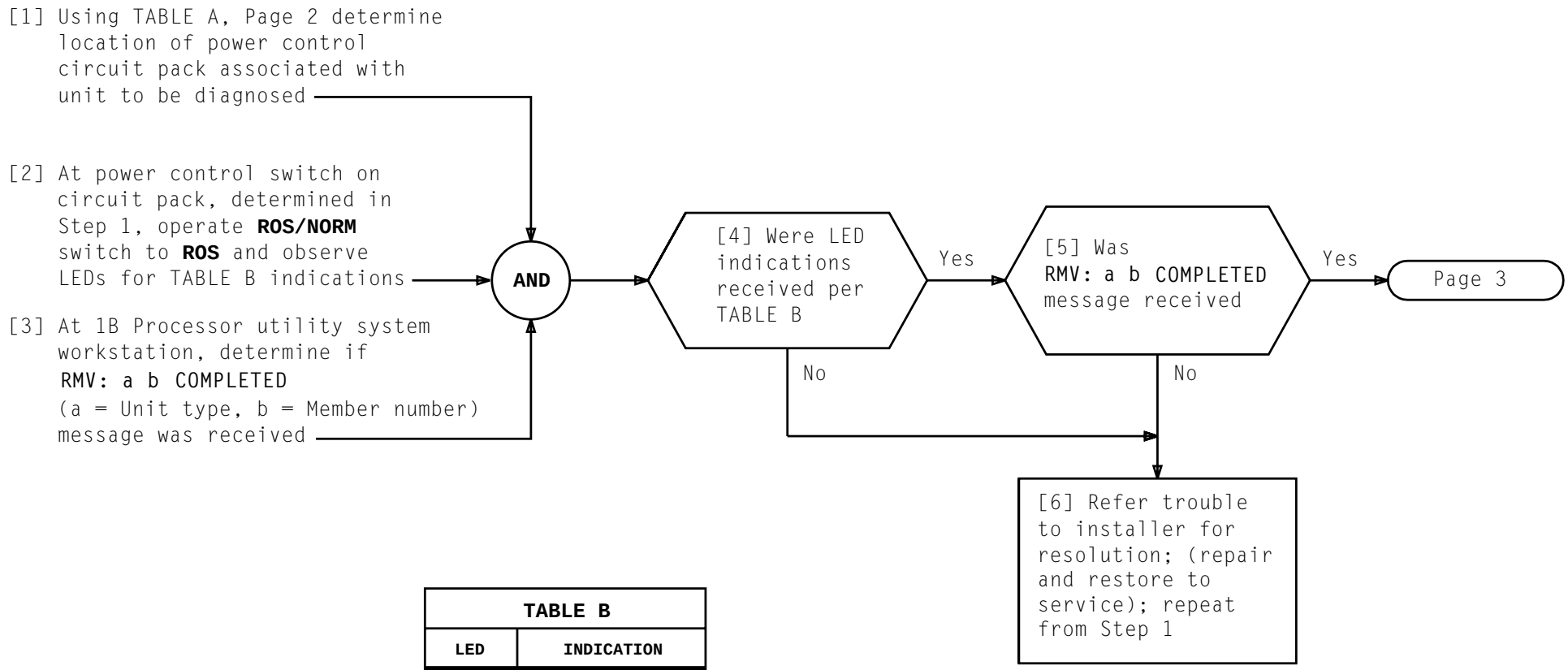
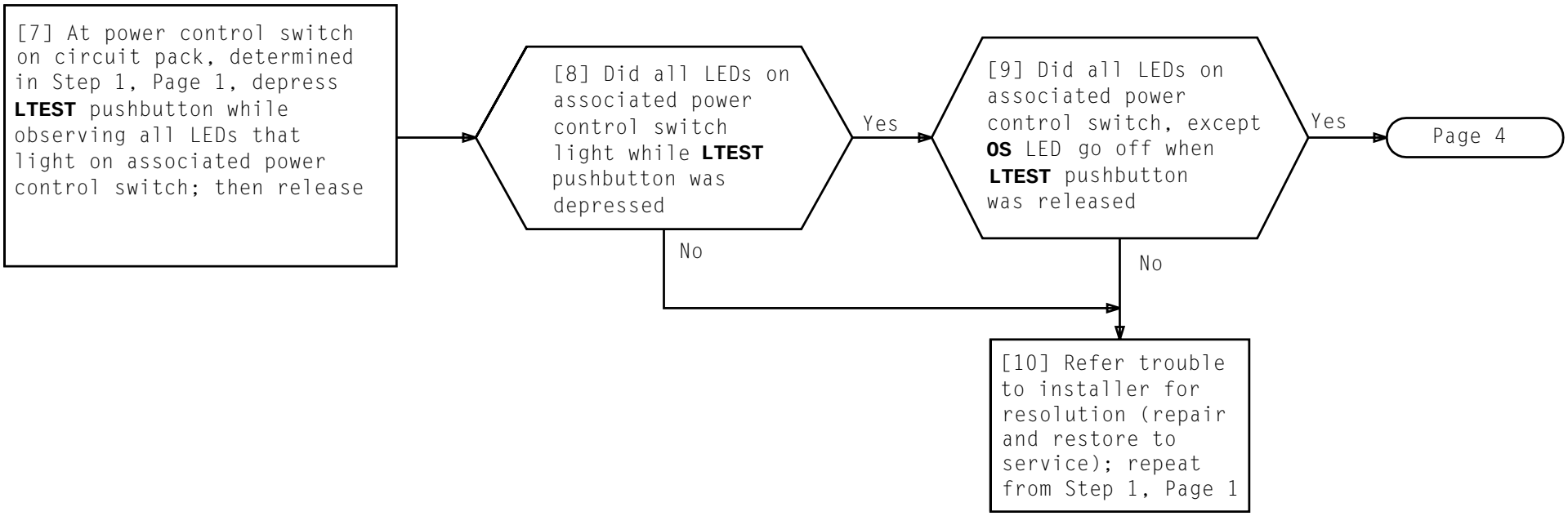


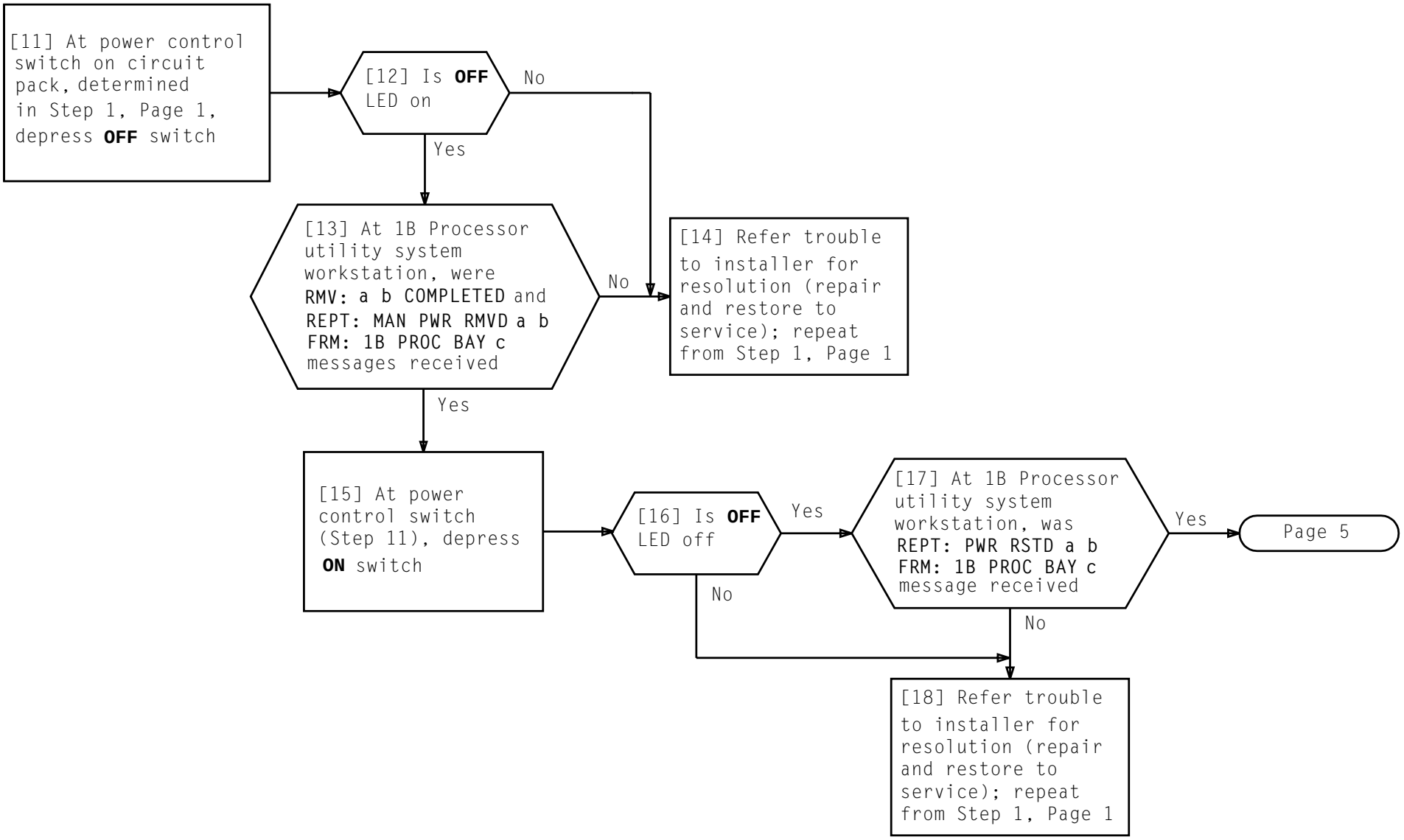
TABLE B	
LED	**INDICATION**
ACK*	On then Off
OS	On

* expected indication may take a short period of time to be received

DIAGNOSE CS 0 THROUGH CS 9, PS 0 THROUGH PS 3, SSD 0, AND SSD 1

TABLE A			
UNIT	POWER CONTROL CP	CABINET	EQUIPMENT LOCATION
CS 0	KLW01	0	024-006
CS 1	KLW01	1	124-006
CS 2	KLW01	0	024-176
CS 3	KLW01	1	124-176
CS 4	KLW01	0	024-014
CS 5	KLW01	1	124-014
CS 6	KLW01	0	024-168
CS 7	KLW01	1	124-168
CS 8	KLW01	0	024-022
CS 9	KLW01	1	124-022
PS 0	KLW02	0	041-128
PS 1	KLW02	1	141-128
PS 2	KLW02	0	041-136
PS 3	KLW02	1	141-136
SSD 0	KLW15	0	058-168
SSD 1	KLW15	1	158-168


[7] At power control switch on circuit pack, determined in Step 1, Page 1, depress **LTEST** pushbutton while observing all LEDs that light on associated power control switch; then release
[8] Did all LEDs on associated power control switch light while **LTEST** pushbutton was depressed
Yes
No
[9] Did all LEDs on associated power control switch, except **OS** LED go off when **LTEST** pushbutton was released
Yes
No
Page 4
[10] Refer trouble to installer for resolution (repair and restore to service); repeat from Step 1, Page 1



DIAGNOSE CS 0 THROUGH CS 9, PS 0 THROUGH PS 3, SSD 0, AND SSD 1

[19] At power control switch on circuit pack, determined in Step 1, Page 1, operate **ROS/NORM** switch to **NORM** and observe LEDs for TABLE C indications

[20] At 1B Procesor utility system workstation, determine if printout was received per TABLE D

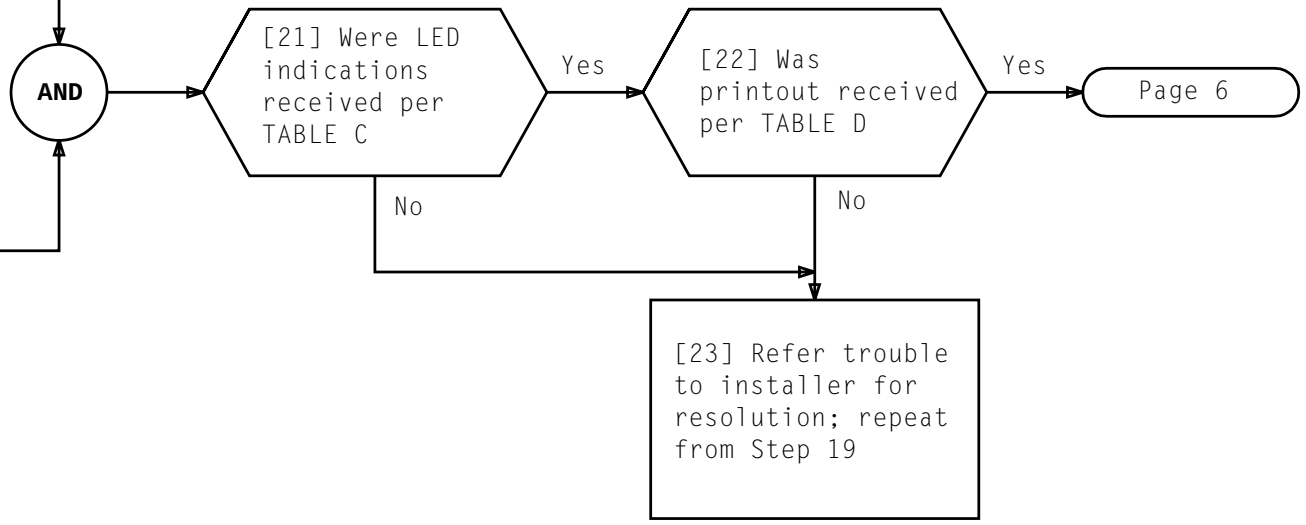


TABLE C	
LED	**INDICATION**
ACK*	On then Off
OS**	Off

* expected indication may take a short period of time to be received

** this will not occur until restore is complete

TABLE D	
MESSAGE NUMBER	**OUTPUT MESSAGES**
1	DGN: a b COMPLETED CATP (20000000 00000000) MSG COMPL TEST: a b ATP* RST: a b [MCODE c]** COMPLETED

* message will be received for SSD

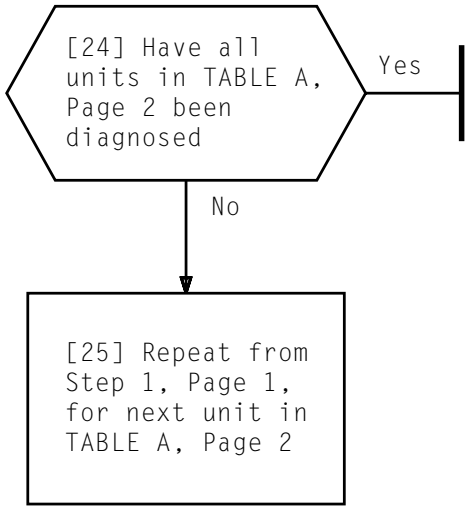
** MCODE will be received for CSs AND PSs

a = unit type being tested

b = member number of unit type being tested

c = MCODE value

DIAGNOSE CS 0 THROUGH CS 9, PS 0 THROUGH PS 3, SSD 0, AND SSD 1


[24] Have all units in TABLE A, Page 2 been diagnosed
Yes
No
[25] Repeat from Step 1, Page 1, for next unit in TABLE A, Page 2

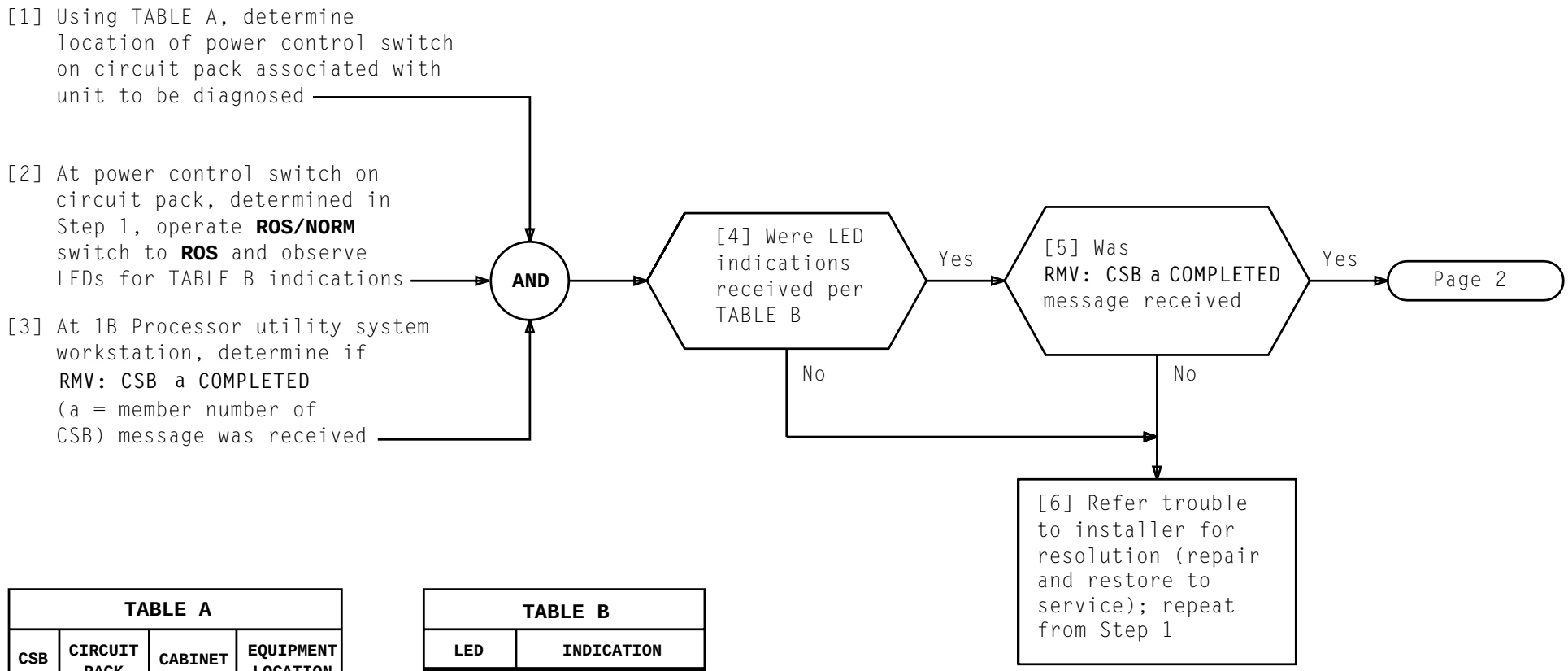


TABLE A

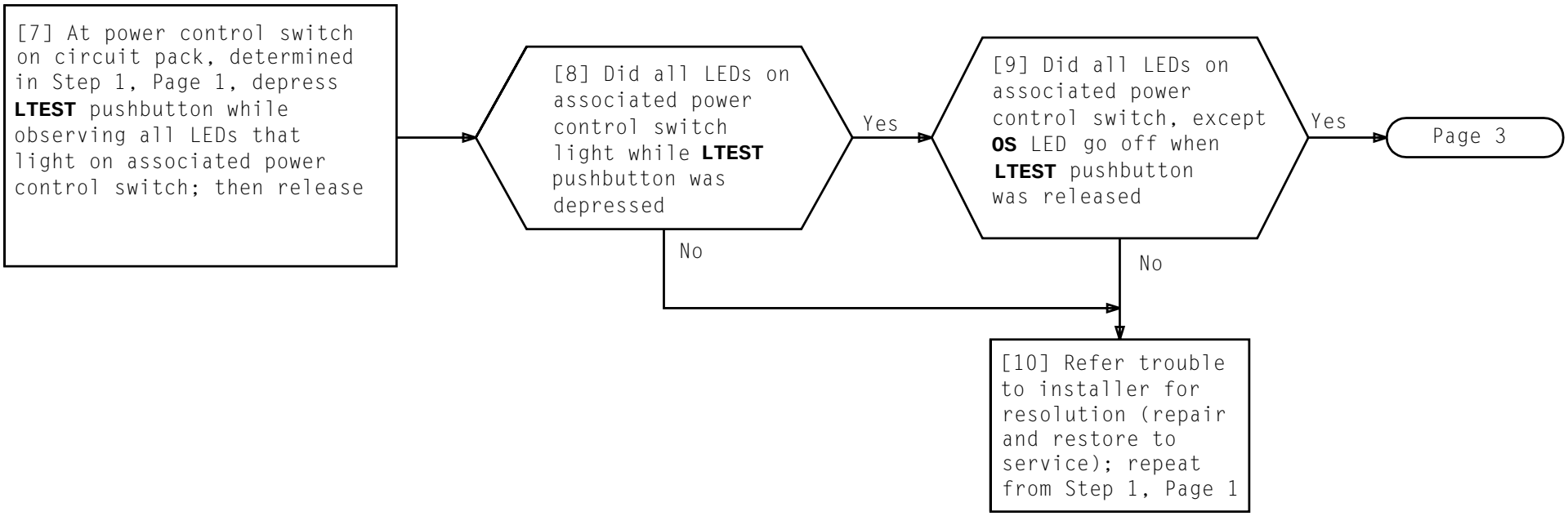
CSB	CIRCUIT PACK	CABINET	EQUIPMENT LOCATION
0	KLW26	0	024-086
0	KLW26	1	124-086
1	KLW27	0	024-096
1	KLW27	1	124-096

TABLE B

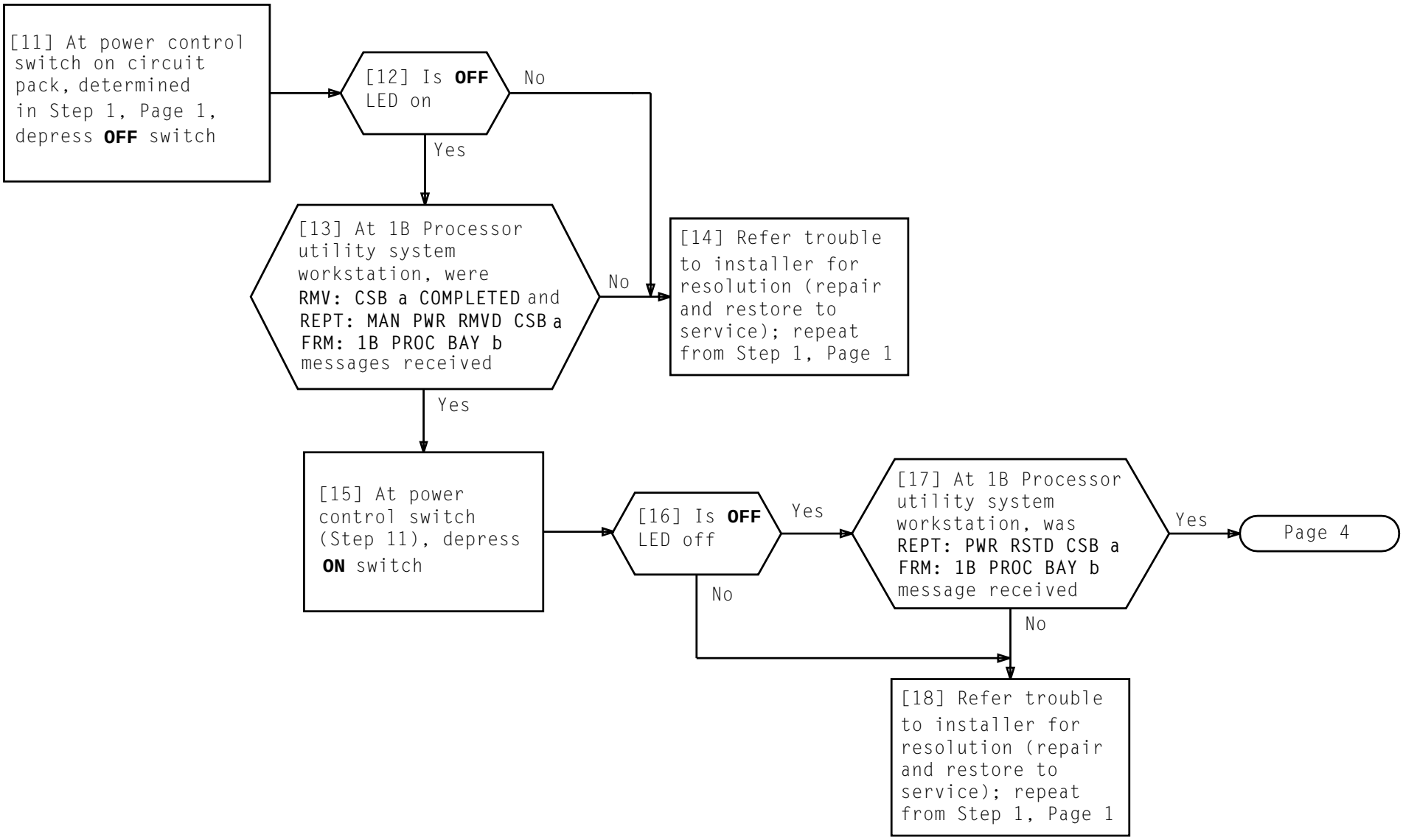
LED	INDICATION
ACK*	On then Off
OS	On

* expected indication may take a short period of time to be received

DIAGNOSE 1B PROCESSOR CSB



DIAGNOSE 1B PROCESSOR CSB



DIAGNOSE 1B PROCESSOR CSB

[19] At power control switch on circuit pack, determined in Step 1, Page 1, operate **ROS/NORM** switch to **NORM** and observe LEDs for TABLE C indications

[20] At 1B Processor utility system workstation, determine if printout was received per TABLE D

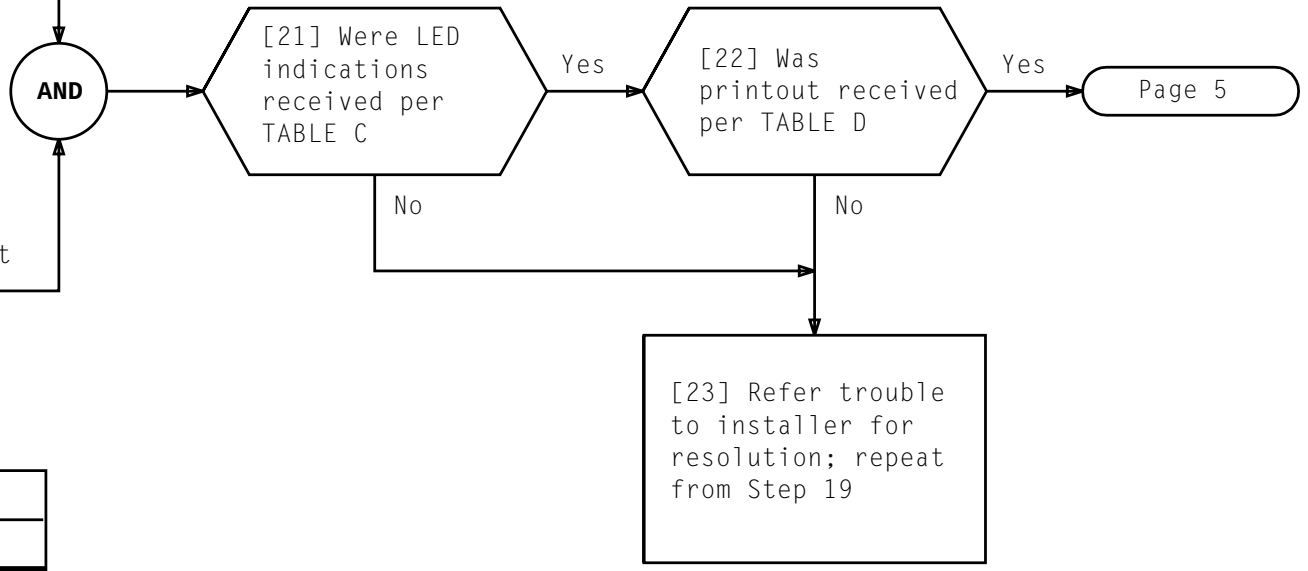


TABLE C	
LED	**INDICATION**
ACK*	On then Off
OS**	Off

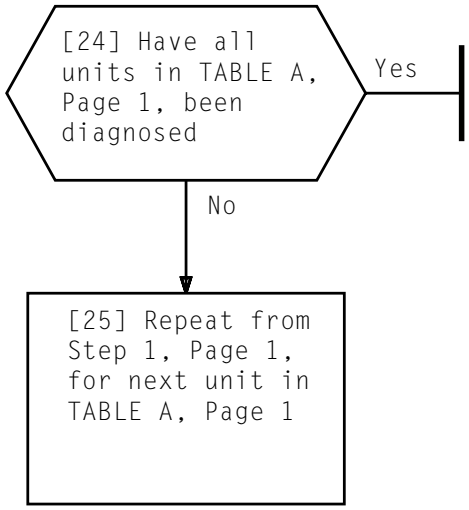
* expected indication may take a short period of time to be received

** this will not occur until restore is complete

TABLE D	
MESSAGE NUMBER	**OUTPUT MESSAGES**
1	DGN:CSB a,b : CS c COMPLETED ATP MSG COMPL RST:CSB a COMPLETED

a = member number of CSB
b = processor number
c = member number of helper CS

DIAGNOSE 1B PROCESSOR CSB



DIAGNOSE 1B PROCESSOR CSB

[1] Using TABLE A, determine location of power control switch on circuit pack associated with unit to be diagnosed

[2] At power control switch on circuit pack, determined in Step 1, operate **ROS/NORM** switch to **ROS** and observe LEDs for TABLE B indications

[3] At 1B Processor utility system workstation, determine if RMV: XPWR a COMPLETED (a = member number of XPWR) message was received

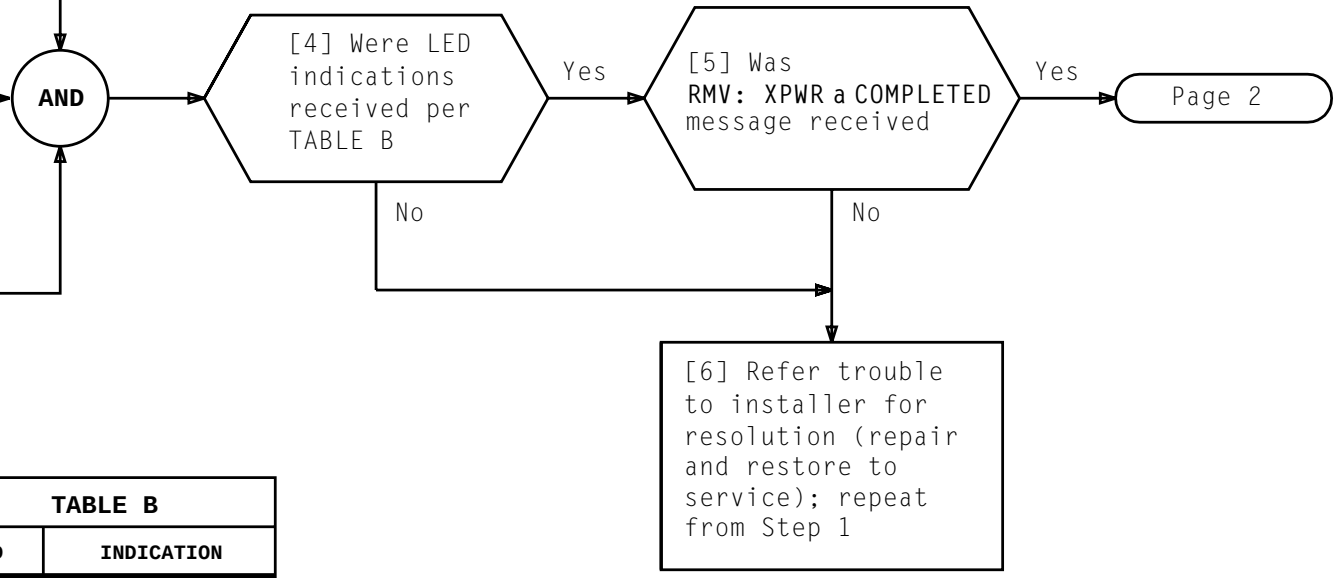
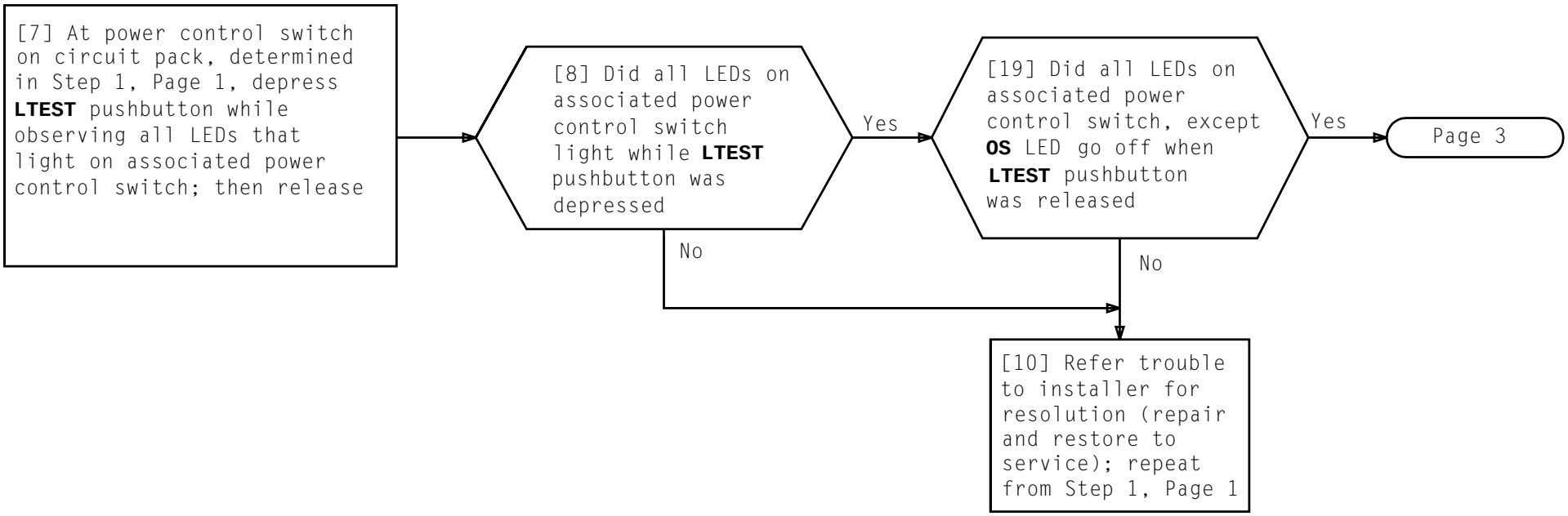


TABLE A			
XPWR	**CIRCUIT PACK**	**CABINET**	**EQUIPMENT LOCATION**
0	KLW23	0	058-030
0	KLW23	1	158-030

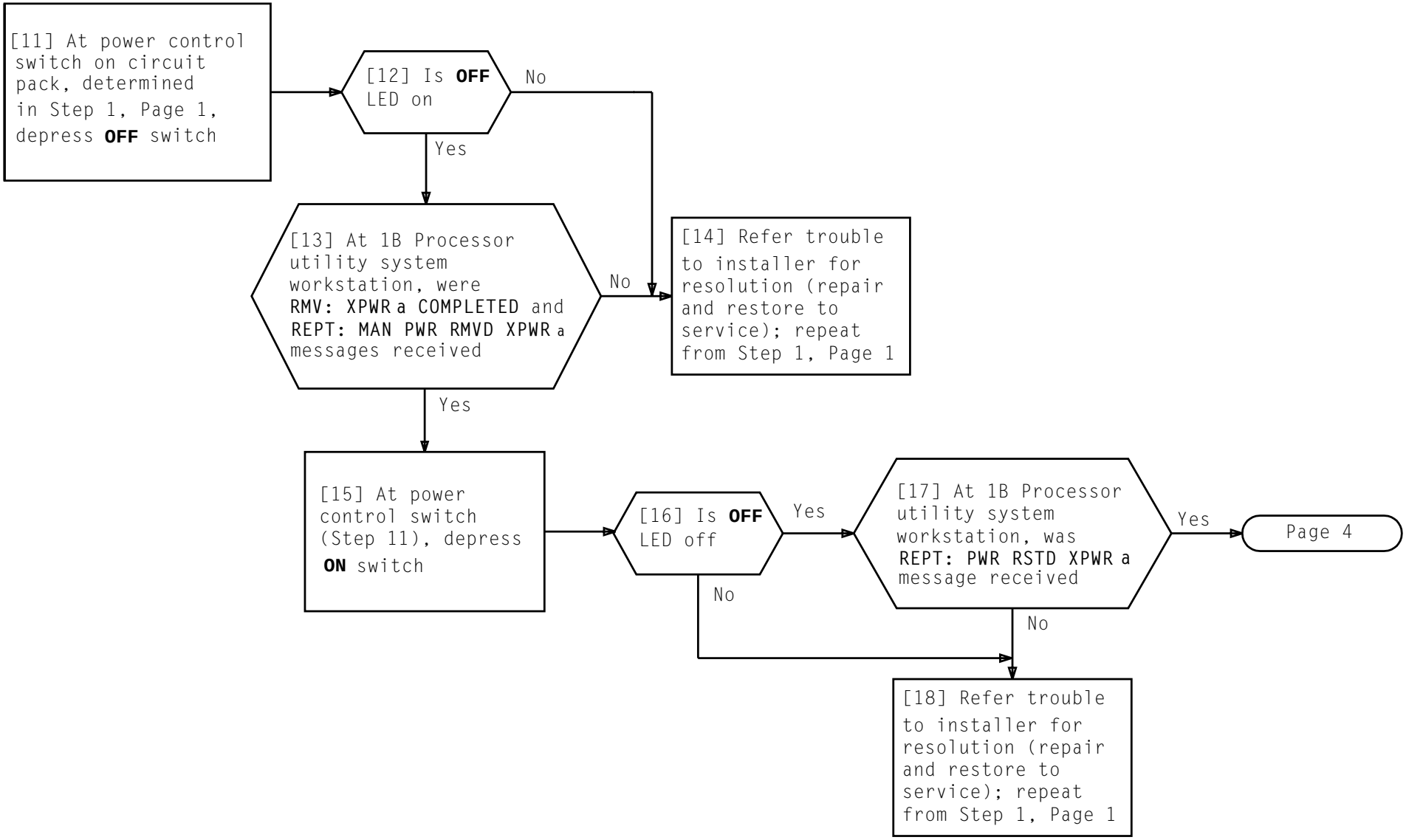
TABLE B	
LED	**INDICATION**
ACK*	On then Off
OS	On

* expected indication may take a short period of time to be received

DIAGNOSE 1B PROCESSOR XPWR



DIAGNOSE 1B PROCESSOR XPWR



DIAGNOSE 1B PROCESSOR XPWR

[19] At power control switch on circuit pack, determined in Step 1, Page 1, operate **ROS/NORM** switch to **NORM** and observe LEDs for TABLE C indications

[20] At utility system workstation, determine if printout was received per TABLE D

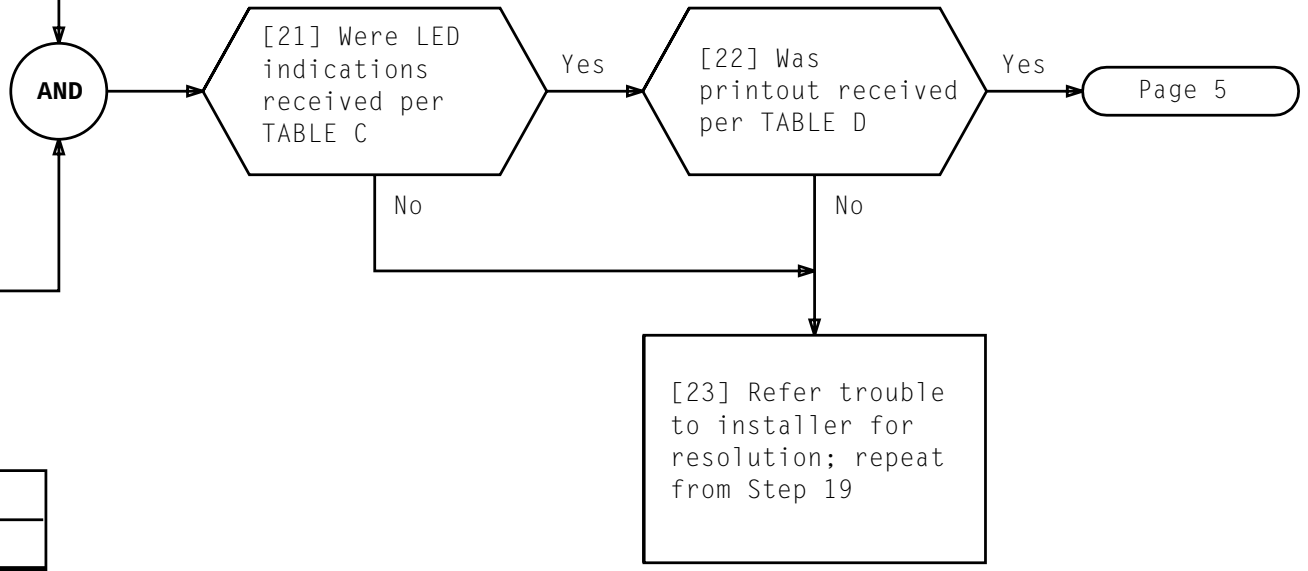


TABLE C	
LED	**INDICATION**
ACK*	On then Off
OS**	Off

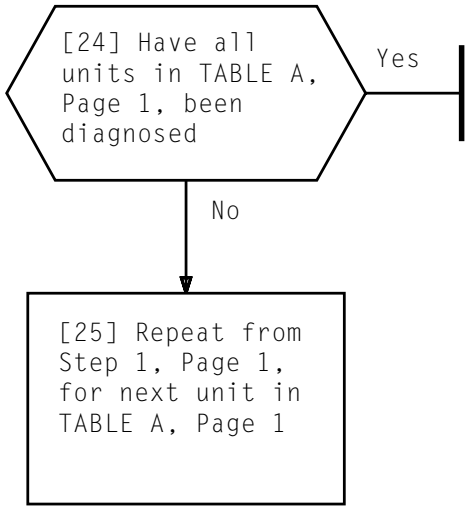
* expected indication may take a short period of time to be received

** this will not occur until restore is complete

TABLE D	
MESSAGE NUMBER	**OUTPUT MESSAGES**
1	DGN: XPWR a,COMPLETED ATP MSG COMPL RST: XPWR a COMPLETED

a = member number of standby XPWR

DIAGNOSE 1B PROCESSOR XPWR



DIAGNOSE 1B PROCESSOR XPWR

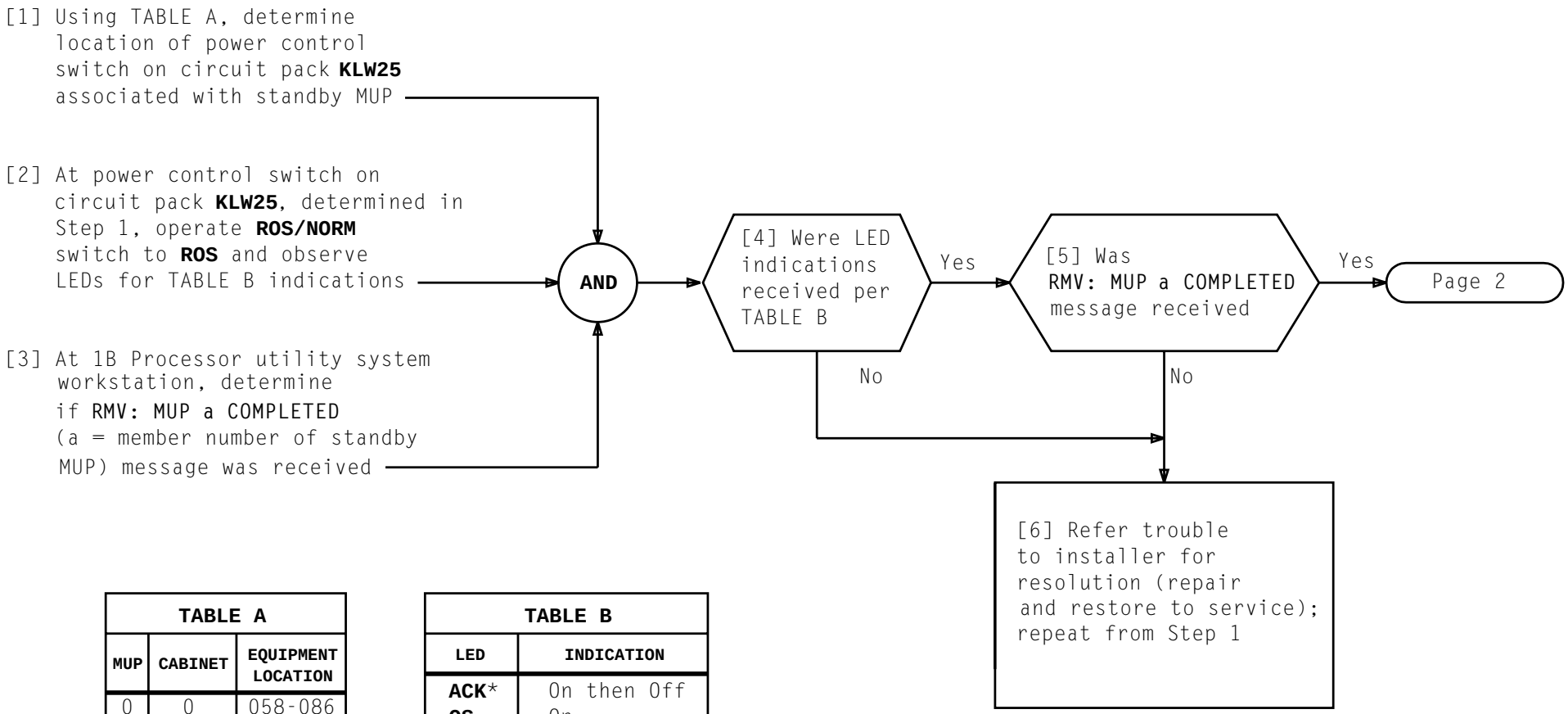


TABLE A

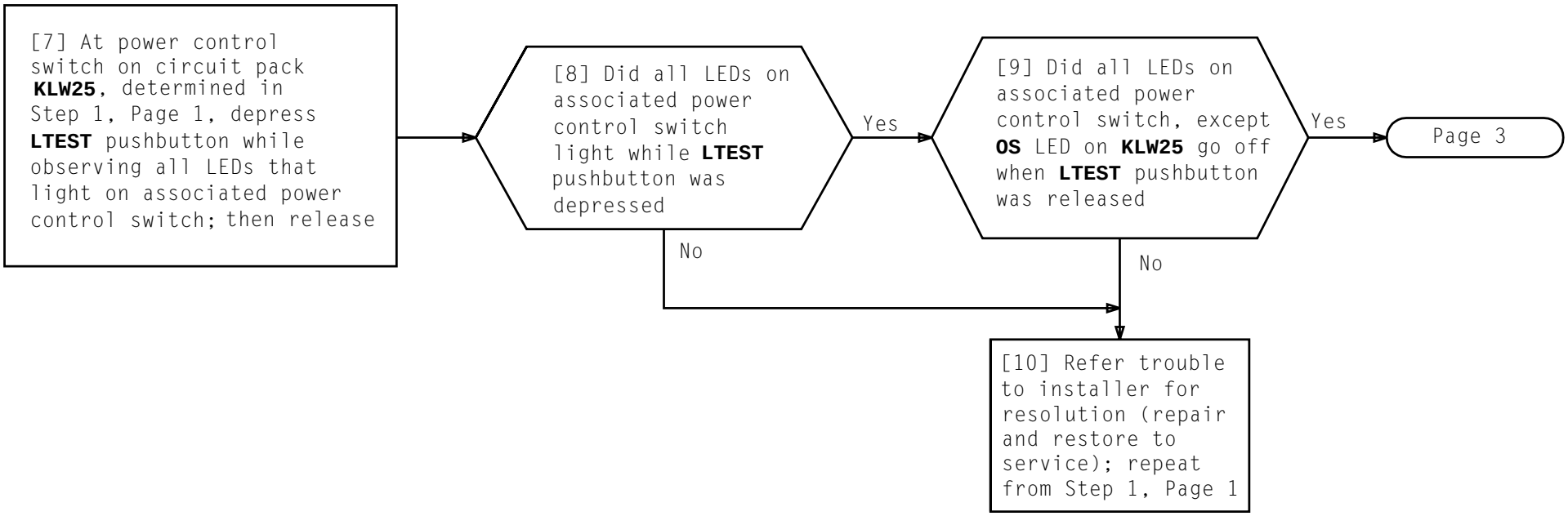
MUP	CABINET	EQUIPMENT LOCATION
0	0	058-086
1	1	158-086

TABLE B

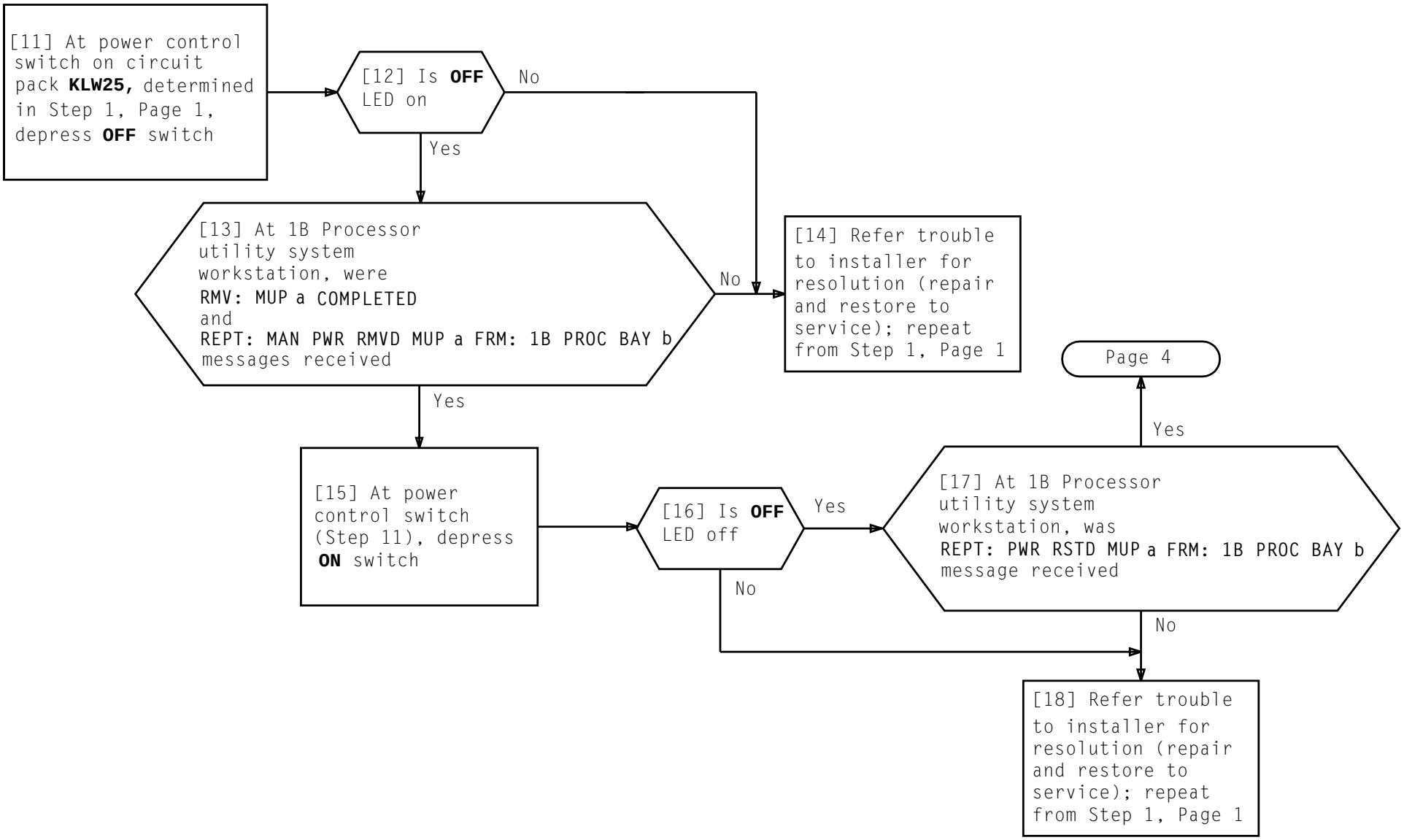
LED	INDICATION
ACK*	On then Off
OS	On

* expected indication may take a short period of time to be received

DIAGNOSE STANDBY 1B PROCESSOR MUP



DIAGNOSE STANDBY 1B PROCESSOR MUP



DIAGNOSE STANDBY 1B PROCESSOR MUP

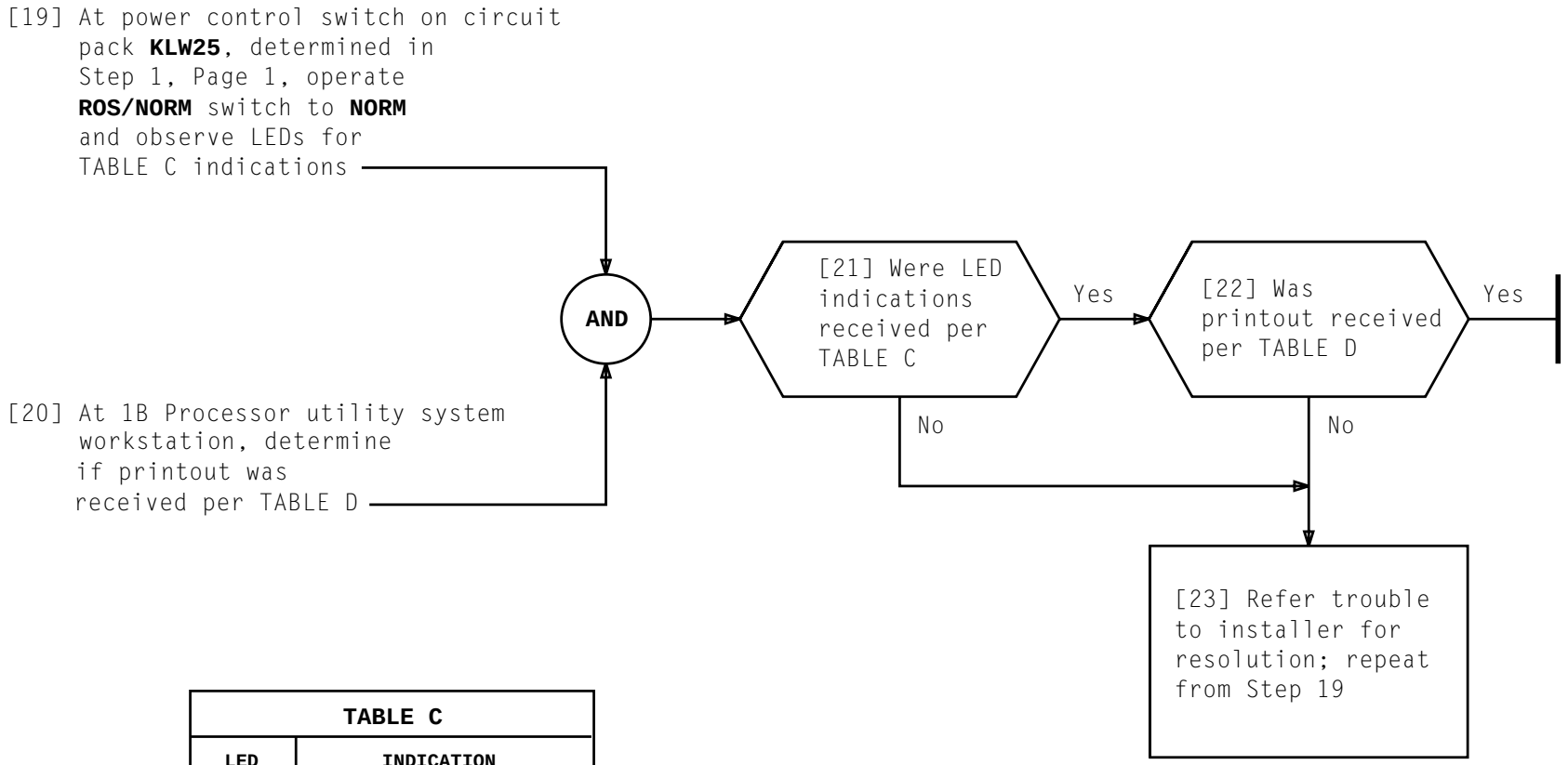


TABLE C	
LED	**INDICATION**
ACK*	On then Off
OS**	Off

* **ACK** LED will go off when **OS** LED goes off

** this will not occur until restore is complete

TABLE D	
MESSAGE NUMBER	**OUTPUT MESSAGES**
1	DGN: MUP a COMPLETED CATP (20000000 00000000) MSG COMPL TEST: MUP a ATP RST: MUP a COMPLETED

a = member number of standby MUP

DIAGNOSE STANDBY 1B PROCESSOR MUP

[1] Using TABLE A, determine location of power control switch on circuit pack **KLW18** associated with standby AUI

[2] At power control switch on circuit pack **KLW18**, determined in Step 1, operate **ROS/NORM** switch to **ROS** and observe LEDs for TABLE B indications

[3] At 1B Processor utility system workstation, determine if **RMV: AUI a COMPLETED** (a = member number of standby AUI) message was received

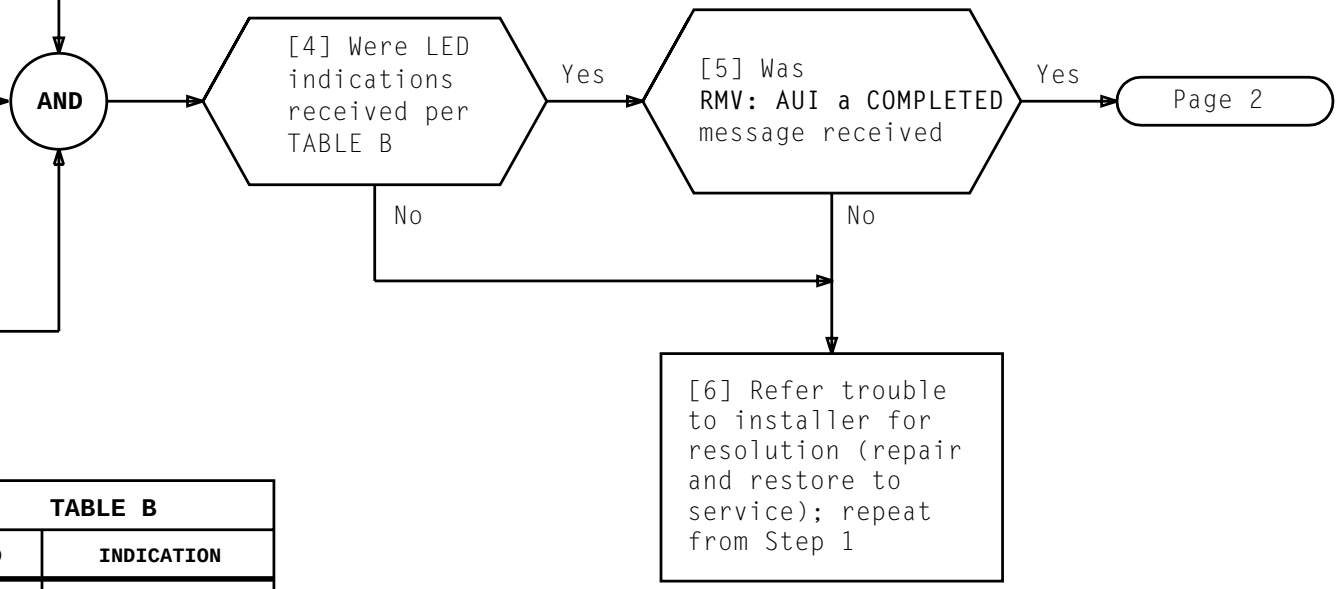
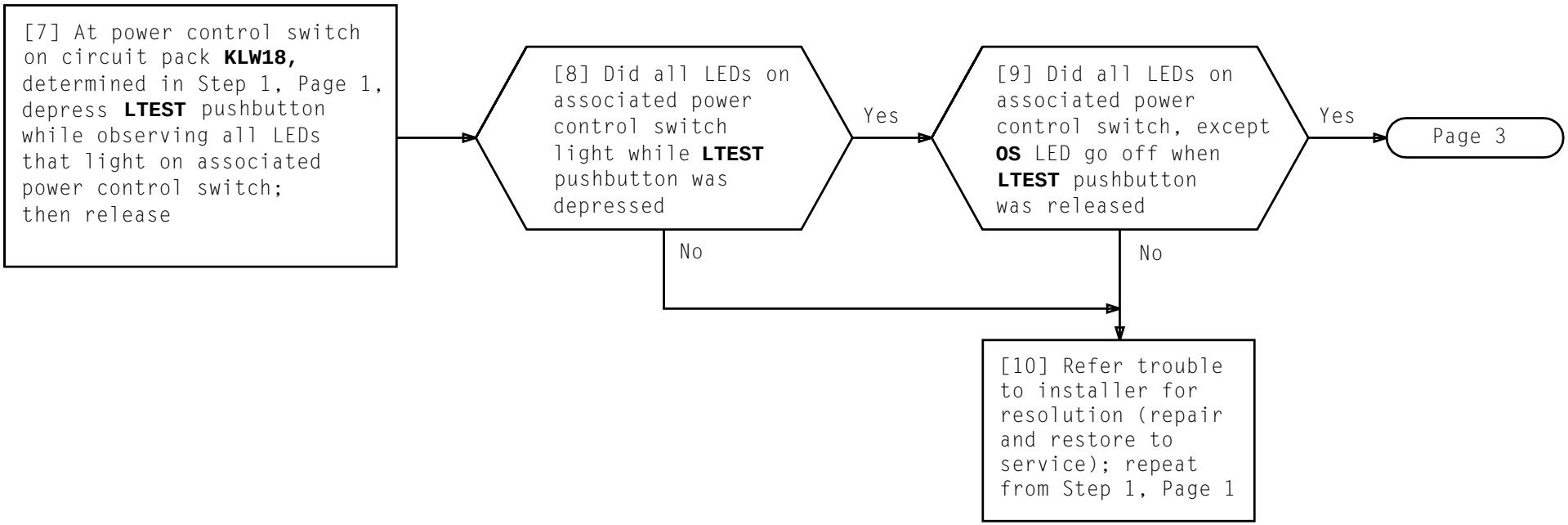


