

Task Oriented Practice  
(TOP)

4ESS™ SWITCH

4E20 TO 4E21 GENERIC RETROFIT

AND

4E21 ODA UPDATE

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

Acceptance . . . . . NTP-002

**NOTE:** The tasks listed below for 4E20 to 4E21 Generic Retrofit or 4E21 ODA Update, must be performed at the interval with respect to retrofit or update date

**4E20 TO 4E21 GENERIC RETROFIT (AT&T Office Only)**

- 3 DAY TASKS:**  
 Arrange for AMA Data Collection and Check Scans for Generic Overwrites . . . . . NTP-003
- 2 DAY TASK:**  
 Test Retrofit Process . . . . . NTP-004
- EVENING OF RETROFIT:**  
 Prepare for Retrofit . . . . . NTP-005
- RETROFIT:**  
 Perform Generic Retrofit . . . . . NTP-006

**4E21 ODA UPDATE (AT&T Office Only)**

- 3 DAY TASKS:**  
 Arrange for AMA Data Collection and Check SCANS for Generic Overwrites . . . . . NTP-003
- 2 DAY TASK:**  
 Test ODA Update Process . . . . . NTP-007
- EVENING OF UPDATE:**  
 Prepare for Update . . . . . NTP-005
- ODA UPDATE:**  
 Perform ODA Update . . . . . NTP-006

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

**4E20 TO 4E21 GENERIC RETROFIT (LEC Office Only)**

- 3 DAY TASKS:**  
 Arrange for AMA Data Collection and Check Scans for Generic Overwrites . . . . . NTP-003
- 2 DAY TASK:**  
 Test Retrofit Process . . . . . NTP-004
- EVENING OF RETROFIT:**  
 Prepare for Retrofit . . . . . NTP-005
- RETROFIT:**  
 Perform Generic Retrofit . . . . . NTP-008

**4E21 ODA UPDATE (LEC Office Only)**

- 3 DAY TASKS:**  
 Arrange for AMA Data Collection and Check SCANS for Generic Overwrites . . . . . NTP-003
- 2 DAY TASK:**  
 Test ODA Update Process . . . . . NTP-007
- EVENING OF UPDATE:**  
 Prepare for Update . . . . . NTP-005
- ODA UPDATE:**  
 Perform ODA Update . . . . . NTP-008

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

**ACCEPTANCE**

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

			DATE	TIME	SIGNATURE
1	Notify National 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 LEC Office Is Being Updated and 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	-			
	<b>Note:</b> AMA data should be saved via tape or teleprocessing to provide AMA processing centers with a known starting point for 4E21 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 4E21 Generic Overwrites and if 4E21 Generic Overwrites Are Required, Save Per Local Practice. These Overwrites Will Be Inserted Into System After Office Is Running Successfully on 4E21 Generic	-			

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

			DATE	TIME	SIGNATURE
1	<b>Enter Date, Time, and Signature or Place Check Mark Beside Each Item or Subitem When Completed, or If Not Required</b>	-			
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-500			
	B. If Data Base Has Been Loaded by Off-Line Processor	DLP-503			
4	At 3B MCRT, if Screen Displays EAI Page, Depress <b>NORM/DISP (PF2)</b> Key	-			
5	Enter <b>101</b> in Command Mode To Obtain Display Page 101	-			
6	Depress <b>CMD/MSG (PF3)</b> 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<21>4x.yy Ra and Proper Office Name Is Listed (OP:APLOAD UPD!)	DLP-504			
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 <ul style="list-style-type: none"> <li>• Generic Tape</li> <li>• ODA</li> <li>• NWM</li> </ul>	-			
10	If Test Retrofit Process Is Expected To Last Through Midnight				
	1. At 3B MCRT, Enter Message <b>INH:DMQ;SRC REX!</b> To Inhibit REX	-			
	2. At 1B MTC Terminal, Enter Message <b>INH:MACLI,CLASS MTCE;REX!</b> To Inhibit REX	-			
11	Mount New Generic and ODA Tapes for Disk Update				
	A. If Two Idle 3B Tape Units Are Available for Update <ul style="list-style-type: none"> <li>1. Verify That Tape Identification Data Is Correct for 4E21 Generic Tape (Step 9)</li> </ul>	-			

**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 4E21 ODA Tape (Step 9)	-			
	3. Mount Generic Tape on MT 0 and ODA Tape on MT 1	DLP-505			
	4. At 3B MCRT, Enter Message VER:UPDATE:TAPE,MT 0! and Record Generic Identification Number (4E<21>4x.yy Ra) for Later Use in LOAD Message	DLP-506			
	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-506			
	B. If Only One 3B Tape Unit Is Available for Update				
	1. Verify That Tape Identification Data Is Correct for 4E21 Generic Tape (Step 9)	-			
	2. At Idle Tape Unit, Mount Generic Tape	DLP-505			
12	3. At 3B MCRT, Enter Message VER:UPDATE:TAPE,MT a! (a = Tape Unit Number) and Record Generic Identification Number (4E<21>4x.yy Ra) for Later Use	DLP-506			
	Load New Generic on Disk (LOAD:UPDATE:GEN "4E<21>4x.yy Ra",MT a!)	DLP-507			
	<i>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</i>				
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-508			
16	Verify That Office Identification Code (Base and Control) and Generic Issue Are Correct for 4E21 ODA Tape (Step 9)	-			
17	At Tape Unit Just Idled, Mount ODA Tape	DLP-505			

**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-506			
19	Load New ODA on Disk (LOAD:UPDATE:CONT "aaaabb",MT c!)  <i>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</i>	DLP-509			
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-508			
22	At 3B MCRT, Enter Message OP:OOS! and Ensure That All Units Are in Service	DLP-510			
23	Repeat From Item 11 Using Another Copy of Tape That Failed	—			
24	Demount Tape on Idle Tape Unit	DLP-508			
25	Mount New Network Management Tape on Tape Unit and Verify That Tape Identification Is Correct for 4E21 Update (VER:UPDATE:TAPE,MT a!) a = Tape Unit Number	DLP-511			
26	Load New Network Management on Disk and Complete Data Base (LOAD:UPDATE:CONT NWM,MT a!)  <b>Notes:</b> 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	DLP-512			
27	If Loading of Network Management Tape Was Successful, Go to Item 31. If It Was Aborted, Perform Items 28 Through 30	—			
28	Demount Network Management Tape From Tape Unit	DLP-508			

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

			DATE	TIME	SIGNATURE
29	At 3B MCRT, Enter Message OP:00S! and Ensure That All Units Are in Service	DLP-510			
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-513			
34	If Critical Overwrites Are Required, Insert Critical Overwrites Into UPDATE File and Save Printout of Overwrites	DLP-514			
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-515			
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 Data Base Was Loaded by Tape, Perform Items 41 Through 43; Otherwise, Go to Item 45	-			
41	Demount Tape(s) From Tape Unit(s)	DLP-508			

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

			DATE	TIME	SIGNATURE
42	If REX Was Inhibited in Item 10				
	1. At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	-			
	2. At 3B MCRT, Enter Message ALW:DMQ;SRC REX! To Allow REX	-			
43	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	-			
44	End of Procedure	-			
45	Notify NSC Provisioning of Expected Date and Time of Generic Retrofit	-			

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

			DATE	TIME	SIGNATURE
1	<b>Enter Date, Time, and Signature or Place Check Mark Beside Each Item or Subitem When Completed, or If Not Required</b>	-			
2	Obtain Most Recent Records of Office Performance Data; Organize for Orderly Post Update Comparison	-			
3	At 1B MTC Terminal, Enter Message OP:OOSUNITS! and Ensure That Required Units Are in Service	DLP-516			
4	At 3B MCRT, Enter Message OP:OOS! and Ensure That Required 3B Computer Units Are in Service	DLP-510			
5	At 1B Processor MCC Terminal, Enter 108 To Obtain 108 Page	-			
6	Enter 801 (RESTRICT RC) (801 - RESTRICT RC Colored Black On White)	-			
	<b>NOTE:</b> For AT&T offices, Items 7 through 13 are to be performed on-site				
	<i>Caution: DO NOT enter COPY:APPFILE NORM message after ODA tape has been written</i>				
7	Write Backup ODA Tape (800-BPI Tape)	DLP-517			
8	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	-			
	<b>NOTE:</b> Writing of long-term storage must be initiated during 7-minute window beginning 4 minutes past any quarter hour				
9	Write Backup Long-Term Storage (LTS) Tape	DLP-518			
10	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	-			
11	Write Backup Traffic and Plant Measurement (TPM) Tape	DLP-519			
12	Write Backup Trunk Out-of-Service List (TOSL) Tape	DLP-520			
13	Save Tapes Just Written Until New Data Base Is Finally Committed	-			
	(Continued on Page 2)				

**PREPARE FOR UPDATE**

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

			DATE	TIME	SIGNATURE
14	Perform Item 14.A or 14.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. At 1B Terminal, Enter Message <b>OP:TSGSTAT;DETL:ALL!</b>	-			
	B. At 1B Terminal, Enter Message <b>OP:TSGSTAT;DETL:TCA a!</b> a = Number for Each Assigned Trunk Control Area	-			
15	At 1B Terminal, Enter Message <b>OP:TANTOTAN!</b> 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	-			
16	Enter Message <b>VER:NAILUP;ALL!</b> 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	-			
17	Run CC Diagnostic Phase 95	DLP-521			
18	Restore Standby CC to Service ( <b>RST:CC a!</b> )	-			
19	Switch CCs ( <b>SW:CC!</b> )	-			
20	Run CC Diagnostic Phase 95	DLP-521			
21	Restore Standby CC to Service ( <b>RST:CC a!</b> )	-			
22	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-522			
	B. For Offices Which Do AMA Teleprocessing				
	1. At 3B 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	-			
	(Continued on Page 3)				

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

			DATE	TIME	SIGNATURE
22 (Contd)	3. Ensure That <b>NORMAL TERMINATION – NO MORE DATA</b> 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 22.B.5 Through 22.B.8; Otherwise, Go to Item 23	–			
	5. At 3B MCRT, Enter Message <b>OP:AMA;CONTROLFILE!</b> and Save Printout for Later Reference in Setting Control File Back to Normal	–			
	6. Enter Message <b>SET:AMA;CONTROL;a:OPTION TAPE [,TAPEID "b"]!</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-522			
	8. At 3B MCRT, Enter Message <b>SET:AMA;CONTROL;a:OPTION TP!</b> (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	–			
23	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	–			
24	Obtain 4E21 Informational BWM Concerning Incident Data Set Overwrites From SCANS. Overwrites Are To Be Applied After System Is Running on 4E21 Generic	–			
25	At 3B MCRT, Depress <b>NORM/DISP (PF2)</b> Key and Enter 1106 in Command Mode To Obtain Display Page 1106	–			
26	Ensure <b>RING POS</b> Is <b>NORM</b> and <b>MAJOR STATE</b> Is <b>ACT</b> for Each Equipped CNI Ring Node	–			
27	Enter 1107 in Command Mode To Obtain Display Page 1107	–			
28	Ensure One Direct Link Node Is Assigned <b>1WAY IN</b> and One Direct Link Node <b>1WAY OUT</b> . Both Direct Link Nodes Must Have <b>HDWR STATE</b> and <b>APPL STATE</b> of <b>ACT</b> . If Four Direct Link Nodes Are Listed, <b>HDWR STATE</b> Must Be <b>ACT</b> and <b>APPL STATE</b> Must Be <b>STBY</b> for Direct Link Nodes Not Assigned <b>1WAY IN</b> or <b>1WAY OUT</b>	–			

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

			DATE	TIME	SIGNATURE
29	Enter 1108 in Command Mode To Obtain Display Page 1108	-			
30	Ensure LINK STATE Is AVL/IS and NODE STATE Is ACT for Each Equipped Signaling Link	-			
31	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	-			
32	Verify No Audits Inhibited. If Audits Are Inhibited, Take Corrective Action as Determined by Appropriate Support Organization	DLP-524			
33	At 1B MTC Terminal, Enter Message OP:SVCSTAT! and Save Printout for Later Use After Running on New Generic and/or ODA	-			
34	At 1B Processor MCC Terminal, Enter 810 on 108 Page and Verify There Is No Service-Degrading Condition. If There Is, Contact Next Higher Technical Support Group	-			

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

		RESPONSIBILITY	
	<b>NOTE:</b> In Responsibility column, NCC is Network Control Center and OSWF is on-site workforce - office technician		
1	Place Check Mark Beside Item or Subitem When Completed, or If Not Required	NCC/OSWF	—
2	Before Starting, Review and Become Familiar With DLP-528	NCC/OSWF	—
3	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	NCC	—
4	Enter Message OP:TSGSTAT;SUM:ALL! To Obtain Trunk Subgroup Status Summary; Save Printout in a File for Trunk Circuit Recovery Verification	NCC	—
5	Enter Message OP:00SUNITS! and Ensure That Required Units Are in Service	NCC	DLP-516
6	At 3B MCRT, Enter Message INH:DMQ;SRC REX! To Inhibit REX	NCC	—
7	Enter Message OP:00S! and Ensure That Required 3B Computer Units Are in Service	NCC	DLP-510
8	Verify Data Base To Ensure That Generic Is <b>4E&lt;21&gt;4x.yy Ra</b> and Proper Office Is Listed (OP:APPLOAD UPD!)	NCC	DLP-525
9	If Critical Overwrites Are Required, Insert Critical Overwrites Into UPDATE File and Save Printout of Overwrites	NCC	DLP-514
	<b>NOTE:</b> If schedules that are entered by SCHED:MEAS input message are to be retained for update, include MEAS option in LOAD message		
10	Map Dynamic Data From NORMAL File to UPDATE File (LOAD:UPDATE:MAP[,MEAS]!)	NCC	DLP-526
11	At 3B MCRT, Verify 1AFILE Hashed Areas for 0 Errors (VER:APPFILE UPD!)	NCC	DLP-513
12	Enter Message COPY:LSNC TOSL! To Update TOSL in UPDATE File; Ensure REPT LSNC: LSNC MAPPING COMPLETE Message Is Received	NCC	—
13	Do NOT Proceed Until Instructed by NOC. Safe Point to Temporarily Stop This Procedure	NCC	—
14	Prepare 1B Processor MCC Terminal for Manual Recovery	NCC	DLP-527
15	Manually Update 1B Processor	NCC	DLP-528
16	If Attempt To Configure to New System Was Successful, Go to Item 21. If Unsuccessful, Perform Items 17 Through 20 Because System Is Returned to 4E20 Data Base	NCC	—
	(Continued on Page 2)		

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

17	<b>ENTERING THIS STEP BECAUSE BACKOUT TO 4E20 OCCURRED.</b> At 1B MTC Terminal, Enter Message UPD:COMMIT;NORMFILE!	NCC	—
18	At 1B Processor MCC Terminal, if EAI Page Is Not Displayed, Depress <b>EA DISP</b> Key	NCC	—
19	Analyze, With Help From Next Higher Technical Support Group, Printout To Determine Why Update Failed	NCC	—
20	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	NCC	—
	B. If Update Is To Be Continued, Proceed as Directed by Next Higher Technical Support Group	NCC	—
21	<b>SUCCESSFUL CONTINUATION OF 1B PROCESSOR RETROFIT.</b> Perform Items 22 Through 26 To Restore 1B Processor Complex Units	NCC	—
22	At 1B MTC Terminal, Enter Message OP:MACLI,CLASS MTCE!	NCC	—
23	If 1B Processor Complex Unit(s) Is Listed in Printout, Go to Item 26; Otherwise, Perform Items 24 Through 26	NCC	—
24	At 1B MTC Terminal, Enter Message OP:OOSUNITS!	NCC	—
	<b>NOTE:</b> IFB must be restored before restoring MUP, AUI, or SSD		
25	If 1B Processor Complex Unit(s) Is Listed in Printout, Enter Restore Message To Restore Each Unit Listed	NCC	—
	<b>NOTE:</b> 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		
26	Periodically Repeat From Item 22 While Continuing To Perform Succeeding Steps in This NTP Until 1B Processor Complex Units Are Restored	NCC	—
27	Verify Direct Link Nodes Were Pumped From Proper 1AFILE	NCC	DLP-530
28	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 <b>OSOR SCHEDULES</b> Are <b>NOT CHANGED</b> and <b>COUNT DATA BASE</b> Is <b>UPDATED</b>	NCC	—
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**DO THE ITEMS BELOW IN THE ORDER LISTED . . . . . FOR DETAILS, GO TO**

29	When System Starts To Process Calls (I/O Communications Reestablished), If System Clock Time Data Is Incorrect, Set System Clock	NCC	DLP-531
30	If New Data Base Was Loaded by Tape, Set Up MC 3, MC 4, and/or MC 8 Schedule(s). At 1B Terminal, Enter Message <b>SCHED:TDASMC a;ADD:MSC bb!</b> for Each Schedule To Be Set Up (Contact Next Higher Technical Support Group for a and bb Variables)	NCC	—
31	At 1B MTC Terminal, Enter Message <b>INH:MACLI,CLASS MTCE;REX!</b> To Inhibit REX	NCC	—
32	Enter Message <b>OP:SVCSTAT!</b> 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-005, Item 33. Ensure All Required Service Circuits Are Active. If Problems Are Found, Request Assistance From Next Higher Technical Support Group for Resolution	NCC	—
33	If Any Active TAN-to-TAN Connections Existed Prior to Update, at 1B MTC Terminal, Enter Message <b>OP:TANTOTAN!</b> and Verify From Printout That TAN-to-TAN Connections Are Still Established (Compare Printout With Printout Saved in NTP-005, Item 15)	NCC	—
34	If Any Active Large-Scale Nailup Connections Existed Prior to Update, at 1B MTC Terminal, Enter Message <b>VER:NAILUP;ALL!</b> and Verify From Printout That Large-Scale Nailup Connections Are Still Established (Compare Printout With Printout Saved in NTP-005, Item 16)	NCC	—
35	Run Audits 43, 44, 45, and 66 (Items 36 Through 39)	NCC	—
36	At 1B MTC Terminal, Enter Message <b>AUD:NUM (43,44,45,66)!</b>	NCC	—
37	While Audits Are Running, Continue To Perform Succeeding Items	NCC	—
38	If Any Errors Are Detected and NOT Corrected, Inform Support Organization of Audit Results and Follow Their Instructions for Further Action	NCC	—
39	During Execution of Audits 43 and 66, Scan Output Messages Periodically for Abort Message	NCC	—
40	Place TLP Tape in Service	OSWF	DLP-532
41	At 1B MTC Terminal, Restore Out-of-Service Units	NCC	DLP-533
42	At 3B MCRT, Depress <b>NORM/DISP (PF2)</b> Key and Enter 1106 in Command Mode To Obtain Display Page 1106	NCC	—
	(Continued on Page 4)		

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

43	Ensure <b>RING POS</b> Is <b>NORM</b> and <b>MAJOR STATE</b> Is <b>ACT</b> for Each Equipped CNI Ring Link Node	NCC	—
44	Enter 1107 in Command Mode To Obtain Display Page 1107	NCC	—
45	Ensure One Direct Link Node Is Assigned <b>1WAY IN</b> and One Direct Link Node <b>1WAY OUT</b> . Both Direct Link Nodes Must Have <b>HDWR STATE</b> and <b>APPL STATE</b> of <b>ACT</b> . If Four Direct Link Nodes Are Listed, <b>HDWR STATE</b> Must be <b>ACT</b> and <b>APPL STATE</b> Must Be <b>STBY</b> for Direct Link Nodes Not Assigned <b>1WAY IN</b> or <b>1WAY OUT</b> .	NCC	—
46	Enter 1108 in Command Mode To Obtain Display Page 1108	NCC	—
47	Ensure <b>LINK STATE</b> Is <b>AVL/IS</b> or <b>AVL/STBY</b> and <b>NODE STATE</b> Is <b>ACT</b> for Each Equipped Signaling Link	NCC	—
48	At 1B MTC Terminal, Enter Message <b>OP:MSGRCDF,FS!</b> To Clear Recorded Message Area on Disk	NCC	—
49	At I/O Terminal Other Than 1B MTC Terminal, Set Up Vacant Code Traps, as Required	NCC	DLP-534
50	At 1B MTC Terminal, Enter Message <b>OP:TSGSTAT;SUM:ALL!</b> To Obtain Trunk Subgroup Status Summary. Compare Printout With Printout Saved in Item 6	NCC	—
51	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	NCC	—
52	Request Appropriate Support Organization (NSC Provisioning or TOC) To Initiate Sample Trunk Testing at Each Test Position	NCC	—
53	Notify Network Management Center To Begin Checkout of Network Management System	NCC	DLP-535
54	Review Maintenance Output Messages; Account for Interrupts, Interjects, and Audit Reports and Compare With Preupdate Office Performance Results	NCC	—
55	Compare Count of Ineffective Machine Attempts With Preupdate Level	NCC	—
56	At 1B MTC Terminal, Enter Message <b>INIT:PUXINIT!</b>	NCC	—
57	Request RNOc To Verify That Manually Placed Calls and System Placed Test Calls Complete Successfully	NCC/OSWF	—
58	Request RNOc To Enter Security Call Traps That Existed Prior to Update (if any)	NCC	—
	(Continued on Page 5)		

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

	<b>NOTE:</b> Writing of long-term storage must be initiated during 7-minute window beginning 4 minutes past any quarter hour		
59	Write Backup Long-Term Storage (LTS) Tape	OSWF	DLP-518
60	Load Library Package(s) That Is Required for Normal Local Use (if Not Loaded) and Library Package <b>LG21RCUA</b> , if Necessary for Recent Change Update Using New 4E21 Office Library Tape	OSWF	DLP-536
61	At 1B MTC Terminal, Enter Message <b>ALW:MACLI,CLASS MTCE!</b> To Allow REX	NCC	—
62	At 3B MCRT, Enter Message <b>ALW:DMQ;SRC REX!</b> To Allow REX	NCC	—
63	At 1B Processor MCC Terminal, Enter <b>108</b> To Obtain System Status Page (108)	NCC	—
64	If <b>801 - RESTRICT RC</b> Is Colored Black on White, Enter <b>801</b>	NCC	—
65	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		
	1. Notify CMAC To Perform Update	NCC	—
	2. Wait Until Update Is Complete Before Continuing	NCC	—
	3. Notify IRAS To Update Office Data Base. Request IRAS To Notify TCC When Data Base Is Complete	NCC	—
	4. Do Not Write Any Backup Tapes Until IRAS Completes Update	OSWF	—
	5. Notify Network Management Center To Complete Network Management System Checkout	NCC	DLP-537
66	At 1B MTC Terminal, Enter Message <b>AUD:NUM (43,44,45,66)!</b> ; Do Not Continue Until Audits Have Completed With 0 Errors	OSWF	—
67	Write Backup 1B Processor ODA Tapes (800 BPI)	OSWF	DLP-517
68	Write Updated Traffic and Plant Measurement (TPM) Schedule Tape	OSWF	DLP-519
69	If Any 4E21 Overwrites Are To Be Installed, Install per Local Practice	NCC	—

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

70	Write 1B Processor Generic Tapes (800 BPI)	OSWF	DLP-500
71	Write Backup Network Management (NWM) Tape (800 BPI)	OSWF	DLP-538
72	If Data Base Was Loaded by Off-Line Processor, Write 4E Library Tape(s) Using TWRL Library Program	OSWF	DLP-539
73	Write Backup 1B Processor ODA Tapes (1600 BPI), if Required	OSWF	DLP-545
74	Write Backup 1B Processor Generic Tapes (1600 BPI), if Required	OSWF	DLP-546
75	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	NCC	-
<i>WARNING: Item 76 will delete any reference to 4E20 generic in NORMAL and UPDATE files. In order to go back to 4E20 generic, a System Reinitialization (SR) will be required</i>			
76	Commit to 4E21 Generic	NCC	DLP-544

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

			DATE	TIME	SIGNATURE
1	<b>Enter Date, Time, and Signature or Place Check Mark Beside Each Item or Subitem When Completed, or If Not Required</b>	-			
2	At 3B MCRT, if Screen Displays EAI Page, Depress <b>NORM/DISP (PF2)</b> Key	-			
3	Enter <b>101</b> in Command Mode To Obtain Display Page 101	-			
4	Depress <b>CMD/MSG (PF3)</b> Key To Move Cursor to Bottom of Screen	-			
5	If Data Base Is To Be Loaded by Off-Line Processor, At 3B MCRT, Verify Data Base To Ensure Proper Office Name Is Listed ( <b>OP:APLOAD UPD!</b> )	DLP-504			
6	If Data Base Is To Be Loaded by Tape, Perform Items 7 Through 23; Otherwise, Go to Item 24	-			
7	If Test ODA Update Process Is Expected To Last Through Midnight				
	1. At 3B MCRT, Enter Message <b>INH:DMQ;SRC REX!</b> To Inhibit REX	-			
	2. At 1B MTC Terminal, Enter Message <b>INH:MACLI,CLASS MTCE;REX!</b> To Inhibit REX	-			
8	If 1600-BPI Network Management Tape Is Not Available, Write Network Management (NWM) Tape	DLP-540			
9	Mount New 1600-BPI ODA Tape on Idle Tape Unit	DLP-505			
10	At 3B MCRT, Enter Message <b>VER:UPDATE:TAPE,MT a!</b> (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-506			
11	Load New ODA on Disk ( <b>LOAD:UPDATE:ODA "aaaabb",MT c!</b> )	DLP-541			
	<i>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</i>				
12	If Loading of ODA Tape Was Aborted, Perform Items 13 Through 15; Otherwise, Go to Item 16	-			
13	Demount ODA Tape From Tape Unit	DLP-508			
14	At 3B MCRT, Enter Message <b>OP:OOS!</b> and Ensure That All Units Are in Service	-			

**TEST ODA UPDATE PROCESS**

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

			DATE	TIME	SIGNATURE
15	Repeat From Item 9 Using Another ODA Tape	-			
16	If Only One Tape Unit Is Available, Demount ODA Tape After Tape Rewinds	DLP-508			
17	Obtain New 1600-BPI Network Management Tape	-			
18	Mount New Network Management Tape on Tape Unit and Verify Tape Identification Is Correct for Update	DLP-511			
19	Load New Network Management on Disk and Complete Data Base	DLP-512			
	<p><b>NOTE:</b> 1. After receiving <b>MAPPING DYNAMIC DATA FROM NORMAL FILE</b> output message, <b>WAITING FOR 4 TO 13 MINUTES PAST QUARTER HOUR</b> 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</p> <p>2. After receiving <b>DATABASE COMPLETE - READY FOR ODA UPDATE</b> output message, loading process is complete</p>				
20	If Loading of Network Management Tape Was Successful, Go to Item 24. If It Was Aborted, Perform Items 21 Through 23	-			
21	Demount Network Management Tape From Tape Unit	DLP-508			
22	At 3B MCRT, Enter Message <b>OP:00S!</b> and Ensure That All Units Are in Service	-			
23	Repeat From Item 9	-			
24	At 3B MCRT, Enter Message <b>COPY:LSNC ALL!</b> To Rebuild Large-Scale Nailup Connections and Update TOSL in UPDATE File	-			
25	After <b>VER</b> Message Has Been Entered (Item 26) and If No Critical Overwrites Are Required (Item 27), Procedure Can Be Continued At Item 28 Without Waiting for Verify To Complete. Printout Must Be Observed Periodically for Errors	-			
26	At 3B MCRT, Verify 1AFILE Hashed Areas for 0 Errors ( <b>VER:APPFIL UPD!</b> )	DLP-513			
27	If Critical Overwrites Are Required, Insert Critical Overwrites Into UPDATE File and Save Printout of Overwrites	DLP-514			
	(Continued on Page 3)				

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

			DATE	TIME	SIGNATURE
28	Compare Critical Data in New ODA With Data in Active System by Performing Items 29 and 30	-			
29	Run Cross-Translations Compare Program	DLP-515			
30	Analyze, With Help From Support Organization, Results of Compare for Unexpected Mismatches	-			
31	If Compare DID NOT Find Unexpected Mismatches, Go to Item 33	-			
32	If Compare Found Unexpected Mismatches Between New ODA and Data 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 27	-			
	B. If It Is Determined that Corrections Cannot Be Made Within the Hour, Await Further Instructions Before Proceeding	-			
33	If Data Base Was Loaded by Tape, Perform Items 34 Through 37; Otherwise, Go to Item 38	-			
34	Demount Tape(s) From Tape Unit(s)	DLP-508			
35	If REX Was Inhibited in Item 7				
	1. At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	-			
	2. At 3B MCRT, Enter Message ALW;DMQ;SRC REX! To Allow Rex	-			
36	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	-			
37	End of Procedure	-			
38	Notify NSC Provisioning of Expected Date and Time of ODA Update	-			

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

			DATE	TIME	SIGNATURE
1	<b>Enter Date, Time, and Signature or Place Check Mark Beside Item or Subitem When Completed, or If Not Required</b>	—			
2	Before Starting, Review and Become Familiar With DLP-528	—			
3	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	—			
4	Enter Message OP:TSGSTAT;SUM:ALL! To Obtain Trunk Subgroup Status Summary; Save Printout in a File for Trunk Circuit Recovery Verification	—			
5	Enter Message OP:00SUNITS! and Ensure That Required Units Are in Service	DLP-516			
6	At 3B MCRT, Enter Message INH:DMQ;SRC REX! To Inhibit REX	—			
7	Enter Message OP:00S! and Ensure That Required 3B Computer Units Are in Service	DLP-510			
8	Verify Data Base To Ensure That Generic Is <b>4E&lt;21&gt;4x.yy Ra</b> and Proper Office Is Listed (OP:APpload UPD!)	DLP-525			
9	If Critical Overwrites Are Required, Insert Critical Overwrites Into UPDATE File and Save Printout of Overwrites	DLP-514			
	<b>NOTE:</b> If schedules that are entered by SCHED:MEAS input message are to be retained for update, include MEAS option in LOAD message				
10	Map Dynamic Data From NORMAL File to UPDATE File (LOAD:UPDATE:MAP[,MEAS]!)	DLP-526			
11	At 3B MCRT, Verify 1AFILE Hashed Areas for 0 Errors (VER:APPFILE UPD!)	DLP-513			
12	Enter Message COPY:LSNC TOSL! To Update TOSL in UPDATE File; Ensure REPT LSNC: LSNC MAPPING COMPLETE Message Is Received	—			
13	Prepare 1B Processor MCC Terminal for Manual Recovery	DLP-527			
14	Manually Update 1B Processor	DLP-528			
15	If Attempt To Configure to New System Was Successful, Go to Item 20. If Unsuccessful, Perform Items 16 Through 19 Because System Is Returned to 4E20 Data Base	—			
16	<b>ENTERING THIS STEP BECAUSE BACKOUT TO 4E20 OCCURRED.</b> At 1B MTC Terminal, Enter Message UPD:COMMIT;NORMFILE!	—			
17	At 1B Processor MCC Terminal, if EAI Page Is Not Displayed, Depress <b>EA DISP</b> Key	—			

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**PERFORM UPDATE (FOR LEC OFFICES ONLY)**

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

			DATE	TIME	SIGNATURE
18	Analyze, With Help From Next Higher Technical Support Group, Printout To Determine Why Update Failed				
19	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	-			
20	<b>SUCCESSFUL CONTINUATION OF 1B PROCESSOR RETROFIT.</b> Perform Items 21 Through 25 To Restore 1B Processor Complex Units	-			
21	At 1B MTC Terminal, Enter Message <b>OP:MACLI,CLASS MTCE!</b>	-			
22	If 1B Processor Complex Unit(s) Is Listed in Printout, Go to Item 25; Otherwise, Perform Items 23 Through 25	-			
23	At 1B MTC Terminal, Enter Message <b>OP:OOSUNITS!</b>	-			
	<b>NOTE:</b> IFB must be restored before restoring MUP, AUI, or SSD				
24	If 1B Processor Complex Unit(s) Is Listed in Printout, Enter Restore Message To Restore Each Unit Listed	-			
	<b>NOTE:</b> 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				
25	Periodically Repeat From Item 21 While Continuing To Perform Succeeding Steps in This NTP Until 1B Processor Complex Units Are Restored	-			
26	Verify Direct Link Nodes Were Pumped From Proper 1AFILE	DLP-530			
27	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 <b>OSOR SCHEDULES</b> Are <b>NOT CHANGED</b> and <b>COUNT DATA BASE</b> Is <b>UPDATED</b>	-			
28	When System Starts To Process Calls (I/O Communications Reestablished), If System Clock Time Data Is Incorrect, Set System Clock	DLP-531			

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

			DATE	TIME	SIGNATURE
29	Set Up MC 3, MC 4, and/or MC 8 Schedule(s). At 1B Terminal, 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)	-			
30	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	-			
31	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-005, Item 34. Ensure All Required Service Circuits Are Active. If Problems Are Found, Request Assistance From Next Higher Technical Support Group for Resolution	-			
32	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-005, Item 15)	-			
33	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-005, Item 16)	-			
34	Run Audits 43, 44, 45, and 66 (Items 35 Through 38)	-			
35	At 1B MTC Terminal, Enter Message AUD:NUM (43,44,45,66)!	-			
36	While Audits Are Running, Continue To Perform Succeeding Items	-			
37	If Any Errors Are Detected and NOT Corrected, Inform Support Organization of Audit Results and Follow Their Instructions for Further Action	-			
38	During Execution of Audits 43 and 66, Scan Output Messages Periodically for Abort Message	-			
39	Place TLP Tape in Service	DLP-532			
40	At 1B MTC Terminal, Restore Out-of-Service Units	DLP-533			
41	If Office Is Arranged for CAMA, Check CAMA Operation	DLP-542			

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

			DATE	TIME	SIGNATURE
42	At 3B MCRT, Depress <b>NORM/DISP (PF2)</b> Key and Enter 1106 in Command Mode To Obtain Display Page 1106	-			
43	Ensure <b>RING POS</b> Is <b>NORM</b> and <b>MAJOR STATE</b> Is <b>ACT</b> for Each Equipped CNI Ring Link Node	-			
44	Enter 1107 in Command Mode To Obtain Display Page 1107	-			
45	Ensure One Direct Link Node Is Assigned <b>1WAY IN</b> and One Direct Link Node <b>1WAY OUT</b> . Both Direct Link Nodes Must Have <b>HDWR STATE</b> and <b>APPL STATE</b> of <b>ACT</b> . If Four Direct Link Nodes Are Listed, <b>HDWR STATE</b> Must be <b>ACT</b> and <b>APPL STATE</b> Must Be <b>STBY</b> for Direct Link Nodes Not Assigned <b>1WAY IN</b> or <b>1WAY OUT</b>	-			
46	Enter 1108 in Command Mode To Obtain Display Page 1108	-			
47	Ensure <b>LINK STATE</b> Is <b>AVL/IS</b> or <b>AVL/STBY</b> and <b>NODE STATE</b> Is <b>ACT</b> for Each Equipped Signaling Link	-			
48	At 1B MTC Terminal, Enter Message <b>OP:MSGRCDF,FS!</b> To Clear Recorded Message Area on Disk ( <b>NG</b> Is Proper Response - No Messages To Clear on Disk)	-			
49	At I/O Terminal Other Than 1B MTC Terminal, Set Up Vacant Code Traps, as Required	DLP-534			
50	At 1B MTC Terminal, Enter Message <b>OP:TSGSTAT;SUM:ALL!</b> To Obtain Trunk Subgroup Status Summary. Compare Printout With Printout Saved in Item 4	-			
51	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	-			
52	Request Appropriate Support Organization (NSC Provisioning or TOC) To Initiate Sample Trunk Testing at Each Test Position	-			
53	Notify Network Management Center To Begin Checkout of Network Management System	DLP-535			
54	Review Maintenance Output Messages; Account for Interrupts, Interjects, and Audit Reports and Compare With Preupdate Office Performance Results	-			
55	Compare Count of Ineffective Machine Attempts With Preupdate Level	-			
	(Continued on Page 5)				

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

			DATE	TIME	SIGNATURE
56	If Office Provides CAMA Service, Monitor CAMA Call Activity; Compare With Expected Level	-			
57	Determine That Manually Placed Calls and System-Placed Test Calls Complete Successfully	-			
58	At 1B MTC Terminal, Enter Message INIT:PUXINIT!	-			
59	If Security Call Traps Existed Prior to Update, Request Network Management To Enter Security Call Traps per Local Practice	-			
	<b>NOTE:</b> Writing of long-term storage must be initiated during 7-minute window beginning 4 minutes past any quarter hour				
60	Write Backup Long-Term Storage (LTS) Tape	DLP-518			
61	Load Library Package(s) That Is Required for Normal Local Use (if Not Loaded) and Library Package <i>LG21RCUA</i> , if Necessary for Recent Change Update Using New 4E21 Office Library Tape	DLP-536			
62	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	-			
63	At 3B MCRT, Enter Message ALW:DMQ;SRC REX! To Allow REX	-			
64	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	-			
65	If 801 - <b>RESTRICT RC</b> Is Colored Black on White, Enter 801	-			
66	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-502			
	2. At 1B MTC Terminal, 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:R0!	-			
	4. Execute Task 3 of RCLI Library Program to Reenter Recent Changes Into System	DLP-543			

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

			DATE	TIME	SIGNATURE
66 (Contd)	5. Enter Message CLR:ADSFUNC UPD!	-			
	6. Demount RC Message Tape	DLP-501			
	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	-			
	D. Request Operation Support System To Enter New Recent Changes, as Required, Into System	-			
	1. Notify CMAC To Perform Update	-			
	2. Wait Until Update Is Complete Before Continuing	-			
	3. Notify Network Management Center To Complete Network Management System Checkout	DLP-537			
67	If Office Is CAMA Equipped, Install Any Special CAMA Data per Local Practice, as Required	-			
68	At 1B MTC Terminal, Enter Message AUD:NUM (43,44,45,66)!; Do Not Continue Until Audits Have Completed With 0 Errors	-			
69	Write Backup 1B Processor ODA Tapes (800 BPI)	DLP-517			
70	Write Updated Traffic and Plant Measurement (TPM) Schedule Tape	DLP-519			
71	If Any 4E21 Overwrites Are To Be Installed, Install per Local Practice	-			
72	Write 1B Processor Generic Tapes (800 BPI)	DLP-500			
73	Write Backup Network Management (NWM) Tape (800 BPI)	DLP-538			
74	If Data Base Was Loaded by Off-line Processor, Write 4E Library Tape(s) Using TWRL Library Program	DLP-539			
75	Write Backup 1B ODA Tapes (1600 BPI), if Required	DLP-545			
76	Write Backup 1B Generic Tapes (1600 BPI), if Required	DLP-546			
77	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	-			

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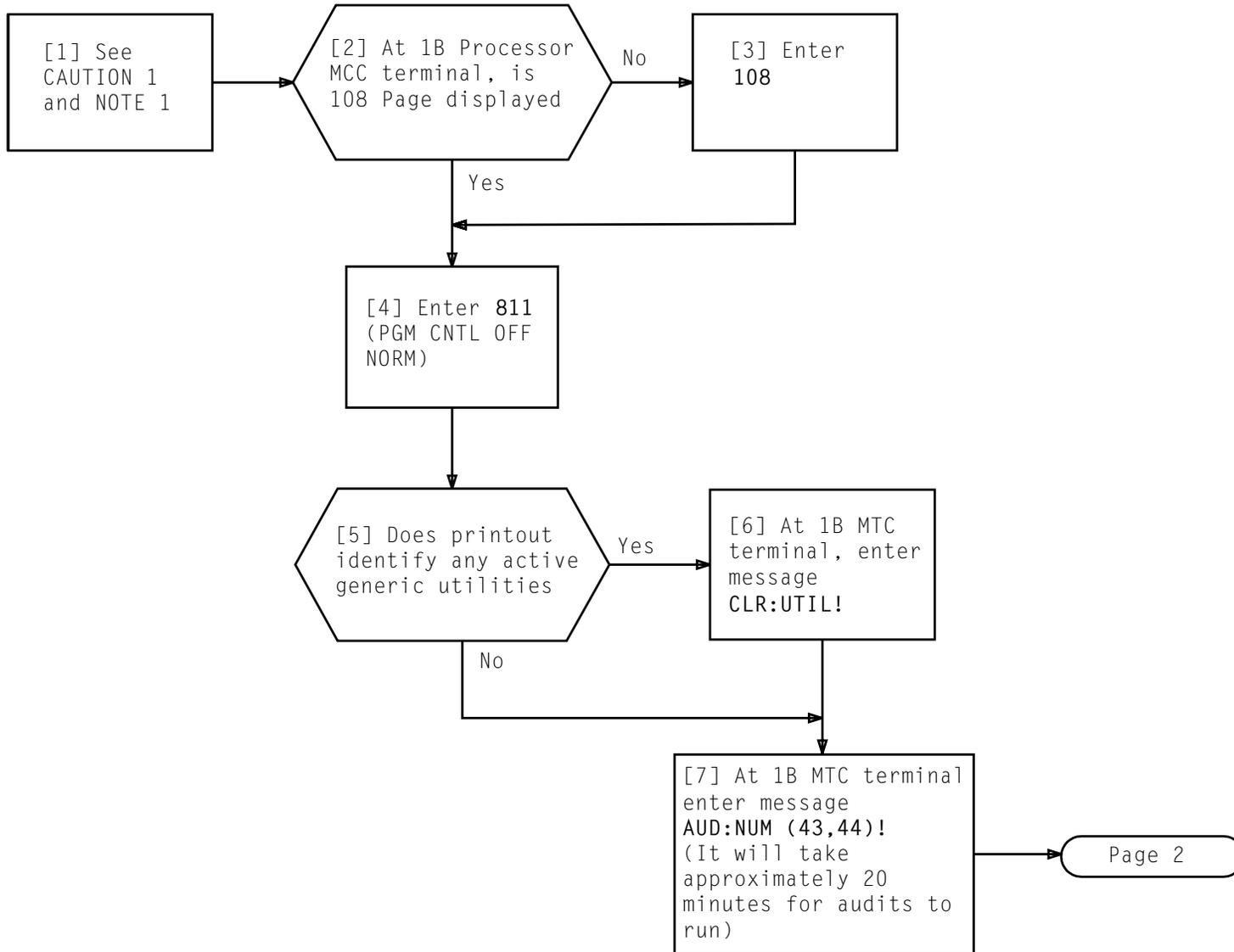
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**PERFORM UPDATE (FOR LEC OFFICES ONLY)**

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

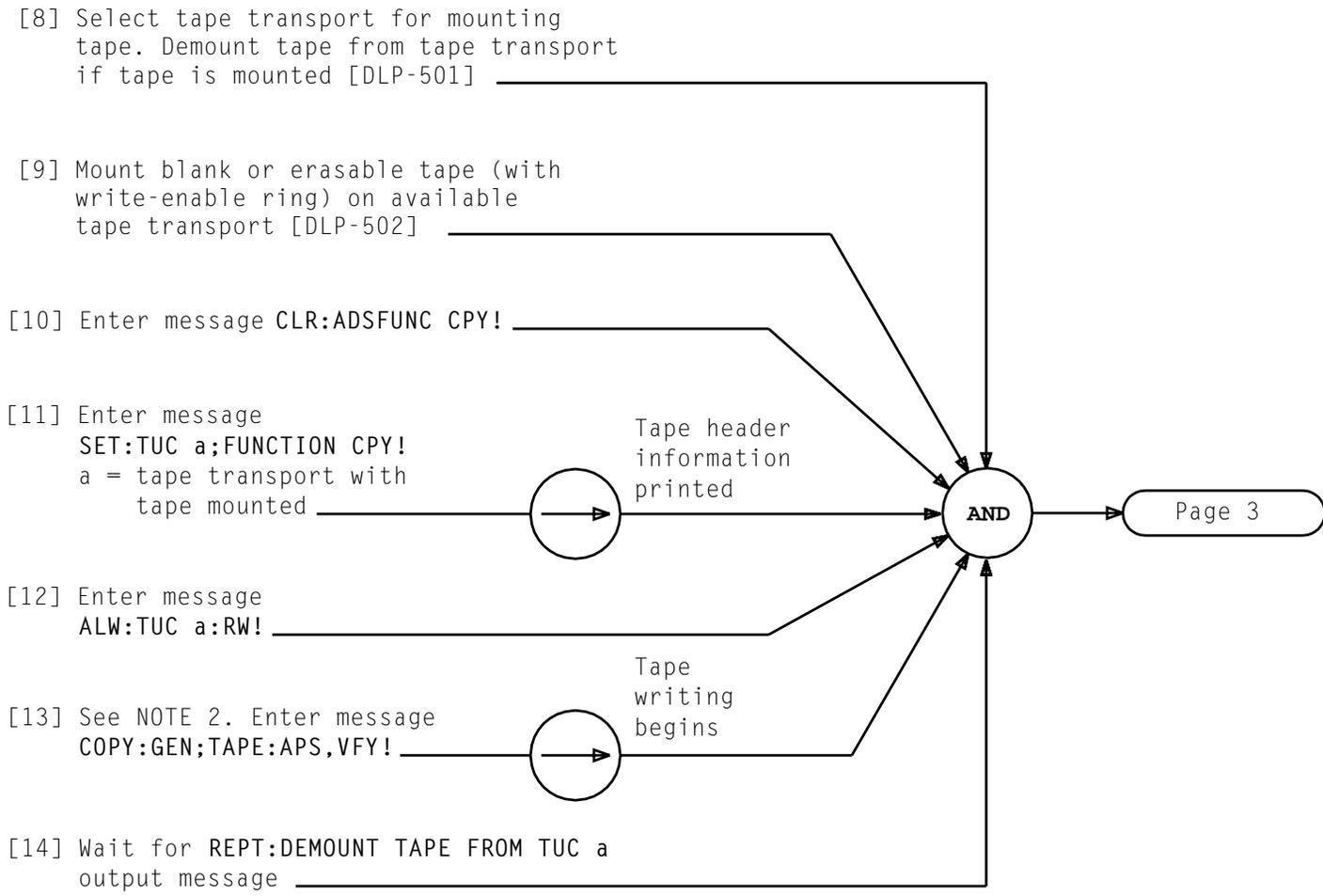
			DATE	TIME	SIGNATURE
	<i>WARNING: Item 78 will delete any reference to 4E20 generic in NORMAL and UPDATE files. In order to go back to 4E20 generic, a System Reinitialization (SR) will be required</i>				
78	Commit to 4E21 Generic	DLP-544			



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

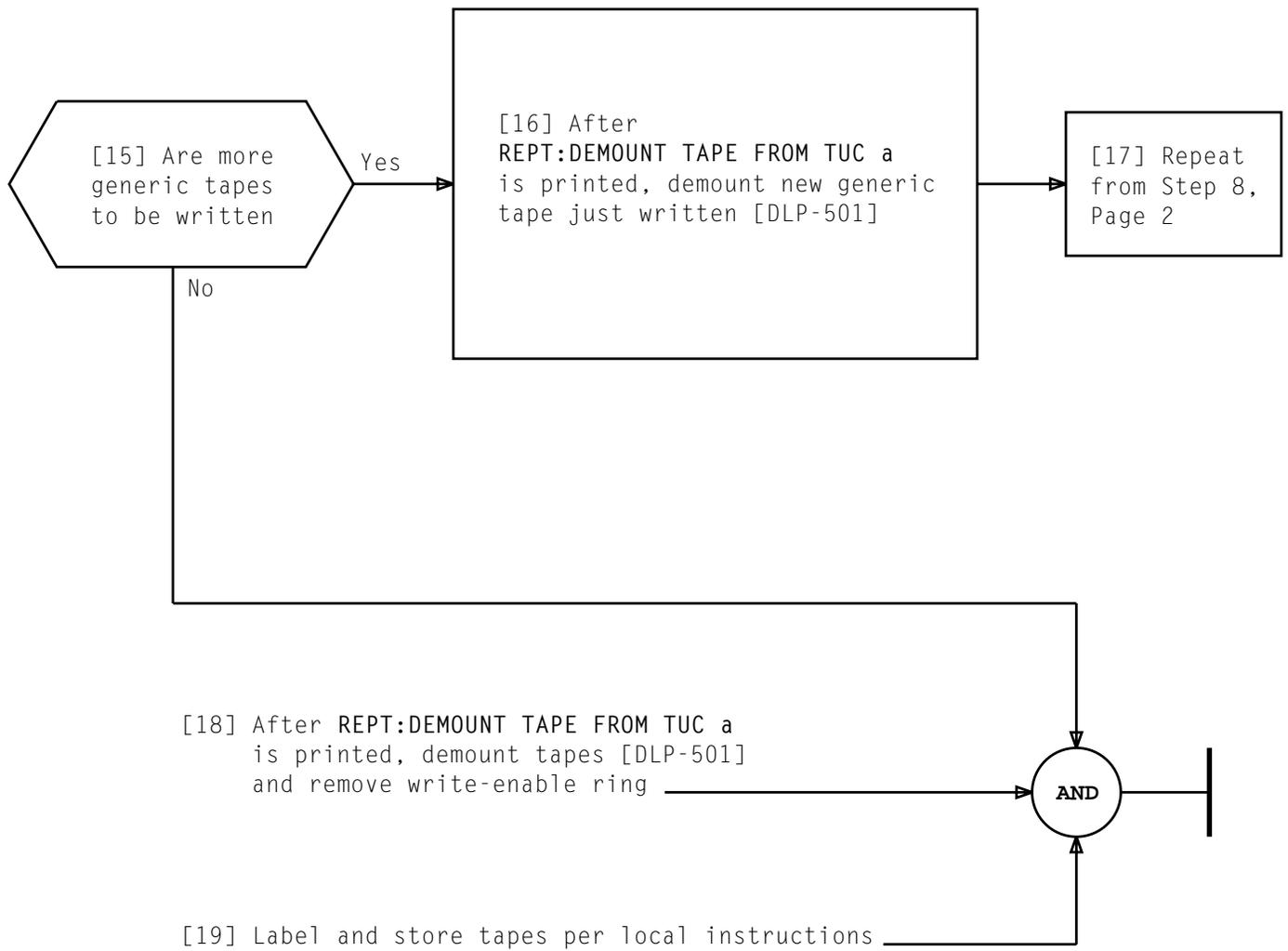
**CAUTION 1**  
*Certain system audits are inhibited during tape writing; therefore, tape writing should be done during light traffic periods*

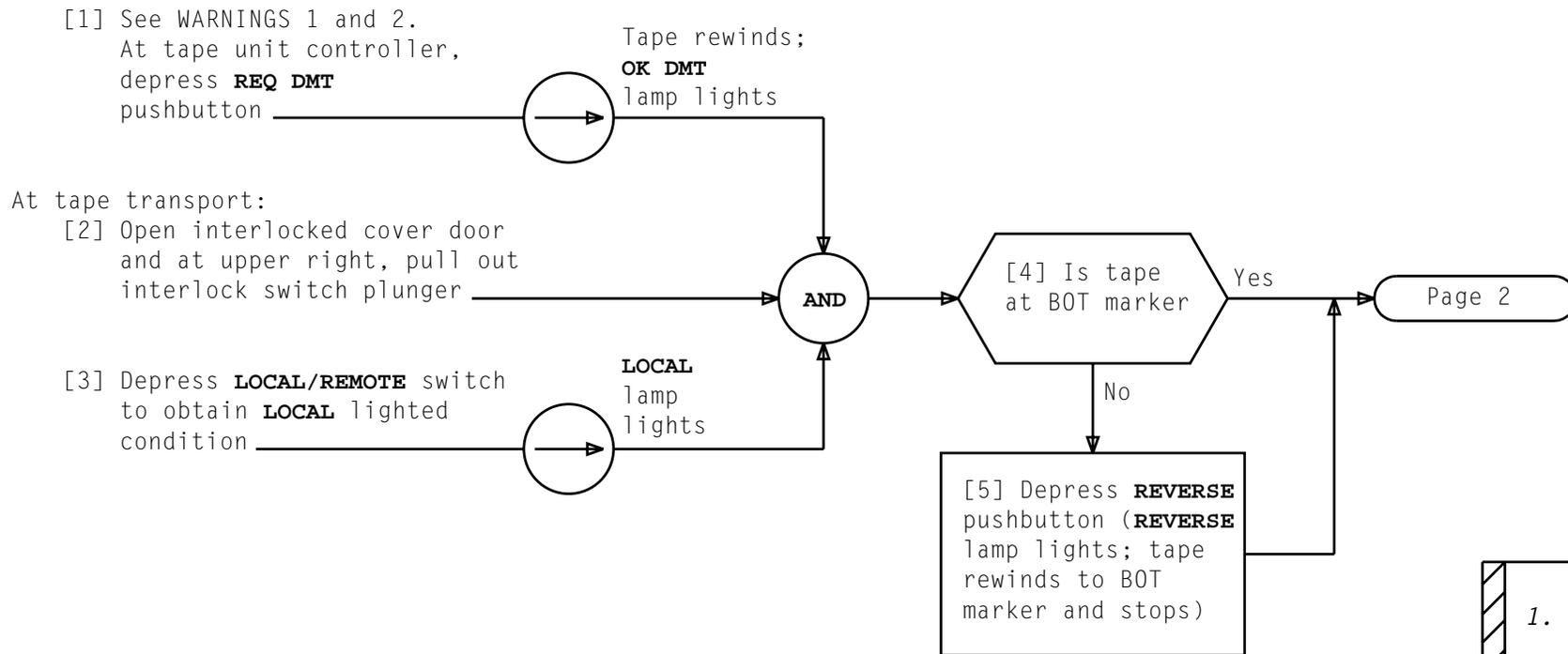
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NOTE 2  
 After generic tape is written, tape will rewind and be verified. After verification has been completed, REPT:DEMOUNT TAPE FROM TUC a message is received