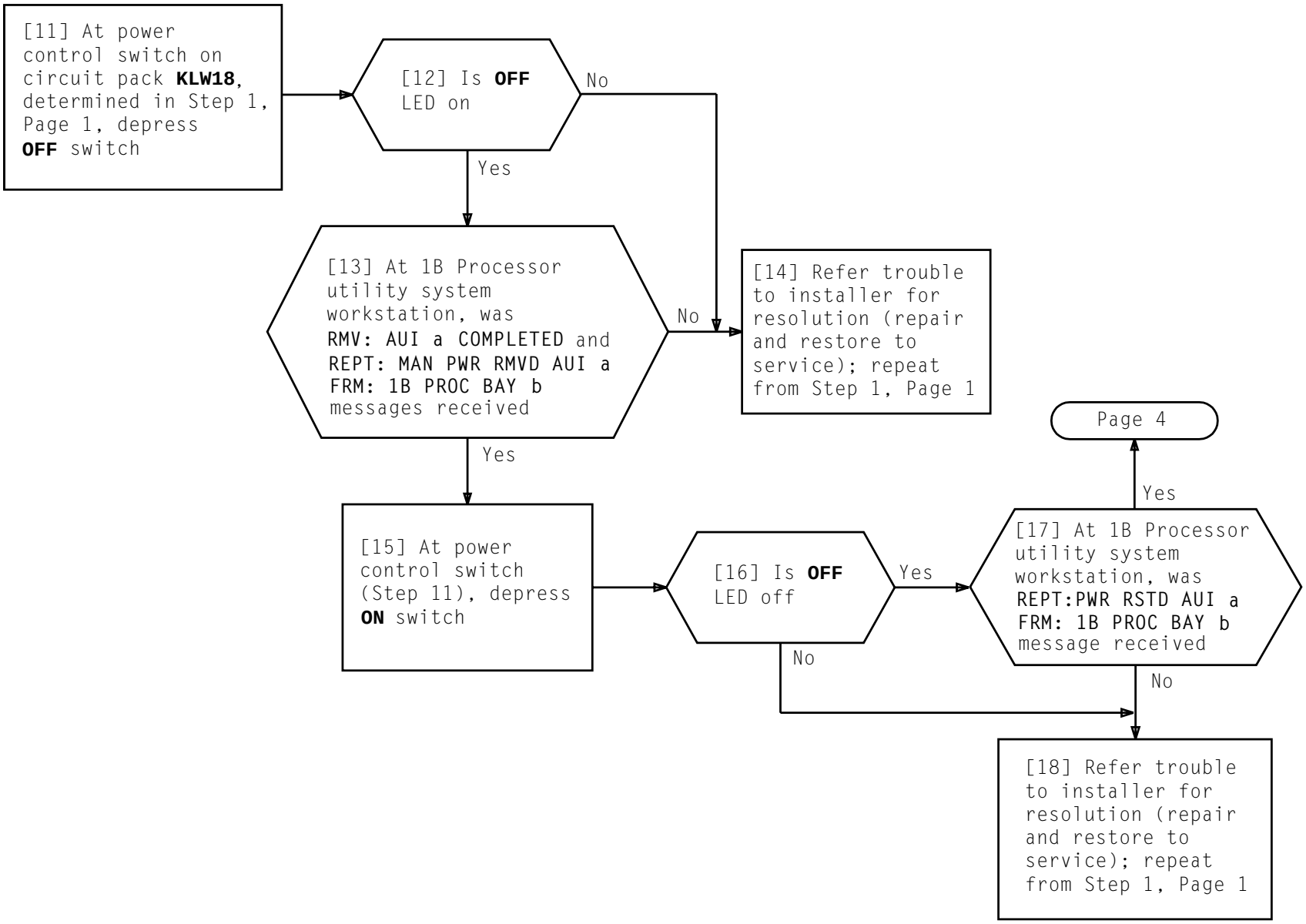
TABLE A		
AUI	**CABINET**	**EQUIPMENT LOCATION**
0	0	058-120
1	1	158-120

TABLE B	
LED	**INDICATION**
ACK*	On then Off
OS	On

* expected indication may take a short period of time to be received

DIAGNOSE STANDBY 1B PROCESSOR AUXILIARY UNIT INTERFACE (AUI)


[7] At power control switch on circuit pack **KLW18,** determined in Step 1, Page 1, depress **LTEST** pushbutton while observing all LEDs that light on associated power control switch; then release
[8] Did all LEDs on associated power control switch light while **LTEST** pushbutton was depressed
Yes
No
[9] Did all LEDs on associated power control switch, except **OS** LED go off when **LTEST** pushbutton was released
Yes
No
Page 3
[10] Refer trouble to installer for resolution (repair and restore to service); repeat from Step 1, Page 1



DIAGNOSE STANDBY 1B PROCESSOR AUXILIARY UNIT INTERFACE (AUI)

[19] At power control switch on circuit pack **KLW18**, determined in Step 1, Page 1, operate **ROS/NORM** switch to **NORM** and observe LEDs for TABLE D indications

[20] At 1B Processor utility system workstation, determine if printout was received per Table E

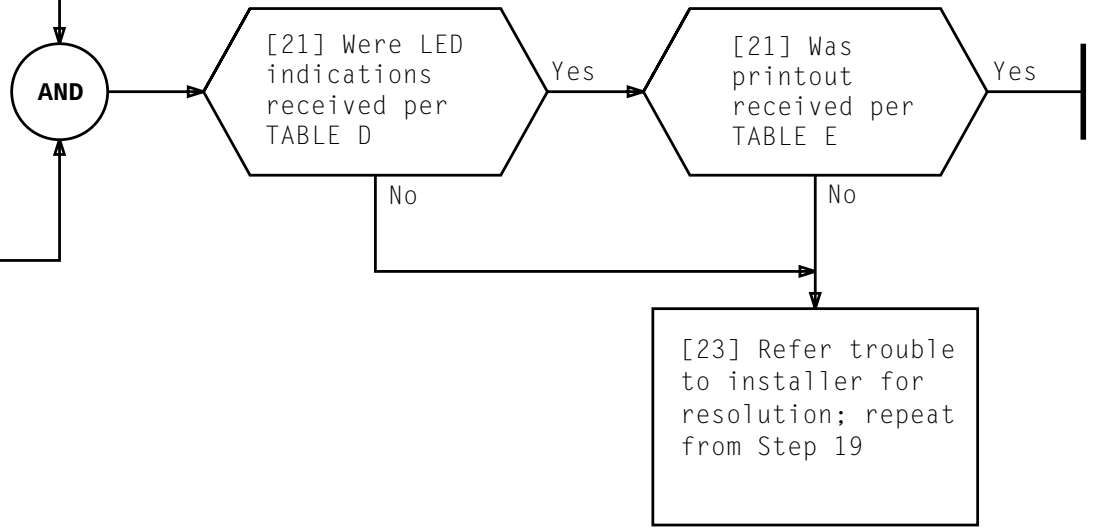


TABLE D	
LED	**INDICATION**
ACK*	On then Off
OS**	Off

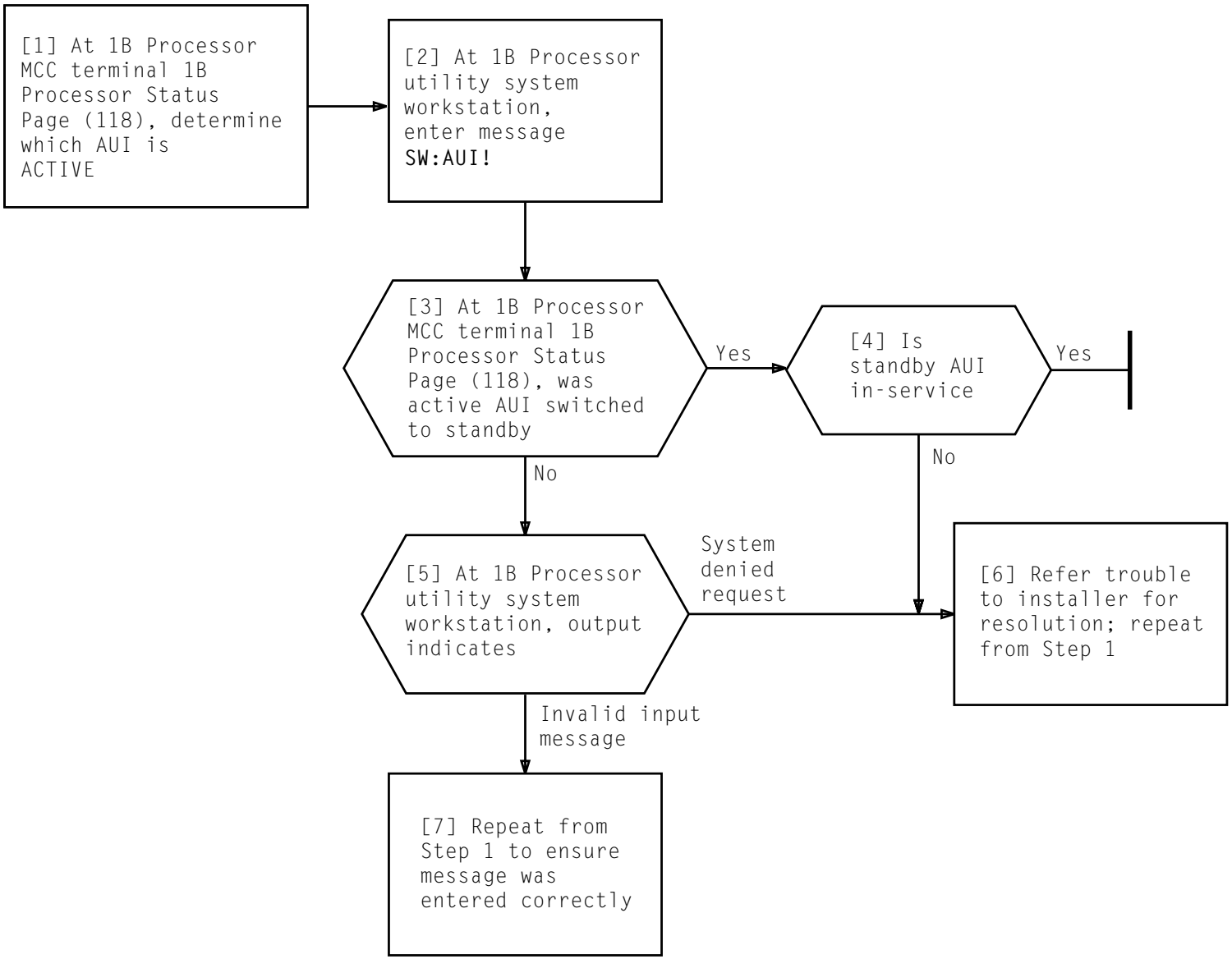
* **ACK** LED will go off when **OS** LED goes off

** this will not occur until restore is complete

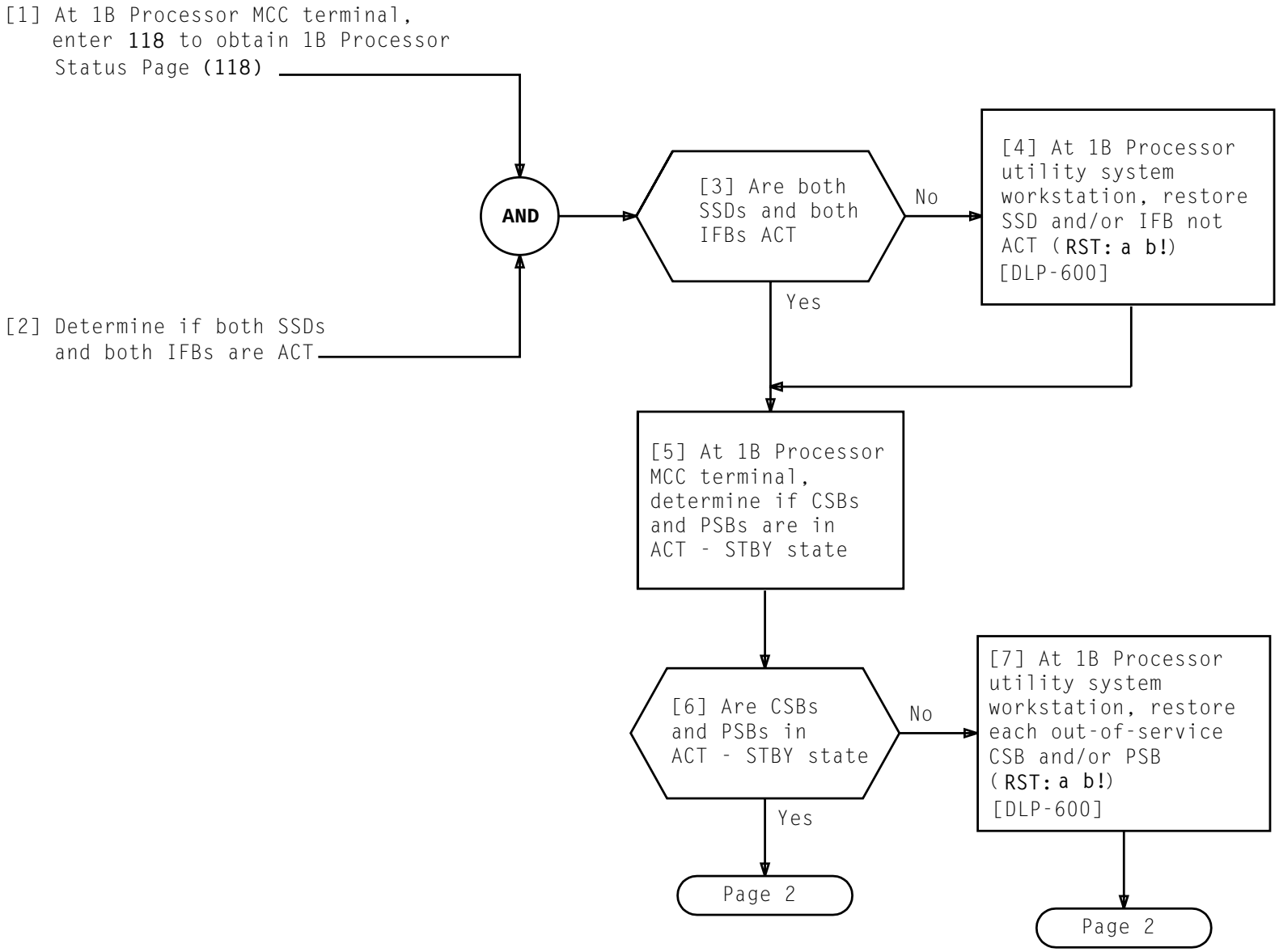
TABLE E	
MESSAGE NUMBER	**OUTPUT MESSAGES**
1	DGN: AUI a COMPLETED CATP (20000000 000b0c00) MSG COMPL TEST: AUI a ATP RST: AUI a COMPLETED

a = member number of standby AUI
b = 2 (if API 0 or DUS 0 not available) or
    4 (if API 1 or DUS 1 not available)
c = 1 (if AUB 0 OOS) or
    2 (if AUB 1 OOS)

DIAGNOSE STANDBY 1B PROCESSOR AUXILIARY UNIT INTERFACE (AUI)



SWITCH 1B PROCESSOR AUXILIARY UNIT INTERFACES (AUIs)



DIAGNOSE MISCELLANEOUS POWER (XPWR)

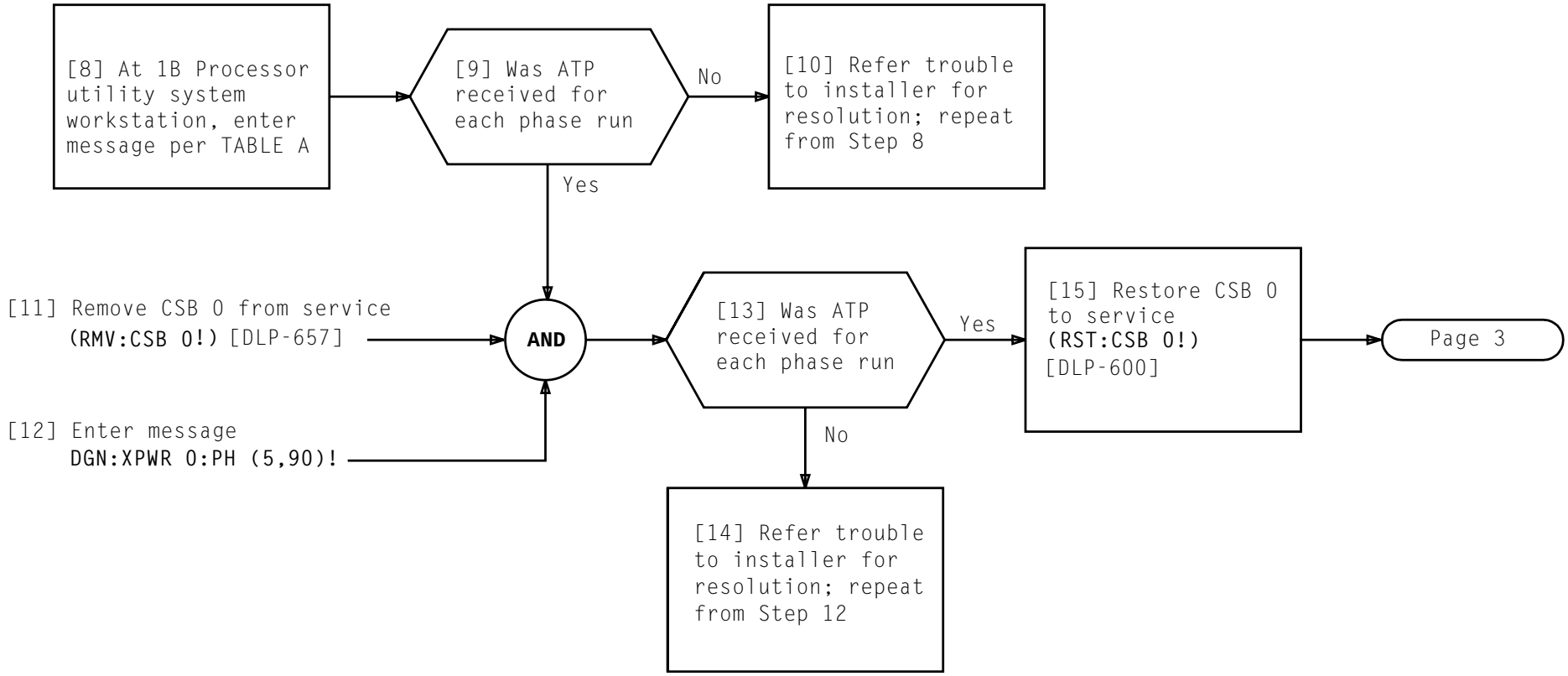
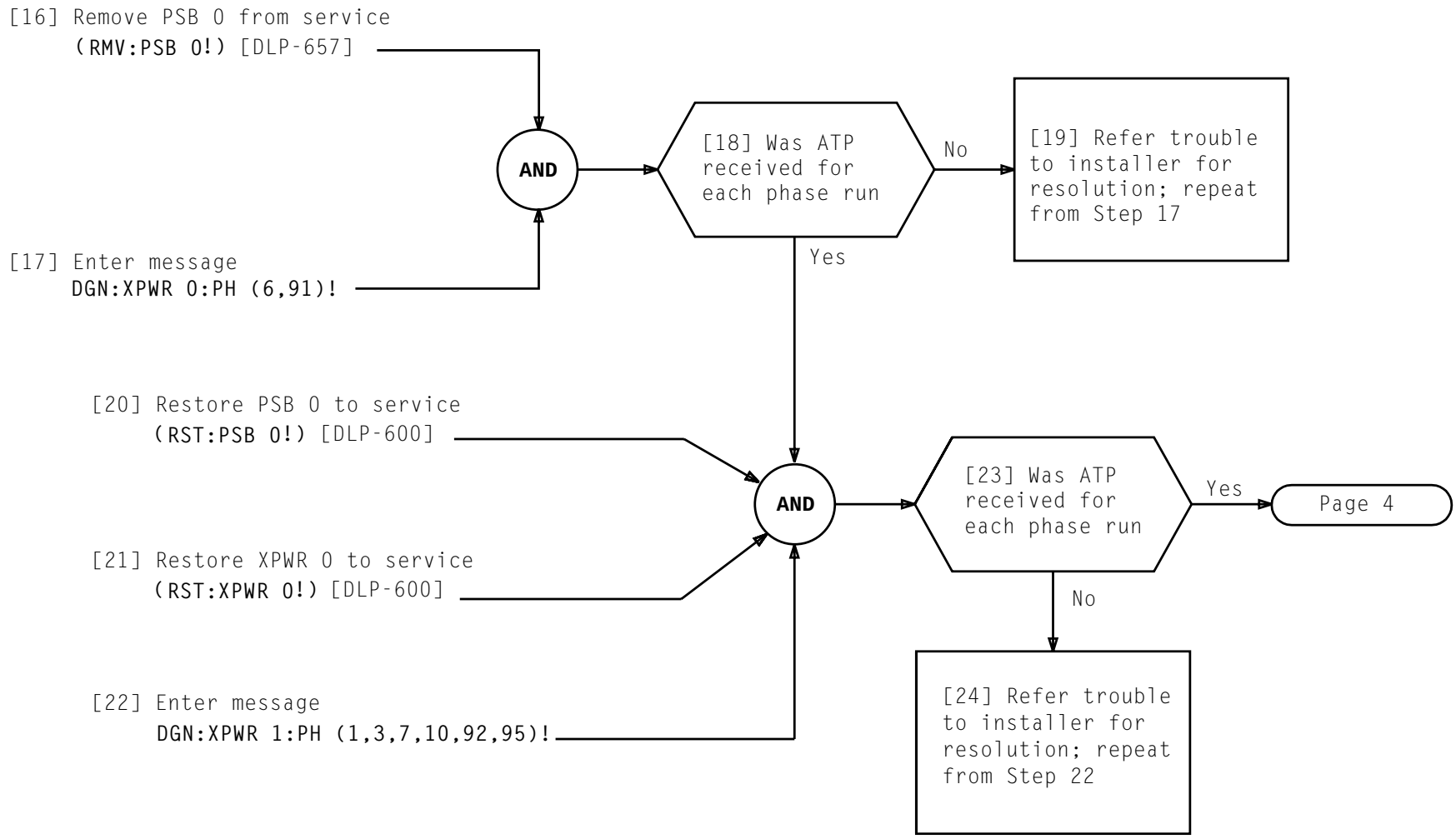
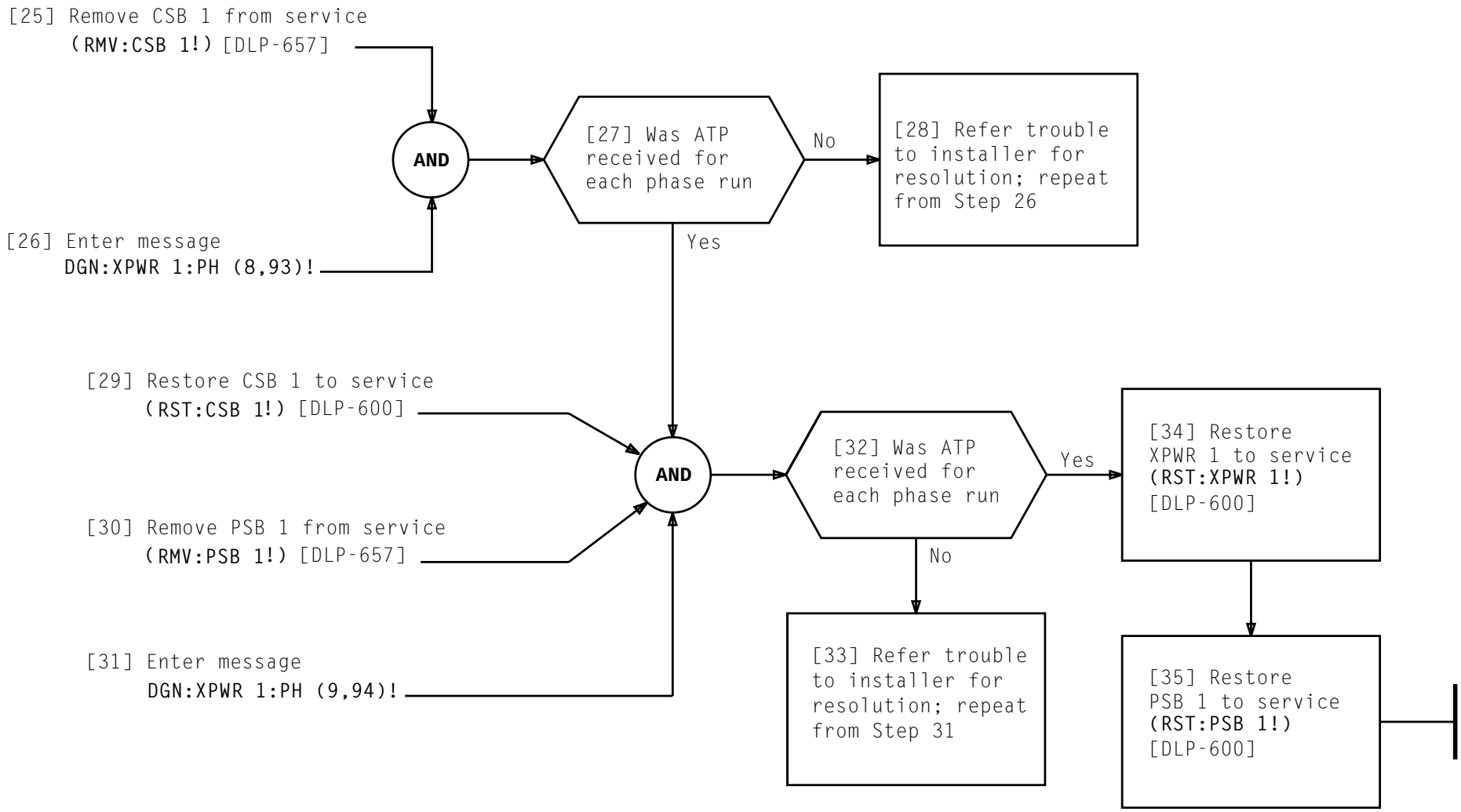


TABLE A	
MESSAGE NUMBER	**INPUT MESSAGE**
1	DGN:XPWR 0:PH (1,3,7,10,92,95)!

DIAGNOSE MISCELLANEOUS POWER (XPWR)



DIAGNOSE MISCELLANEOUS POWER (XPWR)



DIAGNOSE MISCELLANEOUS POWER (XPWR)

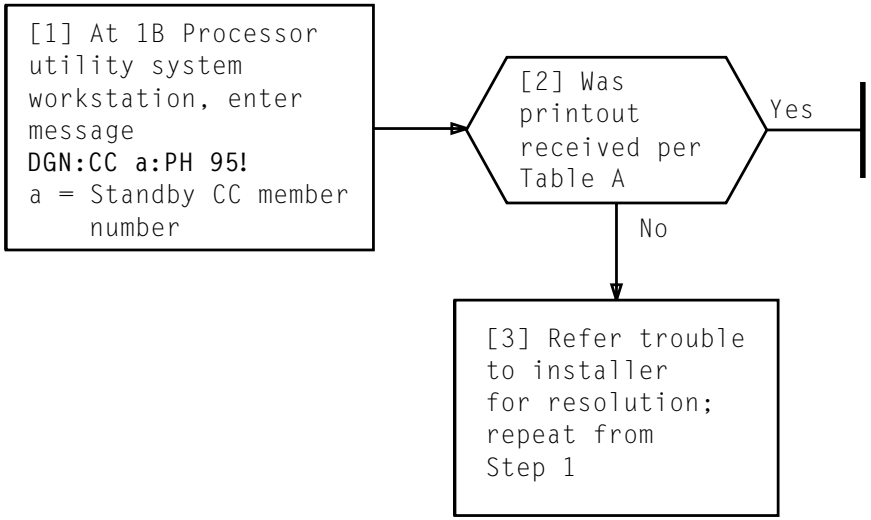
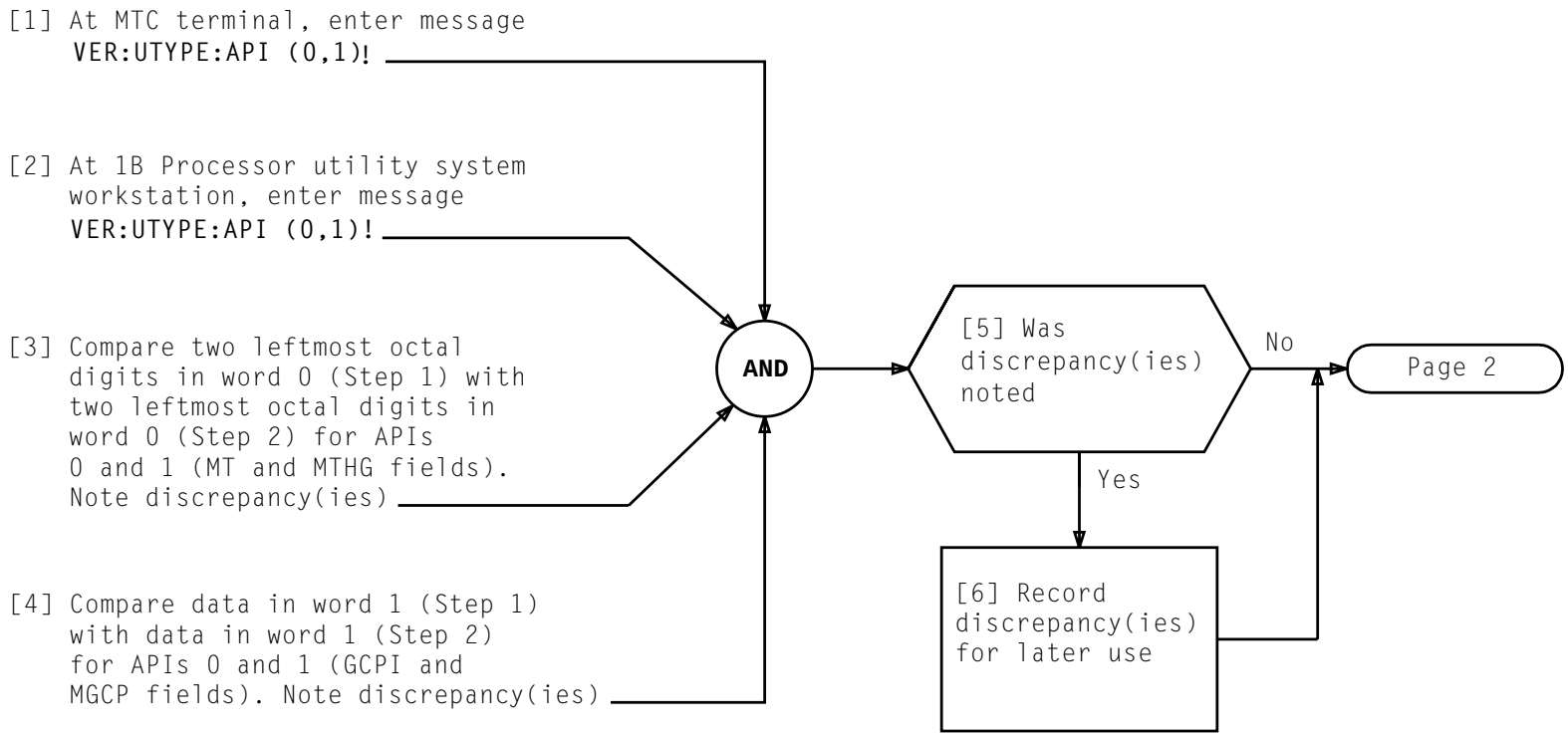


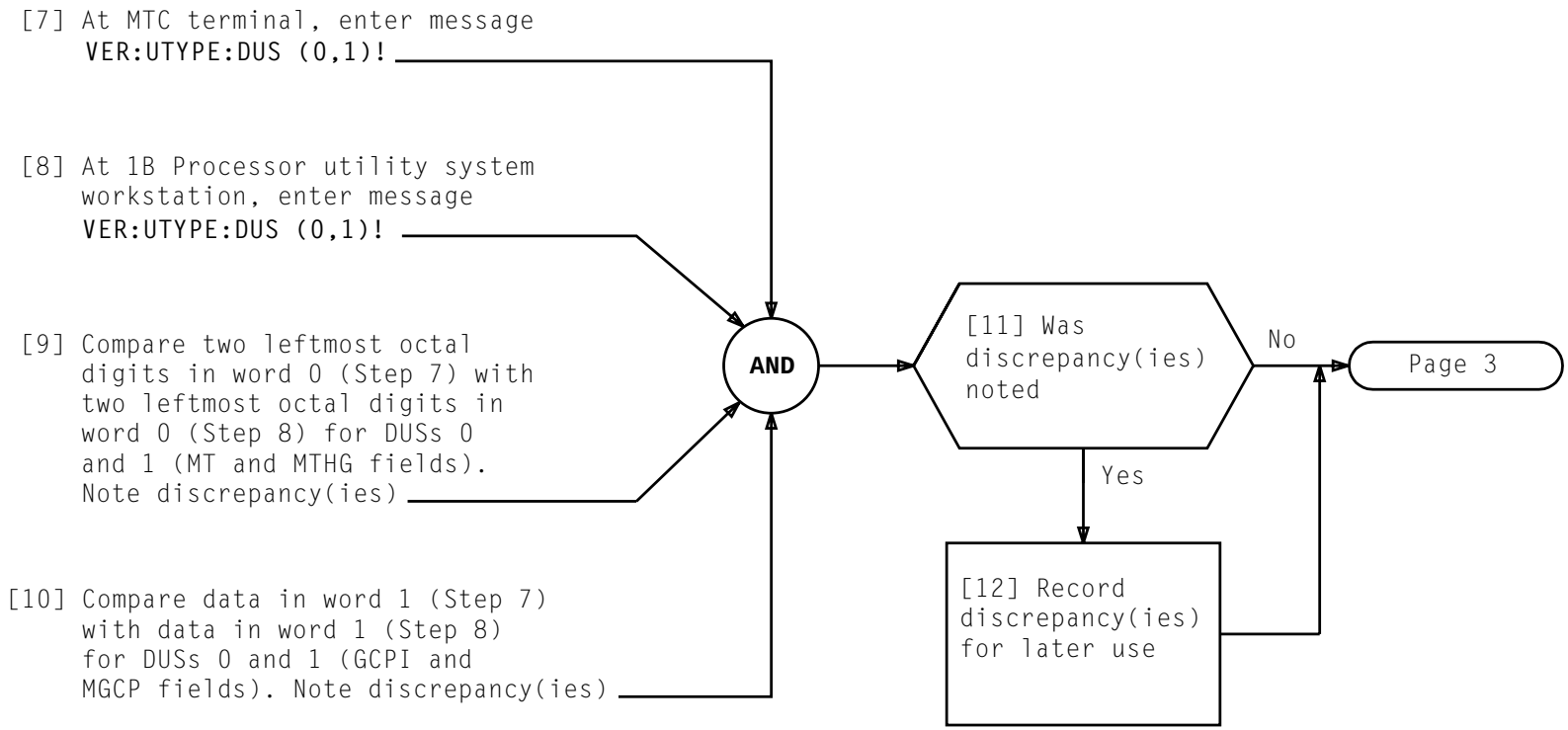
TABLE A

MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN:CC a PH 95 ATP DGN:CC a COMPLETED ATP MSG COMPL TEST:CC a DFR ATP

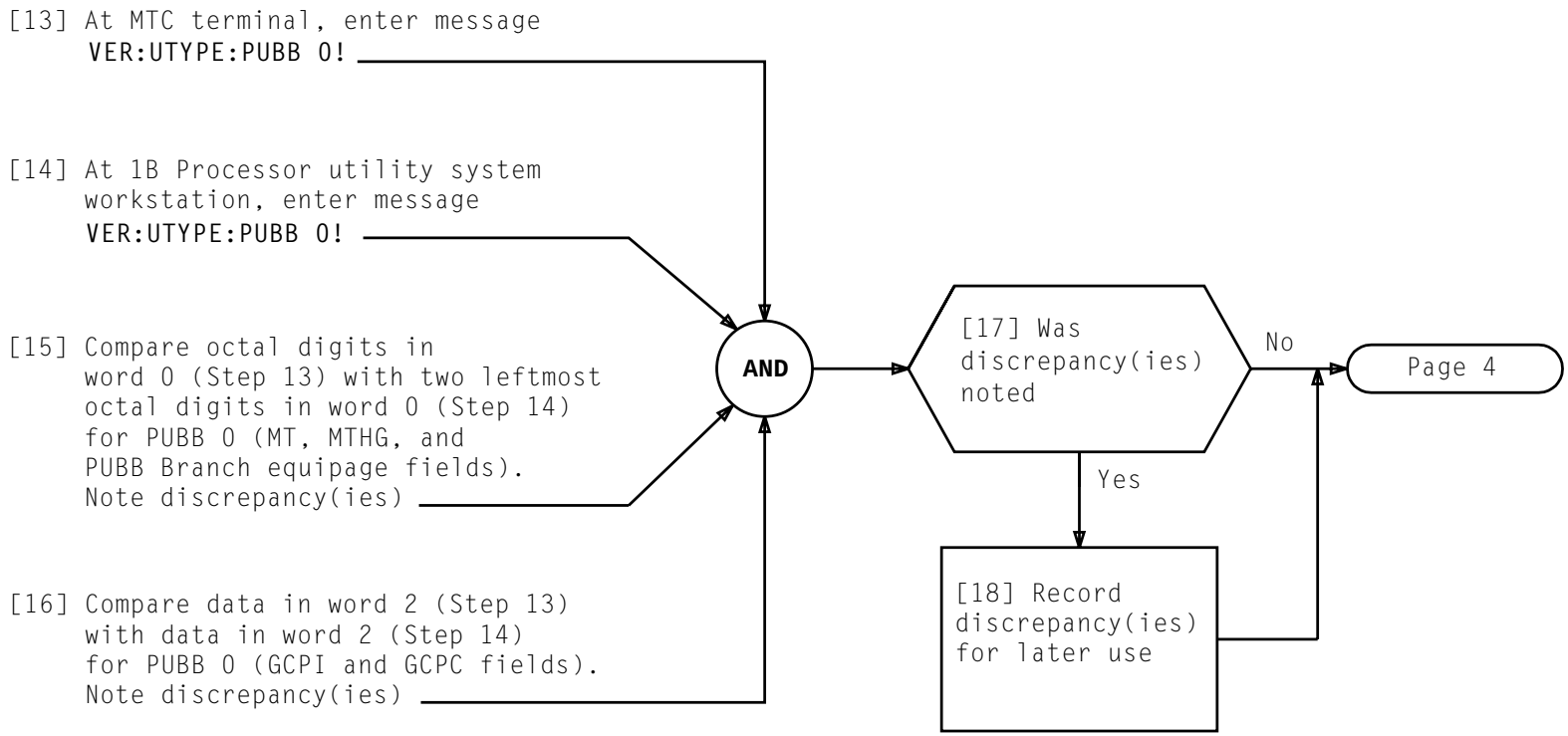
RUN 1B PROCESSOR CC DIAGNOSTIC PHASE 95 TO TEST PC FUNCTION



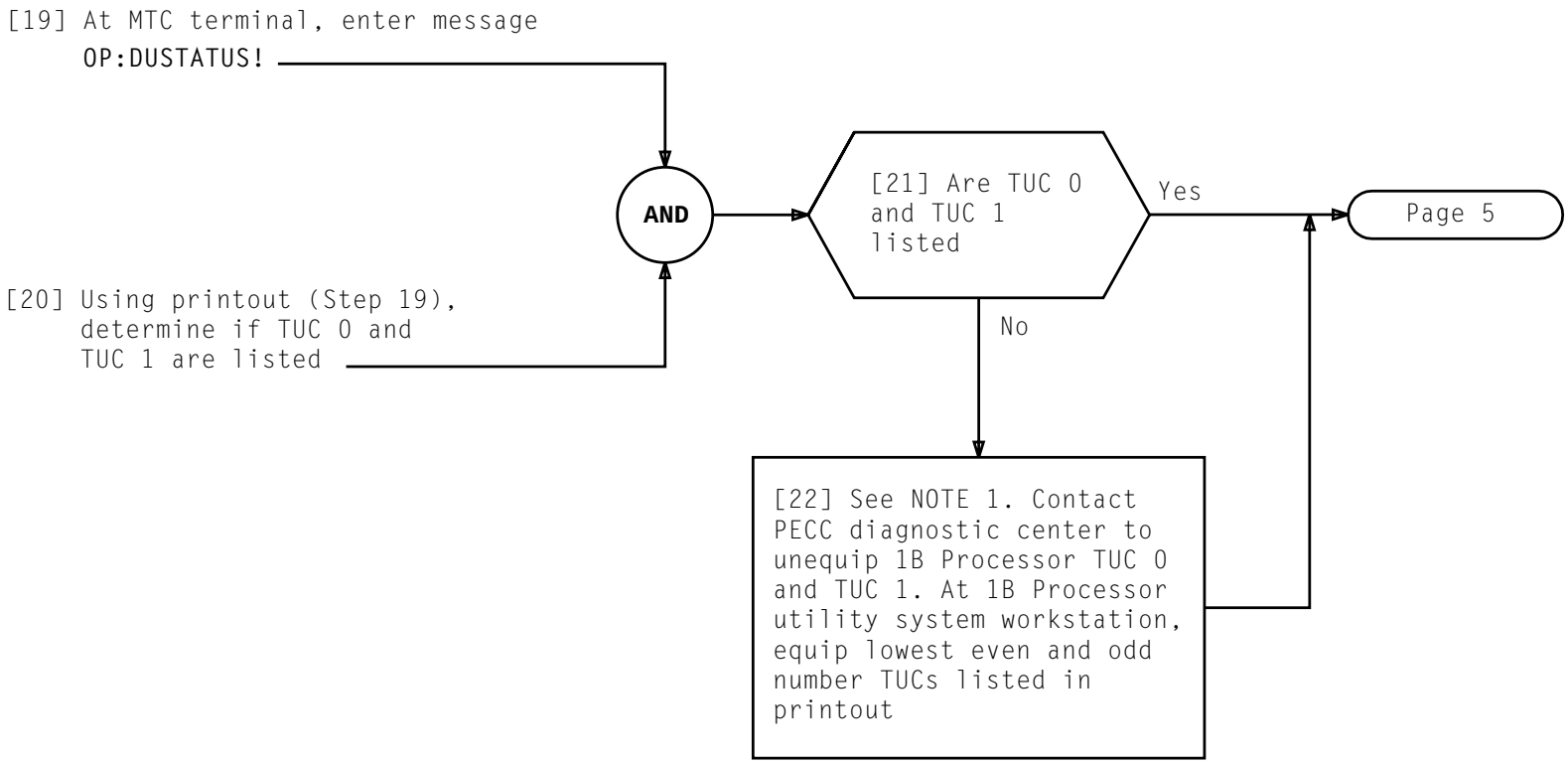
VERIFY API, DUS, TUC, AND PUBB UNIT-TYPE TRANSLATORS FOR 1A PROCESSOR AND 1B PROCESSOR



VERIFY API, DUS, TUC, AND PUBB UNIT-TYPE TRANSLATORS FOR 1A PROCESSOR AND 1B PROCESSOR

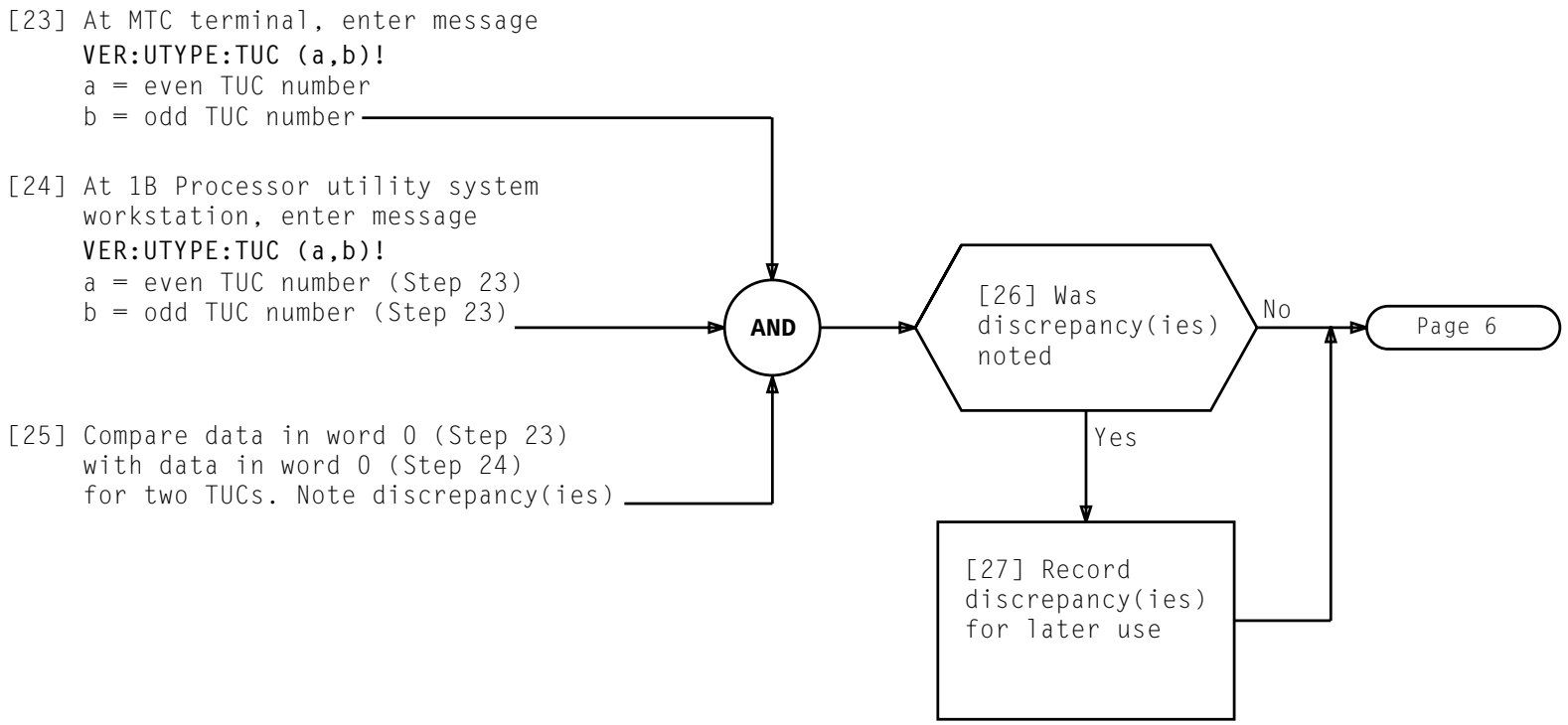


VERIFY API, DUS, TUC, AND PUBB UNIT-TYPE TRANSLATORS FOR 1A PROCESSOR AND 1B PROCESSOR

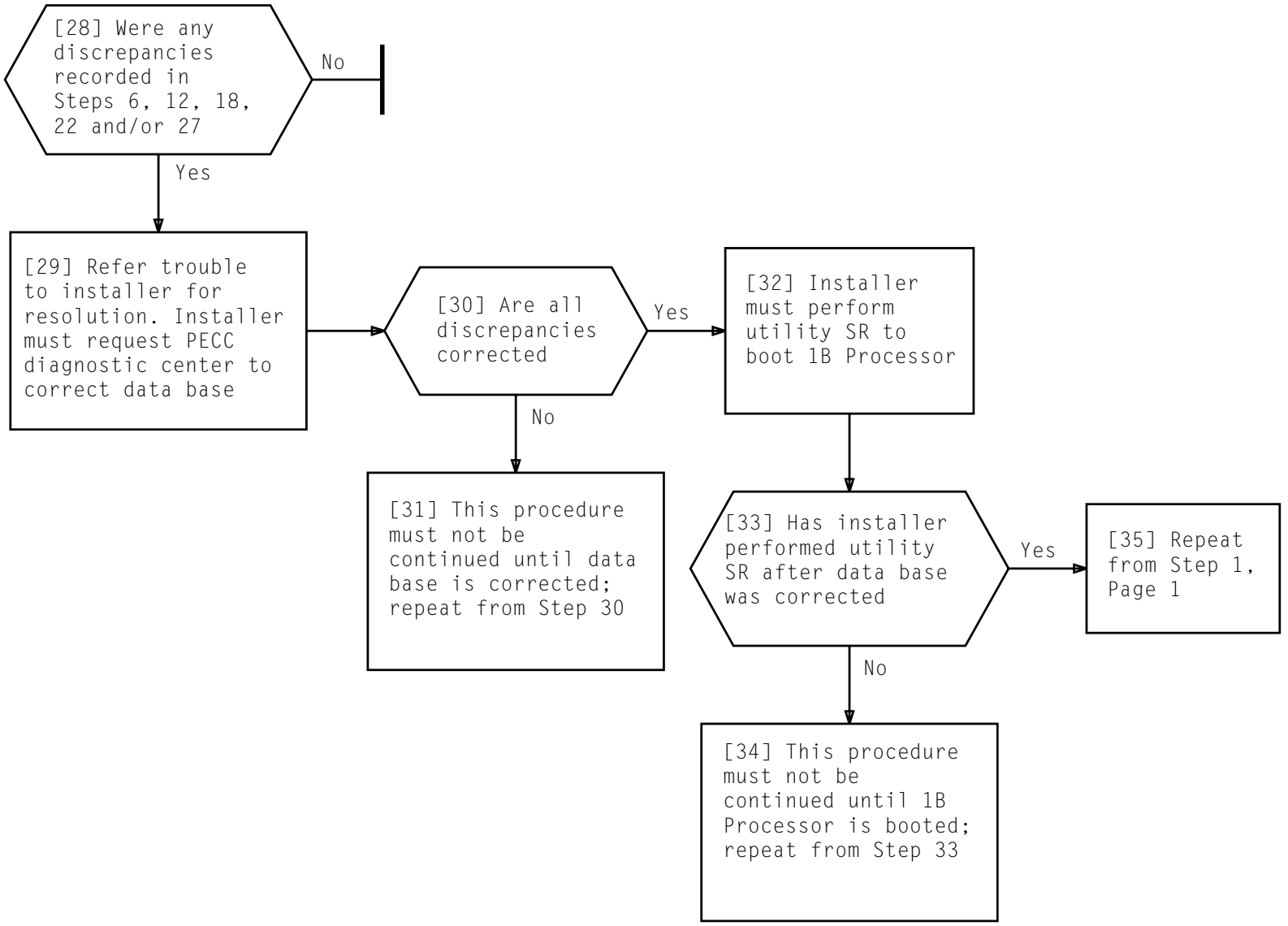


NOTE 1
TUC 0 and TUC 1 are equipped in ODA for 1B Processor utility system workstation. If other than TUC 0 and TUC 1 are equipped in office, ODA in 1B Processor utility system workstation must be changed to equip lowest even number TUC and lowest odd number TUC equipped in office

VERIFY API, DUS, TUC, AND PUBB UNIT-TYPE TRANSLATORS FOR 1A PROCESSOR AND 1B PROCESSOR



VERIFY API, DUS, TUC, AND PUBB UNIT-TYPE TRANSLATORS FOR 1A PROCESSOR AND 1B PROCESSOR



VERIFY API, DUS, TUC, AND PUBB UNIT-TYPE TRANSLATORS FOR 1A PROCESSOR AND 1B PROCESSOR

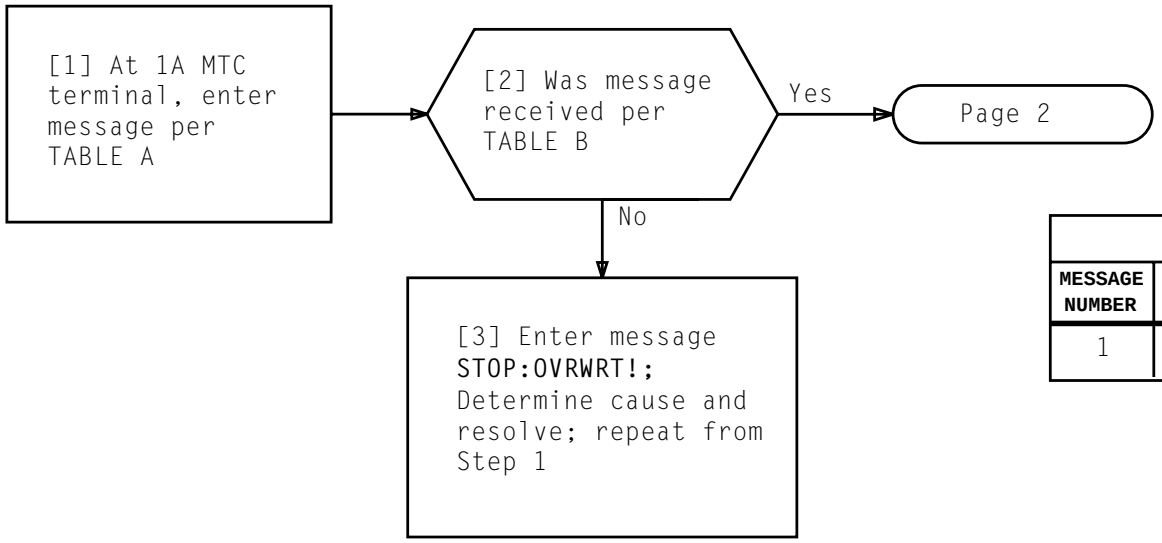


TABLE A

MESSAGE NUMBER	INPUT MESSAGE
1	IN:OWBUF:ADR 15774004,DATA (0,0)!

TABLE B

MESSAGE NUMBER	OUTPUT MESSAGE
1	IN:OWBUF CORE ADR OLDDATA NEWDATA 15774004 33300140 00000000 14001762 00000000

ENTER OVERWRITE FOR MODIFY RECOVERY ACTIONS KEY

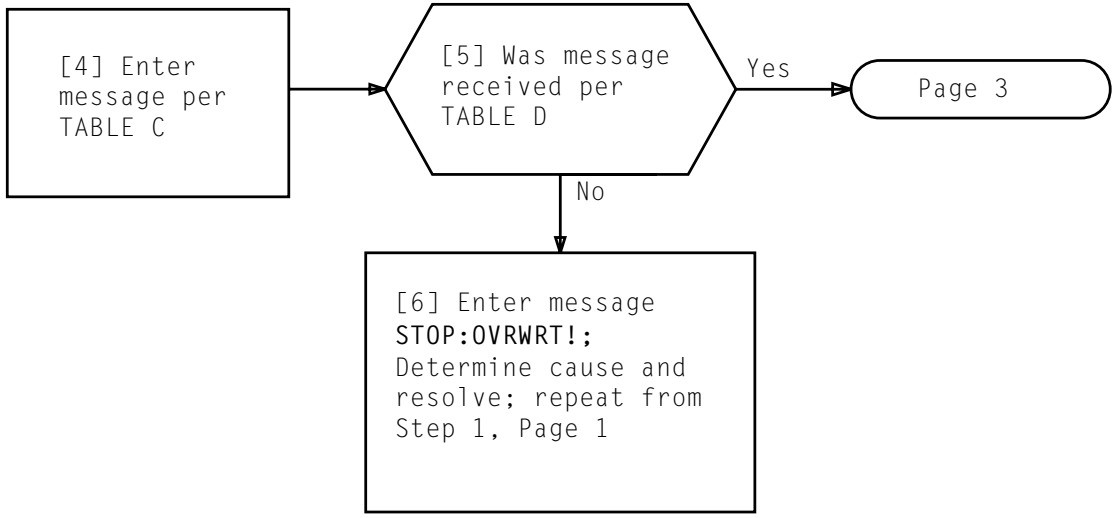


TABLE C	
MESSAGE NUMBER	**INPUT MESSAGE**
1	IN:OWBUF:ADR 15774407,DATA 0!

TABLE D	
MESSAGE NUMBER	**OUTPUT MESSAGE**
1	IN:OWBUF CORE ADR OLDDATA NEWDATA 15774407 73441762 00000000

ENTER OVERWRITE FOR MODIFY RECOVERY ACTIONS KEY

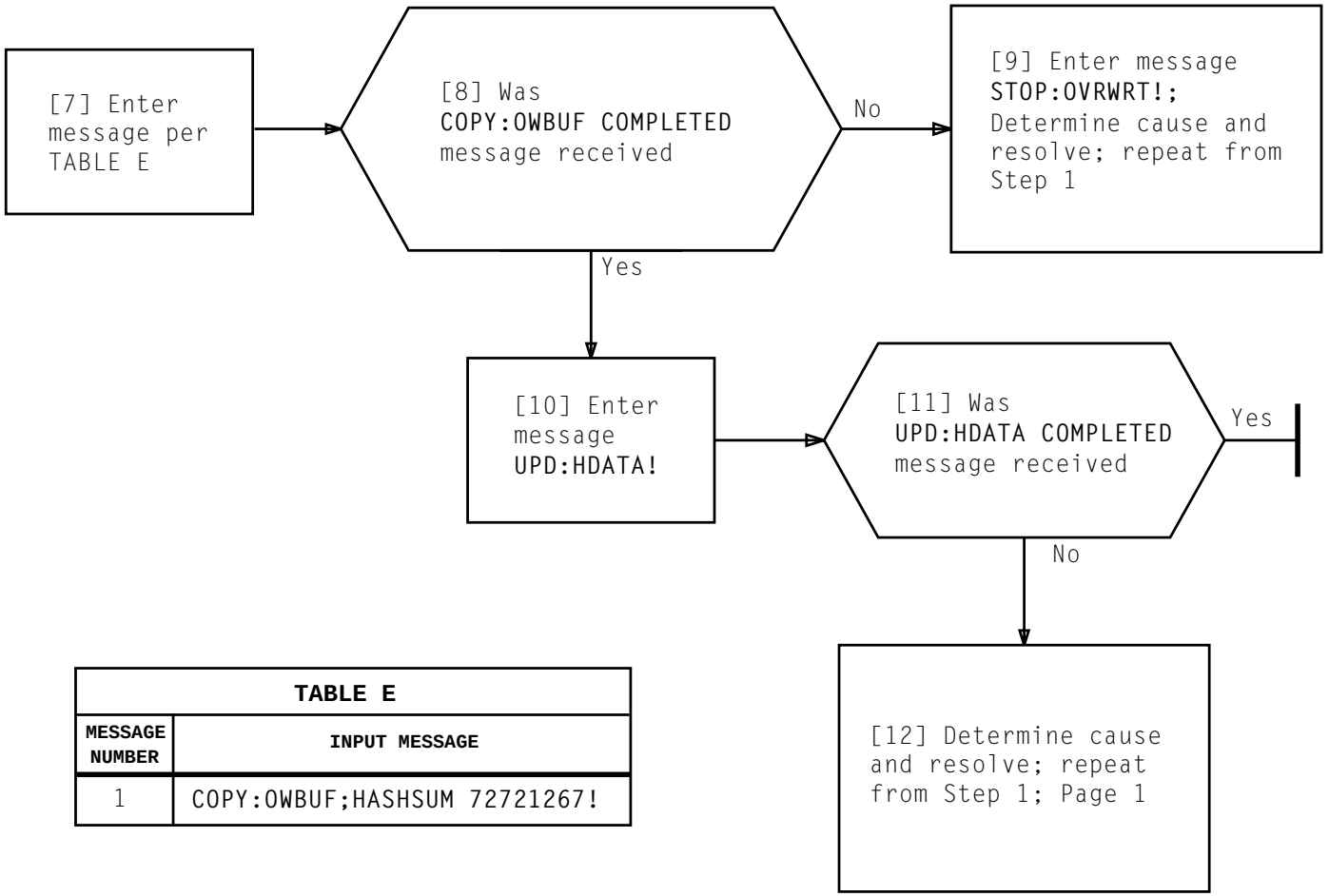


TABLE E	
MESSAGE NUMBER	**INPUT MESSAGE**
1	COPY:OWBUF;HASHSUM 72721267!

ENTER OVERWRITE FOR MODIFY RECOVERY ACTIONS KEY

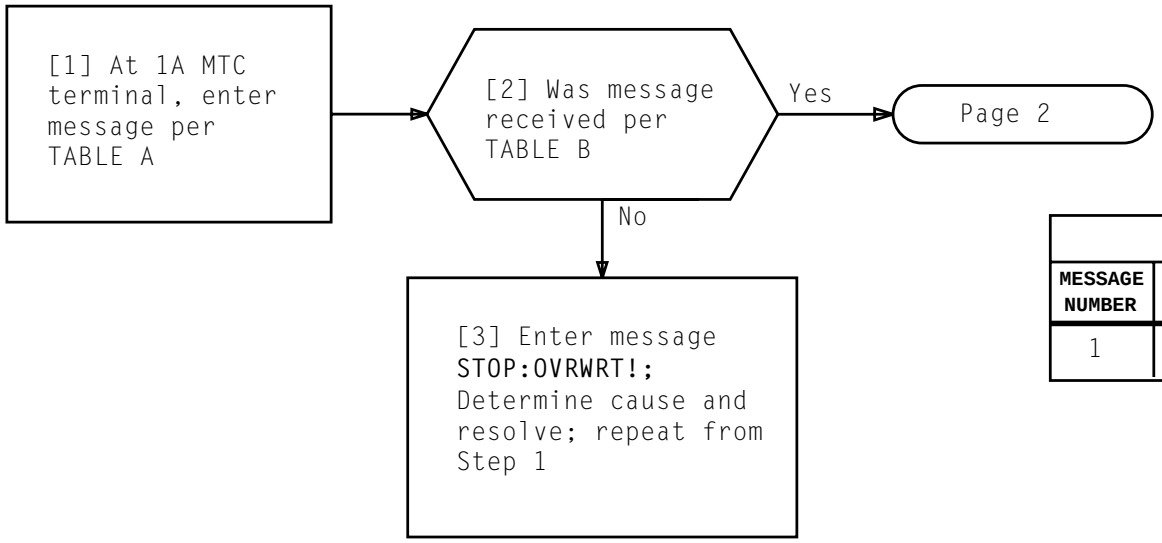


TABLE A

MESSAGE NUMBER	INPUT MESSAGE
1	IN:OWBUF:ADR 15774004,DATA (33300140,14001762)!

TABLE B

MESSAGE NUMBER	OUTPUT MESSAGE
1	IN:OWBUF CORE ADR OLDDATA NEWDATA 15774004 00000000 33300140 00000000 14001762

BACK OUT OVERWRITE

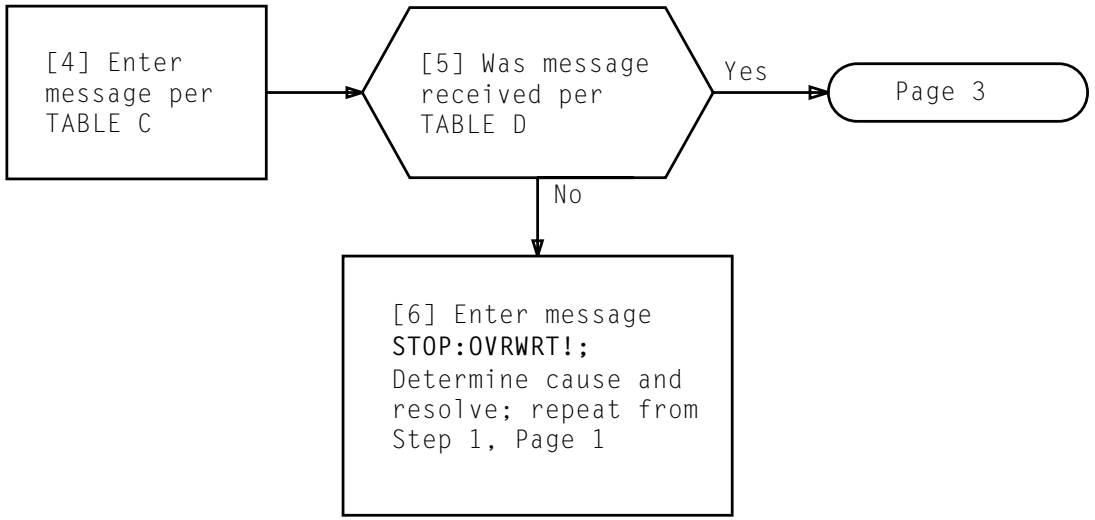


TABLE C

MESSAGE NUMBER	INPUT MESSAGE
1	IN:OWBUF:ADR 15774407,DATA 73441762!

TABLE D

MESSAGE NUMBER	OUTPUT MESSAGE
1	IN:OWBUF CORE ADR OLDDATA NEWDATA 15774407 00000000 73441762

BACK OUT OVERWRITE

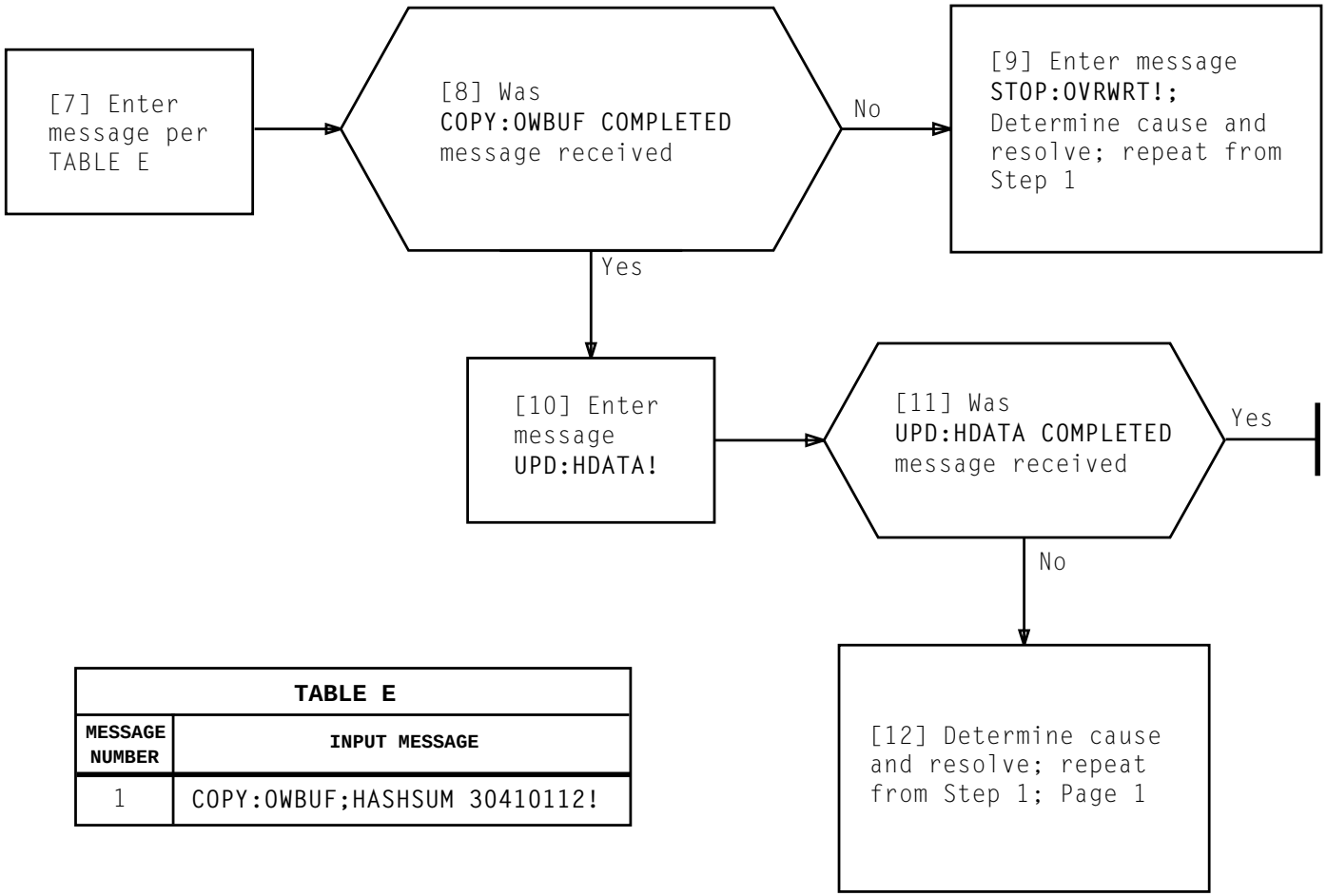
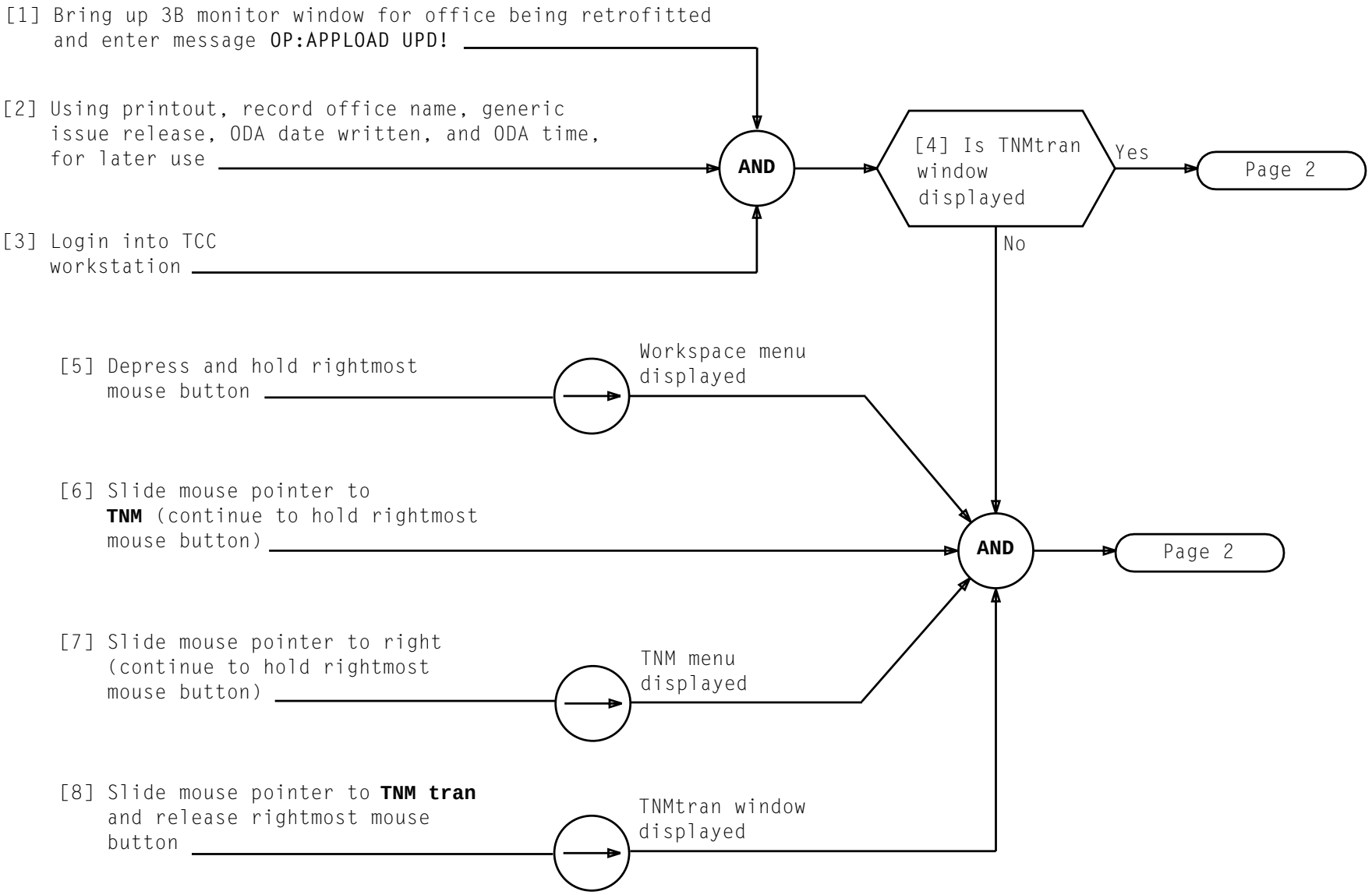
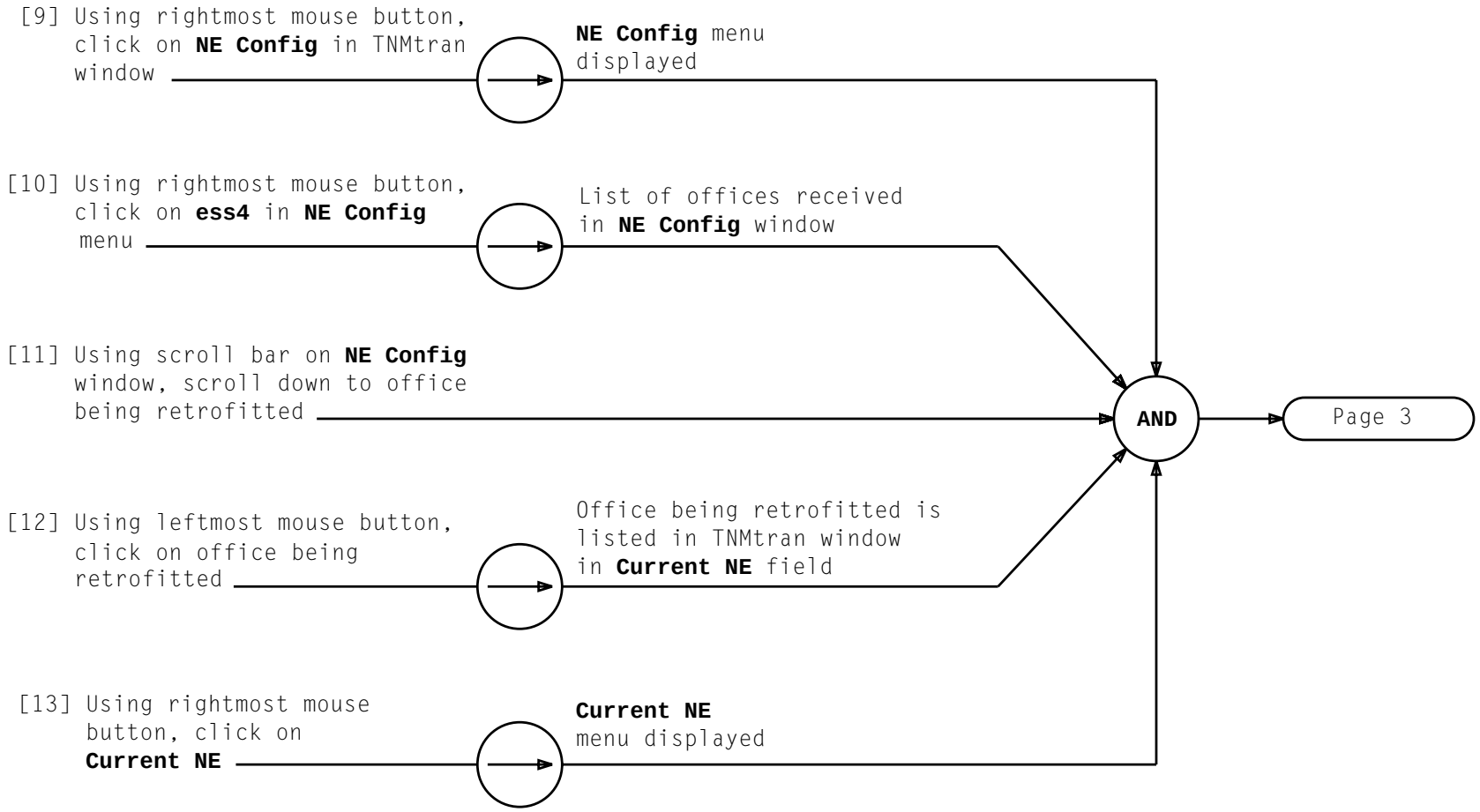


TABLE E	
MESSAGE NUMBER	**INPUT MESSAGE**
1	COPY:OWBUF;HASHSUM 30410112!

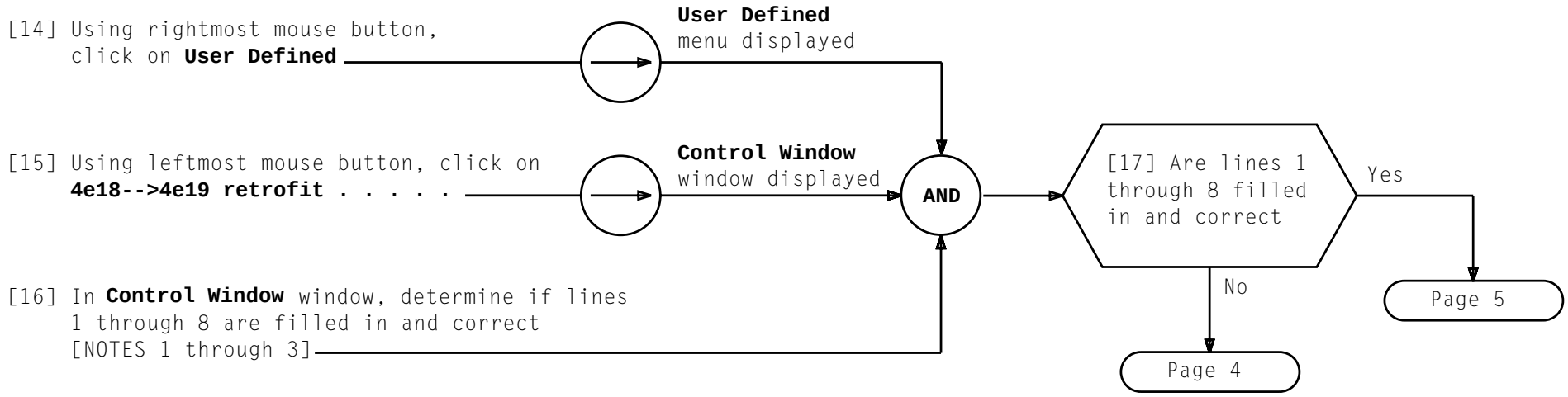
BACK OUT OVERWRITE



SETUP TNM COMMUNICATION FOR AUTOSEQUENCING TO OFFICE BEING RETROFITTED



SETUP TNM COMMUNICATION FOR AUTOSEQUENCING TO OFFICE BEING RETROFITTED



NOTES

1. Information for lines 2 through 5 is obtained from local TNM administrator
2. Information for lines 1 and 6 through 8 was obtained in Step 2, Page 1
3. Lines 1 and 6 through 8 must be entered exactly as received in printout

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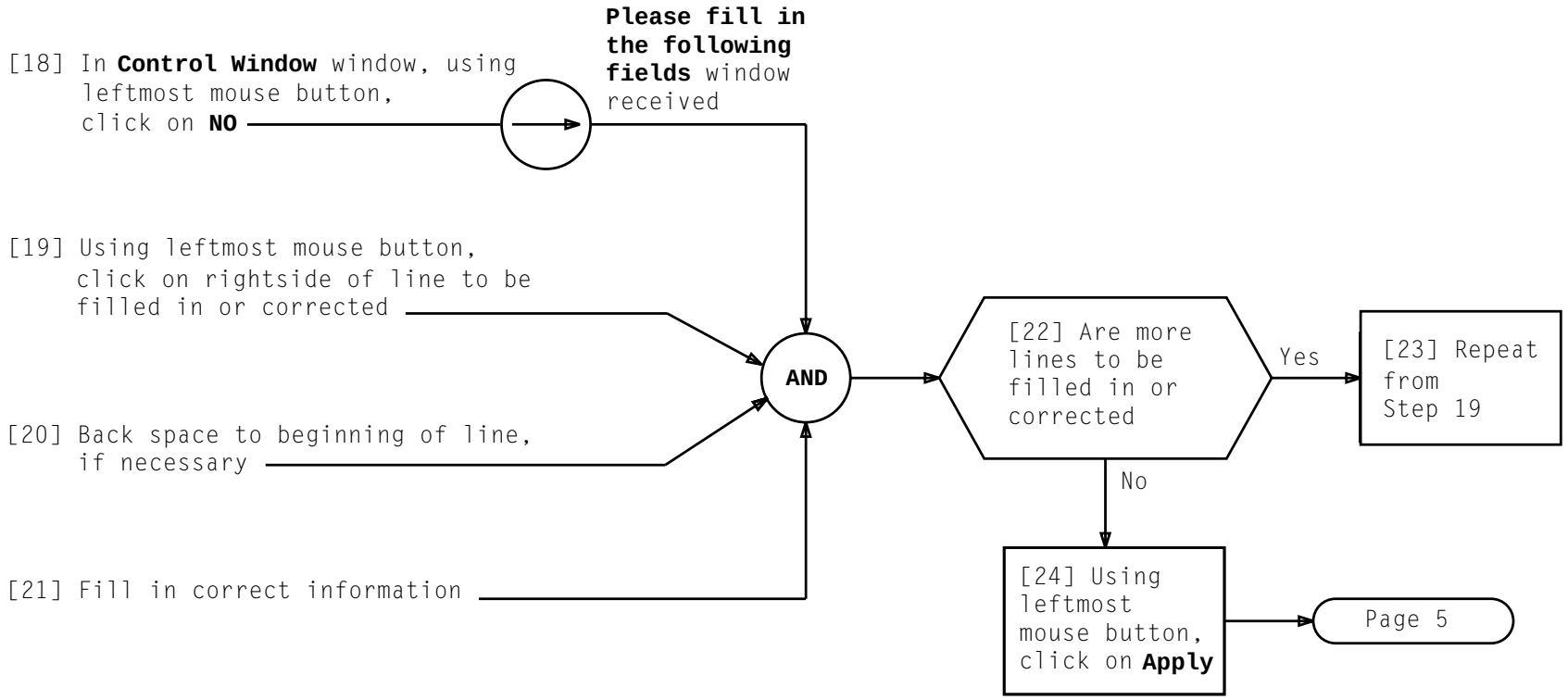
SETUP TNM COMMUNICATION FOR AUTOSEQUENCING TO OFFICE BEING RETROFITTED



SETUP TNM COMMUNICATION FOR AUTOSEQUENCING TO OFFICE BEING RETROFITTED

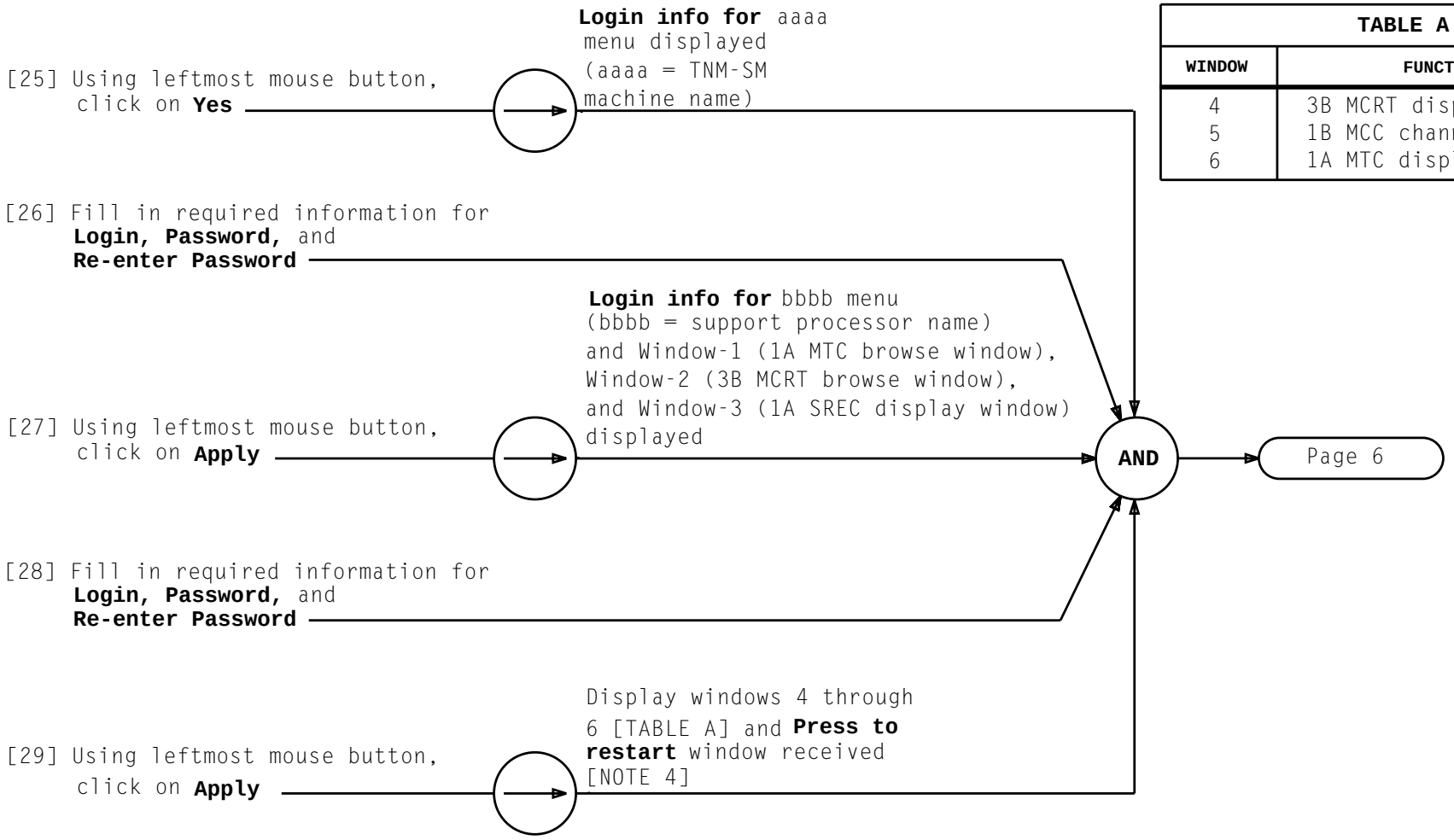


TABLE A

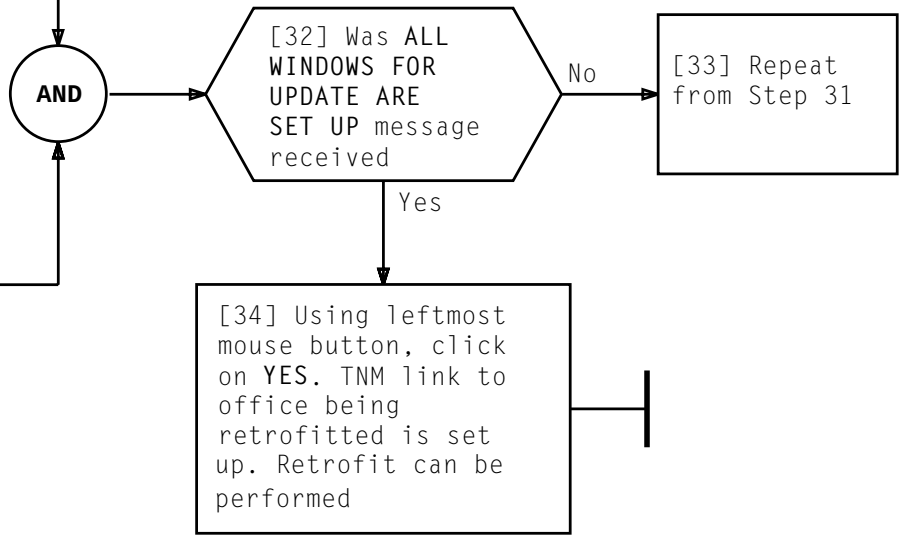
WINDOW	FUNCTION
4	3B MCRT display
5	1B MCC channel
6	1A MTC display

NOTE 4
Takes a short time for TNM to set up window

SETUP TNM COMMUNICATION FOR AUTOSEQUENCING TO OFFICE BEING RETROFITTED

[30] Wait for **TO BEGIN THE UPDATE FOR xxxx.mtc: Click the YES button with the left mouse button** to be displayed in **INSTRUCTIONS:** window (xxxx = 1A processor name entered on line 2 of **INSTRUCTIONS:** window

[31] Proceed as directed by **Control Window** window to set up windows; then wait for **ALL WINDOWS FOR UPDATE ARE SET UP** message



SETUP TNM COMMUNICATION FOR AUTOSEQUENCING TO OFFICE BEING RETROFITTED

[1] Log into workstation with RUAS capabilities (mvterm window for TCC). This workstation will be called RUAS workstation in procedure

[2] Determine from Mini-Maintenance Operation Center (MMOC), new OFFICE server name (TNM-SM processor name) for RUAS office that was cutover and record for later use

[3] Determine from MMOC, Internet Protocol address of concentrator node at MMOC and record for later use

[4] Determine from MMOC, RUAS office name that was cutover and record for later use

AND

[5] At RUAS workstation, enter message **/usr/etc/ping** aaaaa [aaaaa = OFFICE server name (TNM-SM processor name) determined in Step 2] to verify connection to TNM-SM processor

[6] Was aaaaa **is alive** message received

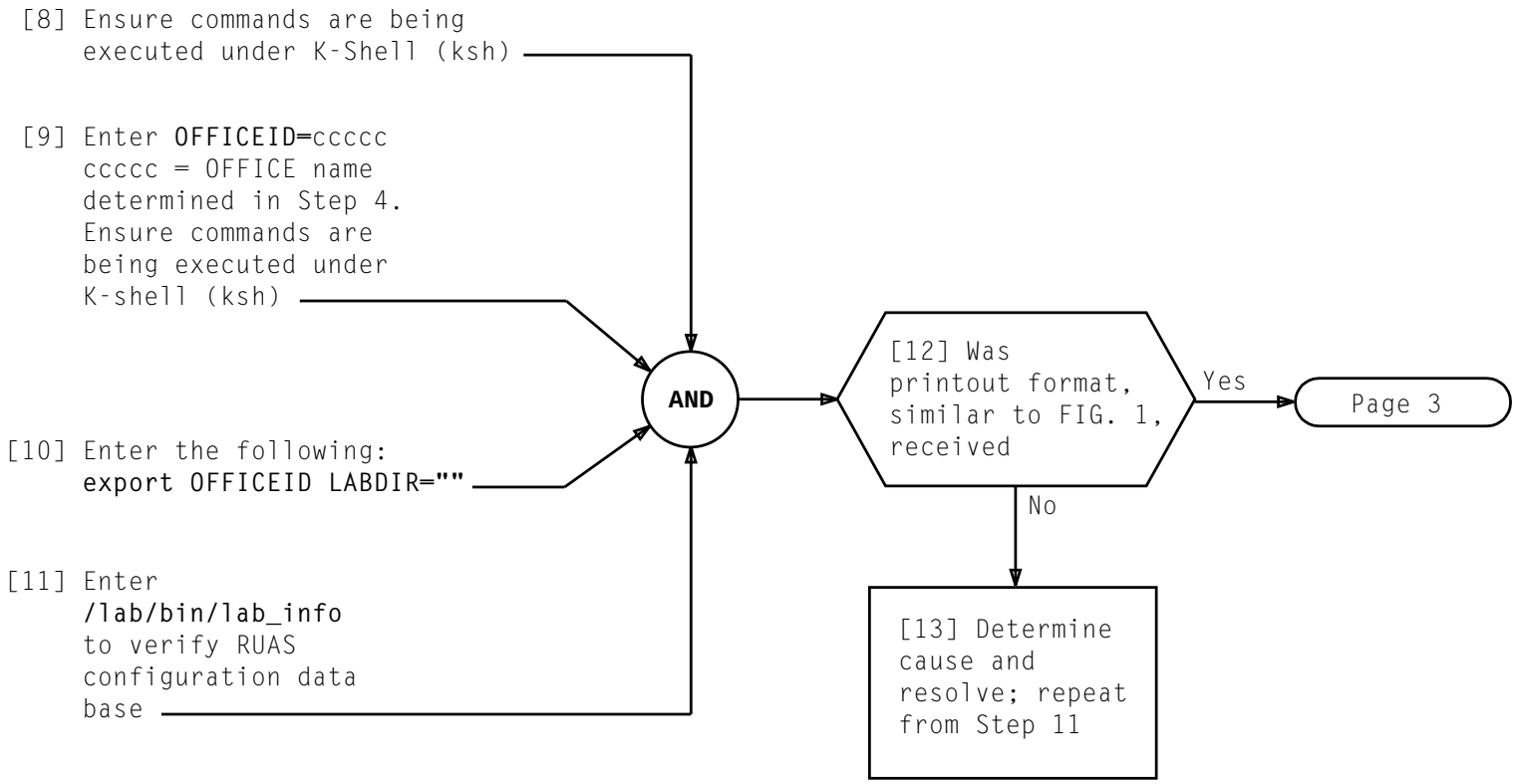
Yes

Page 2

No

[7] Determine cause and resolve; repeat from Step 5

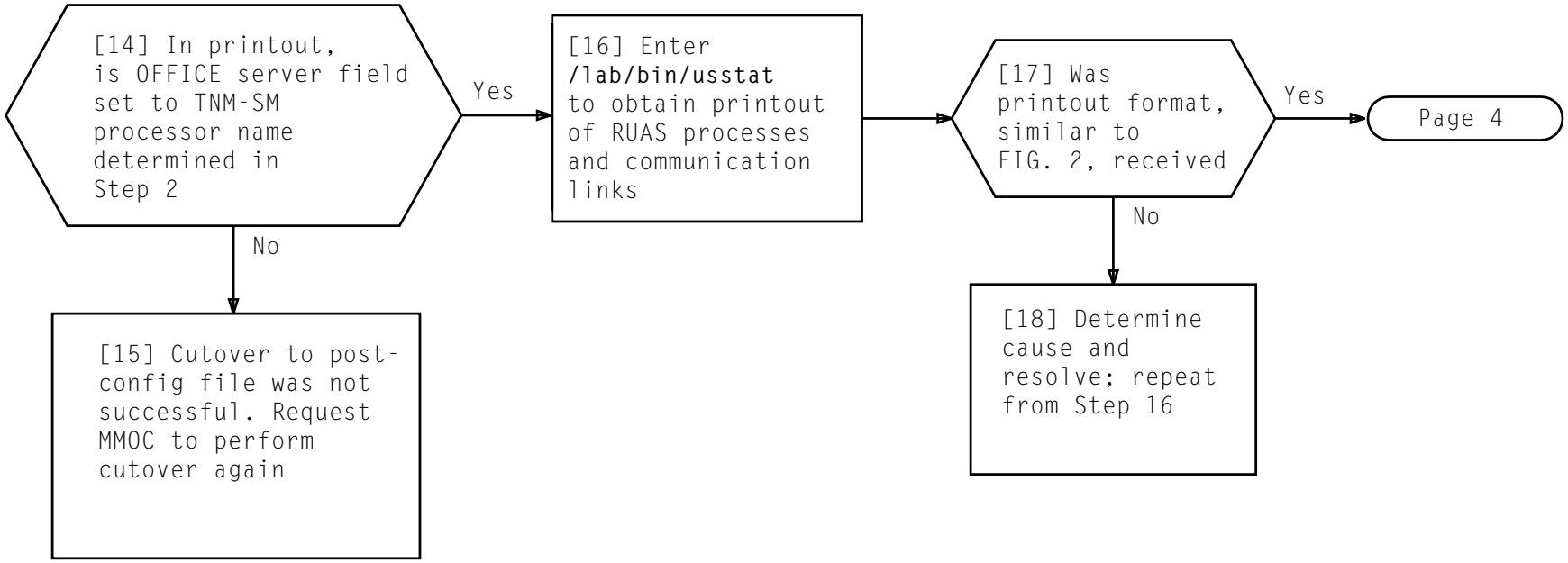
PERFORM RUAS CUTOVER VERIFICATION TESTS




```
wnvl0 OFFICE Configuration
Comments          :
OFFICE name       : wnvl0
OFFICE server     : whost1
Us_flags          : 0x0
Directory         : /lab/wnvl0
Us_handler        : /lab/bin/ushdlr
Us_timeout        : 30 Seconds
mup Names         : wnvl0usmp0 wnvl0usmp1
OFFICE clients    : wnvl0us wnruas whost1
rpc number        : 0x20001201
```

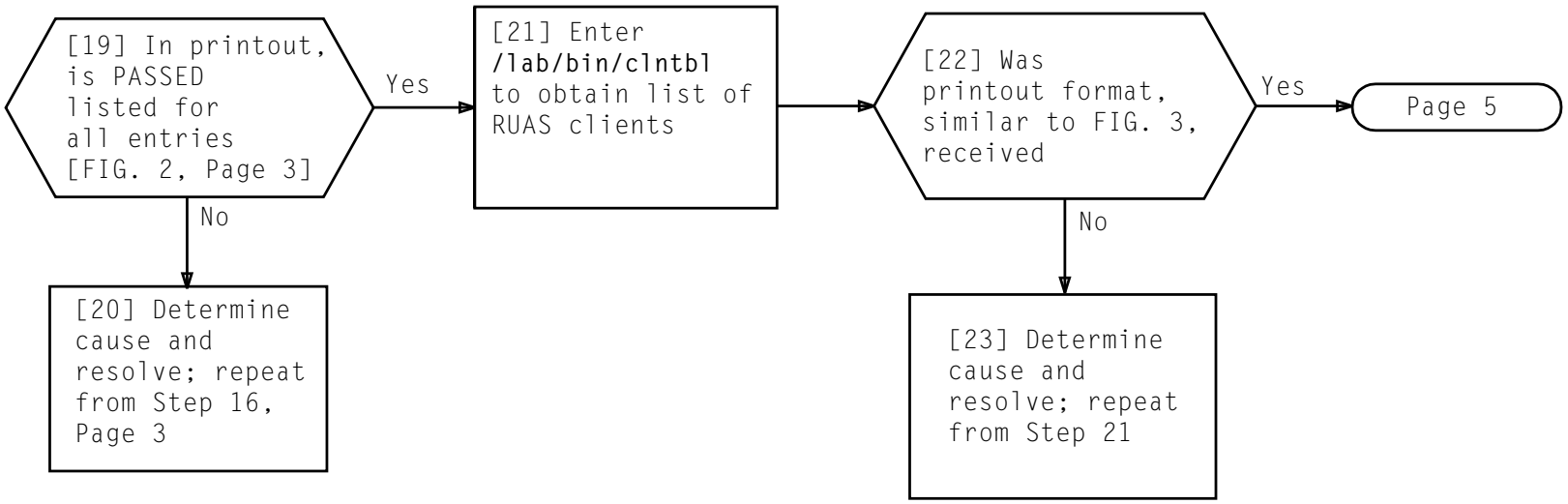
FIG. 1 - Sample of Office Information Printout

PERFORM RUAS CUTOVER VERIFICATION TESTS



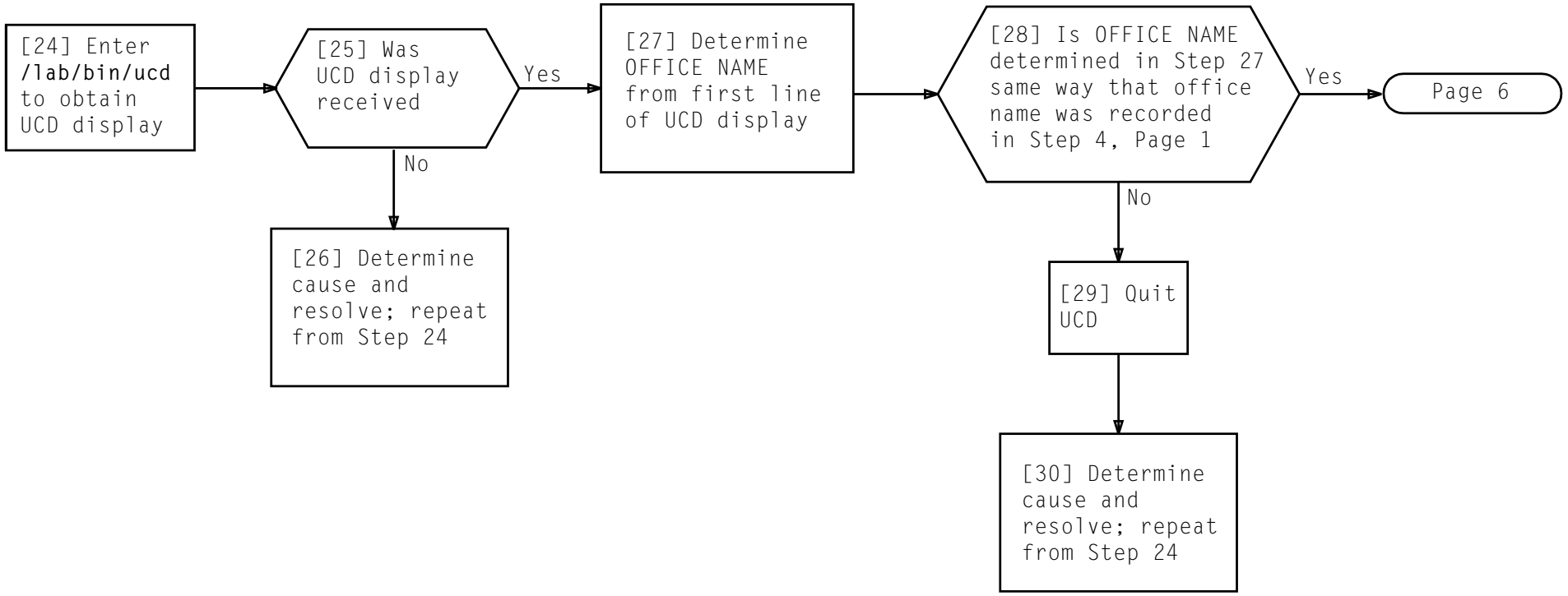

```
OFFICEID=wnvl0  HOST=whost1  server=whost1
    Global Handler      PASSED (whost1)
    Async Handler       PASSED (whost1)
    Error Handler       PASSED (whost1)
    US Handler          PASSED Active MUP (wnvl0usmp0)
                               Standby MUP (wnvl0usmp1)
```

FIG. 2 - Sample usstat Printout

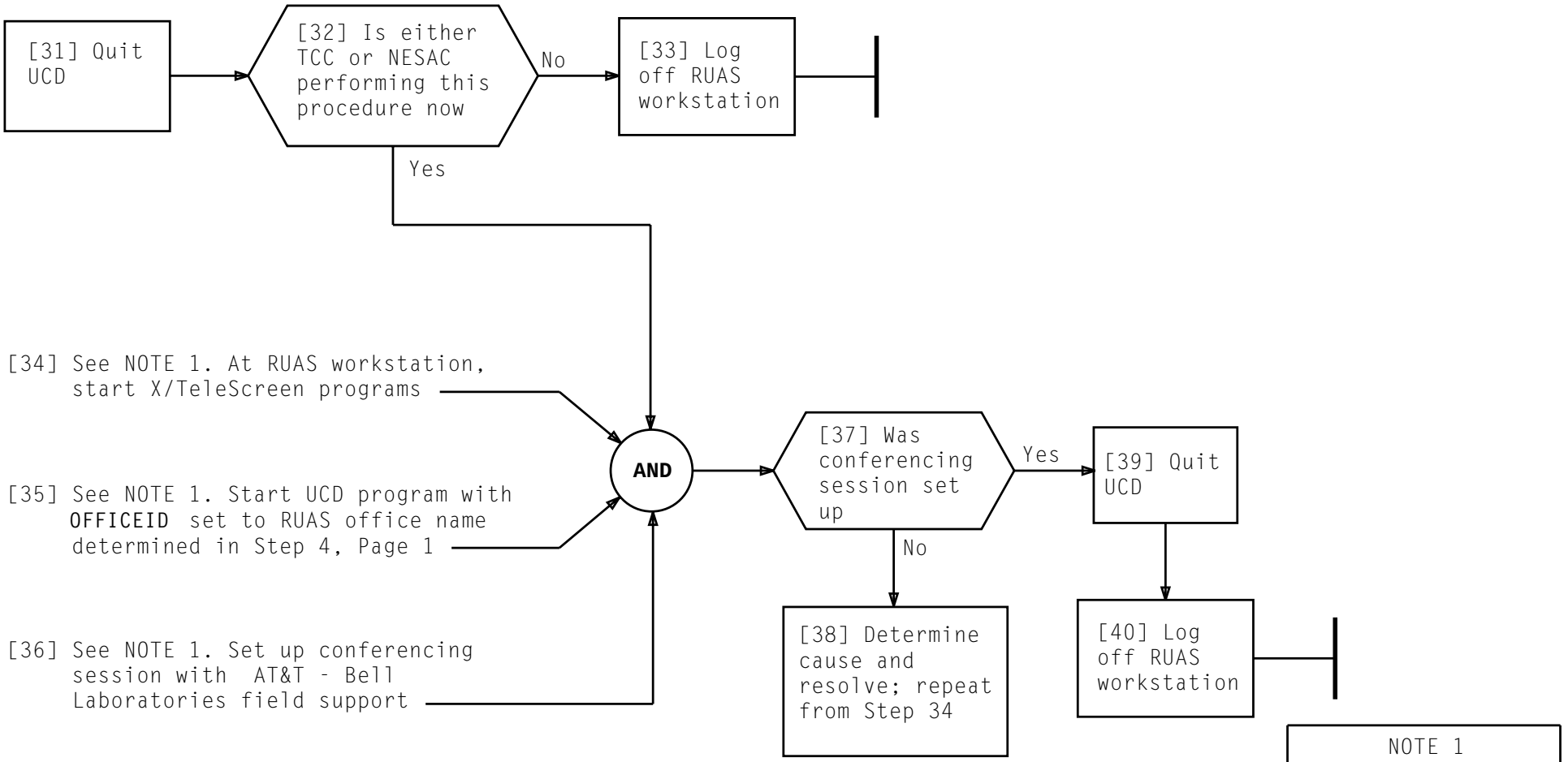



```
Client Number = 78
Release 19.5.3 on 8/6/1993; Client table for lab wnvl0,machine wnvl0usmp0
NUM         PERM        ERMMASK     PID         UNAME       MNAME
78          3           ffffffff    319         dajb        whost1
```

FIG. 3 - Sample of RUAS Client Printout

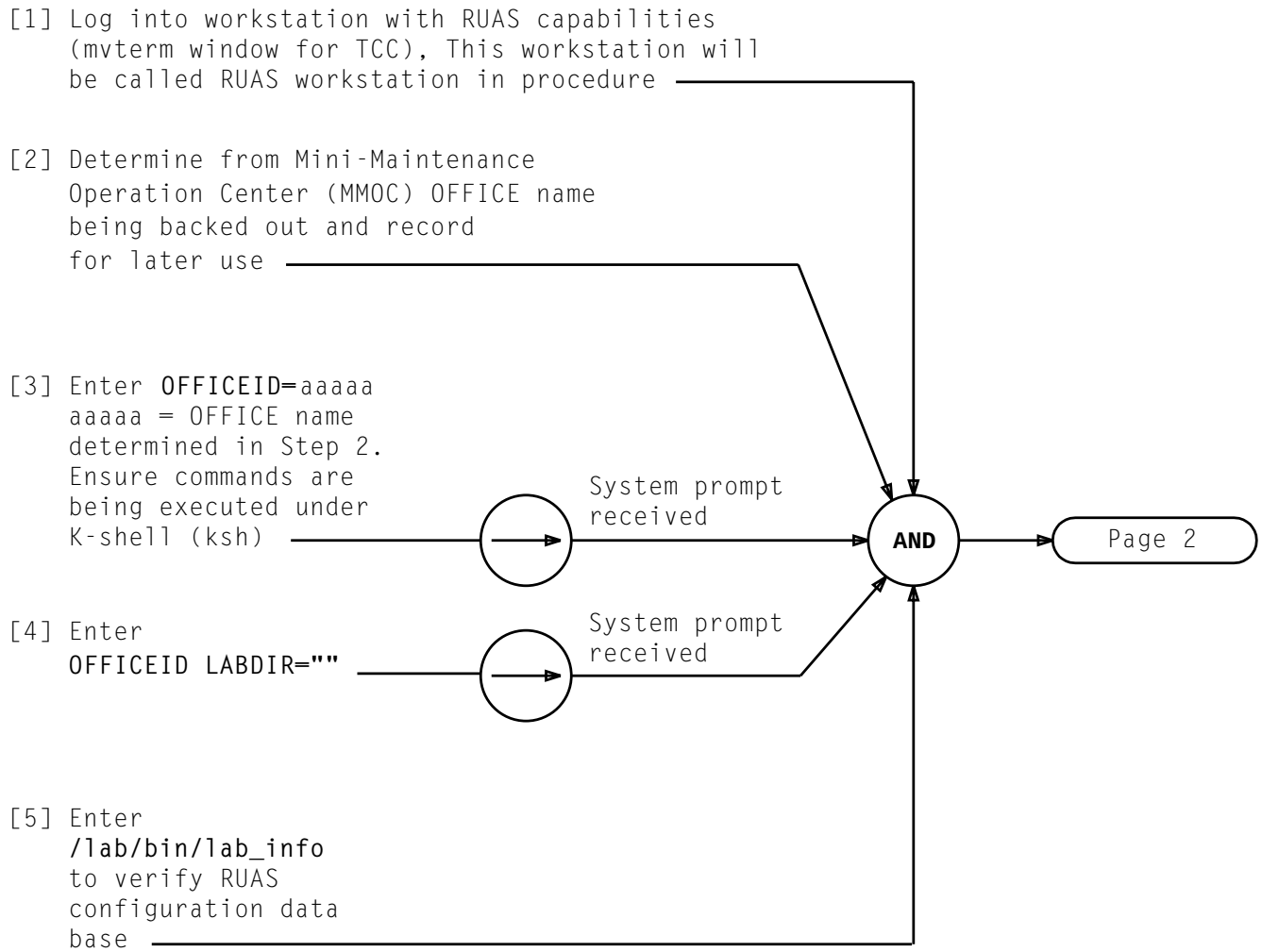


PERFORM RUAS CUTOVER VERIFICATION TESTS

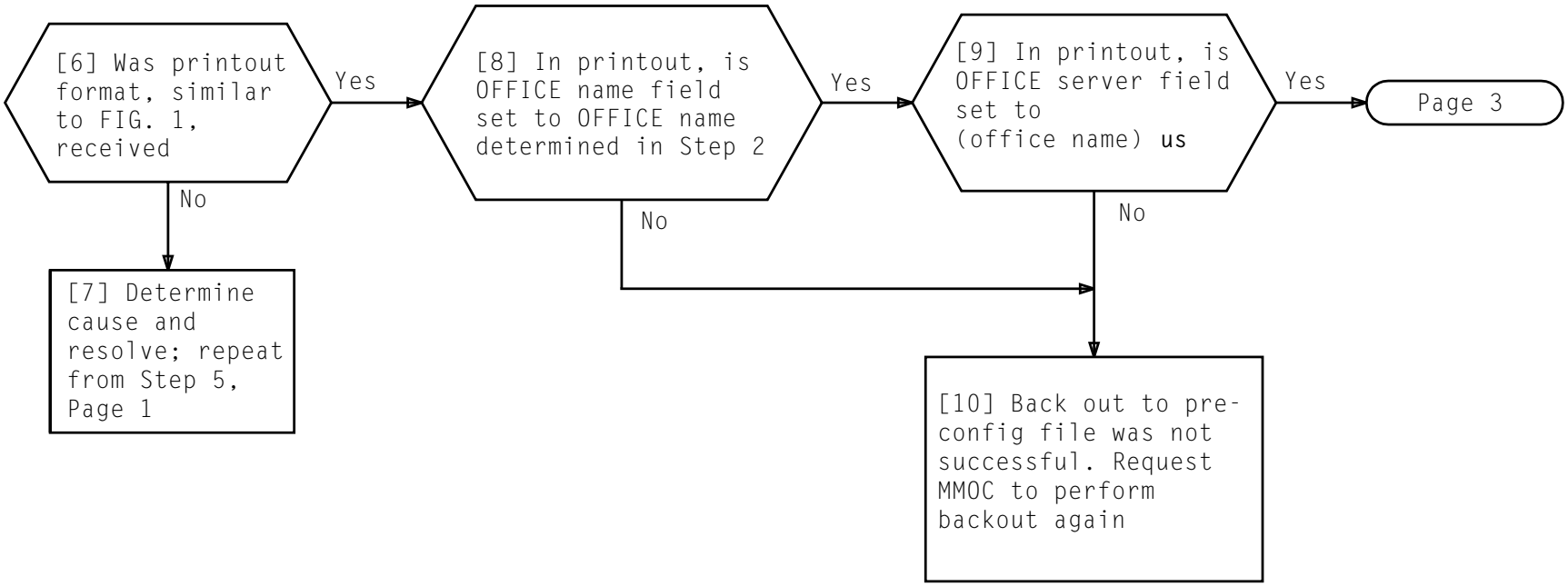


NOTE 1
Refer to Section 7 in 234-310-001, *Utility System Users' Guide* and XTeleScreen documentation for setting up conferencing (Steps 34 through 36)

PERFORM RUAS CUTOVER VERIFICATION TESTS

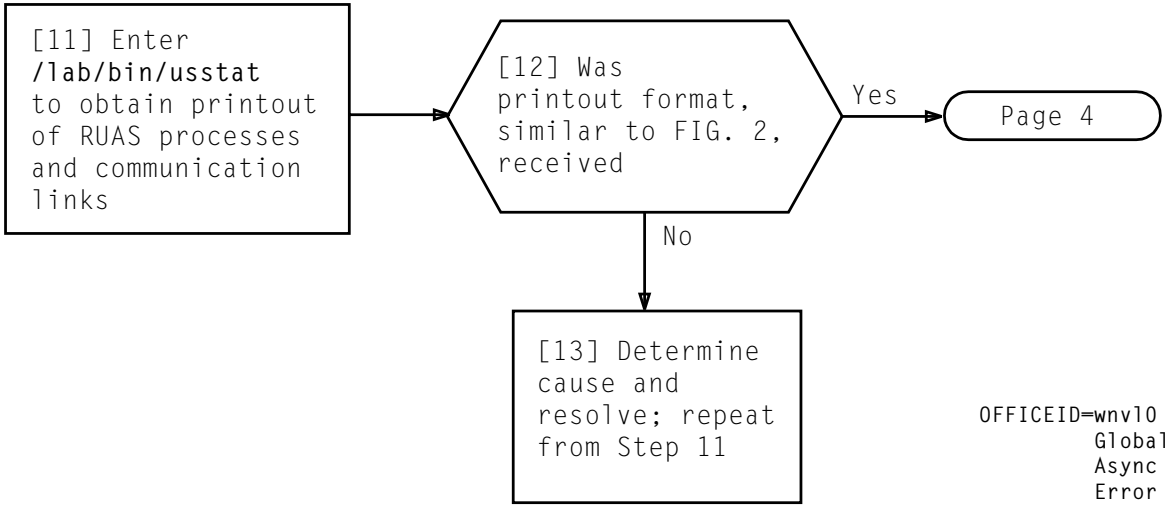


PERFORM RUAS BACKOUT VERIFICATION TESTS



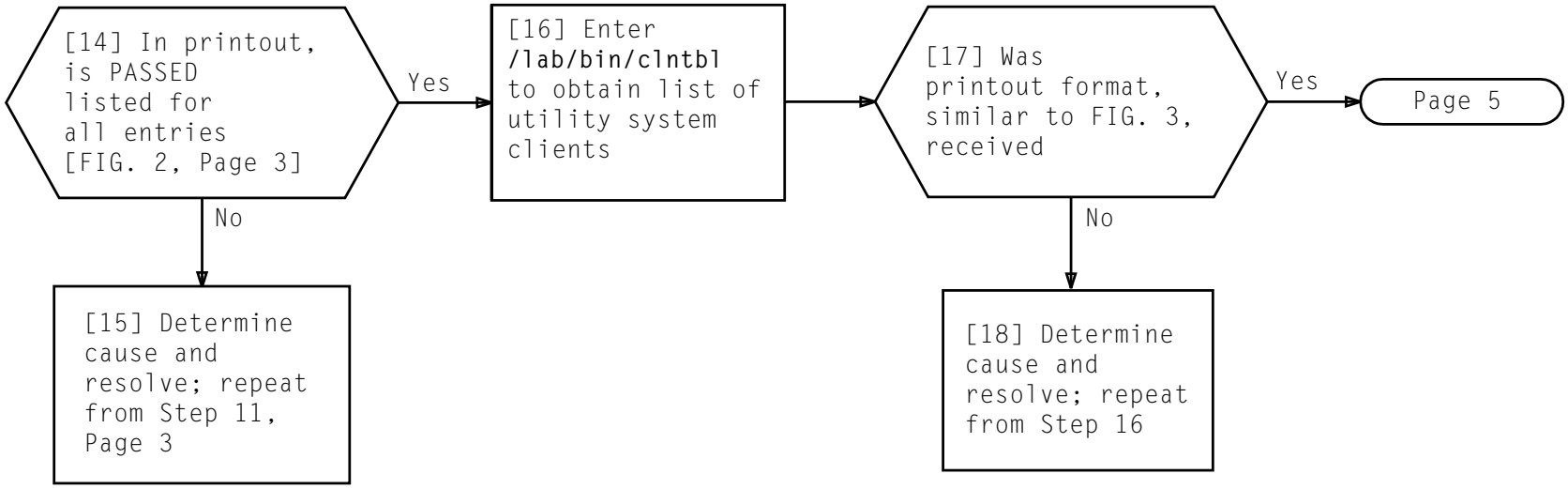

```
wnvl0 OFFICE Configuration
Comments          :
OFFICE name       : wnvl0
OFFICE server     : wnvl0us
Us_flags          : 0x0
Directory         : /lab/wnvl0
Us_handler        : /lab/bin/ushdlr
Us_timeout        : 30 Seconds
mup Names         : wnvl0usmp0 wnvl0usmp1
OFFICE clients    : wnvl0us wnruas whost1
rpc number        : 0x20001201
```

FIG. 1 - Sample of Office Information Printout



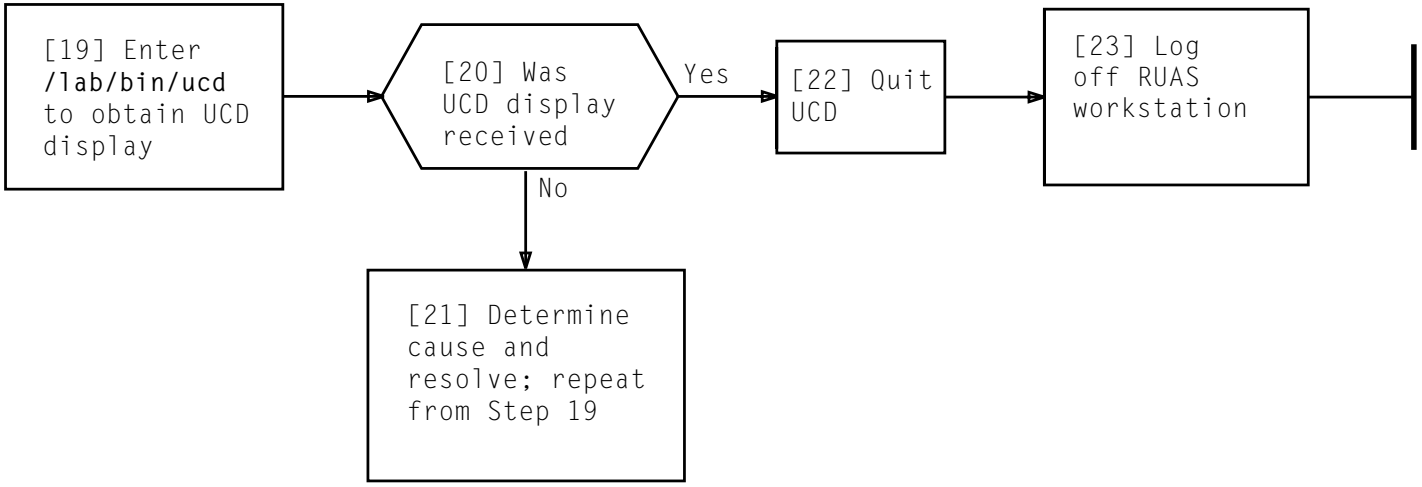

```
OFFICEID=wnvl0  HOST=whost1  server=wnvl0us
          Global Handler          PASSED (wnvl0us)
          Async Handler           PASSED (wnvl0us)
          Error Handler           PASSED (wnvl0us)
          US Handler              PASSED Active MUP (wnvl0usmp0)
                                         Standby MUP (wnvl0usmp1)
          MUP wnvl0usmp0          PASSED
```