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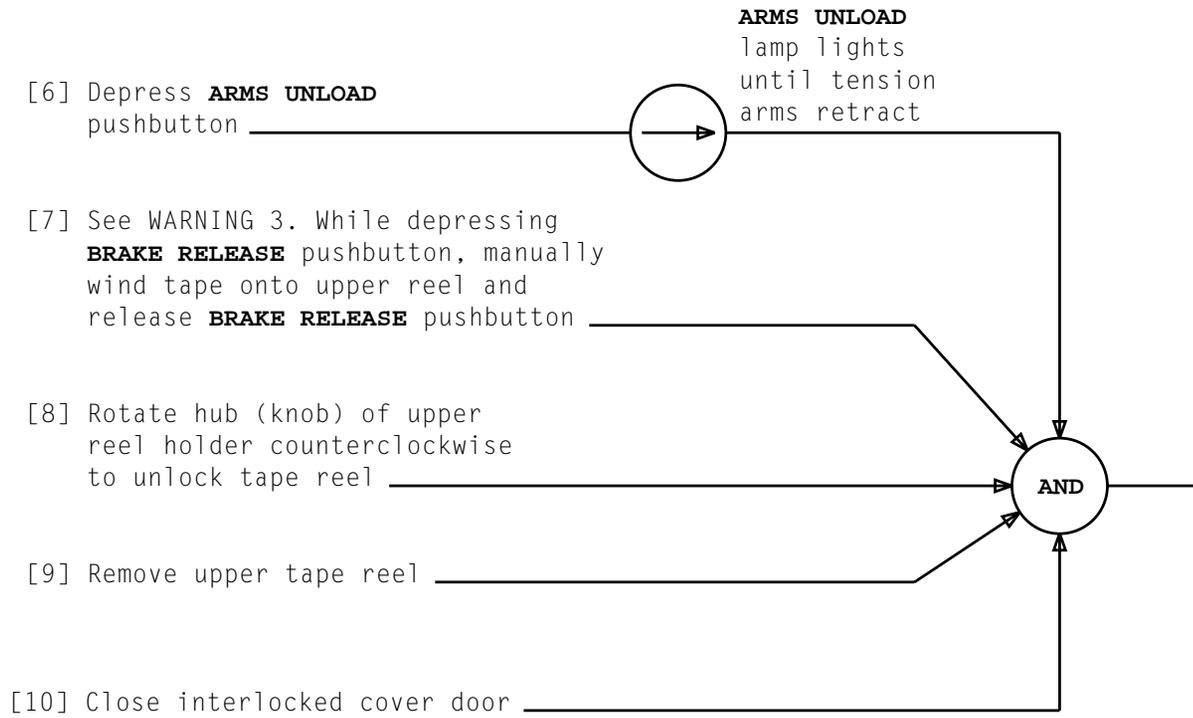




**WARNINGS**

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

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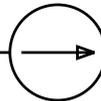


<i>WARNING 3</i> <i>Pulling or dragging last 2 feet of tape across heads may contaminate heads</i>	
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At tape transport:

[1] Open interlocked cover door;  
at upper right of tape  
transport, pull out interlock  
plunger

[2] Operate **LOCAL/REMOTE**  
switch to obtain **LOCAL**  
lighted condition

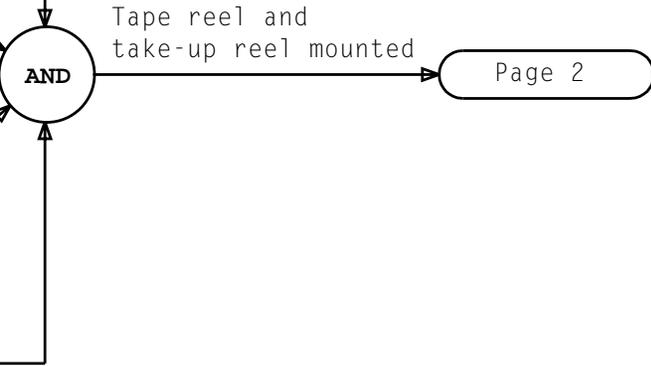


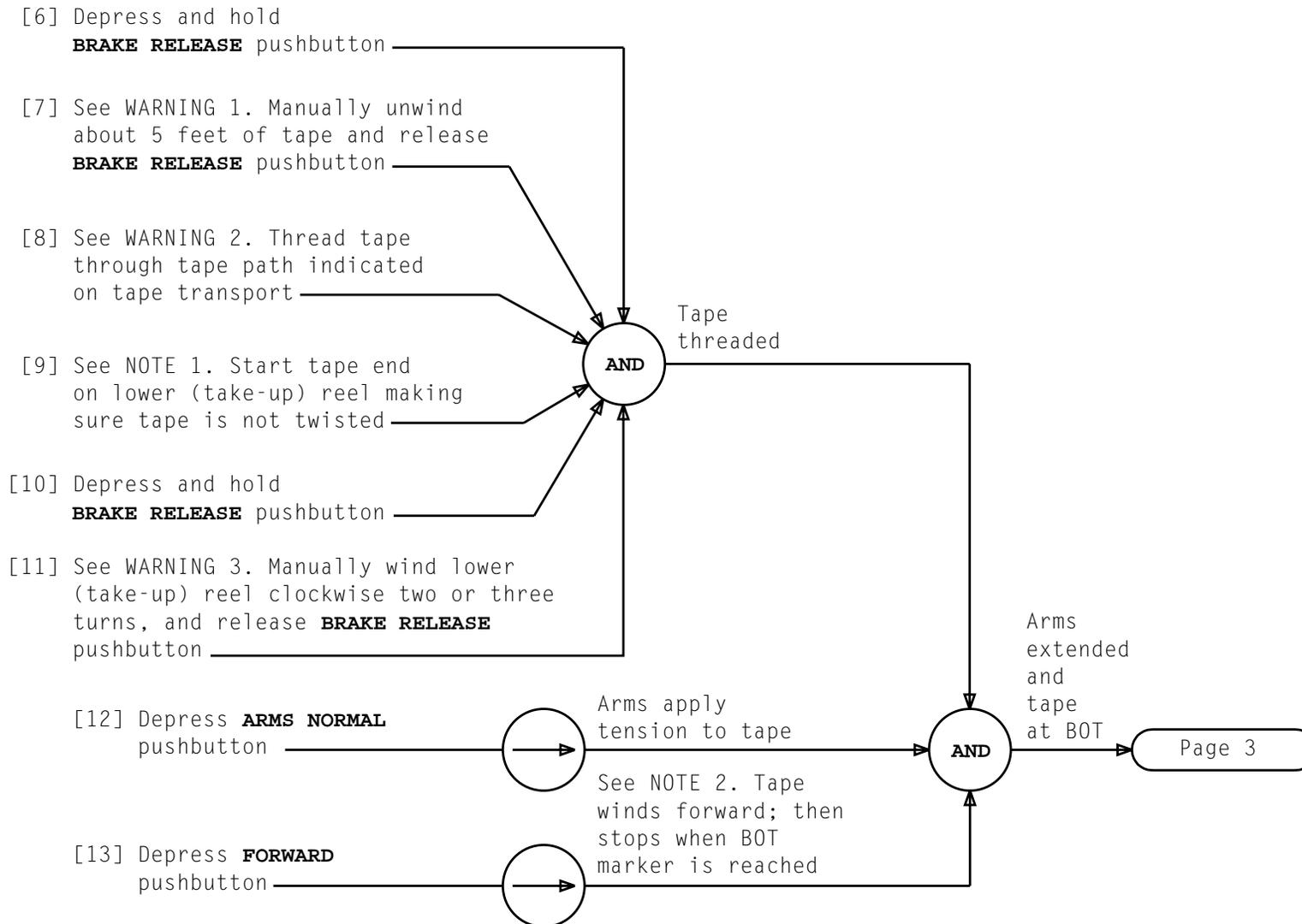
**LOCAL** lamp  
lighted

[3] Verify that empty lower (take-up) tape reel is  
same size or larger than tape reel to be mounted

[4] With hub (knob) of upper reel in  
counterclockwise position, mount reel  
with tape on reel holder

[5] Rotate hub (knob) of upper reel clockwise  
to detent to lock tape reel securely



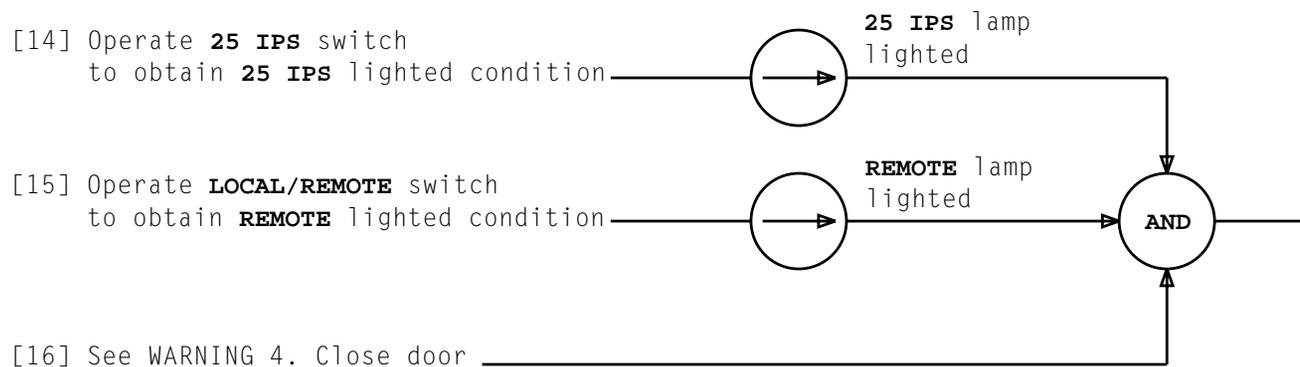


NOTES

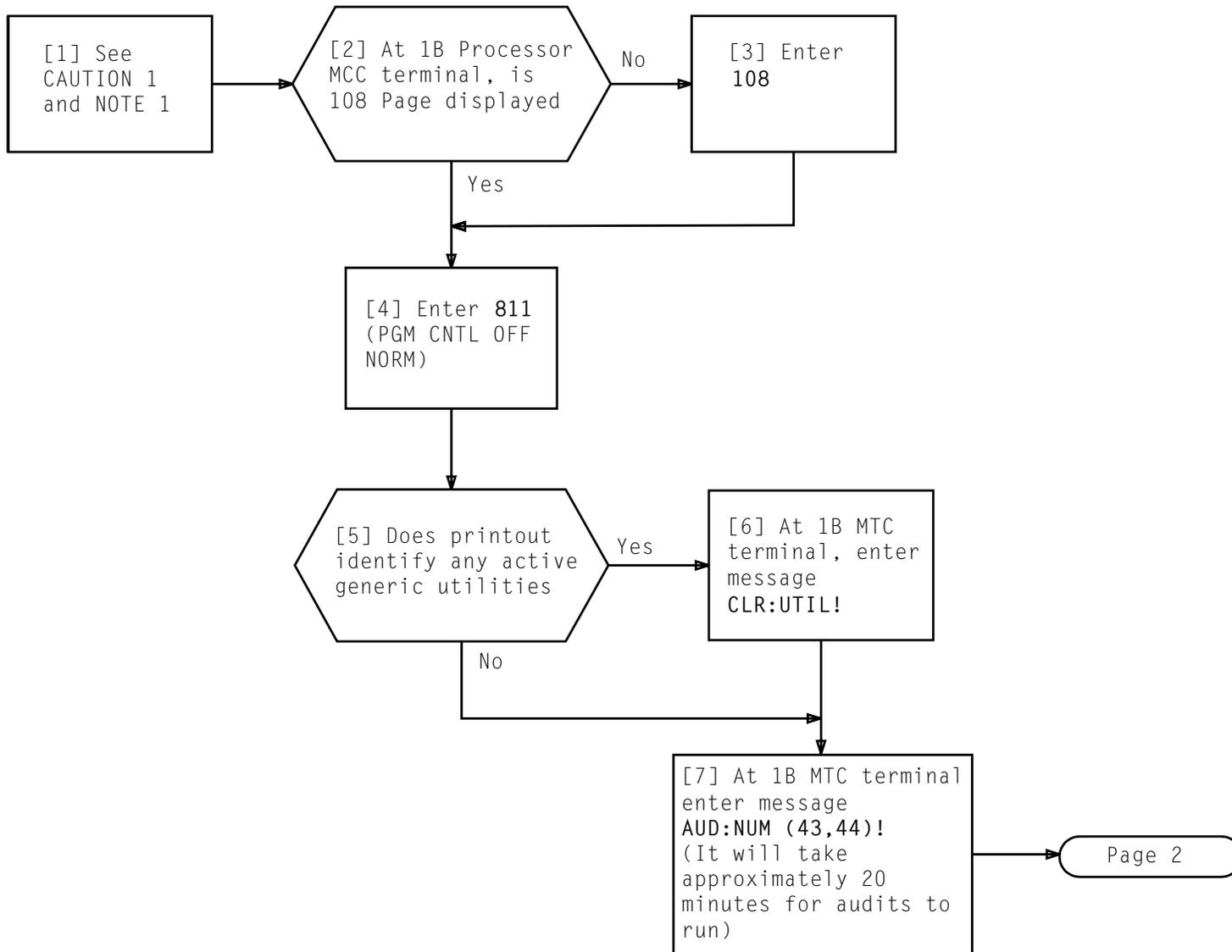
1. To start tape on take-up reel, it may help to moisten tape end (moistened fingers) and stick it to reel axle
2. Tape may not stop at BOT marker if fast forward is depressed

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



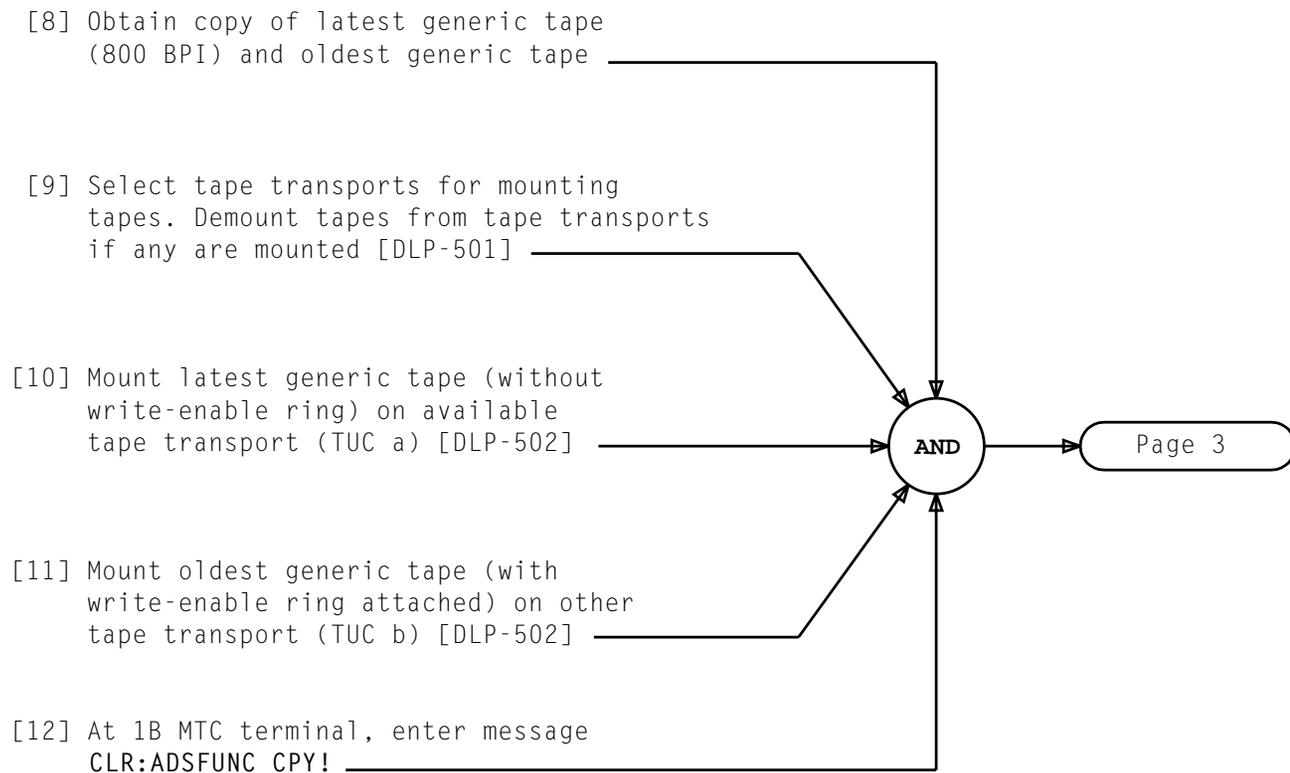
<i>WARNING 4</i> <i>Closing tape transport door in harsh manner may upset alignment</i>	
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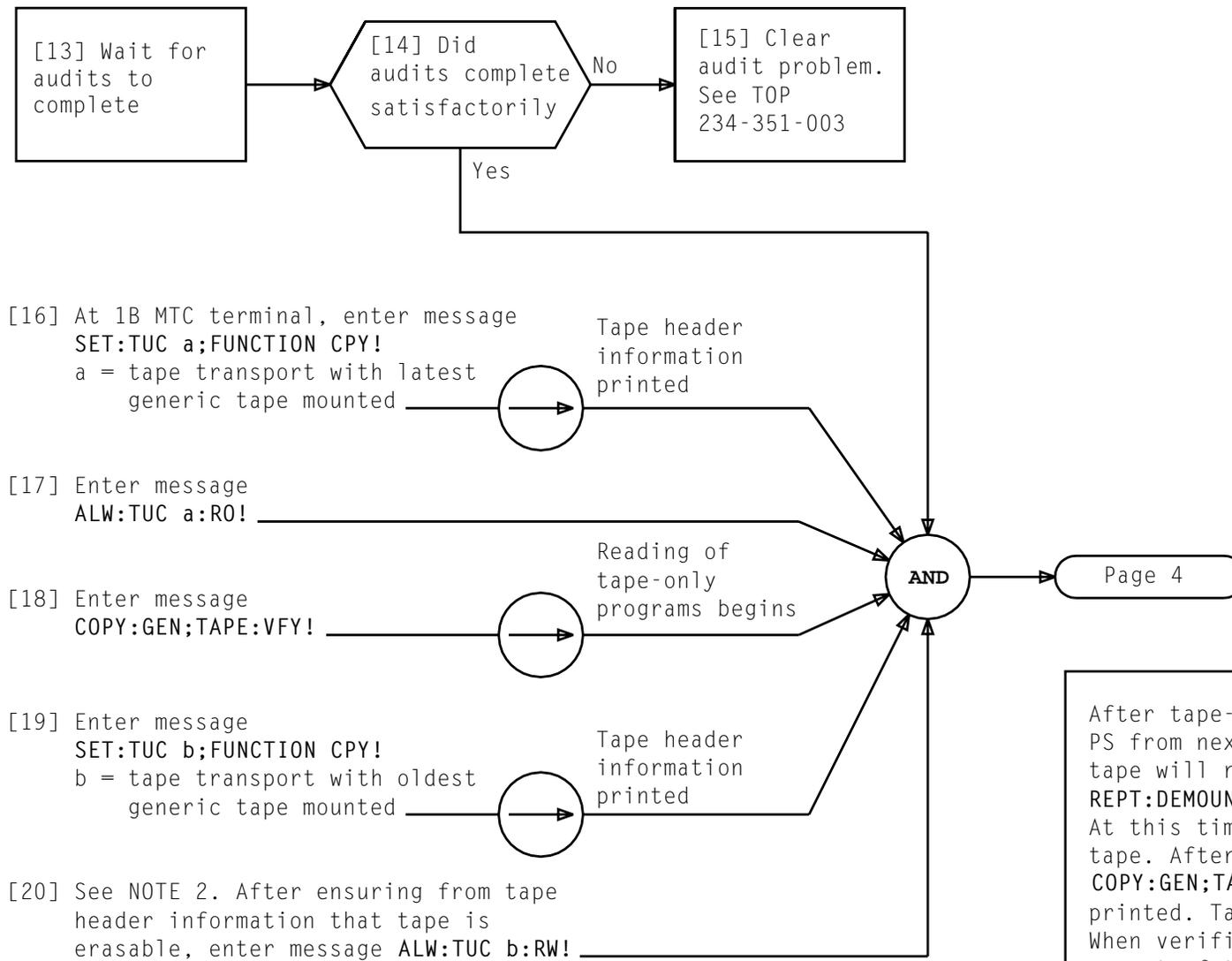


NOTE 1  
 If necessary, AT&T Practice 234-020-010 should be referenced for tape storage requirements and procedures

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

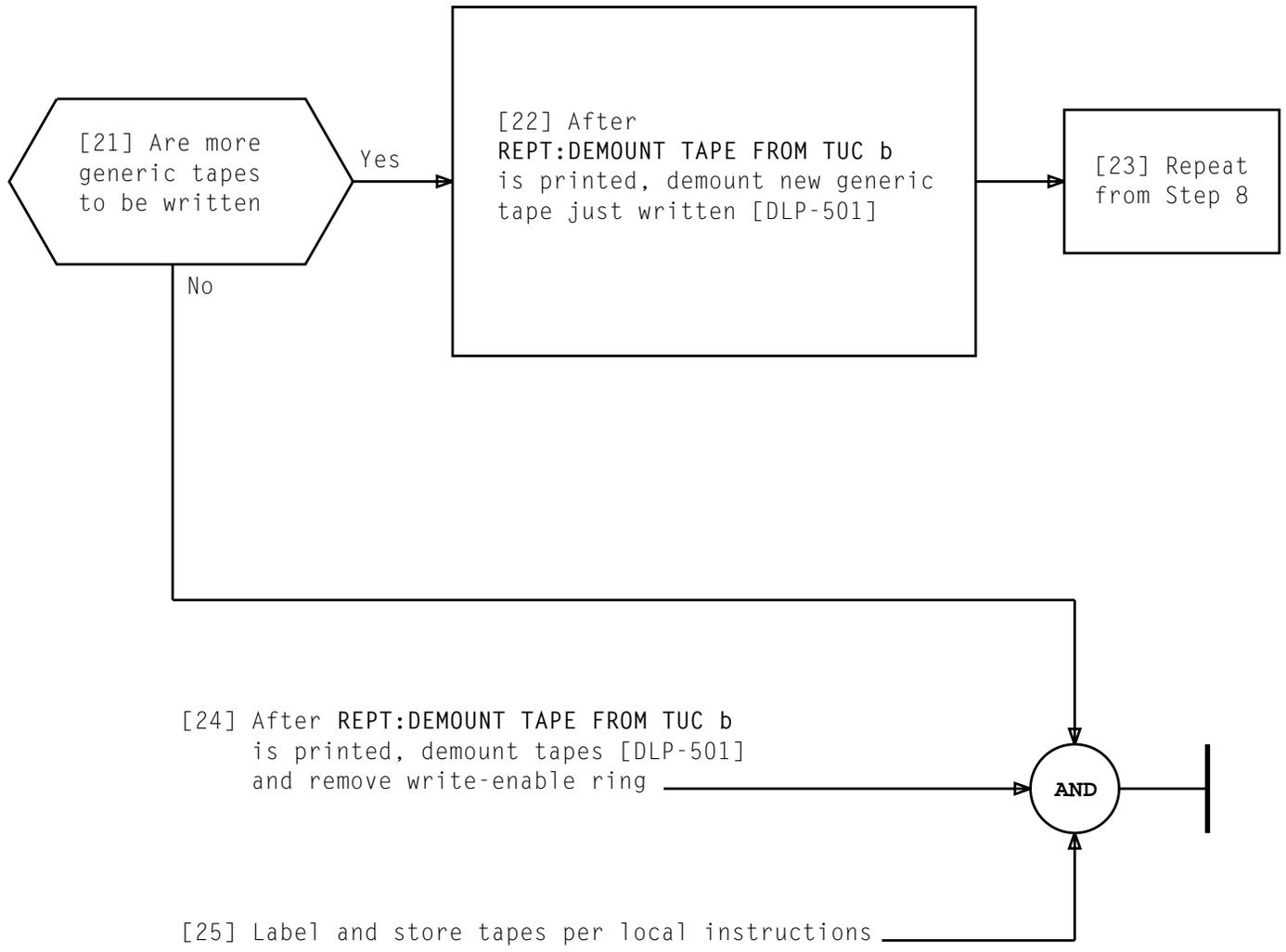
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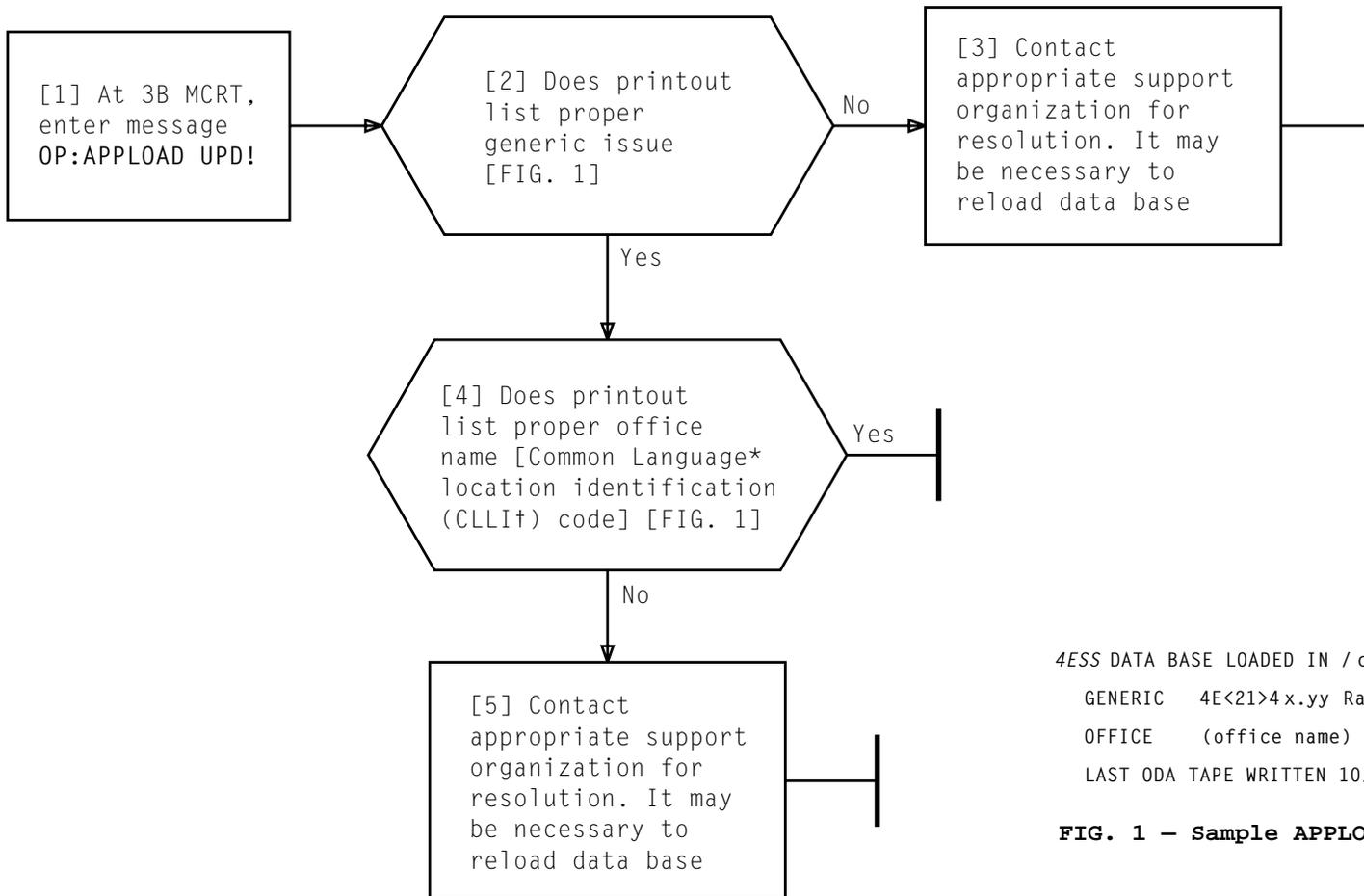




NOTE 2  
 After tape-only programs are copied into PS from next to oldest generic tape, tape will rewind and REPT:DEMOUNT TAPE FROM TUC a is printed. At this time, writing starts on oldest tape. After tape is written (5-10 minutes), COPY:GEN;TAPE COMPL date and time are printed. Tape rewinds and is verified. When verification has completed (same amount of time as it took to write), COPY:VFY;TAPE COMPL is printed followed by REPT:DEMOUNT TAPE FROM TUC b

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```

4ESS DATA BASE LOADED IN / dev/1afile0 IS:
  GENERIC  4E<21>4x.yy Ra
  OFFICE   (office name)
  LAST ODA TAPE WRITTEN 10/25/95 AT 19:51
  
```

**FIG. 1 — Sample APPLOAD Printout**

\* Registered trademark of Bell Communications Research, Inc.

† Trademark of Bell Communications Research, Inc.

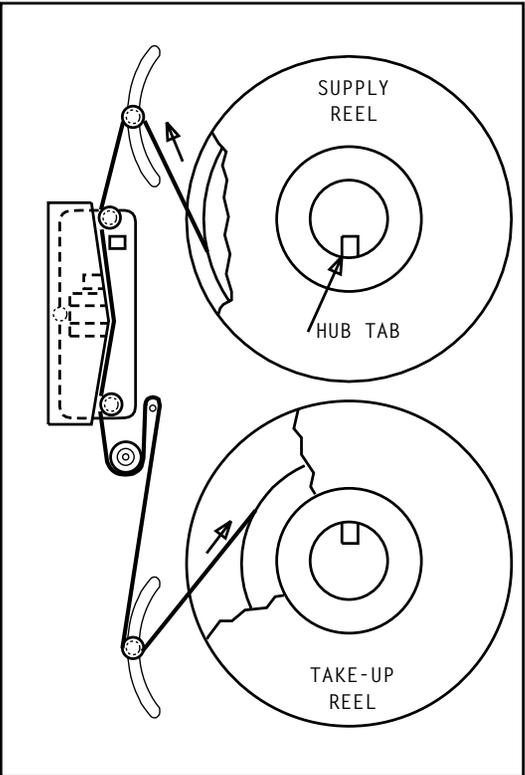
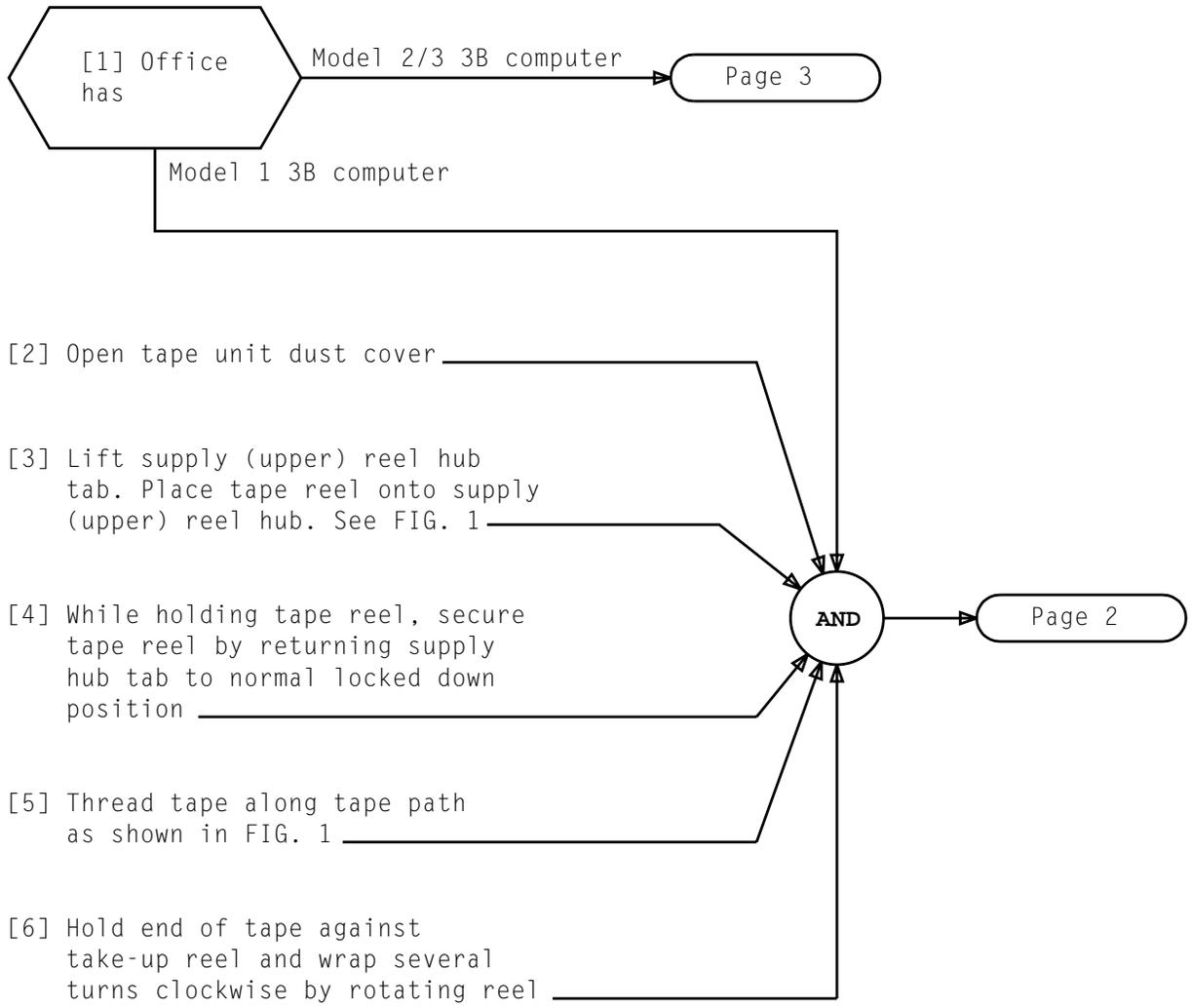
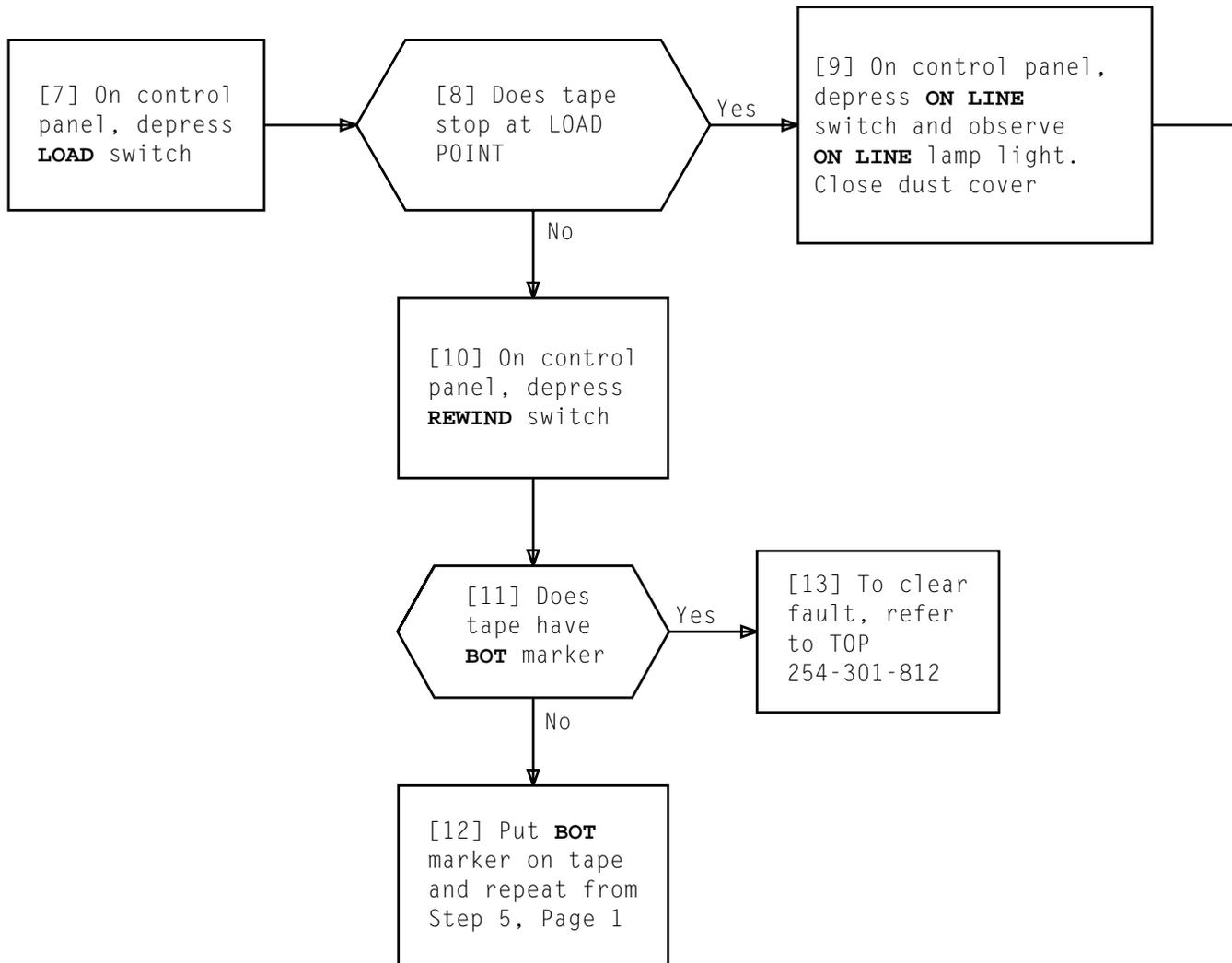


FIG. 1

**MOUNT TAPE ON 3B TAPE UNIT**

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**MOUNT TAPE ON 3B TAPE UNIT**

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[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

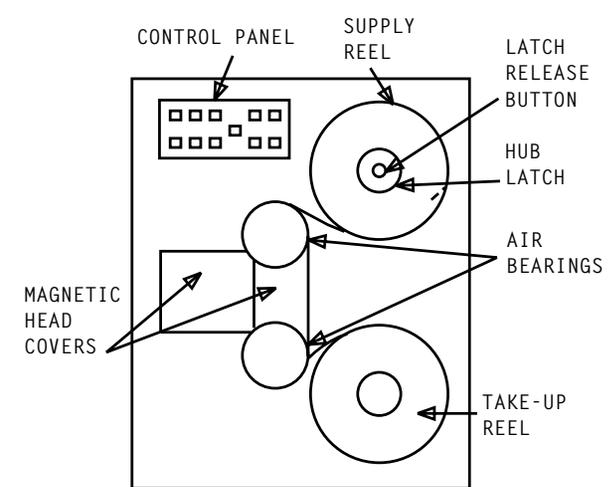
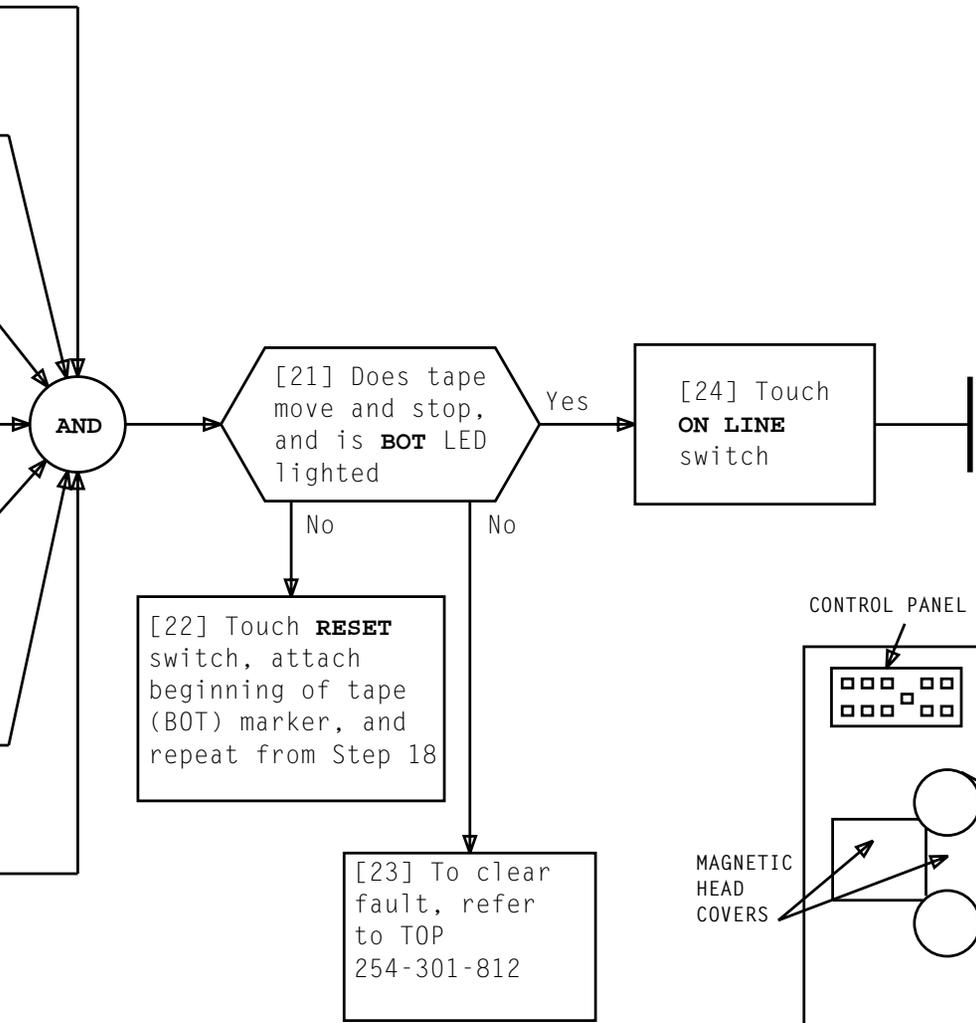
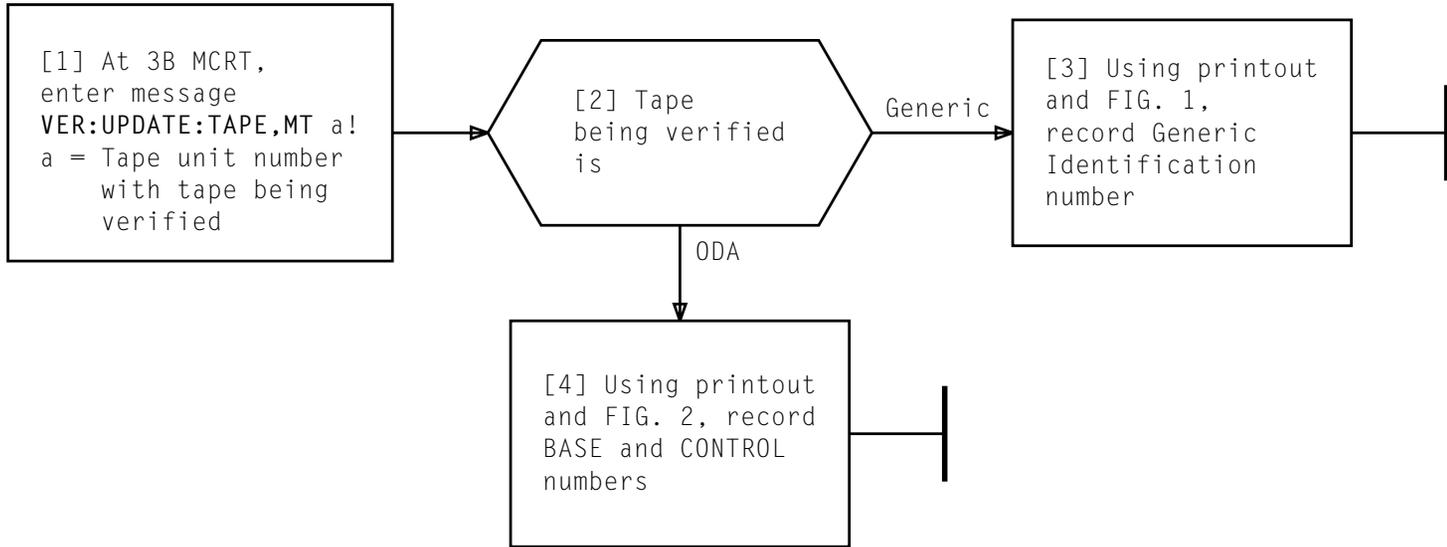


FIG. 2

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```

TAPE TYPE: GEN
GENERIC 4E<21>4A.01 R1 ← Record This Value
MOST RECENT OFL GENERATION: YR 95,MON 10,DAY 04 AT 11:28
THIS TAPE WRITTEN: YR 95,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<G21>.4R
MOST RECENT OFL GENERATION: YR 95,MON 10,DAY 05 AT 16:23
THIS TAPE WRITTEN: YR 95,MON 11,DAY 09 AT 08:23
FS IDS: 0000000000001000,TAPE IDS: 0000000011110100
PARTL UPD FLG: 0,PHASE REQD: 0001000
  
```

FIG. 2 – Sample ODA Tape Header Printout

[1] Determine Generic Identification number recorded earlier

[2] At 3B MCRT, enter message  
LOAD:UPDATE:GEN "a",MT b!  
a = Generic Identification number (Step 1)  
b = Tape unit number with generic tape mounted

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

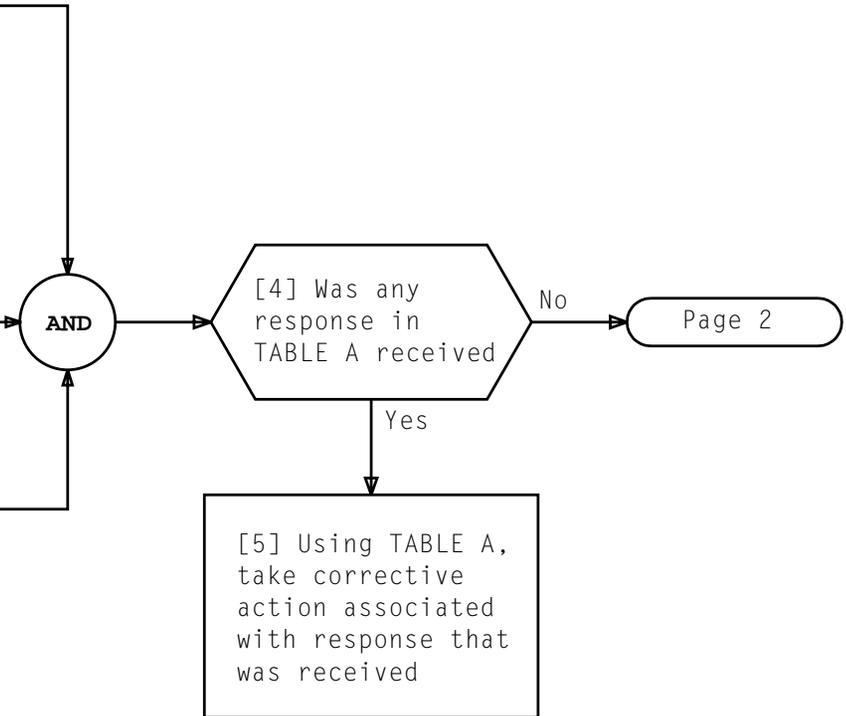
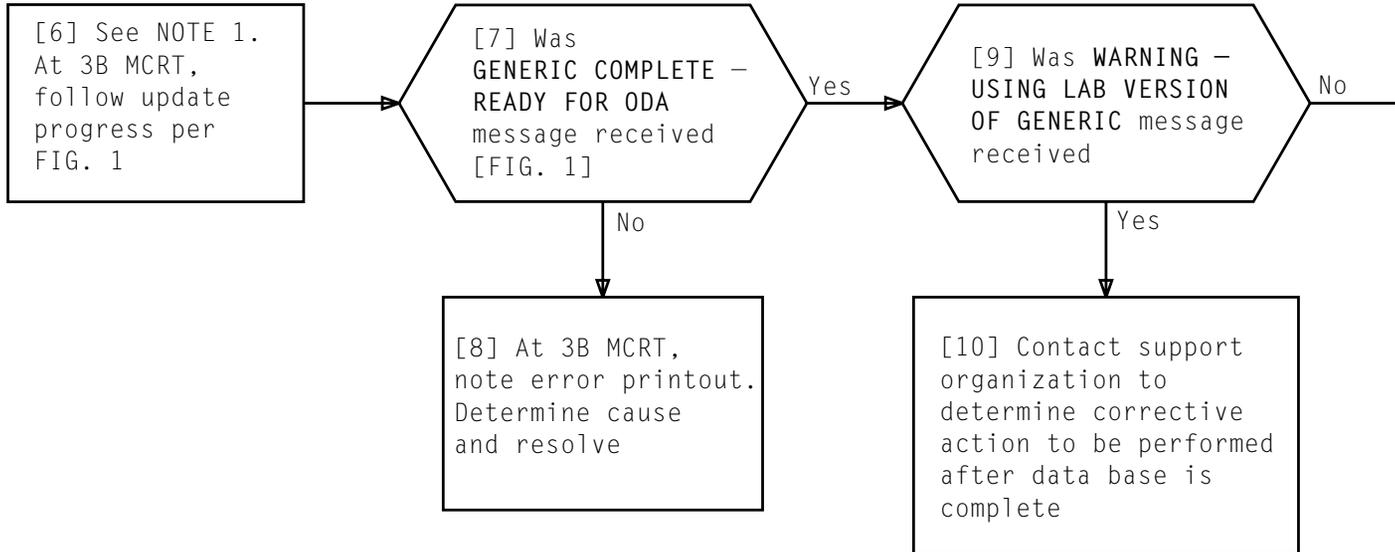


TABLE A	
RESPONSE	CORRECTIVE ACTION
INVALID TAPE ID - ENTER AGAIN	Repeat from Step 2 with correct Generic Identification number
TAPE DRIVE NOT READY - CORRECT AND ENTER AGAIN	Correct tape drive problem and repeat from Step 2