FIG. 2 - Sample usstat Printout

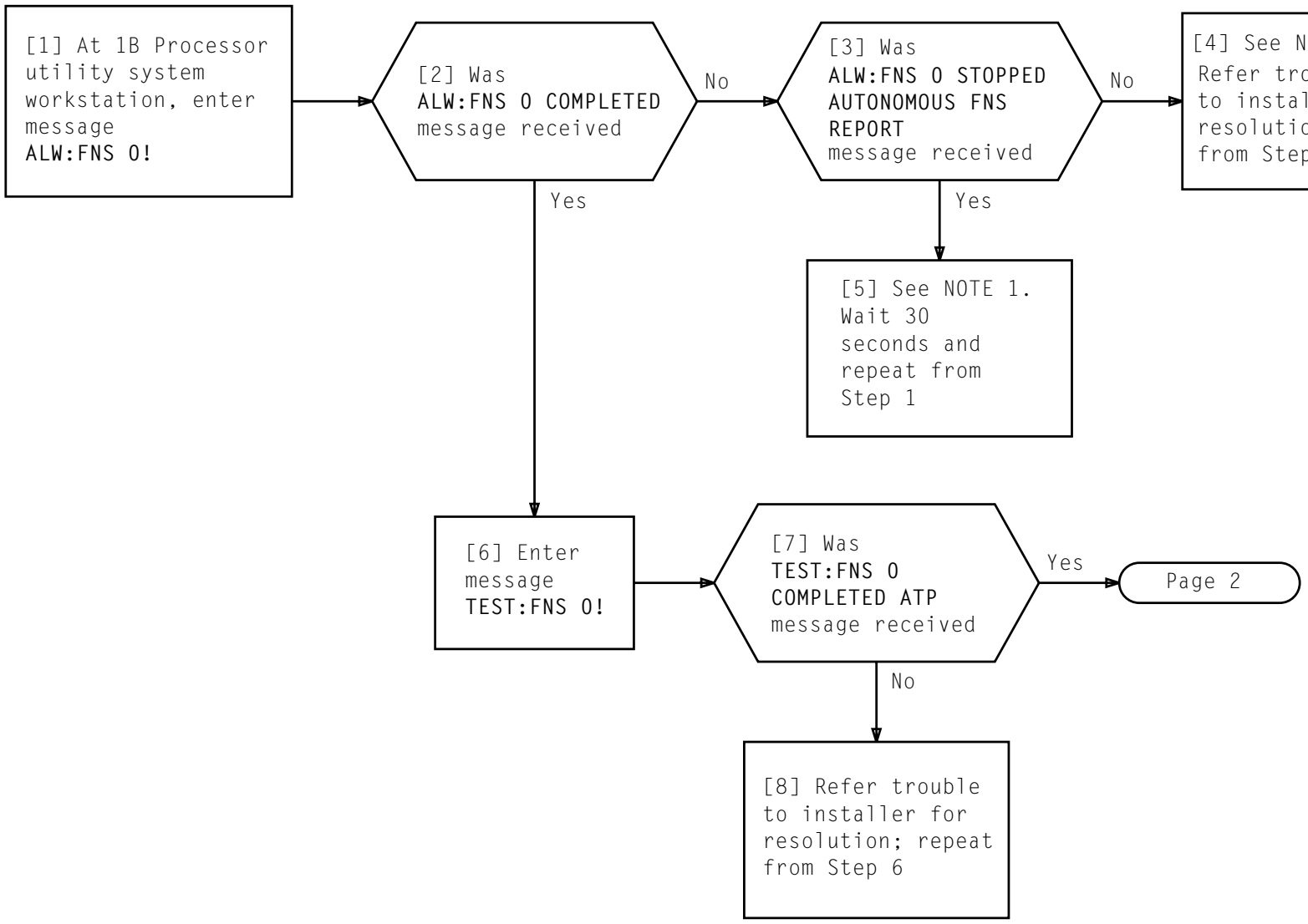



```
Client Number = 78
Release 19.5.3 on 8/6/1993; Client table for lab wnvl0,machine wnvl0usmp0
NUM        PERM       ERMMASK    PID       UNAME       MNAME
78         3          ffffffff   319       dajb        whost1
```

FIG. 3 - Sample of RUAS Client Printout



PERFORM RUAS BACKOUT VERIFICATION TESTS



NOTE 1

INH:FNS 0! message may need to be entered before repeating from Step 1

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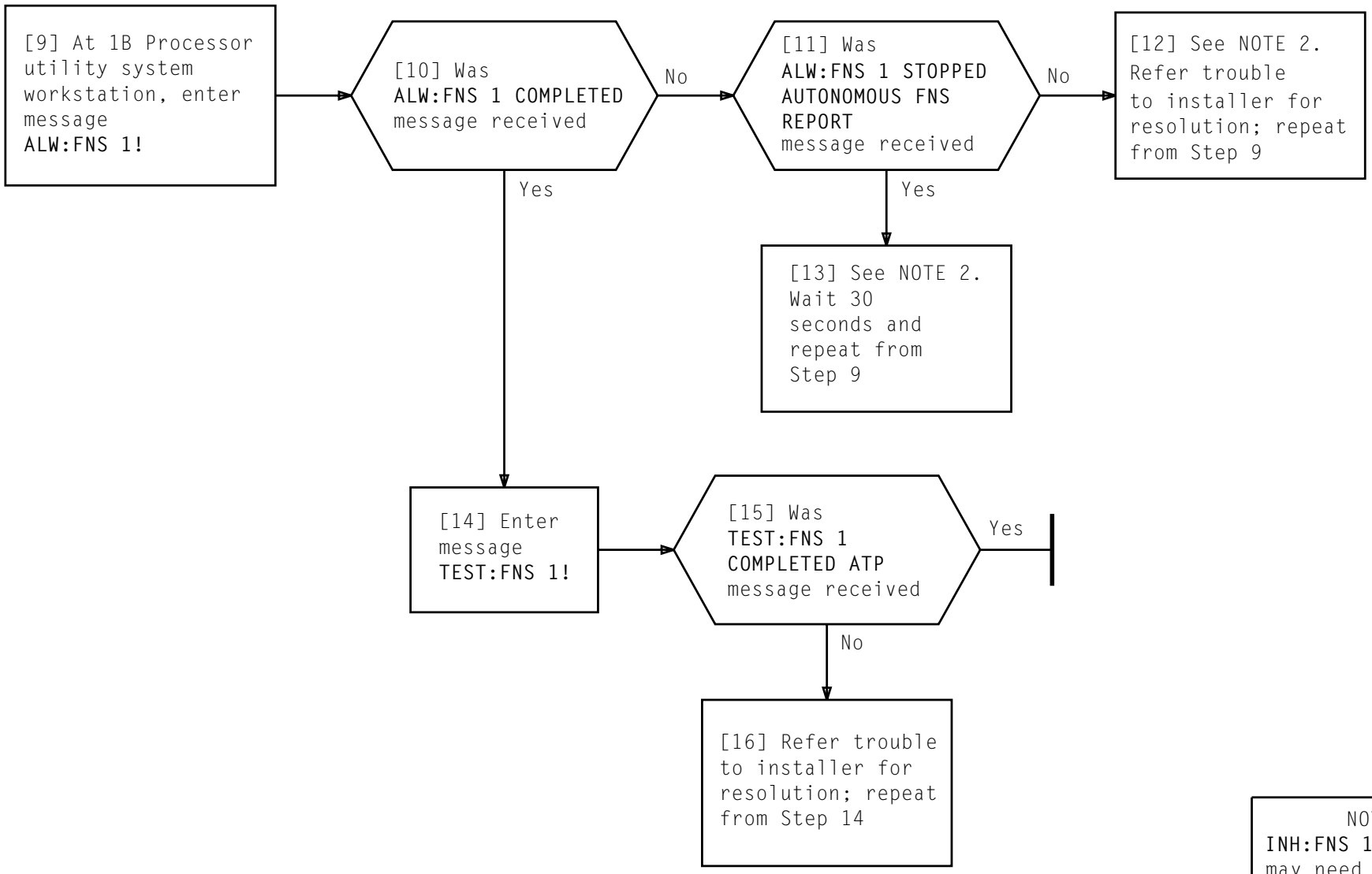
TEST FAN SYSTEM



NOTE 2

INH:FNS 1! message may need to be entered before repeating from Step 9

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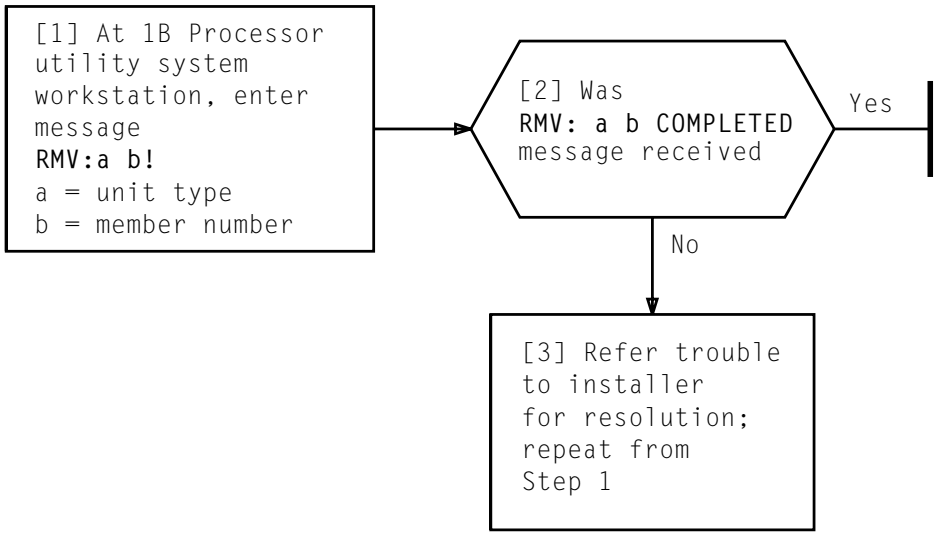
TEST FAN SYSTEM



REMOVE 1B PROCESSOR UNIT FROM SERVICE

[1] Determine ITE workstation
RUAS ID (site ID) for office

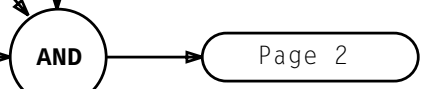
[2] Log into local RUAS workstation designated dual
(early) access to 1B Processor [NOTE 1]

[3] If two shell windows (mvterm) are not created, create
one to be called shell input window and another to
be called shell output window [DLP-659]

[4] In shell input window, enter
rlogin xxxx**us -l tccadm,** to log into ITE workstation
xxxx = ITE workstation RUAS ID determined
in Step 1

Password: prompt
received

[5] Enter password obtained in NTP-006, Step 40



COMPARE MT VALUES OF 1B PROCESSOR UNITS

NOTE 1 Workstation must be logged in with open windows running	
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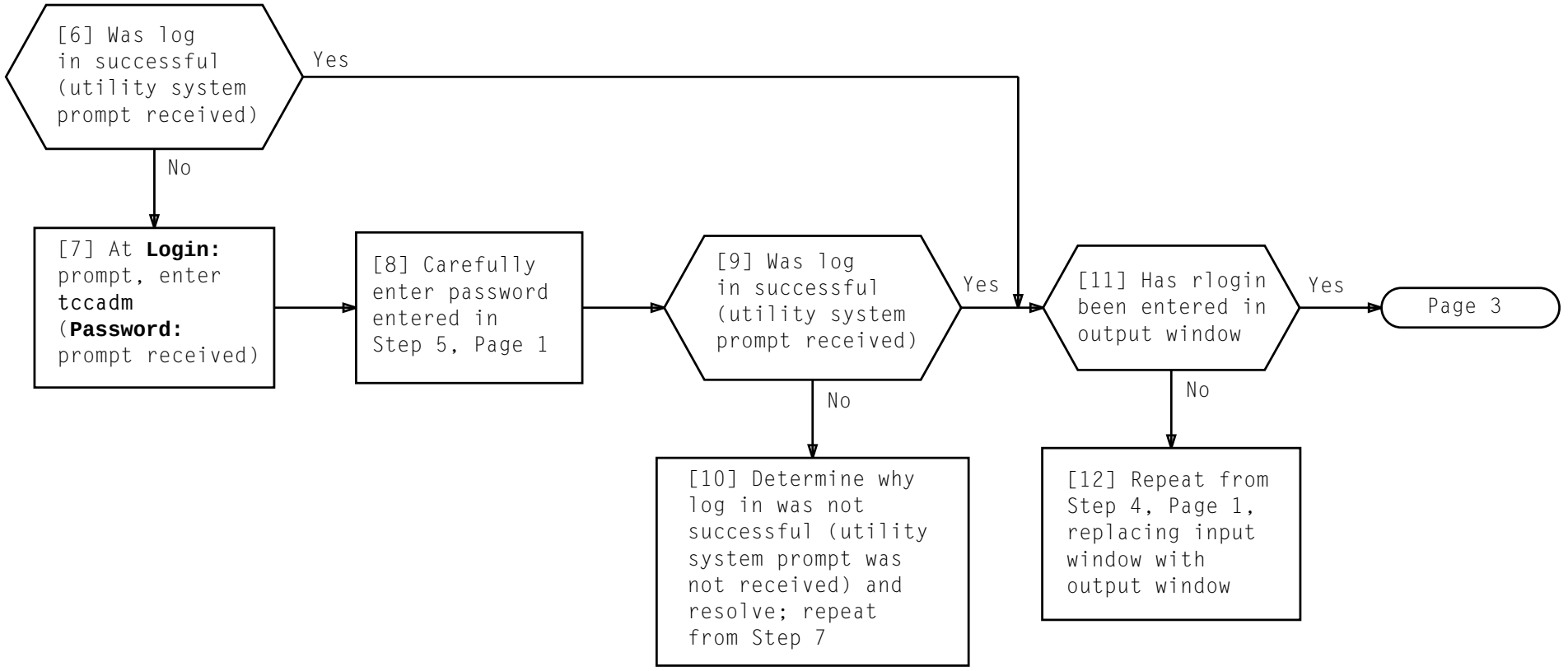
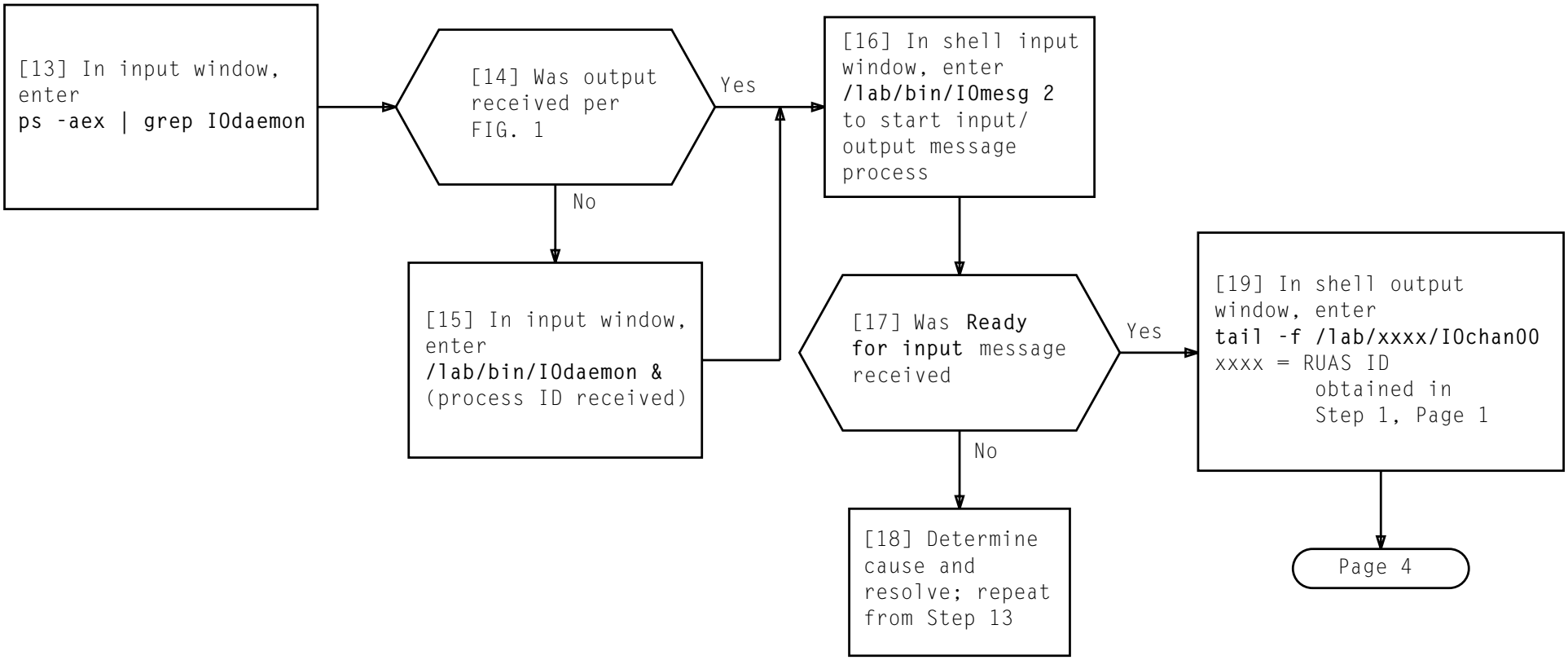


COMPARE MT VALUES OF 1B PROCESSOR UNITS




```
aaa bbb . . . . grep IOdaemon
ccc ddd . . . . /lab/bin/nIOdaemon
                or
ccc ddd . . . . /lab/bin/IOdaemon
```

FIG. 1 - Sample ps -a printout

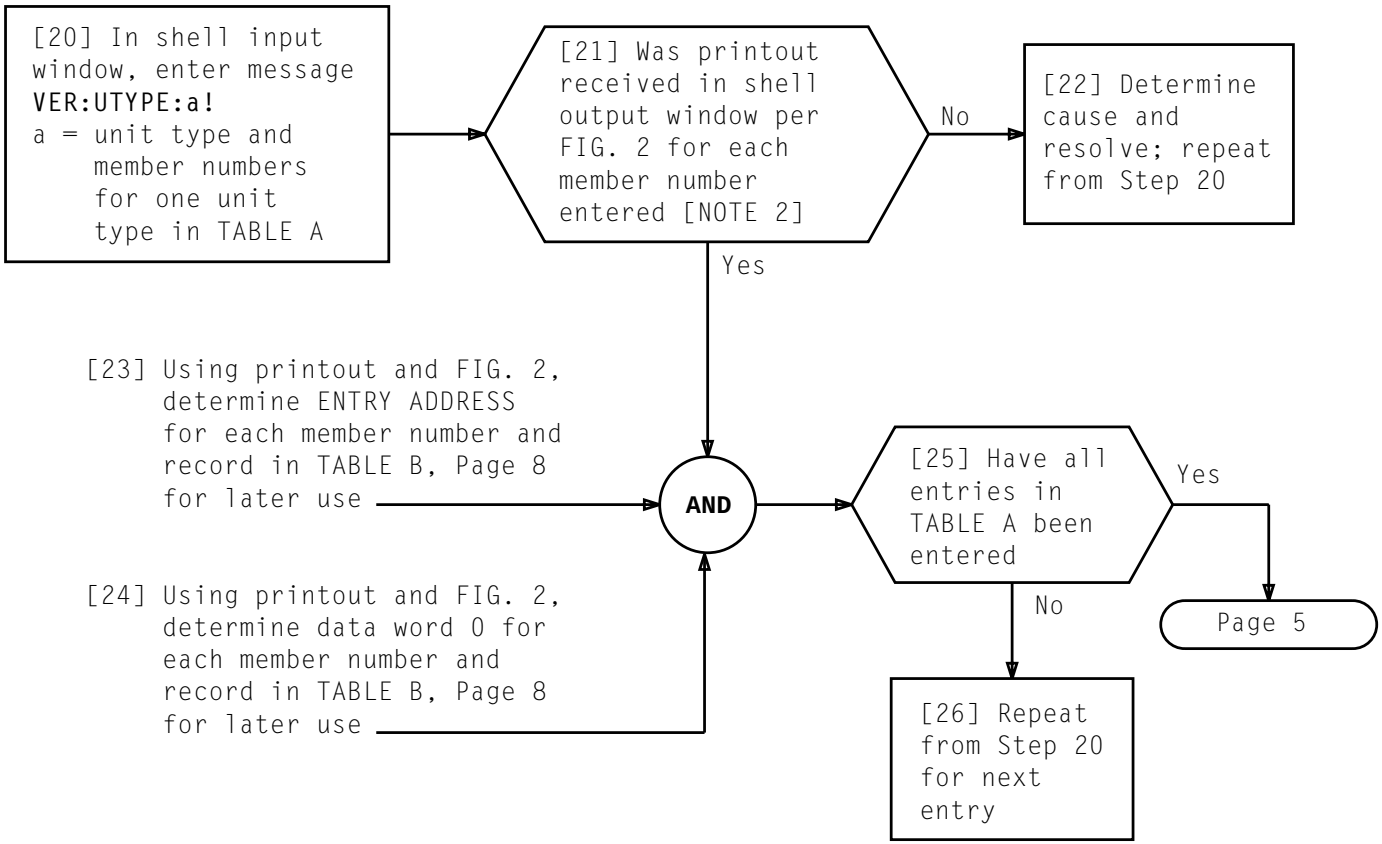


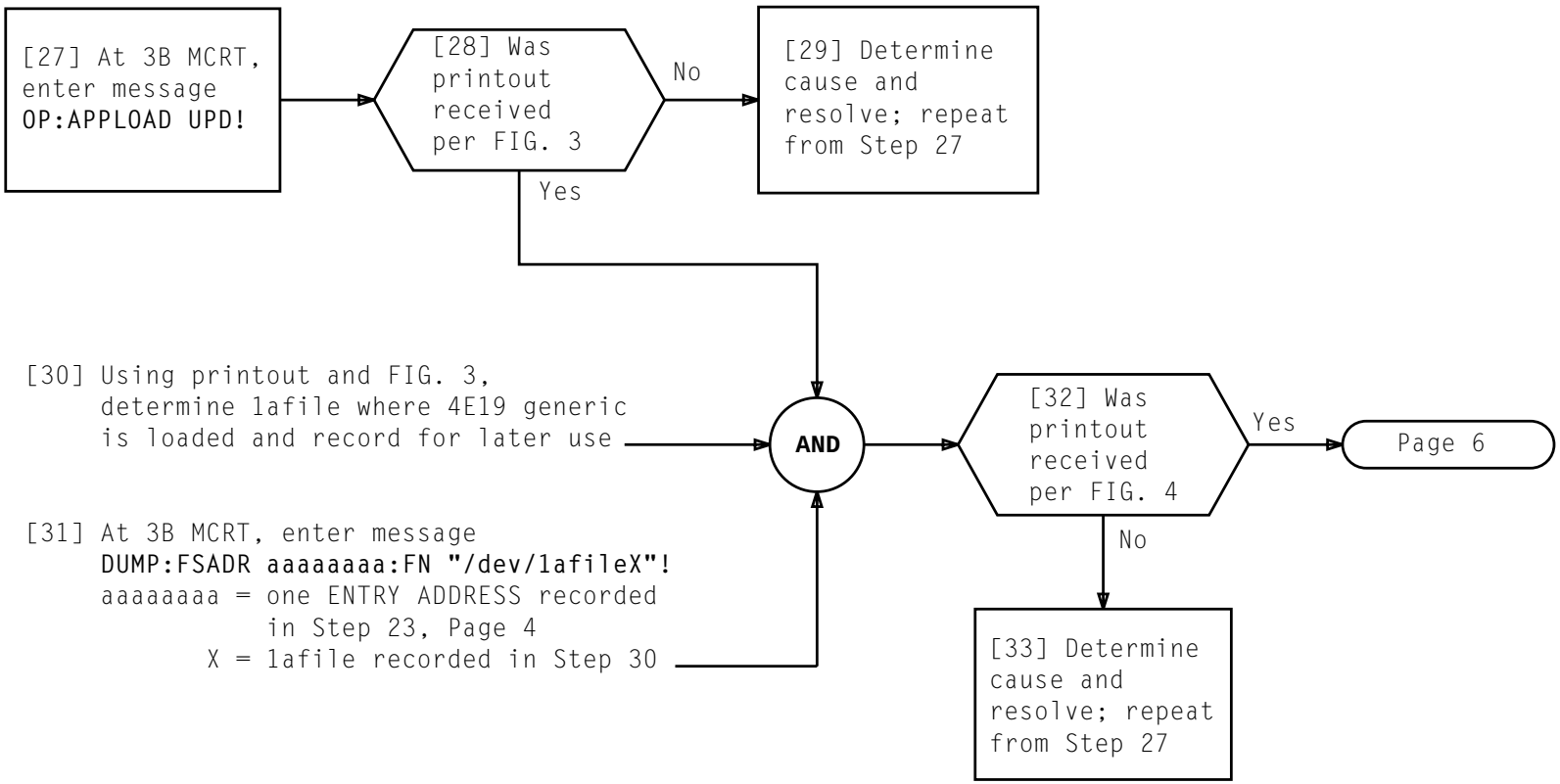
TABLE A	
ENTRY	**VARIABLE a**
1	CC (0,1)
2	PS (0,1,2,3)
3	CS (0,1,2,3,4,5,6,7,8,9)
4	AUI (0,1)
5	SSD (0,1)
6	IFB (0,1)
7	MUP (0,1)
8	PSB (0,1)
9	CSB (0,1)
10	FNS (0,1)
11	XPWR (0,1)

```
VER:UTMN;OPT(),CUR:  FLN _____  UTYN _____ ,
                          Record This Address
ENTRY ADDRESS aaaaaaaa, ENTRY SIZE _ ,
CUR
                     Record This Word
WORD 0 bbbbbbbb cccccccc dddddddd
                  •
                  •
```

FIG. 2 - Sample of VER:UTYPE Output Message

NOTE 2
VER:UTYPE printout will be received for each member number in unit type entered; for CC: printout will be received for member numbers 0 and 1, for PS: printout will be received for member numbers 0 through 3, and so on

COMPARE MT VALUES OF 1B PROCESSOR UNITS



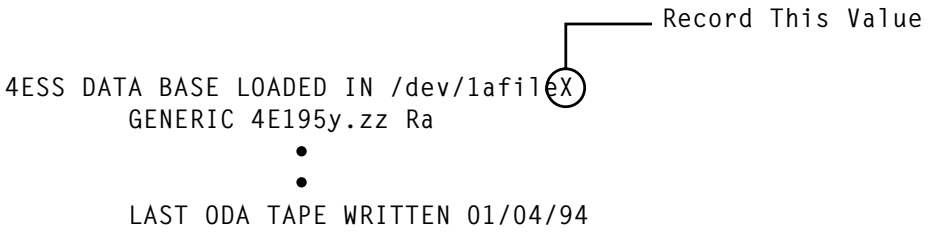


FIG. 3 - Sample of OP:APPLOAD Output Message

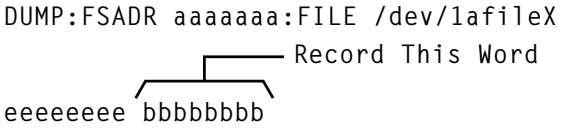
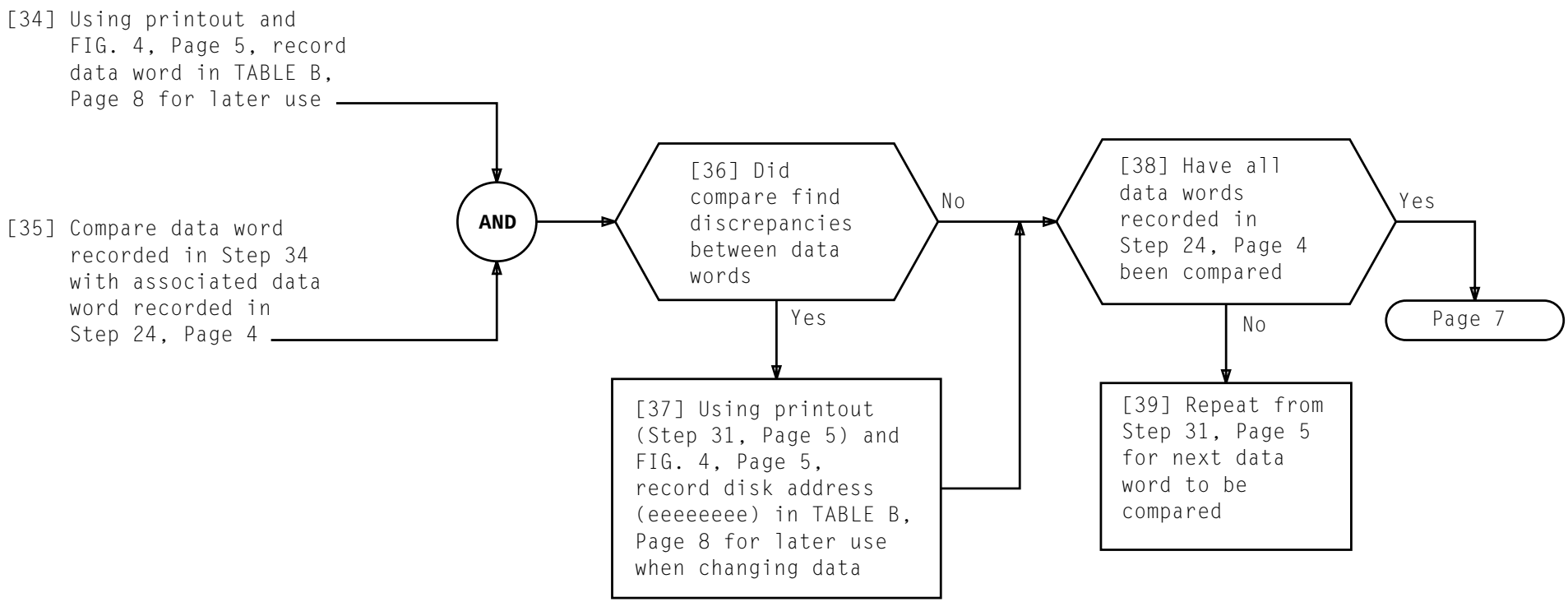
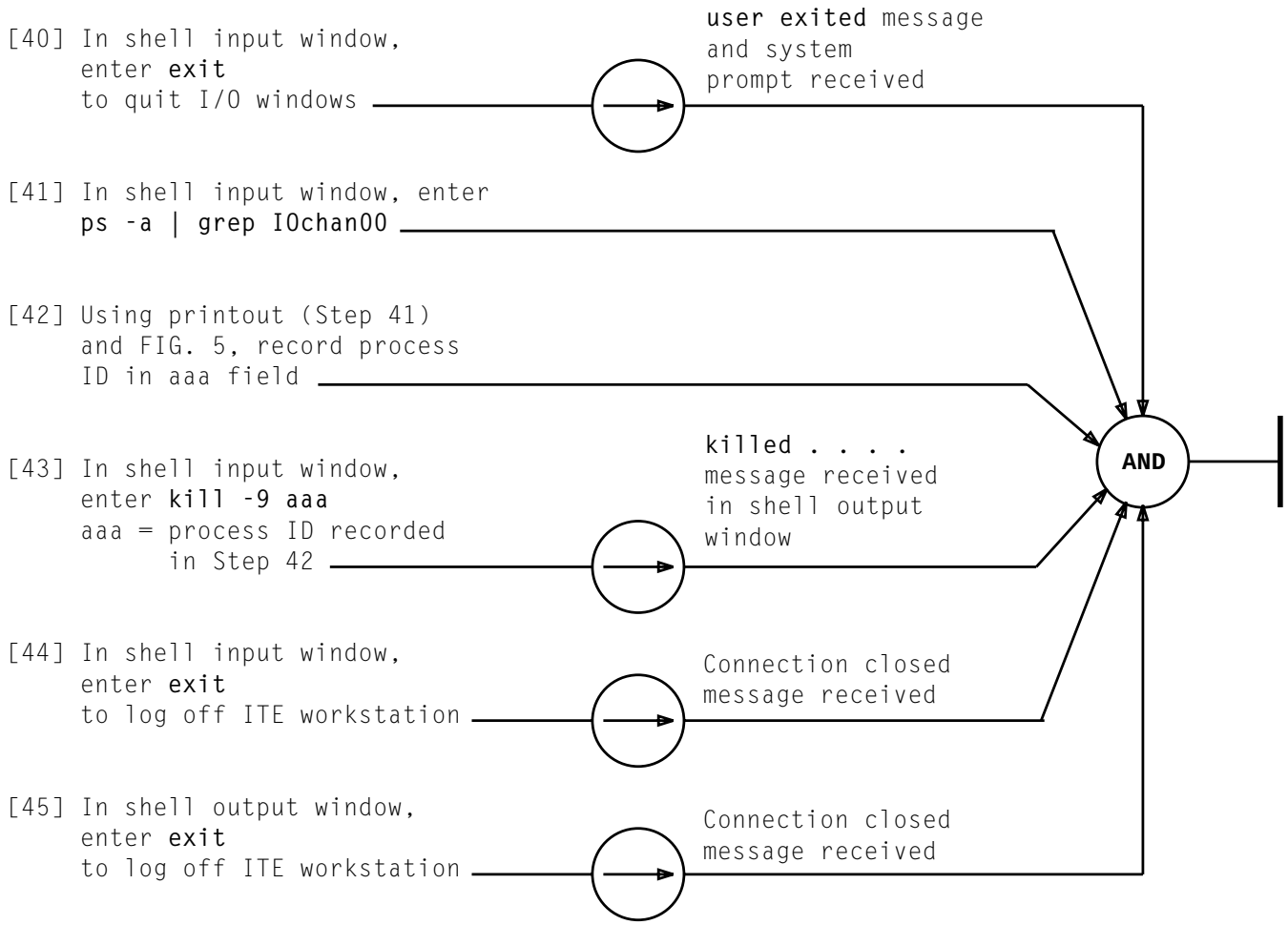


FIG. 4 - Sample of DUMP Output Message

COMPARE MT VALUES OF 1B PROCESSOR UNITS



COMPARE MT VALUES OF 1B PROCESSOR UNITS



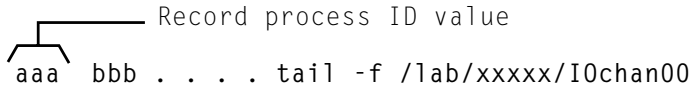
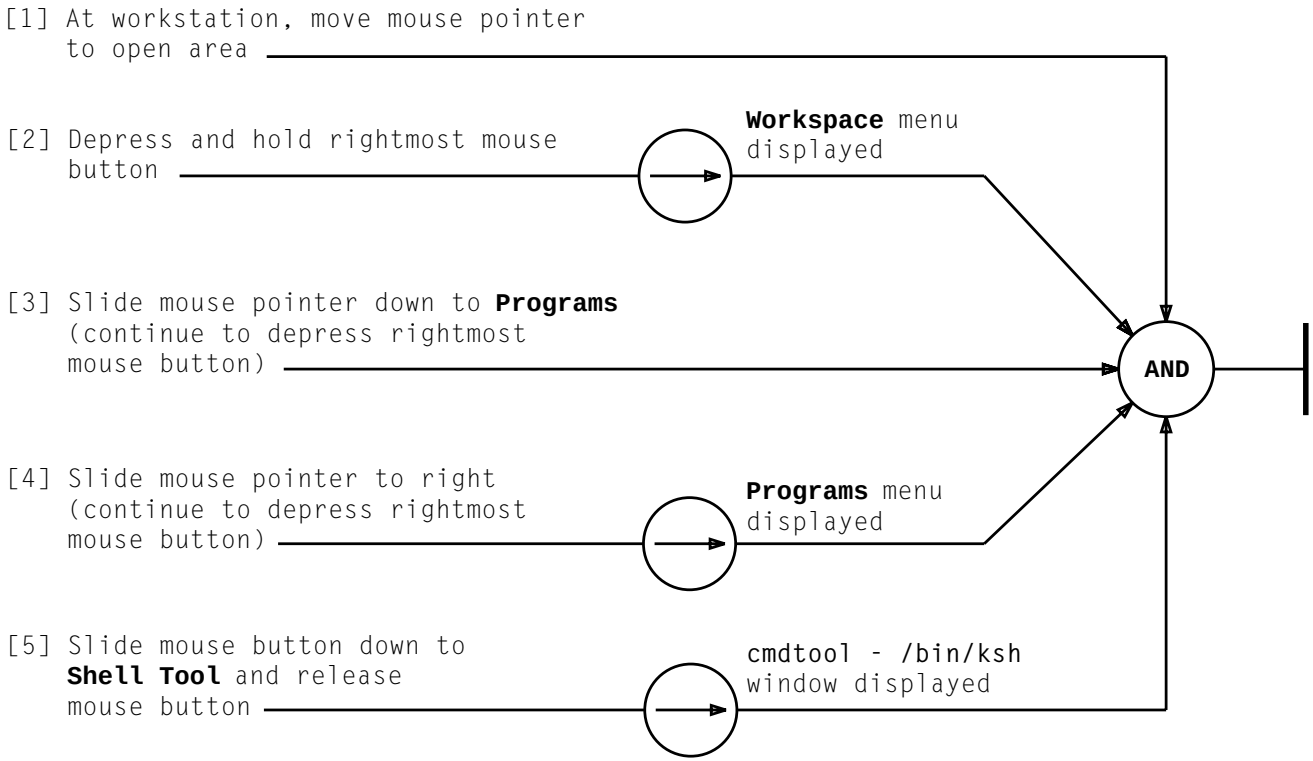


FIG. 5 - Sample ps -a printout

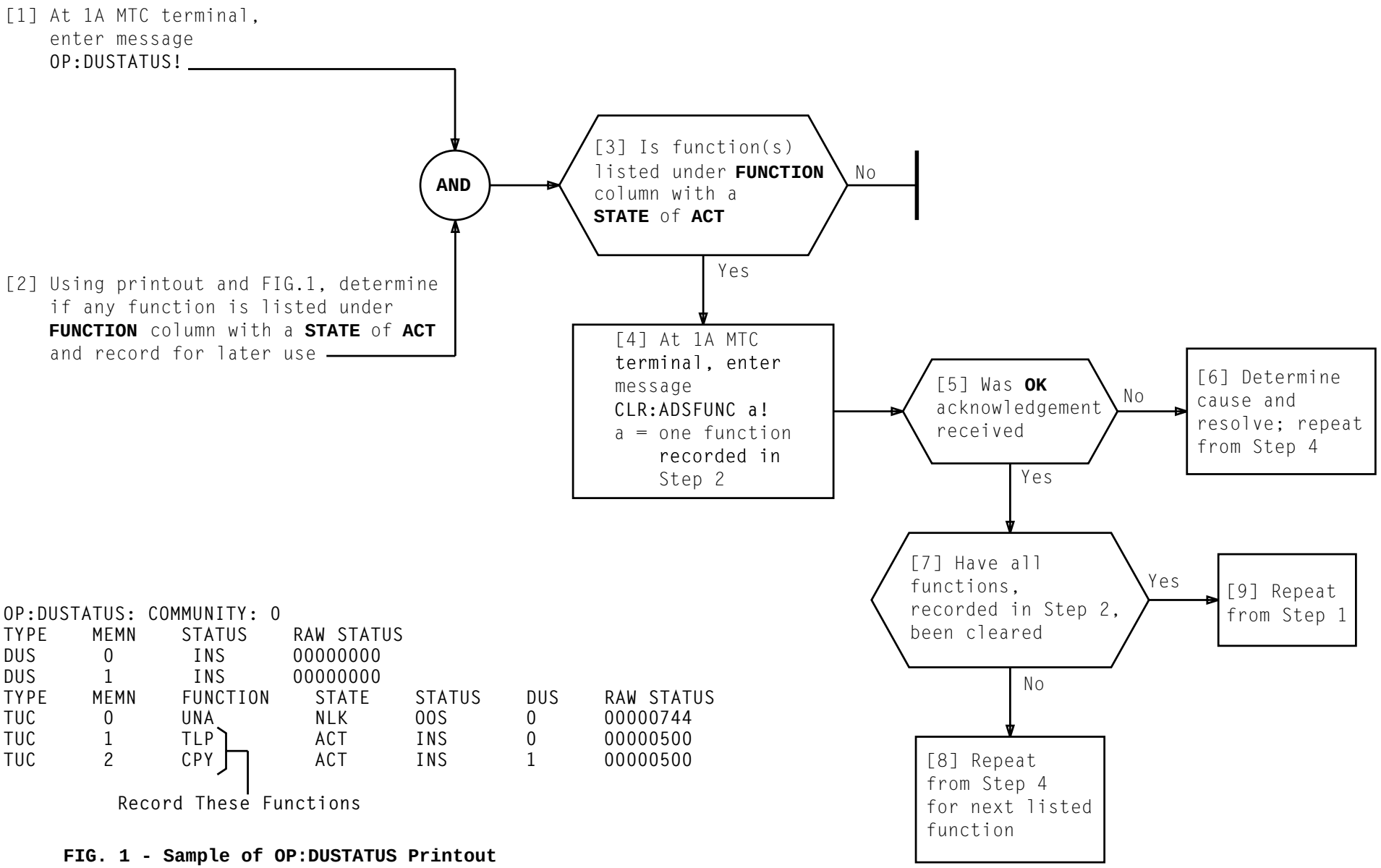
TABLE B					
UNIT TYPE	MEMBER NUMBER	ENTRY ADDRESS (Step 23, Page 4)	DATA WORD 0 (Step 24, Page 4) [NOTE 1]	DATA WORD (Step 34, Page 6) [NOTE 2]	DISK ADDRESS (If Required)
CC	0 1				
PS	0 1 2 3				
CS	0 1 2 3 4 5 6 7 8 9				
AUI	0 1				
SSD	0 1				
IFB	0 1				
MUP	0 1				
PSB	0 1				
CSB	0 1				
FNS	0 1				
XPWR	0 1				

NOTES: 1. Data in this column is to be used as new data if overwrite is required
2. Data in this column is to be used as old data if overwrite is required

COMPARE MT VALUES OF 1B PROCESSOR UNITS



CREATE SHELL WINDOW




```
OP:DUSTATUS: COMMUNITY: 0
TYPE    MEMN    STATUS    RAW STATUS
DUS      0       INS      00000000
DUS      1       INS      00000000
TYPE    MEMN    FUNCTION    STATE    STATUS    DUS    RAW STATUS
TUC      0      UNA         NLK      OOS       0      00000744
TUC      1      TLP         ACT      INS       0      00000500
TUC      2      CPY         ACT      INS       1      00000500
```

Record These Functions

FIG. 1 - Sample of OP:DUSTATUS Printout

CLEAR ADS FUNCTION

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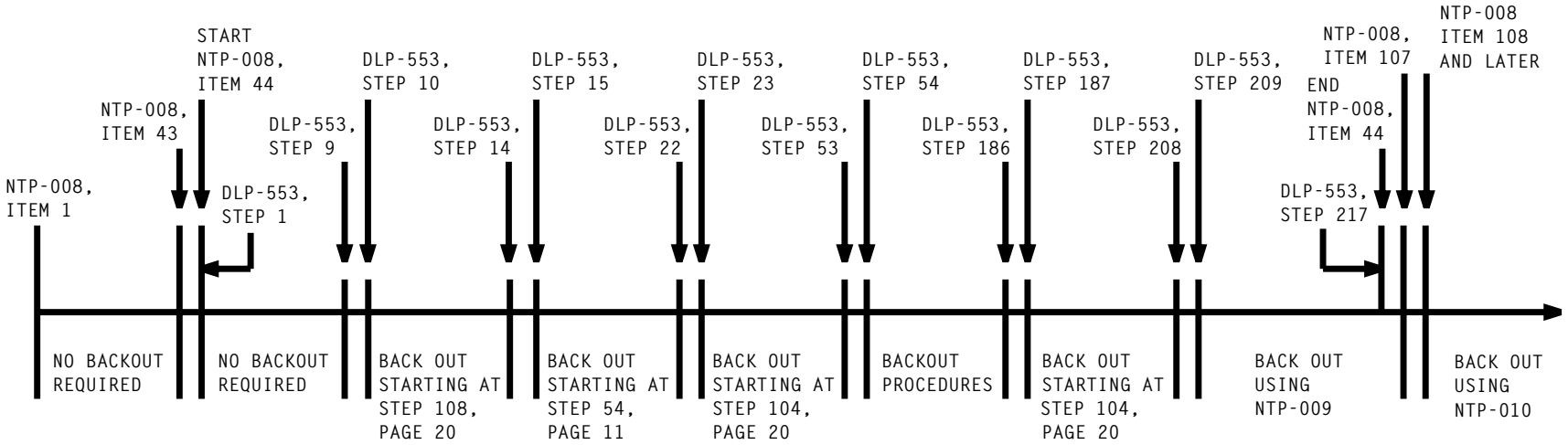
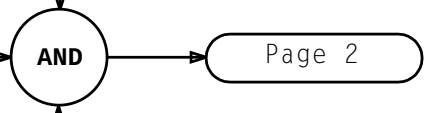


FIG. 1 — Backout Sequence

BACKOUT SEQUENCE

[1] Allow utility interfering actions [DLP-585]

[2] At 1B Processor utility system workstation, start I/O message process, if required [DLP-574]



[3] Enable 1B utility paging administration (UPAD) processes (**ALW:UPAD!**) [DLP-575]

COMPARE MT VALUES OF 1B PROCESSOR UNITS

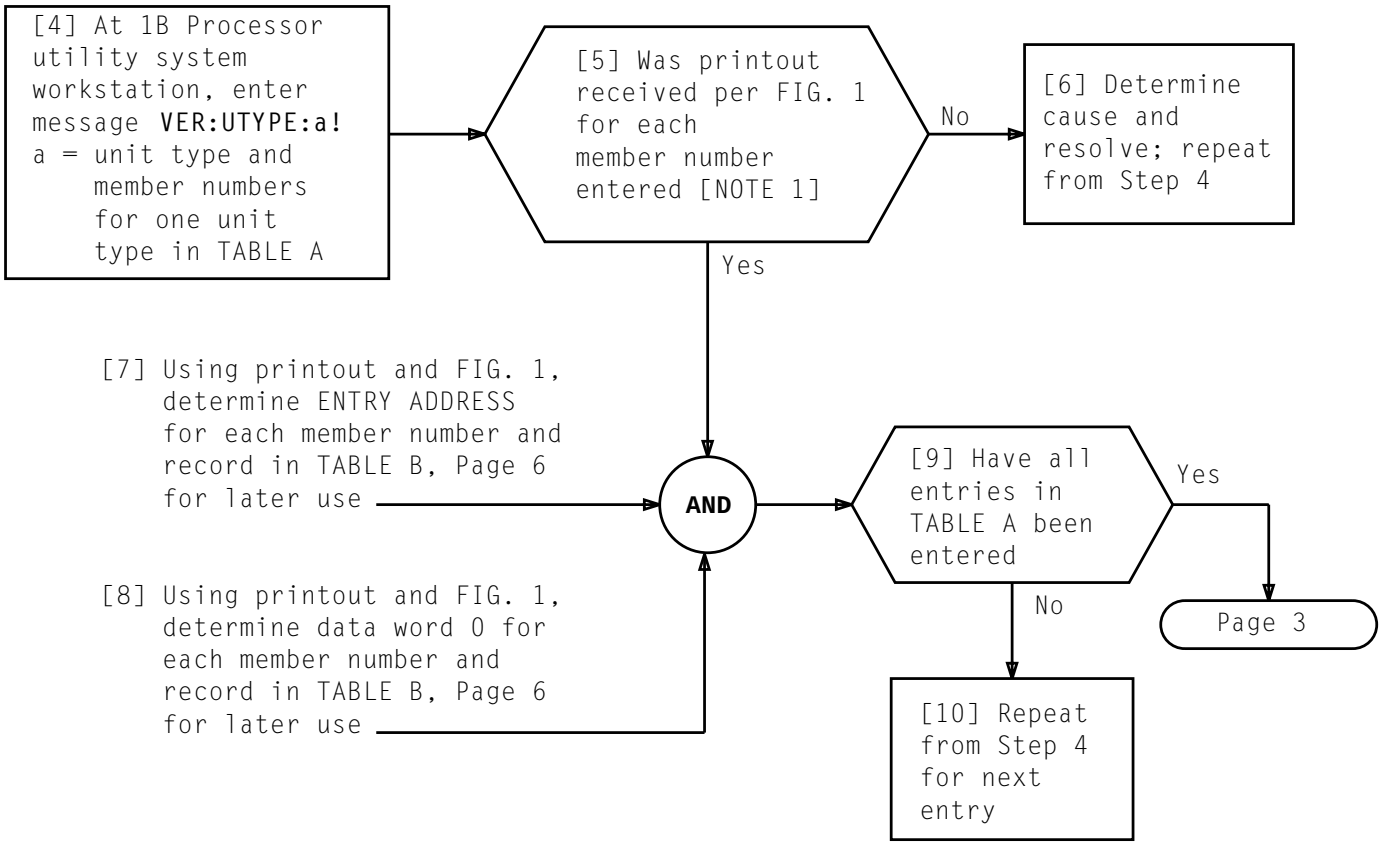


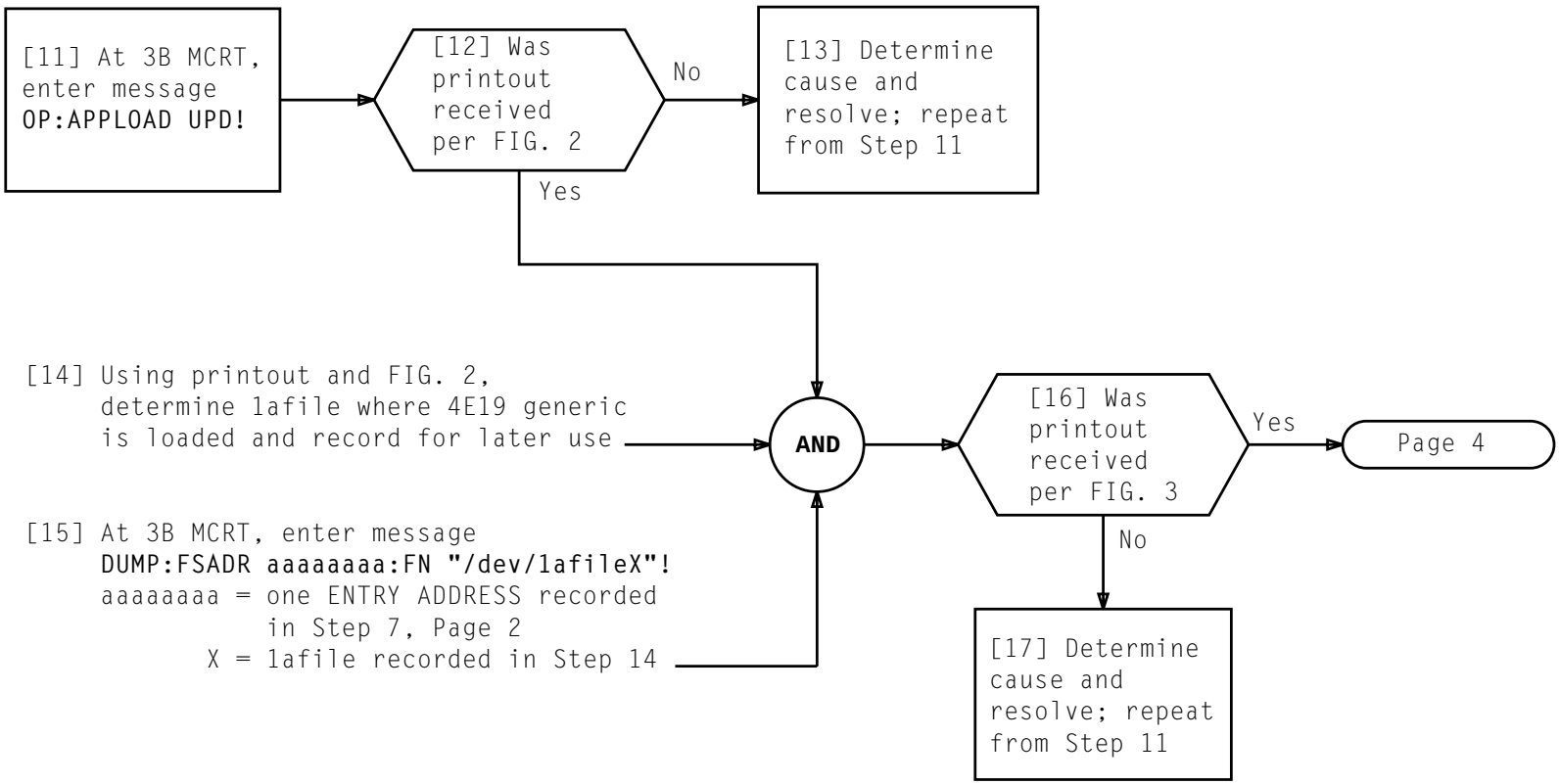
TABLE A	
ENTRY	**VARIABLE a**
1	CC (0,1)
2	PS (0,1,2,3)
3	CS (0,1,2,3,4,5,6,7,8,9)
4	AUI (0,1)
5	SSD (0,1)
6	IFB (0,1)
7	MUP (0,1)
8	PSB (0,1)
9	CSB (0,1)
10	FNS (0,1)
11	XPWR (0,1)

```
VER:UTMN;OPT(),CUR:  FLN _____  UTYN _____ ,
                          Record This Address
ENTRY ADDRESS aaaaaaaa, ENTRY SIZE _ ,
CUR
                     Record This Word
WORD 0 bbbbbbbb cccccccc dddddddd
                  •
                  •
```

FIG. 1 - Sample of VER:UTYPE Output Message

NOTE 1
VER:UTYPE printout will be received for each member number in unit type entered. For CC, printout will be received for member numbers 0 and 1; for PS, printout will be received for member numbers 0 through 3, and so on

COMPARE MT VALUES OF 1B PROCESSOR UNITS



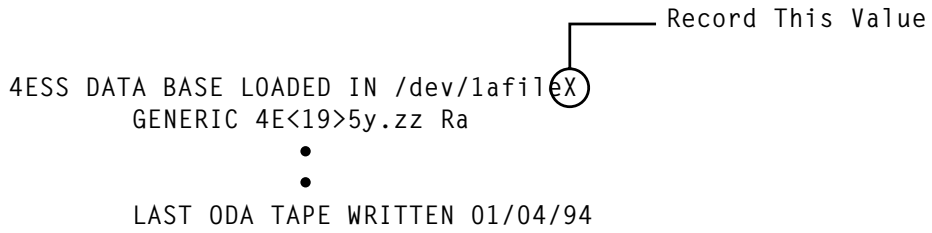


FIG. 2 - Sample of OP:APPLOAD Output Message

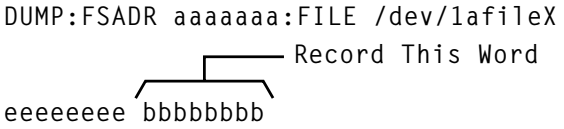
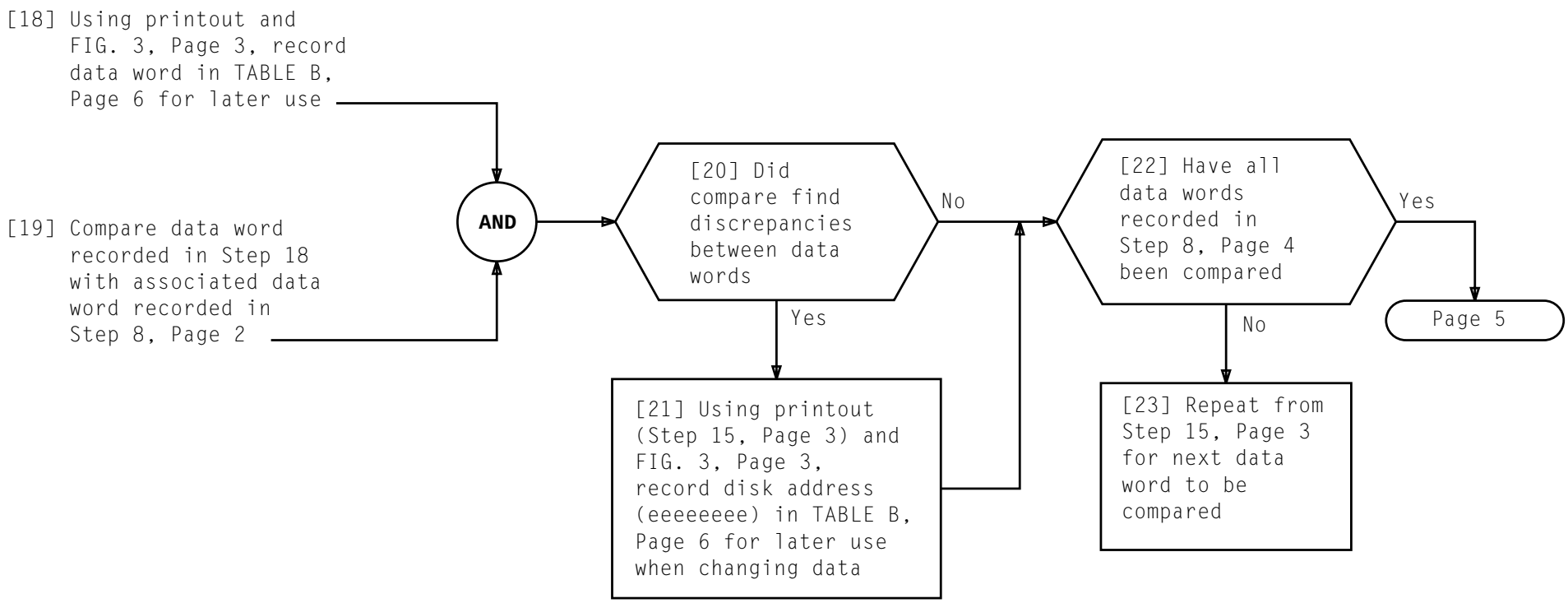


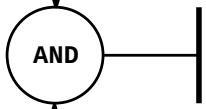
FIG. 3 - Sample of DUMP Output Message

COMPARE MT VALUES OF 1B PROCESSOR UNITS



COMPARE MT VALUES OF 1B PROCESSOR UNITS

[24] At 1B Processor utility system workstation exit I/O message windows [DLP-582]



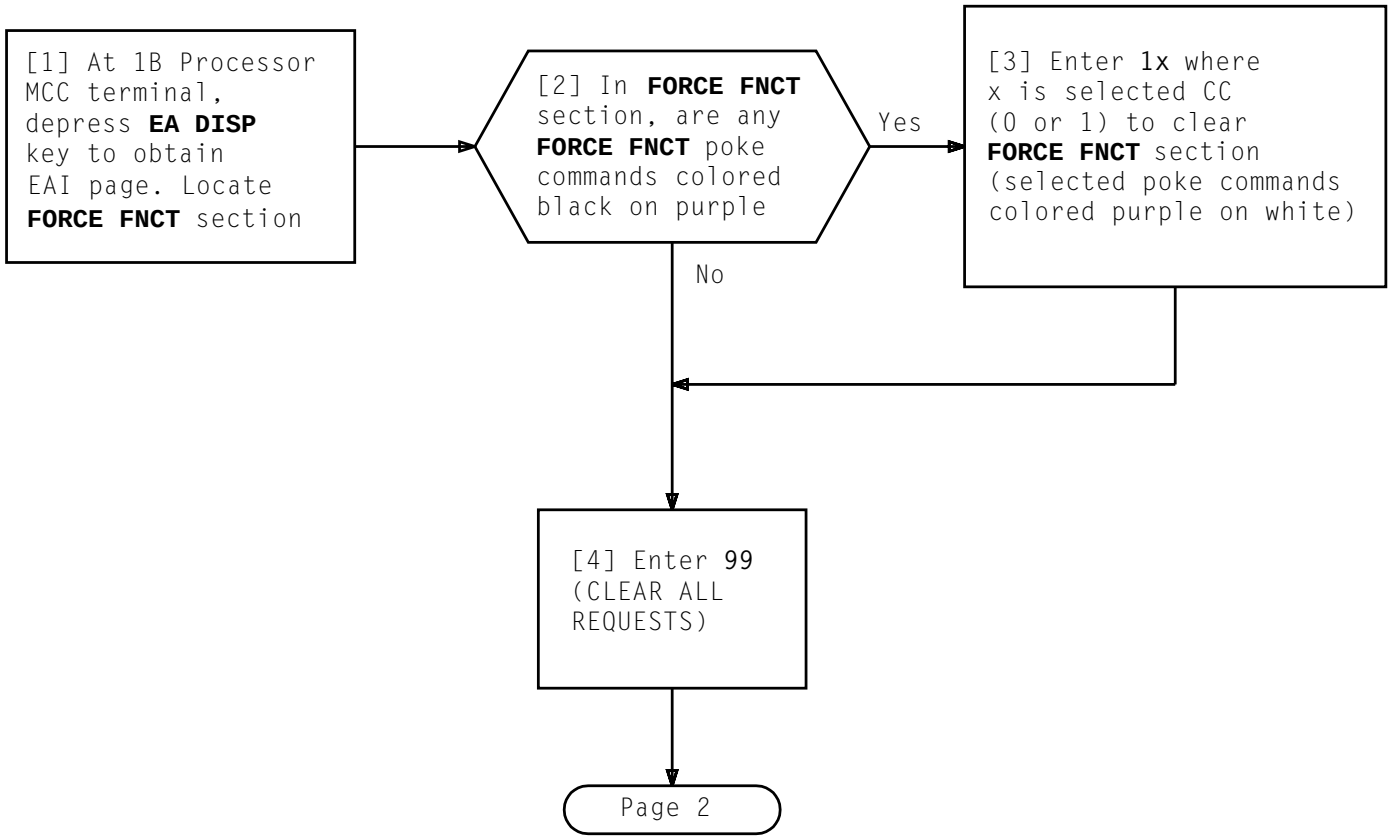
[25] Set MUP Back to Non-Interference [DLP-594]

COMPARE MT VALUES OF 1B PROCESSOR UNITS

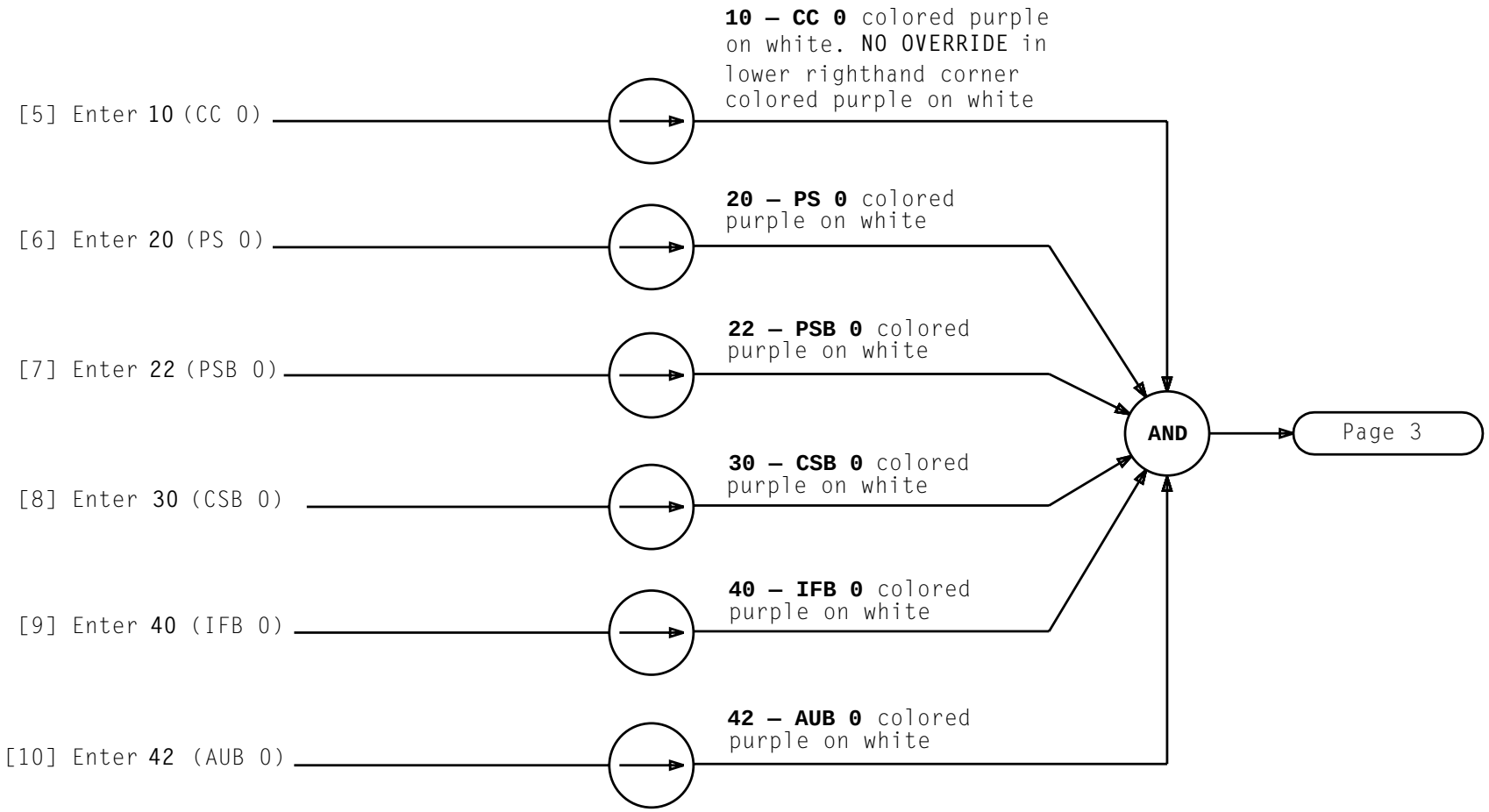
TABLE B					
UNIT TYPE	MEMBER NUMBER	ENTRY ADDRESS (Step 7, Page 2)	DATA WORD 0 (Step 8, Page 2) [NOTE 1]	DATA WORD (Step 18, Page 4) [NOTE 2]	DISK ADDRESS (If Required)
CC	0 1				
PS	0 1 2 3				
CS	0 1 2 3 4 5 6 7 8 9				
AUI	0 1				
SSD	0 1				
IFB	0 1				
MUP	0 1				
PSB	0 1				
CSB	0 1				
FNS	0 1				
XPWR	0 1				

NOTES: 1. Data in this column is to be used as new data if overwrite is required
2. Data in this column is to be used as old data if overwrite is required

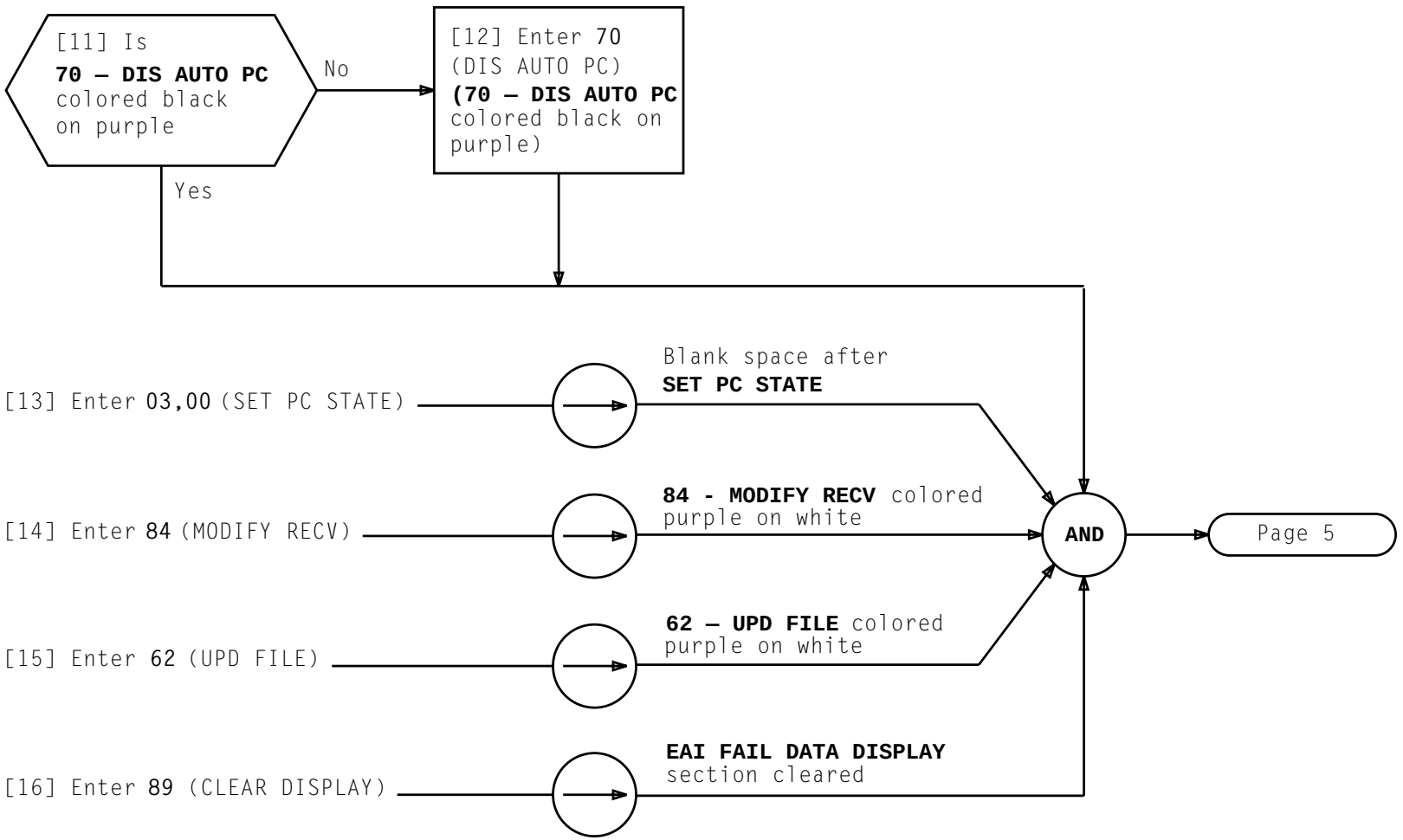
COMPARE MT VALUES OF 1B PROCESSOR UNITS



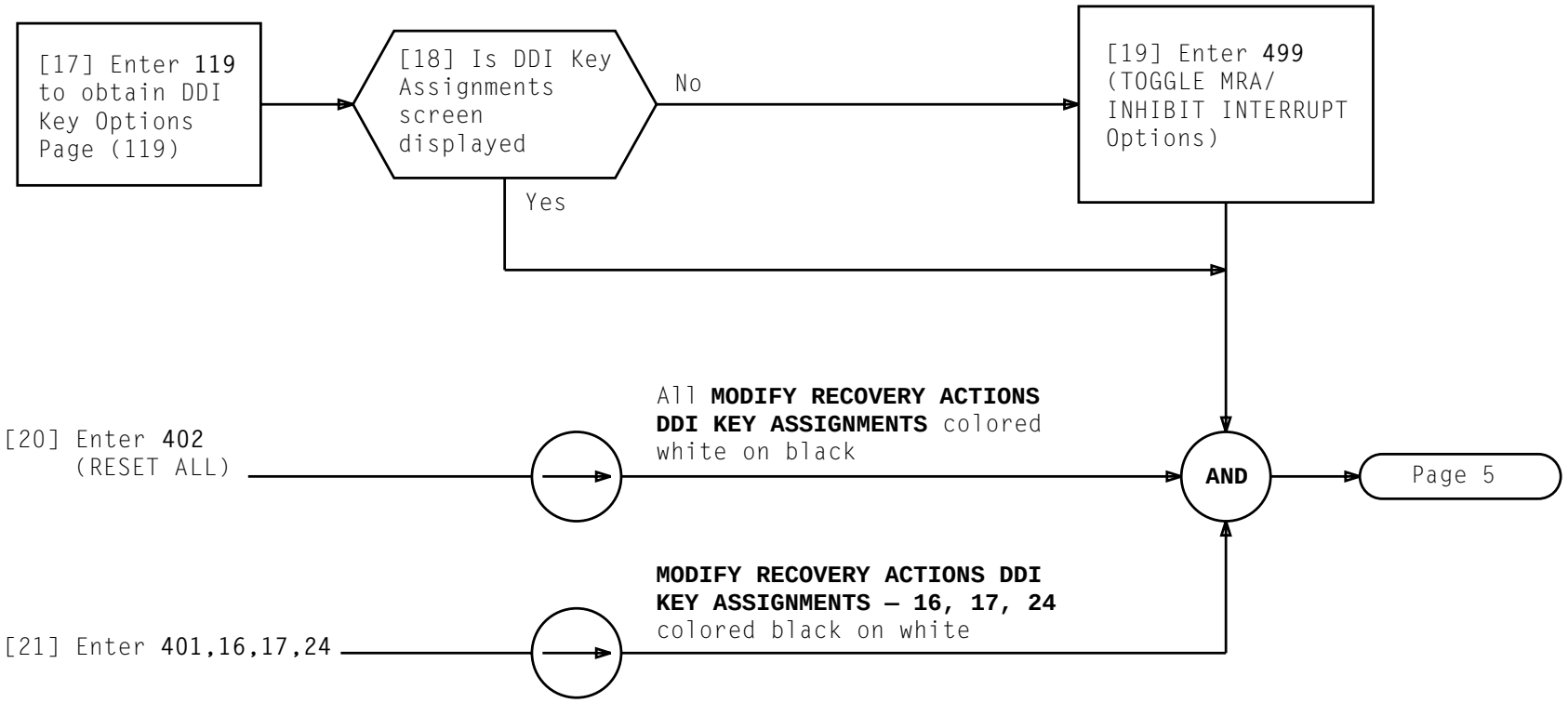
PREPARE 1B PROCESSOR FOR MANUAL RECOVERY - PRIOR TO UPDATE



PREPARE 1B PROCESSOR FOR MANUAL RECOVERY - PRIOR TO UPDATE



PREPARE 1B PROCESSOR FOR MANUAL RECOVERY - PRIOR TO UPDATE



PREPARE 1B PROCESSOR FOR MANUAL RECOVERY — PRIOR TO UPDATE

[22] At 1B Processor MCC terminal, enter **1990** to obtain Dead Start page (1990)

[23] Enter **613**

UAS:INTERFERING colored white on red

[24] Enter **701** (SUSPEND)

701 - SUSPEND colored white on red

[25] Depress **EA DISP** key to obtain EAI page

AND

All **FORCE FNCT** selections colored black on purple. All PC PROGRESSION states colored white on red

[26] Enter **01** (HARD A)

[27] In UCD window, using **SELECT** key on mouse, click on **UPDATE ALL** icon [FIG. 1]

PCRVBOOT.AA+2 displayed in CAR field

[28] At 1A MTC terminal, form enter each input message per TABLE A. **DO NOT ENTER AT THIS TIME.** These messages may be used if backout is required

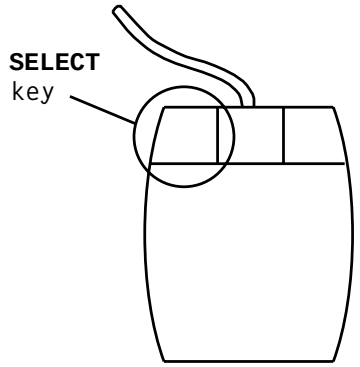
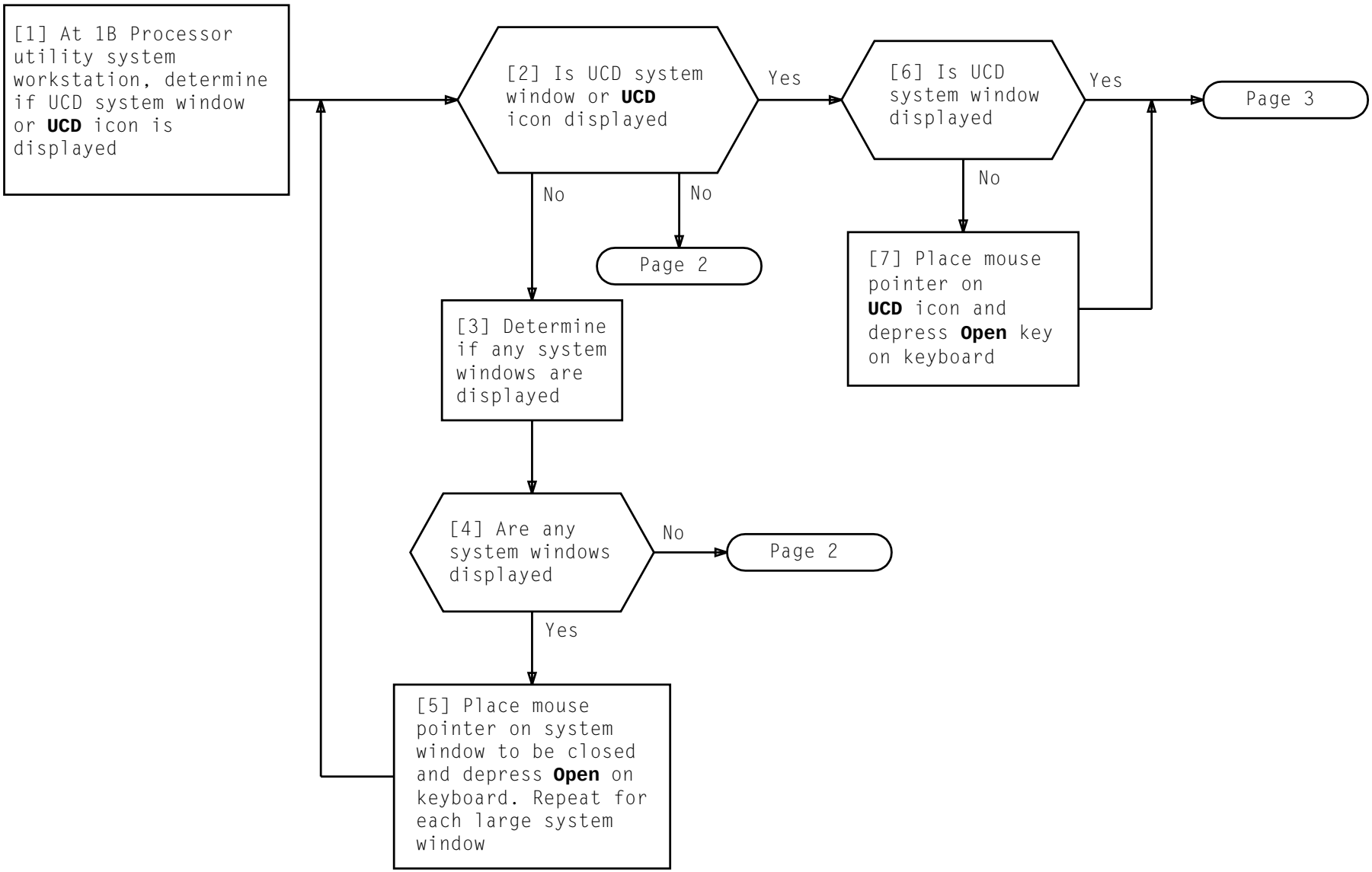


FIG. 1 - Mouse Layout

TABLE A

MESSAGE NUMBER	INPUT MESSAGES
1	RST:AUB 0;UCL!
2	RST:API 0;UCL!
3	RST:AUB 1;UCL!
4	RST:API 1;UCL!
5	CLR:APS 0;DPLXFAIL!
6	OP:APSTATUS!

PREPARE 1B PROCESSOR FOR MANUAL RECOVERY - PRIOR TO UPDATE



SET UP 1B PROCESSOR UTILITY SYSTEM WORKSTATION TO MATCH AND STOP AT END OF 1B PROCESSOR PUMP

[8] Using mouse for 1B Processor utility system workstation, move pointer to blank area

[9] See NOTE 1. Depress and hold **MENU** key on mouse [FIG. 1]

Menu displayed

[10] Slide mouse down until pointer is on **US Tools**

US Tools is highlighted

[11] Slide mouse to right until **US Tools** menu is displayed; then slide mouse to **UCD Display** and release key

AND

[12] Is **UCD** system window displayed [NOTE 2]

Yes

Page 3

No

[13] Determine cause and resolve; repeat from Step 8

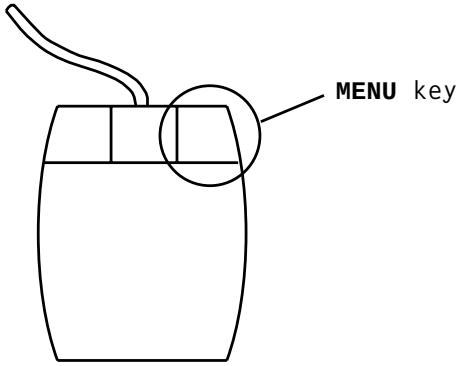
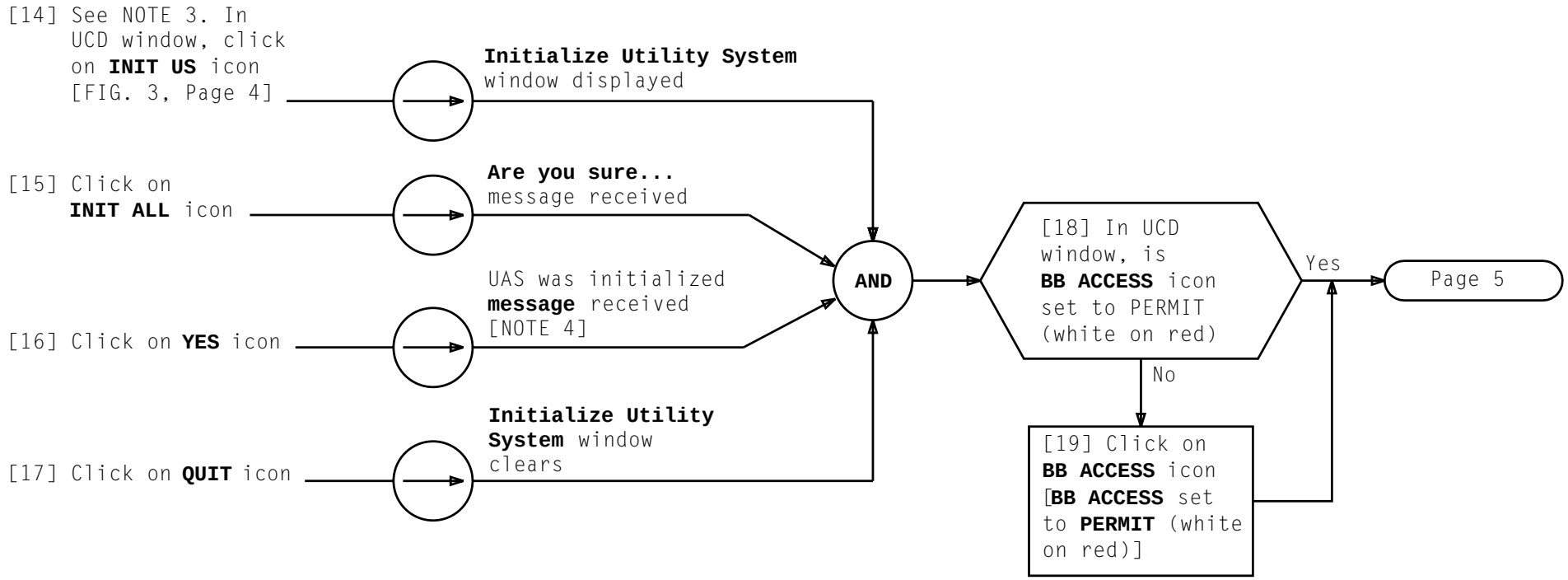


FIG. 1 - Mouse Layout

NOTES

1. **MENU** key on mouse must be depressed and held for Steps 10 and 11
2. It will take a short time before UCD window is received

SET UP 1B PROCESSOR UTILITY SYSTEM WORKSTATION TO MATCH AND STOP AT END OF 1B PROCESSOR PUMP



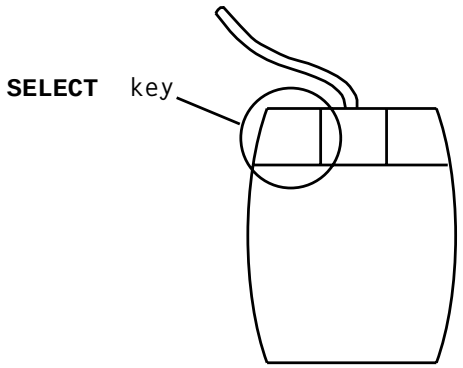


FIG. 2 - Mouse Layout

NOTES

3. Use **SELECT** key on mouse to click for Steps 14 through 17 and 19 [FIG. 2]
4. It will take short time before response is received

SET UP 1B PROCESSOR UTILITY SYSTEM WORKSTATION TO MATCH AND STOP AT END OF 1B PROCESSOR PUMP

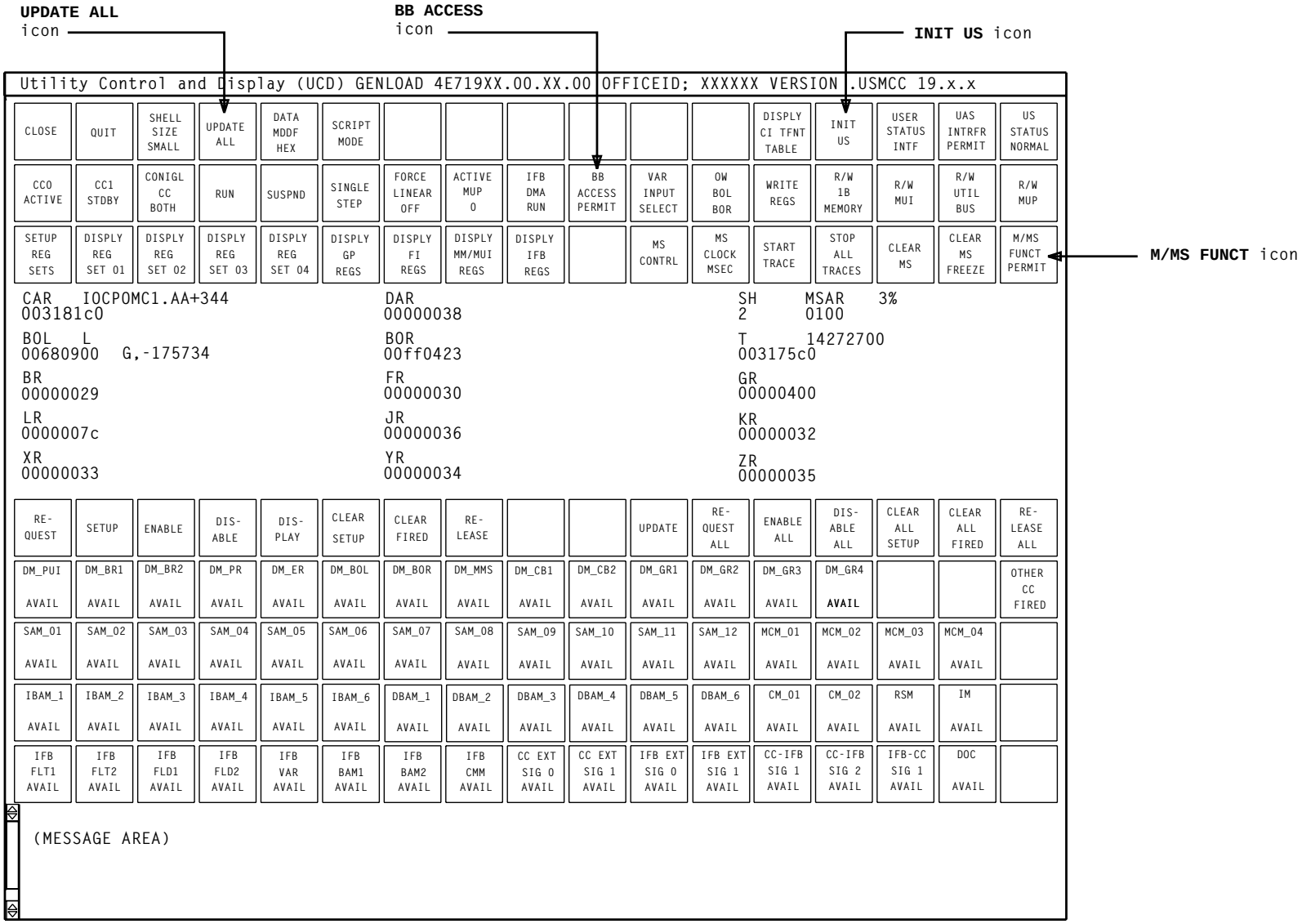
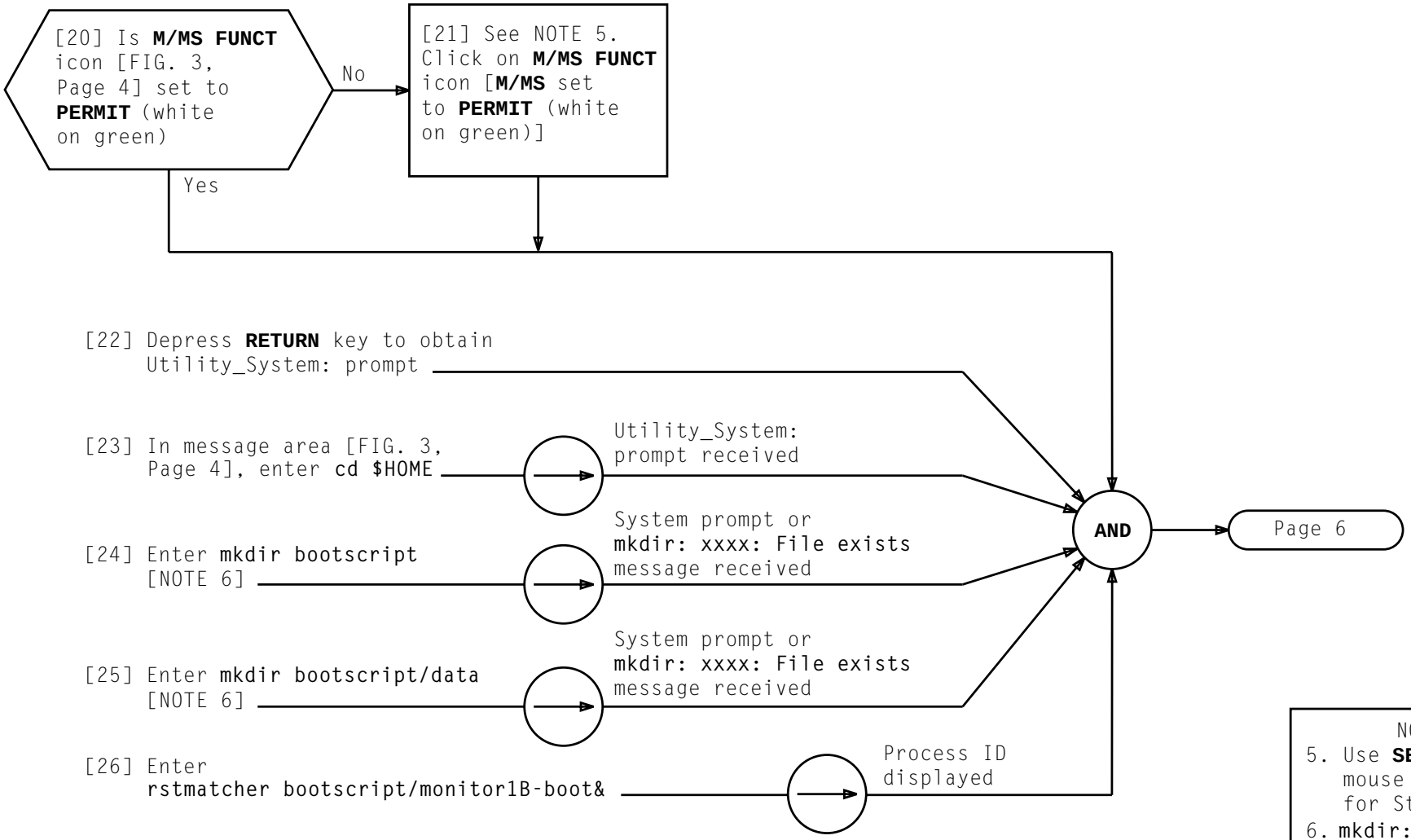


FIG. 3 - Unit and Control Display Window

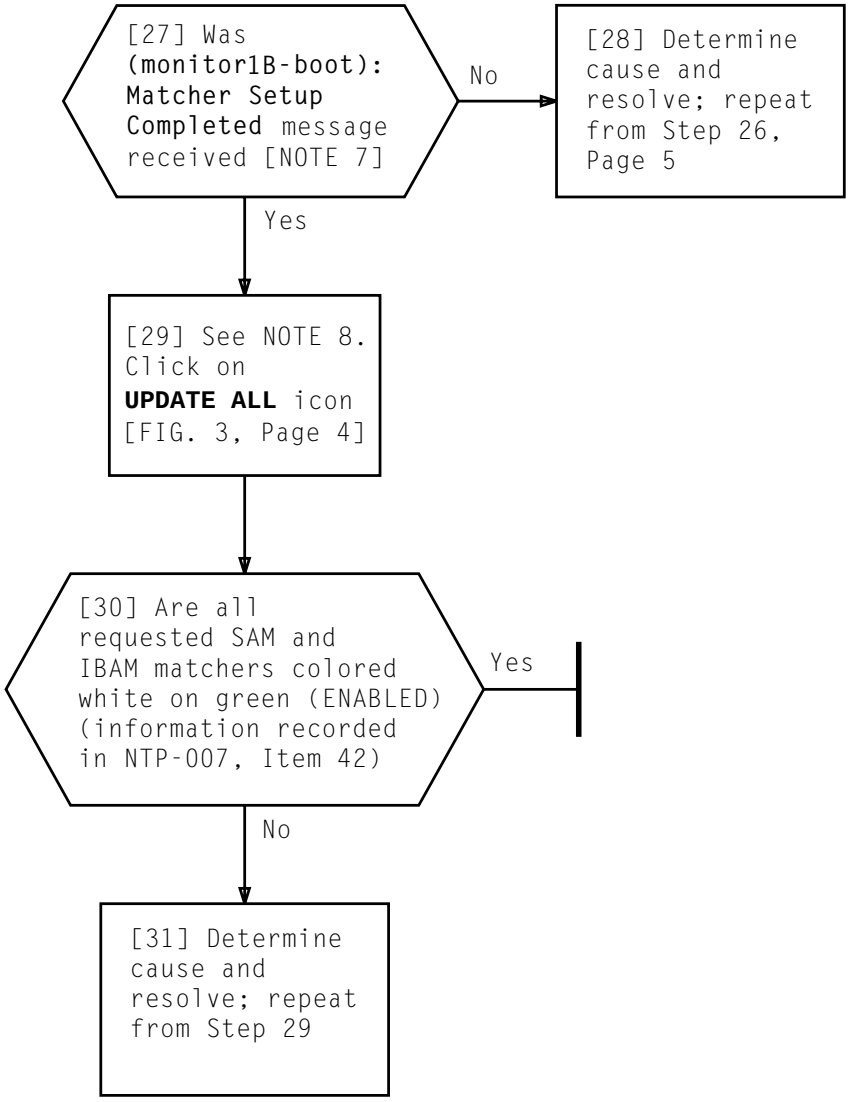
SET UP 1B PROCESSOR UTILITY SYSTEM WORKSTATION TO MATCH AND STOP AT END OF 1B PROCESSOR PUMP



NOTES

5. Use **SELECT** key on mouse to click for Step 21
6. **mkdir: xxxx: File exists** message may be received. This is a valid response since directory is already created

SET UP 1B PROCESSOR UTILITY SYSTEM WORKSTATION TO MATCH AND STOP AT END OF 1B PROCESSOR PUMP



NOTES

7. It will take a short time for response to be received
8. Use **SELECT** key on mouse to click for Step 29

SET UP 1B PROCESSOR UTILITY SYSTEM WORKSTATION TO MATCH AND STOP AT END OF 1B PROCESSOR PUMP

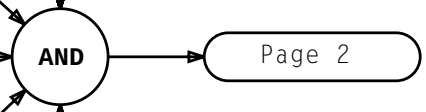
[1] This procedure is to be performed by LEC offices only. Review and become familiar with this procedure. If something is NOT understood, contact next higher technical support group for assistance. Read NOTE 2, Page 5 to become familiar with what is happening on EAI Page during pump and what to look for. *Put some type of book marker at Pages 23, 24, and 32 in case backout is required.*

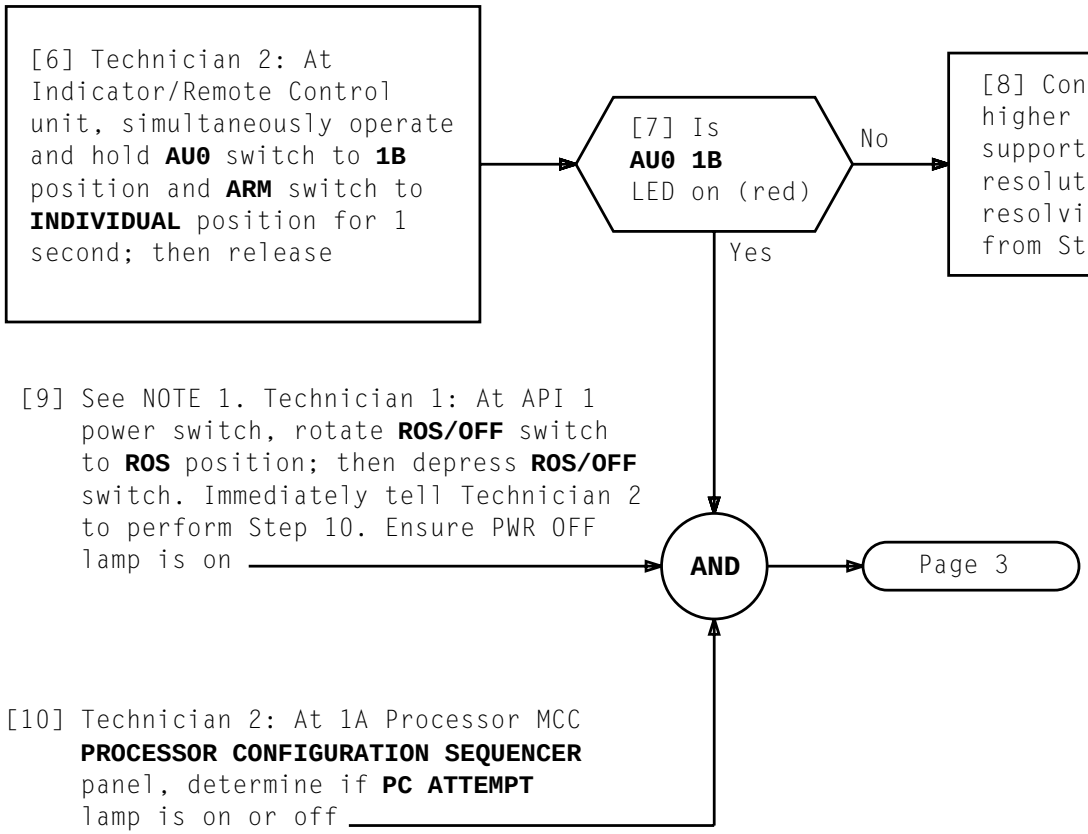
[2] Ensure CAR field on UCD displays **PCRVBOOT.AA+2.** If CAR field does not display **PCRVBOOT.AA+2,** 1B Processor will need to be suspended (701), **FORCE FNCT** selections reset and Hard A (01) entered

[3] At 1B Processor MCC terminal, if EAI page is not displayed, depress **EA DISP** key

[4] Technician 2: At Indicator/Remote Control unit, set rotary bus selector to **AU0**

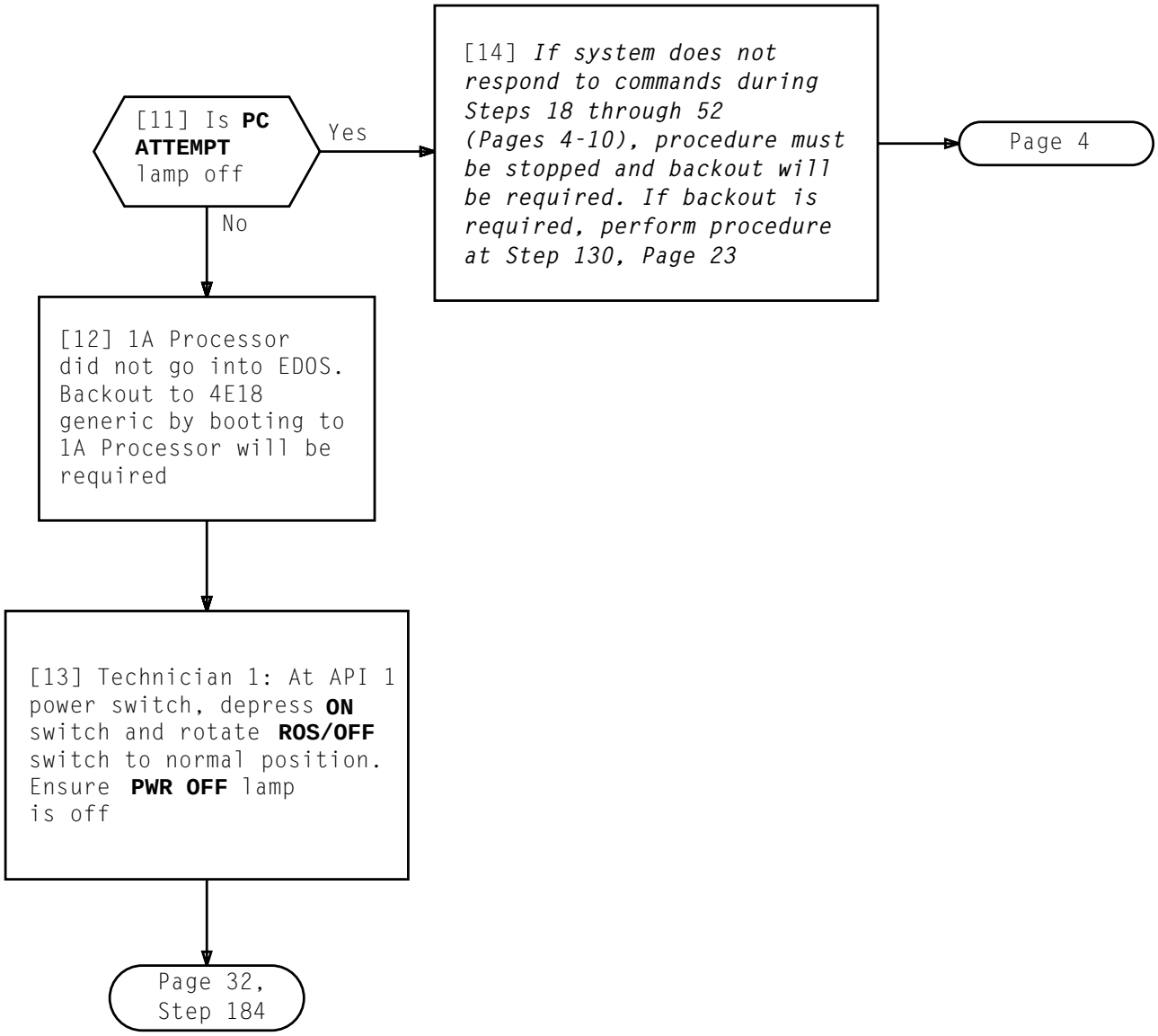
[5] Two technicians will be required to assist when performing Steps 6 through 15 (Pages 2 through 4). Become familiar with this Step sequence before performing. Steps 6, 7, and 9 (Page 2) must be performed without interruption

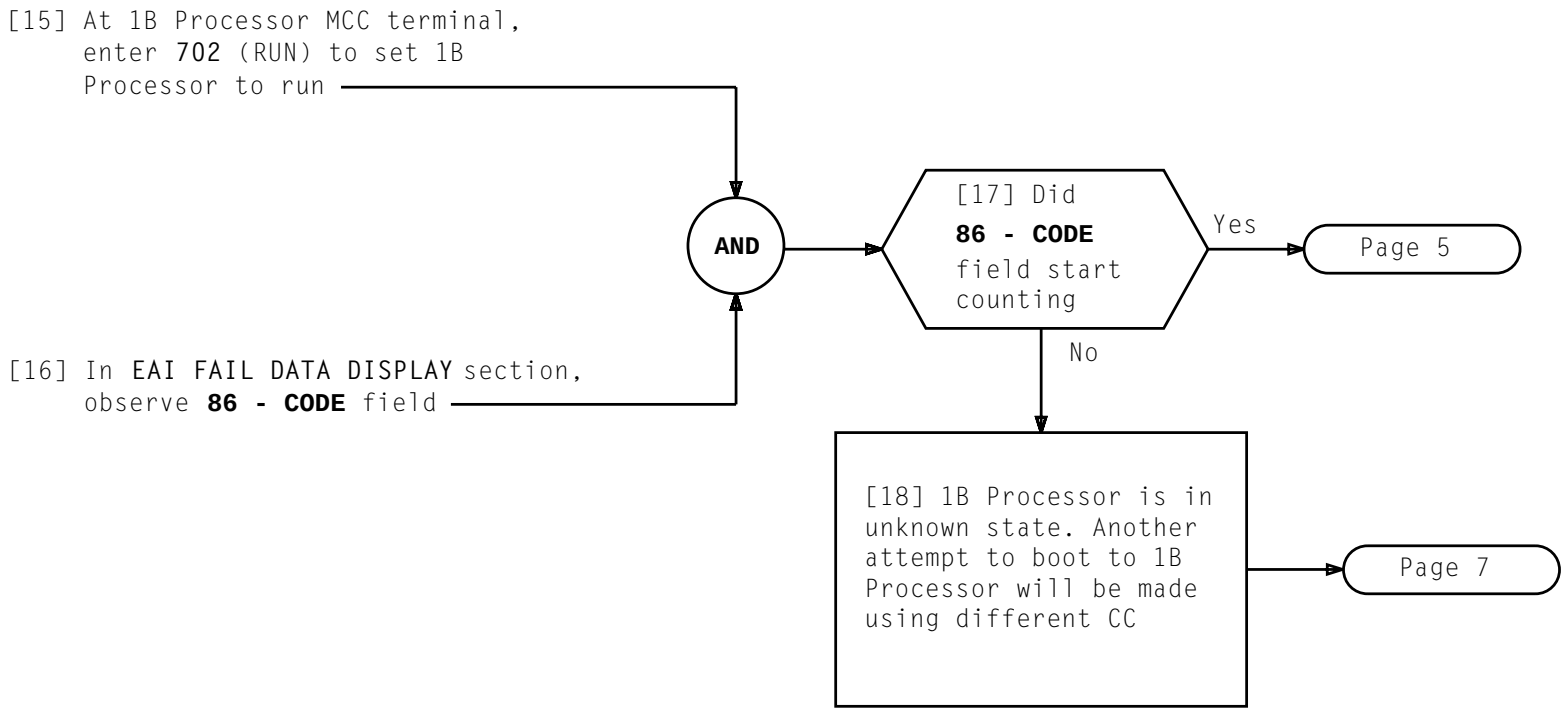


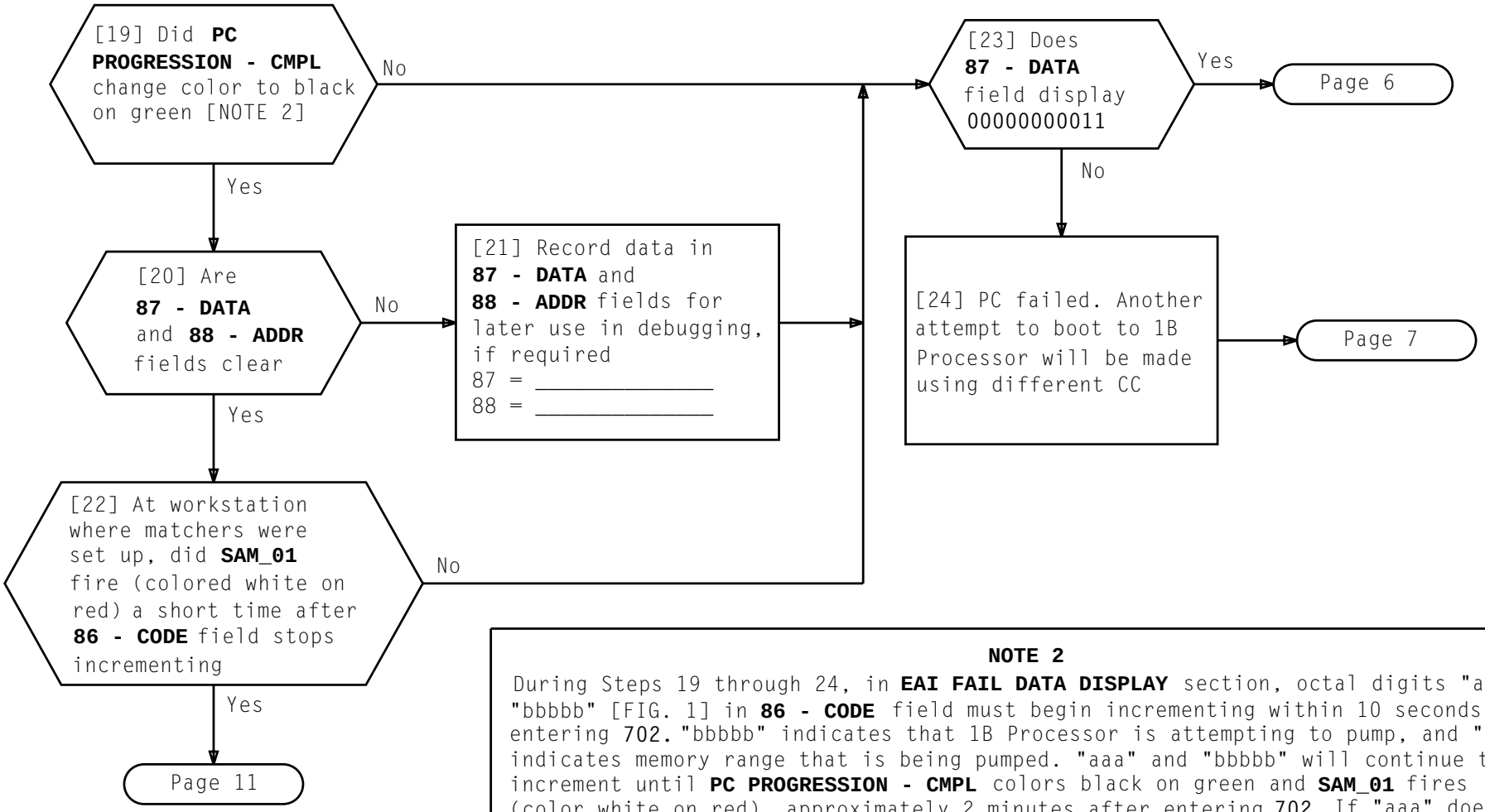


NOTE 1
Step 9 is being performed to duplex fail the APIs. Duplex failed APIs will cause 1A Processor to go into EDOS. AMA billing stops when 1A Processor is in EDOS

RETROFIT TO 1B PROCESSOR


[11] Is **PC ATTEMPT** lamp off
Yes
No
[14] *If system does not respond to commands during Steps 18 through 52 (Pages 4-10), procedure must be stopped and backout will be required. If backout is required, perform procedure at Step 130, Page 23*
Page 4
[12] 1A Processor did not go into EDOS. Backout to 4E18 generic by booting to 1A Processor will be required
[13] Technician 1: At API 1 power switch, depress **ON** switch and rotate **ROS/OFF** switch to normal position. Ensure **PWR OFF** lamp is off
Page 32, Step 184


[15] At 1B Processor MCC terminal, enter 702 (RUN) to set 1B Processor to run
[16] In EAI FAIL DATA DISPLAY section, observe 86 - CODE field
AND
[17] Did 86 - CODE field start counting
Yes
Page 5
No
[18] 1B Processor is in unknown state. Another attempt to boot to 1B Processor will be made using different CC
Page 7

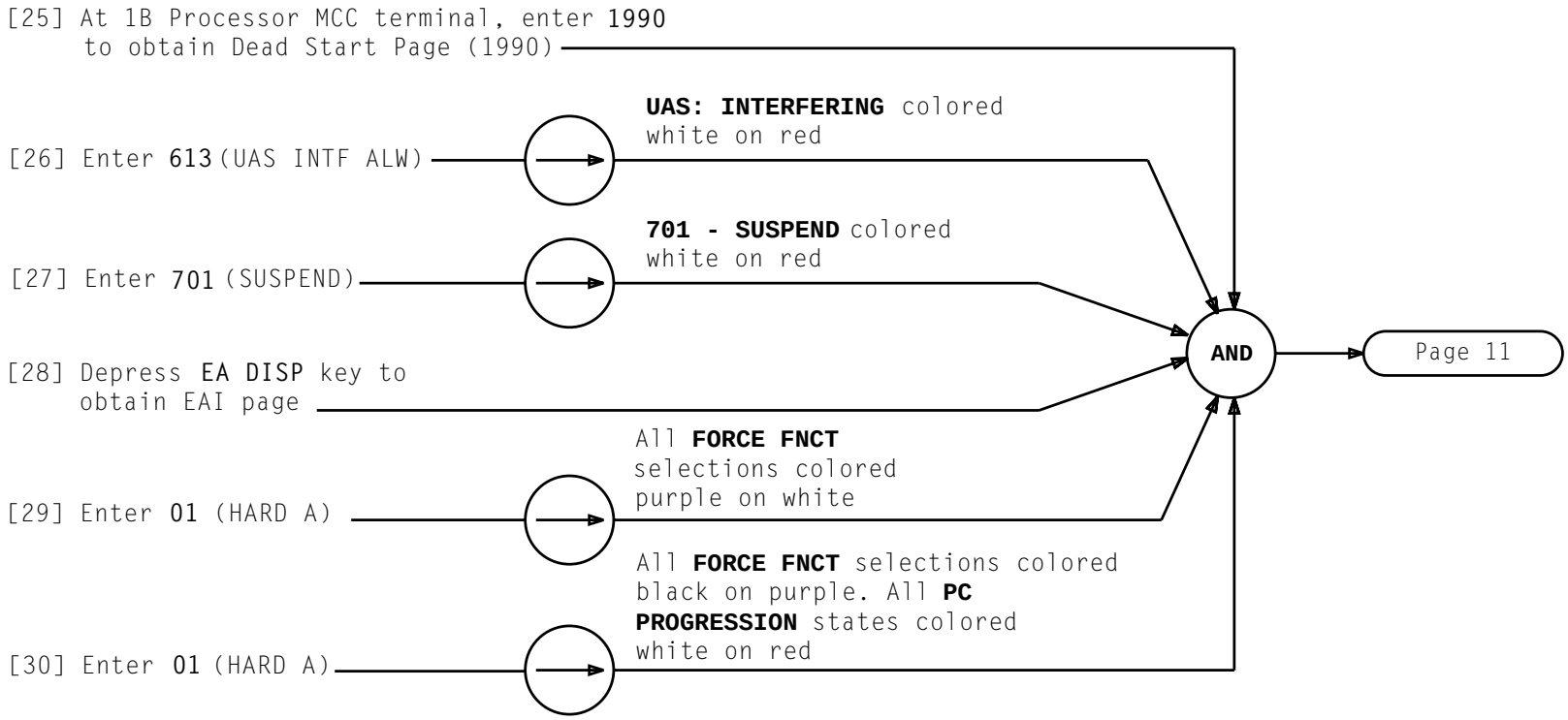


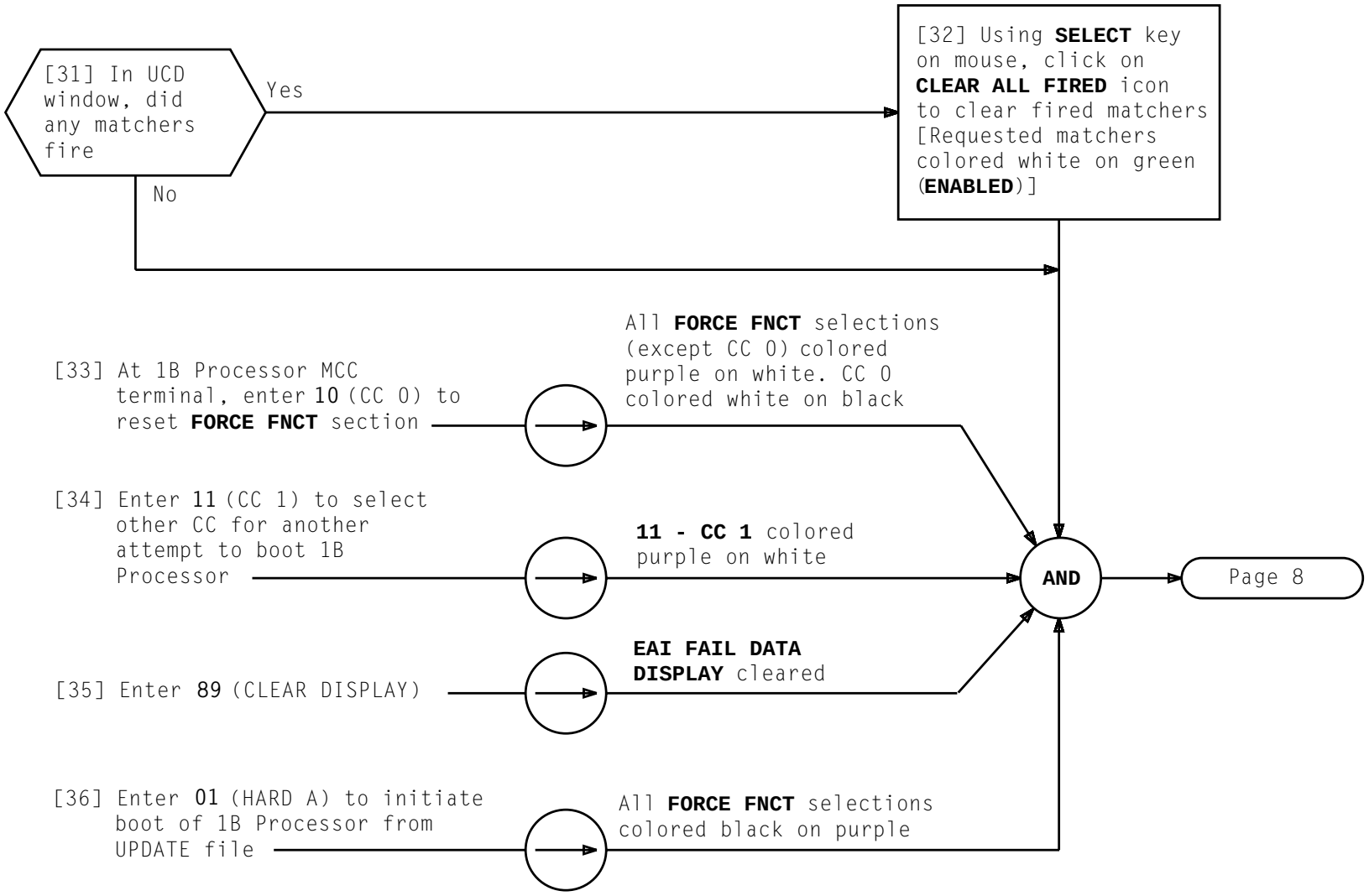
86 - CODE: **O'000aaabbbbb**
87 - DATA:
88 - ADDR:

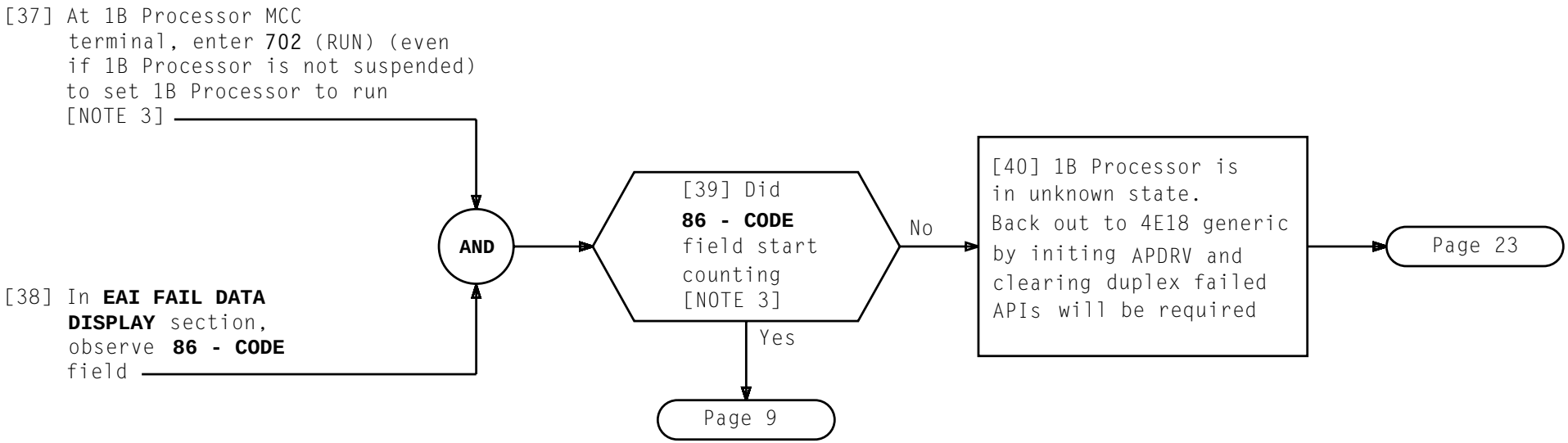
FIG. 1 - 86 - CODE Field Layout

NOTE 2

During Steps 19 through 24, in **EAI FAIL DATA DISPLAY** section, octal digits "aaa" and "bbbbb" [FIG. 1] in **86 - CODE** field must begin incrementing within 10 seconds after entering 702. "bbbbb" indicates that 1B Processor is attempting to pump, and "aaa" indicates memory range that is being pumped. "aaa" and "bbbbb" will continue to increment until **PC PROGRESSION - CMPL** colors black on green and **SAM_01** fires (color white on red), approximately 2 minutes after entering 702. If "aaa" does not begin to increment and "bbbbb" does begin to increment, this is a failure. If at any time "aaa" stops incrementing while "bbbbb" continues to increment, this is a failure. If "aaa" and "bbbbb" stop incrementing and a value other than **00000000011** is found in **87 - DATA** field, this is a failure. If at any time a value of **00000000011** is found in **87 - DATA** field, this indicates that the 1B has successfully pumped but **SAM_01** did not fire before peripheral boot was reached. This is not considered a failure and a successful retrofit can still be achieved by rebooting with periphery


[25] At 1B Processor MCC terminal, enter 1990 to obtain Dead Start Page (1990)
UAS: INTERFERING colored white on red
[26] Enter 613 (UAS INTF ALW)
701 - SUSPEND colored white on red
[27] Enter 701 (SUSPEND)
AND
Page 11
[28] Depress EA DISP key to obtain EAI page
All FORCE FNCT selections colored purple on white
[29] Enter 01 (HARD A)
All FORCE FNCT selections colored black on purple. All PC PROGRESSION states colored white on red
[30] Enter 01 (HARD A)


[31] In UCD window, did any matchers fire
Yes
No
[32] Using **SELECT** key on mouse, click on **CLEAR ALL FIRED** icon to clear fired matchers [Requested matchers colored white on green (**ENABLED**)]
[33] At 1B Processor MCC terminal, enter 10 (CC 0) to reset **FORCE FNCT** section
All **FORCE FNCT** selections (except CC 0) colored purple on white. CC 0 colored white on black
[34] Enter 11 (CC 1) to select other CC for another attempt to boot 1B Processor
11 - CC 1 colored purple on white
[35] Enter 89 (CLEAR DISPLAY)
EAI FAIL DATA DISPLAY cleared
[36] Enter 01 (HARD A) to initiate boot of 1B Processor from UPDATE file
All **FORCE FNCT** selections colored black on purple
AND
Page 8

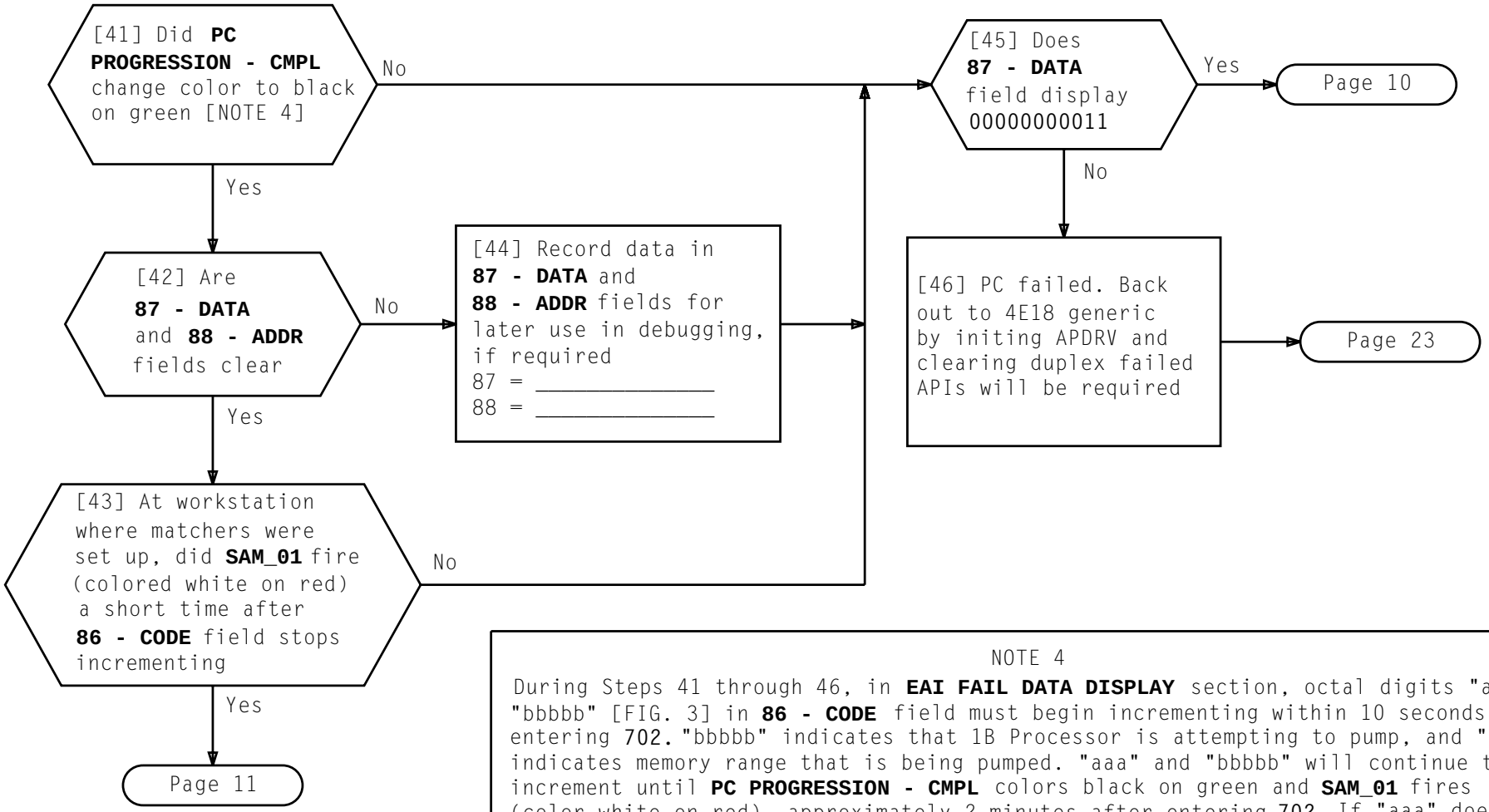


86 - CODE: O'000aaabbbbb
87 - DATA:
88 - ADDR:

FIG. 2 - 86 - CODE Field Layout

NOTE 3

During Steps 41 through 46, Page 9, in **EAI FAIL DATA DISPLAY** section, octal digits "aaa" and "bbbbb" [FIG. 2] in **86 - CODE** field must begin incrementing within 10 seconds after entering 702. "bbbbb" indicates that 1B Processor is attempting to pump, and "aaa" indicates memory range that is being pumped. "aaa" and "bbbbb" will continue to increment until **PC PROGRESSION - CMPL** colors black on green and **SAM_01** fires (color white on red), approximately 2 minutes after entering 702. If "aaa" does not begin to increment and "bbbbb" does begin to increment, this is a failure. If at any time "aaa" stops incrementing while "bbbbb" continues to increment, this is a failure. If "aaa" and "bbbbb" stop incrementing and a value other than **00000000011** is found in **87 - DATA** field, this is a failure. If at any time a value of **00000000011** is found in **87 - DATA** field, this indicates that the 1B has successfully pumped but **SAM_01** did not fire before peripheral boot was reached. This is not considered a failure and a successful retrofit can still be achieved by rebooting with periphery

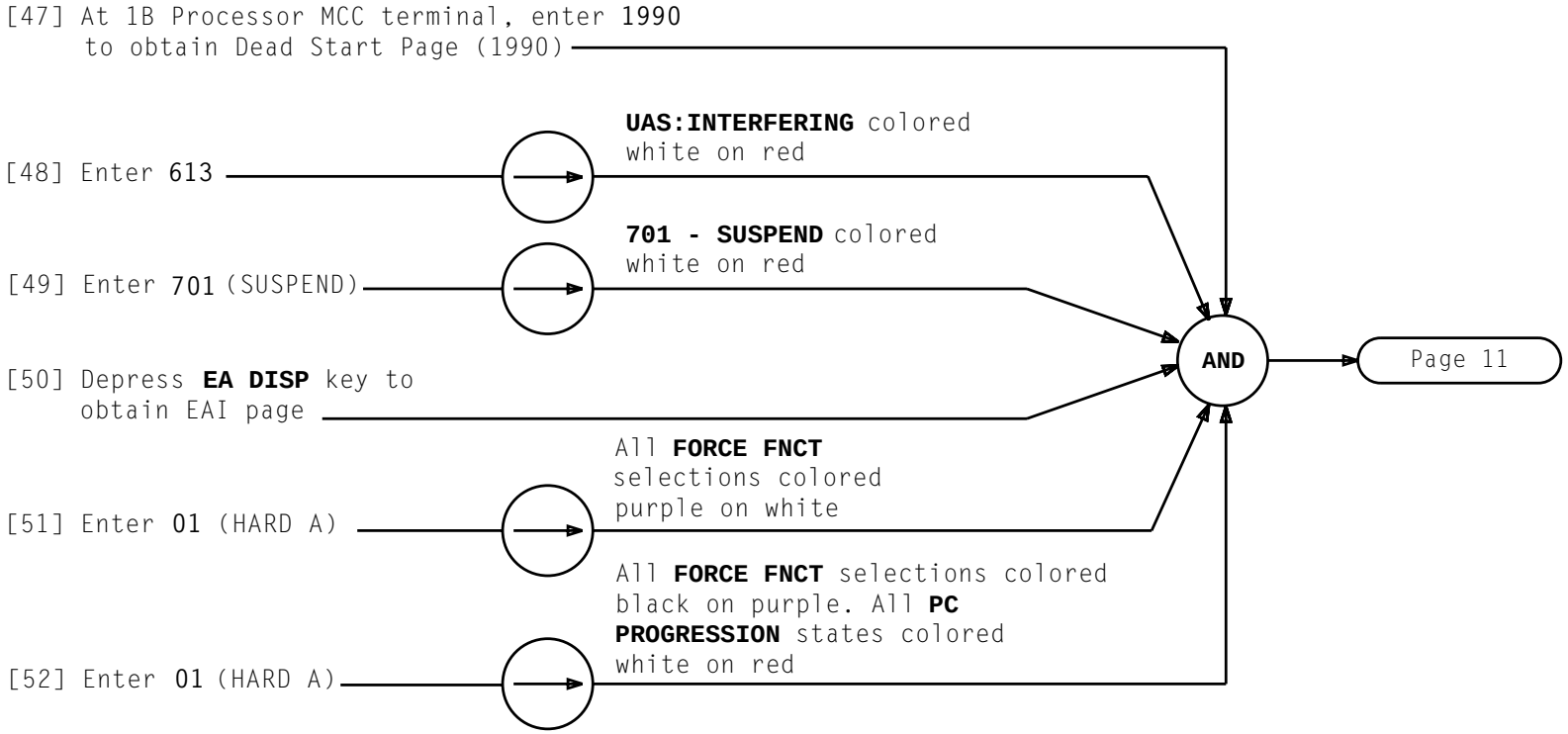


86 - CODE: O'000aaabbbbb
87 - DATA:
88 - ADDR:

FIG. 3 - 86 - CODE Field Layout

NOTE 4

During Steps 41 through 46, in **EAI FAIL DATA DISPLAY** section, octal digits "aaa" and "bbbbb" [FIG. 3] in **86 - CODE** field must begin incrementing within 10 seconds after entering 702. "bbbbb" indicates that 1B Processor is attempting to pump, and "aaa" indicates memory range that is being pumped. "aaa" and "bbbbb" will continue to increment until **PC PROGRESSION - CMPL** colors black on green and **SAM_01** fires (color white on red), approximately 2 minutes after entering 702. If "aaa" does not begin to increment and "bbbbb" does begin to increment, this is a failure. If at any time "aaa" stops incrementing while "bbbbb" continues to increment, this is a failure. If "aaa" and "bbbbb" stop incrementing and a value other than **00000000011** is found in **87 - DATA** field, this is a failure. If at any time a value of **00000000011** is found in **87 - DATA** field, this indicates that the 1B has successfully pumped but **SAM_01** did not fire before peripheral boot was reached. This is not considered a failure and a successful retrofit can still be achieved by rebooting with periphery

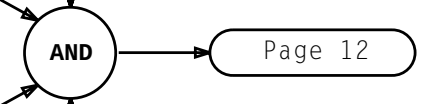

[47] At 1B Processor MCC terminal, enter 1990 to obtain Dead Start Page (1990)
[48] Enter 613
UAS:INTERFERING colored white on red
[49] Enter 701 (SUSPEND)
701 - SUSPEND colored white on red
[50] Depress EA DISP key to obtain EAI page
AND
Page 11
[51] Enter 01 (HARD A)
All FORCE FNCT selections colored purple on white
[52] Enter 01 (HARD A)
All FORCE FNCT selections colored black on purple. All PC PROGRESSION states colored white on red

[53] *If system does not respond to commands during Steps 54 through 126 (Page 22) procedure must be stopped and backout will be required. If backout is required, perform procedure at Step 180, Page 32*

[54] Technician 2: At Indicator/Remote Control unit, operate **ALL-1B** key counterclockwise to **ON** position; then operate **ARM** switch down to **ALL** position. Wait for **PUB0** and/or **PUB1** to go RED; then immediately perform Step 55

[55] At 1B Processor MCC terminal, enter 702 (RUN) to set 1B Processor to run. Tell Technician 1 to perform Step 56; then look for phase 3 indication and continue with Step 57 (Page 12) [NOTE 5]

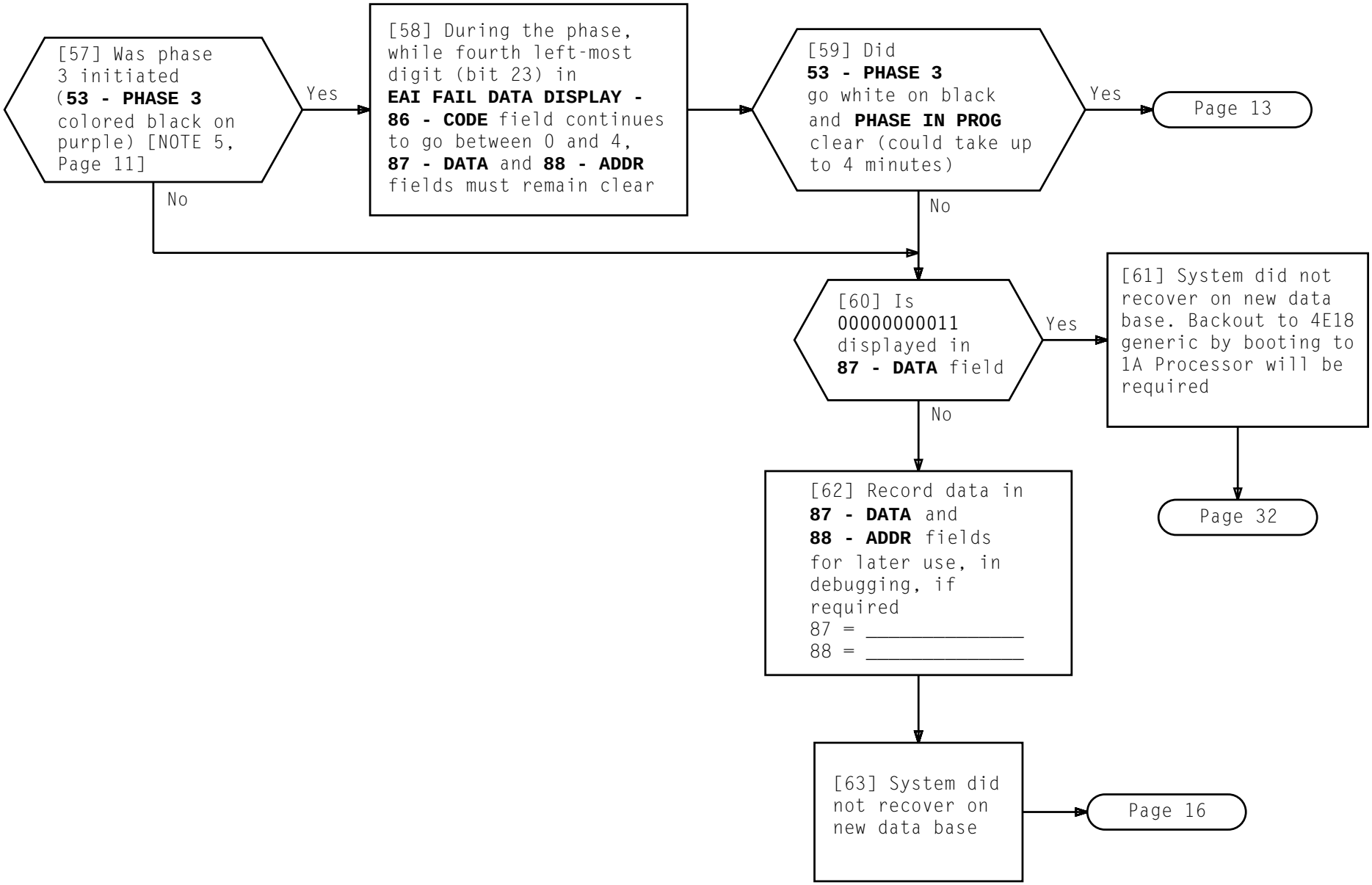
[56] Technician 1: Set utility interfering switches to non-interfering [DLP-594] to eliminate the ability of 1B Processor to suspend if **SAM_01** fires

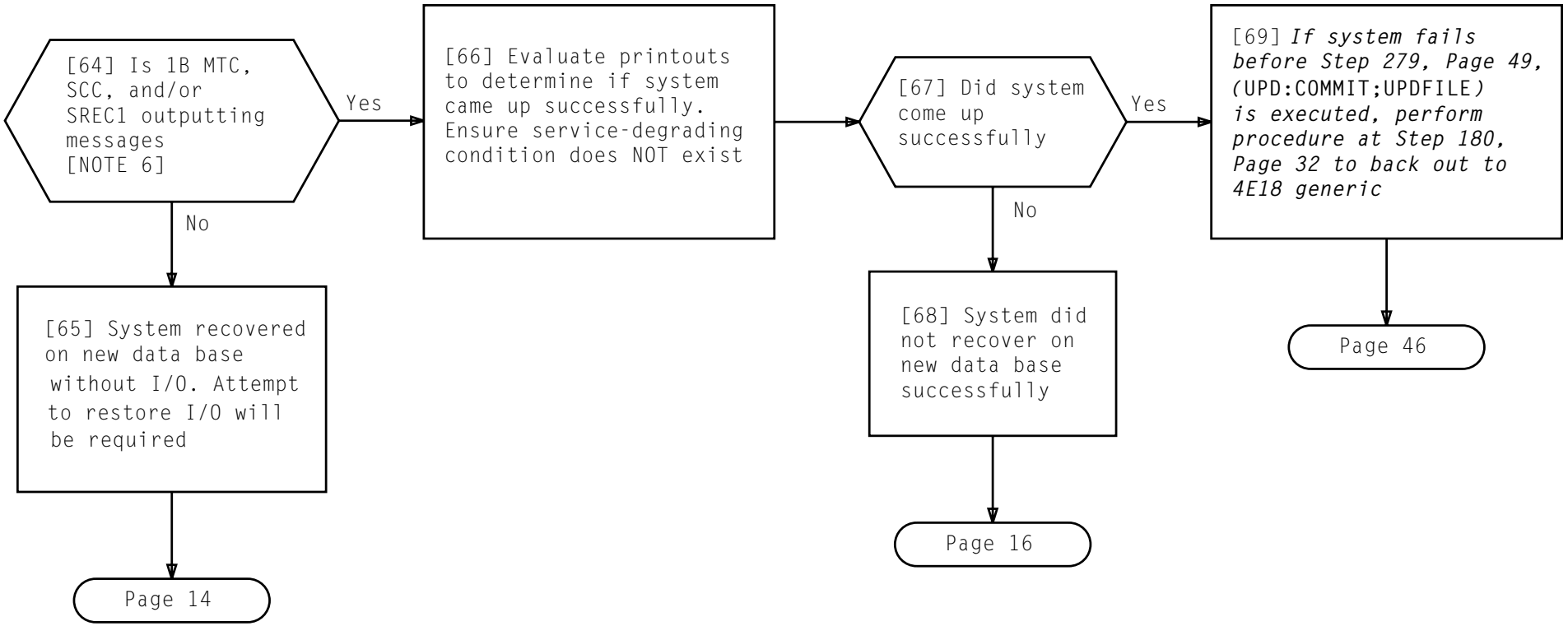


NOTE 5

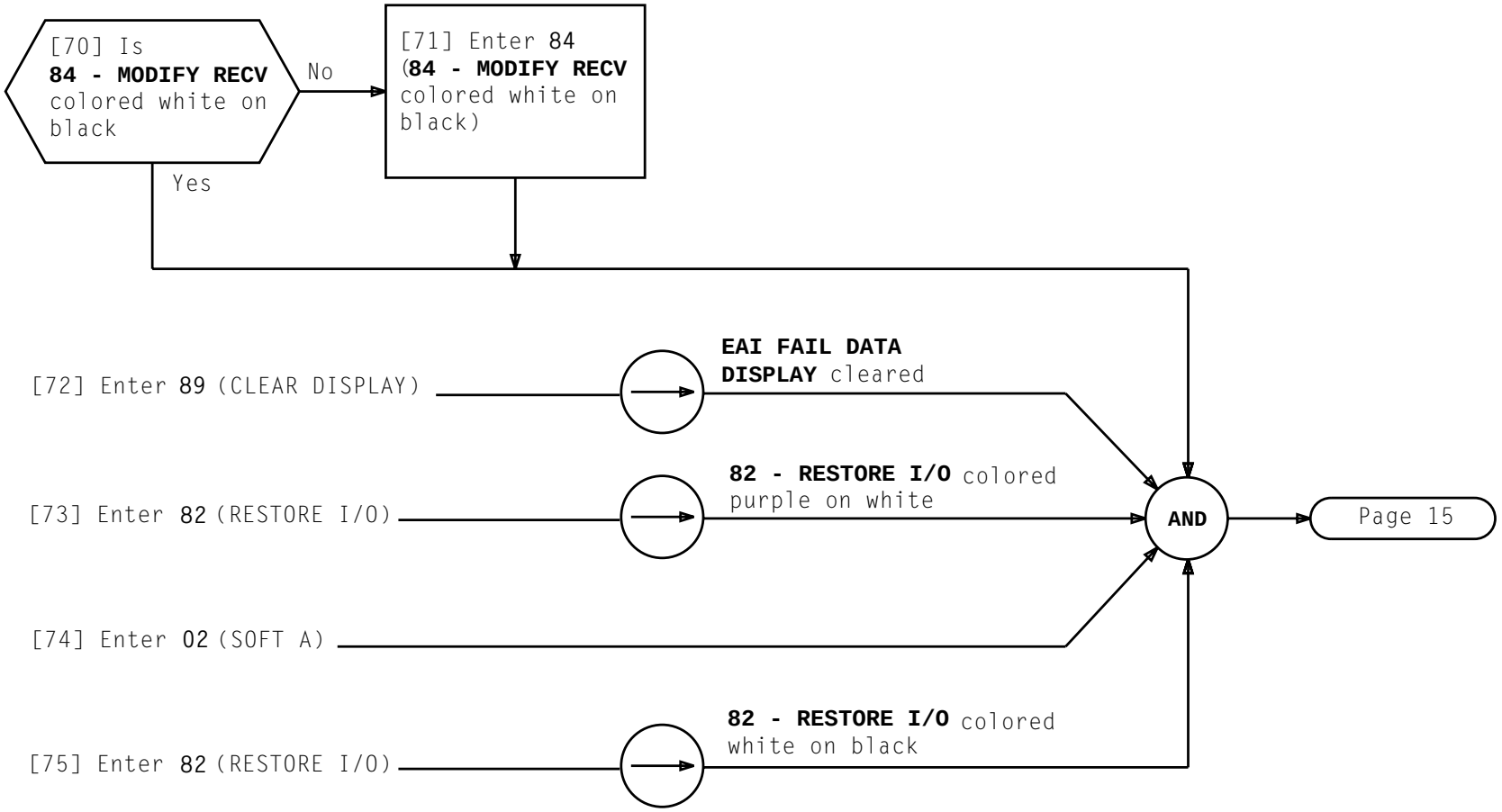
If **00000000011** was received in Step 23, Page 5 or Step 45, Page 9, 1B Processor will be pumped [NOTE 2, Page 5] before phase 3 is initiated. When a phase 3 is initiated, at 1B Processor MCC terminal, fourth left-most digit (bit 23) in **EAI FAIL DATA DISPLAY - 86 - CODE** field will go between **0** and **4**. **53 - PHASE 3** colored black on purple. In lower right-hand corner **PHASE IN PROG** colored white on red. **PC PROGRESSION - CMPL** continues to be colored black on green

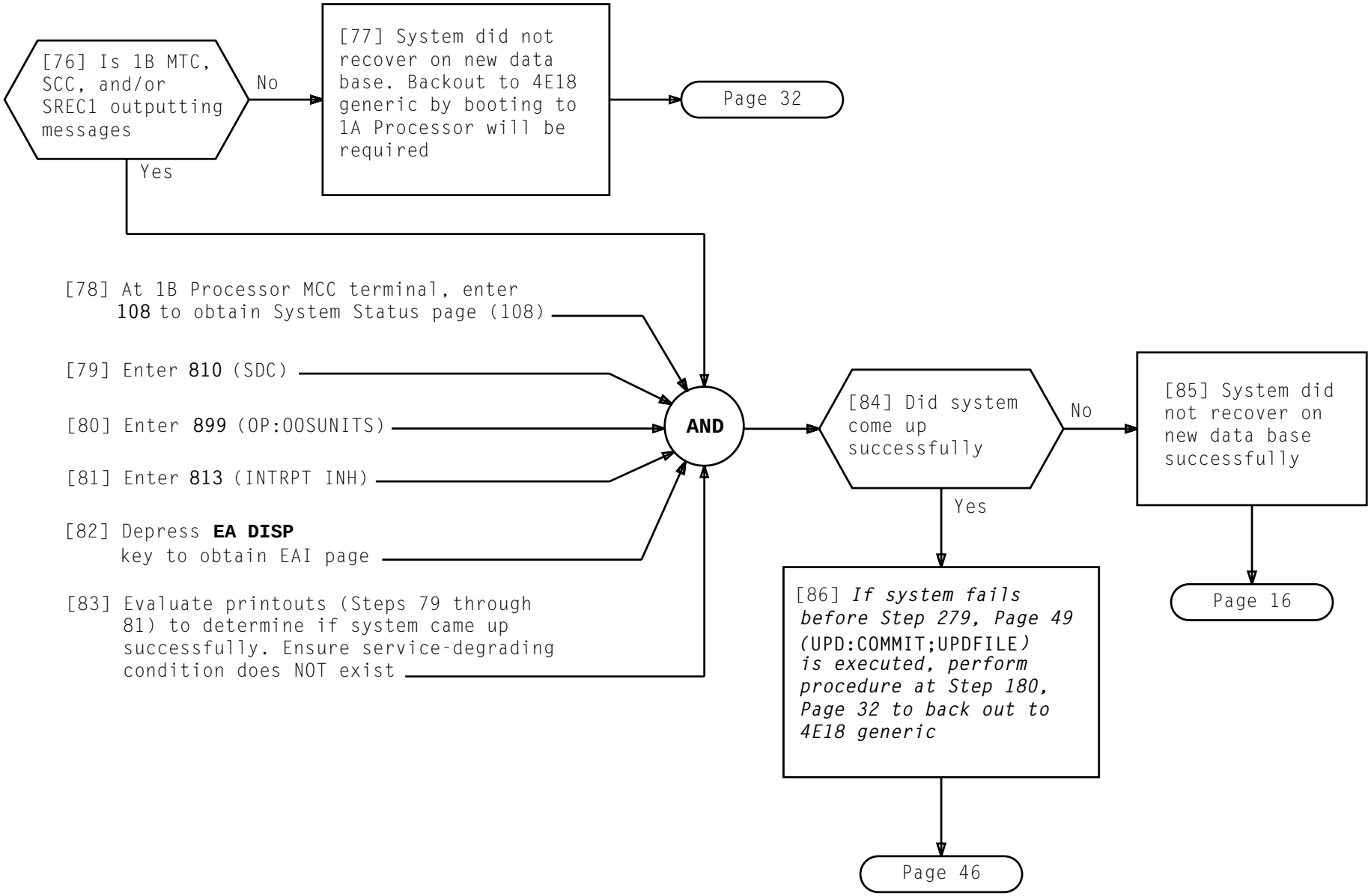
RETROFIT TO 1B PROCESSOR

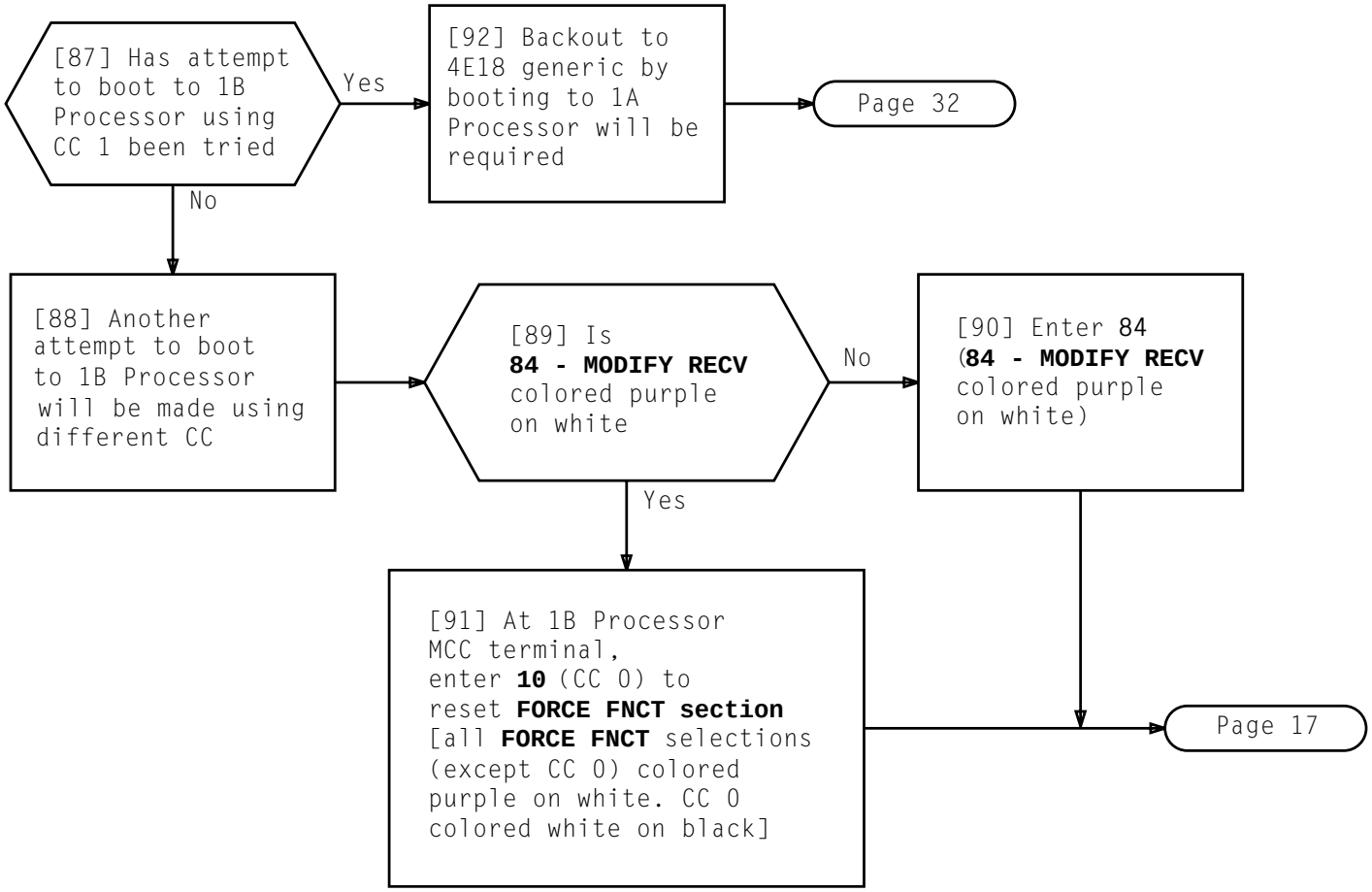

[57] Was phase 3 initiated (**53 - PHASE 3** colored black on purple) [NOTE 5, Page 11]
Yes
No
[58] During the phase, while fourth left-most digit (bit 23) in **EAI FAIL DATA DISPLAY - 86 - CODE** field continues to go between 0 and 4, **87 - DATA** and **88 - ADDR** fields must remain clear
[59] Did **53 - PHASE 3** go white on black and **PHASE IN PROG** clear (could take up to 4 minutes)
Yes
Page 13
No
[60] Is 00000000011 displayed in **87 - DATA** field
Yes
[61] System did not recover on new data base. Backout to 4E18 generic by booting to 1A Processor will be required
Page 32
No
[62] Record data in **87 - DATA** and **88 - ADDR** fields for later use, in debugging, if required
87 = _____
88 = _____
[63] System did not recover on new data base
Page 16

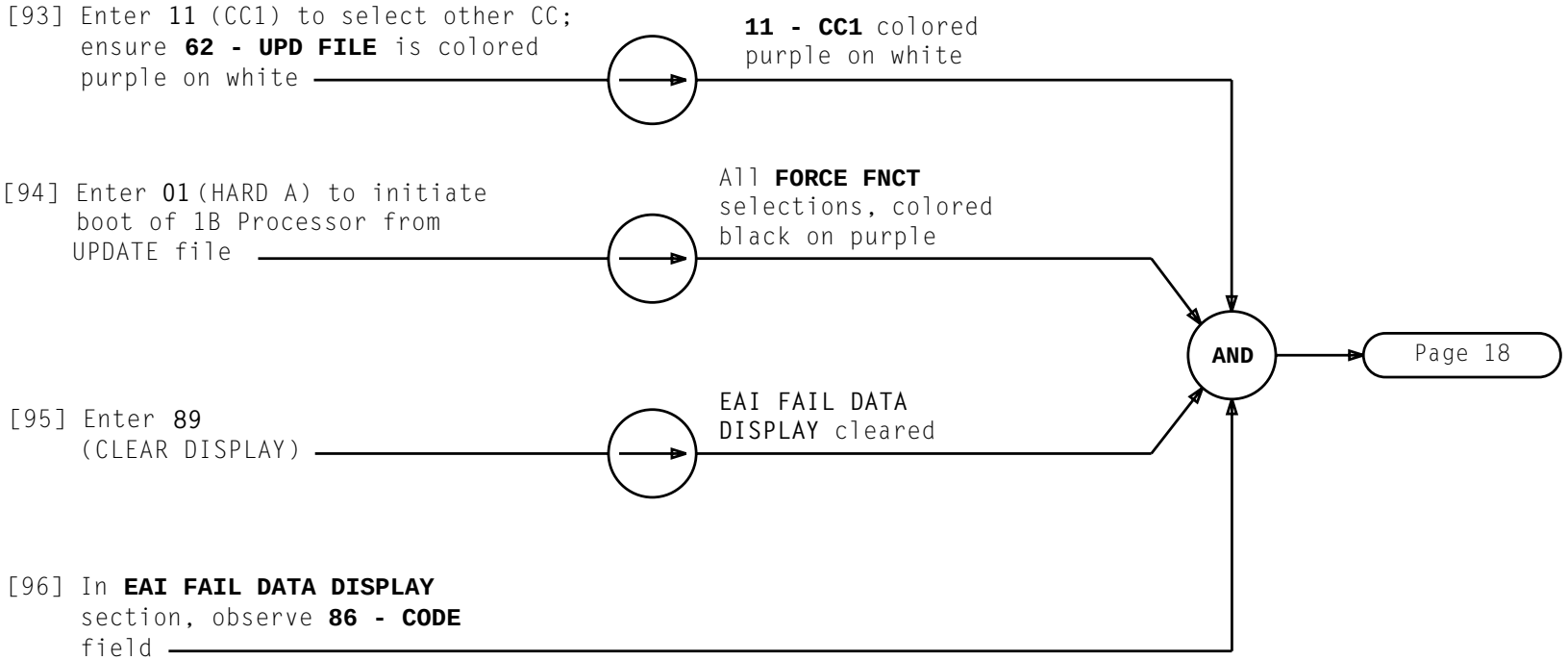


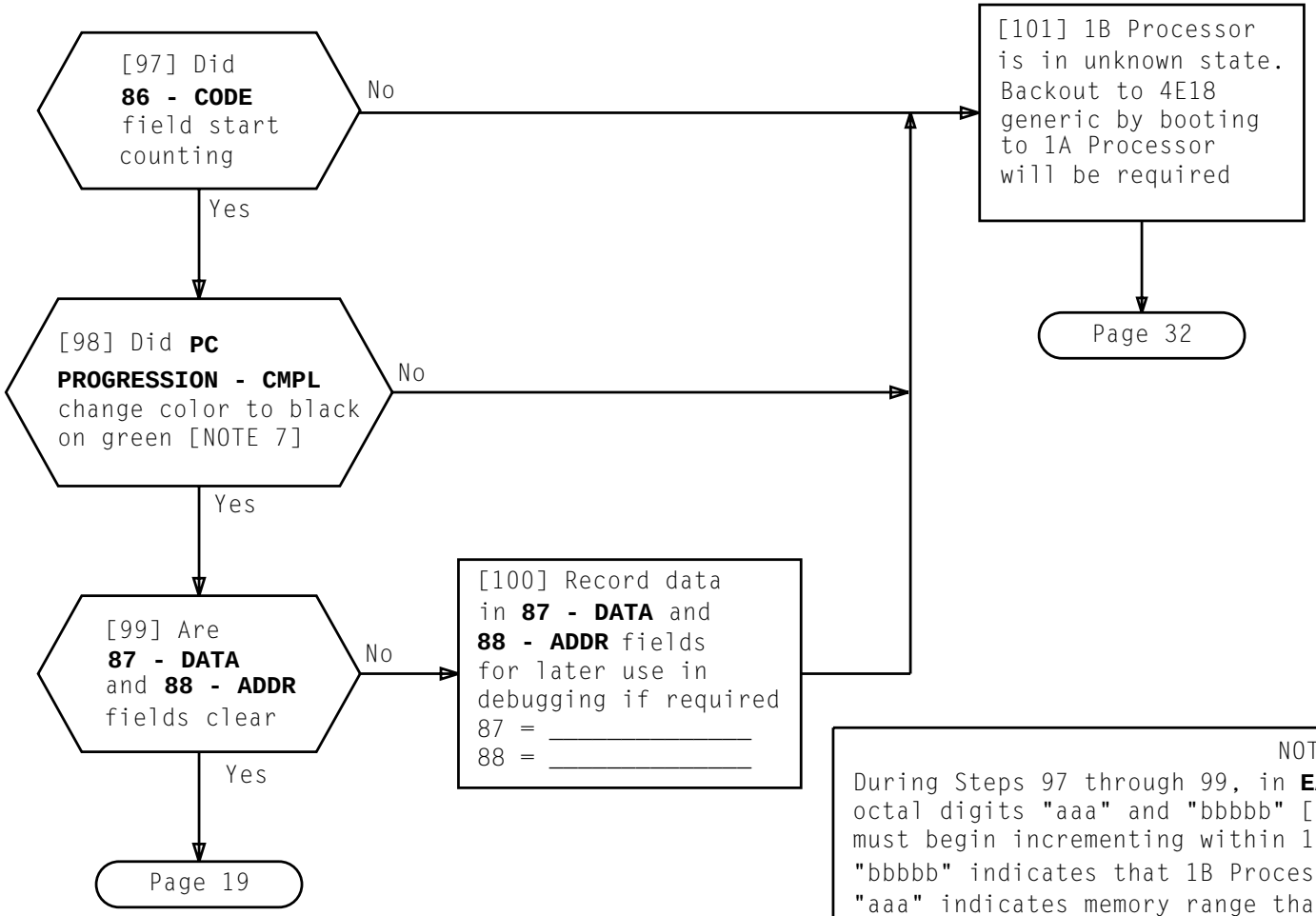
NOTE 6
1A MTC terminal will now be 1B MTC terminal


[70] Is **84 - MODIFY RECV** colored white on black
No
[71] Enter 84 (**84 - MODIFY RECV** colored white on black)
Yes
[72] Enter 89 (CLEAR DISPLAY)
EAI FAIL DATA DISPLAY cleared
[73] Enter 82 (RESTORE I/O)
82 - RESTORE I/O colored purple on white
AND
Page 15
[74] Enter 02 (SOFT A)
[75] Enter 82 (RESTORE I/O)
82 - RESTORE I/O colored white on black


[76] Is 1B MTC, SCC, and/or SREC1 outputting messages
No
[77] System did not recover on new data base. Backout to 4E18 generic by booting to 1A Processor will be required
Page 32
Yes
[78] At 1B Processor MCC terminal, enter 108 to obtain System Status page (108)
[79] Enter 810 (SDC)
[80] Enter 899 (OP:OOSUNITS)
[81] Enter 813 (INTRPT INH)
[82] Depress EA DISP key to obtain EAI page
[83] Evaluate printouts (Steps 79 through 81) to determine if system came up successfully. Ensure service-degrading condition does NOT exist
AND
[84] Did system come up successfully
No
[85] System did not recover on new data base successfully
Page 16
Yes
[86] If system fails before Step 279, Page 49 (UPD:COMMIT;UPDFILE) is executed, perform procedure at Step 180, Page 32 to back out to 4E18 generic
Page 46


[87] Has attempt to boot to 1B Processor using CC 1 been tried
Yes
[92] Backout to 4E18 generic by booting to 1A Processor will be required
Page 32
No
[88] Another attempt to boot to 1B Processor will be made using different CC
[89] Is **84 - MODIFY RECV** colored purple on white
No
[90] Enter 84 (**84 - MODIFY RECV** colored purple on white)
Yes
[91] At 1B Processor MCC terminal, enter **10** (CC 0) to reset **FORCE FNCT section** [all **FORCE FNCT** selections (except CC 0) colored purple on white. CC 0 colored white on black]
Page 17


[93] Enter 11 (CC1) to select other CC; ensure **62 - UPD FILE** is colored purple on white
11 - CC1 colored purple on white
[94] Enter 01 (HARD A) to initiate boot of 1B Processor from UPDATE file
All **FORCE FNCT** selections, colored black on purple
AND
Page 18
[95] Enter 89 (CLEAR DISPLAY)
EAI FAIL DATA DISPLAY cleared
[96] In **EAI FAIL DATA DISPLAY** section, observe **86 - CODE** field

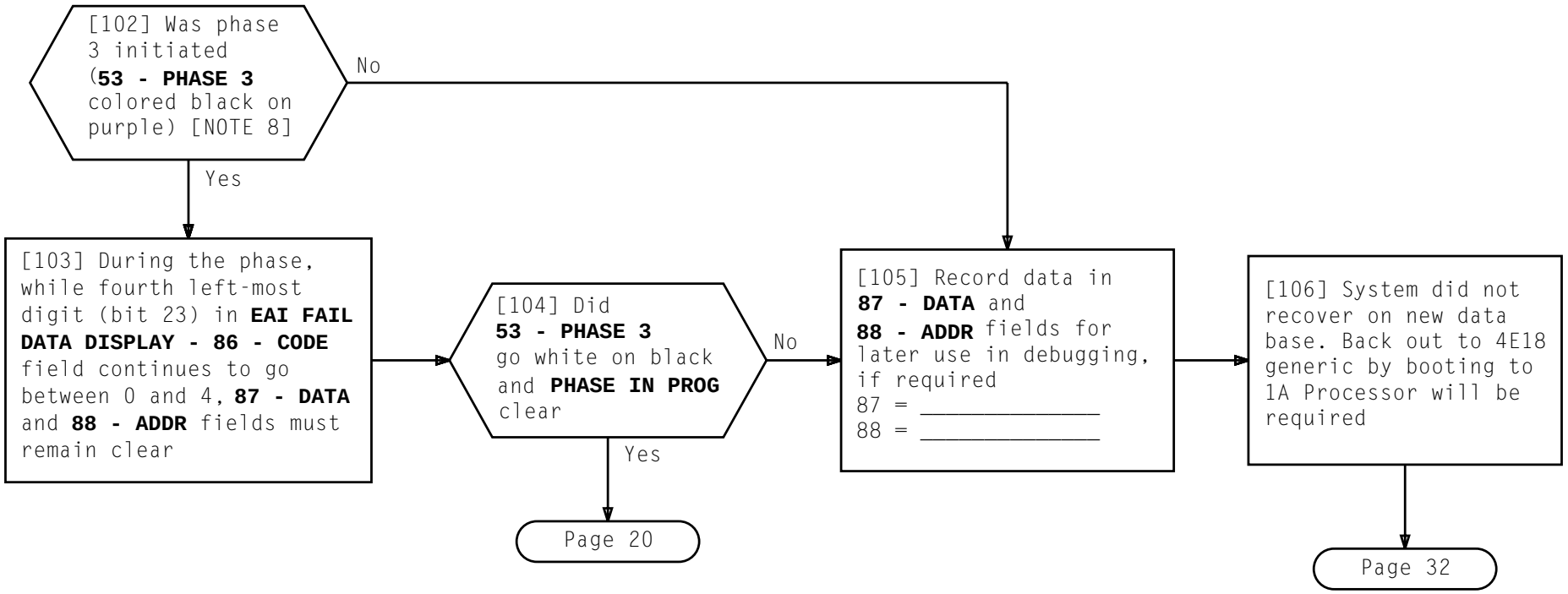


86 - CODE: O'000aaabbbbb
87 - DATA:
88 - ADDR:

FIG. 4 - 86 - CODE Field Layout

NOTE 7

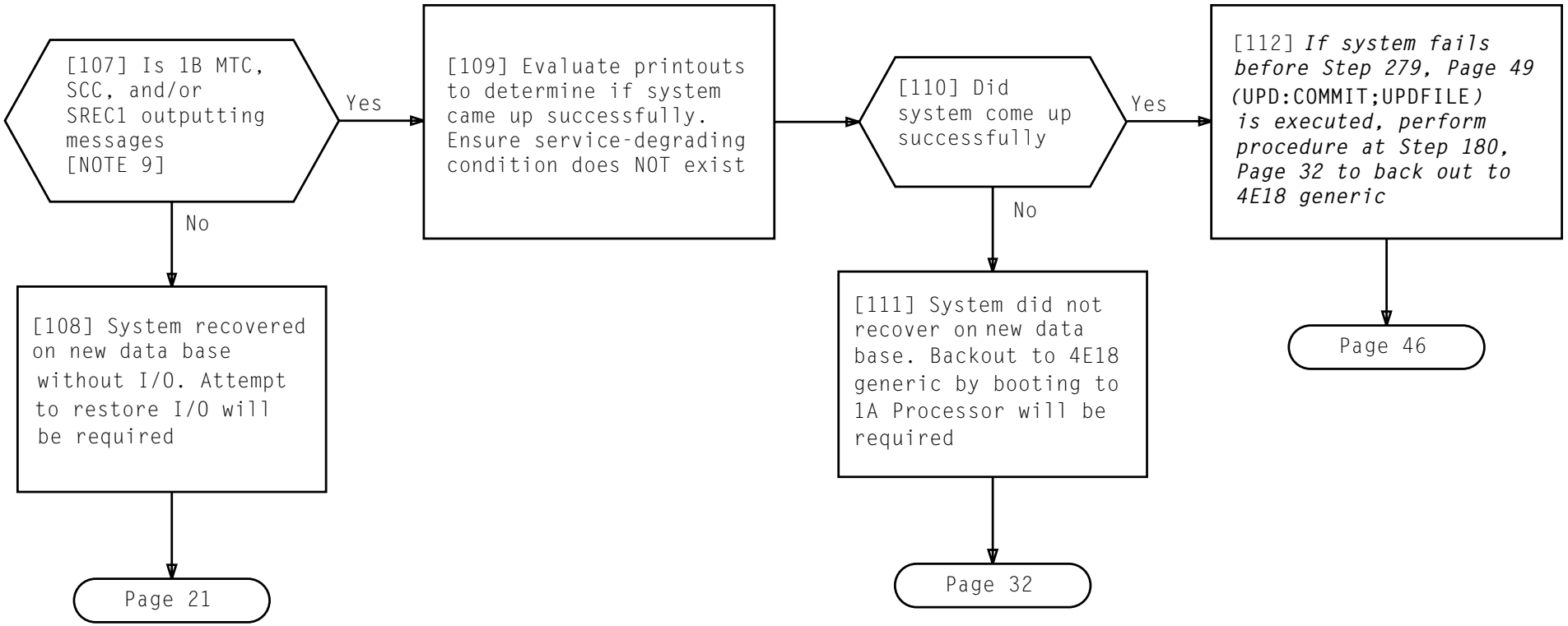
During Steps 97 through 99, in **EAI FAIL DATA DISPLAY** section, octal digits "aaa" and "bbbbb" [FIG. 4] in **86 - CODE** field must begin incrementing within 10 seconds after entering **01**. "bbbbb" indicates that 1B Processor is attempting to pump, and "aaa" indicates memory range that is being pumped. "aaa' and "bbbbb" will continue to increment until **PC PROGRESSION - CMPL** colors black on green, approximately 2 minutes after entering **01**.
If "aaa" does not begin to increment and "bbbbb" does begin to increment, this is a failure.
If at any time "aaa" stops incrementing while "bbbbb" continues to increment, this is a failure.
At no time should data appear in **87 - DATA** and **88 - ADDR** fields; this is a failure.



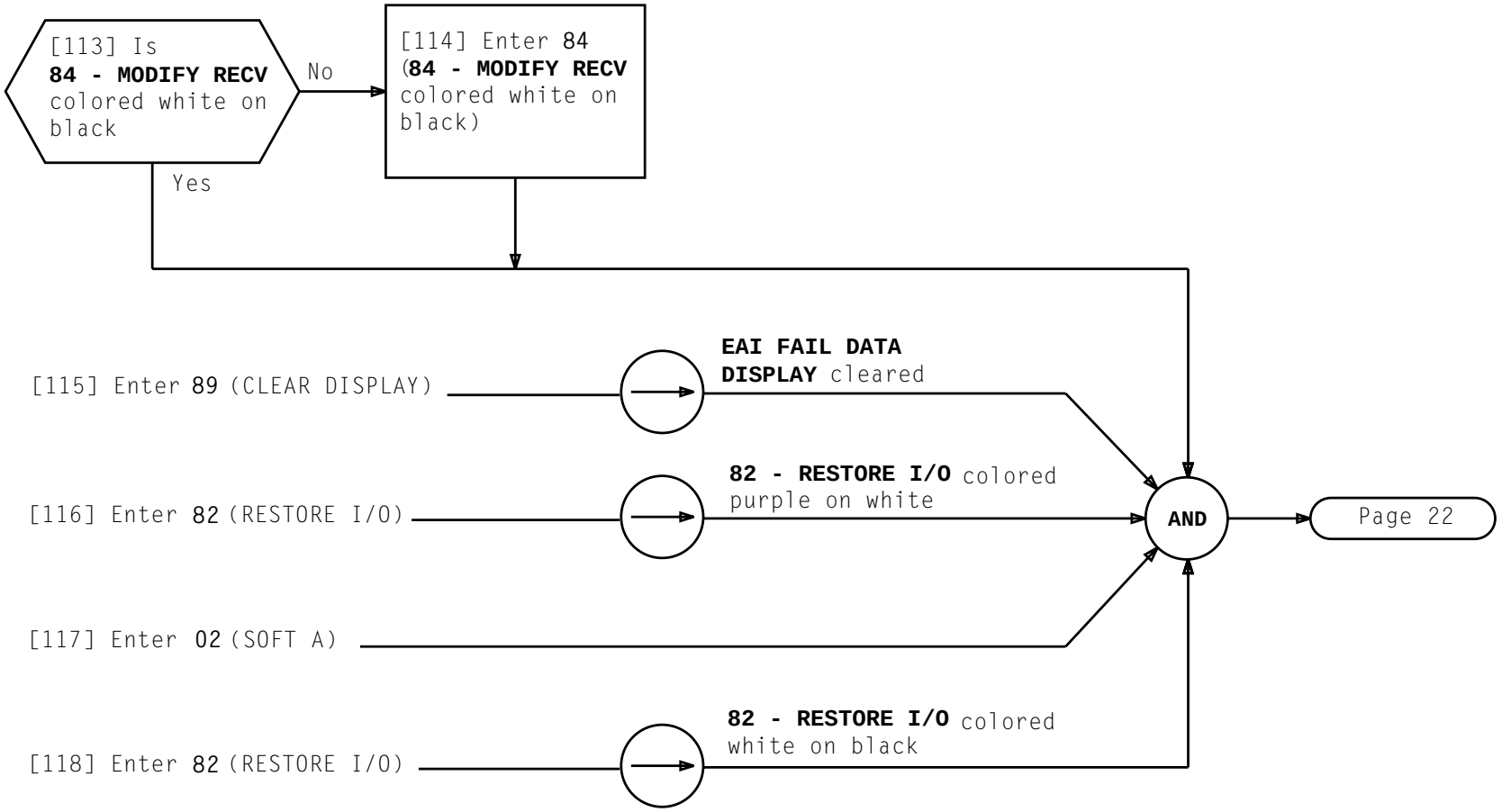
NOTE 8

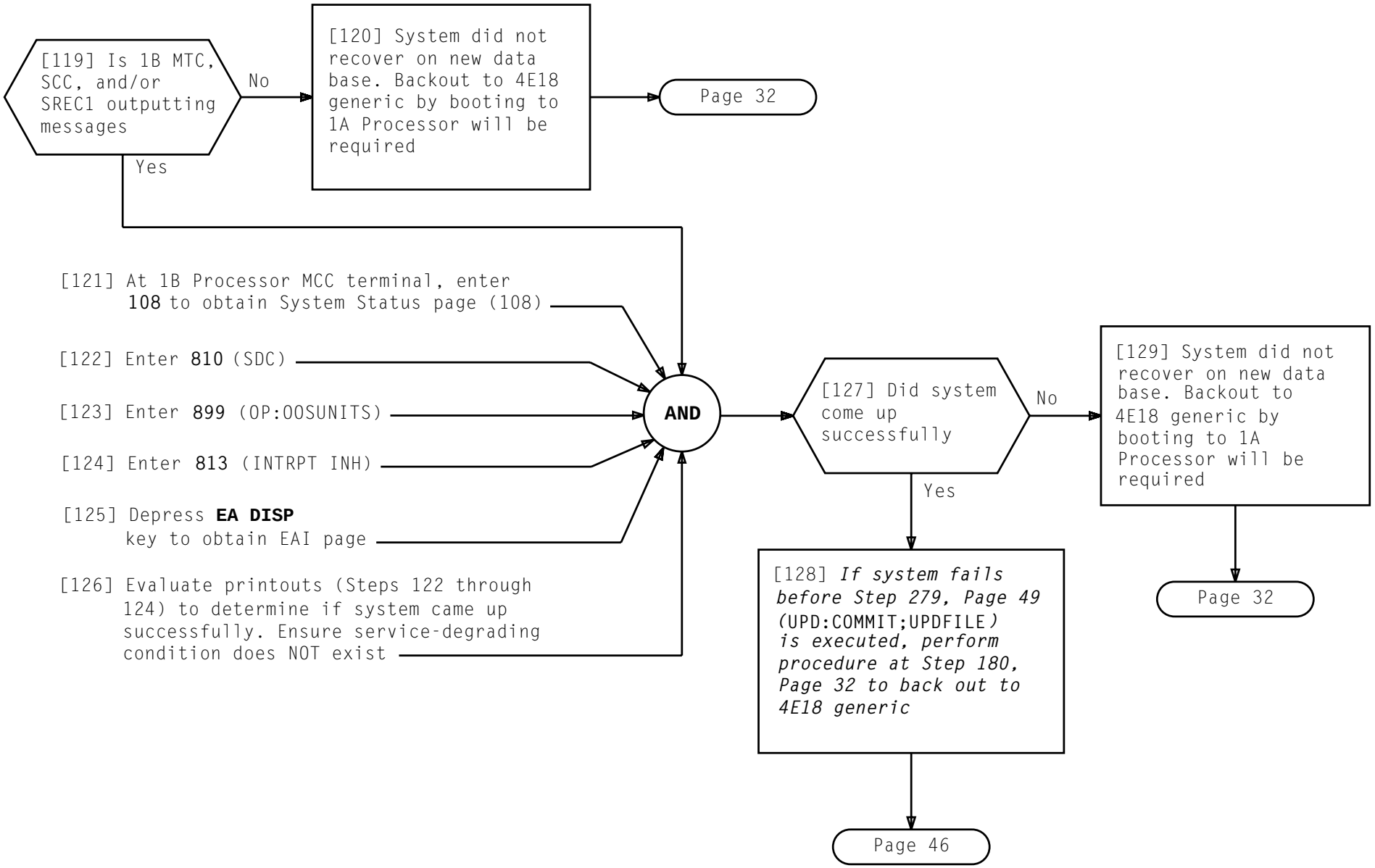
When a phase 3 is initiated, at 1B Processor MCC terminal, fourth left-most digit (bit 23) in **EAI FAIL DATA DISPLAY - 86 - CODE** field will go between **0** and **4**. **53 - PHASE 3** colored black on purple. In lower right-hand corner, **PHASE IN PROG** colored white on red.

PC PROGRESSION - CMPL continues to be colored black on green



NOTE 9
1A MTC terminal will now be 1B MTC terminal


[113] Is **84 - MODIFY RECV** colored white on black
No
[114] Enter 84 (**84 - MODIFY RECV** colored white on black)
Yes
[115] Enter 89 (CLEAR DISPLAY)
EAI FAIL DATA DISPLAY cleared
[116] Enter 82 (RESTORE I/O)
82 - RESTORE I/O colored purple on white
AND
Page 22
[117] Enter 02 (SOFT A)
[118] Enter 82 (RESTORE I/O)
82 - RESTORE I/O colored white on black


[119] Is 1B MTC, SCC, and/or SREC1 outputting messages
No
[120] System did not recover on new data base. Backout to 4E18 generic by booting to 1A Processor will be required
Page 32
Yes
[121] At 1B Processor MCC terminal, enter 108 to obtain System Status page (108)
[122] Enter 810 (SDC)
[123] Enter 899 (OP:OOSUNITS)
[124] Enter 813 (INTRPT INH)
[125] Depress EA DISP key to obtain EAI page
[126] Evaluate printouts (Steps 122 through 124) to determine if system came up successfully. Ensure service-degrading condition does NOT exist
AND
[127] Did system come up successfully
No
[129] System did not recover on new data base. Backout to 4E18 generic by booting to 1A Processor will be required
Page 32
Yes
[128] If system fails before Step 279, Page 49 (UPD:COMMIT;UPDFILE) is executed, perform procedure at Step 180, Page 32 to back out to 4E18 generic
Page 46

[130] **THIS IS START OF BACKOUT PROCEDURE (1A PROCESSOR IS CURRENTLY OPERATING IN EDOS).**
Notify next higher technical support group that **AU0** Conversion Switch Unit will be switched back to 1A Processor bus access

[131] At API 0 power switch, rotate **ROS/OFF** switch to **ROS** position; then depress **ROS/OFF** switch. Ensure **PWR OFF** lamp is on

[132] At 1B Processor MCC terminal, enter **1990** to obtain Dead Start page (1990)

AND

UAS: INTERFERING colored white on red

[133] Enter **613** (UAS INTF ALW)

701 - SUSPEND colored white on red

[134] Enter **701** (SUSPEND) to stop 1B Processor

[135] At 3B MCRT, enter message
OP:APPLOAD NORM!