**LOAD NEW GENERIC ON DISK**

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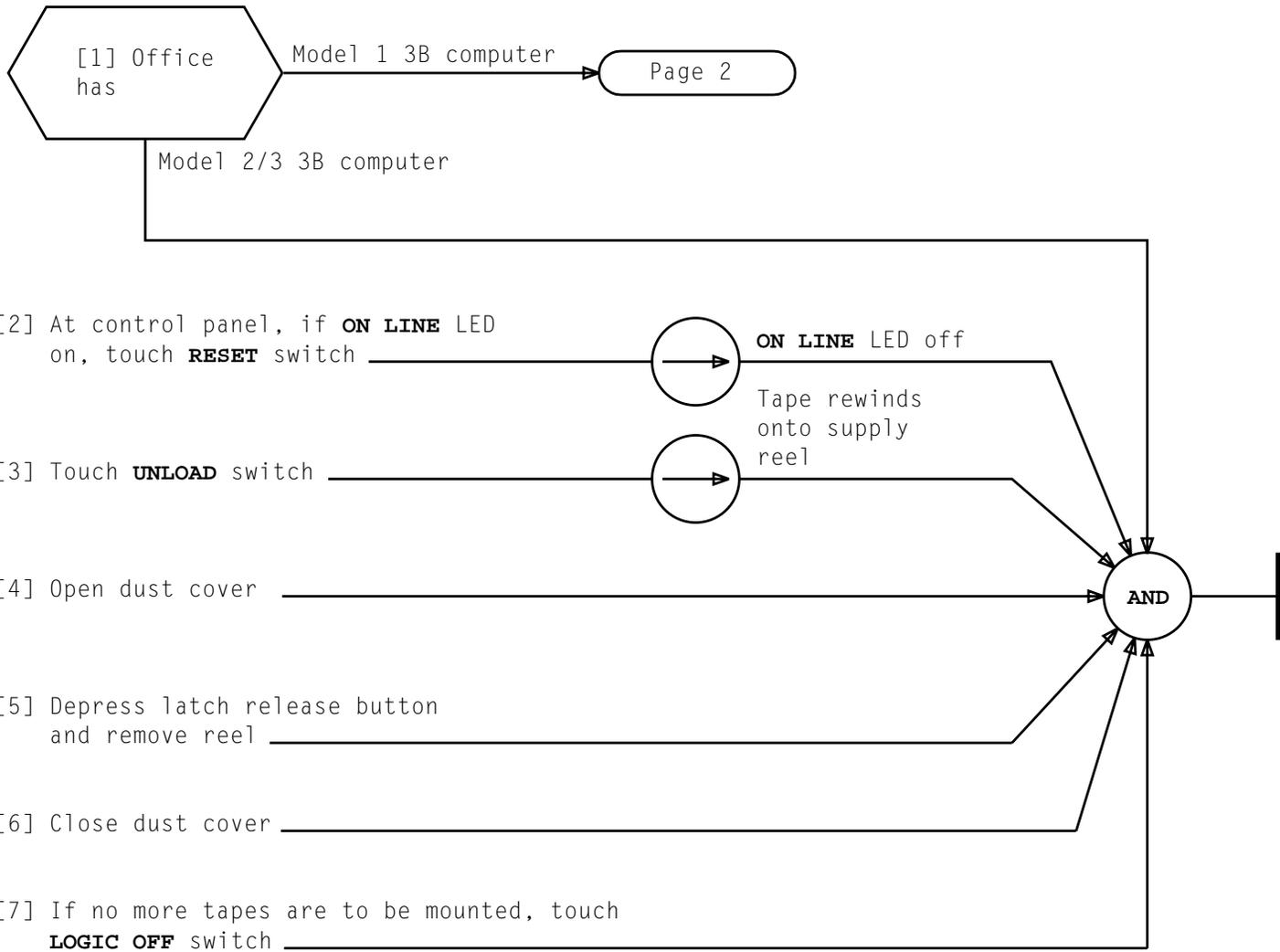


```

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 1 WARNING - USING LAB VERSION OF GENERIC message may be received after tape header information	
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**DEMOUNT TAPE ON 3B TAPE UNIT**

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[8] At control panel, if **ON LINE** lamp is on, depress **ON LINE** switch

[9] If tape is not at BOT, depress **REWIND** switch

**LOAD POINT**  
LED lights

Tape rewinds  
to end of tape  
and stops

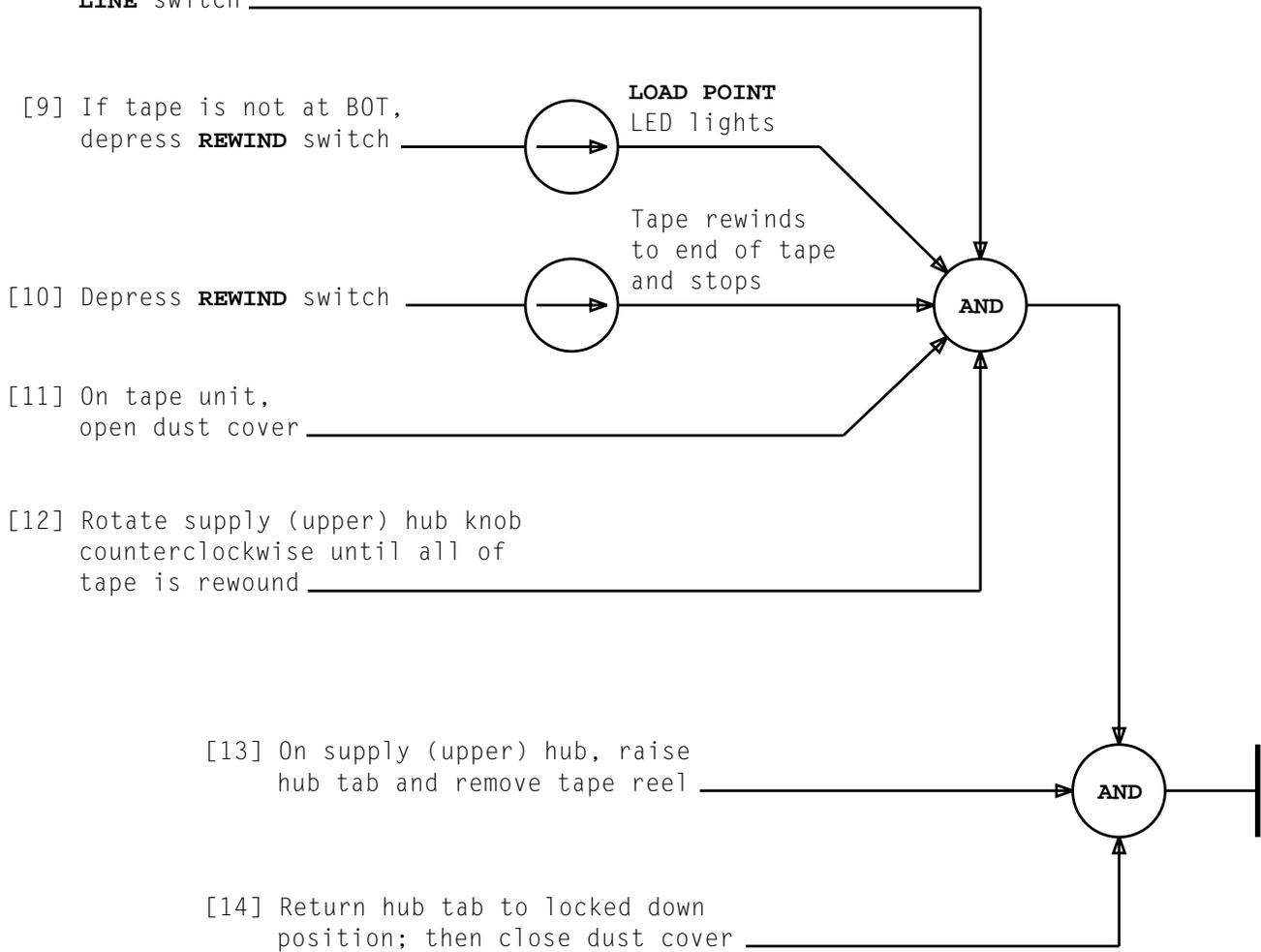
[10] Depress **REWIND** switch

[11] On tape unit,  
open dust cover

[12] Rotate supply (upper) hub knob  
counterclockwise until all of  
tape is rewound

[13] On supply (upper) hub, raise  
hub tab and remove tape reel

[14] Return hub tab to locked down  
position; then close dust cover



## DEMOUNT TAPE ON 3B TAPE UNIT

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[1] Determine BASE and CONTROL numbers recorded earlier

[2] At 3B 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

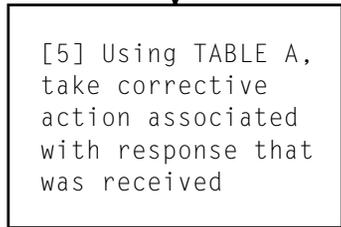
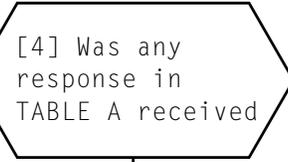
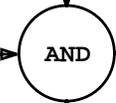
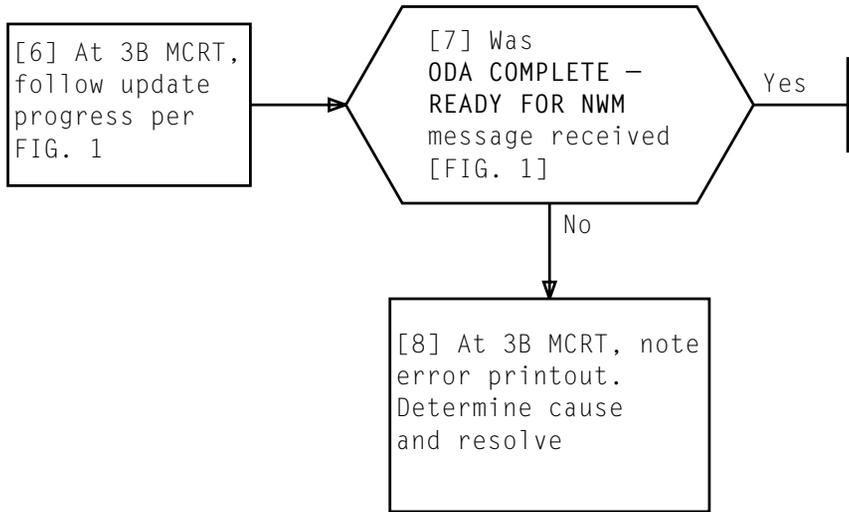


TABLE A	
RESPONSE	CORRECTIVE ACTION
INVALID TAPE ID - ENTER AGAIN	Repeat from Step 2 with correct BASE and CONTROL numbers
TAPE DRIVE NOT READY - CORRECT AND ENTER AGAIN	Correct tape drive problem and repeat from Step 2
WRONG GENERIC - CHANGE TAPE AND ENTER AGAIN	Demount wrong ODA tape. Obtain correct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

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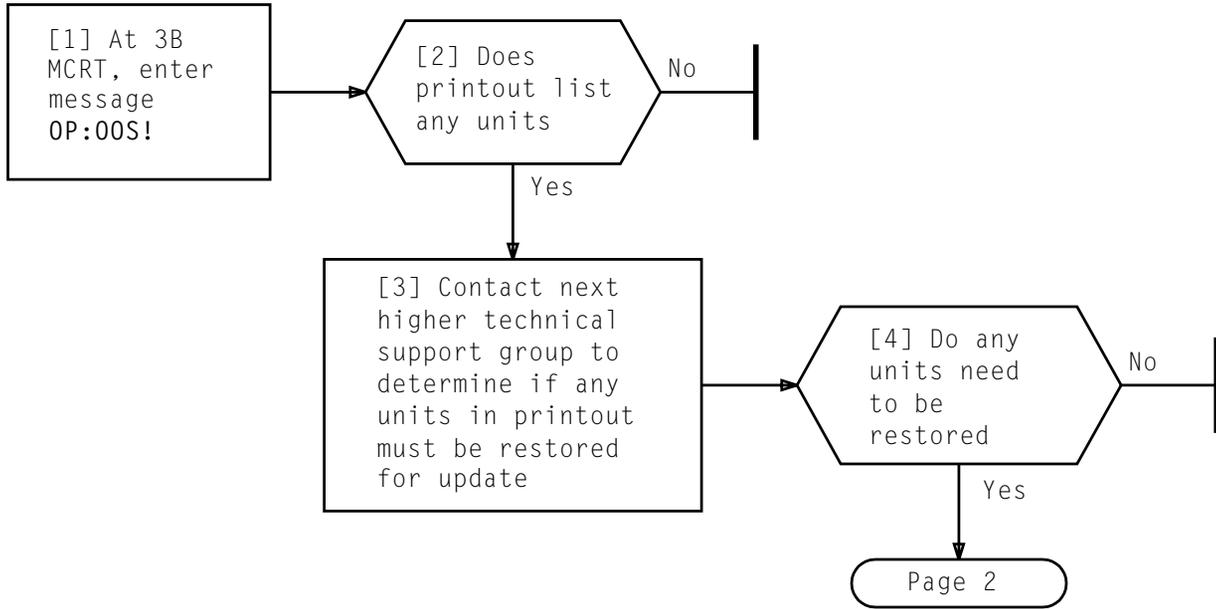


```

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**



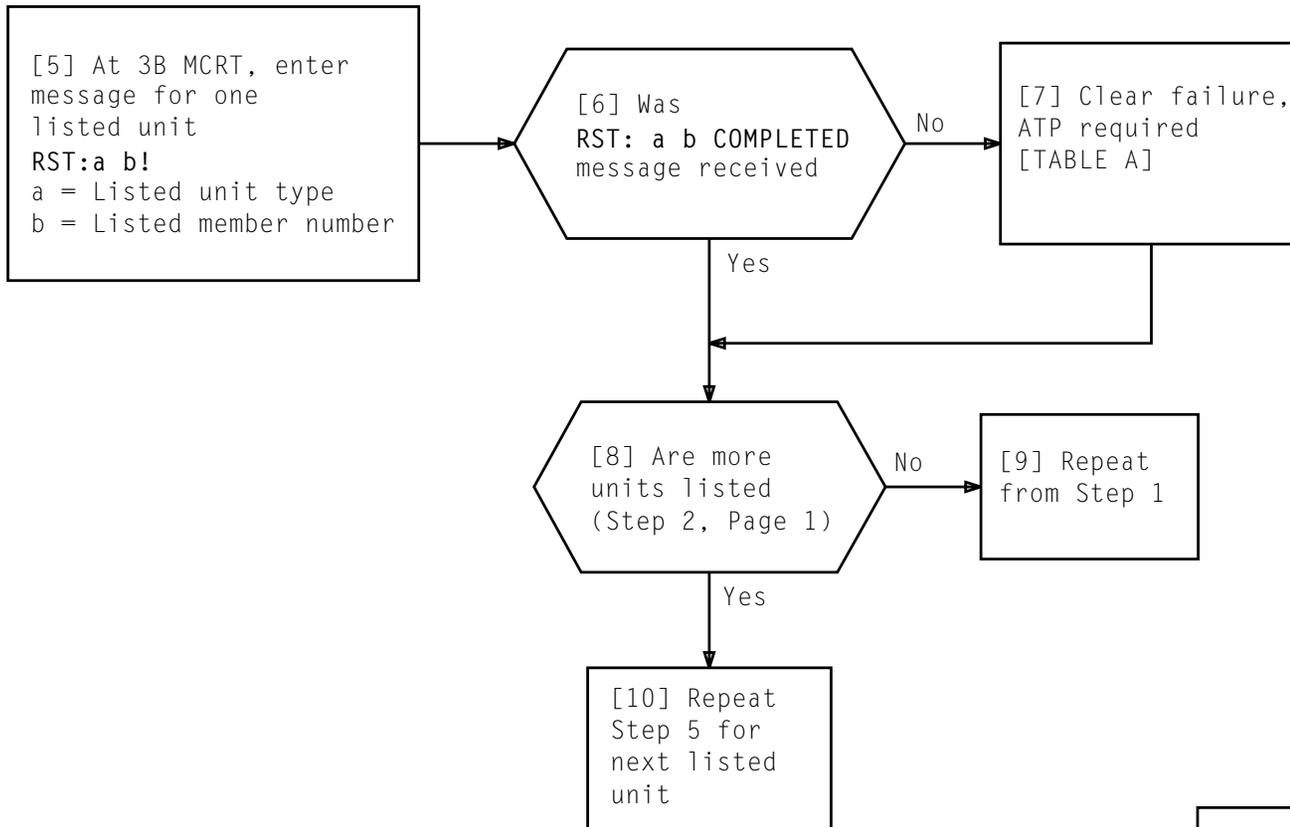
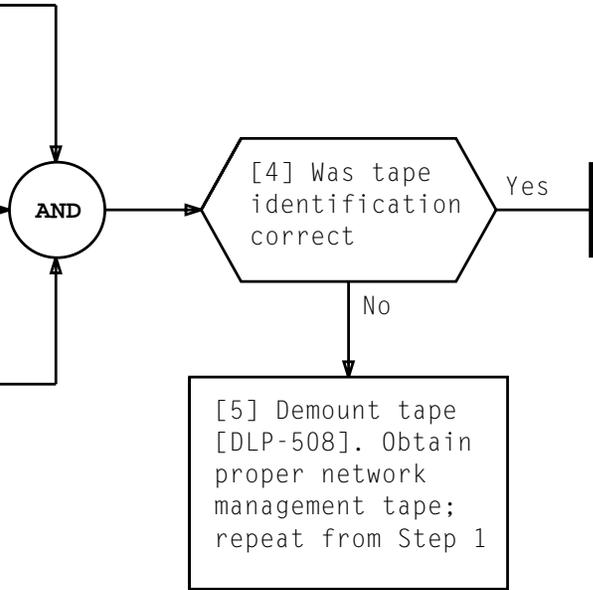


TABLE A	
UNIT TYPE	TROUBLE-CLEARING VOLUME
3B Computer Model 1	254-301-812 254-301-813
3B Computer Model 2/3	254-302-812

[1] Mount new network management tape on available 3B computer tape unit [DLP-505]

[2] At 3B MCRT, enter message  
VER:UPDATE:TAPE,MT a!  
a = Tape unit number  
with tape being verified

[3] Using printout and FIG. 1, verify that TAPE TYPE: is NWM and ORIGINAL GENERIC is 4E<21>4R



```
TAPE TYPE: NWM
ORIGINAL GENERIC 4E<21>4R
MOST RECENT OFL GENERATION: YR 95,MON 10,DAY 06 AT 08:30
THIS TAPE WRITTEN: YR 95,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

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[1] See NOTES 1 and 2.

At 3B MCRT, enter message

LOAD:UPDATE:CONT NWM,MT a!

a = Tape unit number with network management tape mounted

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

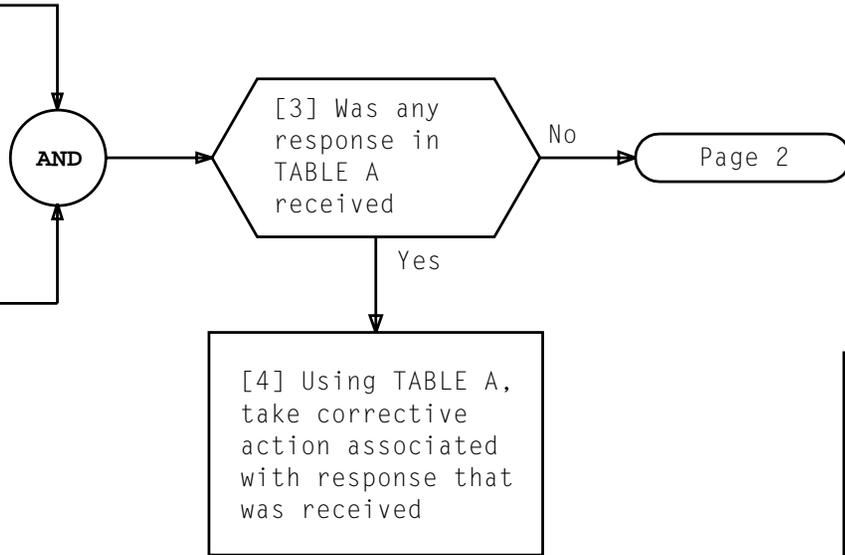
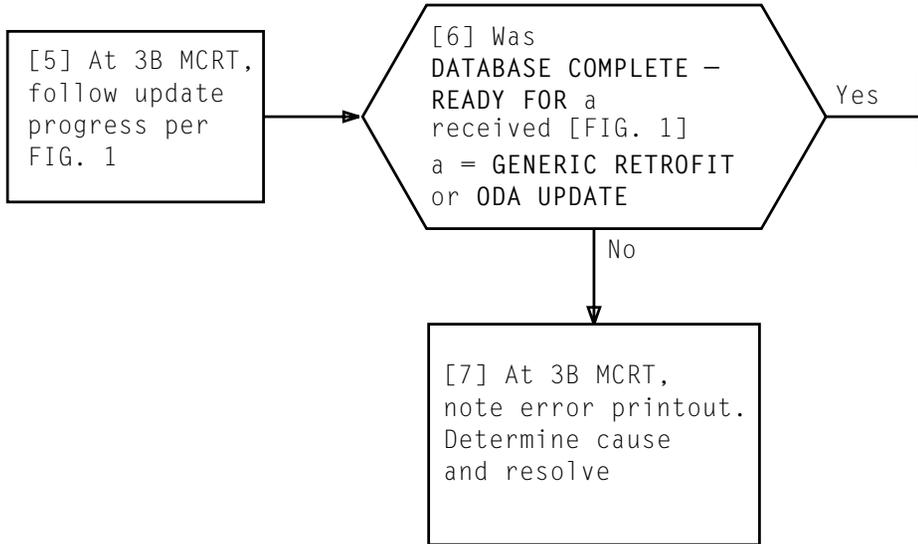


TABLE A	
RESPONSE	CORRECTIVE ACTION
TAPE DRIVE NOT READY – CORRECT AND ENTER AGAIN	Correct tape drive problem and repeat from Step 2
WRONG GENERIC – CHANGE TAPE AND ENTER AGAIN	Demount wrong network management tape. Obtain correct tape and mount on tape drive. Repeat from Step 2
INVALID COMMAND - ENTER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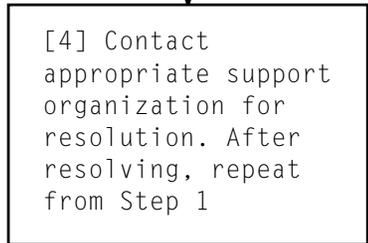
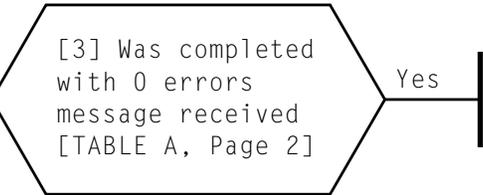
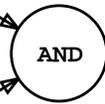
```

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**

[1] At 3B MCRT, enter message  
VER:APPFILE UPD!

[2] Read NOTE 1. Observe printout  
for 0 errors per TABLE A

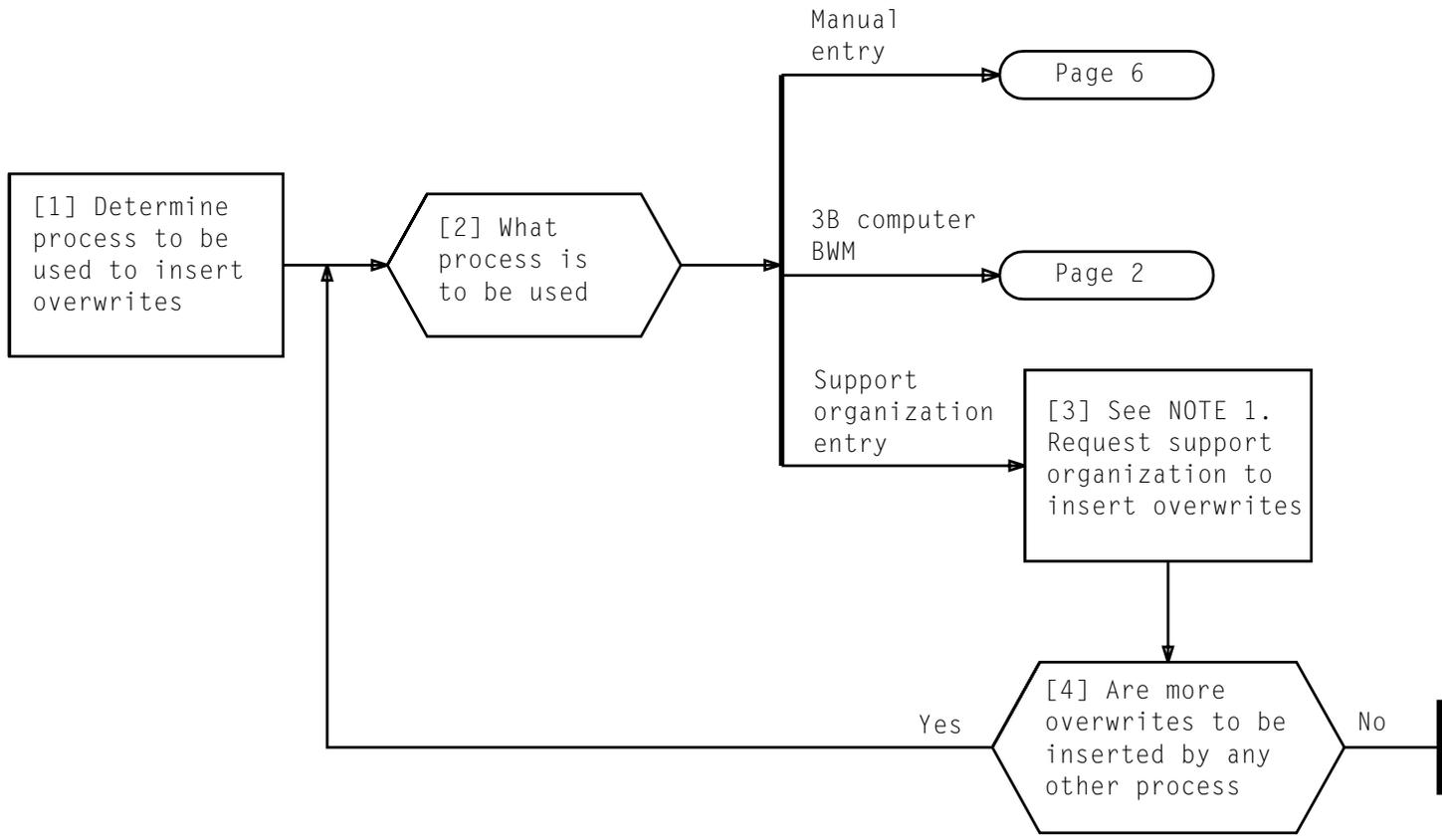


NOTE 1	
It takes approximately 35 minutes for verify to complete	
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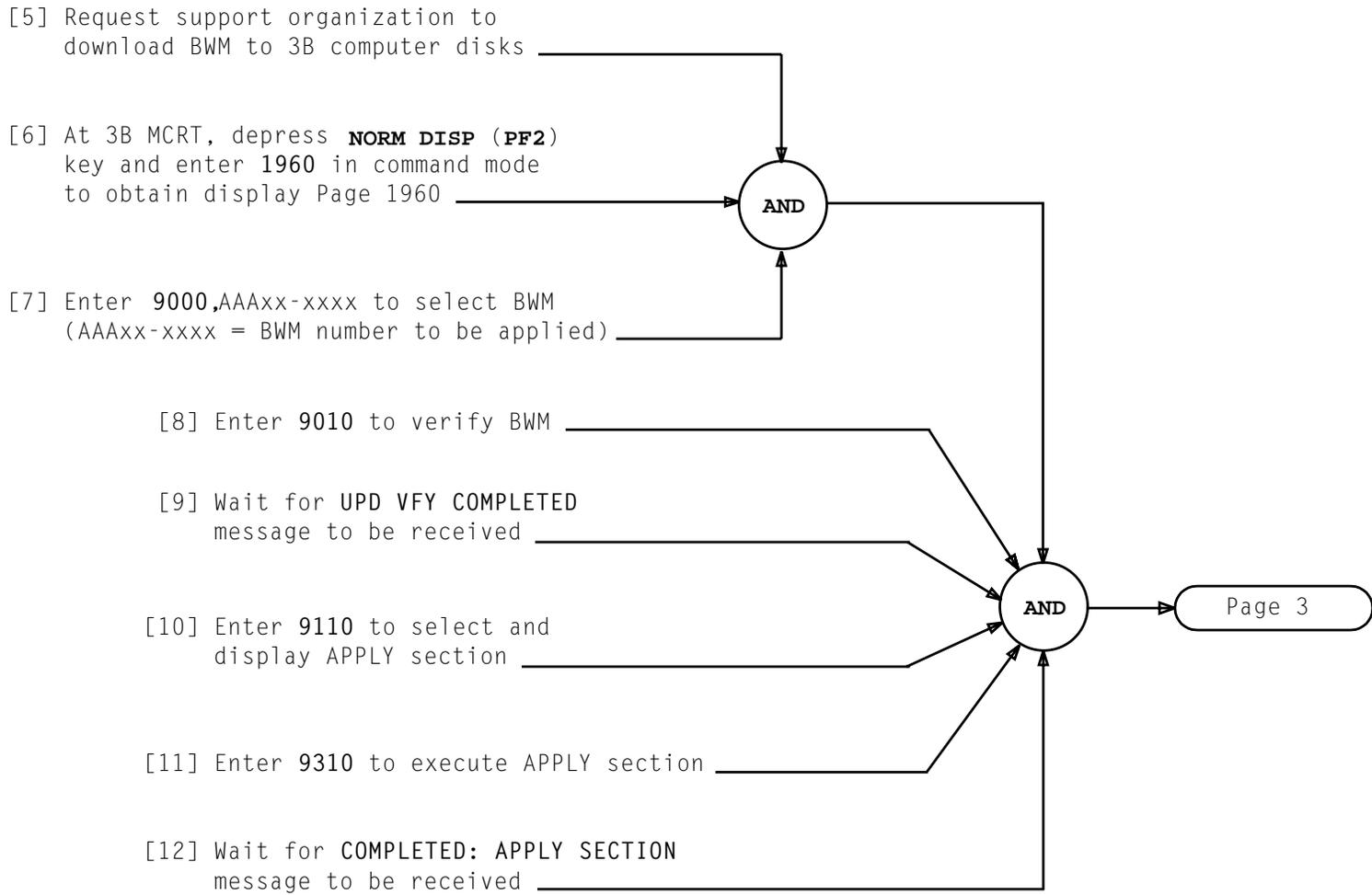
TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:APPFILE STARTED, /dev/lafileX (X = 0 or 1) VER:APPFILE /dev/lafileX MERGE AREA, MSG IP, 0 ERRORS DETECTED VER:APPFILE /dev/lafileX ID 1, MSG IP, 0 ERRORS DETECTED (Generic Area) VER:APPFILE /dev/lafileX ID 2, MSG IP, 0 ERRORS DETECTED (Library Area) VER:APPFILE /dev/lafileX ID 3, MSG IP, 0 ERRORS DETECTED (ODA Area) VER:APPFILE /dev/lafileX ID 7, MSG IP, 0 ERRORS DETECTED (Network Management Area) VER:APPFILE /dev/lafileX ID 11, MSG IP, 0 ERRORS DETECTED (RC Rollback Area) VER:APPFILE /dev/lafileX ID 12, MSG IP, 0 ERRORS DETECTED (Traffic and Plant Management Area) VER:APPFILE /dev/lafileX ID 17, MSG IP, 0 ERRORS DETECTED (Paged Program Area) VER:APPFILE /dev/lafileX ID 20, MSG IP, 0 ERRORS DETECTED (ODA Translations and Parameters in File Segment 1 With TWRP) VER:APPFILE /dev/lafileX ID 21, MSG IP, 0 ERRORS DETECTED (ODA Translations and Parameters in File Segment 2 With TWRP) VER:APPFILE /dev/lafileX COMPLETED, 0 ERRORS DETECTED

**VERIFY 1AFILE HASHED AREAS**

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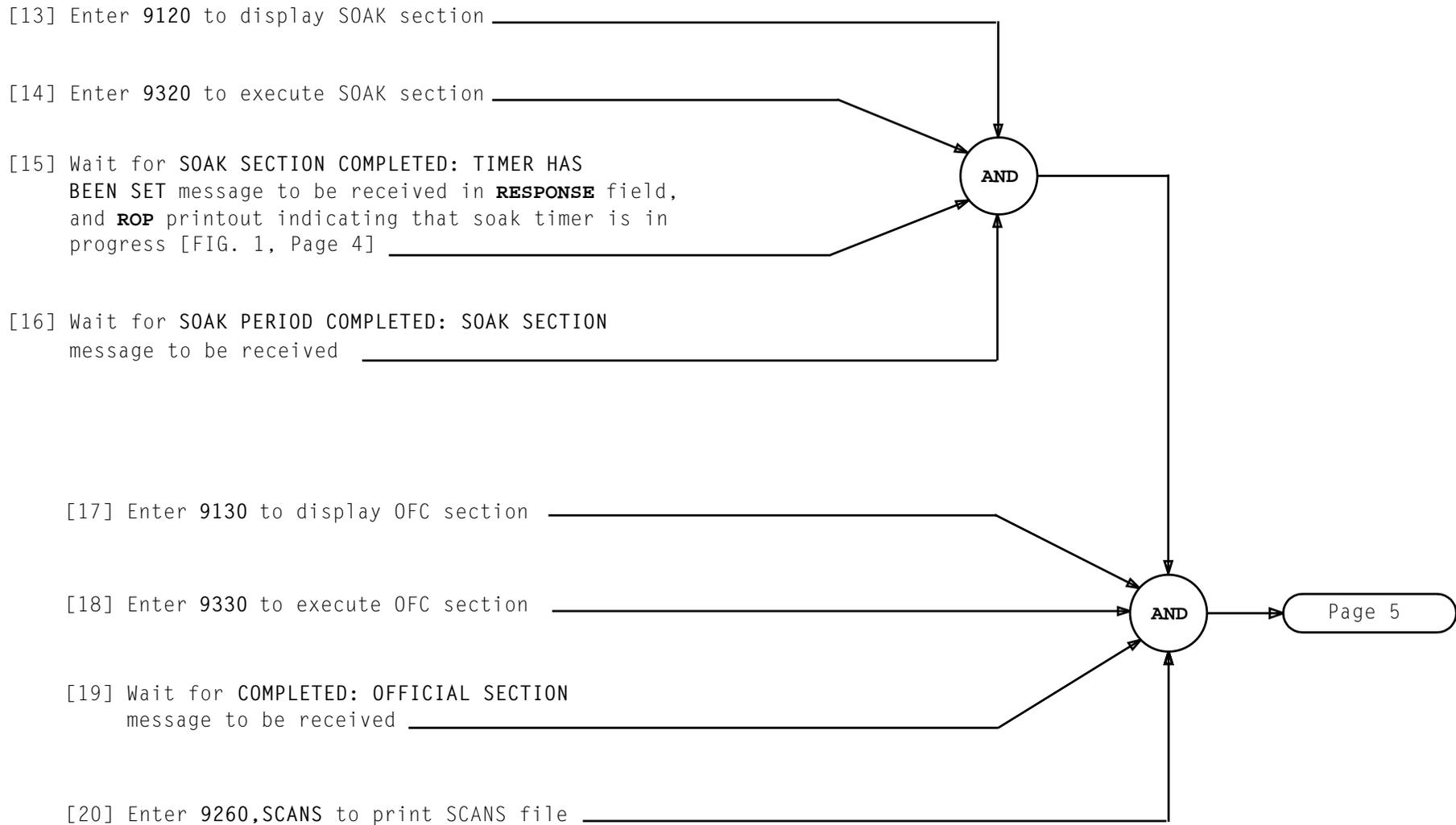


NOTE 1	
Overwrites from support organization must be in form of TABLE B or TABLE C, Page 5	
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**INSERT CRITICAL OVERWRITES INTO UPDATE FILE**

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**INSERT CRITICAL OVERWRITES INTO UPDATE FILE**

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\_\_\_\_\_ UPD PRINT SOAK TIMER IN PROGRESS \_\_\_\_\_  
BWM NAME = CFT94-0165      REMAINING SOAK PERIOD = 23:59 (HH:MM)

CURRENT SOAK TIMER  
START      Wed Jul 27 23:32:54 1995  
END        Thu Jul 28 23:32:54 1995  
DURATION  24:0 (HH:MM)

PREVIOUS SOAK TIMER  
START      Wed Jul 27 23:32:54 1995  
END        Thu Jul 28 23:32:54 1995  
DURATION  24:0 (HH:MM)

\_\_\_\_\_ END OF BWM SOAK TIMER INFORMATION \_\_\_\_\_  
UPD PRINT SOAK TIMER COMPLETED

**FIG. 1 - Sample Soak Timer Printout**

**INSERT CRITICAL OVERWRITES INTO UPDATE FILE**

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[21] At 3B MCRT,  
 enter message  
 LOAD:GULP:GENERIC "a"!  
 a = Full pathname  
 specified in  
 SCANS file

[22] Using TABLE A,  
 and printout, follow  
 progress for  
 associated input  
 message

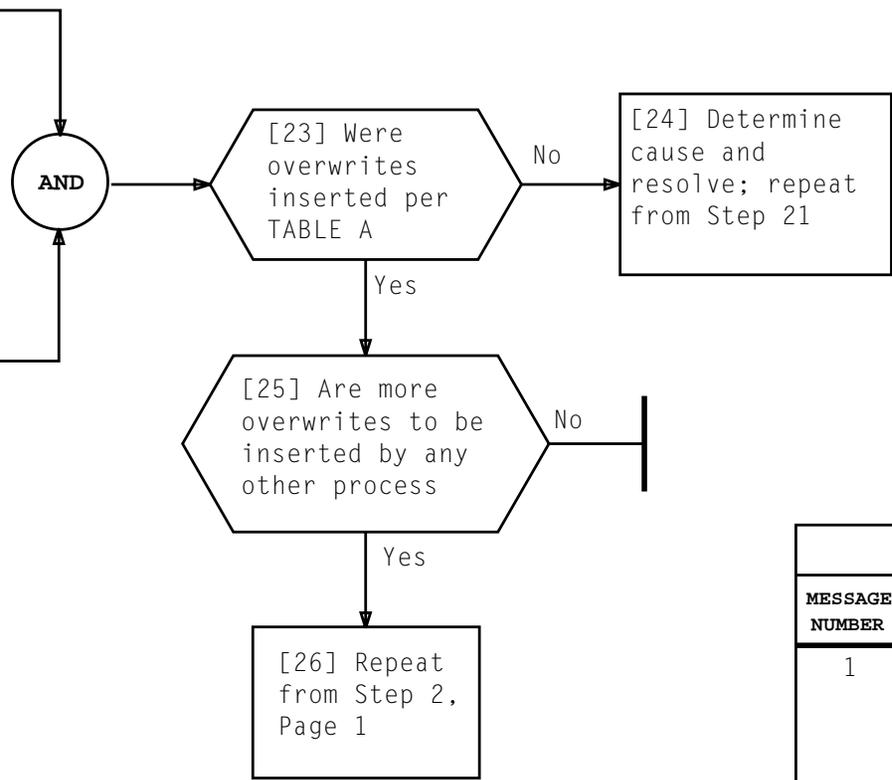


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	BUILDING OW BUFFER - OW BLOCK 1
	BUILDING OW BUFFER - OW BLOCK 2
	.
	.
	.
	DATABASE UPDATED WITH OVERWRITES

[27] Collect and list overwrite(s) to be inserted into 4E21 generic or ODA loaded in update file

[28] At 3B MCRT, enter message IN:OSOW:START! [NOTE 2]

READY FOR OVERWRITE DATA message received

AND

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[29] At 3B 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,DAT 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,DAT 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

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**INSERT CRITICAL OVERWRITES INTO UPDATE FILE**

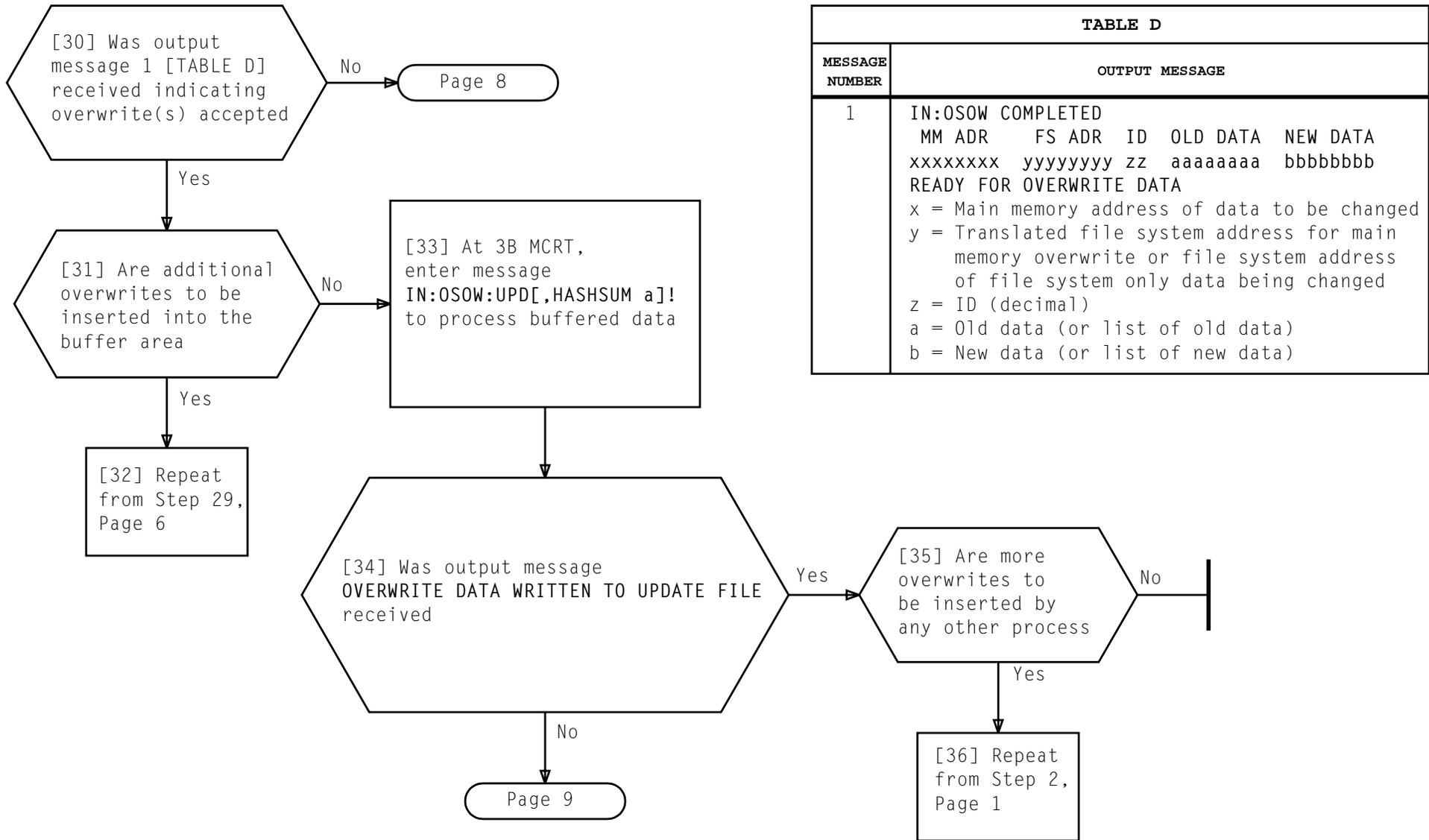
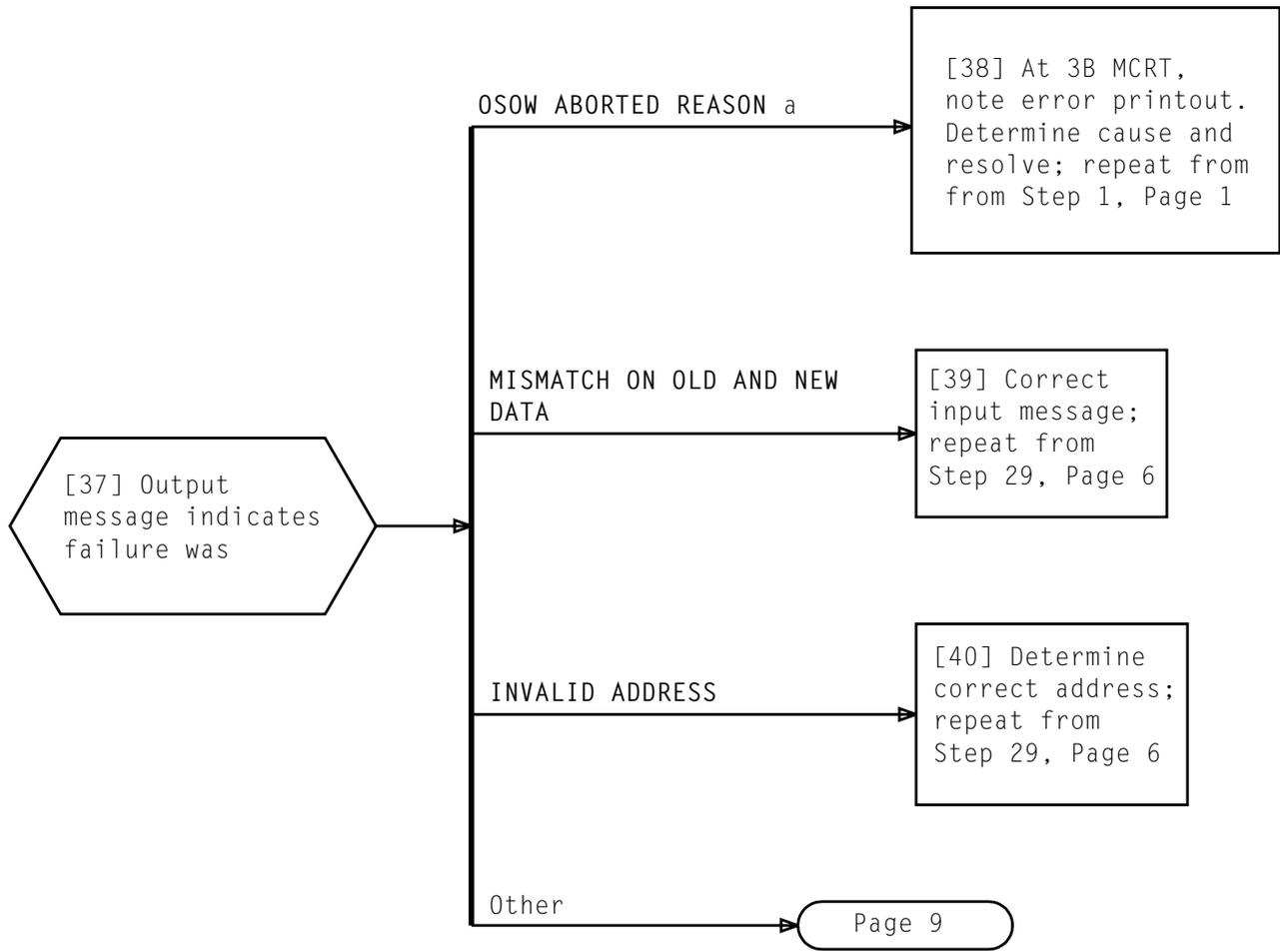
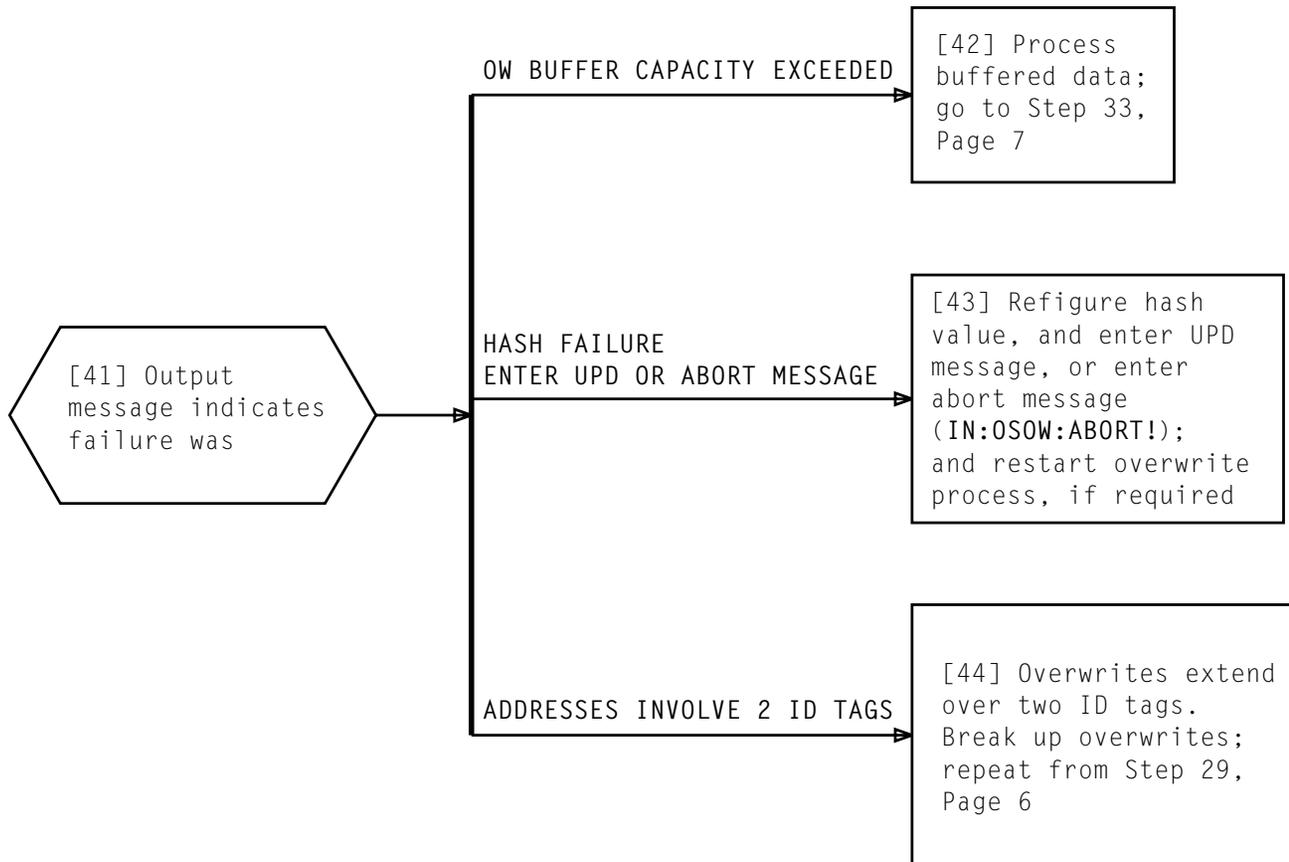


TABLE D	
MESSAGE NUMBER	OUTPUT MESSAGE
1	IN:OSOW COMPLETED MM ADR FS ADR ID OLD DATA NEW DATA xxxxxxxx yyyyyyyy zz aaaaaaa bbbbbbbb READY FOR OVERWRITE DATA x = Main memory address of data to be changed y = Translated file system address for main memory overwrite or file system address of file system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



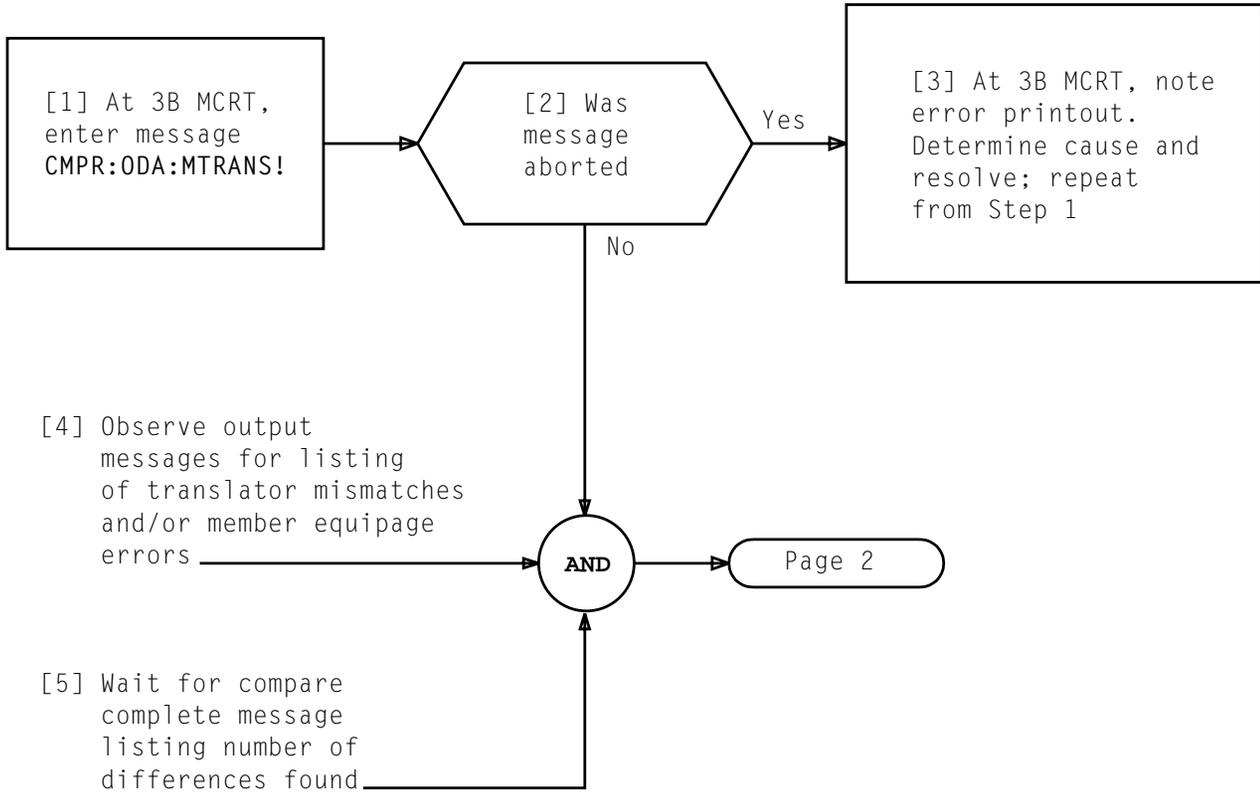
INSERT CRITICAL OVERWRITES INTO UPDATE FILE

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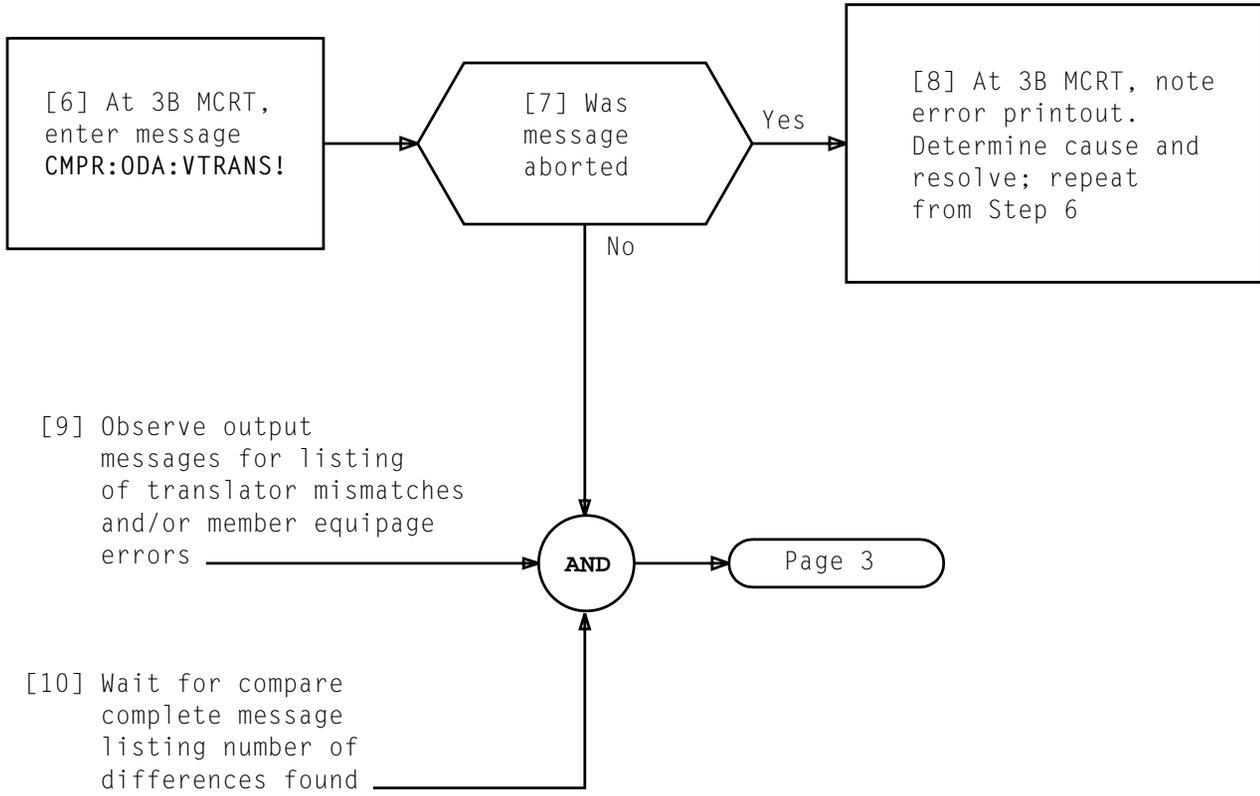
**INSERT CRITICAL OVERWRITES INTO UPDATE FILE**

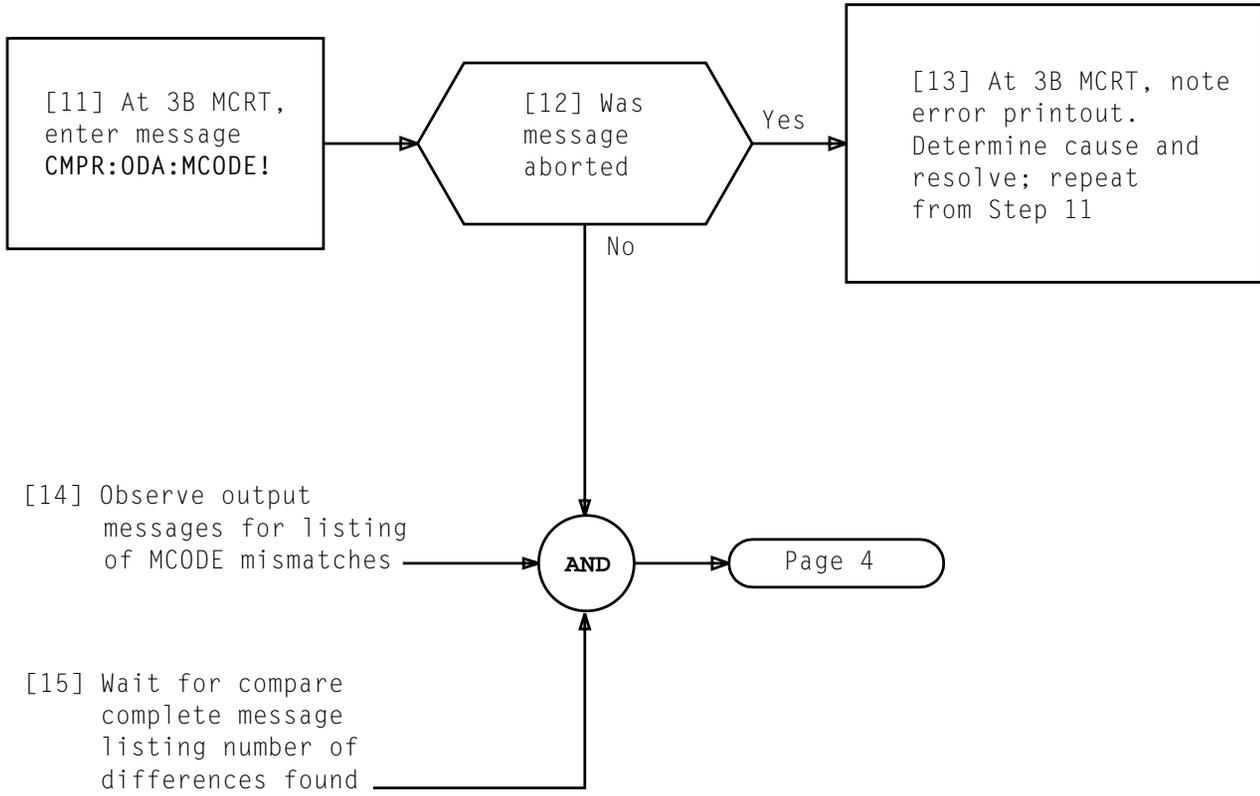
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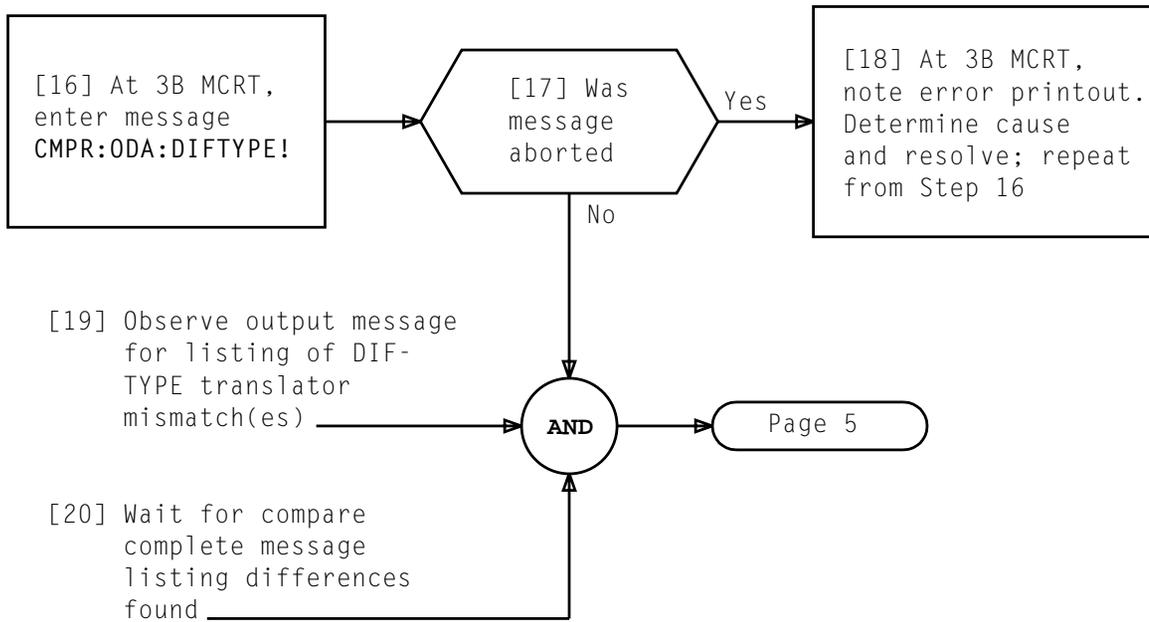


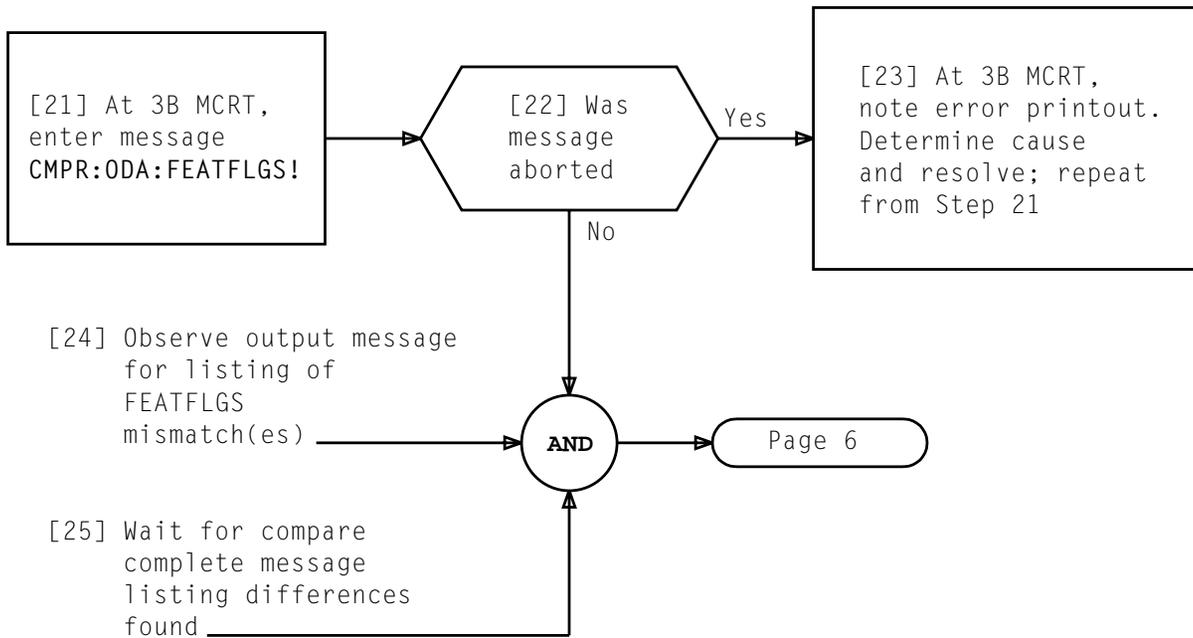
**RUN CROSS-TRANSLATIONS COMPARE PROGRAM**

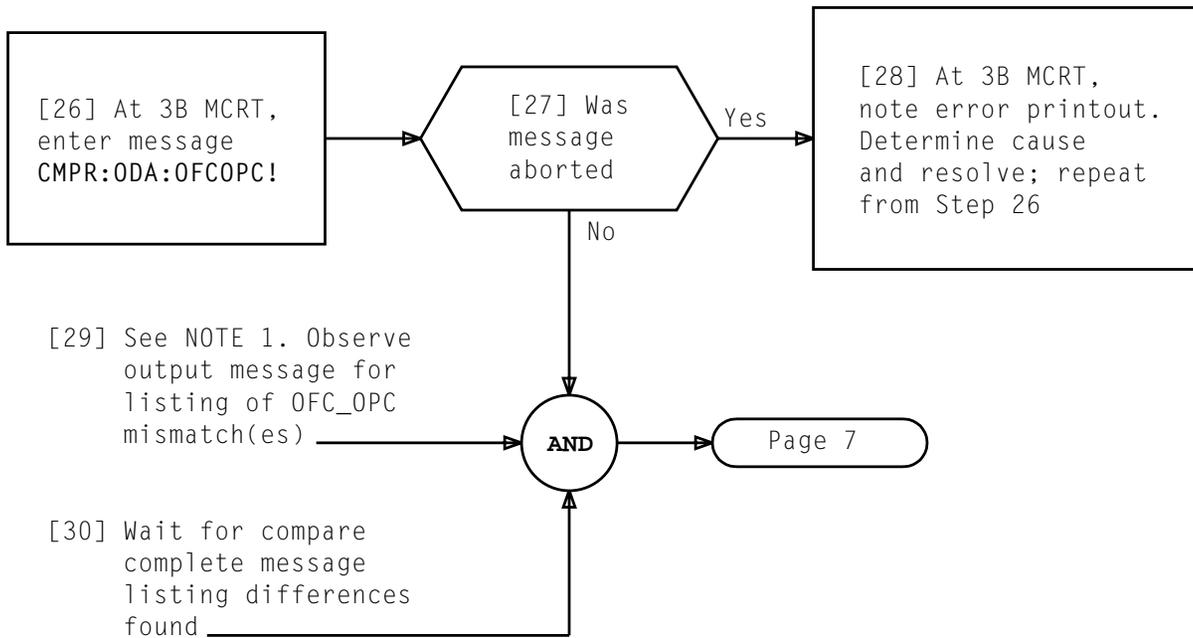
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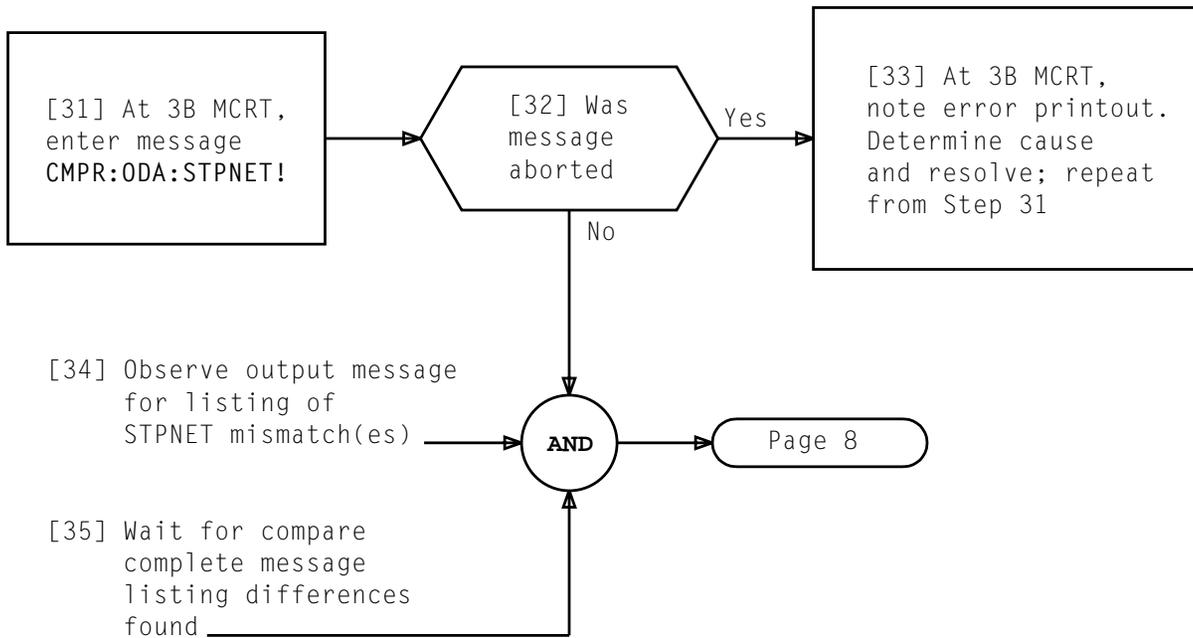


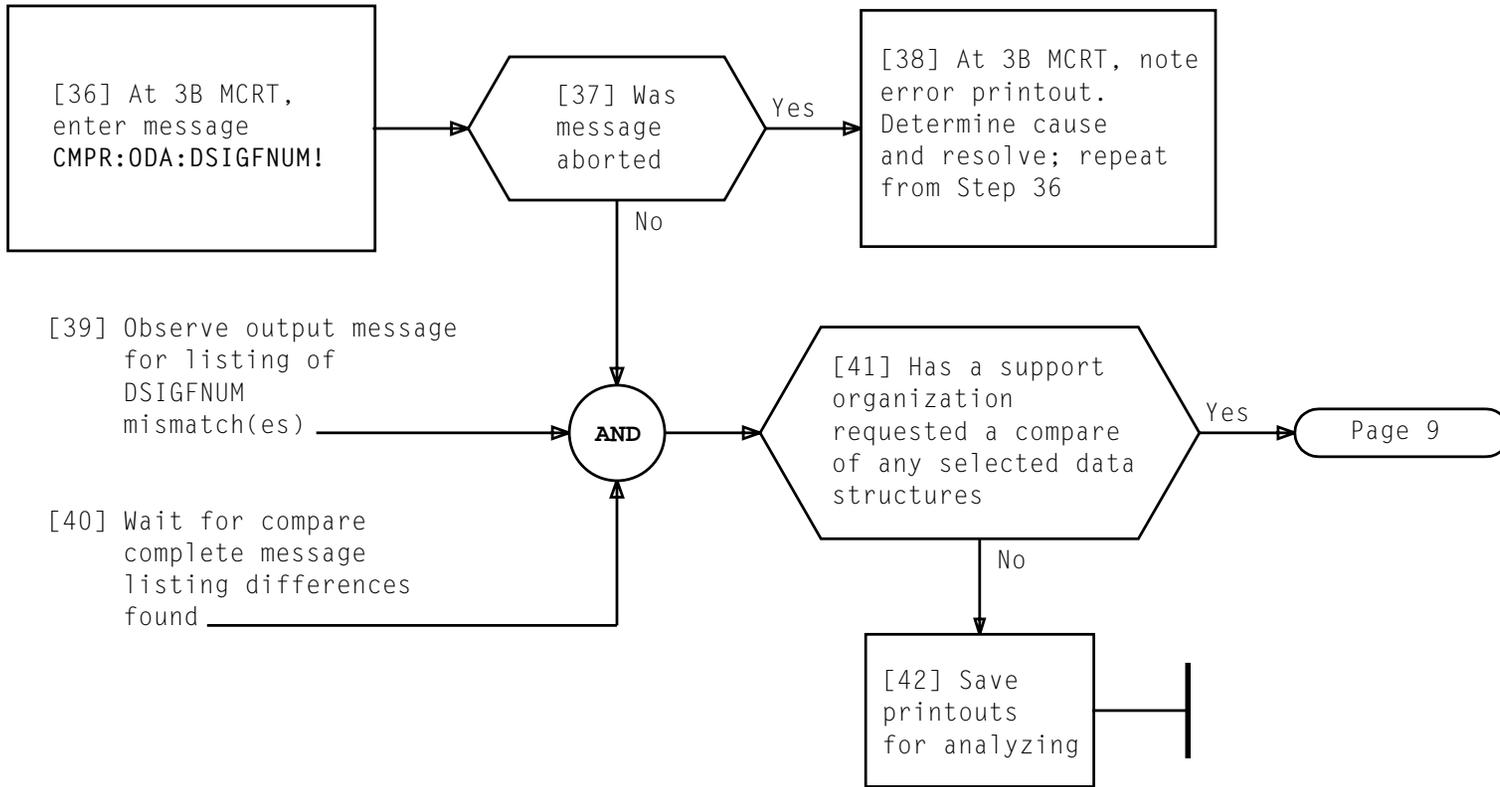






NOTE 1 Expect mismatch if point code is being changed	
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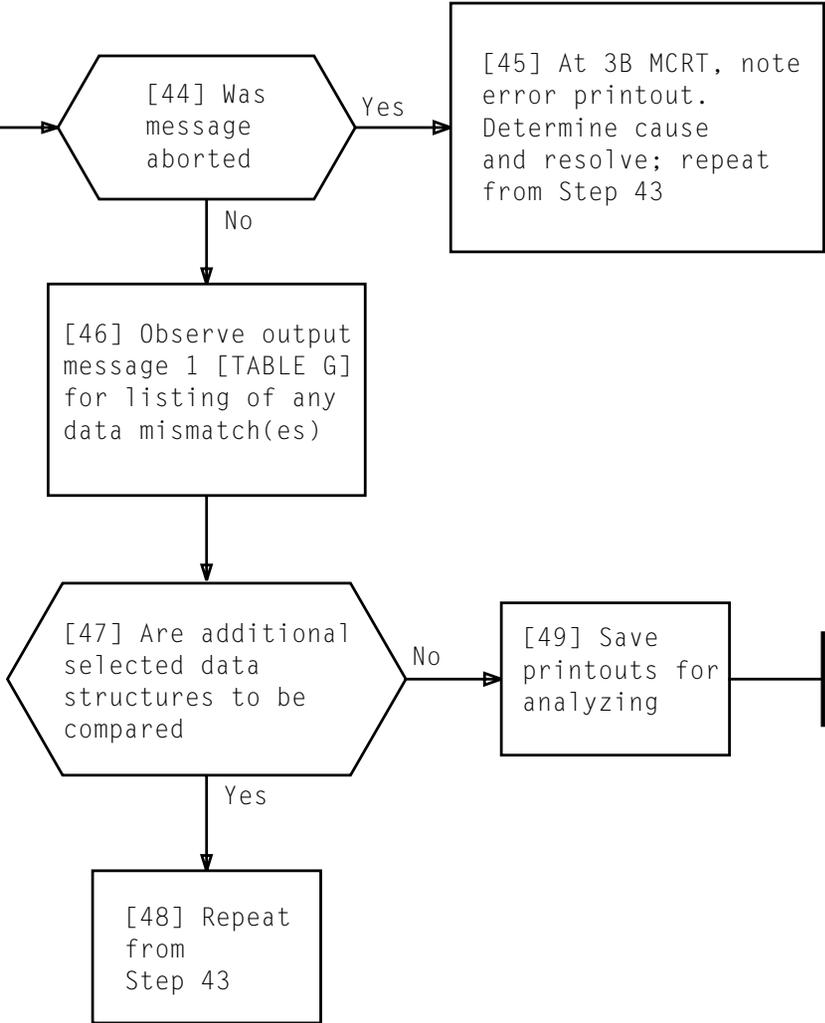




[43] At 3B MCRT, enter message 1 [TABLE F] for compare of selected data structure

TABLE F	
MESSAGE NUMBER	INPUT MESSAGE
1	CMPR:ODA:SPCL,ACTADR a,0OSADR 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 yyyyyyy 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

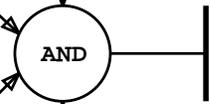


[1] Refer to TABLE A, Page 2, for minimum hardware in-service requirements for update

[2] At 1B 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

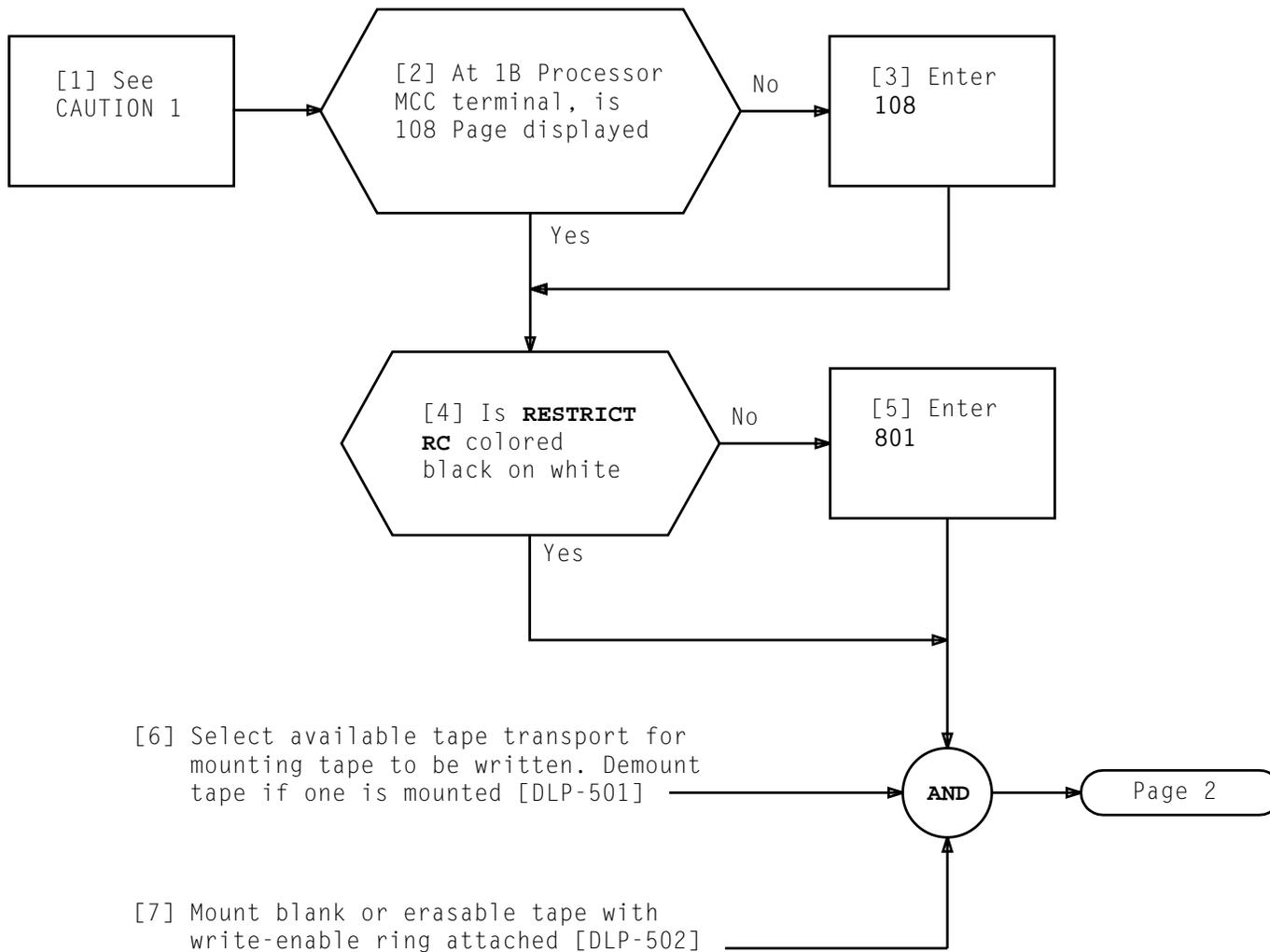


NOTE 1  
If an actual update, only remove power from units in trouble. When verifying tape compatibility, do not remove power from out-of-service units

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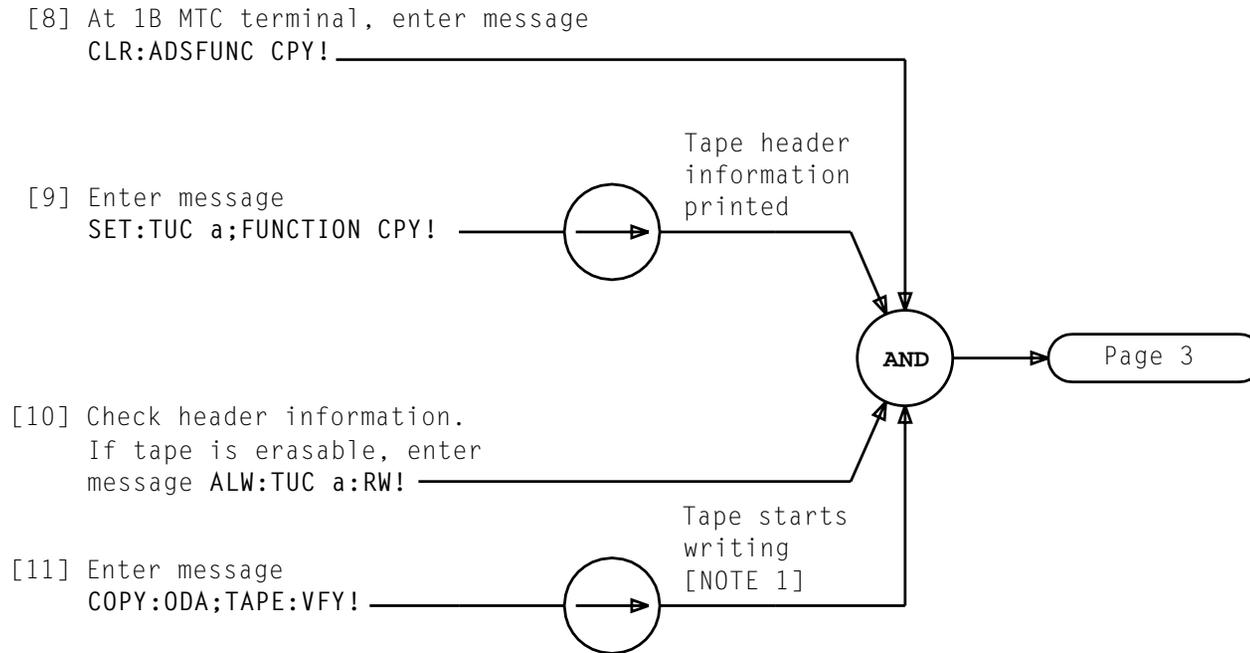
TABLE A			
UNIT	MINIMUM REQUIREMENTS*	UNIT	MINIMUM REQUIREMENTS*
1B Processor	Operating full duplex	TSI	Dedicated TSI operating duplex. All other TSIs in service with no more than one controller out of service
DUS	DUS 0 and 1 in service. Must have run diagnostics ATP including system reinitialization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

\*Any operational unit which fails diagnostics must be powered down



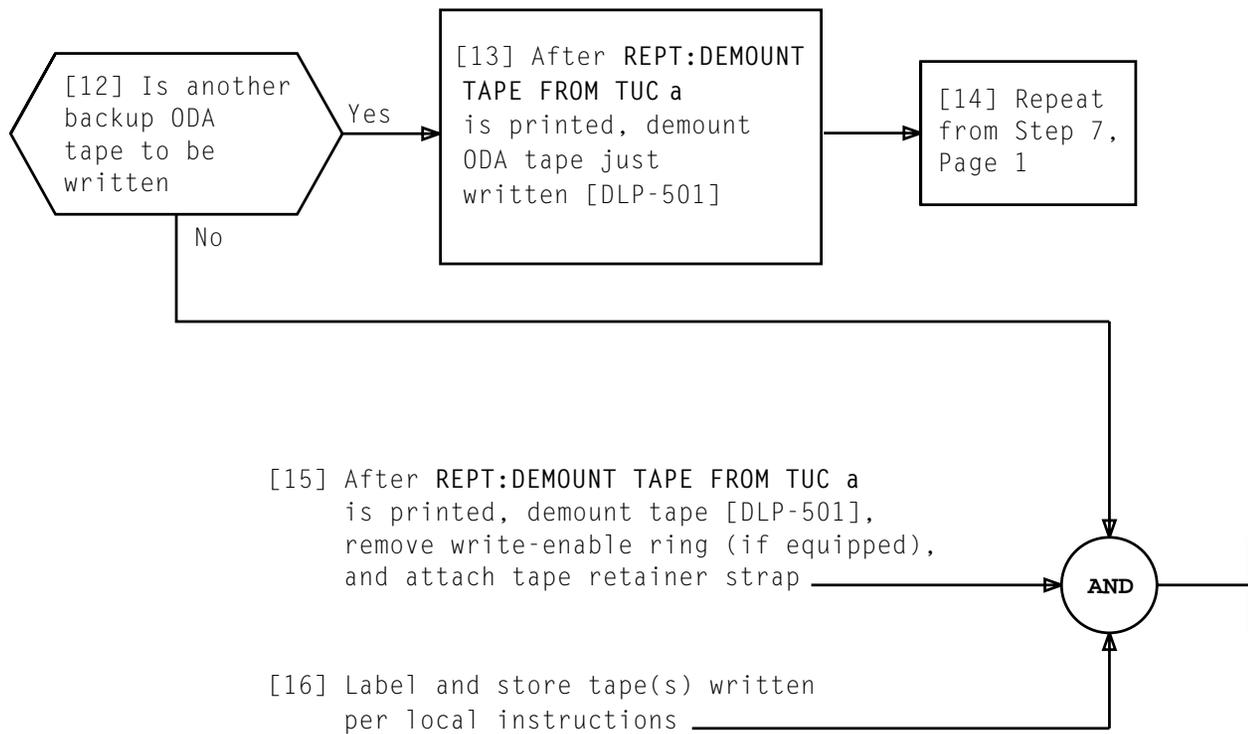
*CAUTION 1*  
*Certain system audits are inhibited during tape writing; therefore, tape writing should be done during light traffic periods*

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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

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[1] Mount a blank or erasable tape with write-enable ring attached on 3B computer tape unit [DLP-505]

[2] See NOTE 1. At 3B MCRT, enter message  
 COPY:APPTAPE:LTS,MT a!  
 a = tape unit number with tape mounted

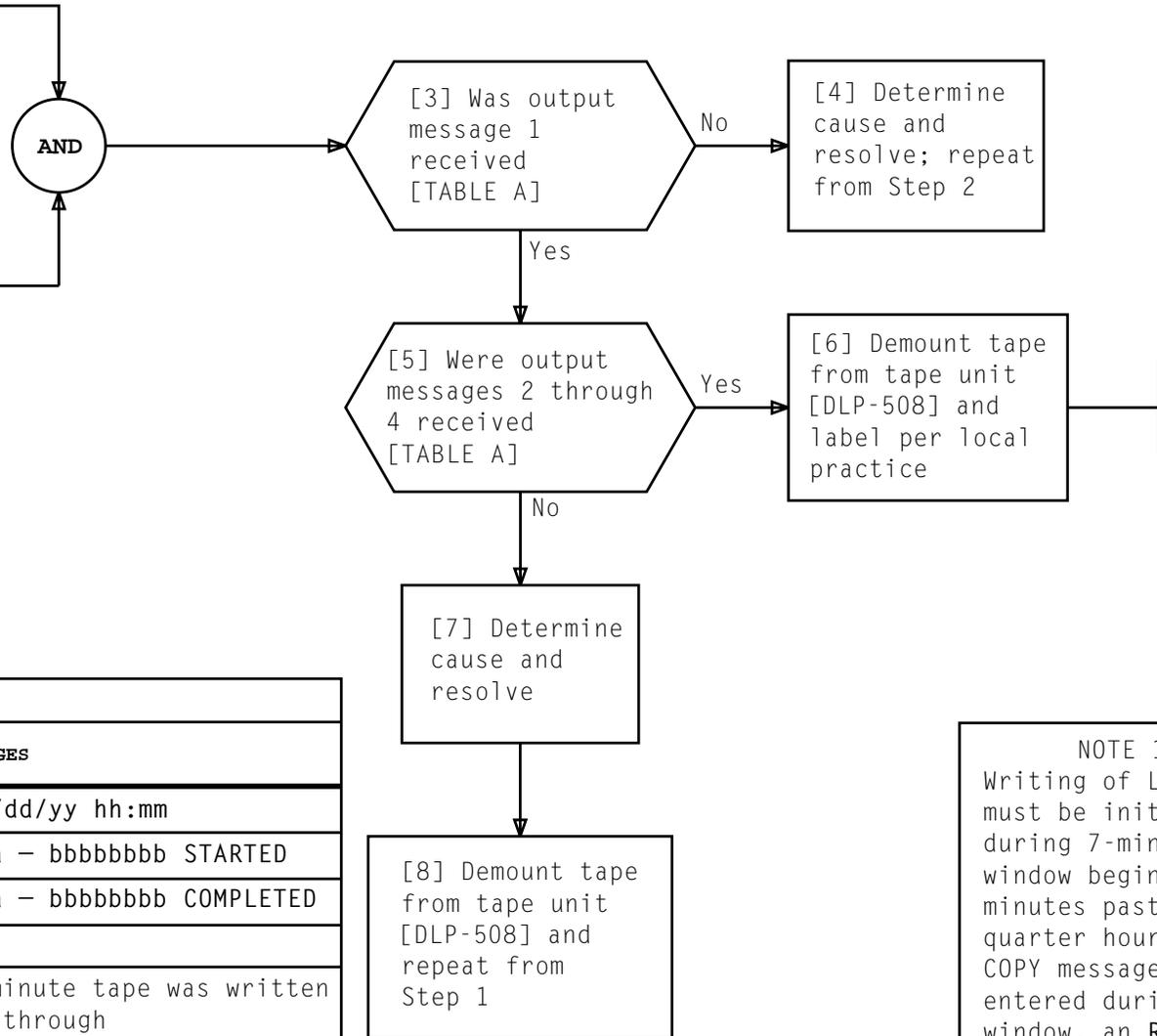


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGES
1	APPTAPE TYPE: LTS, WRITTEN mm/dd/yy hh:mm
2	APPTAPE ADDRESS RANGE aaaaaaaaa - bbbbbbbb STARTED
3	APPTAPE ADDRESS RANGE aaaaaaaaa - bbbbbbbb COMPLETED
4	APPTAPE COMPLETED
mm/dd/yy hh:mm = month/day/year hour:minute tape was written aaaaaaaaa = starting LTS address 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

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[1] See CAUTION 1. Inform MAC to not make any traffic scheduling changes while tape writing is in progress

[2] Select available tape transport for mounting tape to be written. Demount tape if one is mounted [DLP-501]

[3] Mount blank, or erasable, tape with write-enable ring attached [DLP-502]

At 1B MTC terminal:

[4] Enter message  
CLR:ADSFUNC CPY!

[5] Enter message  
SET:TUC a;FUNCTION CPY!

[6] Check header information. If tape is blank or erasable, enter message ALW:TUC a:RW!

[7] Enter message  
COPY:TPM;TAPE:VFY!

Inhibits set and tape mounted

Tape header information printed

Writing of tape begins [NOTE 1]

Tape writing started

Page 2

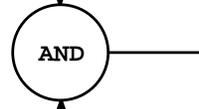
NOTE 1  
After TPM tape is written, COPY:TPM;TAPE COMPL date and time are printed. Tape will then rewind and be verified. After verification has been completed, COPY:VFY;TAPE COMPL is printed followed by REPT: DEMOUNT TAPE FROM TUC a

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

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[8] After tape has been written  
and verified and REPT:DEMOUNT  
TAPE FROM TUC a is printed, demount  
tape just written [DLP-501] and  
remove write-enable ring

[9] Label and store tape per local instructions



[1] Mount a blank, or erasable tape with write-enable ring attached on 3B computer tape unit [DLP-505]

[2] At 3B MCRT, enter message COPY:APPTAPE:TOSL,MT a!  
a = tape unit number with tape mounted

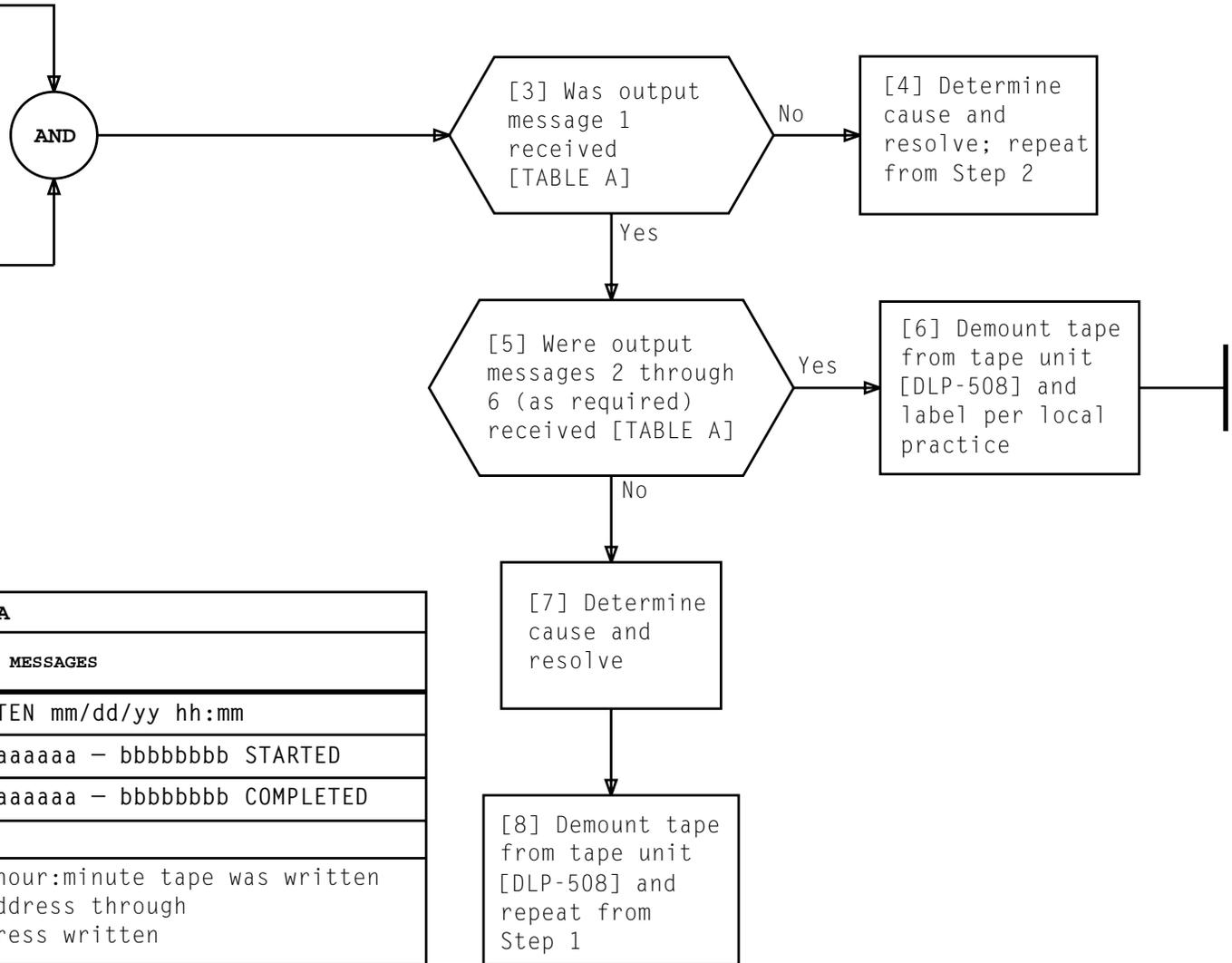


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGES
1	APPTAPE TYPE: TOSL, WRITTEN mm/dd/yy hh:mm
2	APPTAPE ADDRESS RANGE aaaaaaaaa - bbbbbbbb STARTED
3	APPTAPE ADDRESS RANGE aaaaaaaaa - bbbbbbbb COMPLETED
4	APPTAPE COMPLETED
mm/dd/yy hh:mm = month/day/year hour:minute tape was written aaaaaaaa = starting TOSL address through bbbbbbbb = ending TOSL address written	

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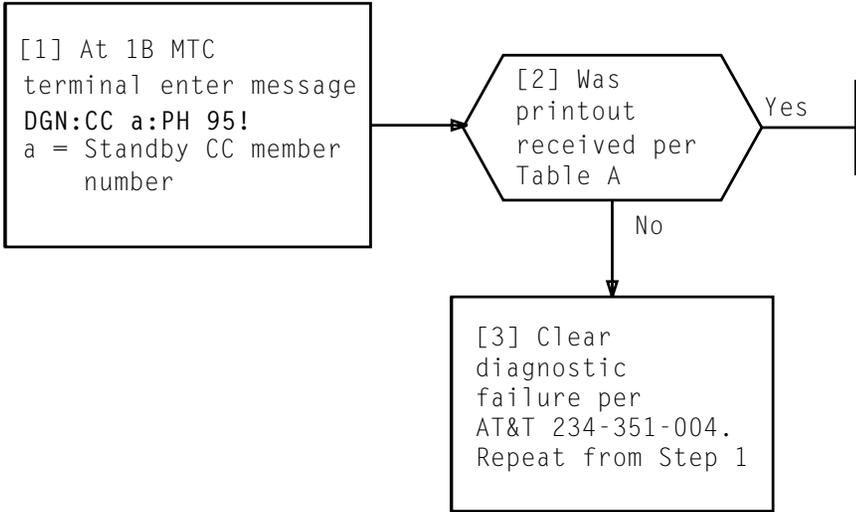


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN:CC a PH 95 ATP DGN:CC a COMPLETED ATP MSG COMPL TEST:CC a DFR ATP

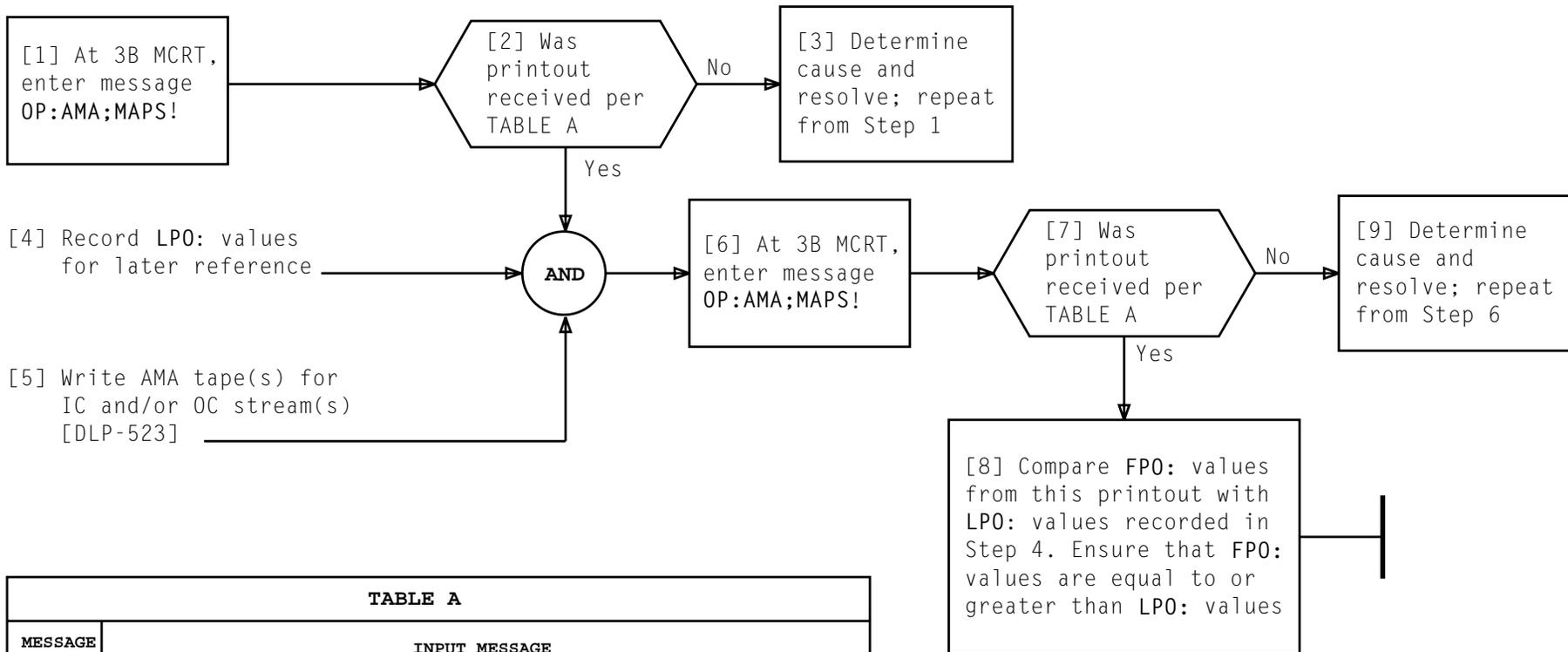


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	REPT AMA DISK MAPS WRITE PARTITION a READ PARTITION a = Partition number AMA data being written
2	PARTITION b DISK MAP: FPO: c      LPO: d      FPS: _____ LPS: _____ FSO: _____ LSO: _____ FSS: _____ LSS: _____ FBO: _____ LBO: _____ FBS: _____ LBS: _____  b = Equipped 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-505]

[2] At 3B MCRT, enter message for appropriate stream  
 VER:AMATAPE;MT a:b!  
 a = Tape drive number  
 b = IC or OC

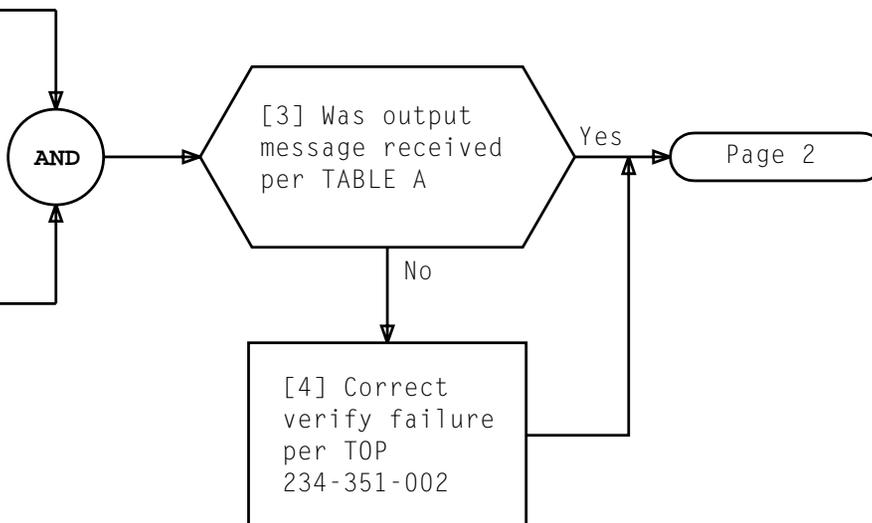
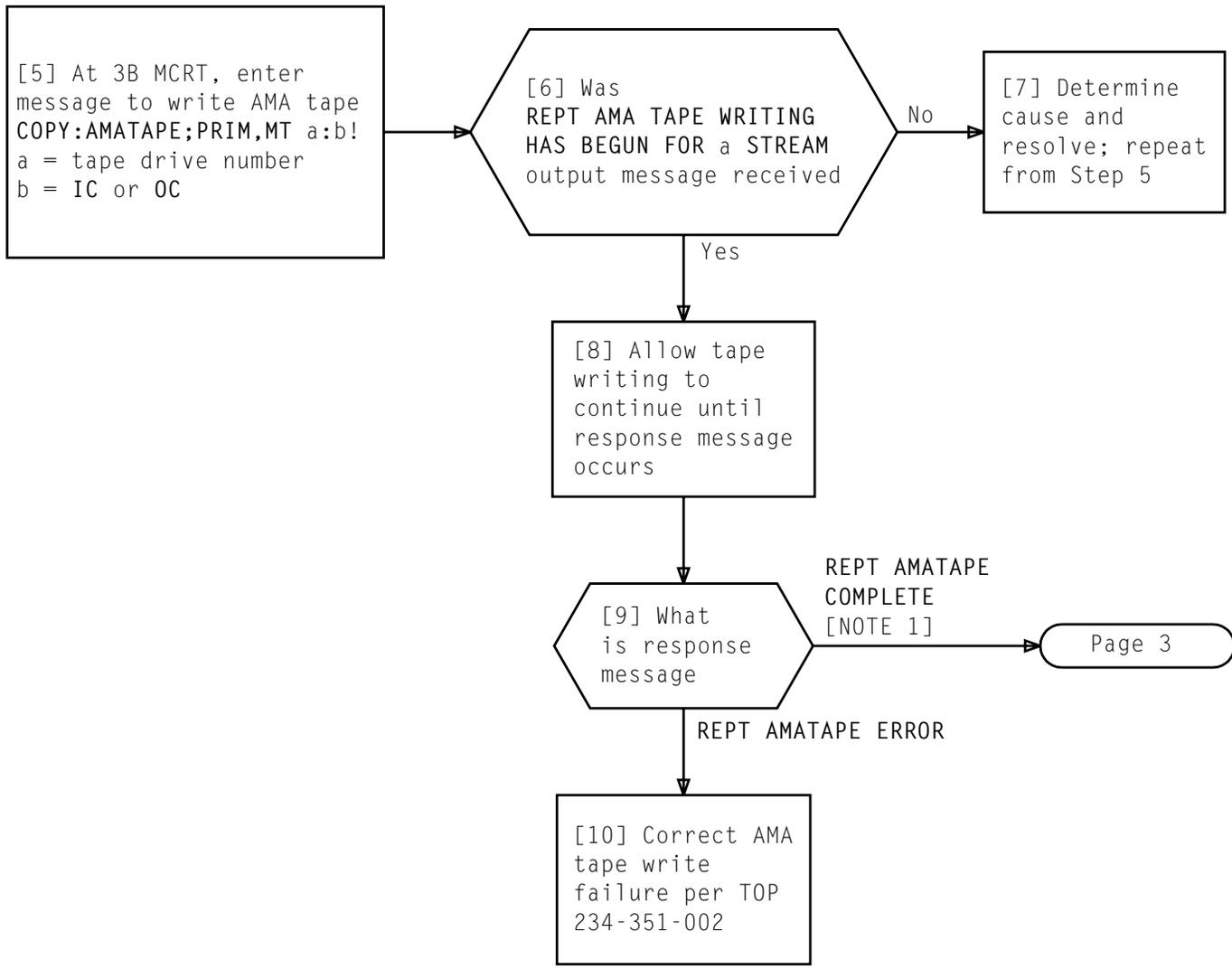
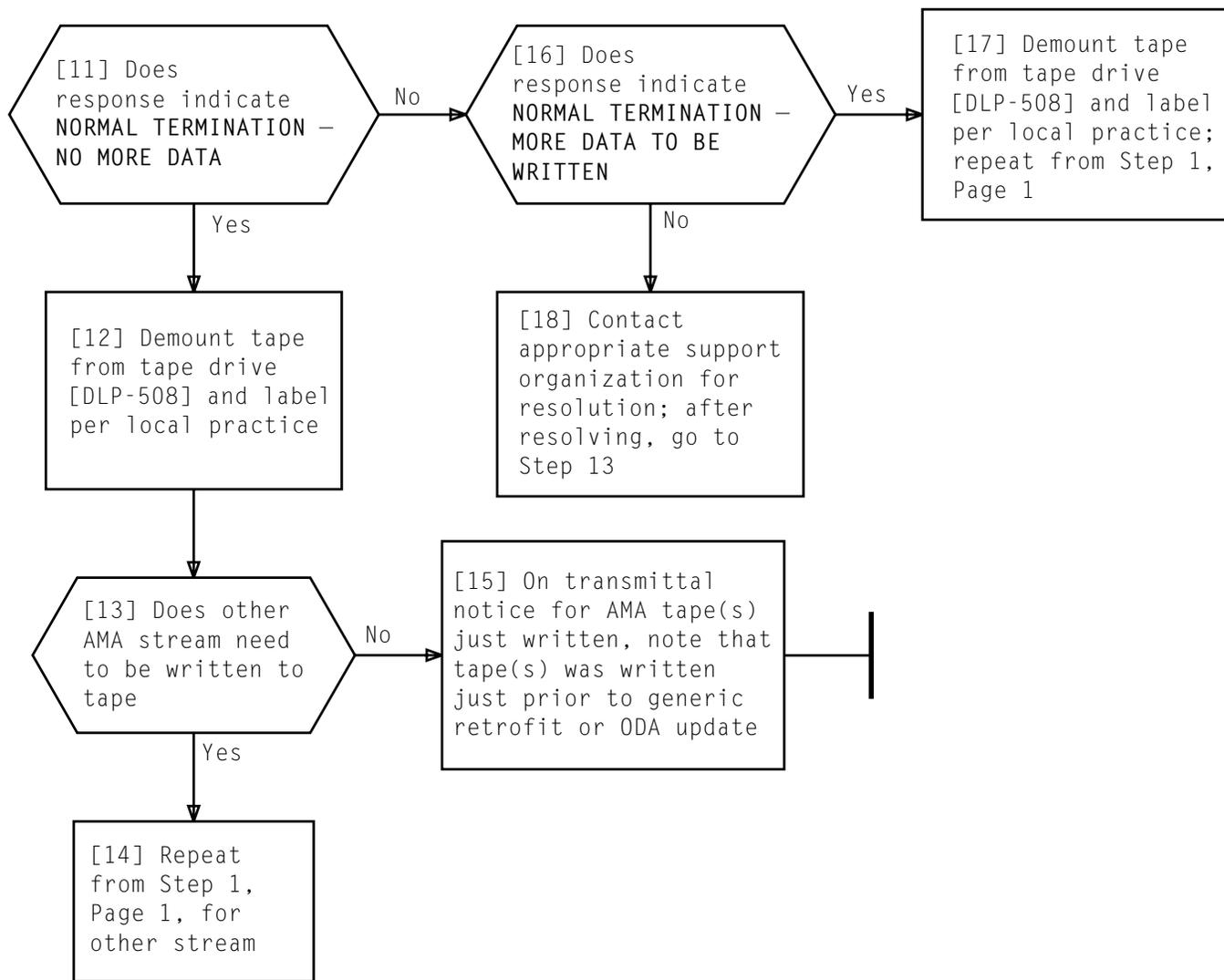


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	REPT AMATAPE VERIFY FOR a STREAM VOL SER NUMBER b DATA SET ID c EXPIRATION DATE d-e TAPE DRIVE NUMBER f AMA TAPE CAN BE WRITTEN  a = IC or OC b = Tape serial number c = Data set ID d = Year of expiration date e = Day of expiration (1 through 365) f = Tape drive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



NOTE 1 Output message contains detailed data of AMA tape	
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**WRITE AMA TAPE(S)**



**WRITE AMA TAPE(S)**

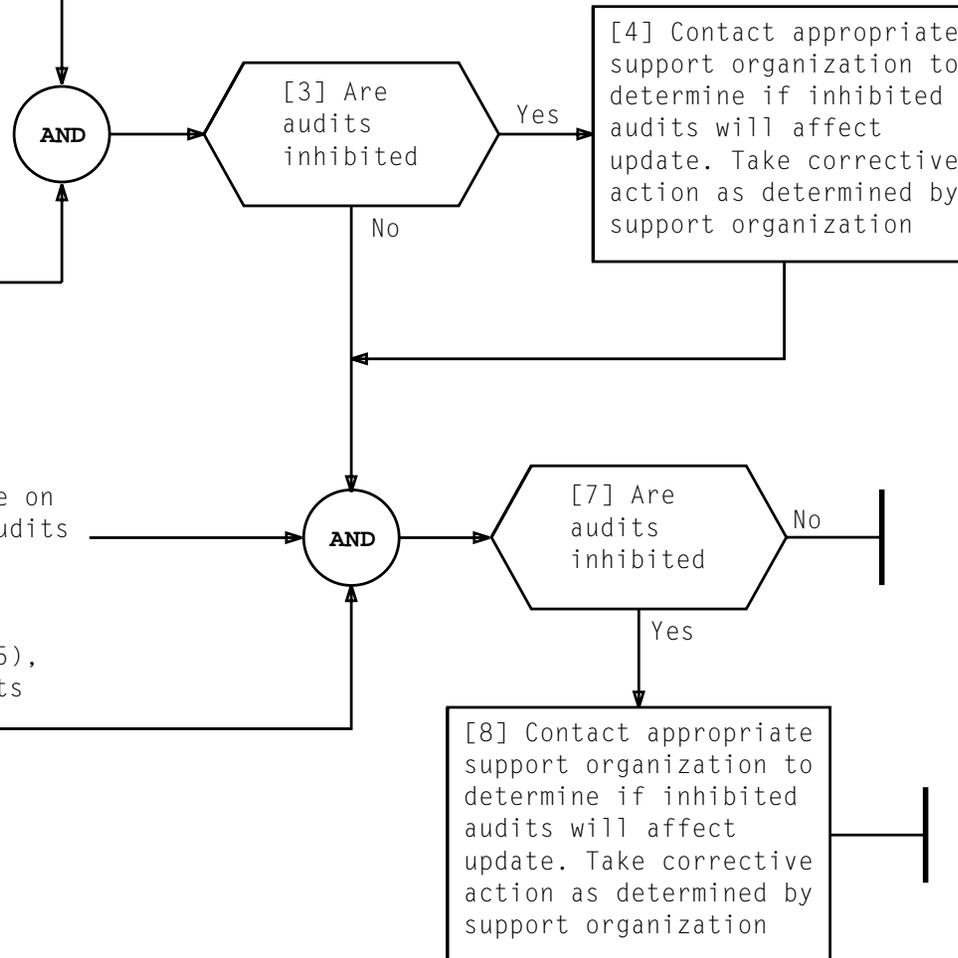
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[1] At 1B MTC terminal, enter message OP:AUDSTAT!