AND

Page 24

[136] See NOTE 10. Using printout and FIG. 5, determine what 1afile is NORMAL file

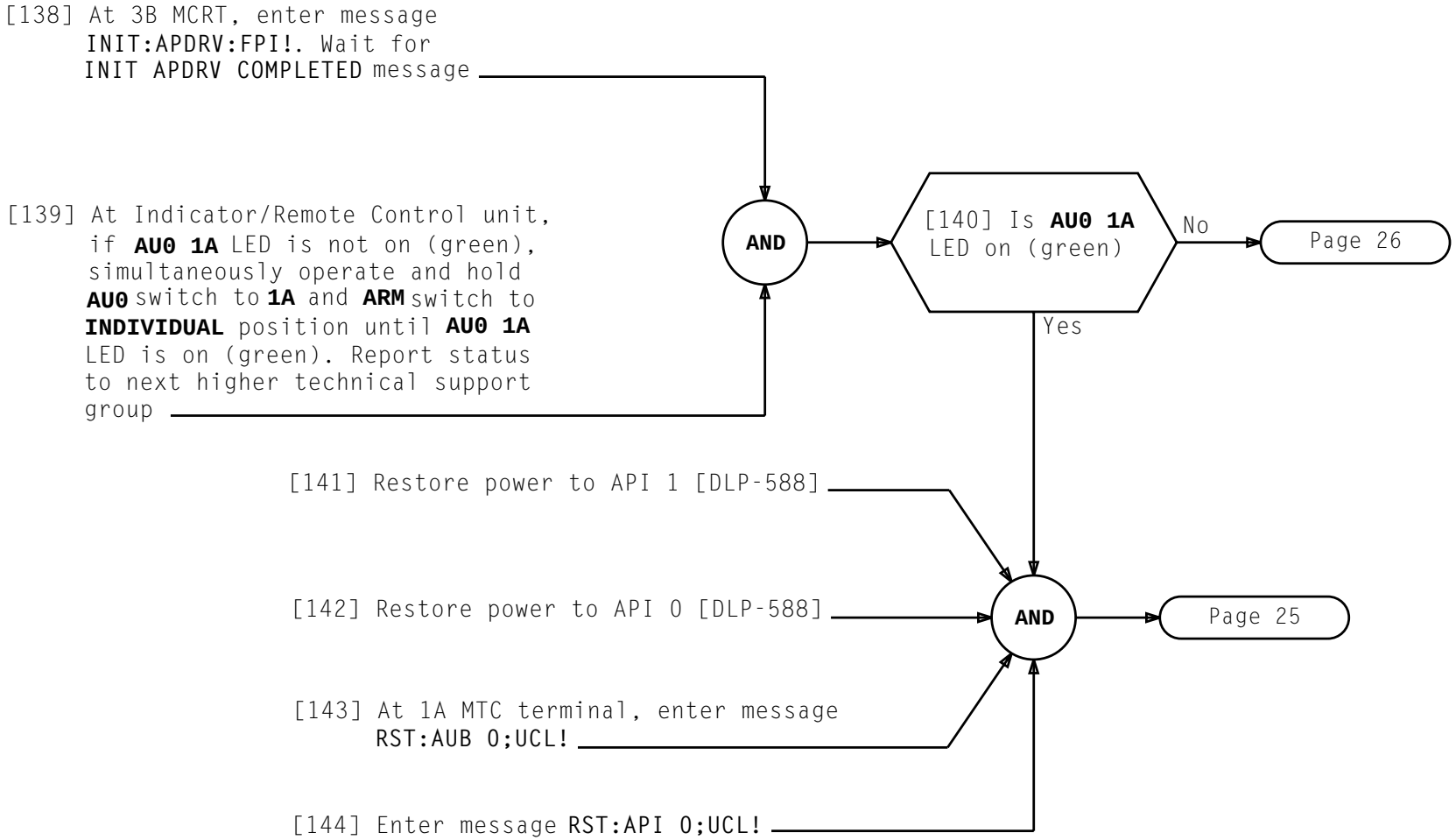
[137] At 3B MCRT, enter message
EXC:ENVIR:UPROC,FN"/bin/sh",ARGS("-c","cp /tools/1astatX /dev/1astat")!
X = recorded 1afile. Wait for EXC ENVIR UPROC /bin/sh COMPLETED message

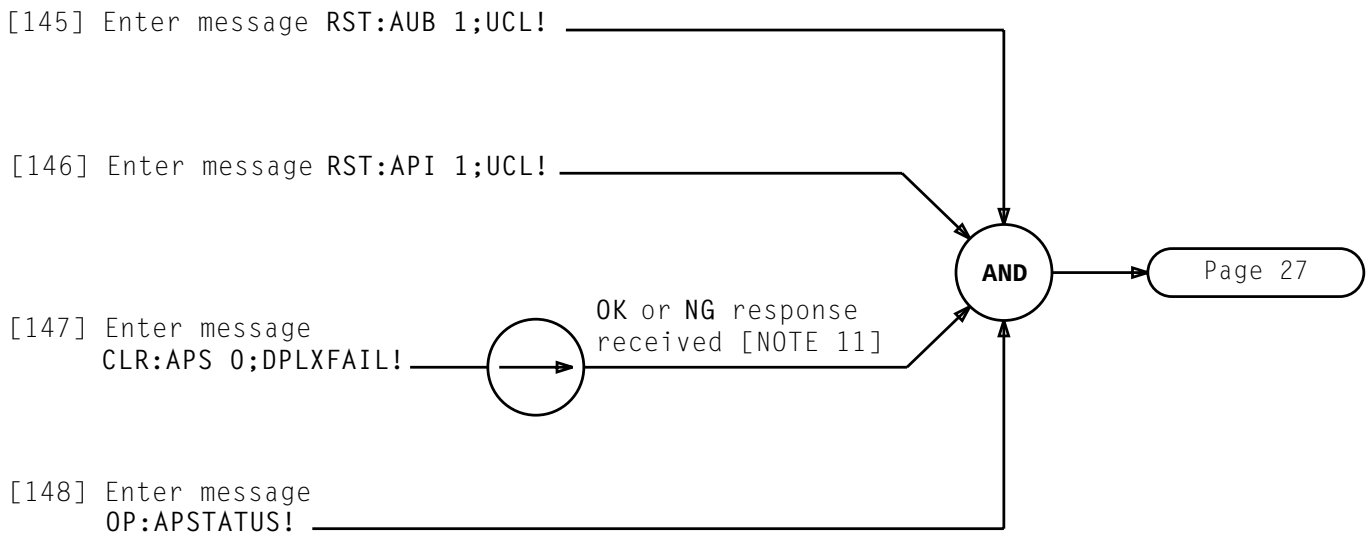
4ESS DATA BASE LOADED IN /dev/1afileX

Record this value

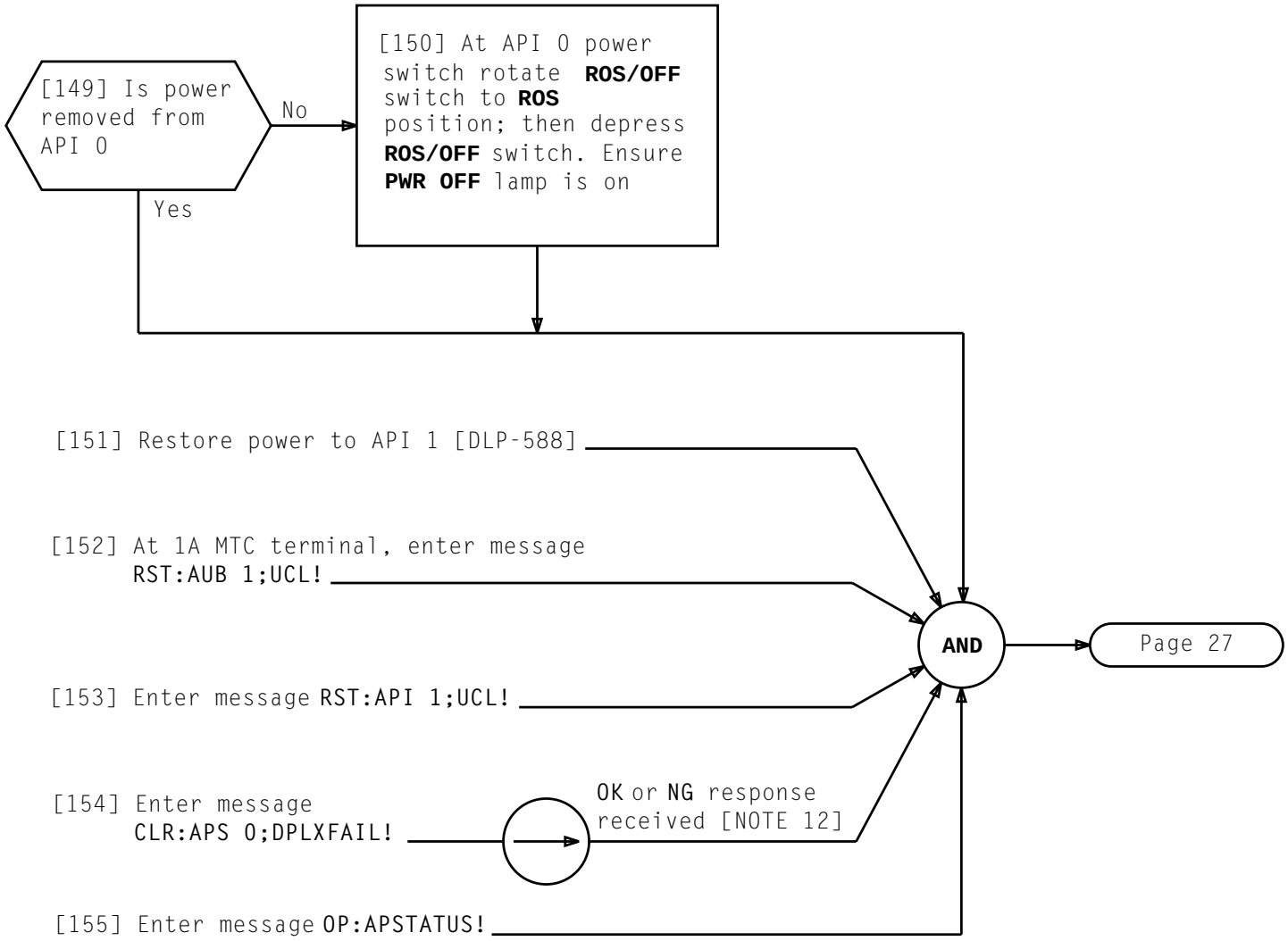
FIG.5 - Sample of OP:APPLOAD Printout

NOTE 10
It may take a short time before response is received

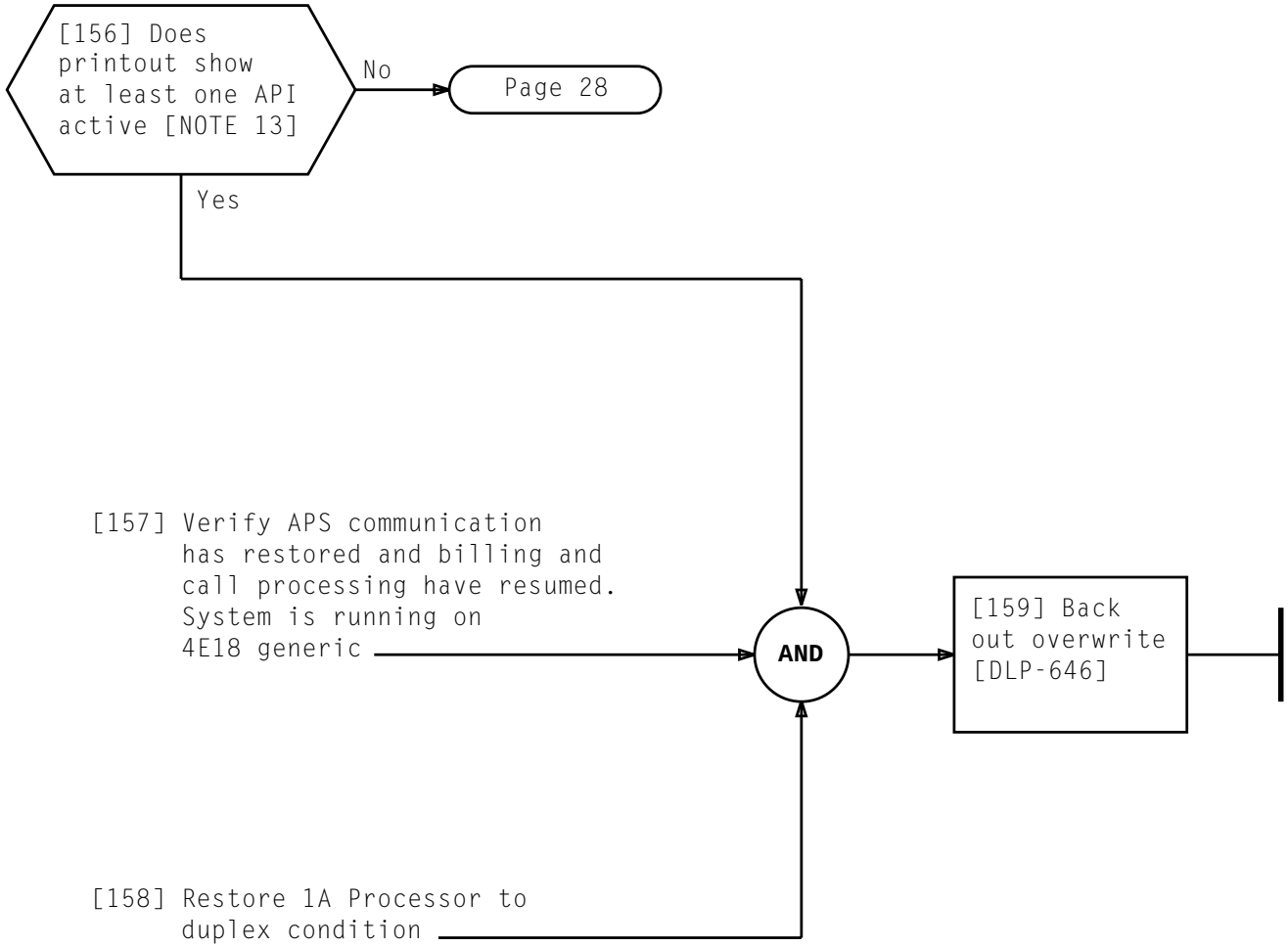

[138] At 3B MCRT, enter message INIT:APDRV:FPI!. Wait for INIT APDRV COMPLETED message
[139] At Indicator/Remote Control unit, if AU0 1A LED is not on (green), simultaneously operate and hold AU0 switch to 1A and ARM switch to INDIVIDUAL position until AU0 1A LED is on (green). Report status to next higher technical support group
AND
[140] Is AU0 1A LED on (green)
No
Page 26
Yes
[141] Restore power to API 1 [DLP-588]
[142] Restore power to API 0 [DLP-588]
AND
Page 25
[143] At 1A MTC terminal, enter message RST:AUB 0;UCL!
[144] Enter message RST:API 0;UCL!



NOTE 11
NG response will be received if 1afiles are not duplex failed

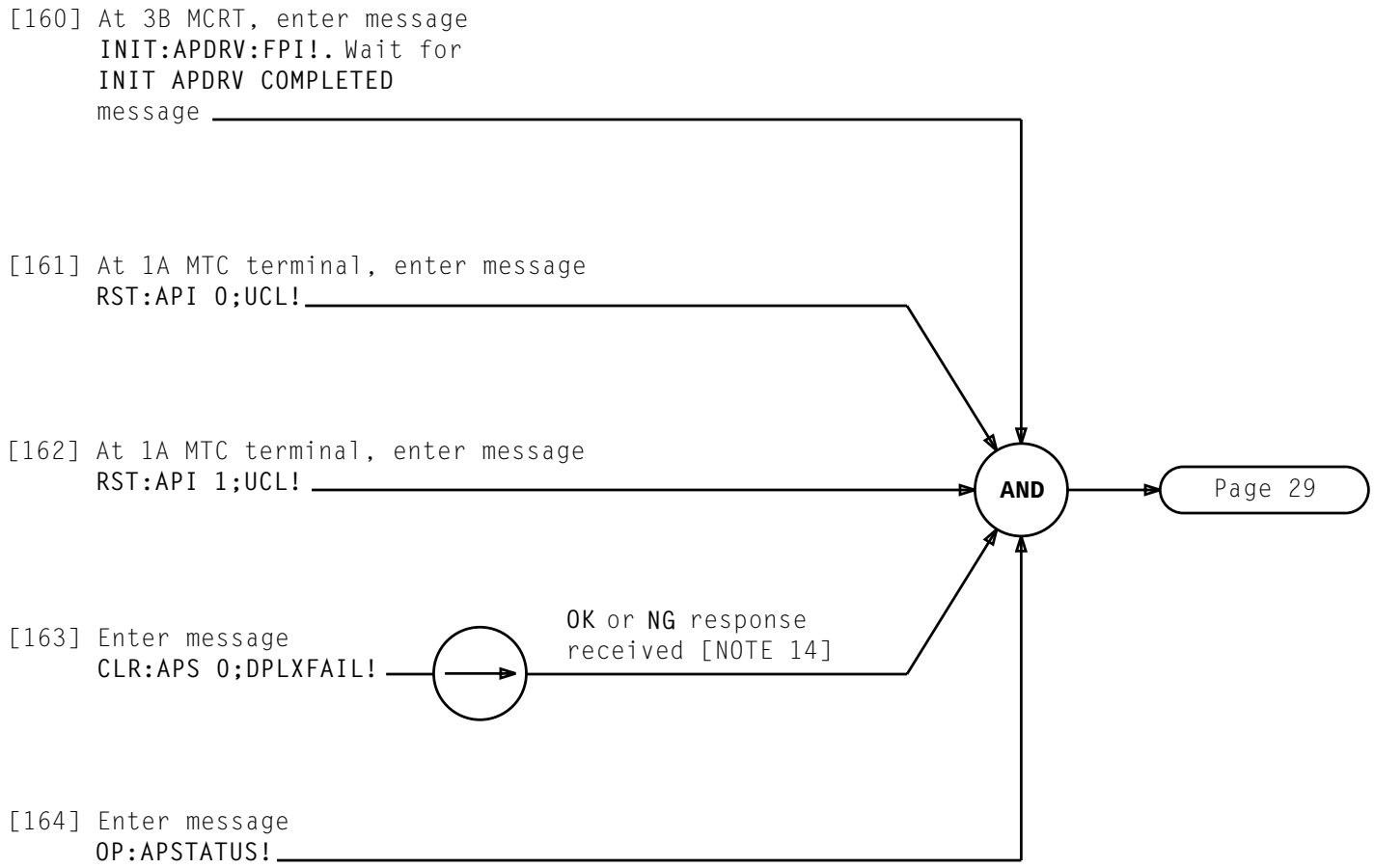


NOTE 12
NG response will be received if 1afiles are not duplex failed



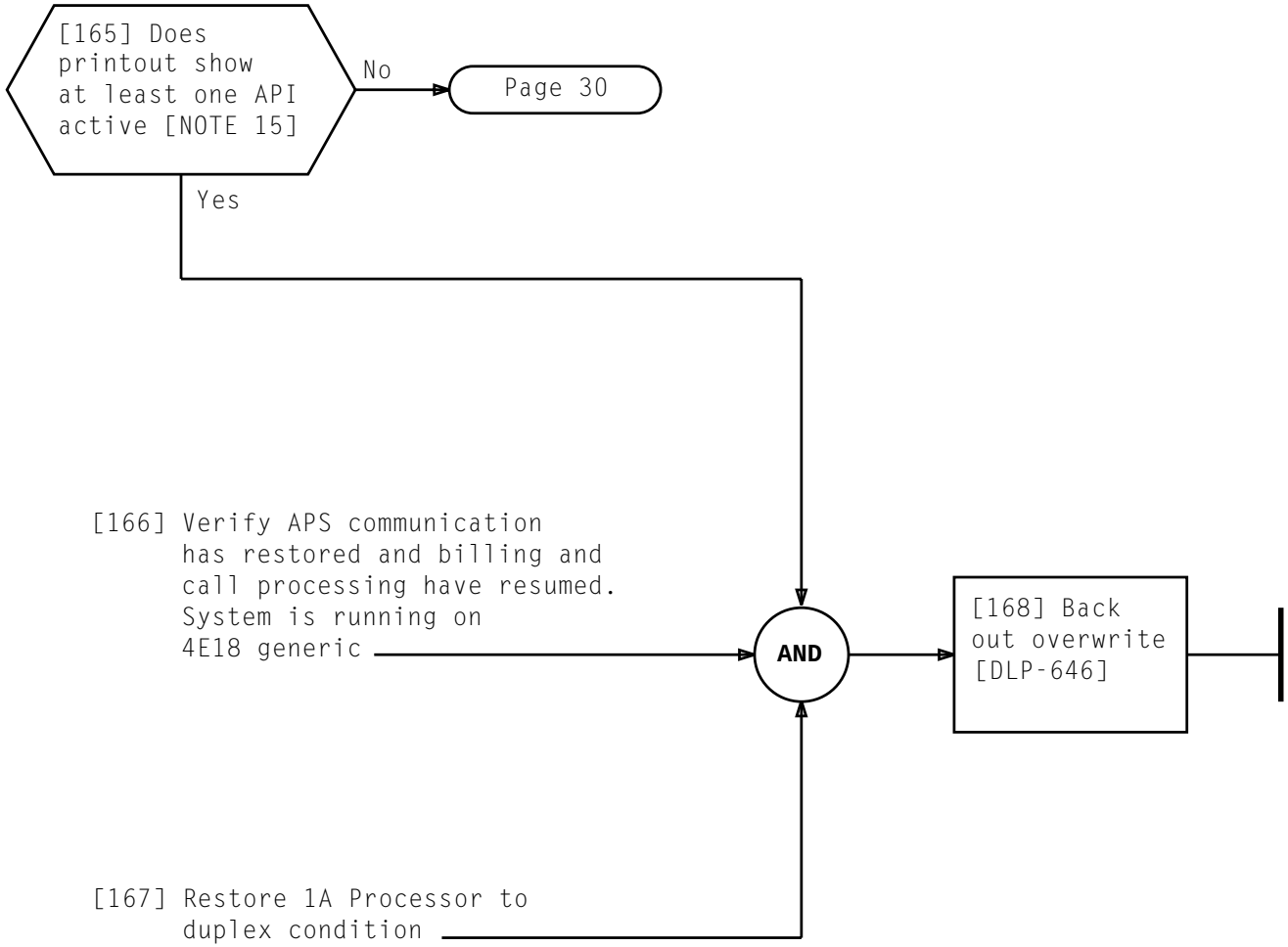
NOTE 13

It will take a short time before response is received



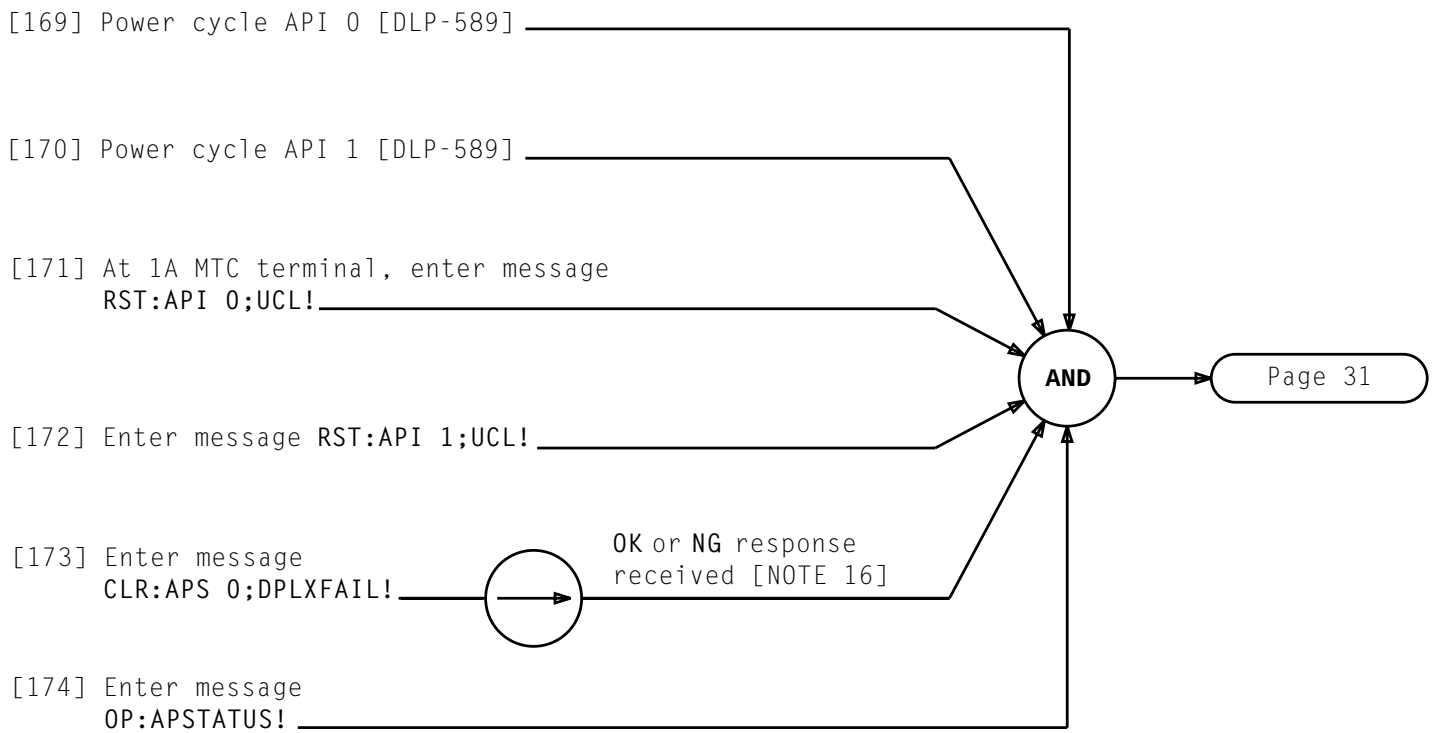
NOTE 14

It will take a short time before response is received



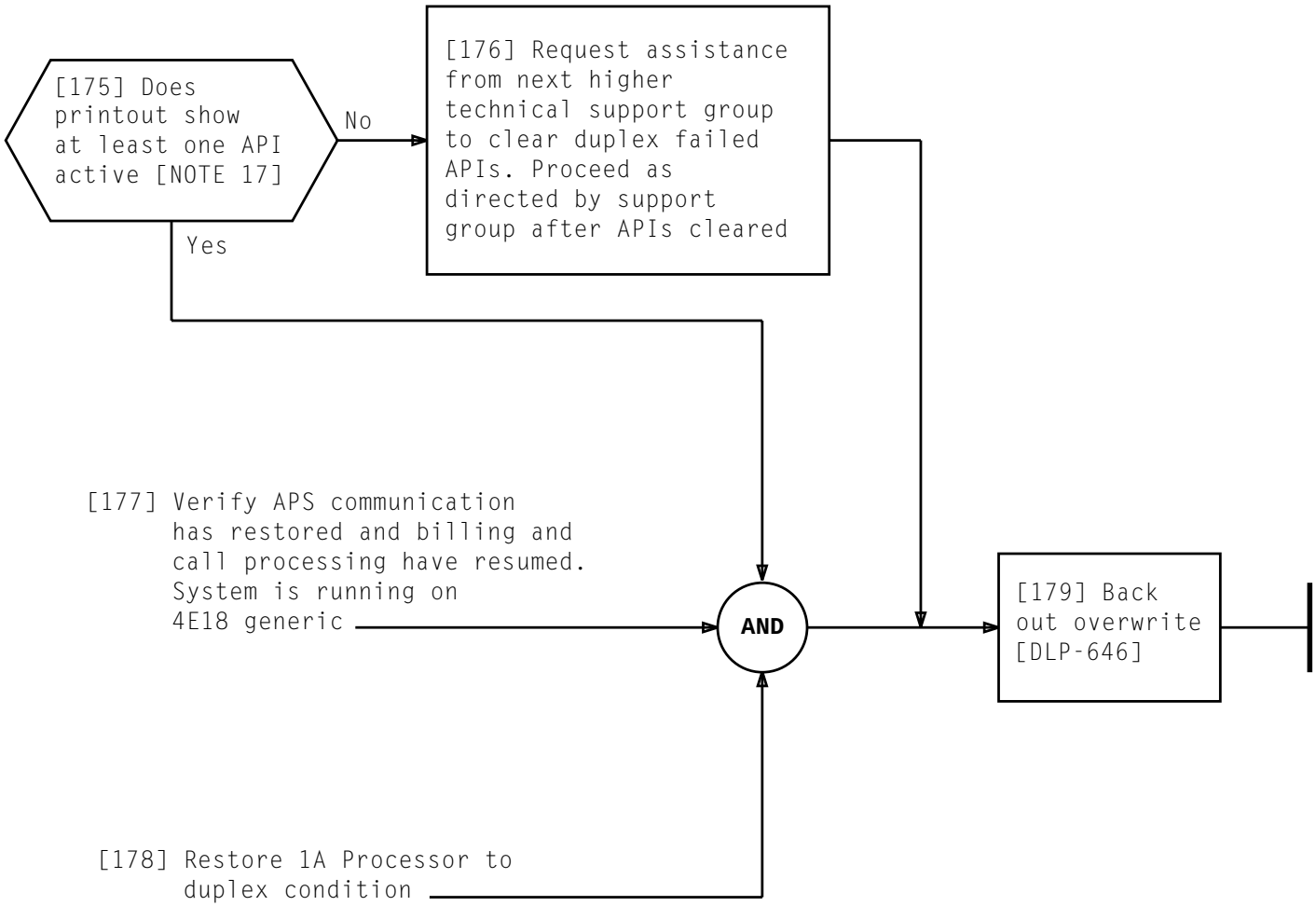
NOTE 15

It will take a short time before response is received



NOTE 16

NG response will be received if 1afiles are not duplex failed



NOTE 17	
It will take a short time before response is received	
Issue 1	**DEC 1995**
234-160-019	**DLP**
PAGE 31 of 50	**665**

[180] **BACK OUT PROCESSOR TO 1A (1A PROCESSOR IS CURRENTLY IN STAND-ALONE MODE WITH CONVERSION SWITCH UNITS SET TO 1B BUS ACCESS [RED]).**
Notify next higher technical support group that attempt to recover on 1A Processor will be made

[181] Technician 1: Allow utility-interfering actions [DLP-585]

[182] At 1B Processor MCC terminal, enter 1990 to obtain Dead Start page (1990); then enter 613 (UAS INTF ALW)

AND

[183] Enter 701 (SUSPEND)

701 - SUSPEND colored white on red

[184] During this step, Technician 2 should perform Steps 185 through 189, Page 33. Ensure power is restored to API 1, and power switch is in normal position

[185] At 1A Processor MCC **UPDATE** panel, depress **NORMAL** key

Lamp lights

[186] At 1A Processor MCC **OVERRIDE CONTROL** panel, depress **BLOCK 0 PS 0, AU BUS 0, PS BUS 0**, and **CC 0** keys

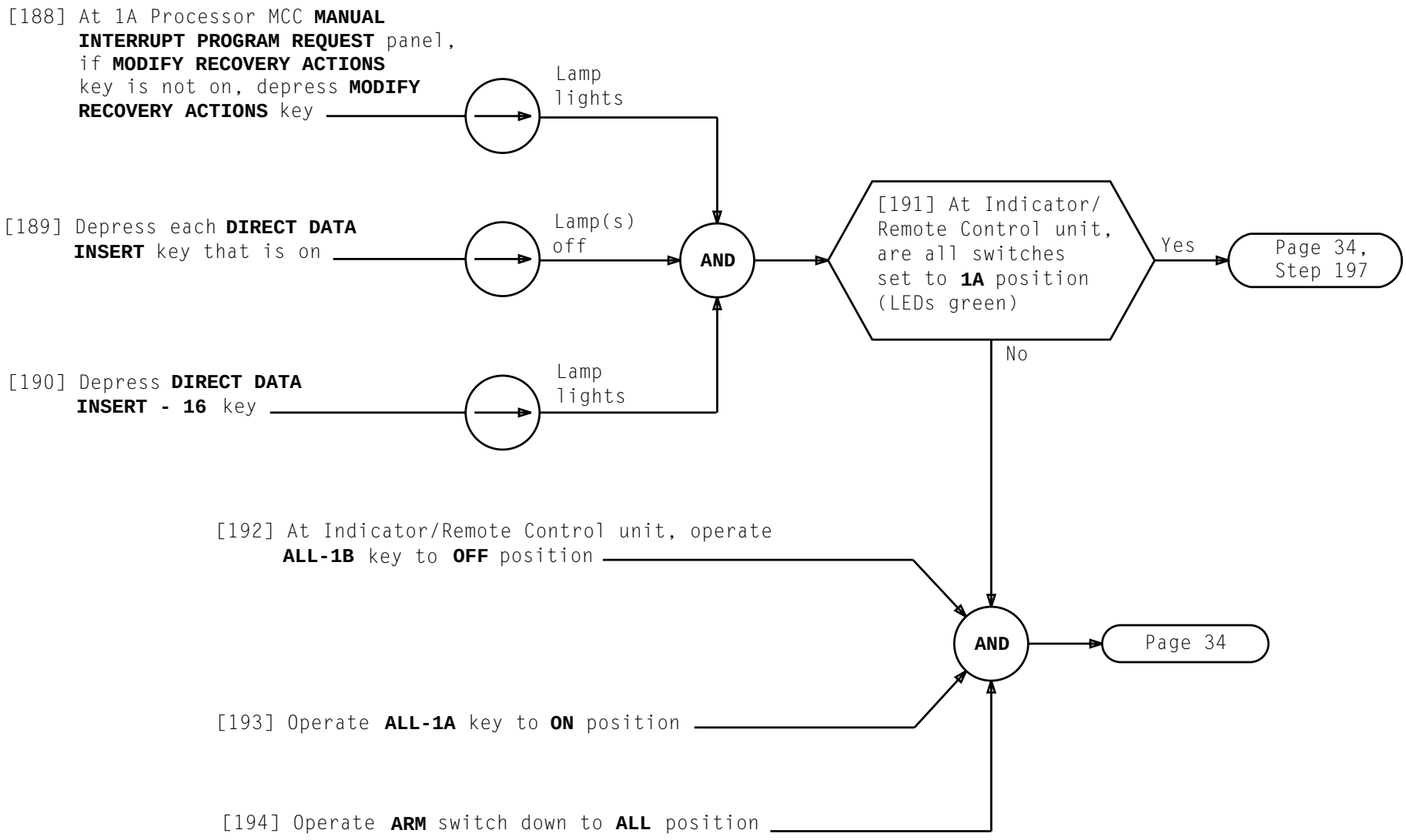
Lamps light

[187] At 1A Processor MCC **PROCESSOR CONFIGURATION SEQUENCER** panel, if **DISABLE AUTO PC** lamp is not on, depress **DISABLE AUTO PC** key

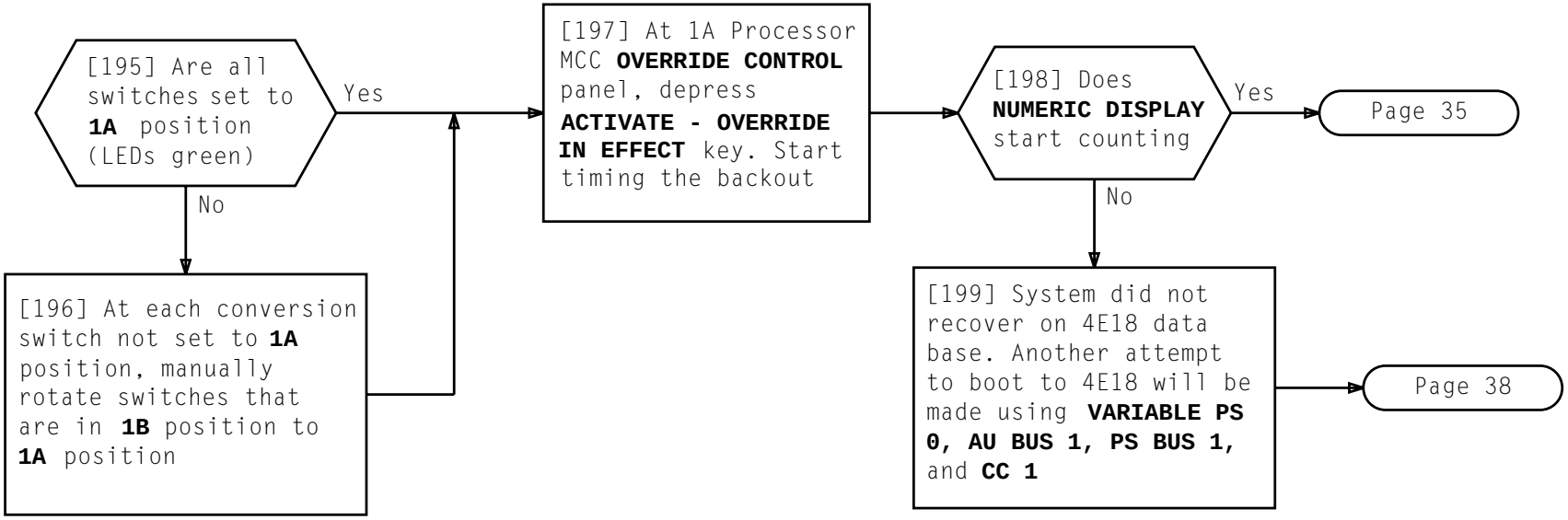
Lamp lights

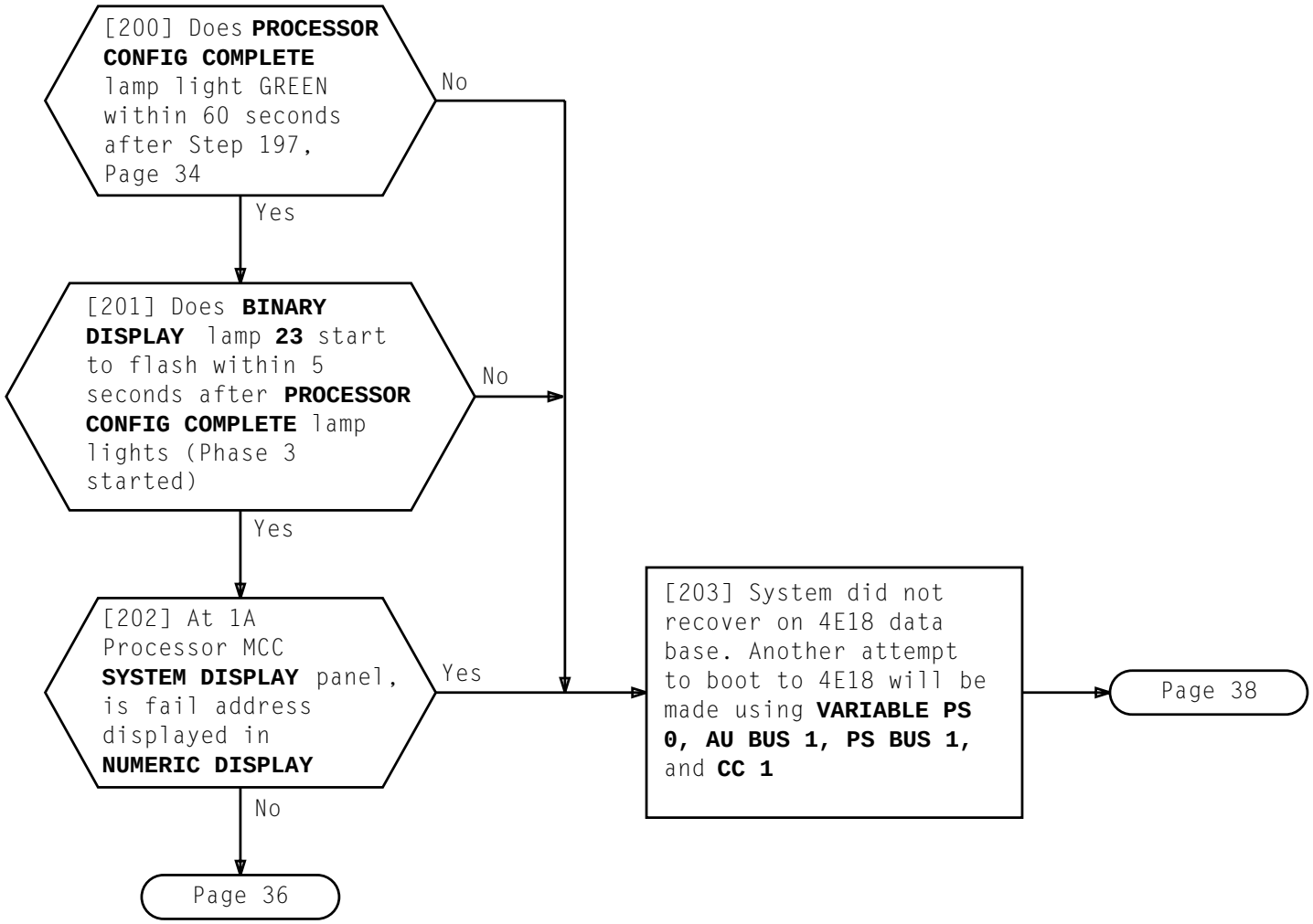
AND

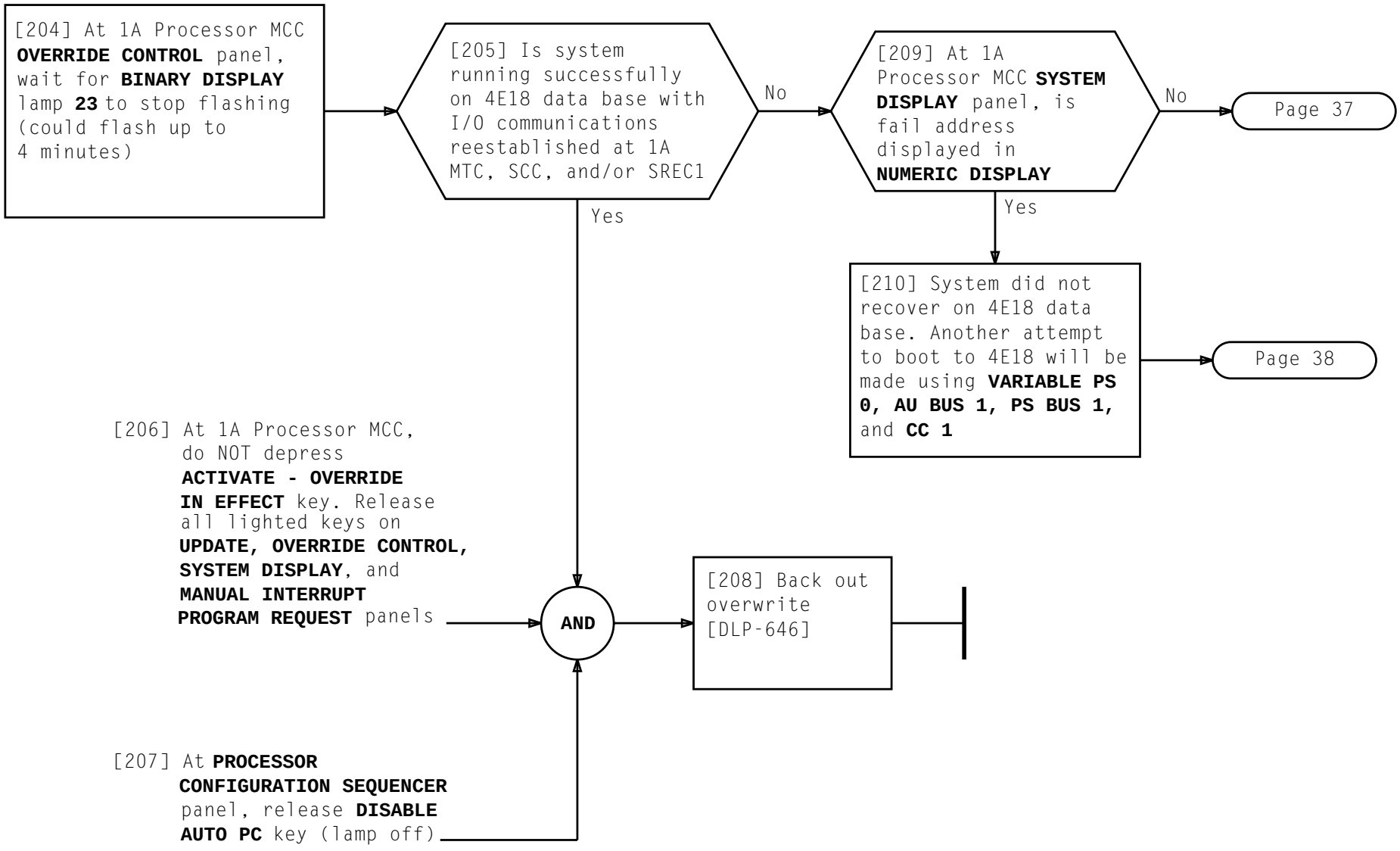
Page 33

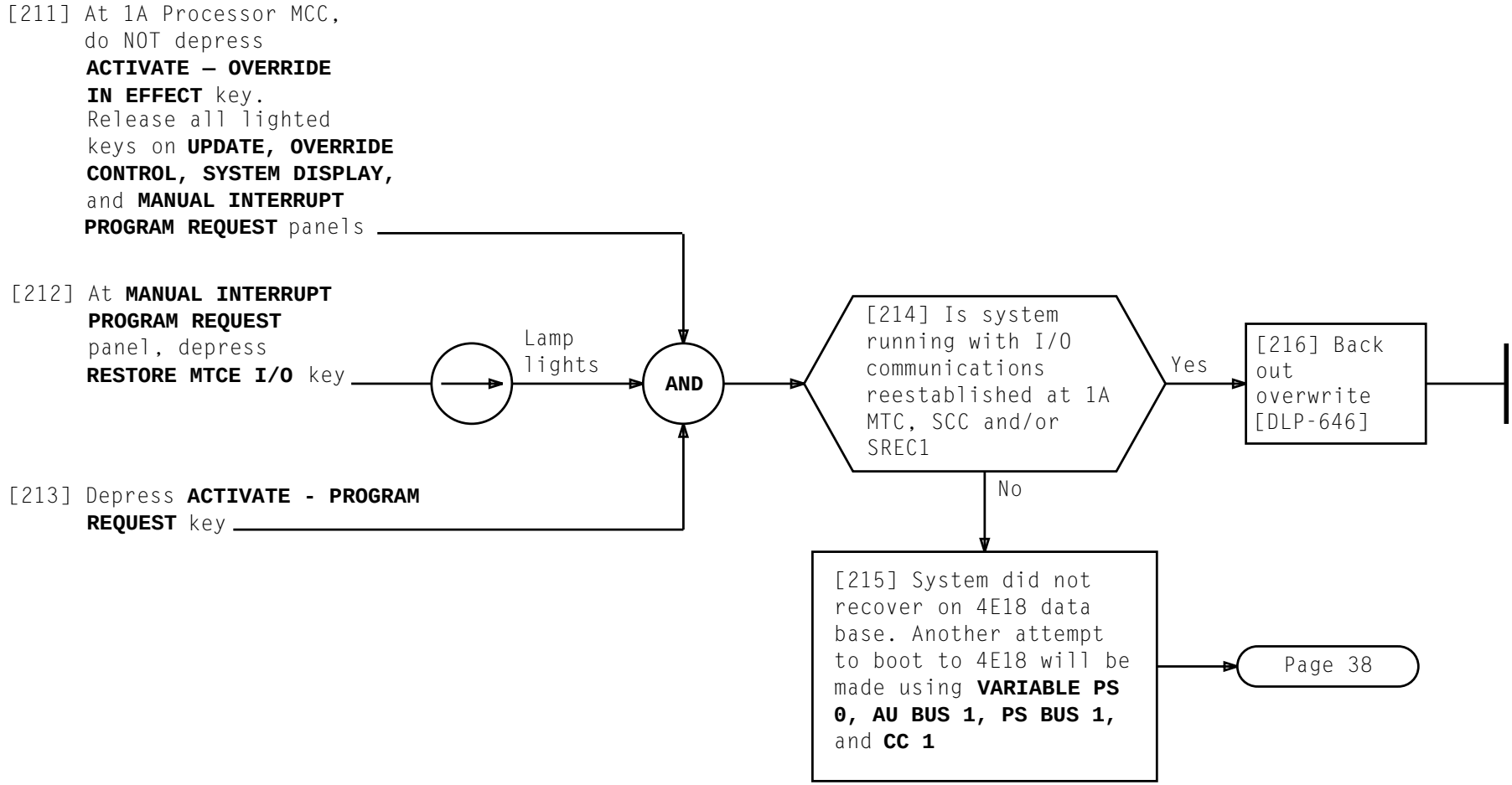


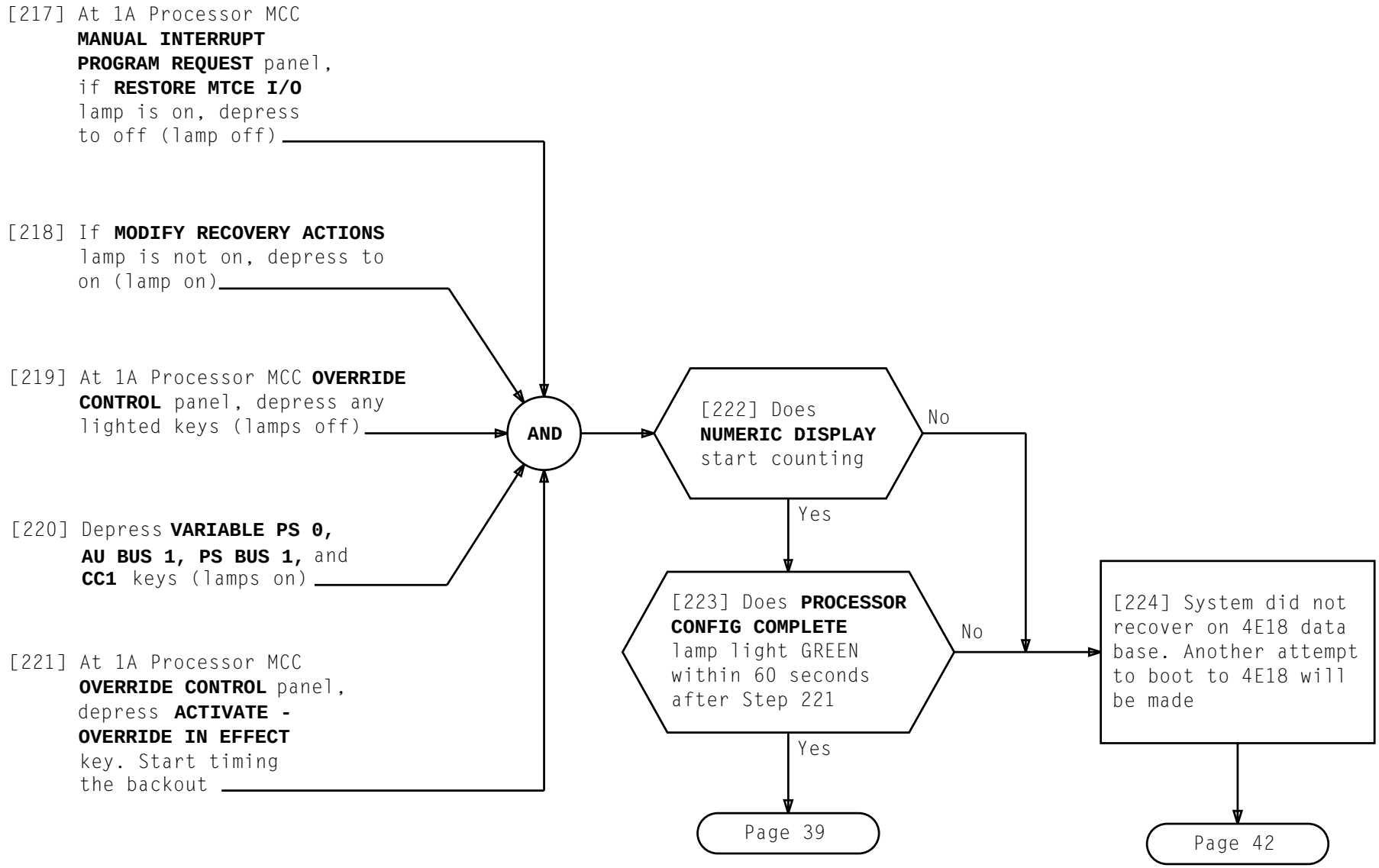
RETROFIT TO 1B PROCESSOR

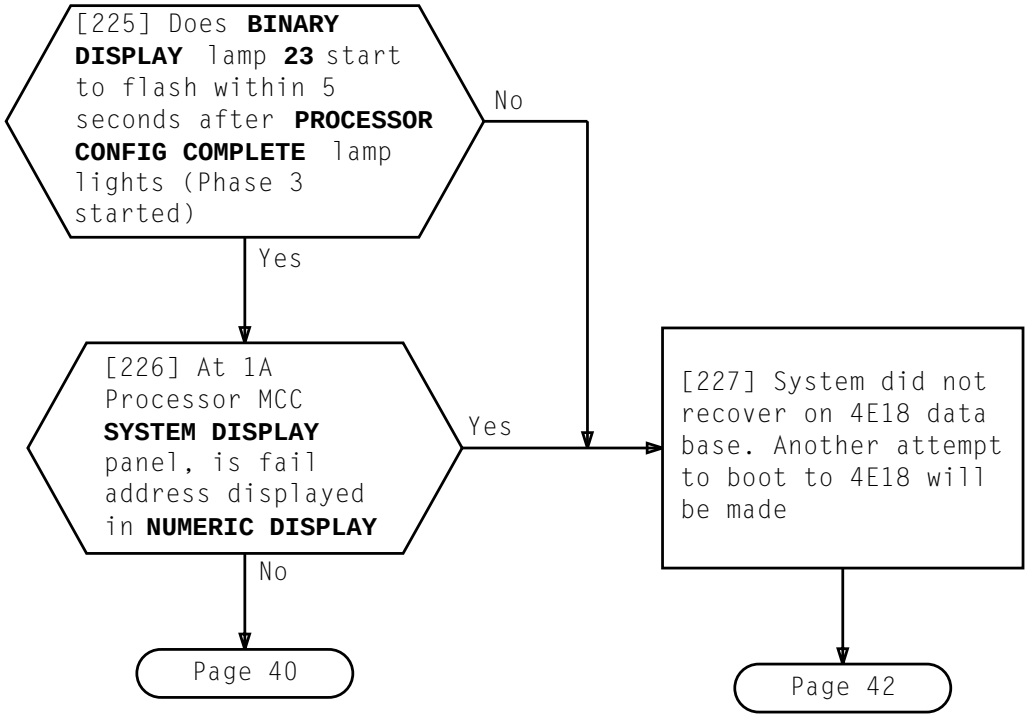

[195] Are all switches set to **1A** position (LEDs green)
Yes
No
[196] At each conversion switch not set to **1A** position, manually rotate switches that are in **1B** position to **1A** position
[197] At 1A Processor MCC **OVERRIDE CONTROL** panel, depress **ACTIVATE - OVERRIDE IN EFFECT** key. Start timing the backout
[198] Does **NUMERIC DISPLAY** start counting
Yes
Page 35
No
[199] System did not recover on 4E18 data base. Another attempt to boot to 4E18 will be made using **VARIABLE PS 0, AU BUS 1, PS BUS 1,** and **CC 1**
Page 38

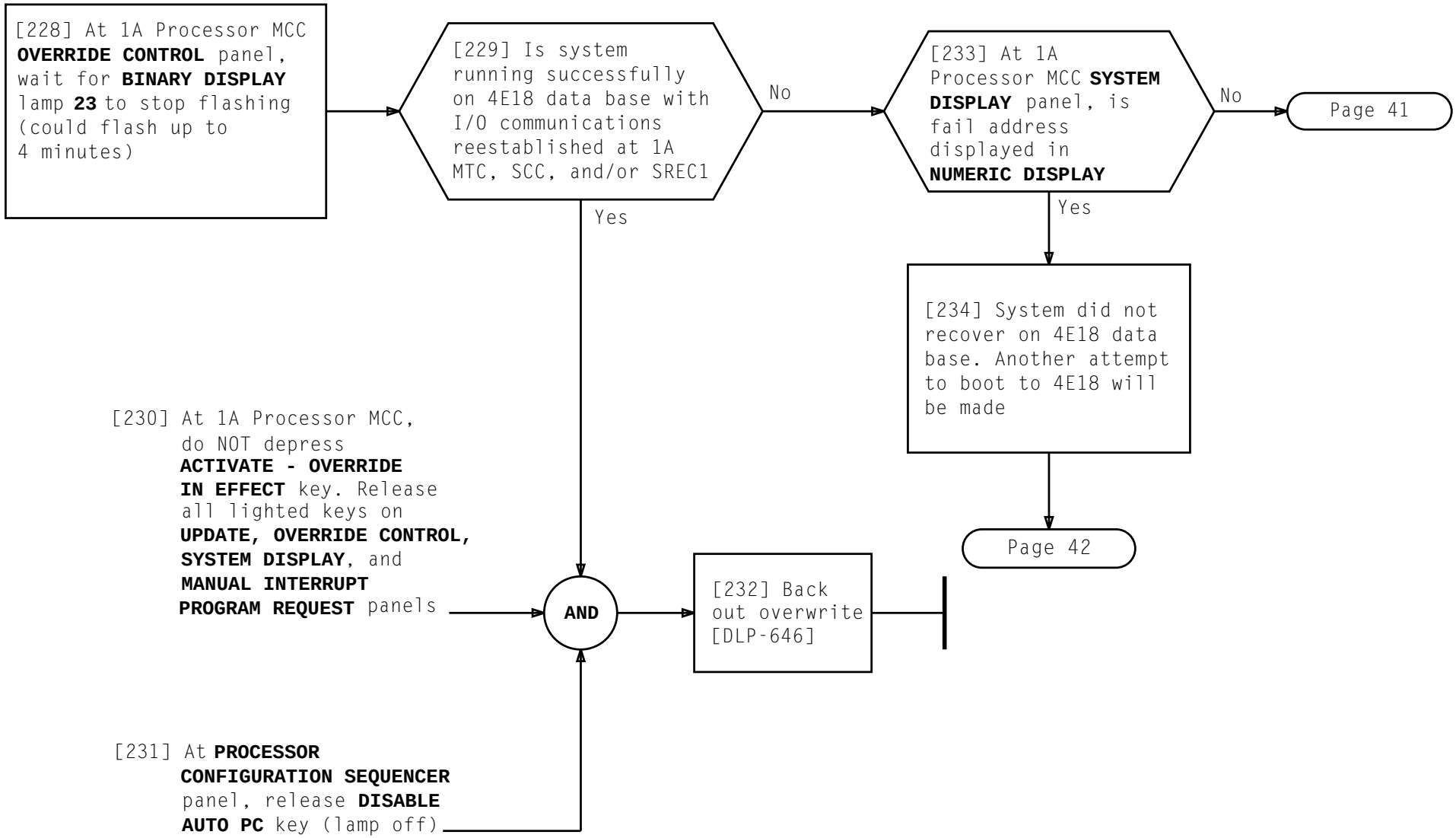

[200] Does **PROCESSOR CONFIG COMPLETE** lamp light GREEN within 60 seconds after Step 197, Page 34
No
Yes
[201] Does **BINARY DISPLAY** lamp **23** start to flash within 5 seconds after **PROCESSOR CONFIG COMPLETE** lamp lights (Phase 3 started)
No
Yes
[202] At 1A Processor MCC **SYSTEM DISPLAY** panel, is fail address displayed in **NUMERIC DISPLAY**
Yes
No
Page 36
[203] System did not recover on 4E18 data base. Another attempt to boot to 4E18 will be made using **VARIABLE PS 0, AU BUS 1, PS BUS 1,** and **CC 1**
Page 38