[2] Using printout (Step 1), determine if any audits are inhibited

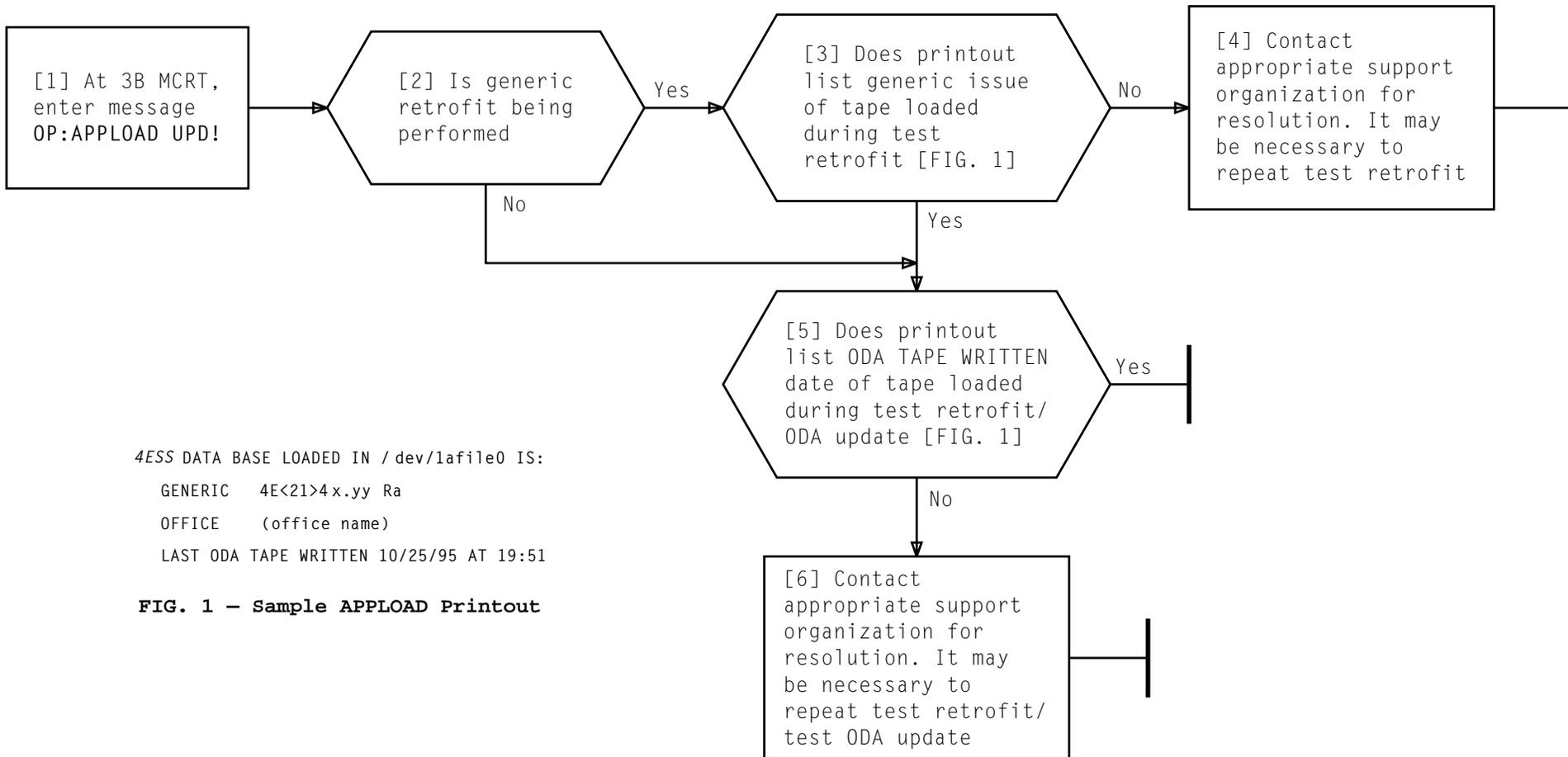
[5] At 3B MCRT ROP, locate on printout, status of audits

[6] Using printout (Step 5), determine if any audits are inhibited



## VERIFY NO AUDITS INHIBITED

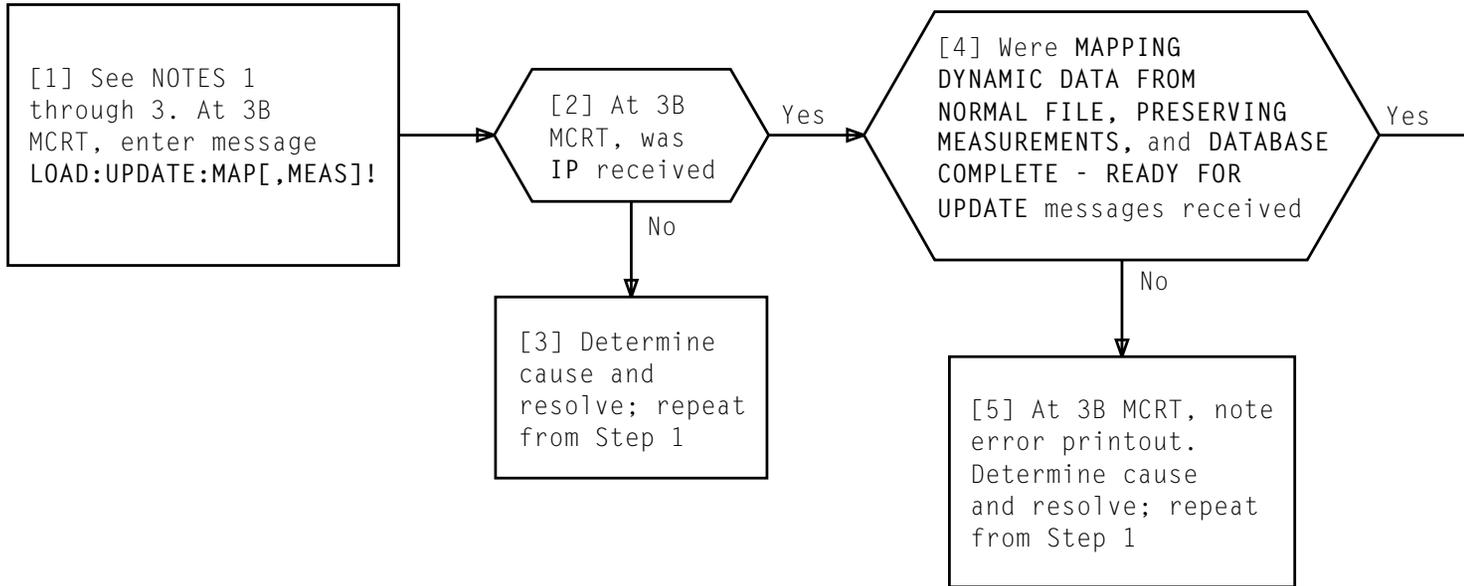
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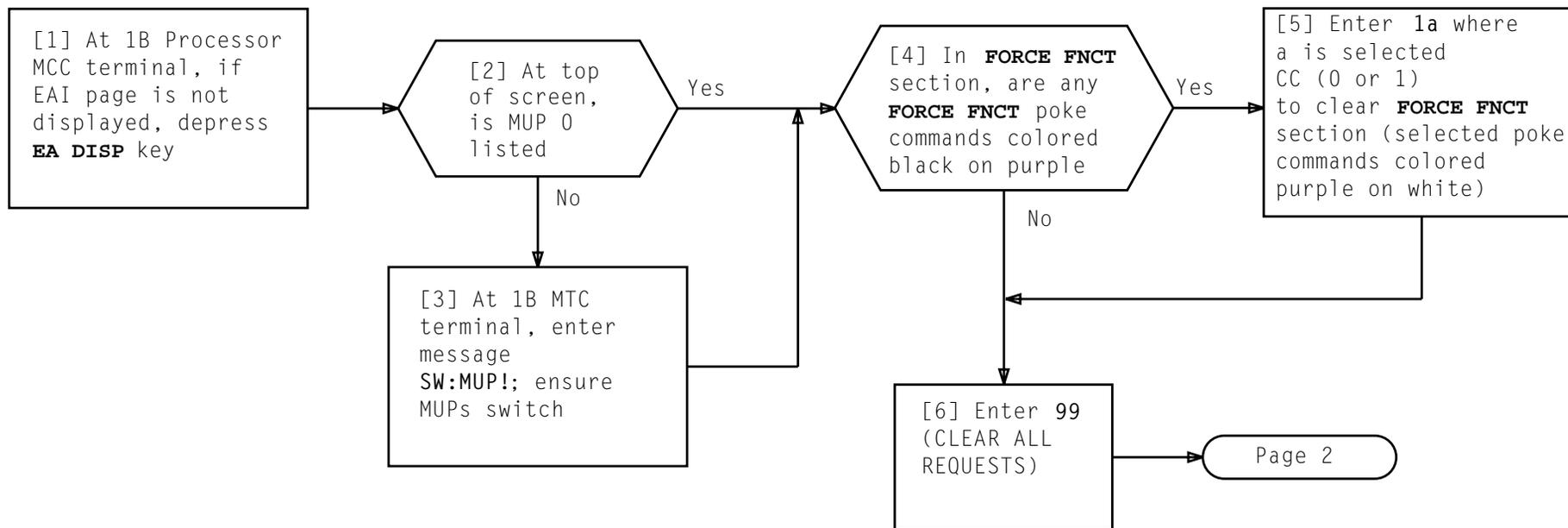
```

4ESS DATA BASE LOADED IN / dev/1afile0 IS:
  GENERIC  4E<21>4x.yy Ra
  OFFICE   (office name)
  LAST ODA TAPE WRITTEN 10/25/95 AT 19:51
  
```

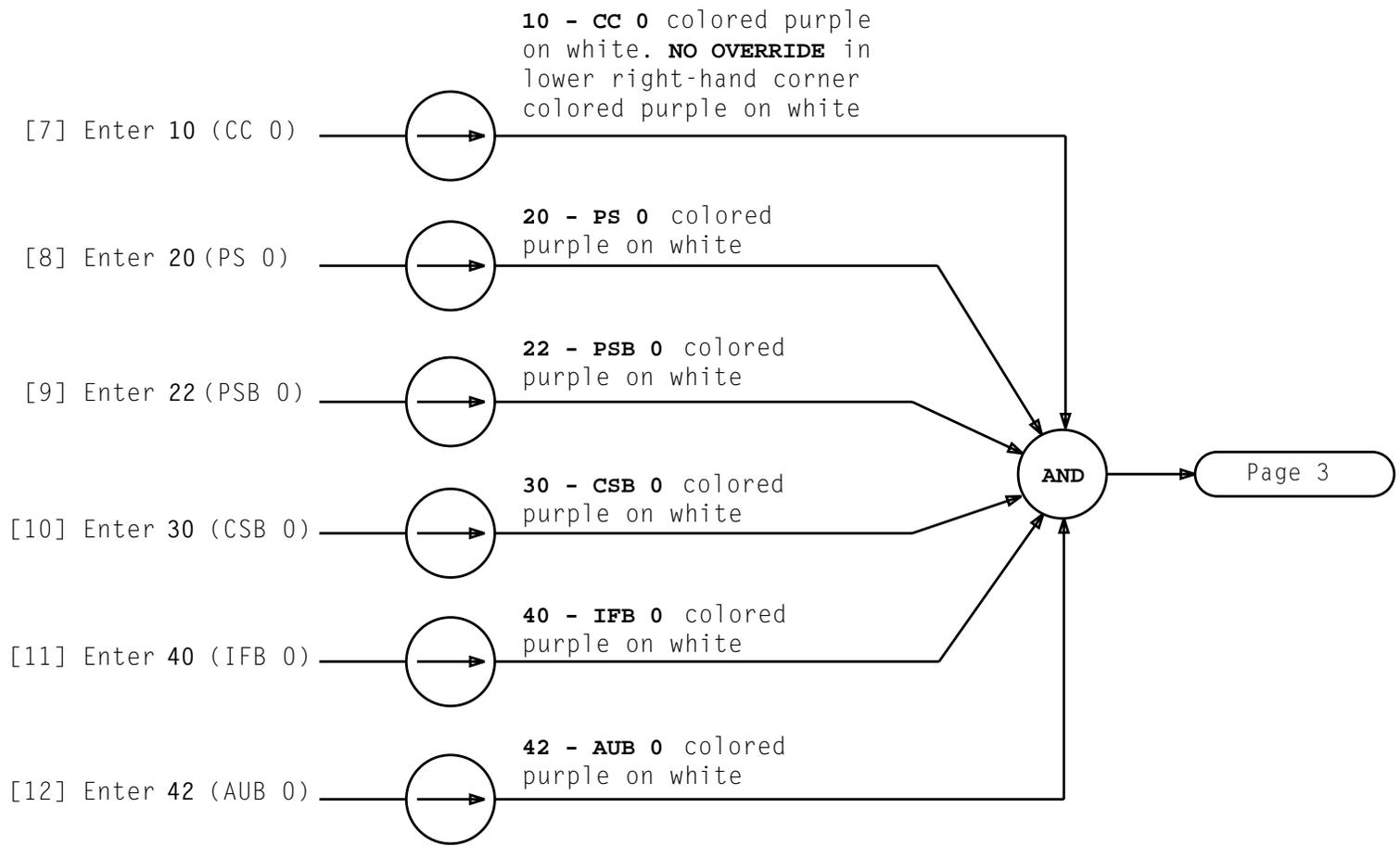
**FIG. 1 - Sample APPLOAD Printout**

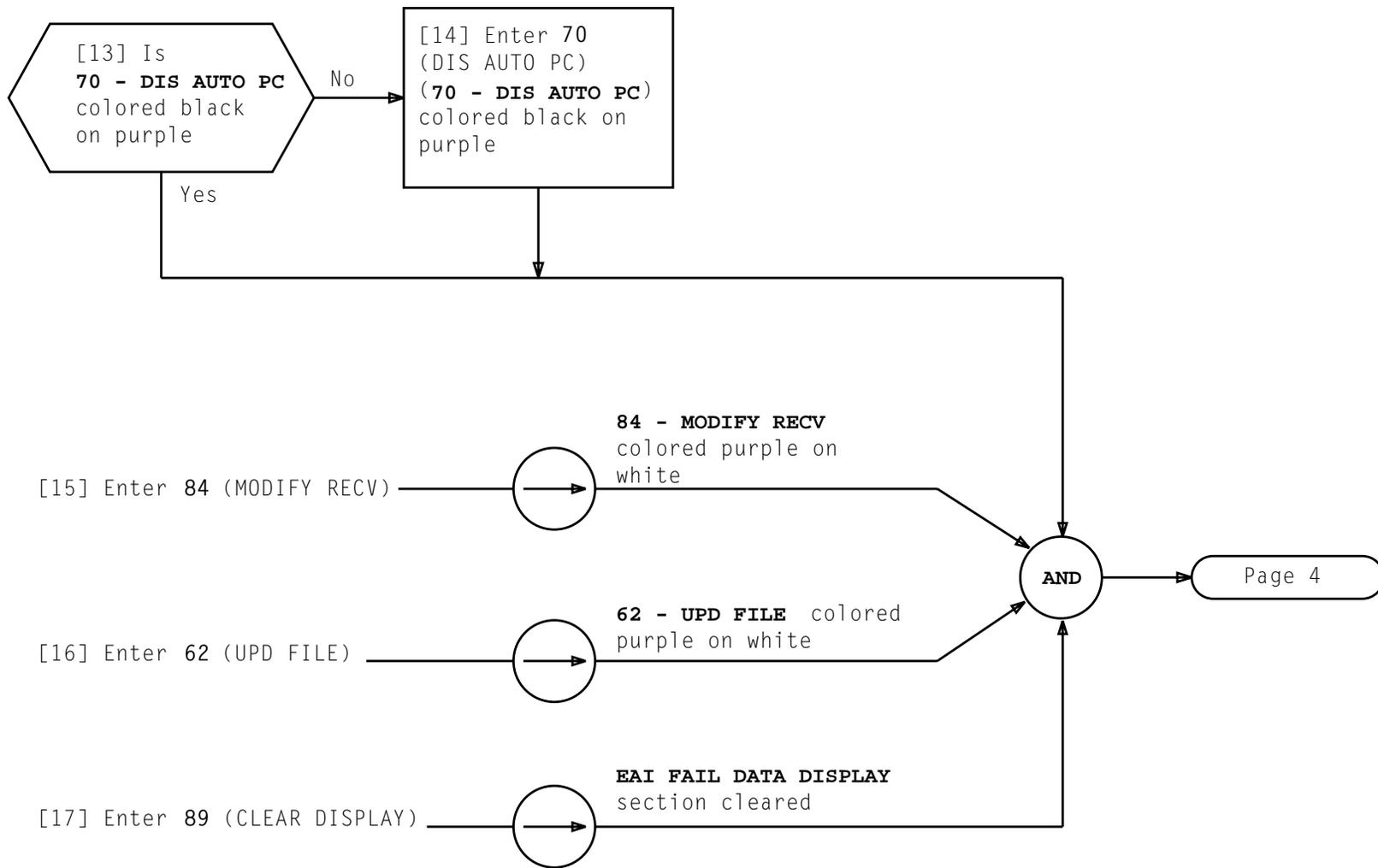


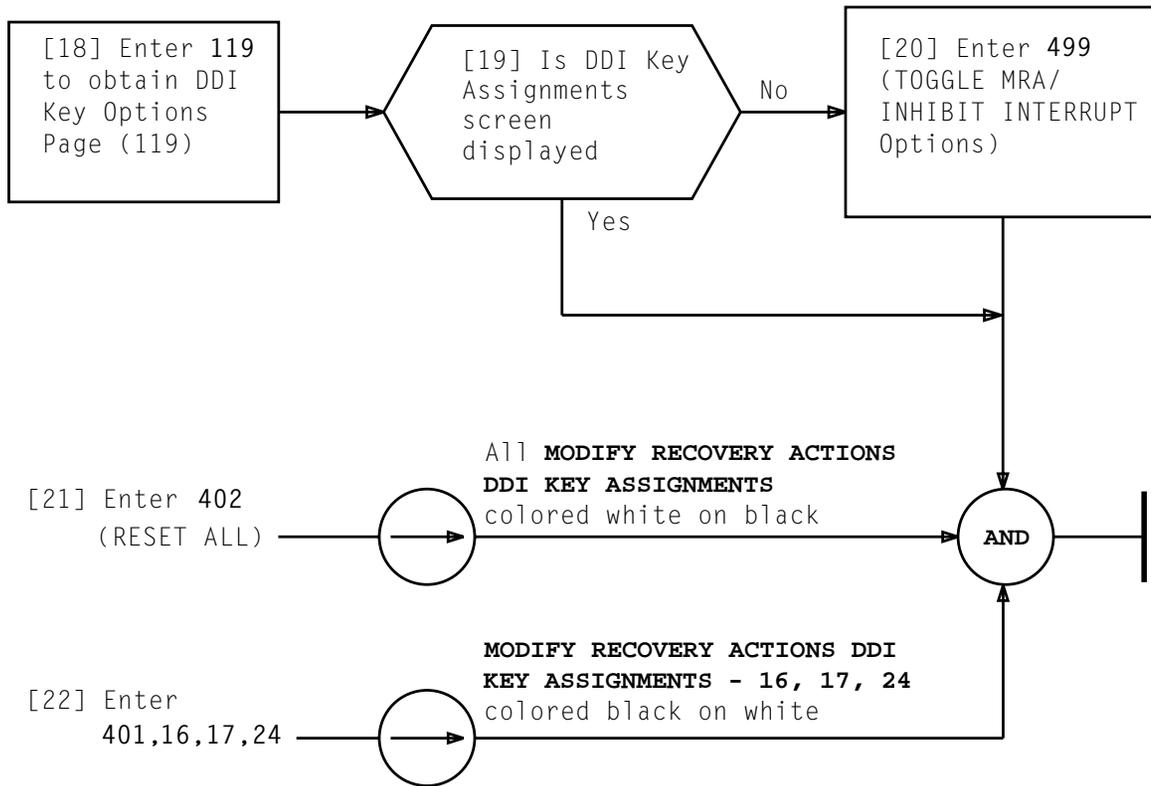
NOTES	
1. If schedules that are entered by SCHED:MEAS input message are to be retained for update, include MEAS option in LOAD message (AT&T offices should use MEAS option)	
2. WAITING FOR 4 TO 13 MINUTES PAST QUARTER HOUR output message may be received. System will automatically map dynamic data when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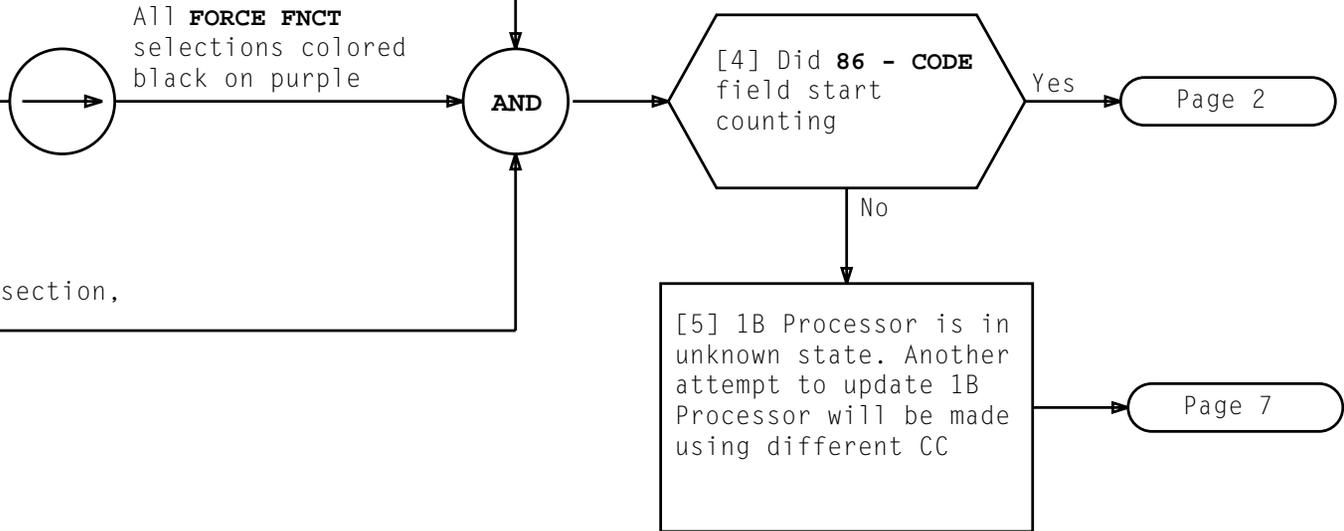




[1] At 1B Processor MCC terminal,  
if EAI Page is not displayed,  
depress **EA DISP** key

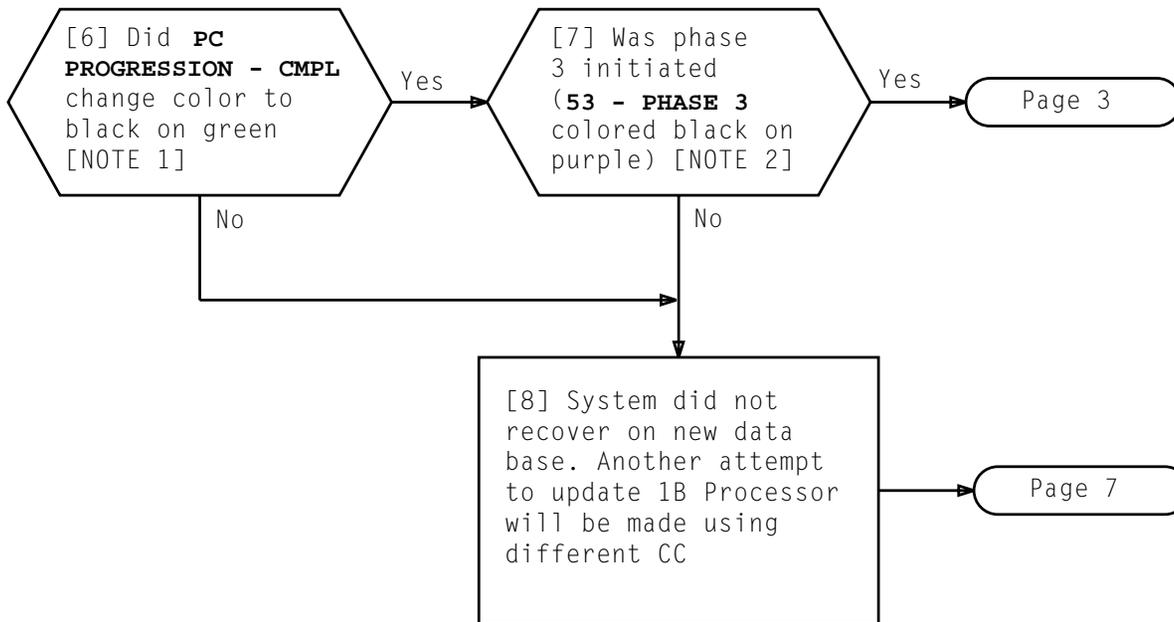
[2] Enter **01** (HARD A).  
Start timing the  
update

[3] In **EAI FAIL DATA DISPLAY** section,  
observe **86 - CODE** field



## PERFORM UPDATE

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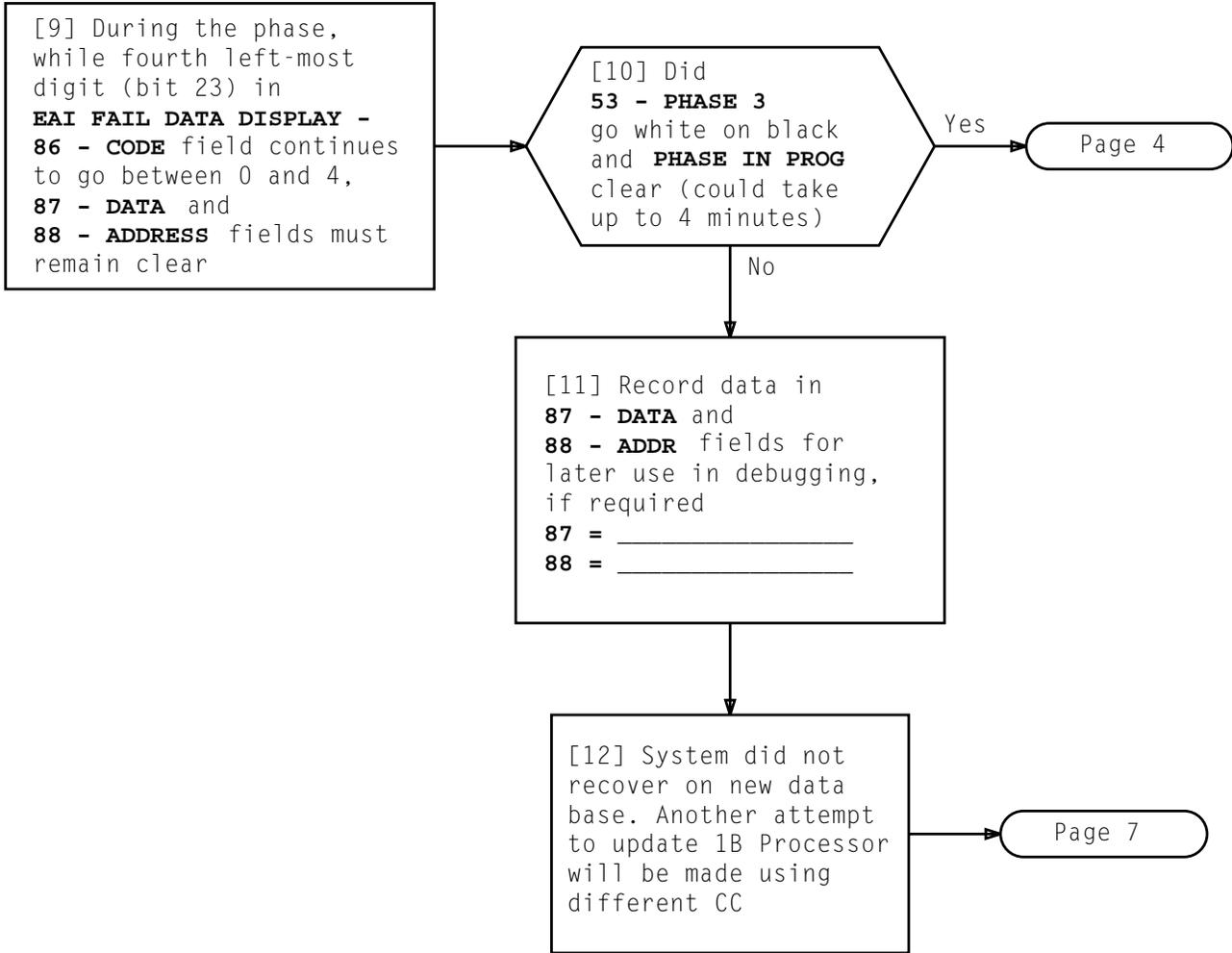
86 - CODE: 0'000aaabbbb  
 87 - DATA:  
 88 - ADDR:

FIG. 1 - 86 - CODE Field Layout

NOTES

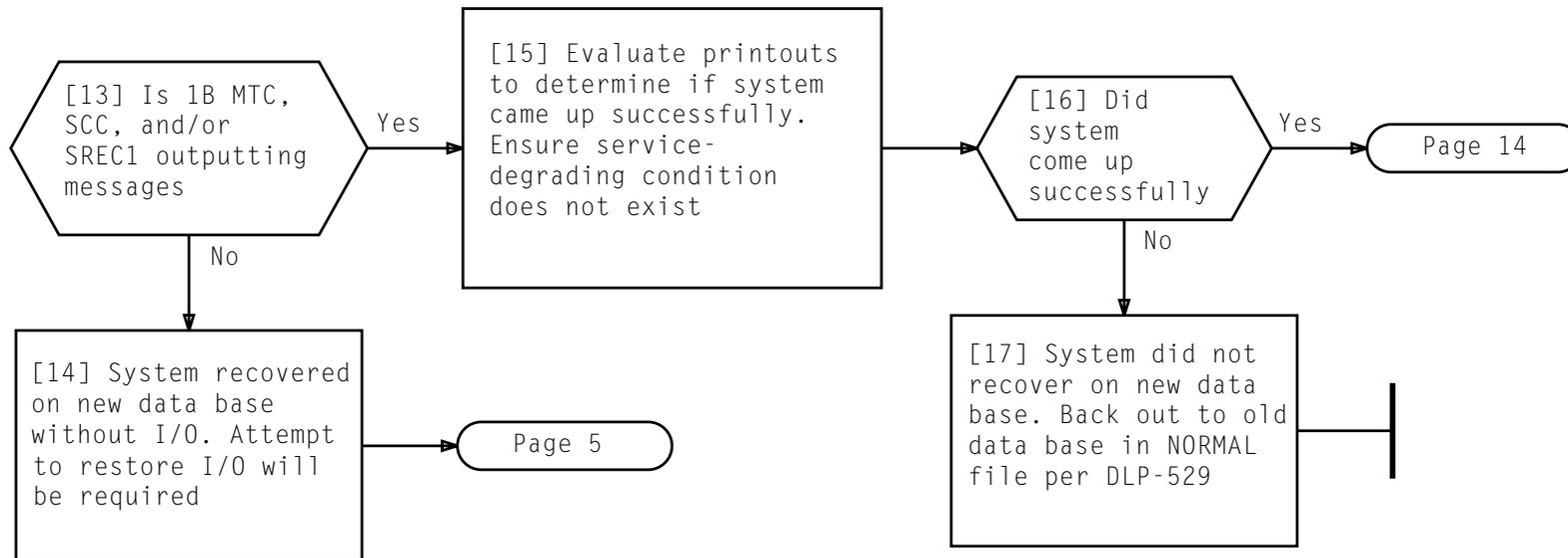
- During Step 6, in **EAI FAIL DATA DISPLAY** section, octal digits "aaa" and "bbbb" [FIG. 1] in **86 - CODE** field must begin incrementing within 10 seconds after entering 01. "bbbb" indicates that 1B Processor is attempting to pump, and "aaa" indicates memory range being pumped. "aaa" and "bbbb" will continue to increment until **PC PROGRESSION - CMPL** color black on green, approximately 2 minutes after entering 01. If "aaa" does not begin to increment and "bbbb" does begin to increment, this is a failure. If at any time "aaa" stops incrementing and "bbbb" continues to increment, this is a failure. If data is received in **87 - DATA** field, this is a failure
- When a phase 3 is initiated, at 1B Processor MCC terminal, fourth left-most digit in **EAI FAIL DATA DISPLAY - 86 - CODE** field will go between 0 and 4. **53 - PHASE 3** colored black on purple. In lower left-hand corner, **PHASE IN PROG** colored white on red. **PC PROGRESSION - CMPL** continues to be colored black on green

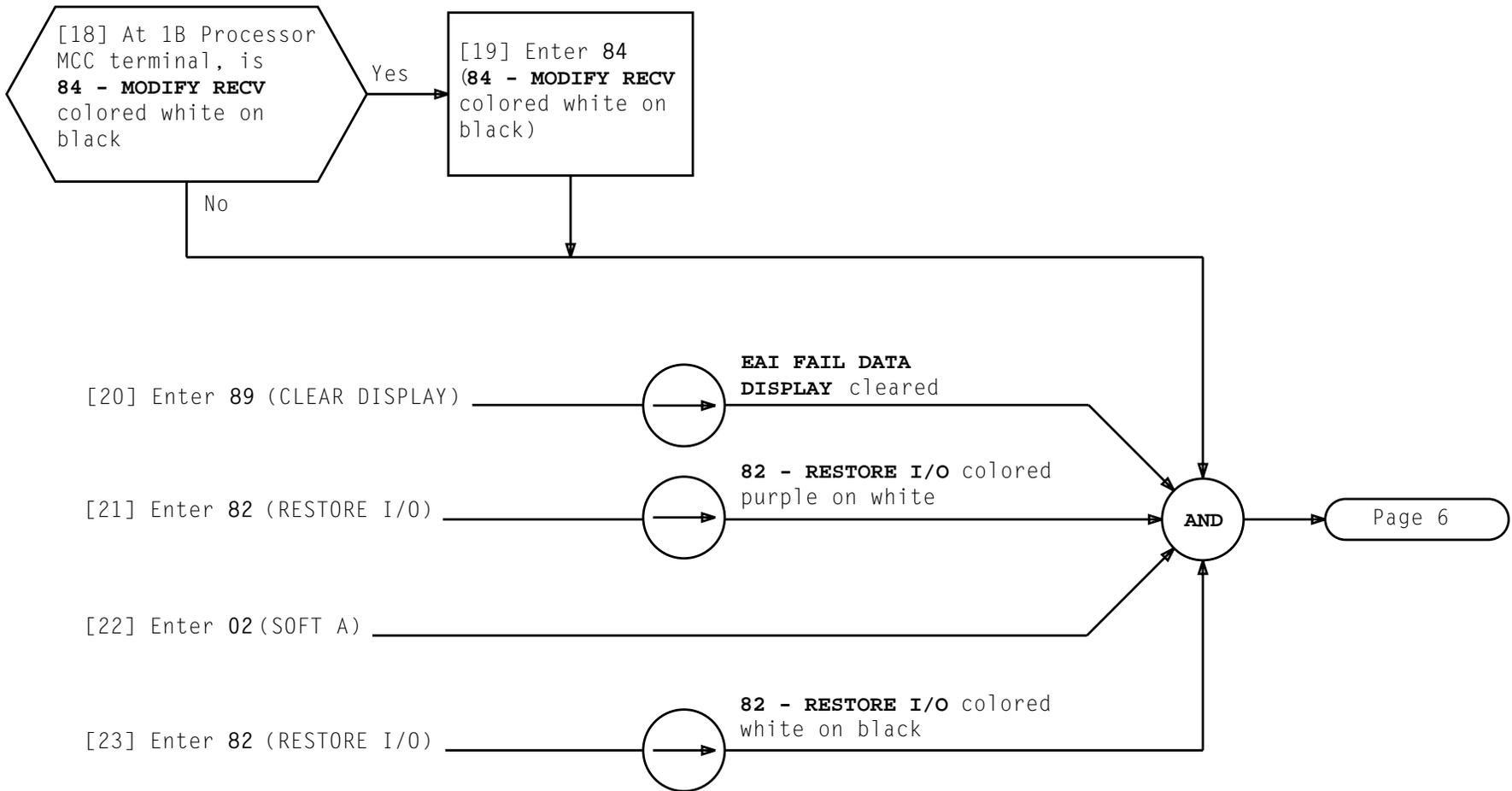
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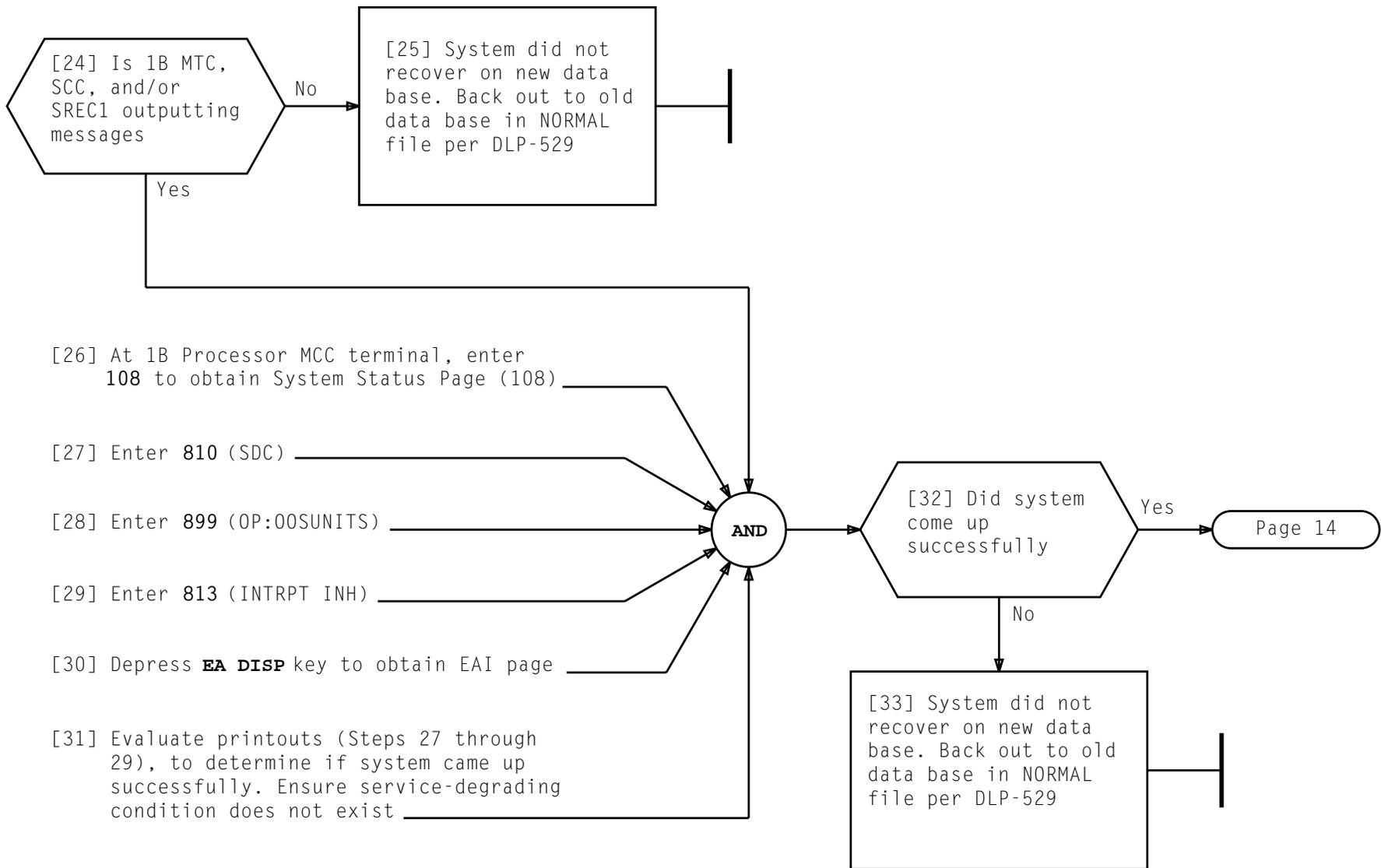


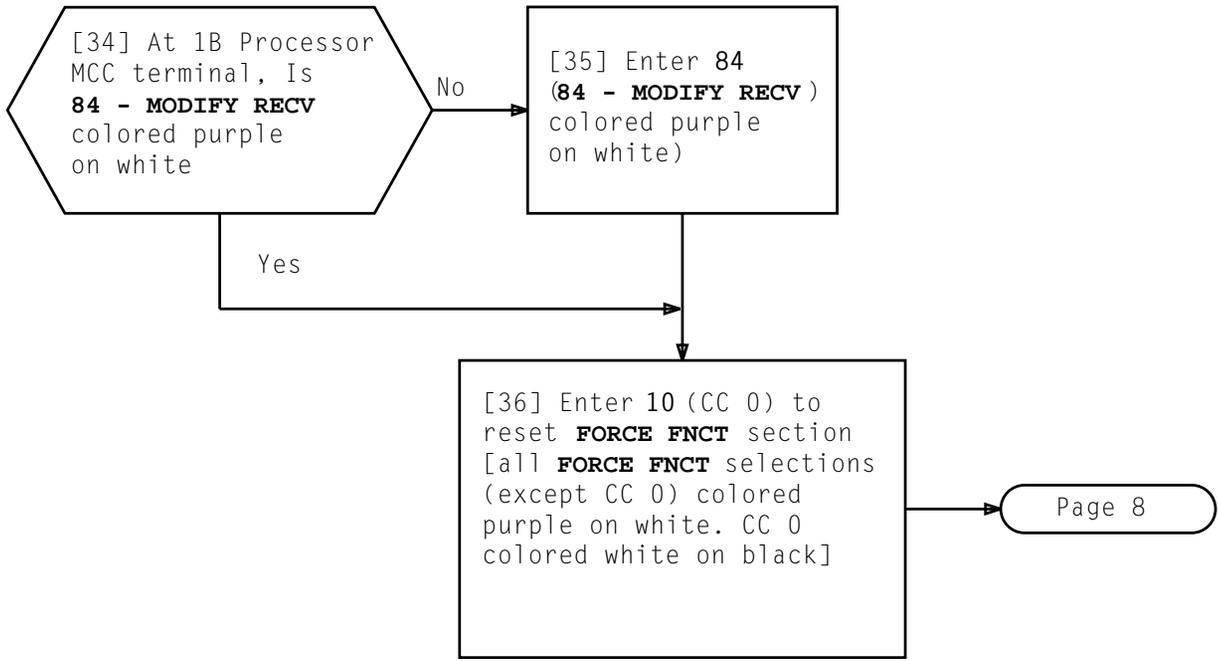
**PERFORM UPDATE**

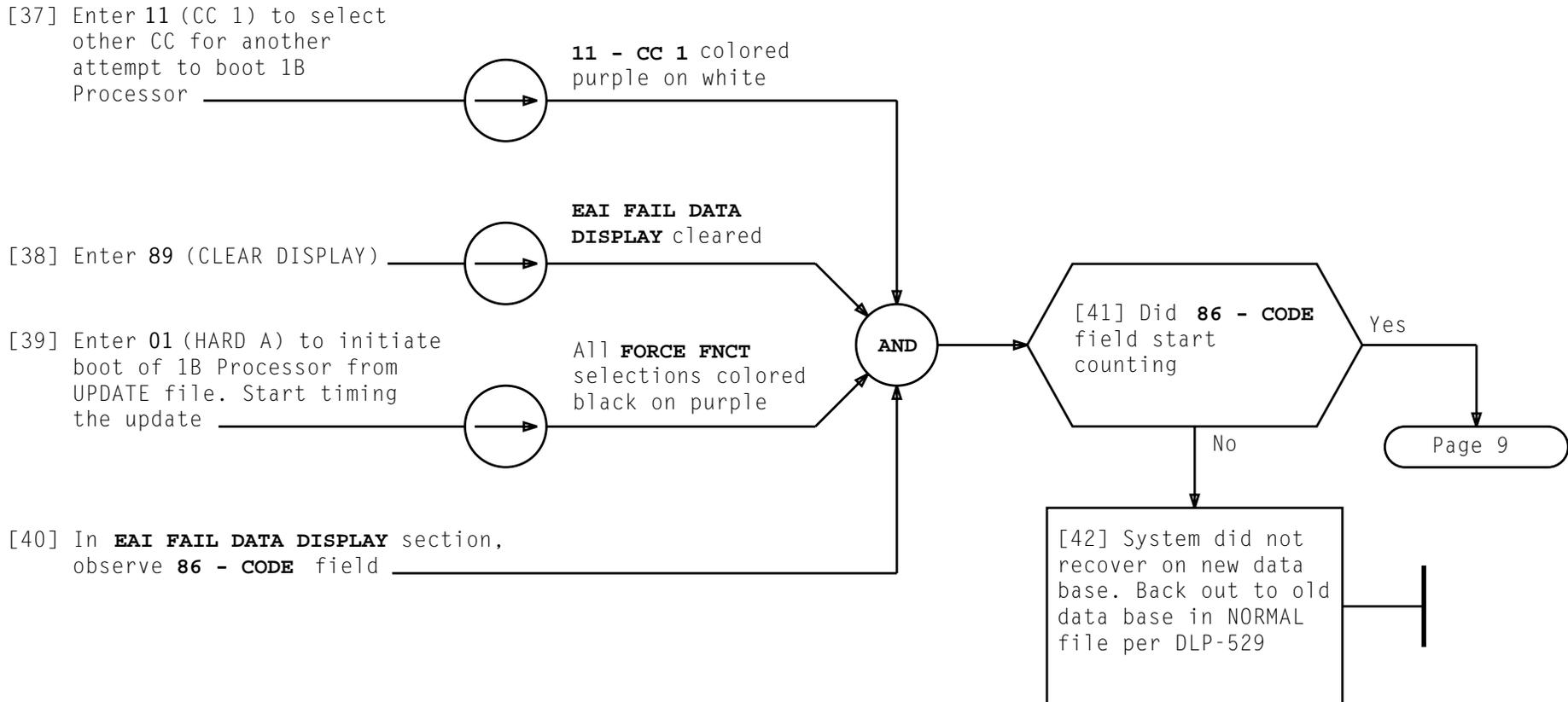
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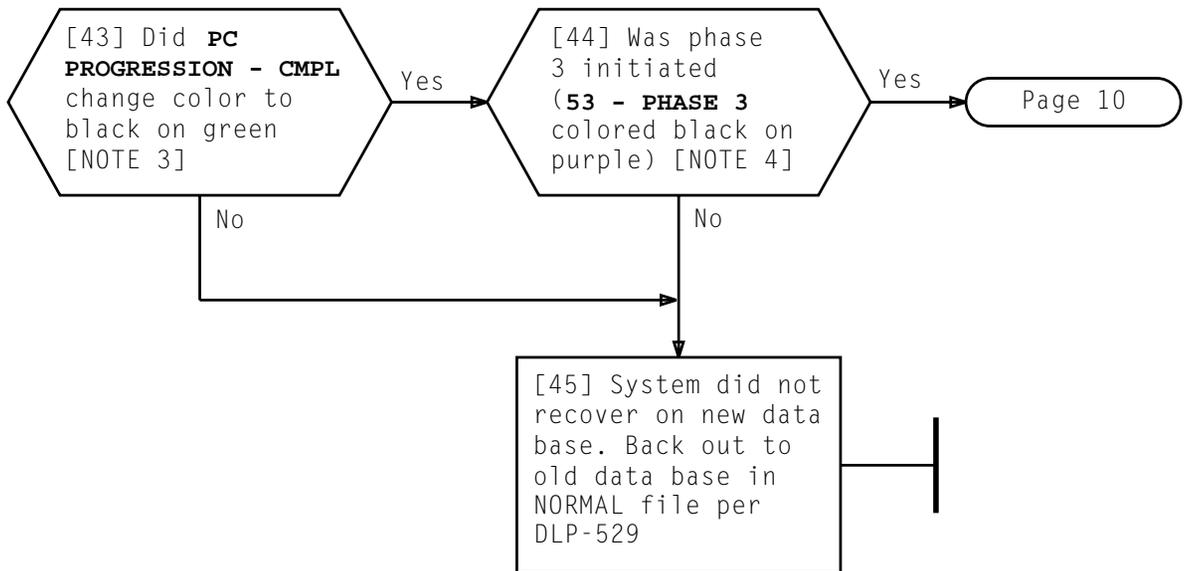






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86 - CODE: 0'000aaabbbb  
 87 - DATA:  
 88 - ADDR:

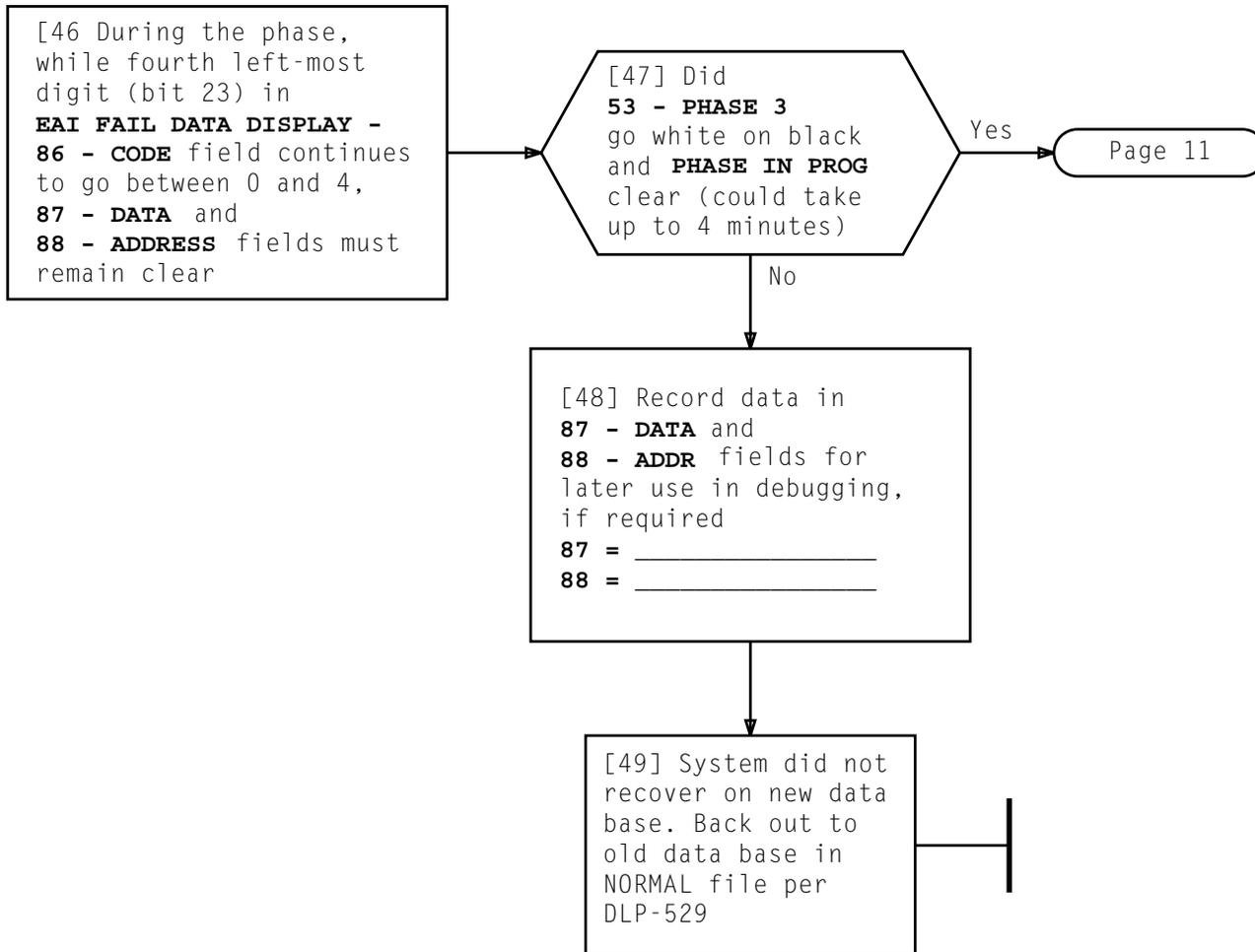
FIG. 2 - 86 - CODE Field Layout

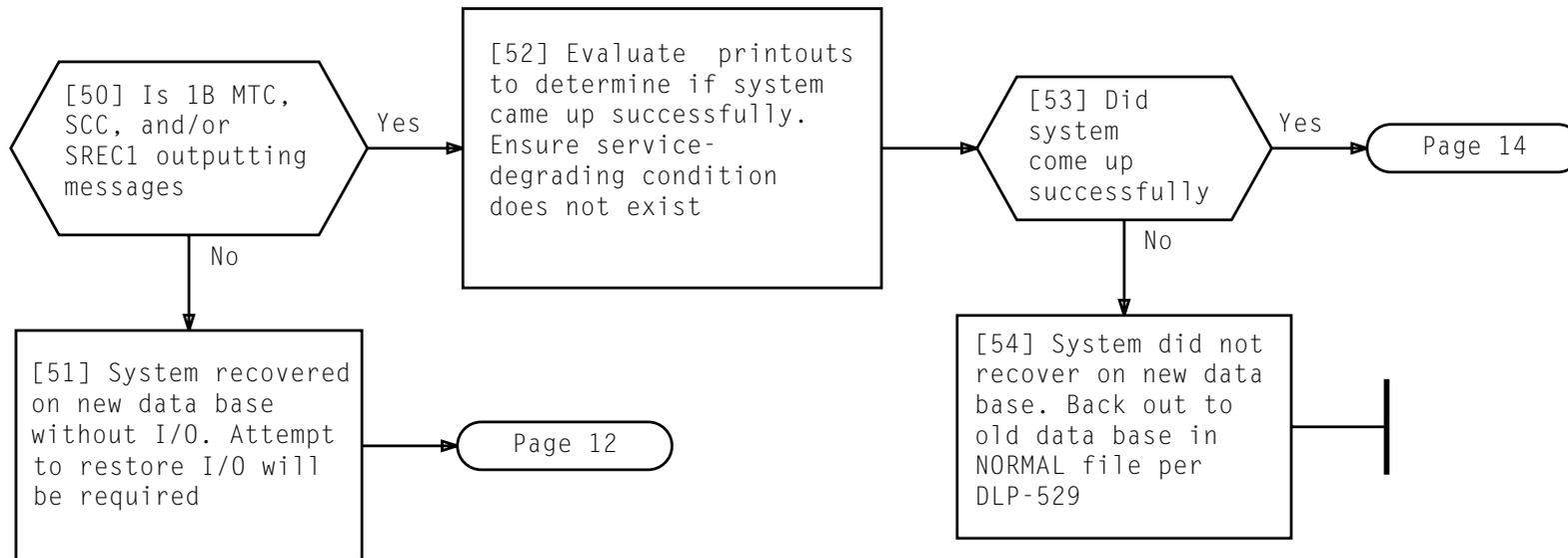
NOTES

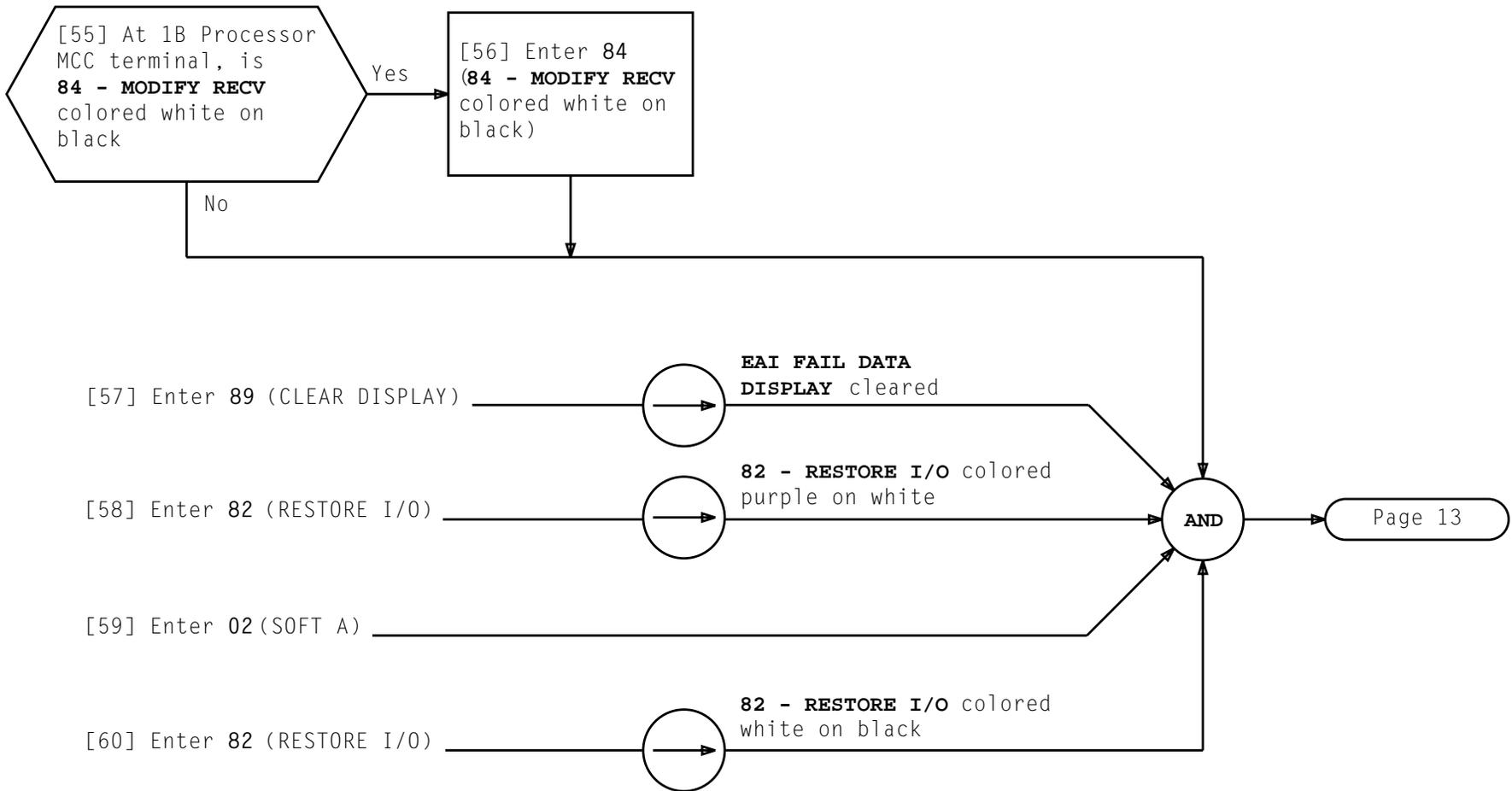
3. During Step 43, in **EAI FAIL DATA DISPLAY** section, octal digits "aaa" and "bbbb" [FIG. 2] in **86 - CODE** field must begin incrementing within 10 seconds after entering 01. "bbbb" indicates that 1B Processor is attempting to pump, and "aaa" indicates memory range being pumped. "aaa" and "bbbb" will continue to increment until **PC PROGRESSION - CMPL** color black on green, approximately 2 minutes after entering 01. If "aaa" does not begin to increment and "bbbb" does begin to increment, this is a failure. If at any time "aaa" stops incrementing and "bbbb" continues to increment, this is a failure. If data is received in **87 - DATA** field, this is a failure

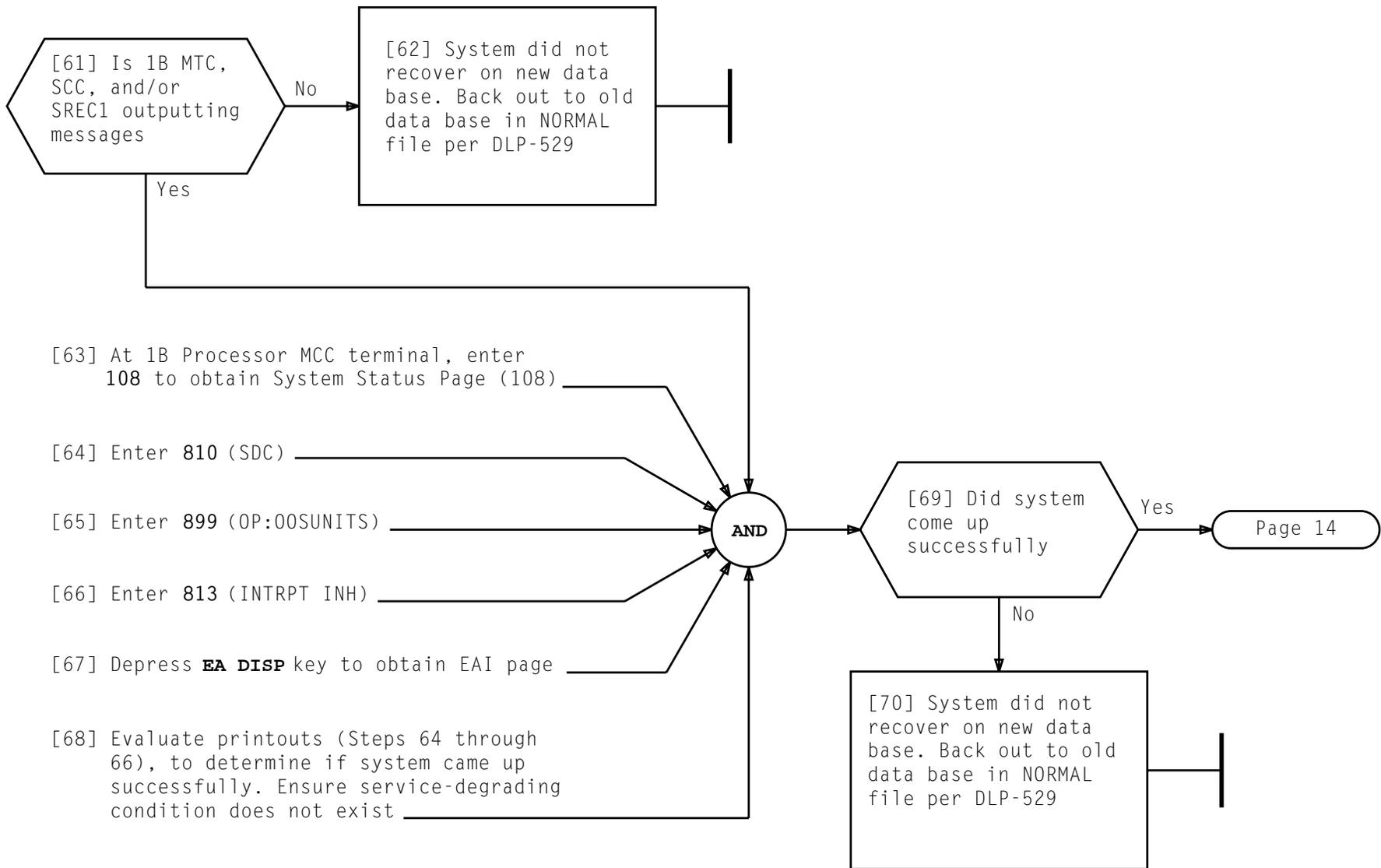
4. When a phase 3 is initiated, at 1B Processor MCC terminal, fourth left-most digit in **EAI FAIL DATA DISPLAY - 86 - CODE** field will go between 0 and 4 (bit 23).  
**53 - PHASE 3** colored black on purple. In lower left-hand corner, **PHASE IN PROG** colored white on red. **PC PROGRESSION - CMPL** continues to be colored black on green

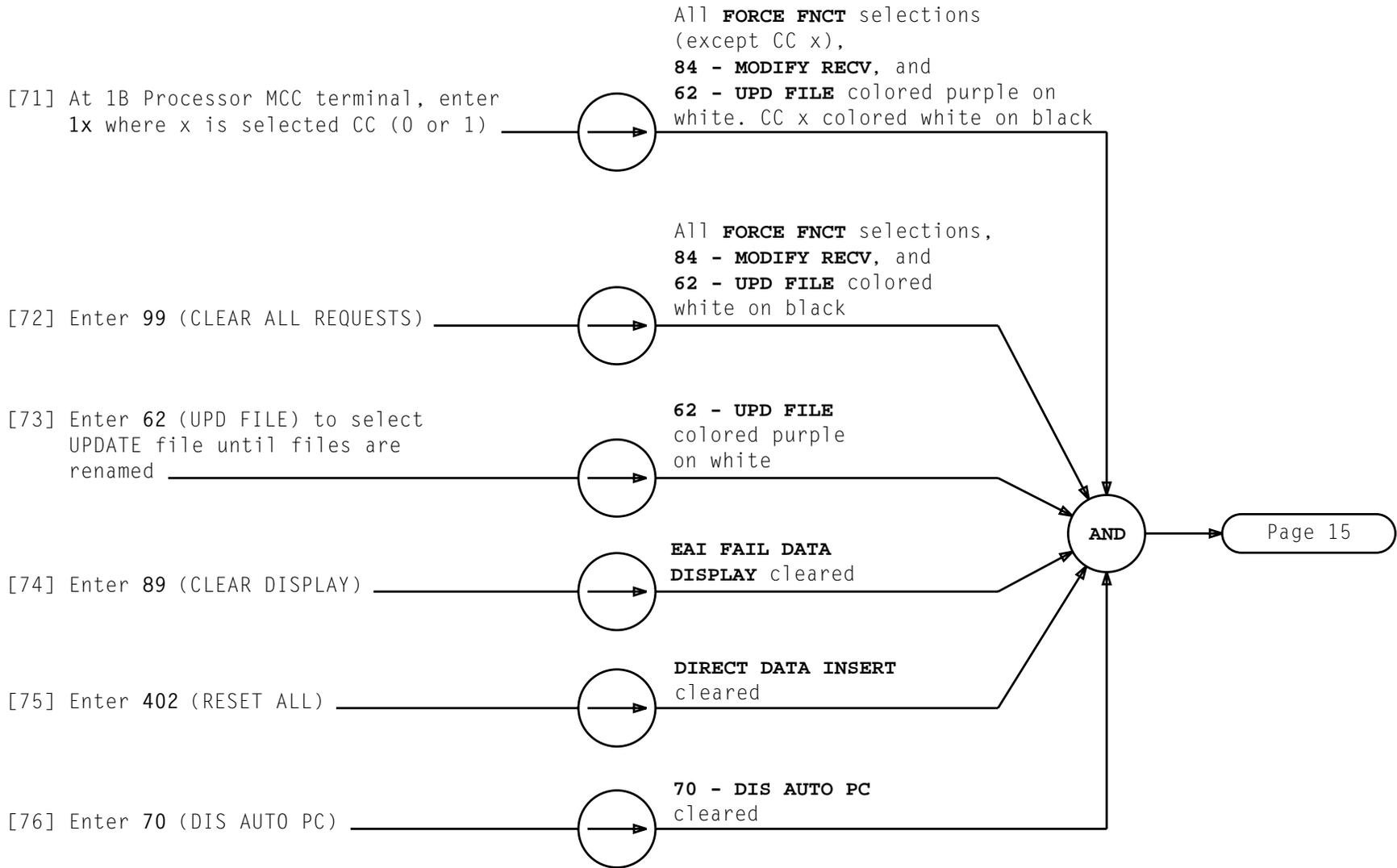
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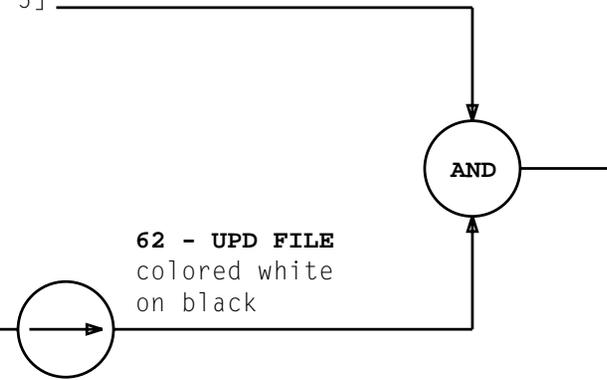


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[77] At 1B MTC terminal, enter message  
UPD:COMMIT;UPDFILE! to rename  
UPDATE file to NORMAL file [NOTE 5]

[78] At 1B Processor MCC terminal,  
enter 62 (UPD FILE)



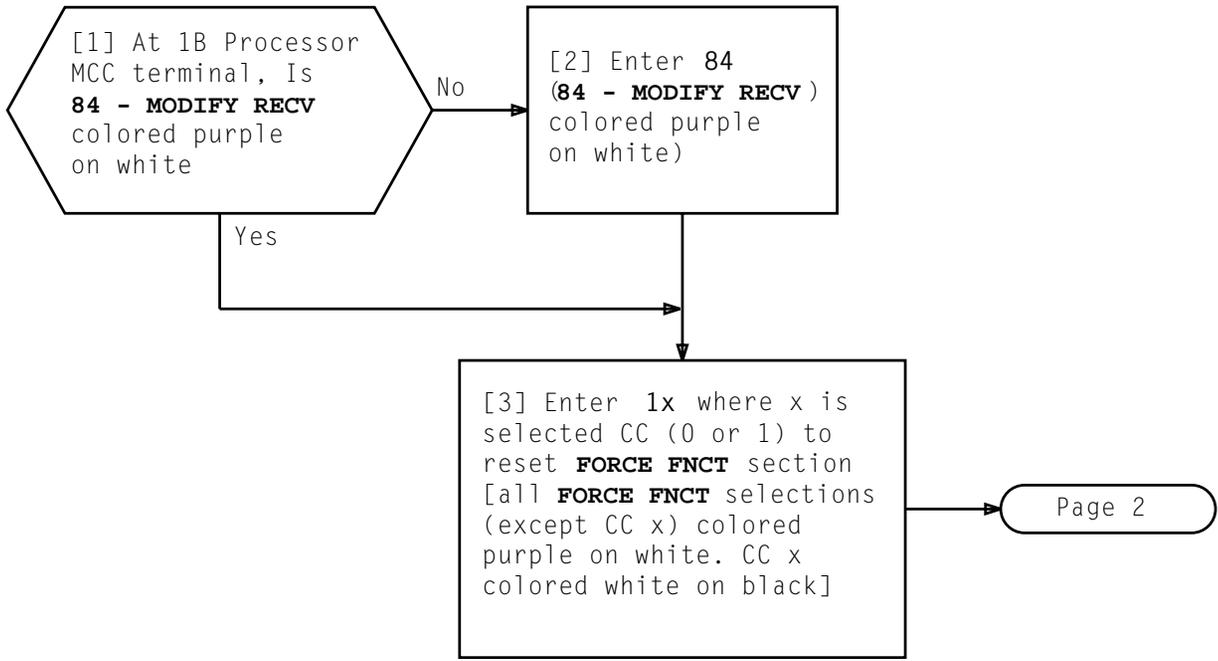
NOTE 5

Step 77 is being performed to rename UPDATE file to NORMAL file and precedes the actual commitment to 1B Processor

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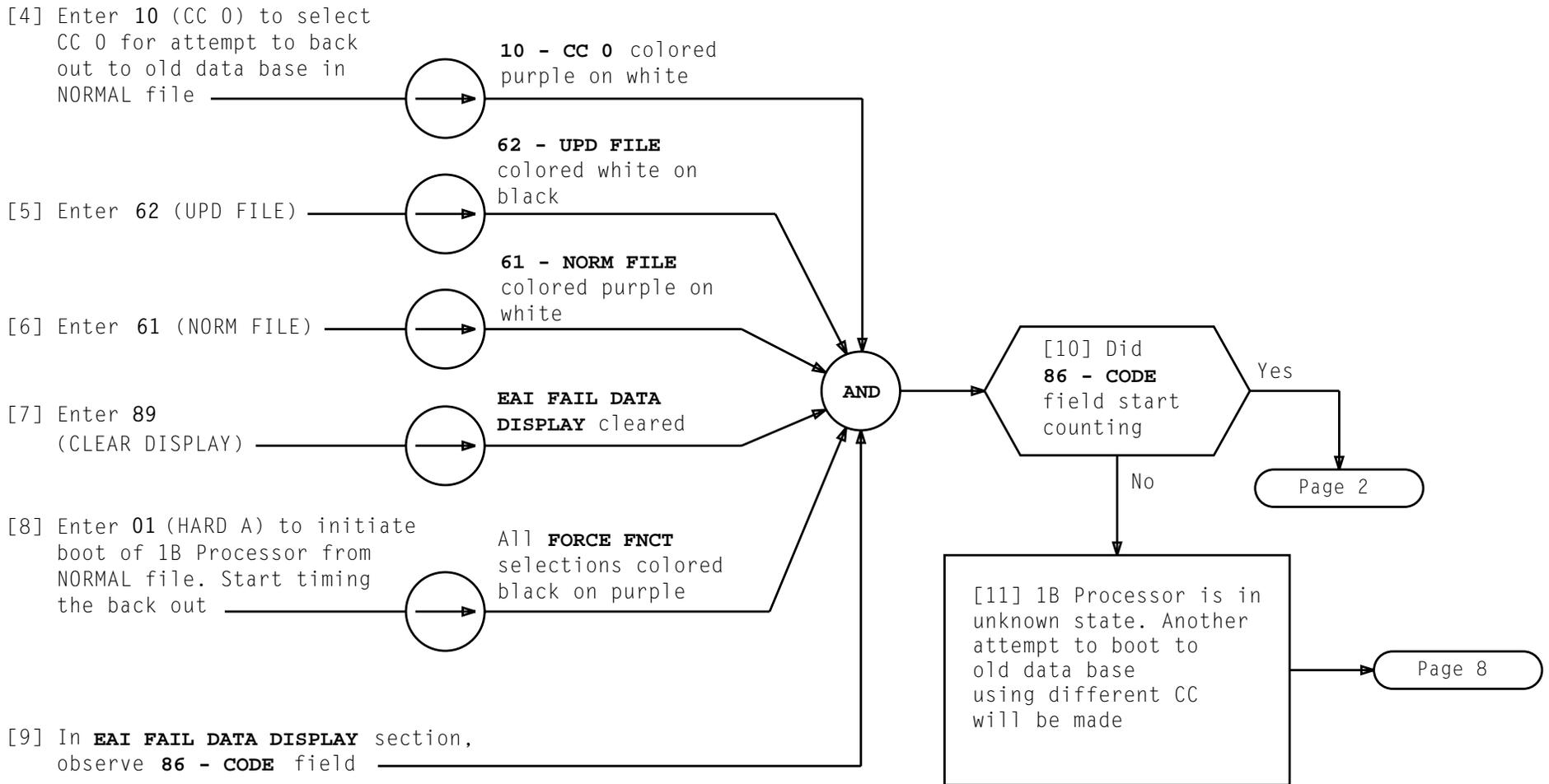
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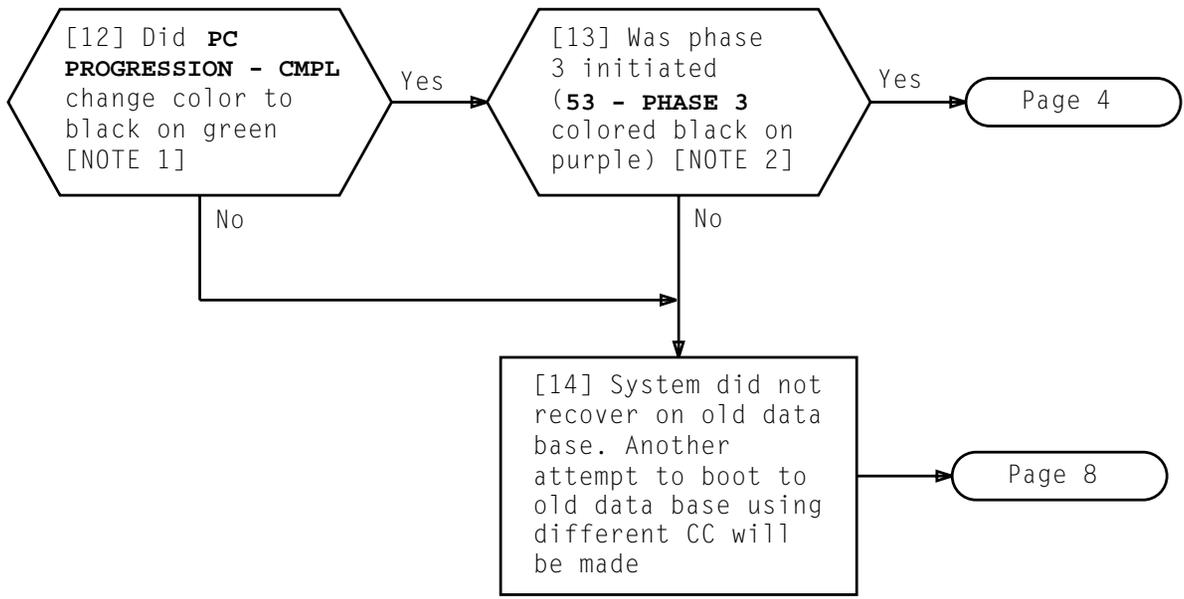
BACK OUT TO OLD DATA BASE IN NORMAL FILE

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**BACK OUT TO OLD DATA BASE IN NORMAL FILE**

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86 - CODE: 0'000aaabbbb  
 87 - DATA:  
 88 - ADDR:

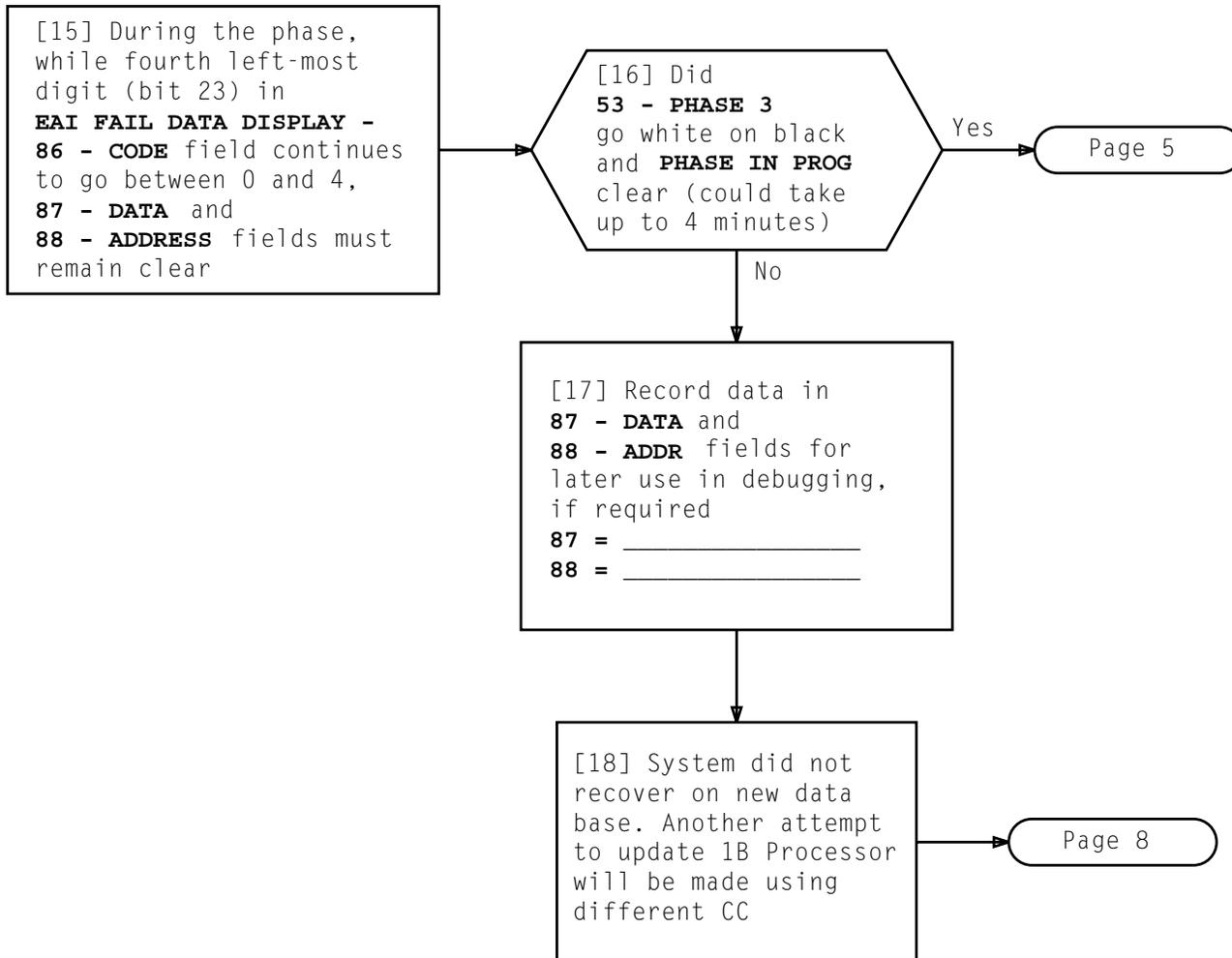
FIG. 1 - 86 - CODE Field Layout

NOTES

- During Step 12, in **EAI FAIL DATA DISPLAY** section, octal digits "aaa" and "bbbb" [FIG. 1] in **86 - CODE** field must begin incrementing within 10 seconds after entering 01. "bbbb" indicates that 1B Processor is attempting to pump, and "aaa" indicates memory range being pumped. "aaa" and "bbbb" will continue to increment until **PC PROGRESSION - CMPL** color black on green, approximately 2 minutes after entering 01. If "aaa" does not begin to increment and "bbbb" does begin to increment, this is a failure. If at any time "aaa" stops incrementing and "bbbb" continues to increment, this is a failure. If data is received in **87 - DATA** field, this is a failure
- When a phase 3 is initiated, at 1B Processor MCC terminal, fourth left-most digit in **EAI FAIL DATA DISPLAY - 86 - CODE** field will go between 0 and 4 (bit 23).  
**53 - PHASE 3** colored black on purple. In lower left-hand corner, **PHASE IN PROG** colored white on red. **PC PROGRESSION - CMPL** continues to be colored black on green

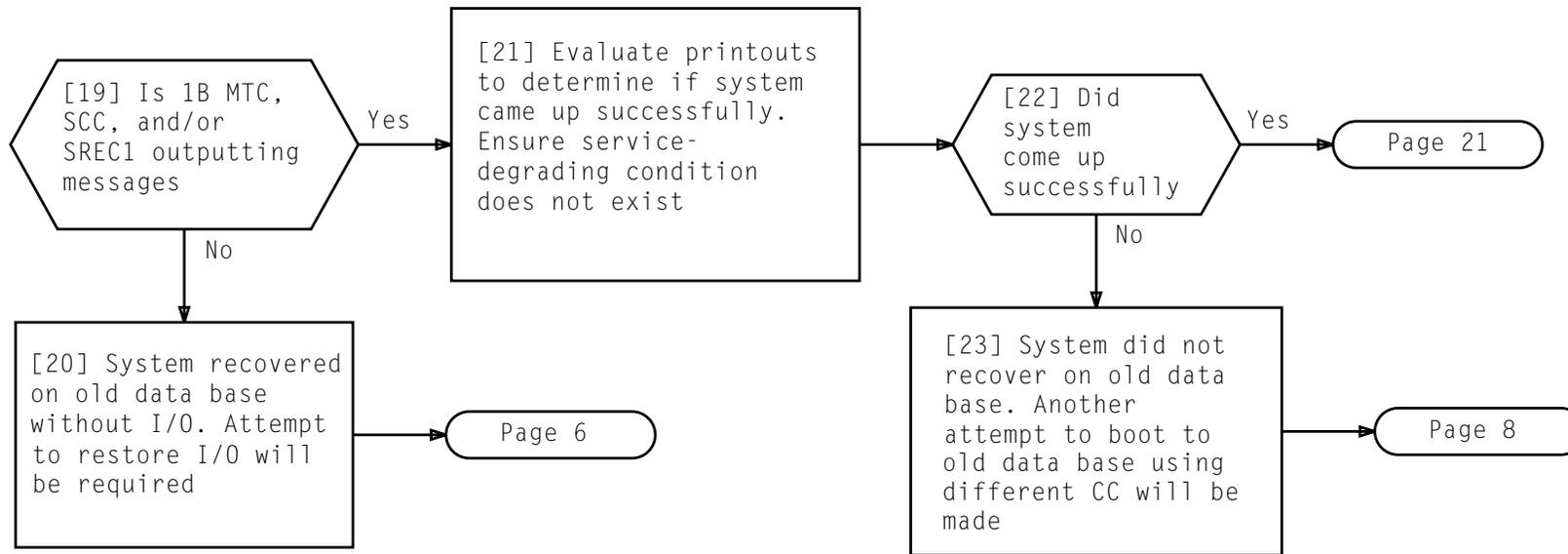
BACK OUT TO OLD DATA BASE IN NORMAL FILE

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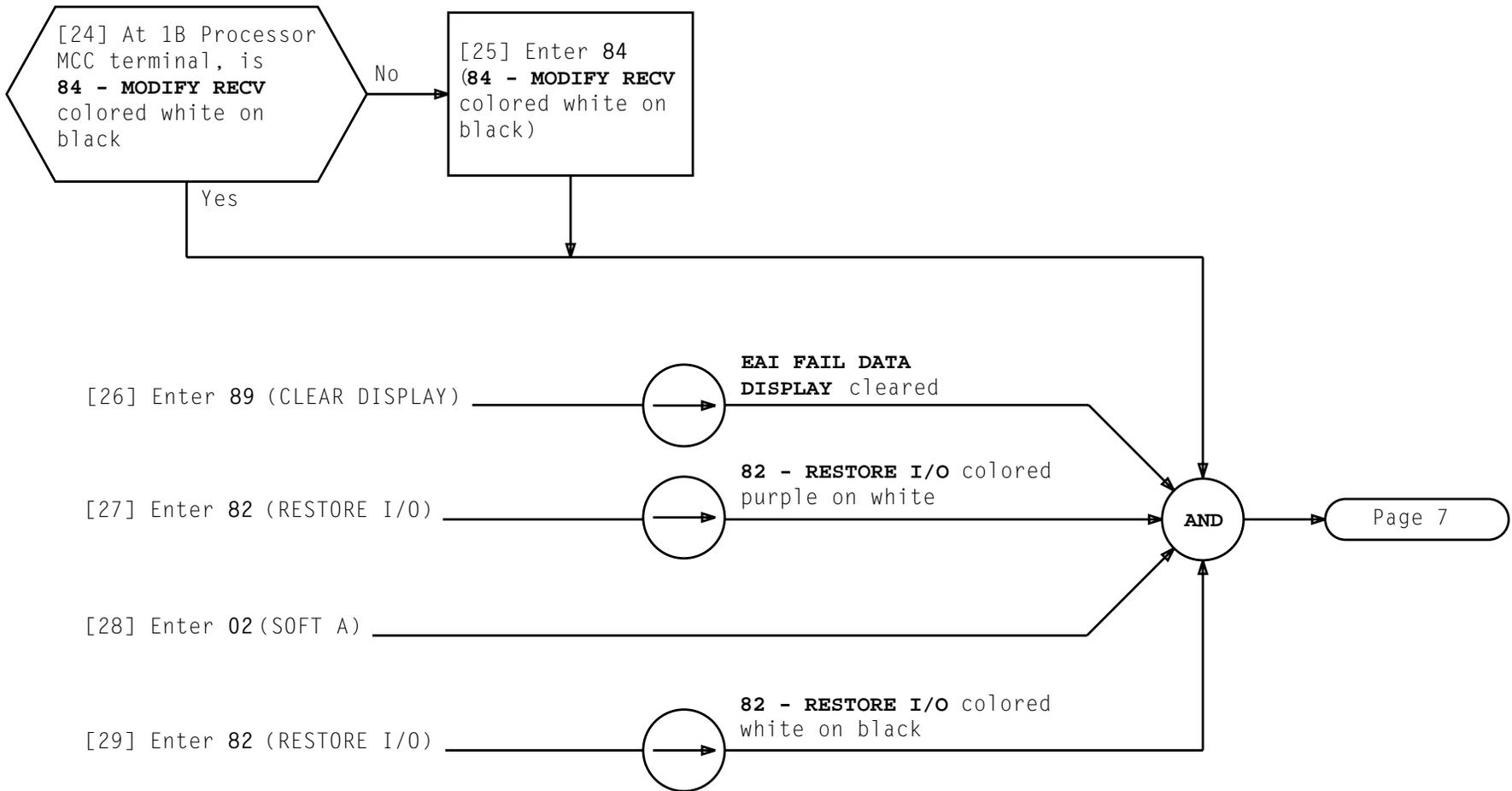
BACK OUT TO OLD DATA BASE IN NORMAL FILE

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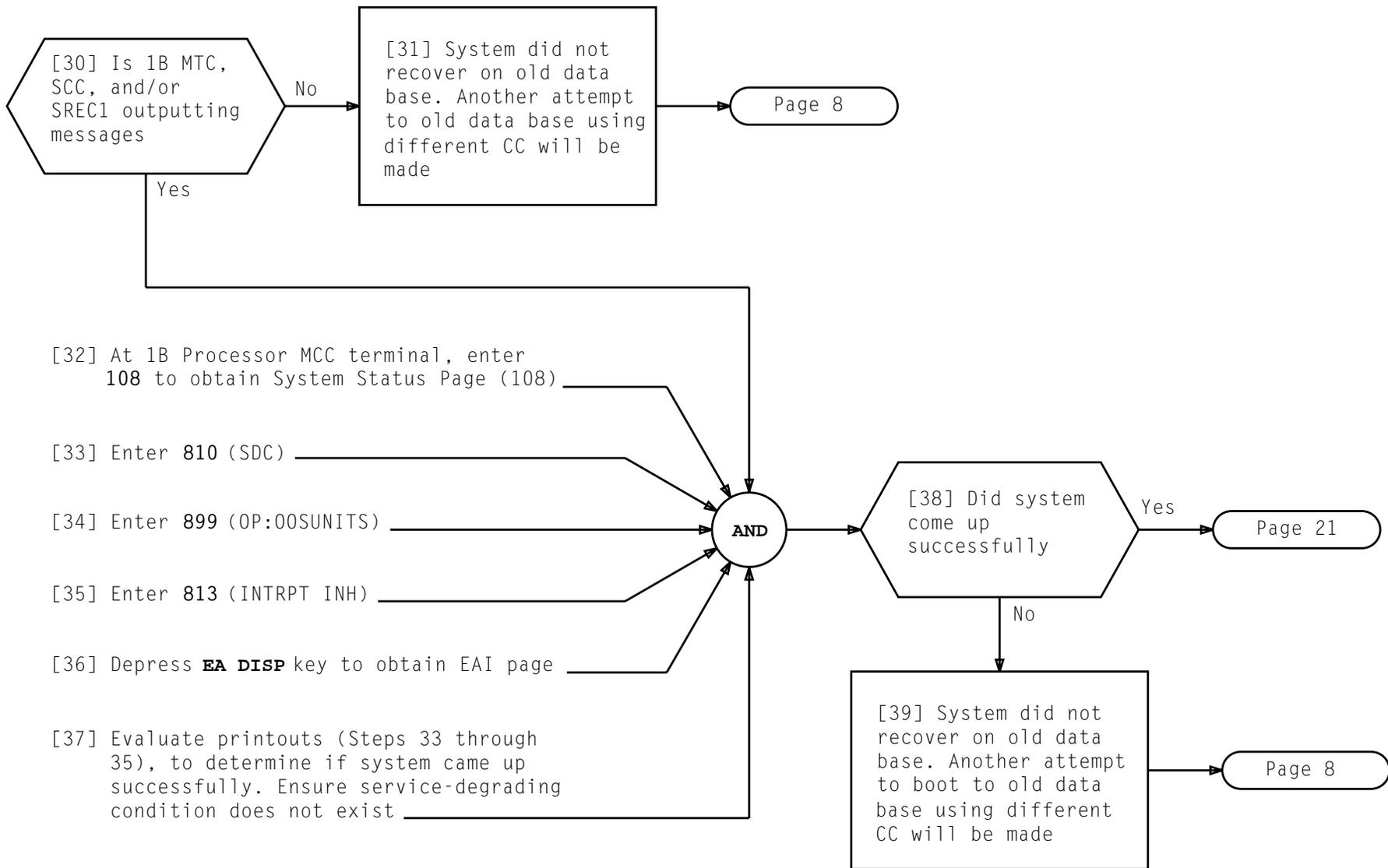
**BACK OUT TO OLD DATA BASE IN NORMAL FILE**

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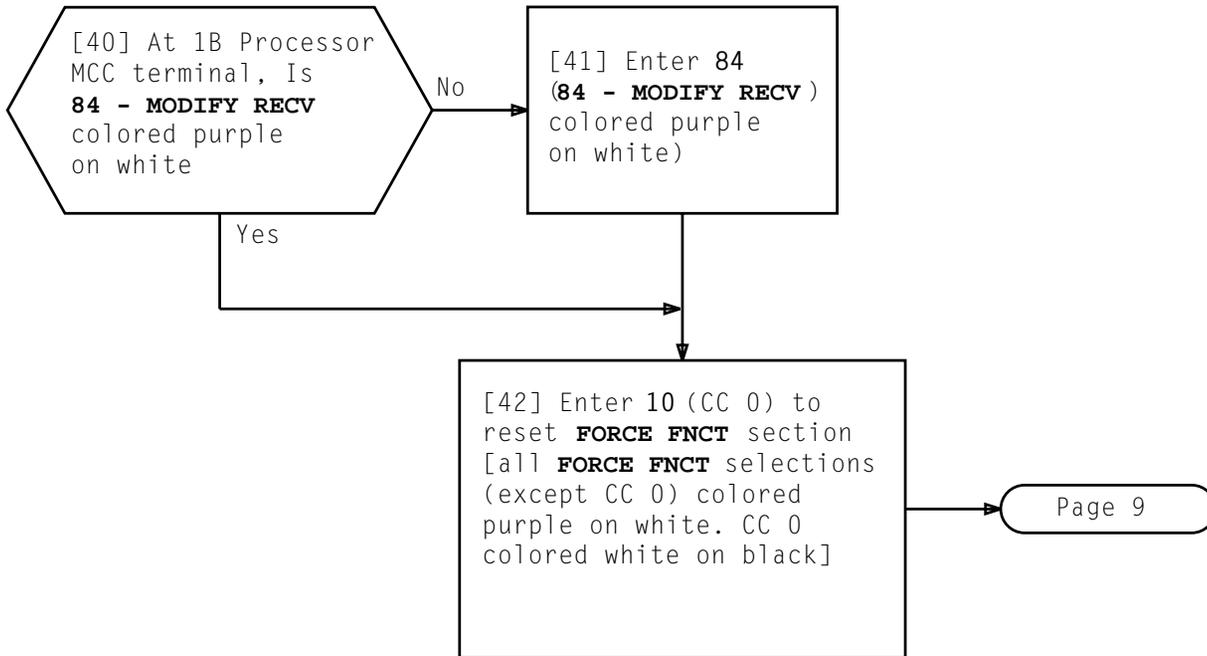
**BACK OUT TO OLD DATA BASE IN NORMAL FILE**

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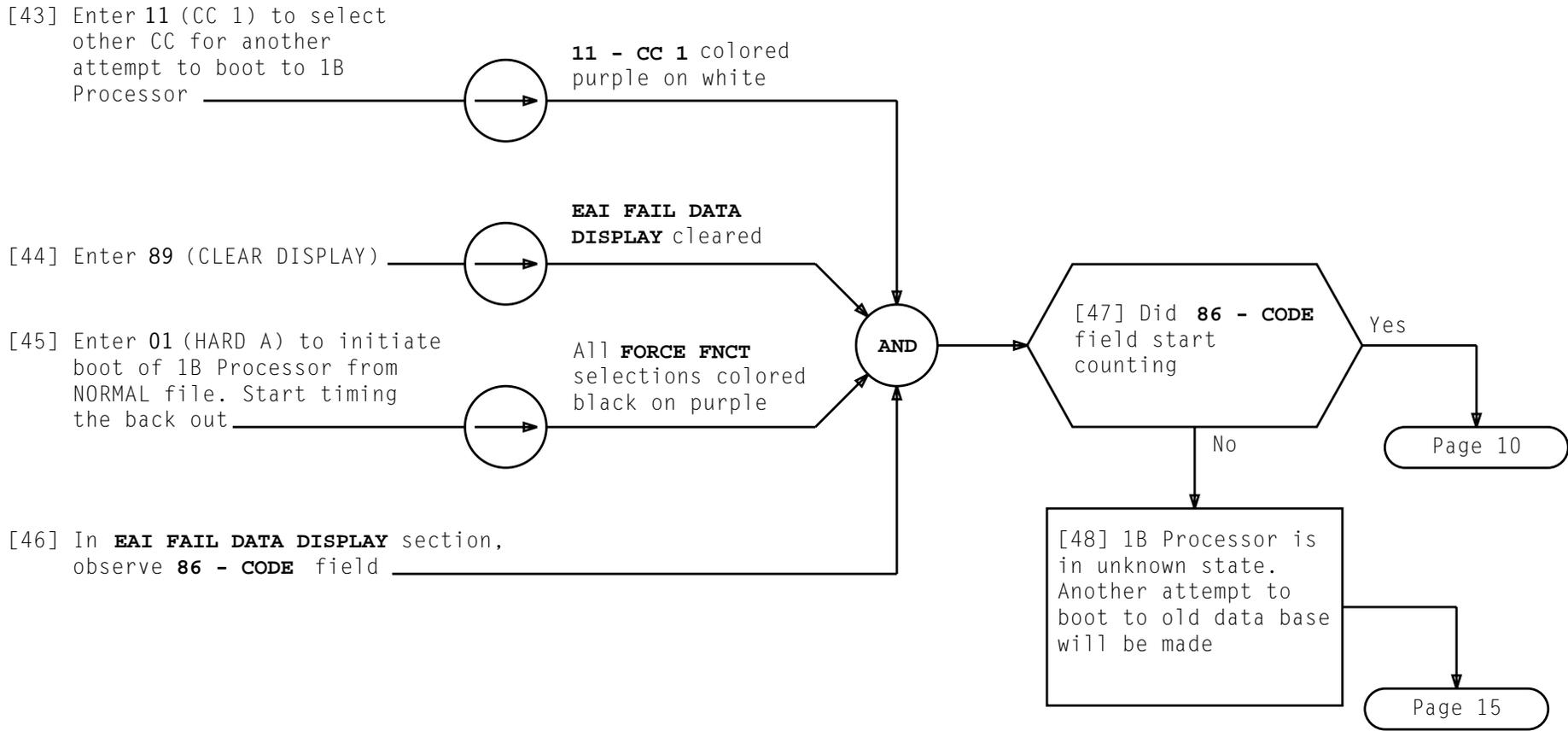
**BACK OUT TO OLD DATA BASE IN NORMAL FILE**

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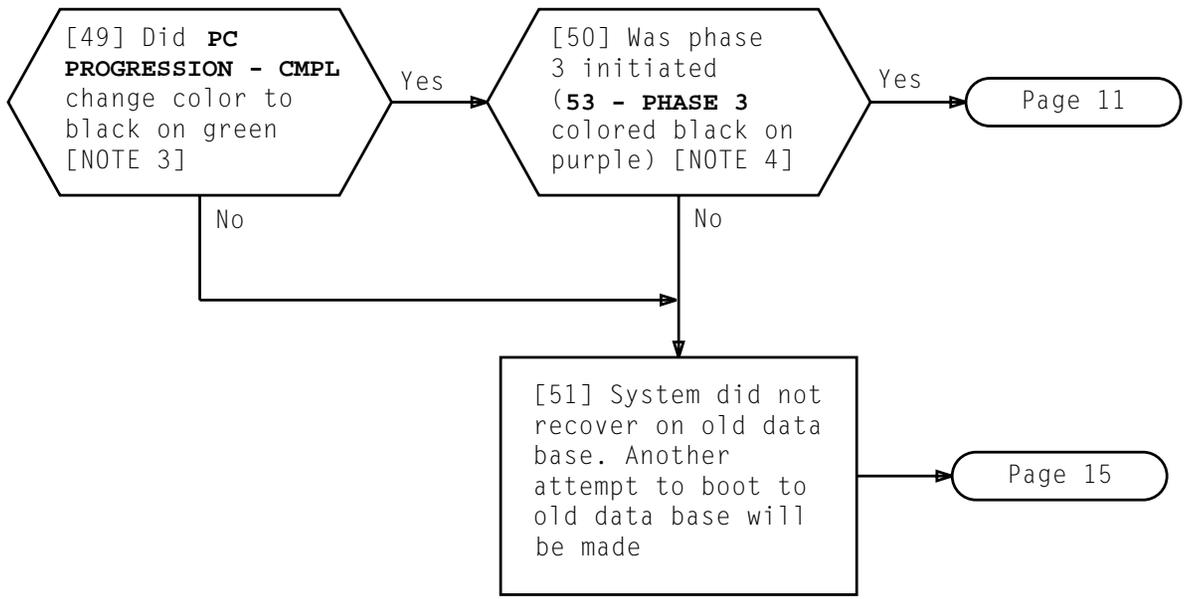
BACK OUT TO OLD DATA BASE IN NORMAL FILE

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**BACK OUT TO OLD DATA BASE IN NORMAL FILE**

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86 - CODE: 0'000aaabbbb  
 87 - DATA:  
 88 - ADDR:

FIG. 2 - 86 - CODE Field Layout

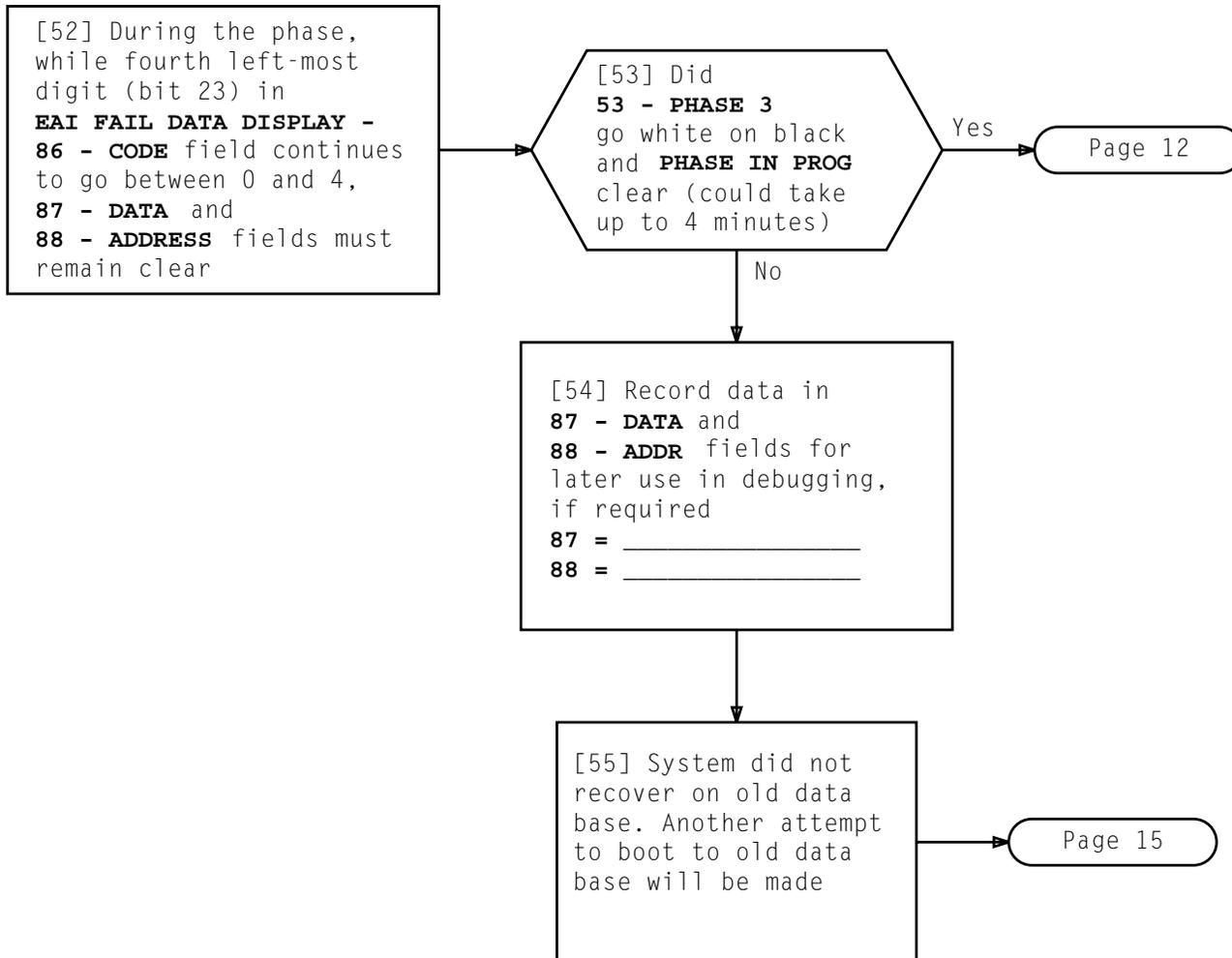
NOTES

3. During Step 49, in **EAI FAIL DATA DISPLAY** section, octal digits "aaa" and "bbbb" [FIG. 2] in **86 - CODE** field must begin incrementing within 10 seconds after entering 01. "bbbb" indicates that 1B Processor is attempting to pump, and "aaa" indicates memory range being pumped. "aaa" and "bbbb" will continue to increment until **PC PROGRESSION - CMPL** color black on green, approximately 2 minutes after entering 01. If "aaa" does not begin to increment and "bbbb" does begin to increment, this is a failure. If at any time "aaa" stops incrementing and "bbbb" continues to increment, this is a failure. If data is received in **87 - DATA** field, this is a failure