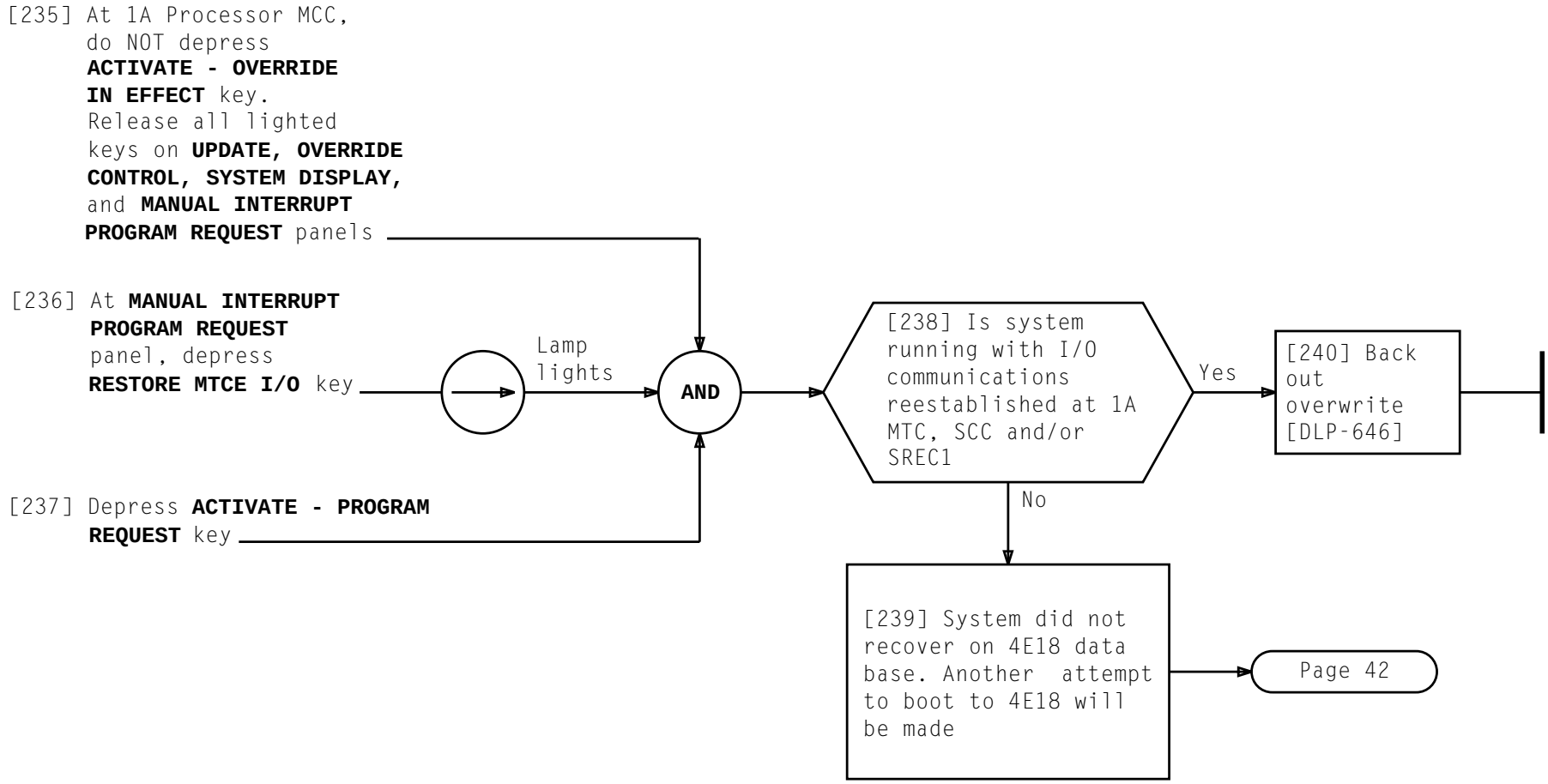

[204] At 1A Processor MCC **OVERRIDE CONTROL** panel, wait for **BINARY DISPLAY** lamp **23** to stop flashing (could flash up to 4 minutes)
[205] Is system running successfully on 4E18 data base with I/O communications reestablished at 1A MTC, SCC, and/or SREC1
No
[209] At 1A Processor MCC **SYSTEM DISPLAY** panel, is fail address displayed in **NUMERIC DISPLAY**
No
Page 37
Yes
[210] System did not recover on 4E18 data base. Another attempt to boot to 4E18 will be made using **VARIABLE PS 0, AU BUS 1, PS BUS 1,** and **CC 1**
Page 38
Yes
[206] At 1A Processor MCC, do NOT depress **ACTIVATE - OVERRIDE IN EFFECT** key. Release all lighted keys on **UPDATE, OVERRIDE CONTROL, SYSTEM DISPLAY**, and **MANUAL INTERRUPT PROGRAM REQUEST** panels
AND
[208] Back out overwrite [DLP-646]
[207] At **PROCESSOR CONFIGURATION SEQUENCER** panel, release **DISABLE AUTO PC** key (lamp off)

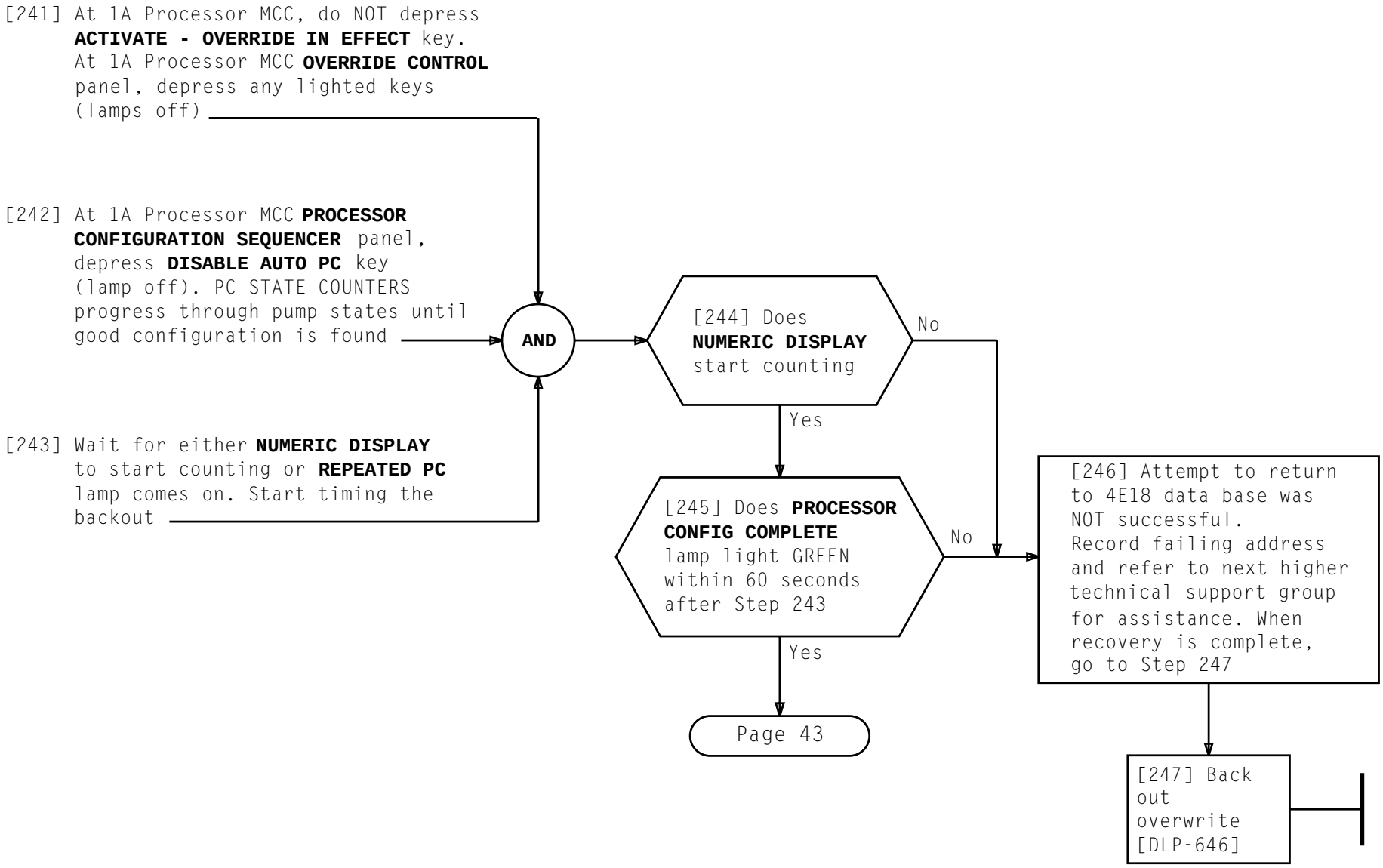

[211] At 1A Processor MCC, do NOT depress **ACTIVATE – OVERRIDE IN EFFECT** key. Release all lighted keys on **UPDATE, OVERRIDE CONTROL, SYSTEM DISPLAY,** and **MANUAL INTERRUPT PROGRAM REQUEST** panels
[212] At **MANUAL INTERRUPT PROGRAM REQUEST** panel, depress **RESTORE MTCE I/O** key
Lamp lights
AND
[213] Depress **ACTIVATE - PROGRAM REQUEST** key
[214] Is system running with I/O communications reestablished at 1A MTC, SCC and/or SREC1
Yes
[216] Back out overwrite [DLP-646]
No
[215] System did not recover on 4E18 data base. Another attempt to boot to 4E18 will be made using **VARIABLE PS 0, AU BUS 1, PS BUS 1,** and **CC 1**
Page 38

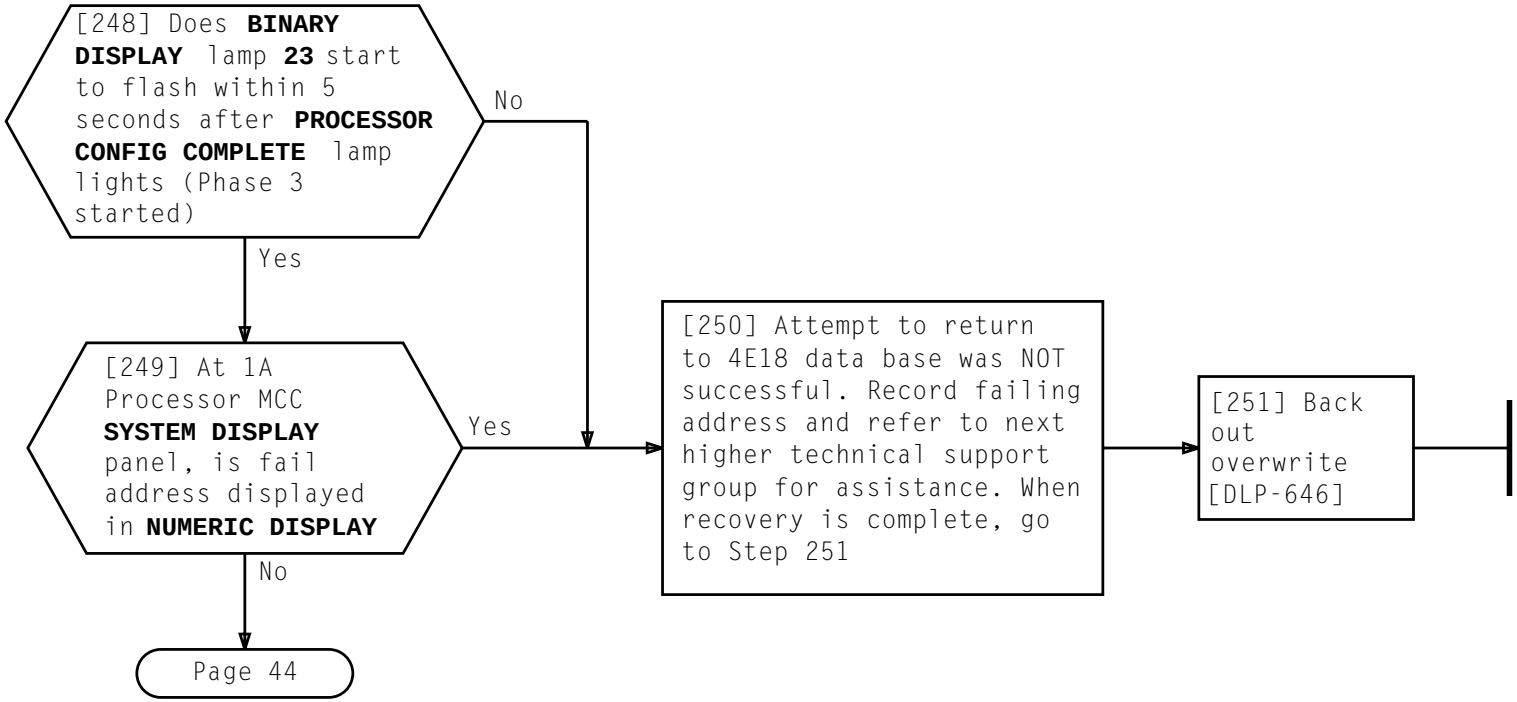

[217] At 1A Processor MCC **MANUAL INTERRUPT PROGRAM REQUEST** panel, if **RESTORE MTCE I/O** lamp is on, depress to off (lamp off)
[218] If **MODIFY RECOVERY ACTIONS** lamp is not on, depress to on (lamp on)
[219] At 1A Processor MCC **OVERRIDE CONTROL** panel, depress any lighted keys (lamps off)
[220] Depress **VARIABLE PS 0, AU BUS 1, PS BUS 1,** and **CC1** keys (lamps on)
[221] At 1A Processor MCC **OVERRIDE CONTROL** panel, depress **ACTIVATE - OVERRIDE IN EFFECT** key. Start timing the backout
AND
[222] Does **NUMERIC DISPLAY** start counting
No
Yes
[223] Does **PROCESSOR CONFIG COMPLETE** lamp light GREEN within 60 seconds after Step 221
No
Yes
[224] System did not recover on 4E18 data base. Another attempt to boot to 4E18 will be made
Page 39
Page 42

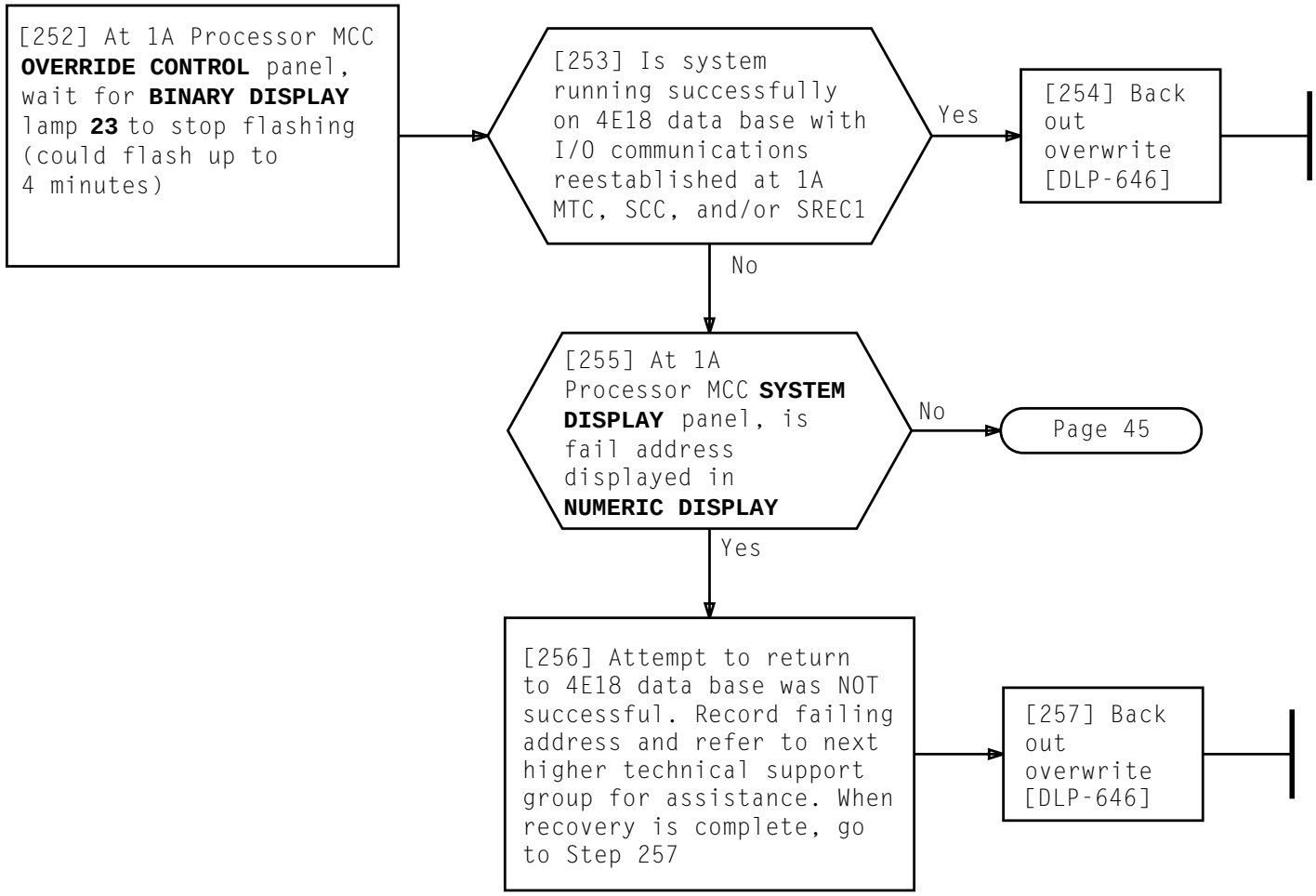

[225] Does **BINARY DISPLAY** lamp **23** start to flash within 5 seconds after **PROCESSOR CONFIG COMPLETE** lamp lights (Phase 3 started)
No
Yes
[226] At 1A Processor MCC **SYSTEM DISPLAY** panel, is fail address displayed in **NUMERIC DISPLAY**
Yes
No
[227] System did not recover on 4E18 data base. Another attempt to boot to 4E18 will be made
Page 40
Page 42

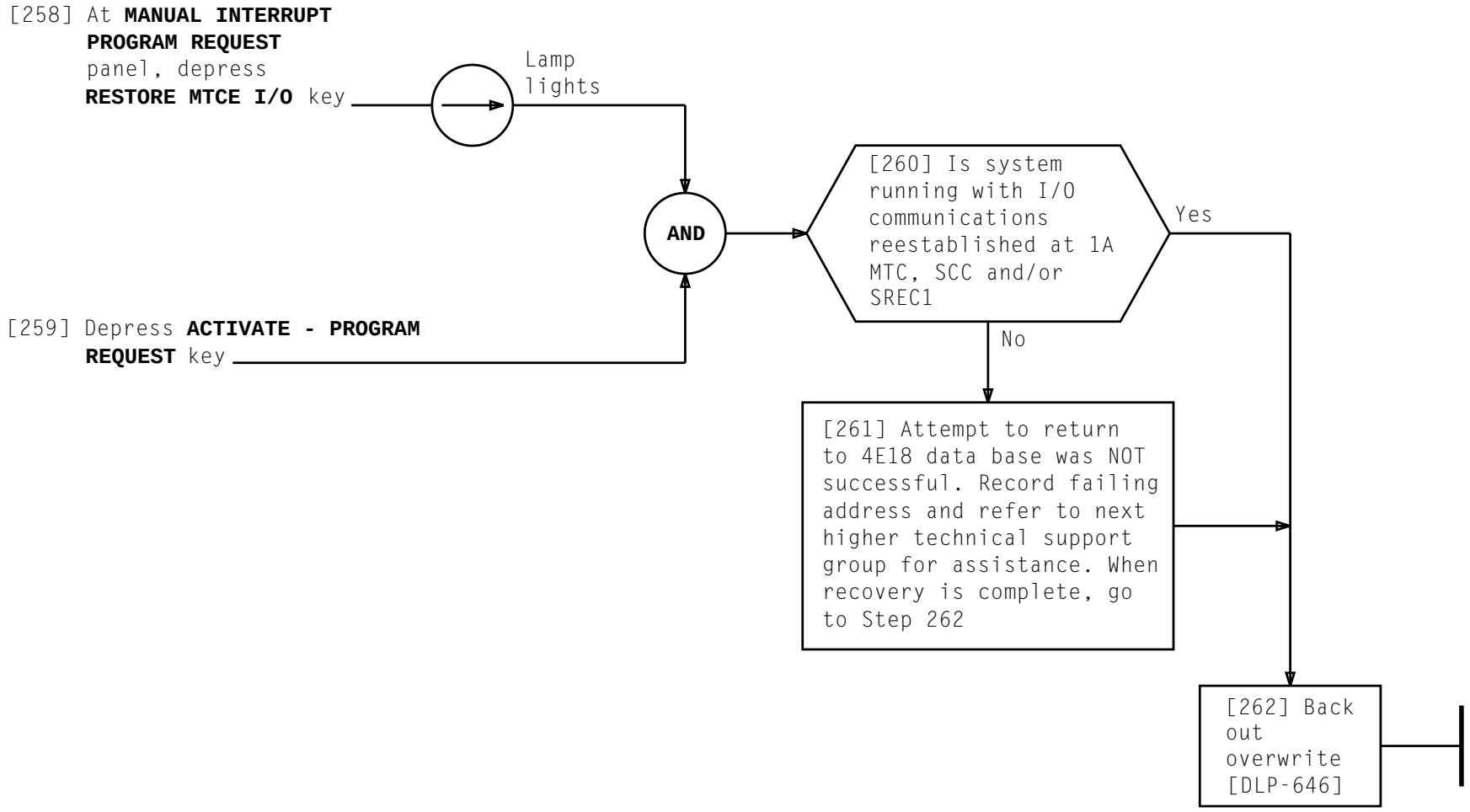

[228] At 1A Processor MCC **OVERRIDE CONTROL** panel, wait for **BINARY DISPLAY** lamp **23** to stop flashing (could flash up to 4 minutes)
[229] Is system running successfully on 4E18 data base with I/O communications reestablished at 1A MTC, SCC, and/or SREC1
No
[233] At 1A Processor MCC **SYSTEM DISPLAY** panel, is fail address displayed in **NUMERIC DISPLAY**
No
Page 41
Yes
[234] System did not recover on 4E18 data base. Another attempt to boot to 4E18 will be made
Page 42
Yes
[230] At 1A Processor MCC, do NOT depress **ACTIVATE - OVERRIDE IN EFFECT** key. Release all lighted keys on **UPDATE, OVERRIDE CONTROL, SYSTEM DISPLAY**, and **MANUAL INTERRUPT PROGRAM REQUEST** panels
AND
[232] Back out overwrite [DLP-646]
[231] At **PROCESSOR CONFIGURATION SEQUENCER** panel, release **DISABLE AUTO PC** key (lamp off)

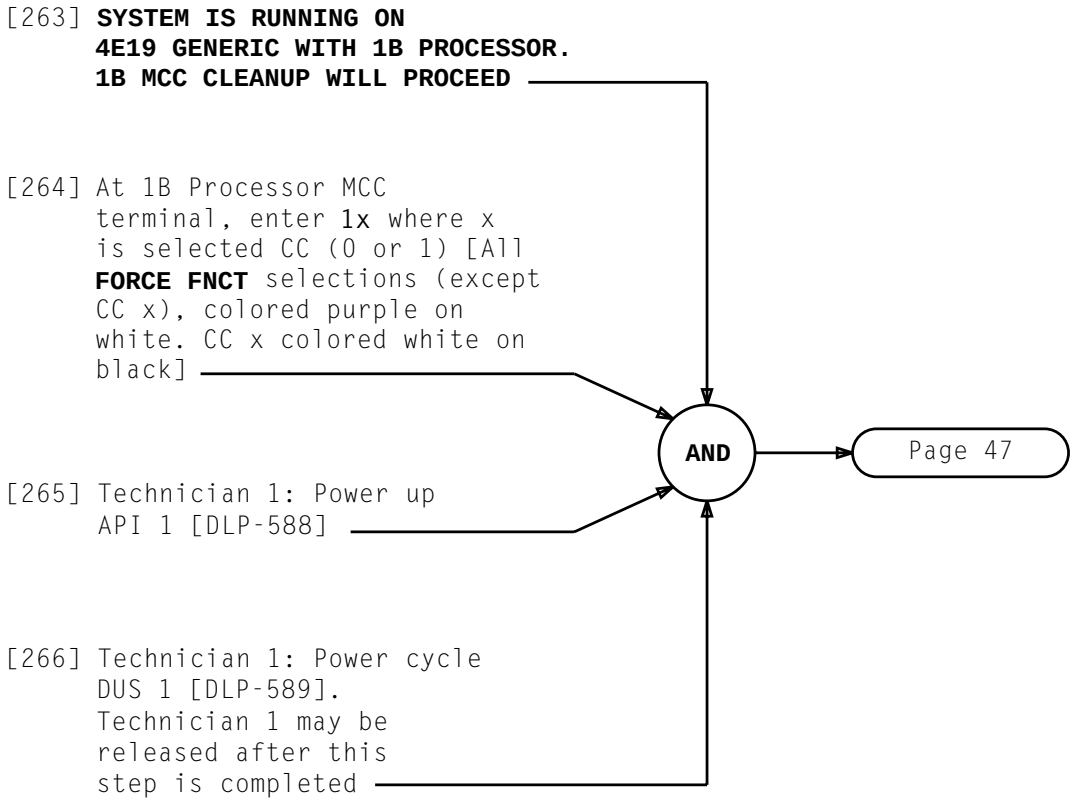

[235] At 1A Processor MCC, do NOT depress **ACTIVATE - OVERRIDE IN EFFECT** key. Release all lighted keys on **UPDATE, OVERRIDE CONTROL, SYSTEM DISPLAY,** and **MANUAL INTERRUPT PROGRAM REQUEST** panels
[236] At **MANUAL INTERRUPT PROGRAM REQUEST** panel, depress **RESTORE MTCE I/O** key
Lamp lights
AND
[237] Depress **ACTIVATE - PROGRAM REQUEST** key
[238] Is system running with I/O communications reestablished at 1A MTC, SCC and/or SREC1
Yes
[240] Back out overwrite [DLP-646]
No
[239] System did not recover on 4E18 data base. Another attempt to boot to 4E18 will be made
Page 42

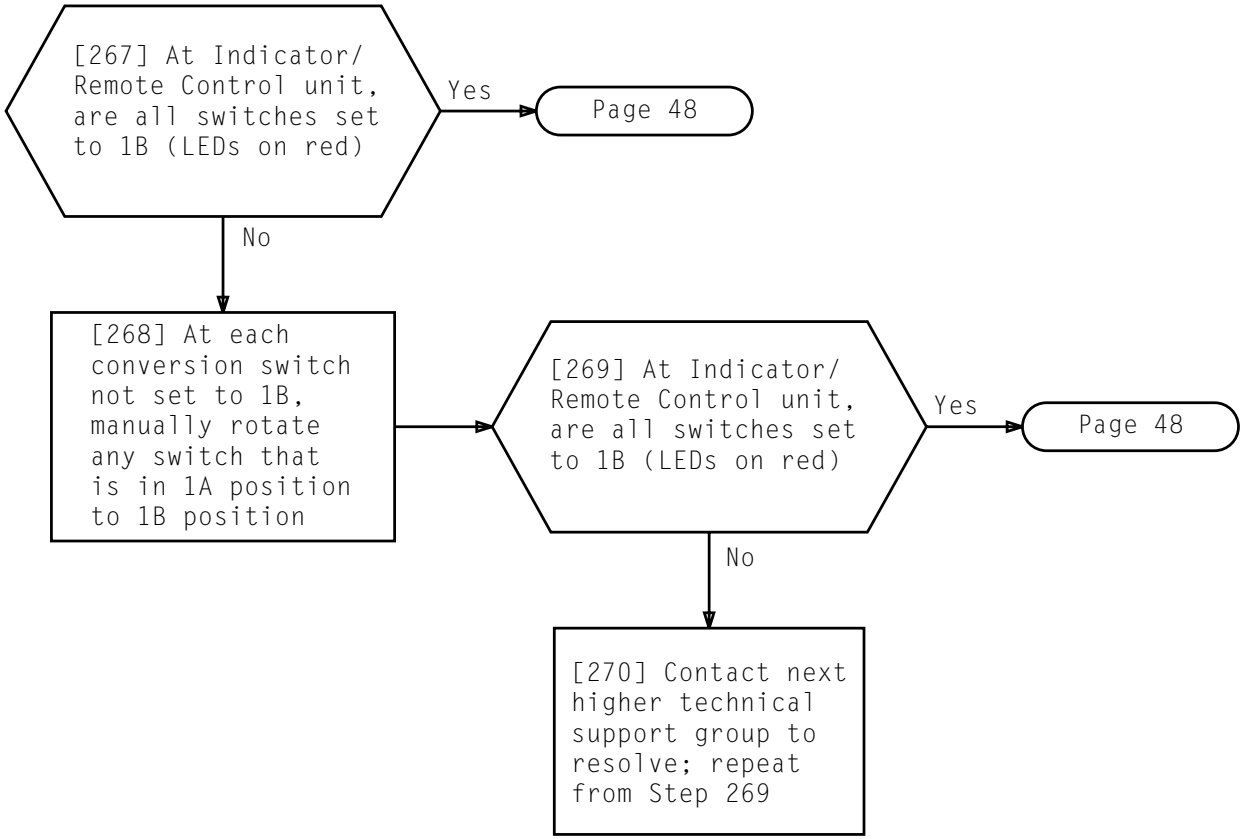

[241] At 1A Processor MCC, do NOT depress **ACTIVATE - OVERRIDE IN EFFECT** key. At 1A Processor MCC **OVERRIDE CONTROL** panel, depress any lighted keys (lamps off)
[242] At 1A Processor MCC **PROCESSOR CONFIGURATION SEQUENCER** panel, depress **DISABLE AUTO PC** key (lamp off). PC STATE COUNTERS progress through pump states until good configuration is found
[243] Wait for either **NUMERIC DISPLAY** to start counting or **REPEATED PC** lamp comes on. Start timing the backout
AND
[244] Does **NUMERIC DISPLAY** start counting
No
Yes
[245] Does **PROCESSOR CONFIG COMPLETE** lamp light GREEN within 60 seconds after Step 243
No
Yes
Page 43
[246] Attempt to return to 4E18 data base was NOT successful. Record failing address and refer to next higher technical support group for assistance. When recovery is complete, go to Step 247
[247] Back out overwrite [DLP-646]

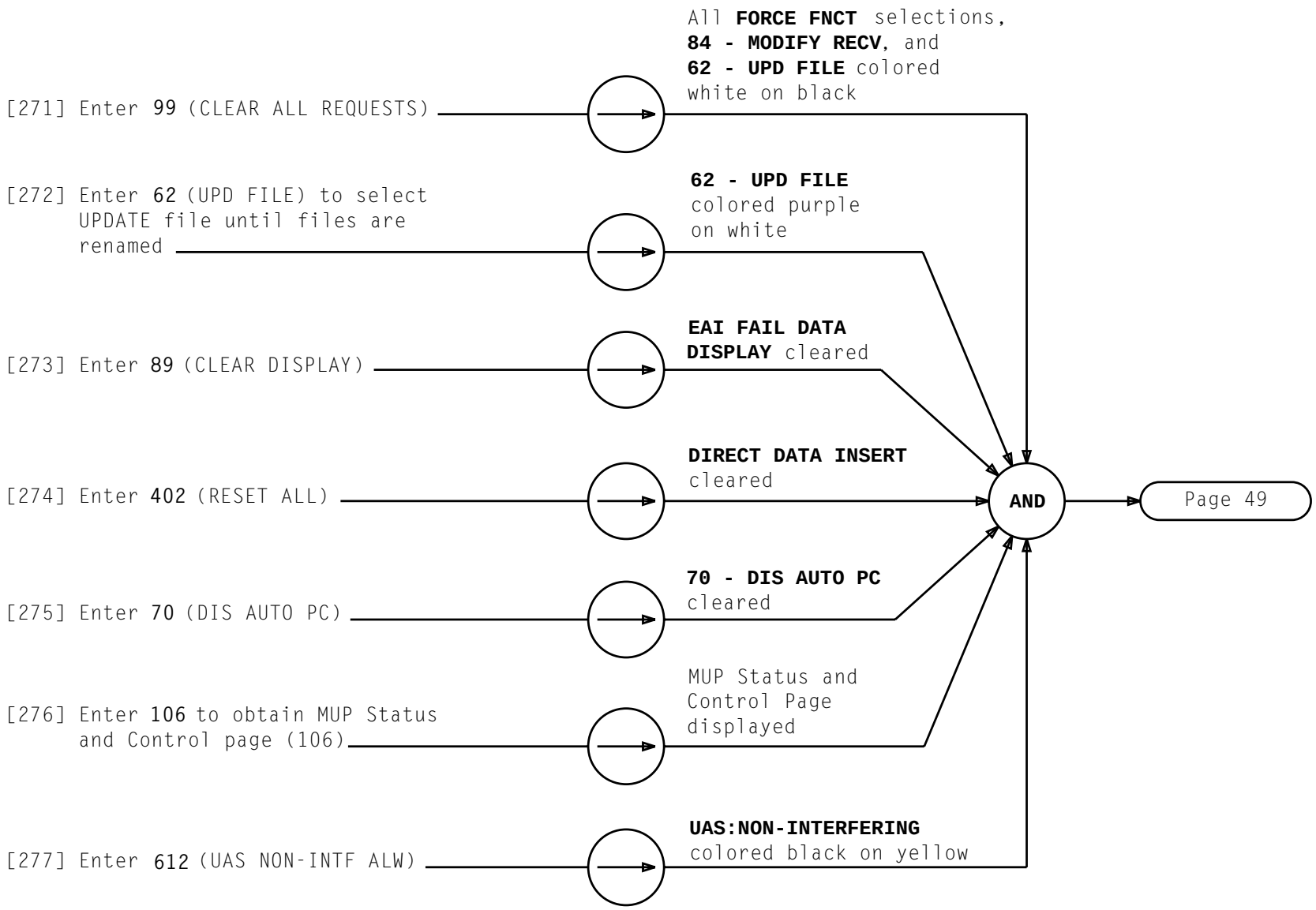

[248] Does **BINARY DISPLAY** lamp **23** start to flash within 5 seconds after **PROCESSOR CONFIG COMPLETE** lamp lights (Phase 3 started)
No
Yes
[249] At 1A Processor MCC **SYSTEM DISPLAY** panel, is fail address displayed in **NUMERIC DISPLAY**
Yes
No
Page 44
[250] Attempt to return to 4E18 data base was NOT successful. Record failing address and refer to next higher technical support group for assistance. When recovery is complete, go to Step 251
[251] Back out overwrite [DLP-646]

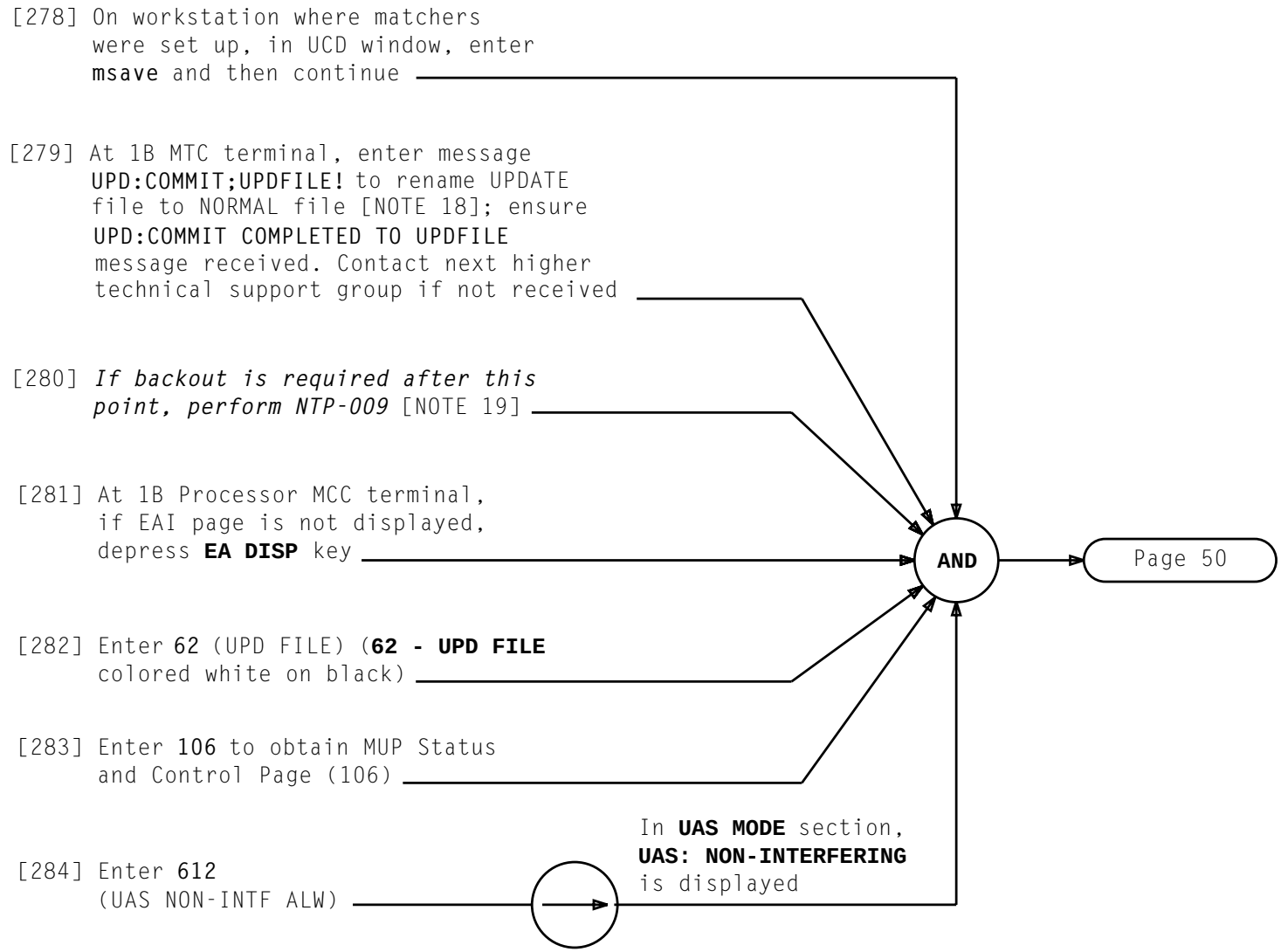

[252] At 1A Processor MCC **OVERRIDE CONTROL** panel, wait for **BINARY DISPLAY** lamp **23** to stop flashing (could flash up to 4 minutes)
[253] Is system running successfully on 4E18 data base with I/O communications reestablished at 1A MTC, SCC, and/or SREC1
Yes
[254] Back out overwrite [DLP-646]
No
[255] At 1A Processor MCC **SYSTEM DISPLAY** panel, is fail address displayed in **NUMERIC DISPLAY**
No
Page 45
Yes
[256] Attempt to return to 4E18 data base was NOT successful. Record failing address and refer to next higher technical support group for assistance. When recovery is complete, go to Step 257
[257] Back out overwrite [DLP-646]


[258] At **MANUAL INTERRUPT PROGRAM REQUEST** panel, depress **RESTORE MTCE I/O** key
Lamp lights
AND
[259] Depress **ACTIVATE - PROGRAM REQUEST** key
[260] Is system running with I/O communications reestablished at 1A MTC, SCC and/or SREC1
Yes
No
[261] Attempt to return to 4E18 data base was NOT successful. Record failing address and refer to next higher technical support group for assistance. When recovery is complete, go to Step 262
[262] Back out overwrite [DLP-646]


[263] SYSTEM IS RUNNING ON
4E19 GENERIC WITH 1B PROCESSOR.
1B MCC CLEANUP WILL PROCEED
[264] At 1B Processor MCC terminal, enter 1x where x is selected CC (0 or 1) [All FORCE FNCT selections (except CC x), colored purple on white. CC x colored white on black]
AND
Page 47
[265] Technician 1: Power up API 1 [DLP-588]
[266] Technician 1: Power cycle DUS 1 [DLP-589]. Technician 1 may be released after this step is completed


[267] At Indicator/ Remote Control unit, are all switches set to 1B (LEDs on red)
Yes
Page 48
No
[268] At each conversion switch not set to 1B, manually rotate any switch that is in 1A position to 1B position
[269] At Indicator/ Remote Control unit, are all switches set to 1B (LEDs on red)
Yes
Page 48
No
[270] Contact next higher technical support group to resolve; repeat from Step 269


[271] Enter 99 (CLEAR ALL REQUESTS)
All FORCE FNCT selections, 84 - MODIFY RECV, and 62 - UPD FILE colored white on black
[272] Enter 62 (UPD FILE) to select UPDATE file until files are renamed
62 - UPD FILE colored purple on white
[273] Enter 89 (CLEAR DISPLAY)
EAI FAIL DATA DISPLAY cleared
[274] Enter 402 (RESET ALL)
DIRECT DATA INSERT cleared
AND
Page 49
[275] Enter 70 (DIS AUTO PC)
70 - DIS AUTO PC cleared
[276] Enter 106 to obtain MUP Status and Control page (106)
MUP Status and Control Page displayed
[277] Enter 612 (UAS NON-INTF ALW)
UAS:NON-INTERFERING colored black on yellow



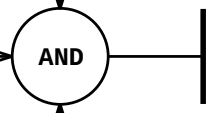
NOTES

18. Step 279 is being performed to rename UPDATE file to NORMAL file and precedes the actual commitment to 1B Processor
19. Commitment to 1B Processor takes place when the NORMAL file is written to the UPDATE file

[285] See NOTE 20. Enter **118** to obtain 1B Processor System Display page (118)

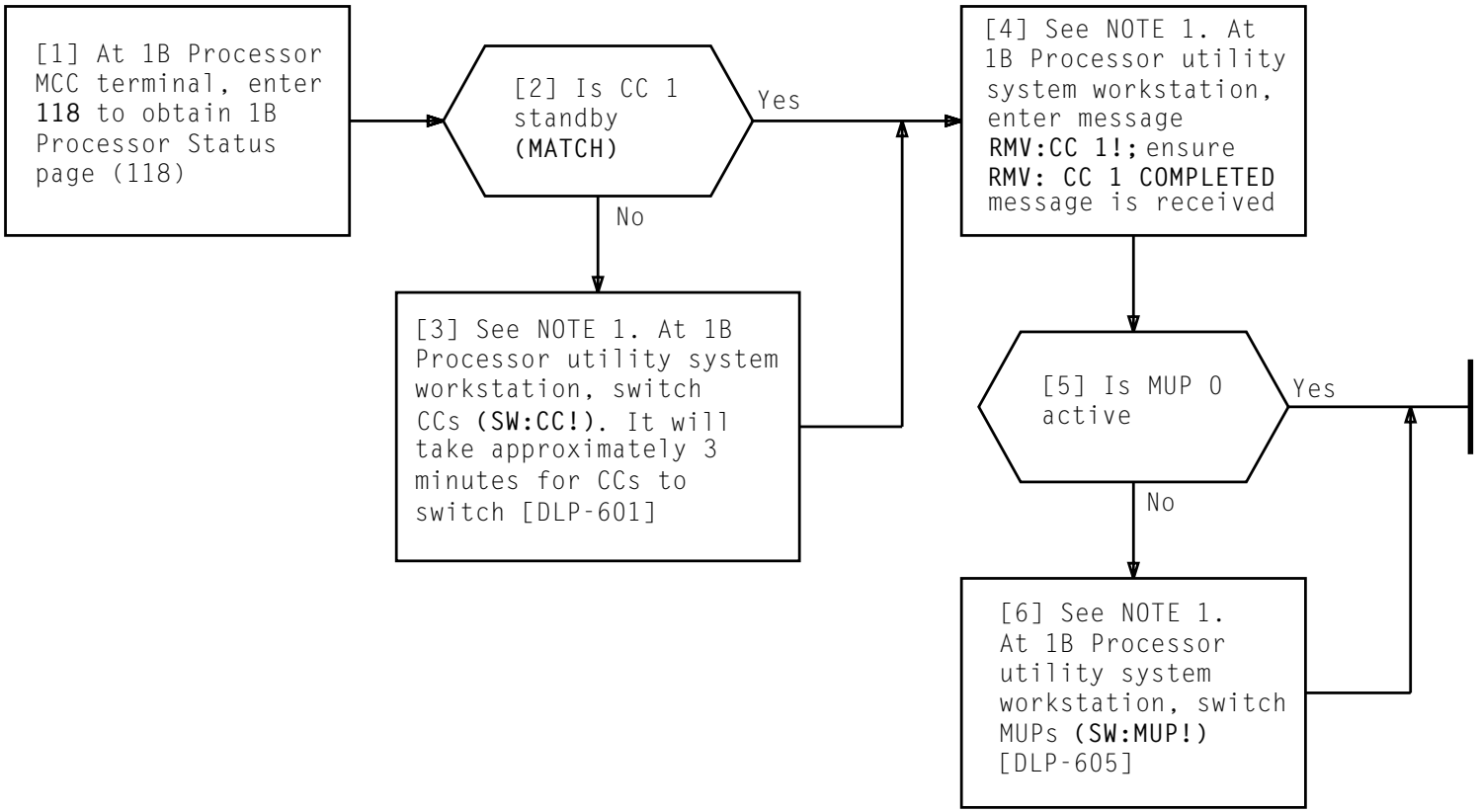
[286] At workstation where **msave** command was entered, ensure **(msave): Dump Completed** message was received

[287] At 1A Processor MCC **SYSTEM DISPLAY** panel, depress **NUMERIC DISPLAY SELECTION - CONTENTS OF MEMORY** and/or **BINARY DISPLAY SELECTION – CONTENTS OF MEMORY** key(s) [lamp(s) on]. Report if 1A Processor did or did not go into stand-alone mode to next higher technical support group. This is for information only [NOTE 21]



NOTES

20. 118 page is to be used to monitor system operation and must NOT be covered by any other screen
21. Counting in **NUMERIC DISPLAY** indicates 1A Processor is cycling. If counting, 1A Processor is in stand-alone mode. If not counting, 1A Processor is not in stand-alone mode. If **NUMERIC DISPLAY** does not count or stops counting later, do not attempt to restart



REMOVE STANDBY CC 1 AND ENSURE MUP 0 IS ACTIVE

NOTE 1
This step must be performed on-site

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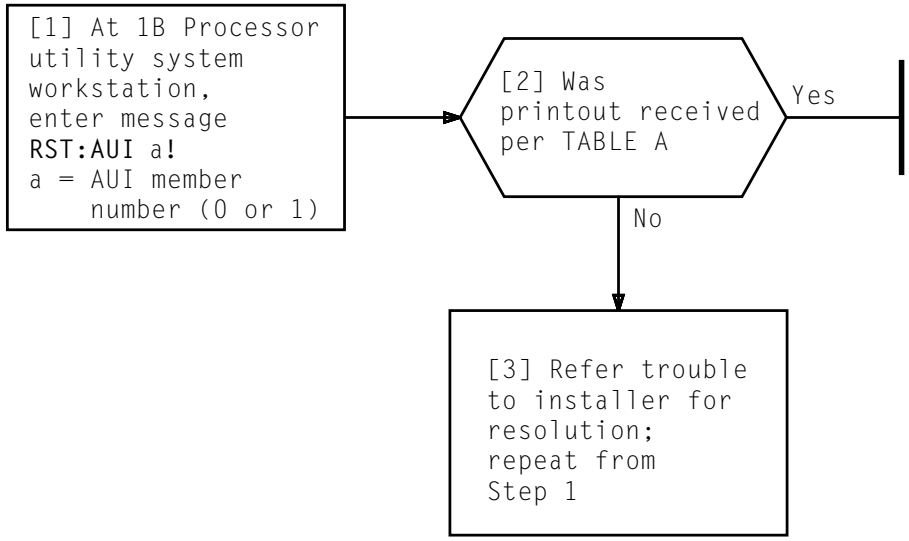


TABLE A

MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN:AUI a COMPLETED CATP (00000000 00060b00) MSG COMPL TEST:AUI a ATP RST:AUI a COMPLETED

a = AUI member number (0 or 1)
b = 0 (if no AUBs are OOS) or
1 (if AUB 0 is OOS) or
2 (if AUB 1 is OOS)

DIAGNOSE AUI USING RESTORE MESSAGE

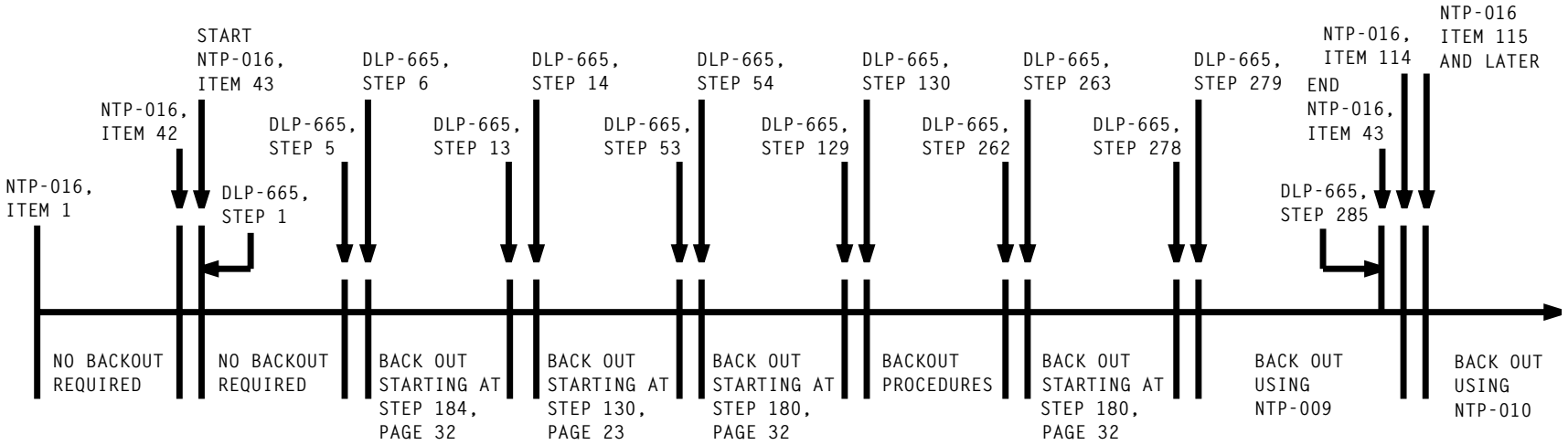
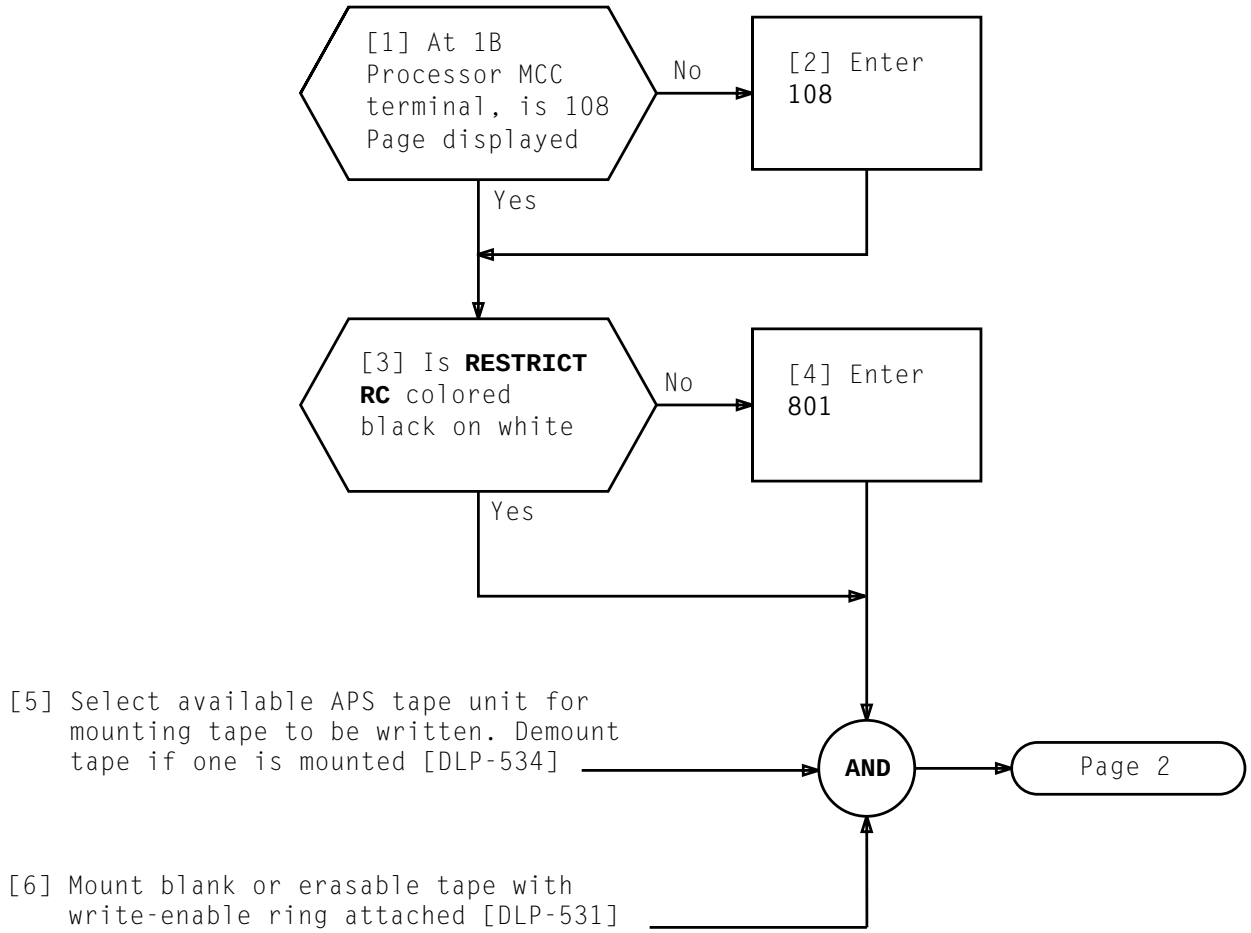


FIG. 1 – Backout Sequence

BACKOUT SEQUENCE (LEC ONLY)



WRITE BACKUP 1B PROCESSOR ODA TAPE (1600 BPI)

[7] At APS MCRT terminal, enter **COPY:UPDATE:ODA NOR,MT** a!
a = Tape unit member number

[8] Is **ODA TAPE WRITTEN** message received [FIG. 1]

No → [9] Contact next higher technical support group and inform personnel of actions performed and results obtained

Yes ↓

[10] Demount tape on tape unit [DLP-534] and label per local procedure

[11] Is another ODA backup tape required to be written

No → [13] Store tapes per local procedure

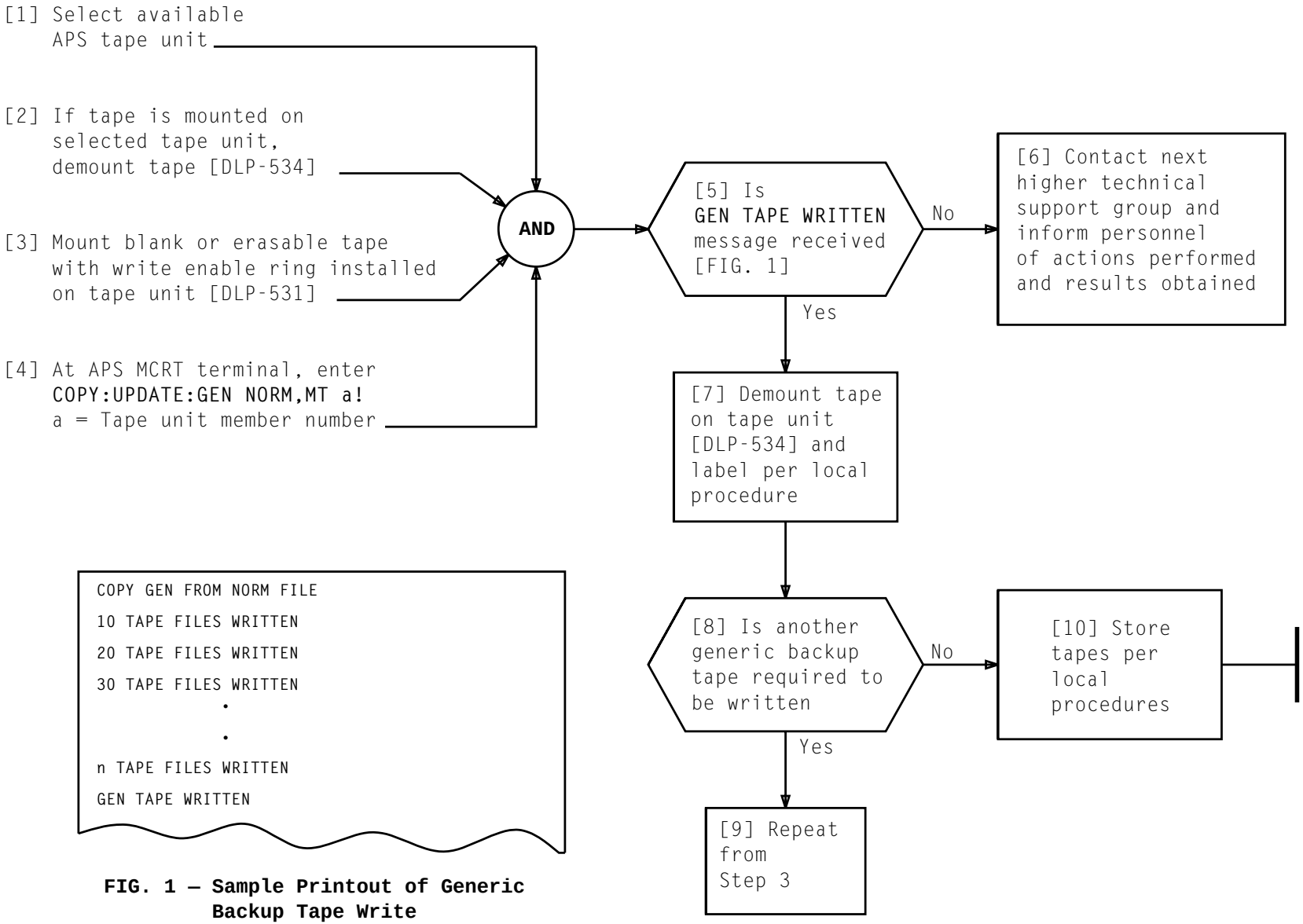
Yes ↓ [12] Repeat from Step 6, Page 1

[13] → [14] At 1B Processor MCC terminal, enter 801 **(RESTRICT RC** colored white on black)

```
COPY ODA FROM NORM FILE
10 TAPE FILES WRITTEN
20 TAPE FILES WRITTEN
      •
      •
 n TAPE FILES WRITTEN
 ODA TAPE WRITTEN
```

FIG. 1 — Sample Printout of ODA Backup Tape Write

WRITE BACKUP 1B PROCESSOR ODA TAPE (1600 BPI)




```
COPY GEN FROM NORM FILE
10 TAPE FILES WRITTEN
20 TAPE FILES WRITTEN
30 TAPE FILES WRITTEN
          .
          .
n TAPE FILES WRITTEN
GEN TAPE WRITTEN
```

FIG. 1 — Sample Printout of Generic Backup Tape Write

WRITE BACKUP 1B PROCESSOR GENERIC TAPE (1600 BPI)

ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE
IXL-001		DLP-526		DLP-565		DLP-607		DLP-643			
NTP-002		DLP-527		DLP-566		DLP-608		DLP-644			
NTP-003		DLP-528		DLP-567		DLP-609		DLP-645			
NTP-004		DLP-529		DLP-568		DLP-610		DLP-646			
NTP-005		DLP-530		DLP-570		DLP-611		DLP-653			
NTP-006		DLP-531		DLP-571		DLP-612		DLP-654			
NTP-007		DLP-532		DLP-572		DLP-613		DLP-655			
NTP-008		DLP-533		DLP-574		DLP-614		DLP-656			
NTP-009		DLP-534		DLP-575		DLP-615		DLP-657			
NTP-010		DLP-535		DLP-577		DLP-616		DLP-658			
NTP-011		DLP-536		DLP-580		DLP-617		DLP-659			
NTP-012		DLP-537		DLP-582		DLP-618		DLP-660			
NTP-013		DLP-538		DLP-583		DLP-619		DLP-661			
NTP-014		DLP-539		DLP-584		DLP-620		DLP-662			
NTP-016		DLP-540		DLP-585		DLP-621		DLP-663			
NTP-017		DLP-541		DLP-586		DLP-622		DLP-664			
DLP-500		DLP-543		DLP-588		DLP-623		DLP-665			
DLP-501		DLP-544		DLP-589		DLP-624		DLP-666			
DLP-502		DLP-545		DLP-590		DLP-625		DLP-668			
DLP-503		DLP-546		DLP-591		DLP-626		DLP-669			
DLP-504		DLP-547		DLP-592		DLP-627		DLP-670			
DLP-505		DLP-548		DLP-593		DLP-628		DLP-671			
DLP-506		DLP-549		DLP-594		DLP-629		CKL-891			
DLP-507		DLP-550		DLP-595		DLP-630		TNG-893			
DLP-508		DLP-552		DLP-596		DLP-631					
DLP-509		DLP-553		DLP-597		DLP-632					
DLP-510		DLP-554		DLP-598		DLP-633					
DLP-511		DLP-555		DLP-599		DLP-635					
DLP-512		DLP-556		DLP-600		DLP-636					
DLP-513		DLP-557		DLP-601		DLP-637					
DLP-514		DLP-558		DLP-602		DLP-638					
DLP-515		DLP-559		DLP-603		DLP-639					
DLP-516		DLP-562		DLP-604		DLP-640					
DLP-517		DLP-563		DLP-605		DLP-641					
DLP-518		DLP-564		DLP-606		DLP-642					