4. When a phase 3 is initiated, at 1B Processor MCC terminal, fourth left-most digit in **EAI FAIL DATA DISPLAY - 86 - CODE** field will go between 0 and 4 (bit 23).  
**53 - PHASE 3** colored black on purple. In lower left-hand corner, **PHASE IN PROG** colored white on red. **PC PROGRESSION - CMPL** continues to be colored black on green

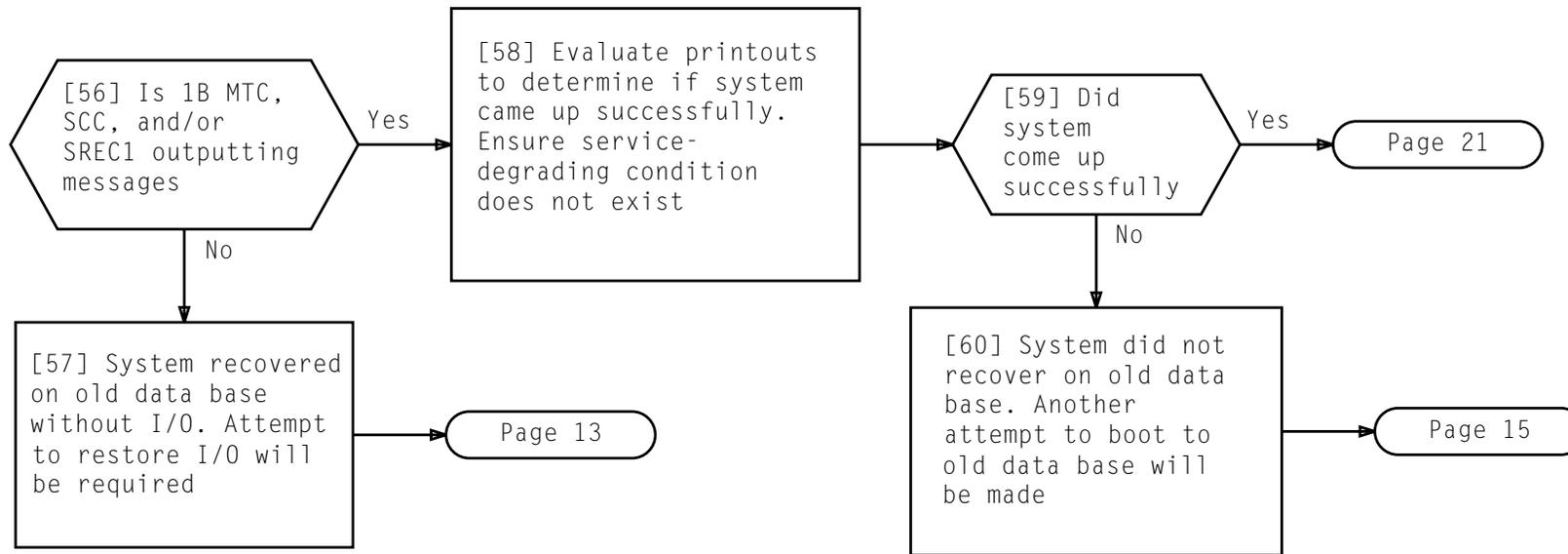
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BACK OUT TO OLD DATA BASE IN NORMAL FILE



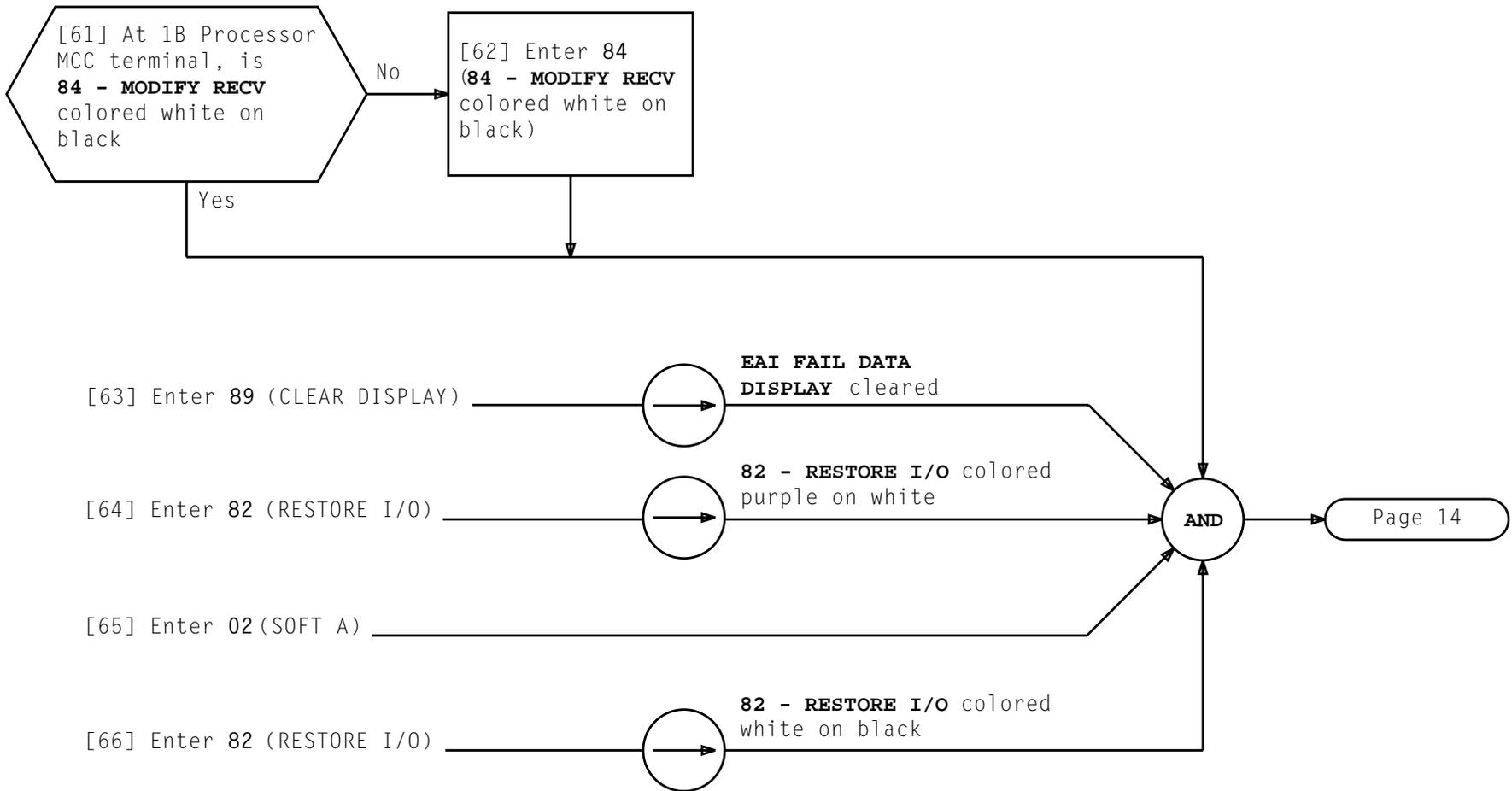
BACK OUT TO OLD DATA BASE IN NORMAL FILE

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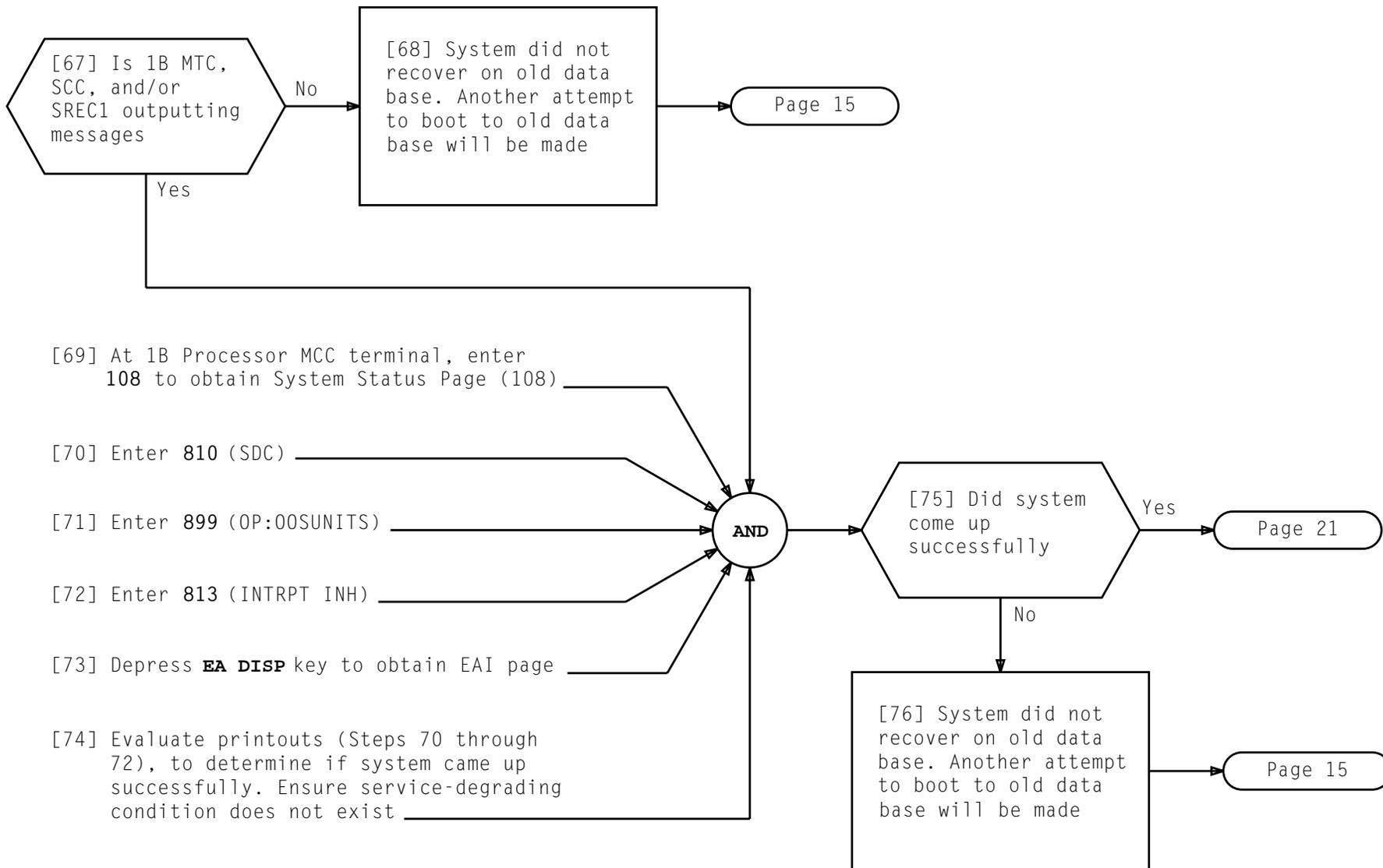
**BACK OUT TO OLD DATA BASE IN NORMAL FILE**

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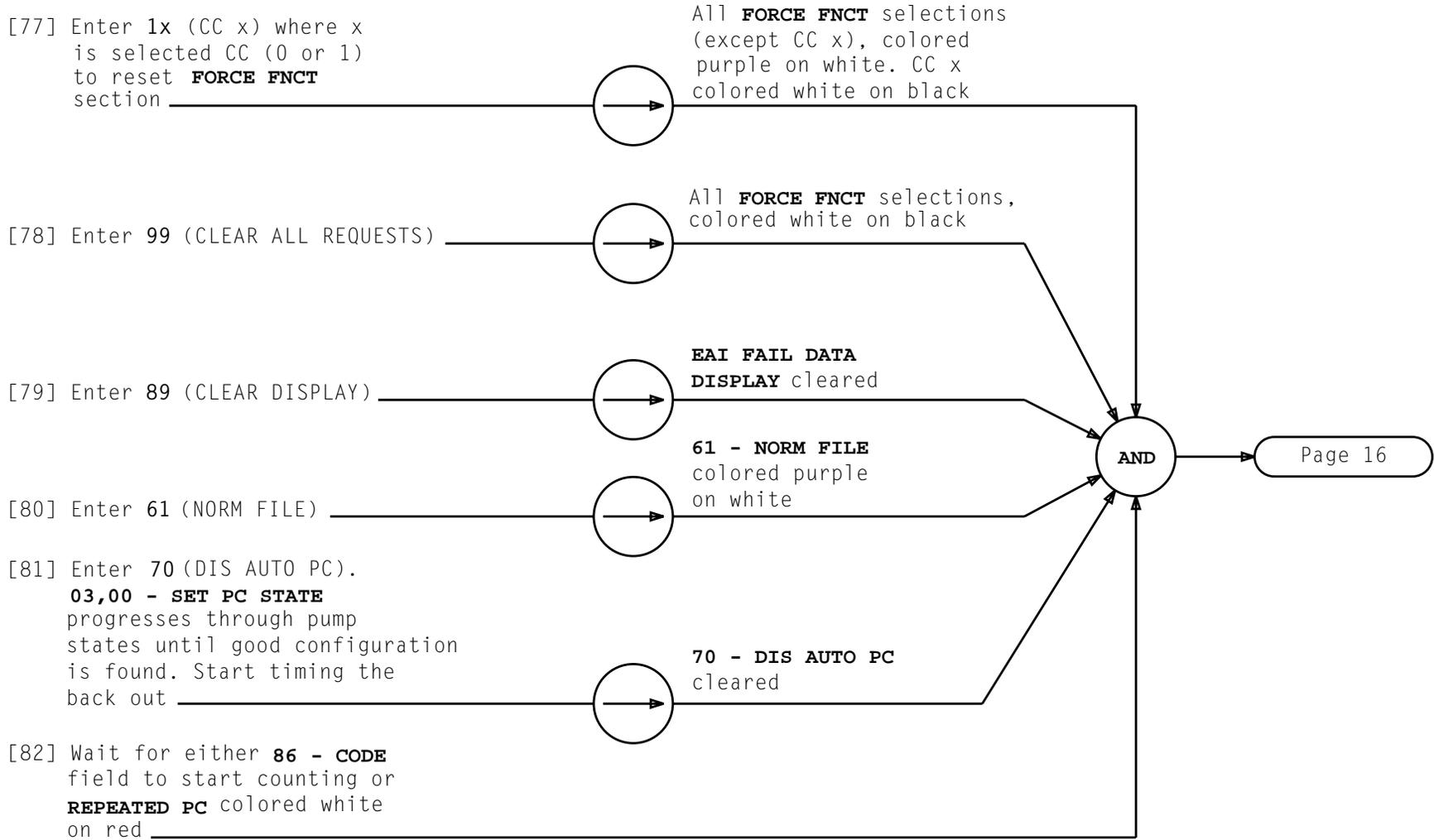
**BACK OUT TO OLD DATA BASE IN NORMAL FILE**

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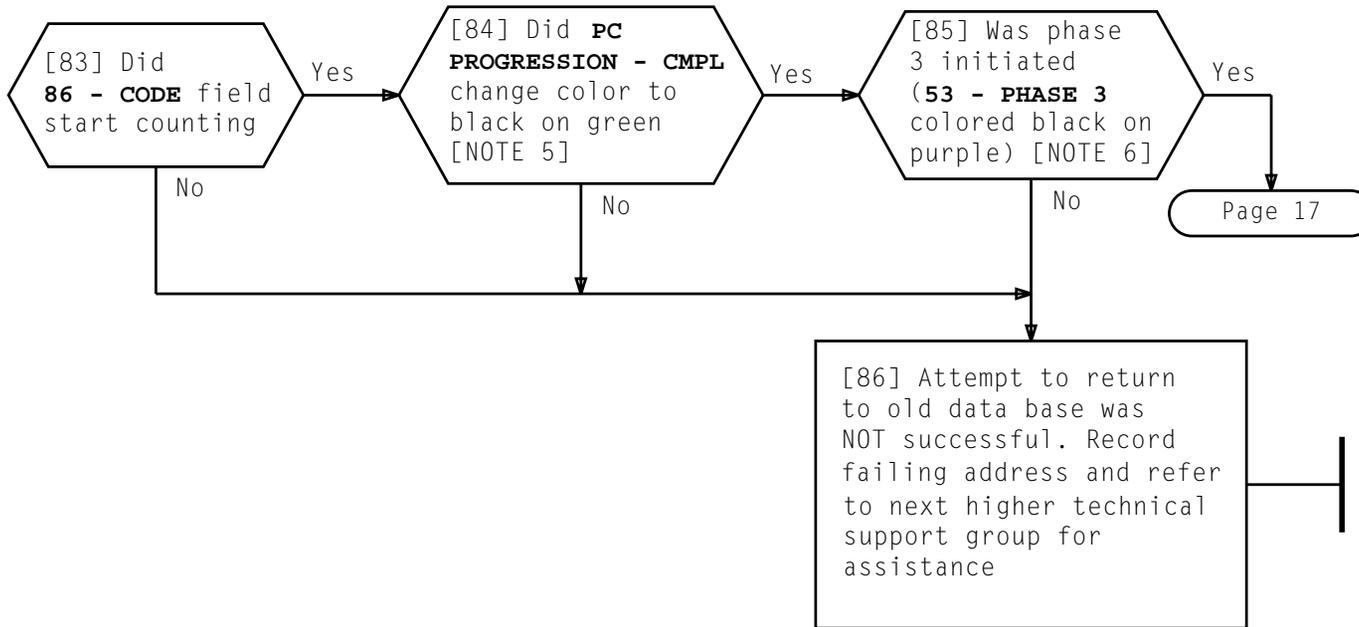
**BACK OUT TO OLD DATA BASE IN NORMAL FILE**

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**BACK OUT TO OLD DATA BASE IN NORMAL FILE**

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86 - CODE: 0'000aaabbbbb  
 87 - DATA:  
 88 - ADDR:

FIG. 3 - 86 - CODE Field Layout

NOTES

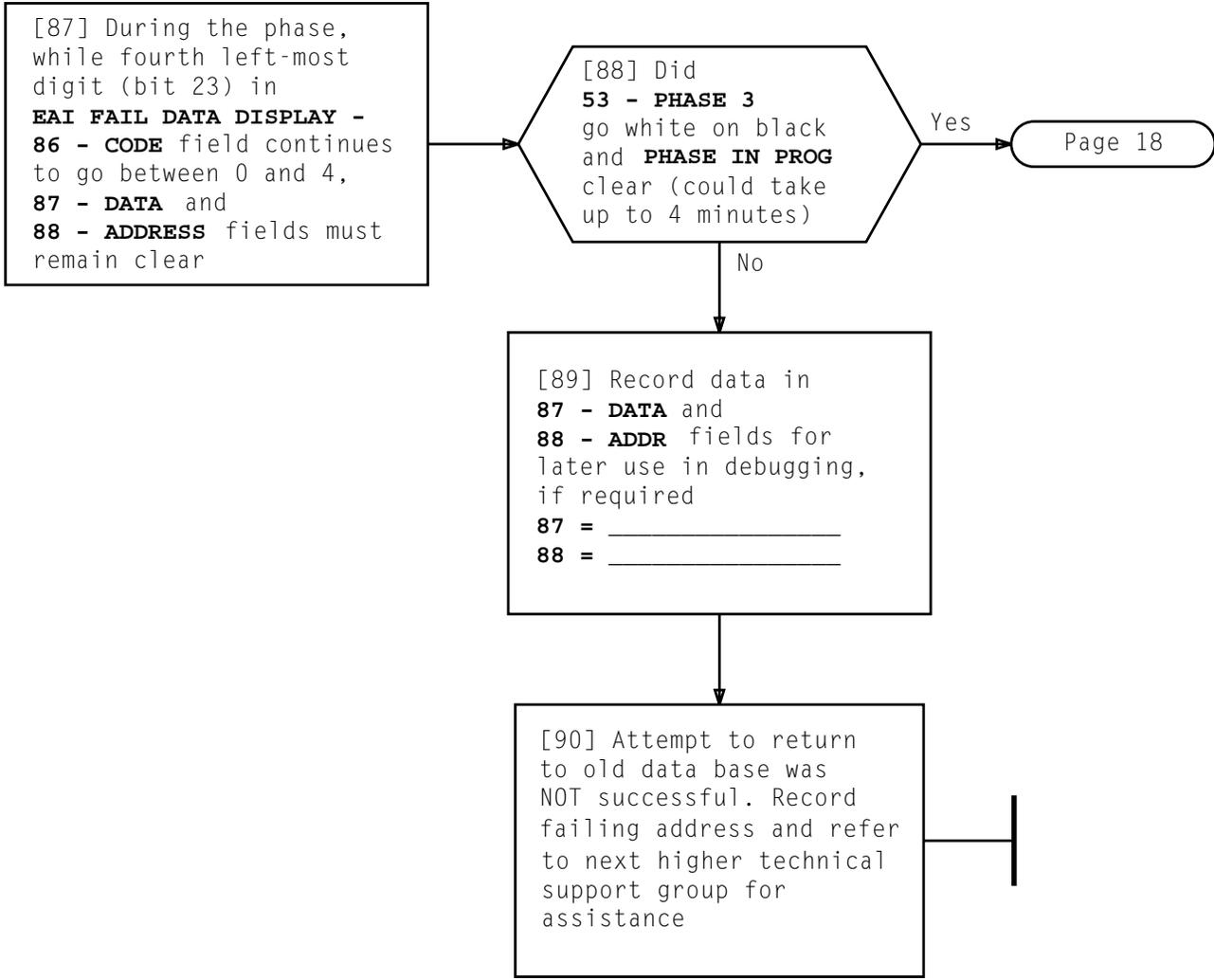
5. During Step 83, in **EAI FAIL DATA DISPLAY** section, octal digits "aaa" and "bbbb" [FIG. 3] in **86 - CODE** field must begin incrementing within 10 seconds after entering 01. "bbbb" indicates that 1B Processor is attempting to pump, and "aaa" indicates memory range being pumped. "aaa" and "bbbb" will continue to increment until **PC PROGRESSION - CMPL** color black on green, approximately 2 minutes after entering 01. If "aaa" does not begin to increment and "bbbb" does begin to increment, this is a failure. If at any time "aaa" stops incrementing and "bbbb" continues to increment, this is a failure. If data is received in **87 - DATA** field, this is a failure

6. When a phase 3 is initiated, at 1B Processor MCC terminal, fourth left-most digit in **EAI FAIL DATA DISPLAY - 86 - CODE** field will go between 0 and 4 (bit 23). **53 - PHASE 3** colored black on purple. In lower left-hand corner, **PHASE IN PROG** colored white on red. **PC PROGRESSION - CMPL** continues to be colored black on green

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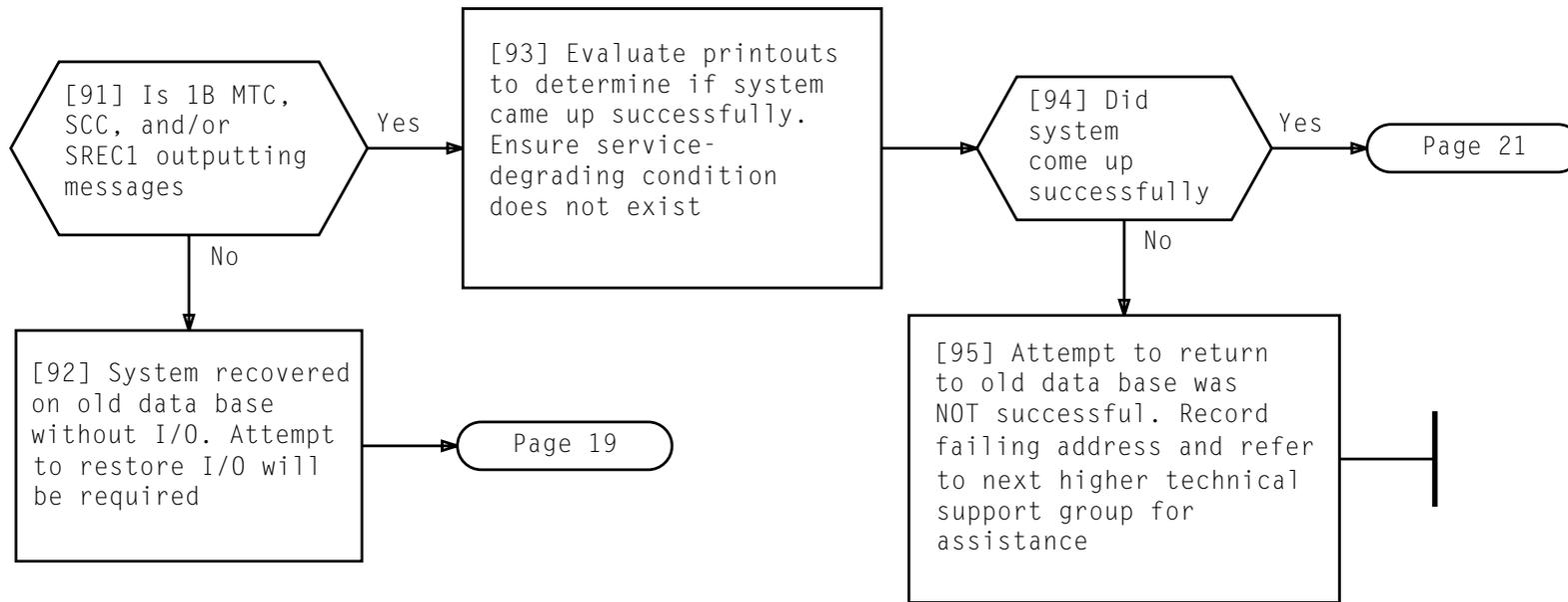
[86] Attempt to return to old data base was NOT successful. Record failing address and refer to next higher technical support group for assistance

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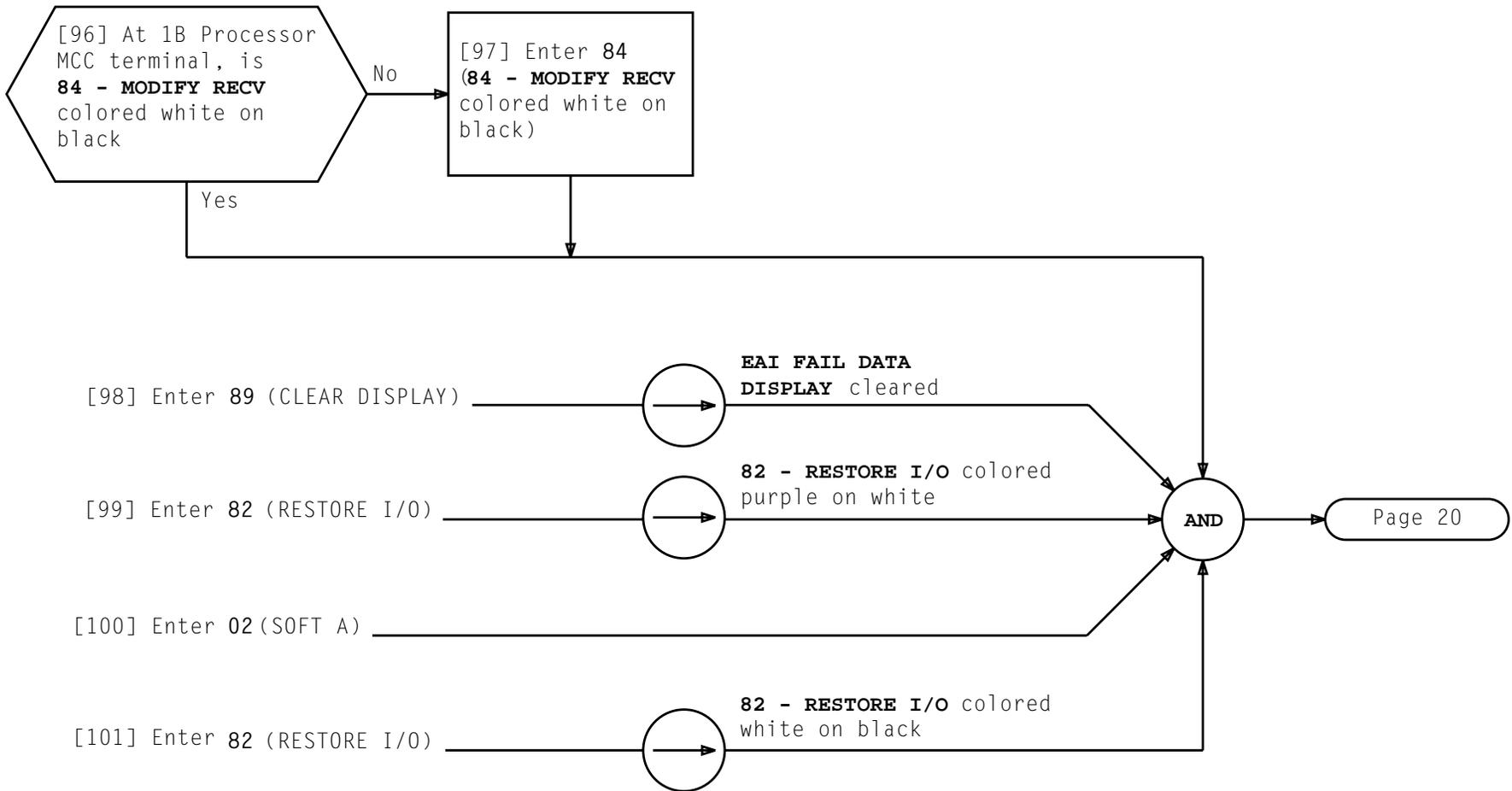
BACK OUT TO OLD DATA BASE IN NORMAL FILE

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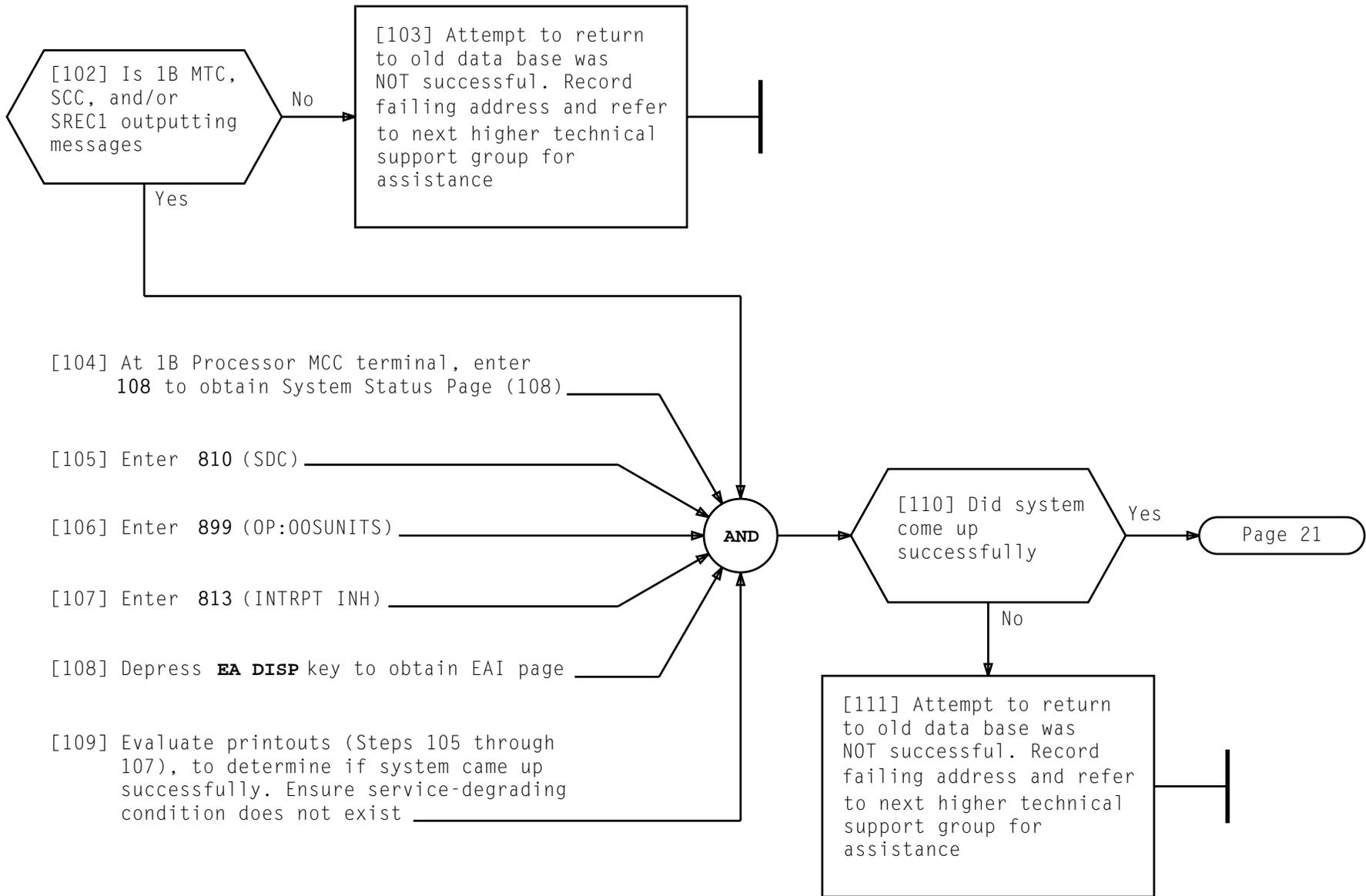
**BACK OUT TO OLD DATA BASE IN NORMAL FILE**

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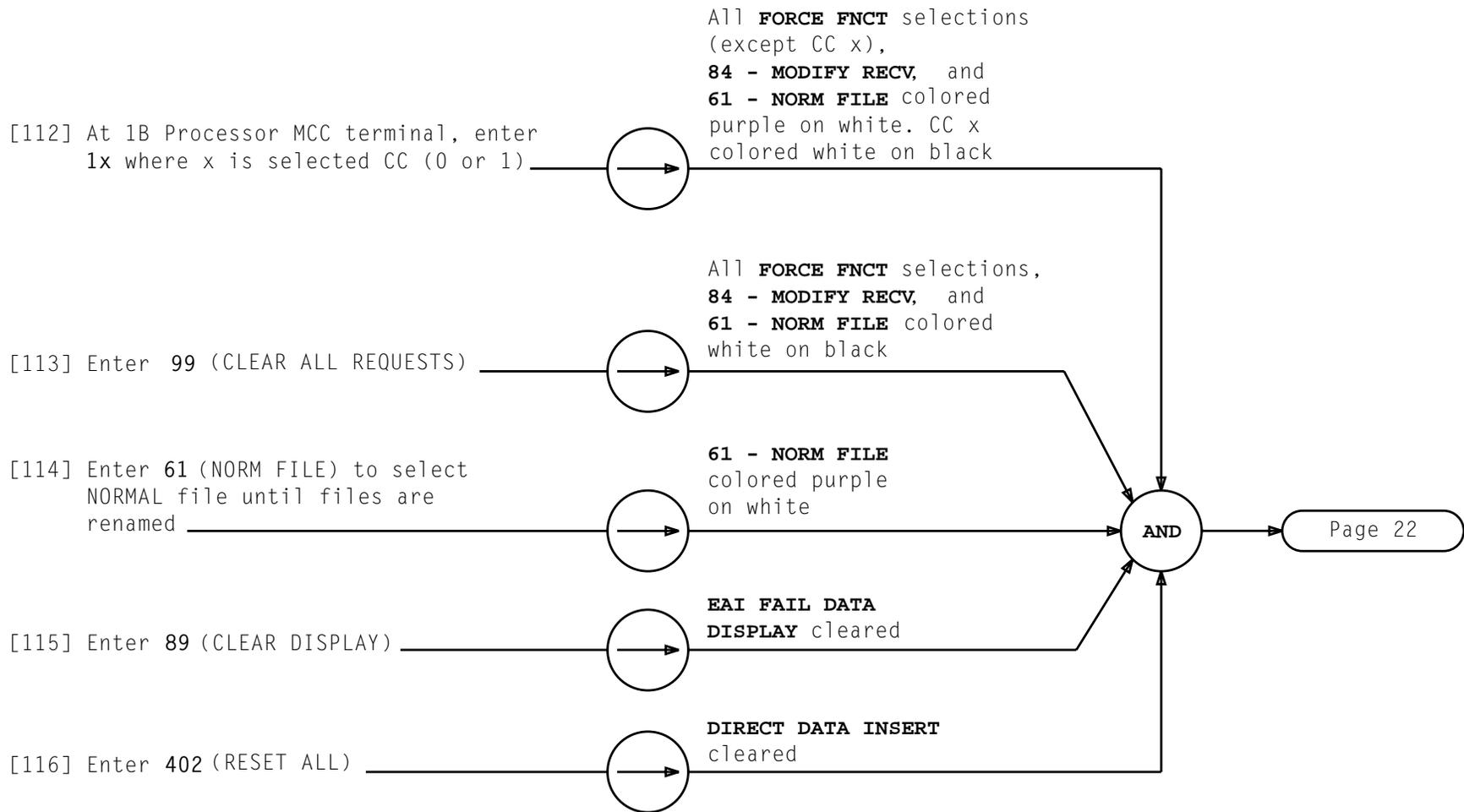
**BACK OUT TO OLD DATA BASE IN NORMAL FILE**

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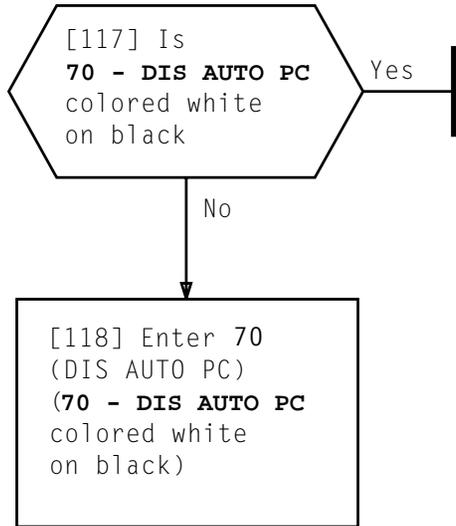
**BACK OUT TO OLD DATA BASE IN NORMAL FILE**

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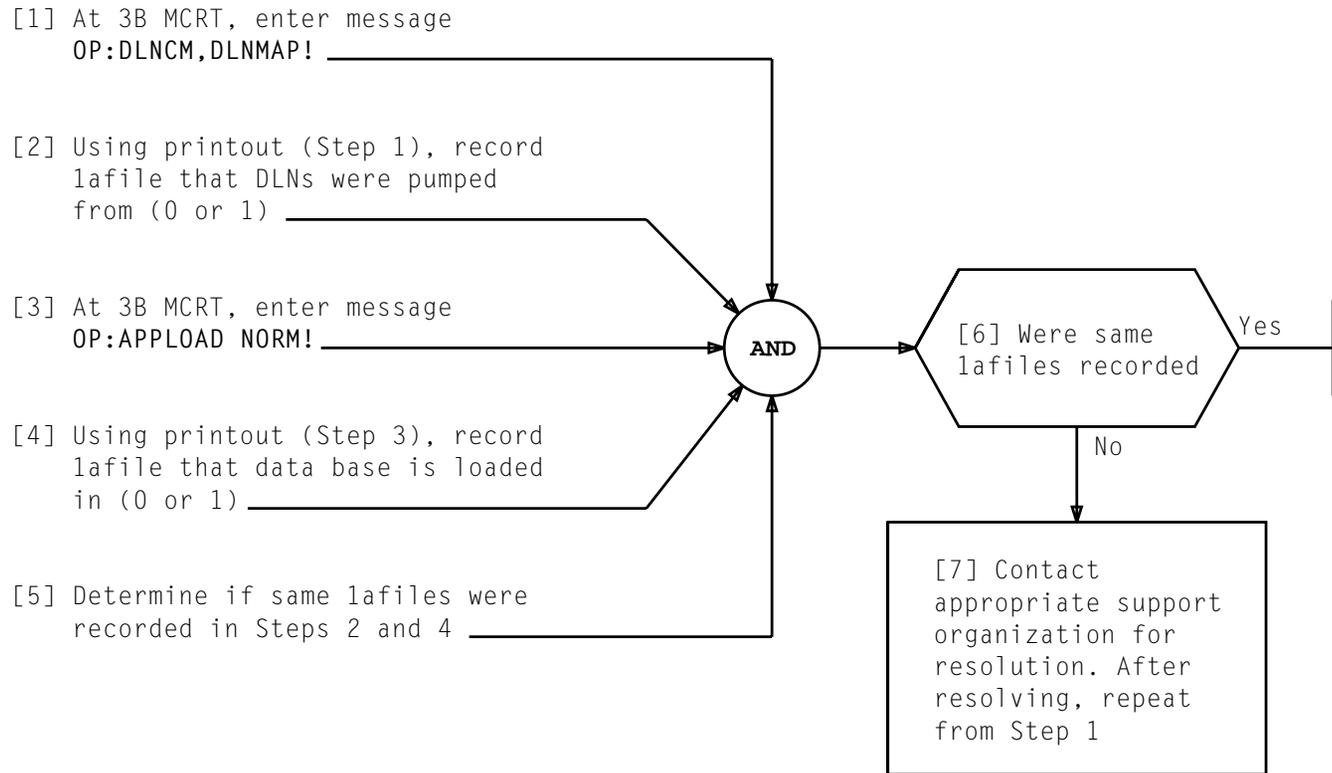
**BACK OUT TO OLD DATA BASE IN NORMAL FILE**

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BACK OUT TO OLD DATA BASE IN NORMAL FILE

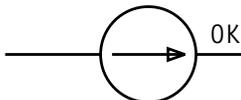
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**VERIFY DLNs PUMPED FROM PROPER 1AFILE**

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[1] At 1B 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

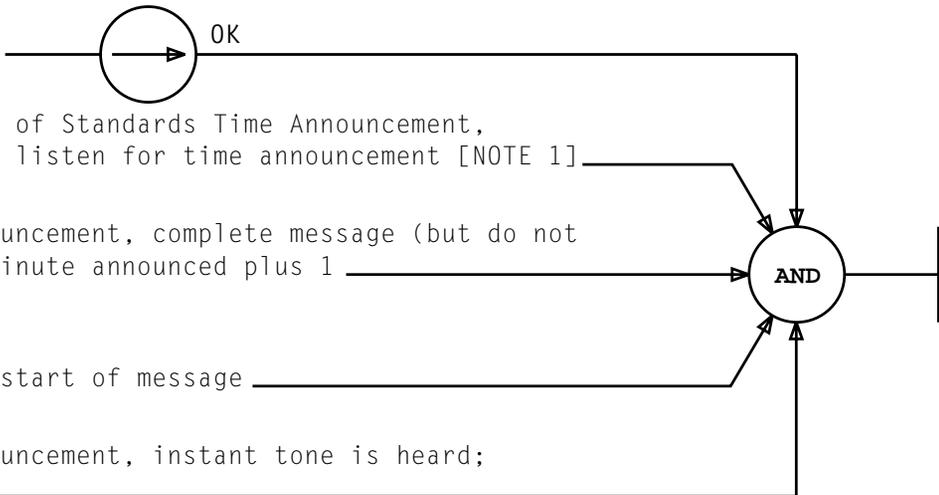


[2] Call U. S. Bureau of Standards Time Announcement,  
 303-499-7111, and listen for time announcement [NOTE 1]

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

[4] Return cursor to start of message

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



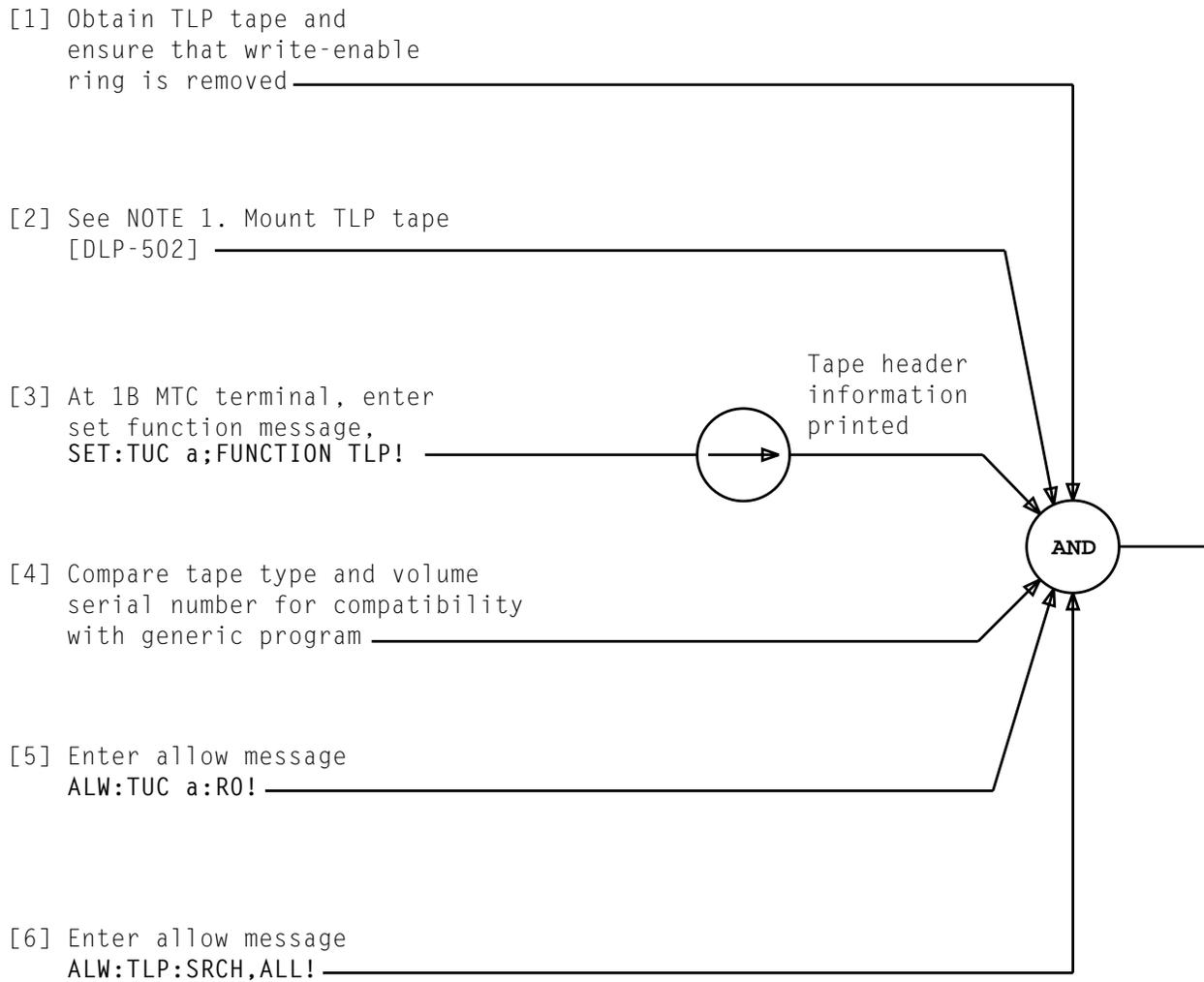
NOTE 1

Time announcements  
 are made every  
 minute on the minute.  
 Hours announced are  
 in Greenwich Mean  
 Time

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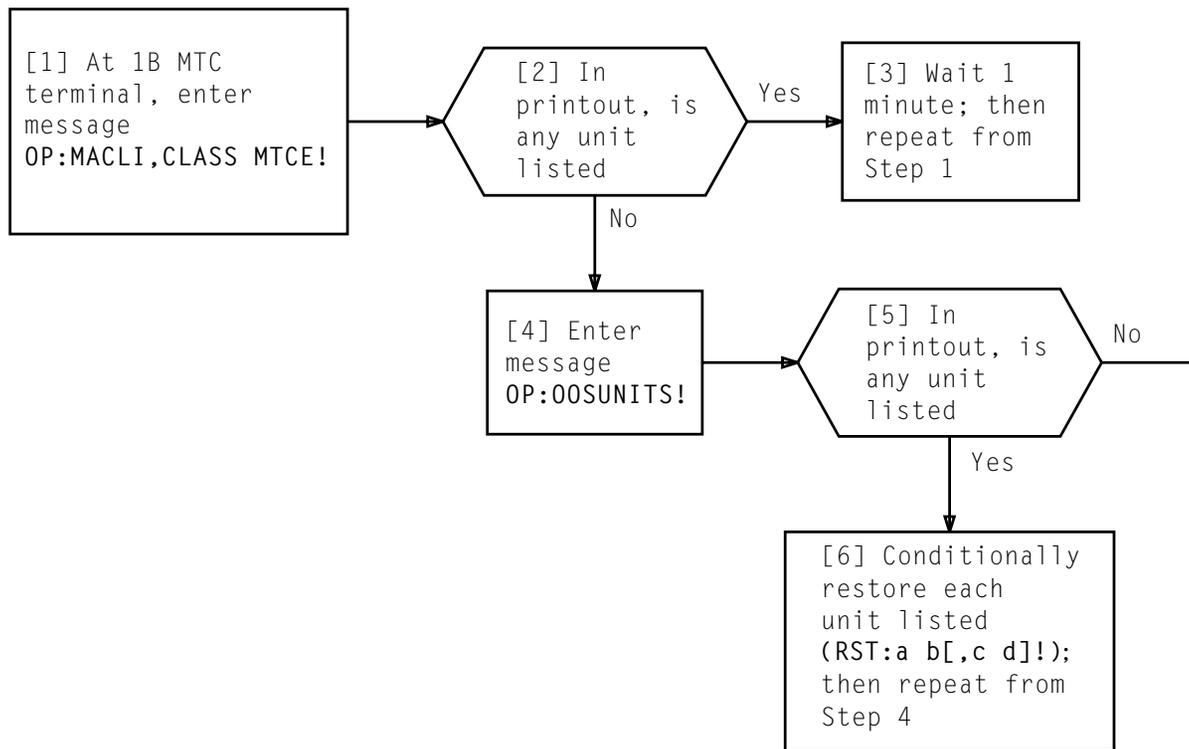
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**PLACE TLP TAPE IN SERVICE**

NOTE 1	
Local procedures will dictate tape units on which TLP tape can be mounted	
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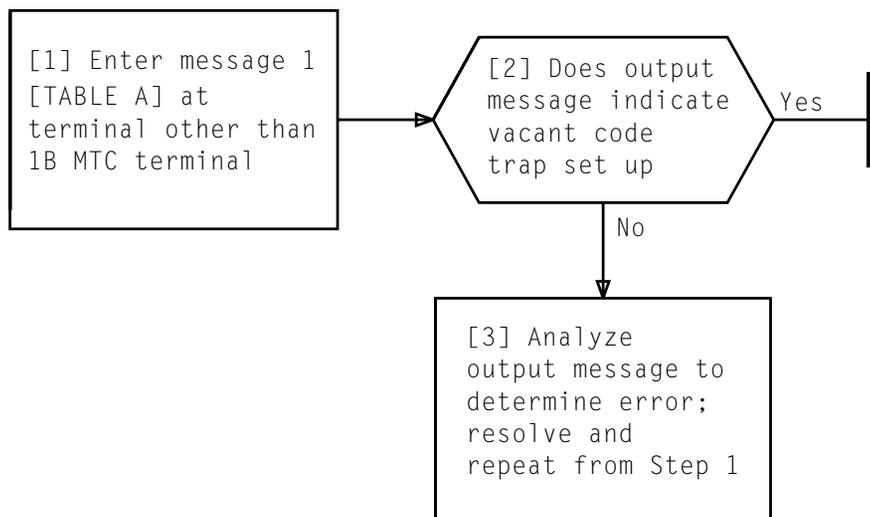
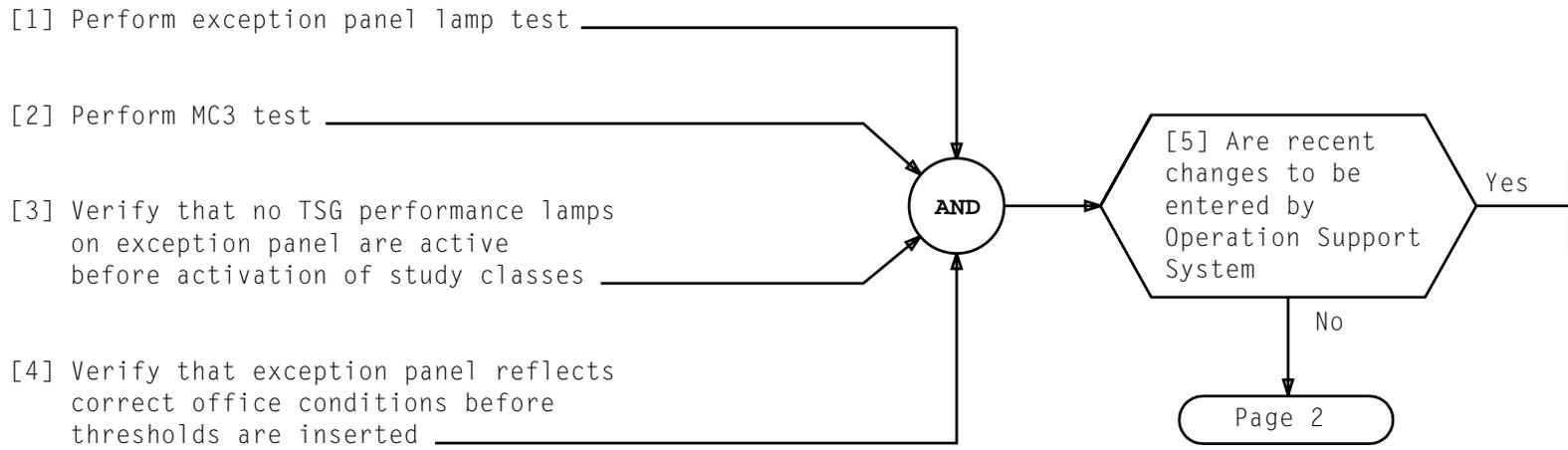
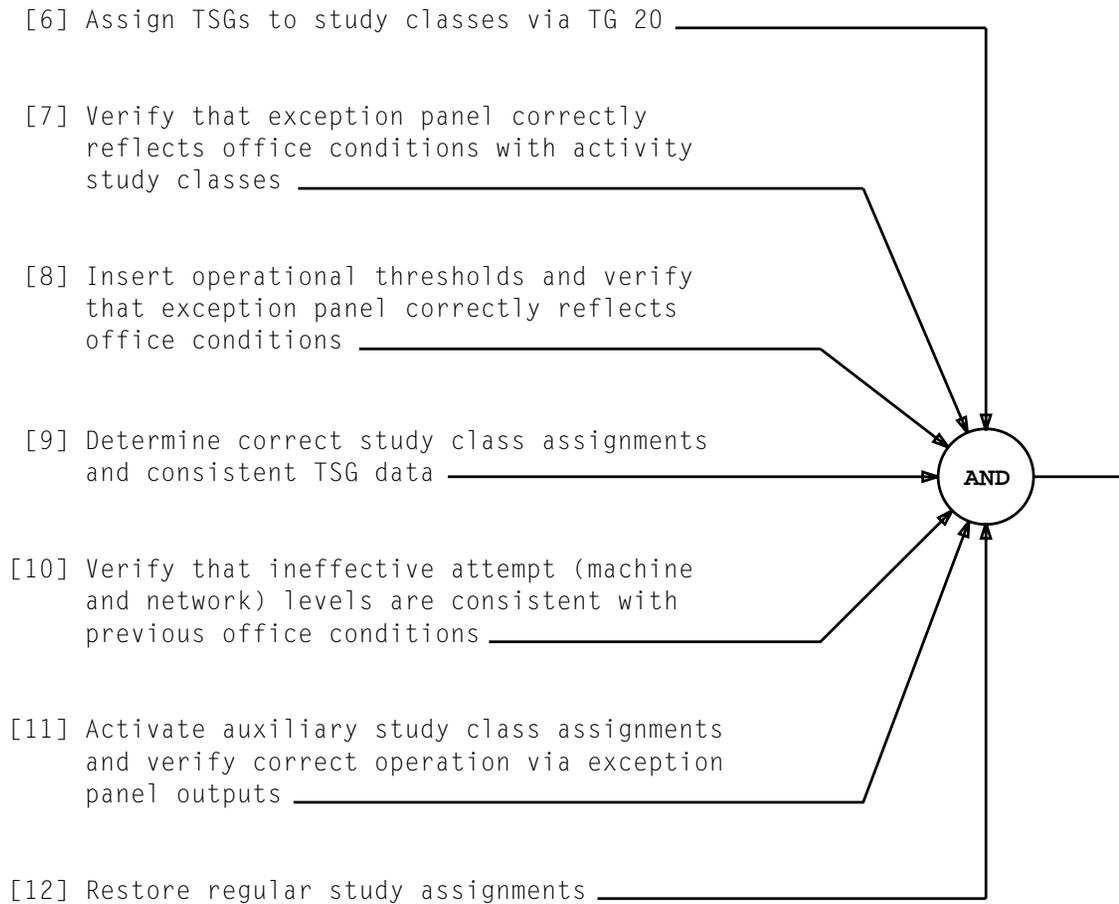


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	MON:IAOFC,NEW;ADD:IA (VCA,NCA,PDA,PER),TIMEON hhmm,COUT! hhmm = Hour (00 to 23) and minute (00 to 59) which specifies time trap is to start collecting data



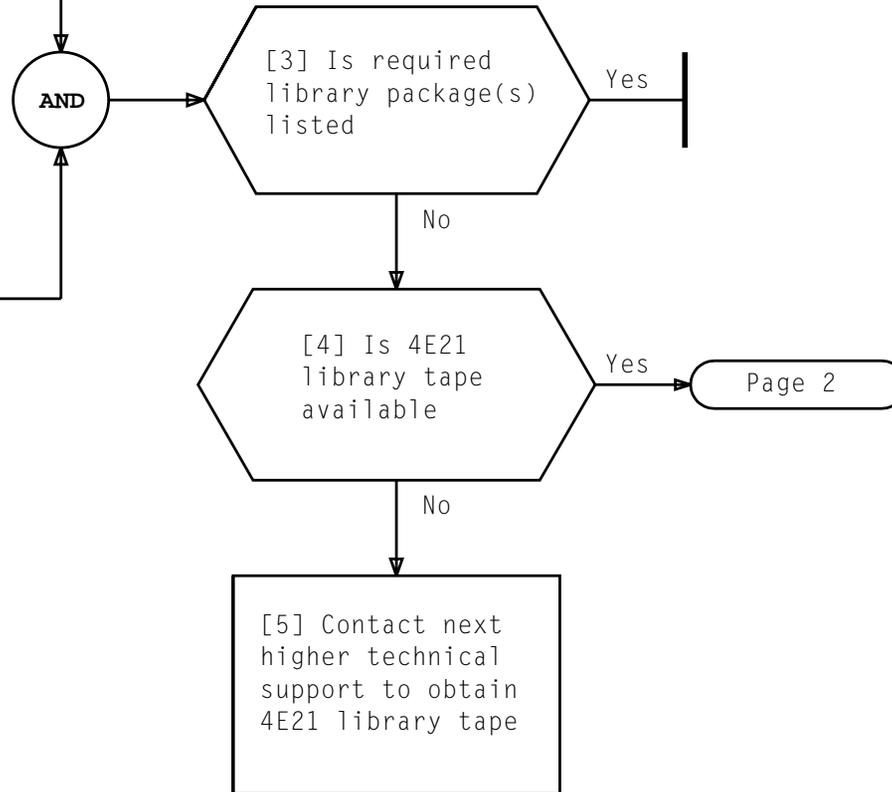
**CHECK OUT NETWORK MANAGEMENT SYSTEM**

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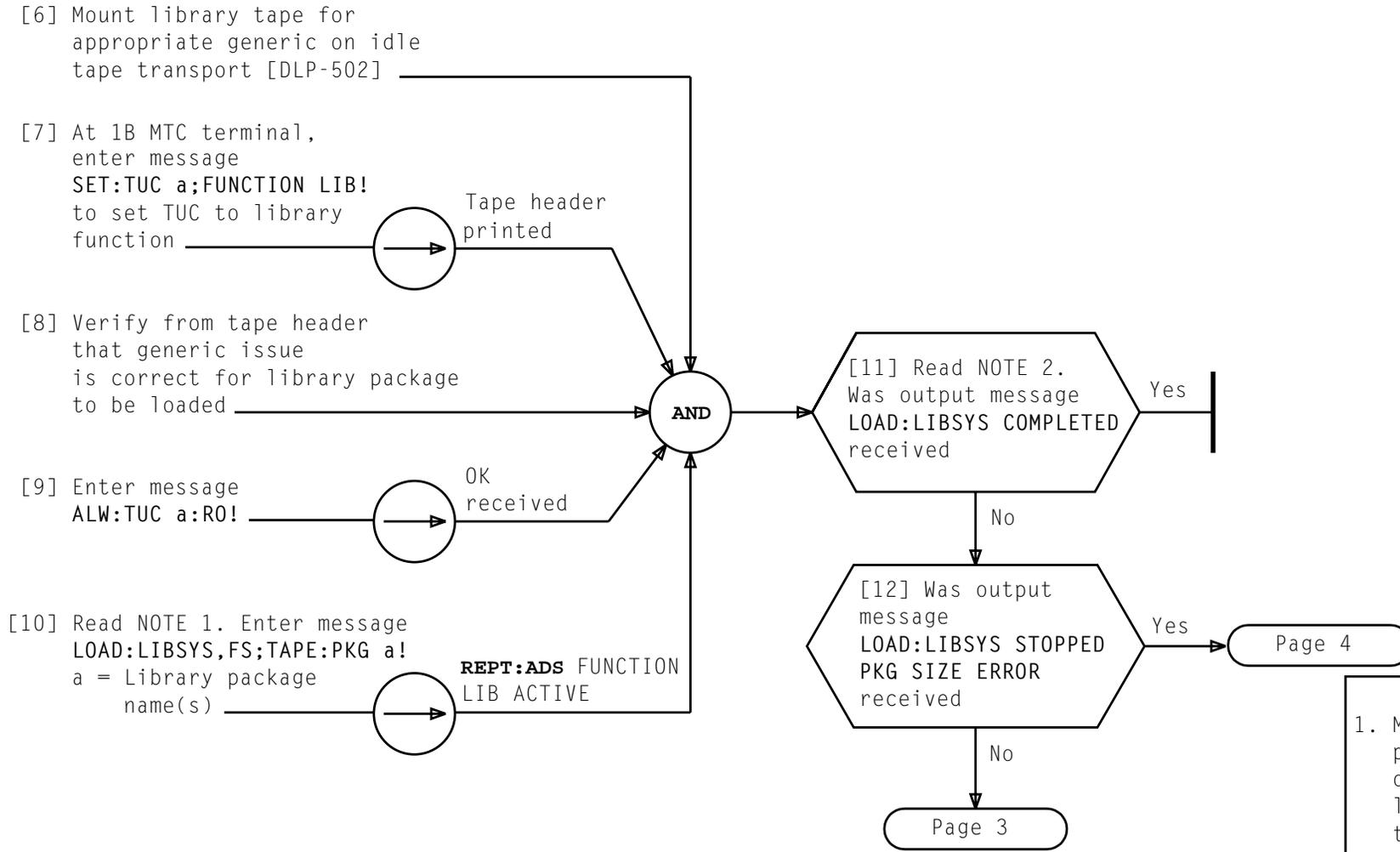
[1] At 1B MTC terminal,  
enter message  
OP:LIBSTAT,FS!

[2] Using printout,  
determine if  
required library  
package(s) is  
listed



## LOAD LIBRARY PROGRAM PACKAGE(S) FROM TAPE ONTO DISK

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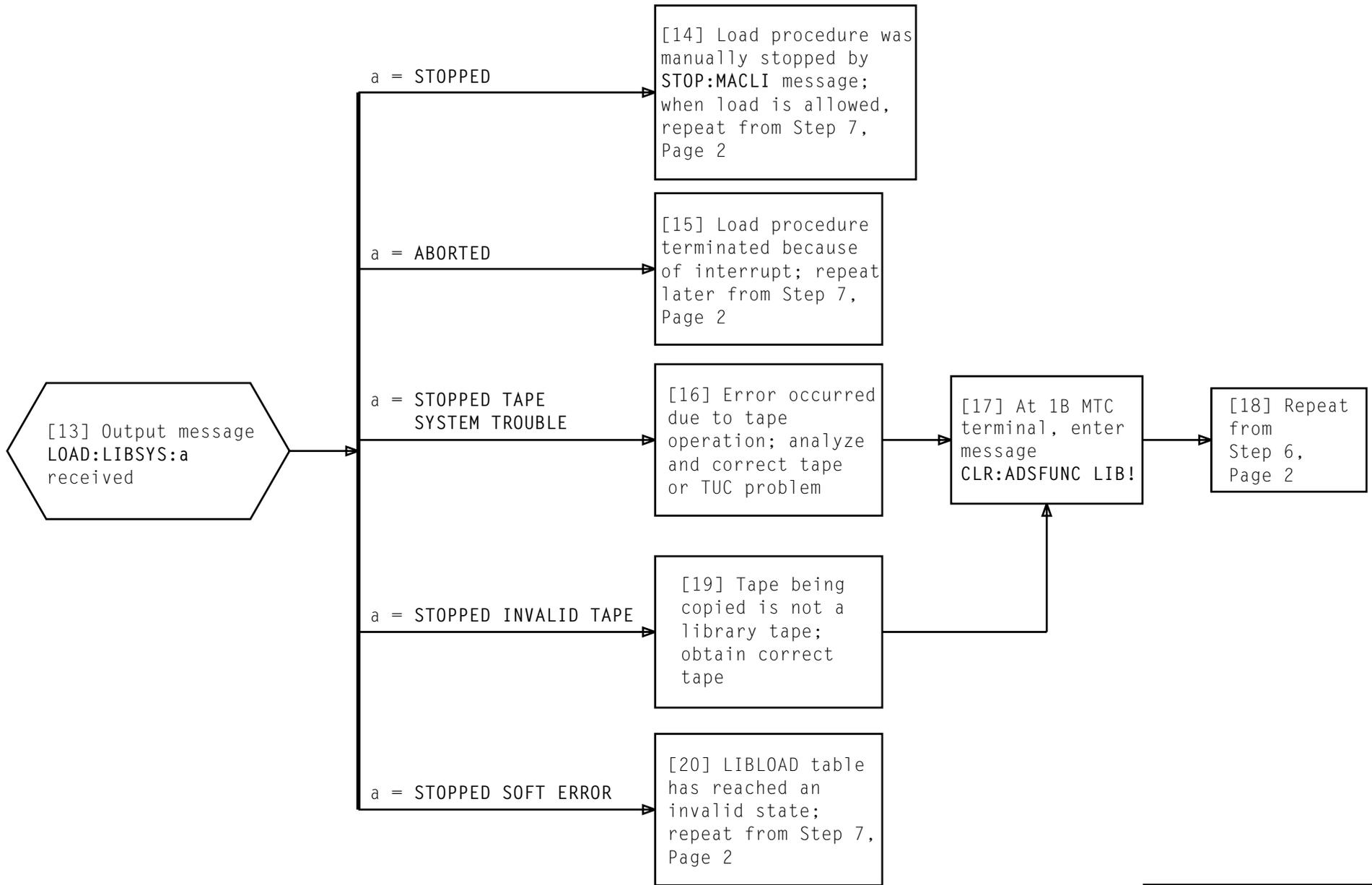


**NOTES**

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

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**LOAD LIBRARY PROGRAM PACKAGE(S) FROM TAPE ONTO DISK**



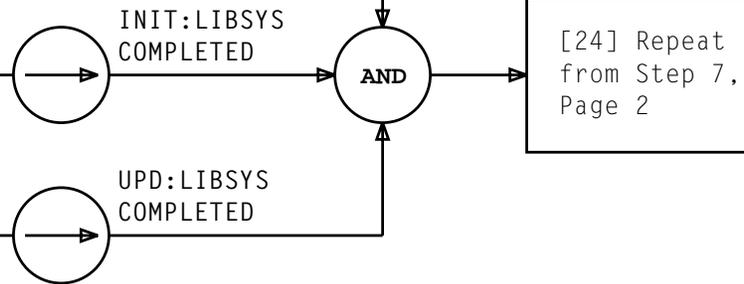
**LOAD LIBRARY PROGRAM PACKAGE(S) FROM TAPE ONTO DISK**

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[21] At 1B MTC terminal, enter message **OP:LIBSTAT,FS!** and identify library packages that will not be required for retrofit or ODA update processes

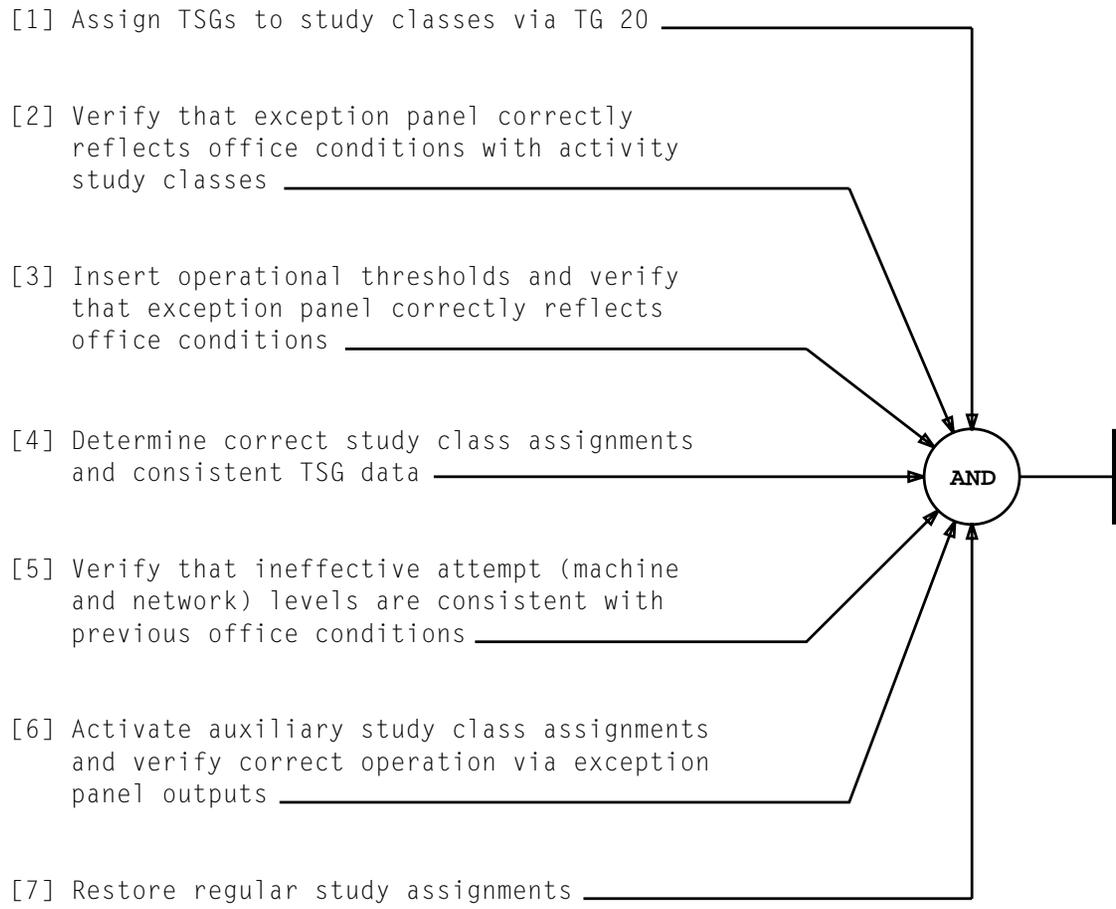
[22] Enter message **INIT:LIBSYS,PKG a!** to remove a library package  
a = library package identified in previous step

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



## LOAD LIBRARY PROGRAM PACKAGE(S) FROM TAPE ONTO DISK

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[1] See CAUTION 1. Inform Network Management Center not to make any changes to the NWM data base via Page CN20 while tape writing is in progress

[2] Select available tape transport for mounting tape to be written. Demount tape if one is mounted [DLP-501]

[3] Mount blank, or erasable, tape with write-enable ring attached [DLP-502]

At 1B MTC terminal:

[4] Enter message  
CLR:ADSFUNC CPY!

[5] Enter message  
SET:TUC a;FUNCTION CPY!

[6] Check header information. If tape is blank or erasable, enter message ALW:TUC a:RW!

[7] Enter message  
COPY: NWM;TAPE:VFY!

Inhibits set and tape mounted

Tape header information printed

Writing of tape begins [NOTE 1]

Tape writing started

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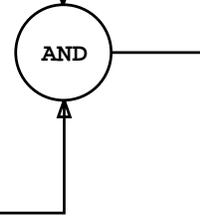
**NOTE 1**  
After network management tape is written, COPY:NWM;TAPE COMPL date and time are printed. Tape will then rewind and be verified. After verification has been completed, COPY:VFY;TAPE COMPL is printed followed by REPT:DEMOUNT TAPE FROM TUC a

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

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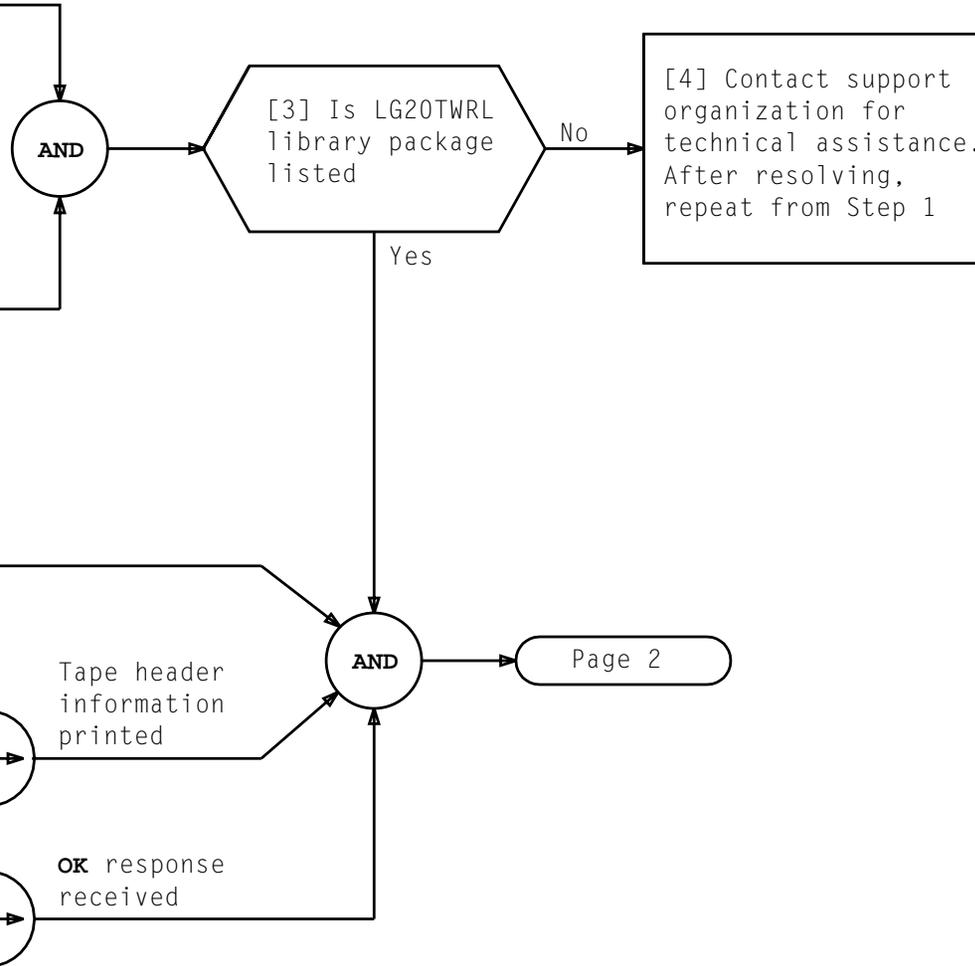
[8] After tape has been written  
and verified and REPT:DEMOUNT  
TAPE FROM TUC a is printed, demount  
tape just written [DLP-501] and  
remove write-enable ring

[9] Label and store tape per  
local instructions



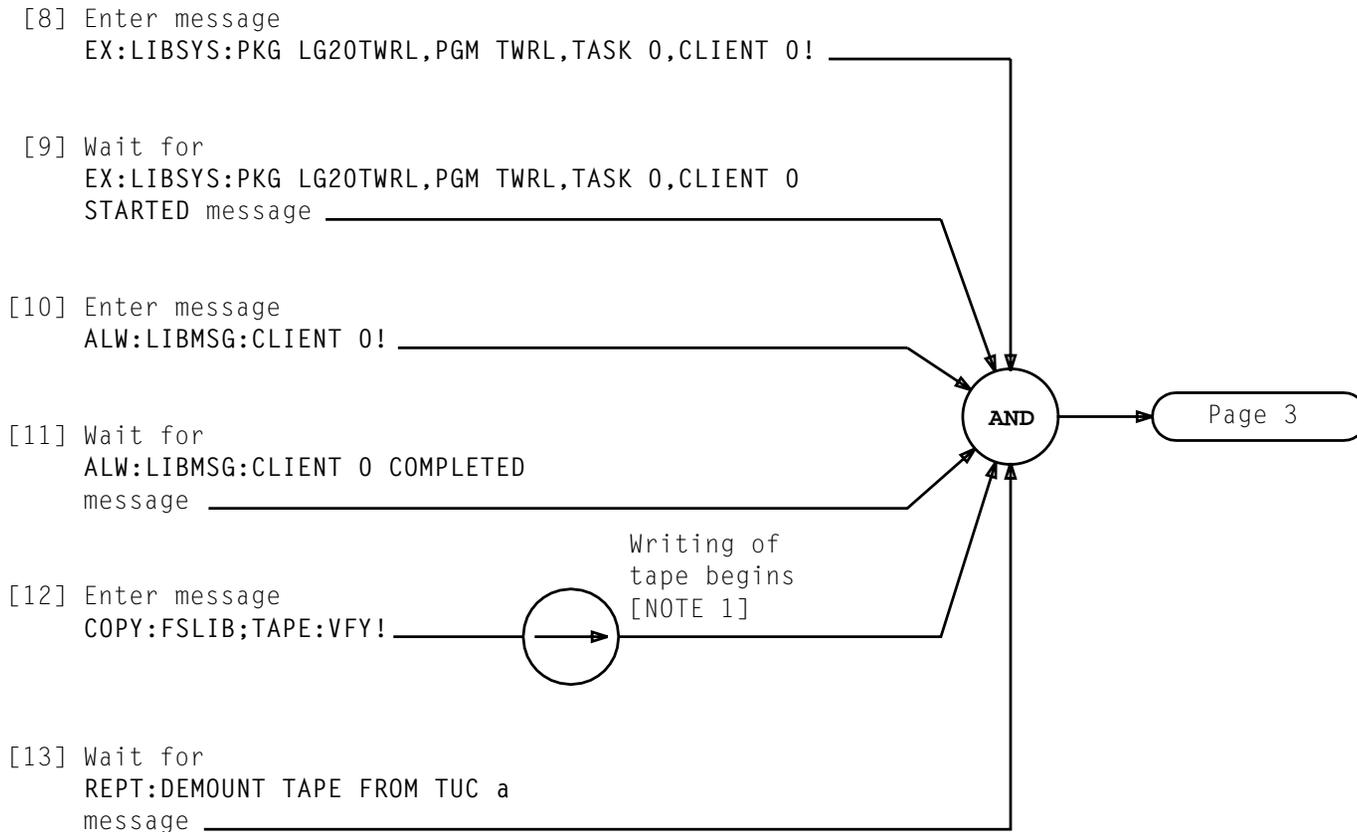
[1] At 1B MTC terminal, enter message  
OP:LIBSTAT,FS!

[2] Using printout, determine  
if LG20TWRL library  
package is listed



# WRITE 4E21 LIBRARY TAPE(S) USING TWRL LIBRARY PROGRAM

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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	
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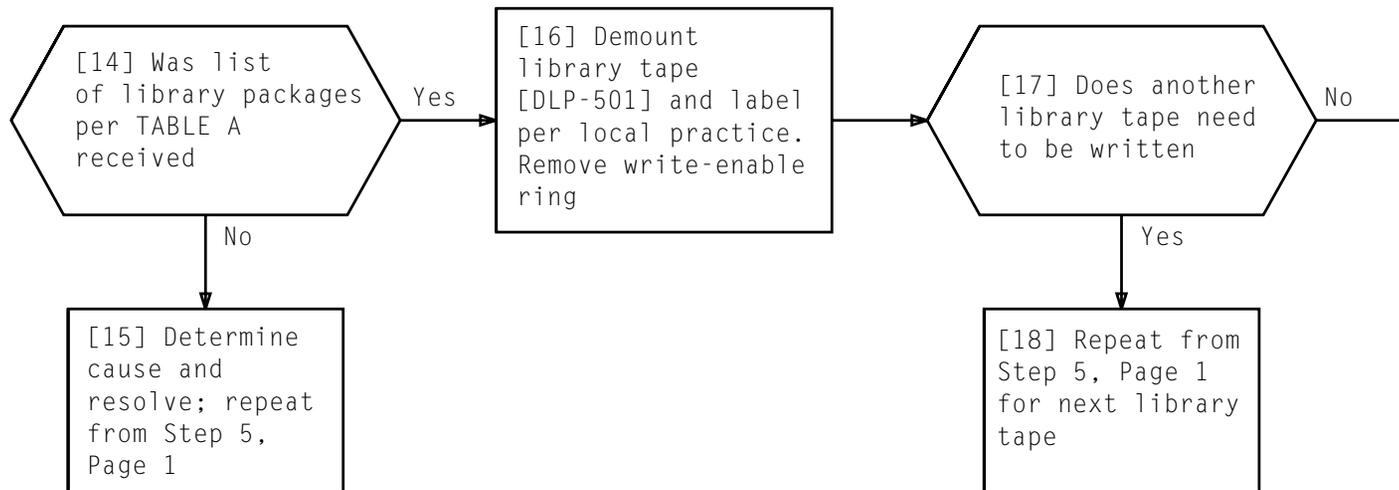
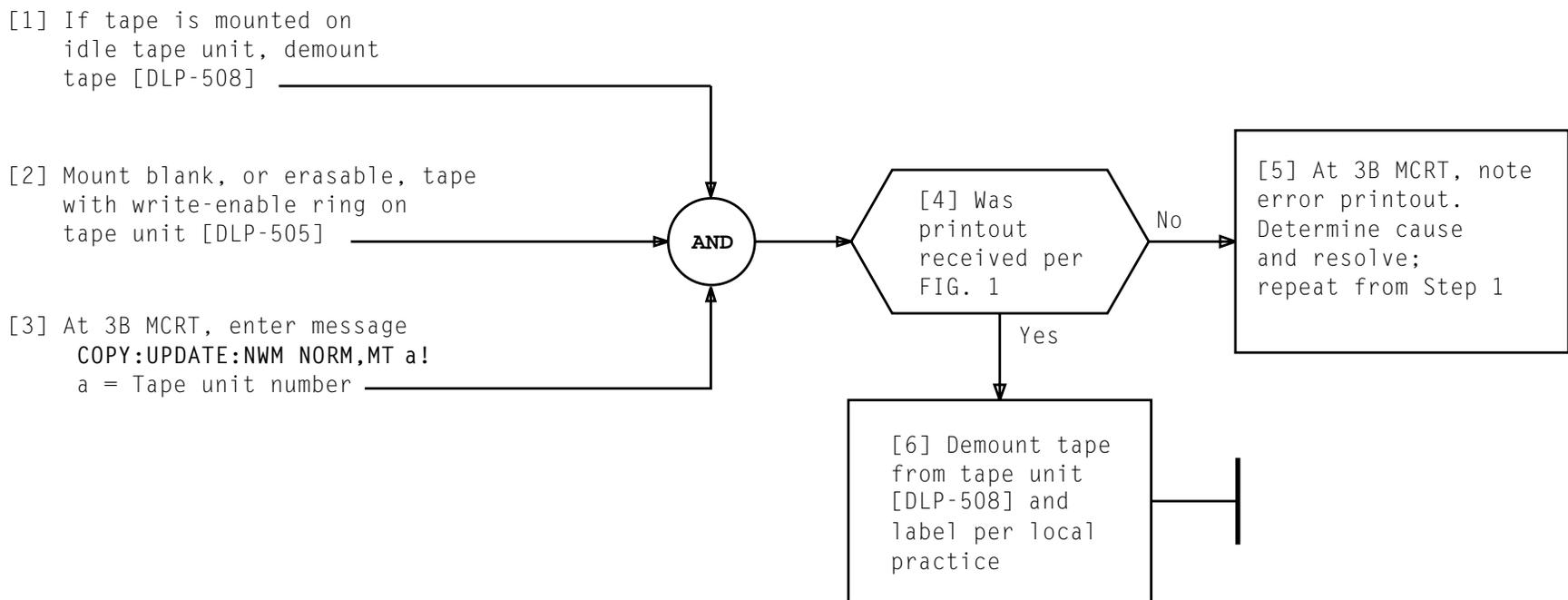


TABLE A	
LIBRARY PACKAGES	
LG21TPAD	LG21PKG1
LG21FLDS	LG21RCUA
LG21NETX	LG21TMSG
LG21PGRO	LG21TWRL



COPY NWM FROM NORMAL FILE

TAPE FILE 10 WRITTEN FROM FS\*

NWM TAPE WRITTEN

\* MAY NOT BE RECEIVED

**FIG. 1 - Sample NWM Tape Write Printout**

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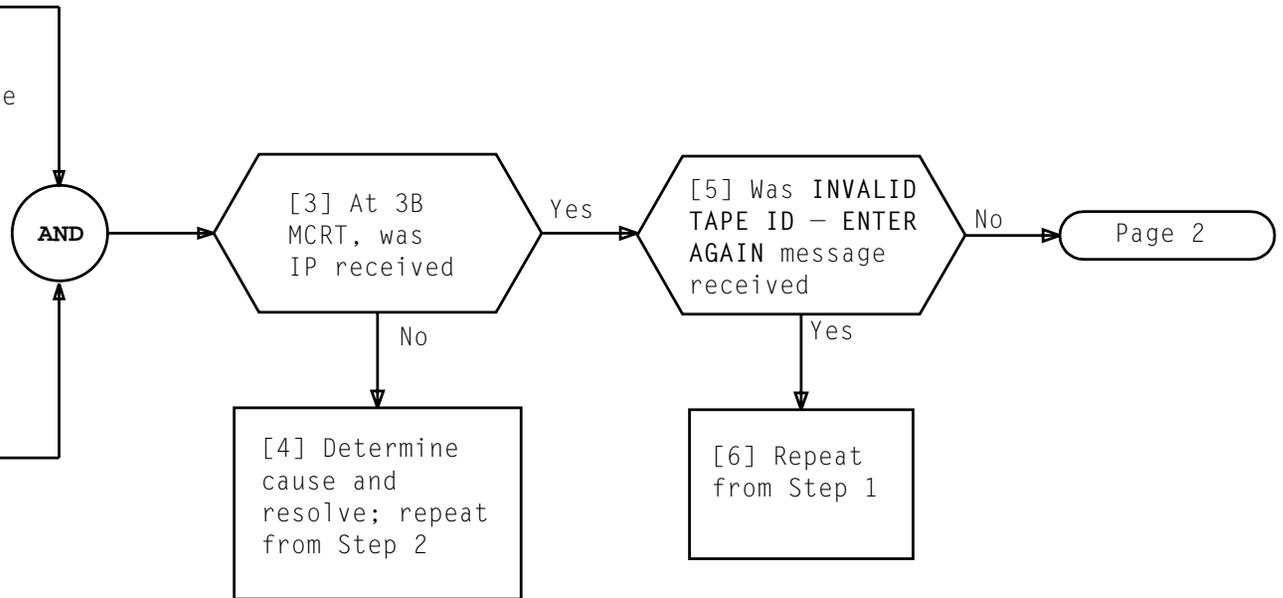
[1] Determine BASE and CONTROL numbers recorded earlier

[2] See NOTE 1. At 3B MCRT, enter message LOAD:UPDATE:ODA "ab",MT c!

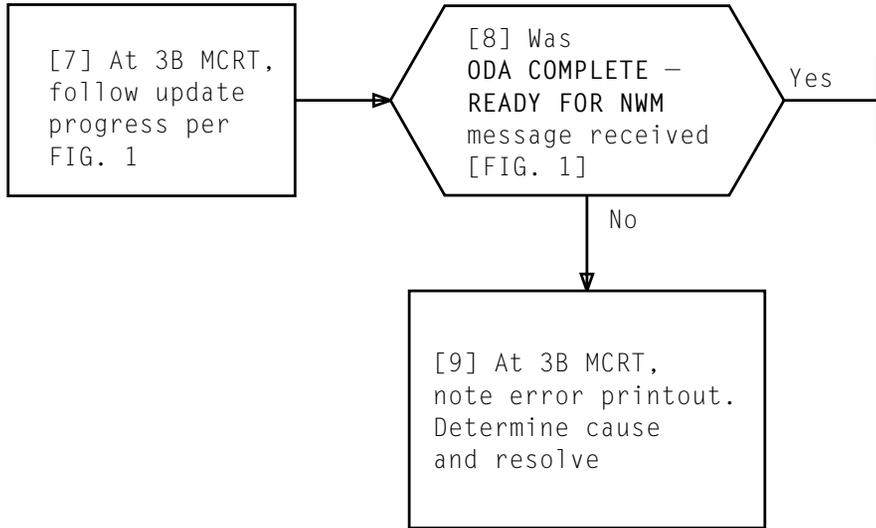
a = BASE number (Step 1). Must be 4 characters long. Spaces are used after base number if not 4 characters long

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



NOTE 1	
ODA tape will not start loading immediately after LOAD:UPDATE . . . message is entered. There will be 5-minute delay while 1AFILE is copied into UPDATE file	
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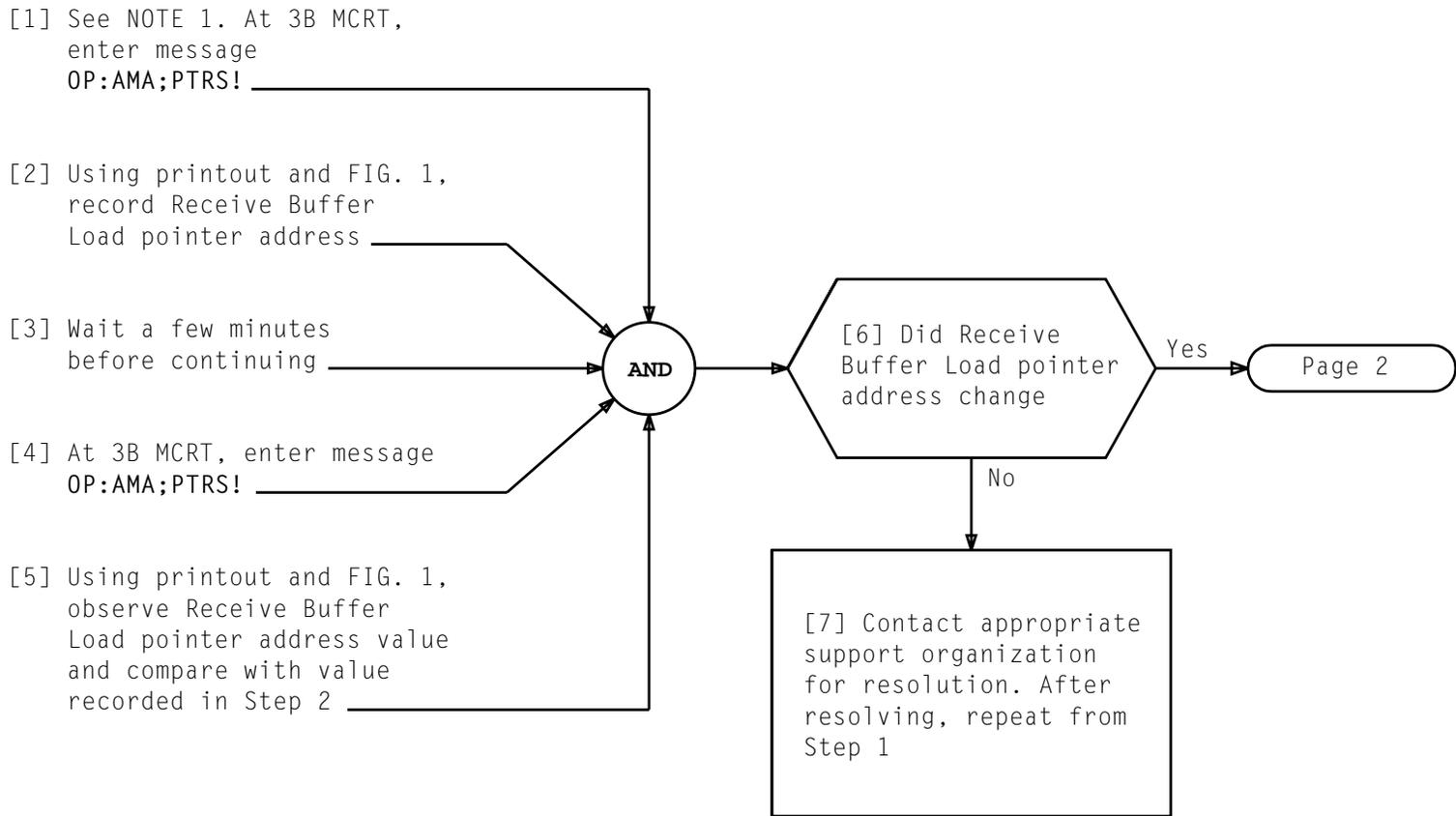


```

ODA UPDATE
TAPE HEADER
•
•
•

/etc/vcp /dev/1afileX /dev/1afileY 131072 > /dev/null
TAPE FILE 10 LOADED TO FS
•
TAPE FILE n LOADED TO FS
ODA COMPLETE - READY FOR NWM
  
```

**FIG. 1 - Sample ODA Load Printout**



```

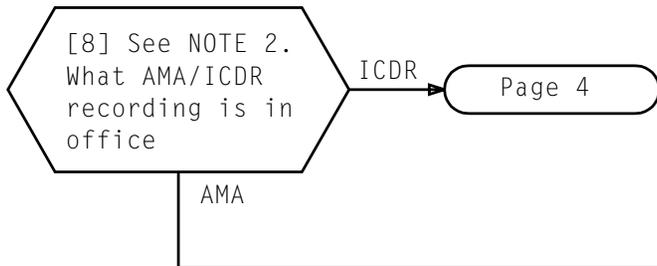
REPT AMA POINTERS INFORMATION
Receive Buffer Unload pointer:
DMA num 0 offset 52284 address 508988
Receive Buffer Load pointer:
DMA num 0 offset 50008 address 506712
.
.
  
```

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

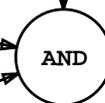
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[9] At 3B MCRT, enter message OP:AMA;MAPS! \_\_\_\_\_

[10] Using printout and TABLE A, determine partition number associated with WRITE PARTITION for each stream (IC/OC) being recorded \_\_\_\_\_

[11] Using printout and TABLE A, record LPO: value(s) under PARTITION DISK MAP:, associated with partition(s) determined in Step 10 \_\_\_\_\_



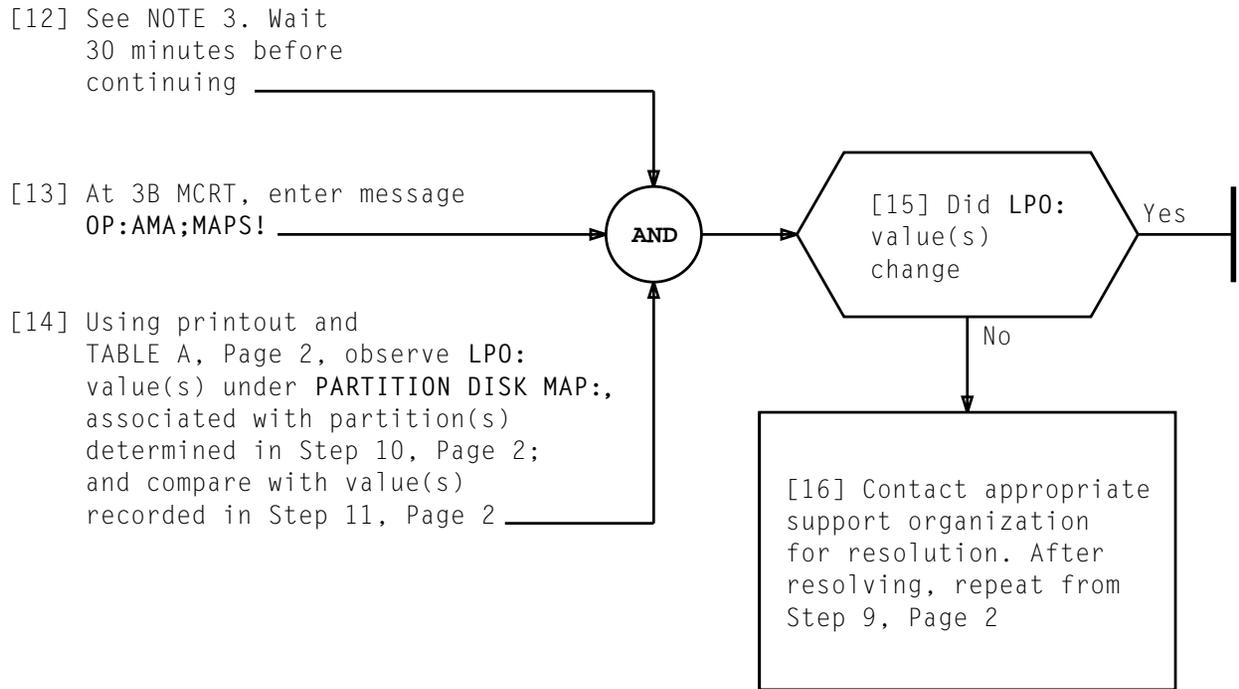
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TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	REPT AMA DISK MAPS FOR a STREAM WRITE PARTITION b READ PARTITION a = IC or OC b = Partition number AMA data being written
2	Message 1 is repeated for each stream
3	PARTITION c DISK MAP: FPO: _____ LPO: d      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

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**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

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[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

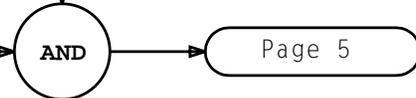
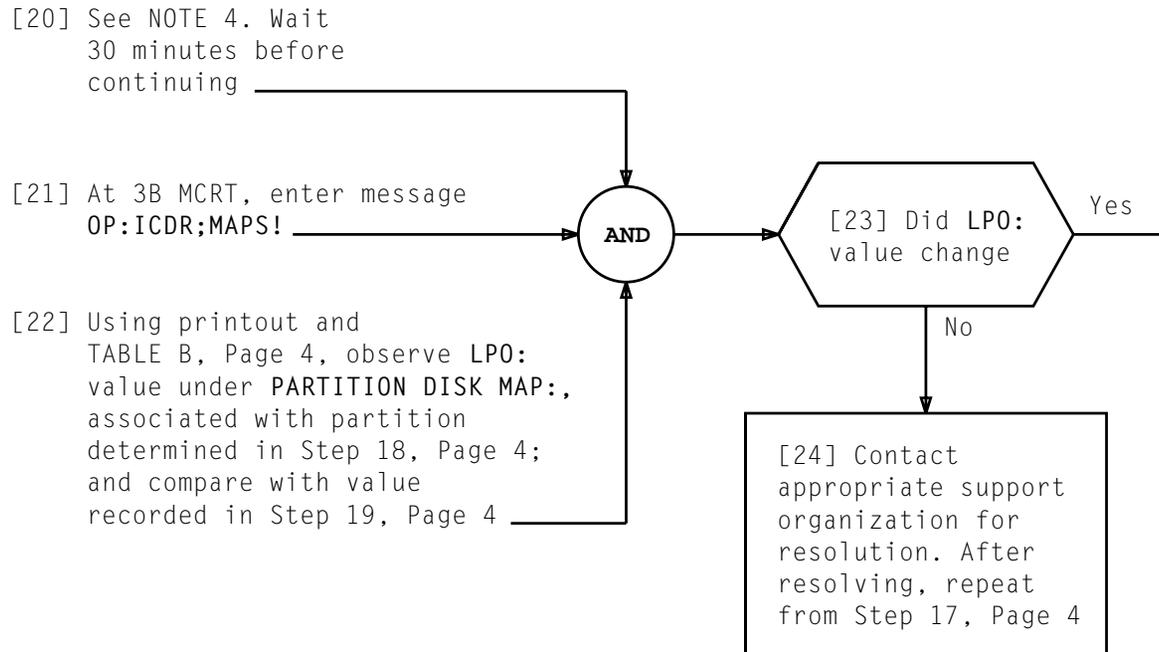


TABLE B	
MESSAGE NUMBER	OUTPUT MESSAGE
1	REPT ICDR DISK MAPS WRITE PARTITION a READ PARTITION a = Partition number ICDR data being written
2	PARTITION b DISK MAP: FPO: _____ LPO: c      FPS: _____ LPS: _____ FSO: _____ LSO: _____ FSS: _____ LSS: _____ FBO: _____ LBO: _____ FBS: _____ LBS: _____ b = Equipped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



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	
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[1] At 1B MTC terminal,  
 enter execute message  
 EX:LIBSYS:PKG LG21RCUA,PGM RCLI,TASK 3,CLIENT 0!

[2] Verify that output messages 1, 2, and 3  
 [TABLE A] are received

[3] See NOTE 1. When output message 3  
 [TABLE A] is received, enter message to  
 start processing  
 IN:LIBSYS:CLIENT 0,ASC nnnnnn!  
 nnnnnn = first RC order number on tape  
 (6-digit number)

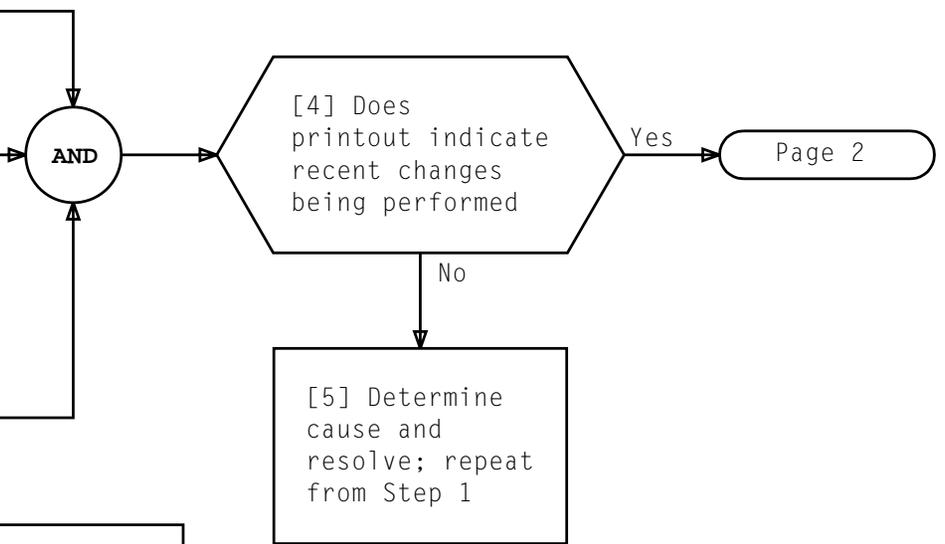


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	EX:LIBSYS:PKG LG21RCUA,PGM RCLI,TASK 3,CLIENT 0 STARTED
2	REPT:RCLI,PROCESSING INPUT FILE RCLIMnyymmddhhmm n = 1 or 2 yymmddhhmm = Date and time Task 3 Tape created
3	REPT:RCLI,ENTER MSG FOR TASK 3 - ORNU TO START PROCESSING

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**

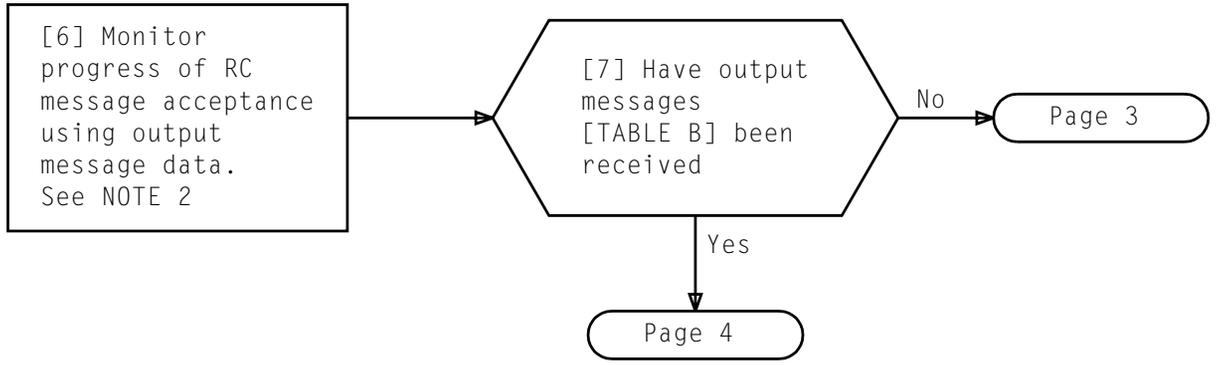


TABLE B	
MESSAGE NUMBER	OUTPUT MESSAGE
1	REPT:RCLI,RC ROLLBACK AREA 90% FULL,ORNU nnnnnn LAST ORNU PROCESSED
2	REPT:RCLI, ENTER MSG FOR TASK 3-ABORT OR OVERWRITE ROLLBACK AREA

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

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

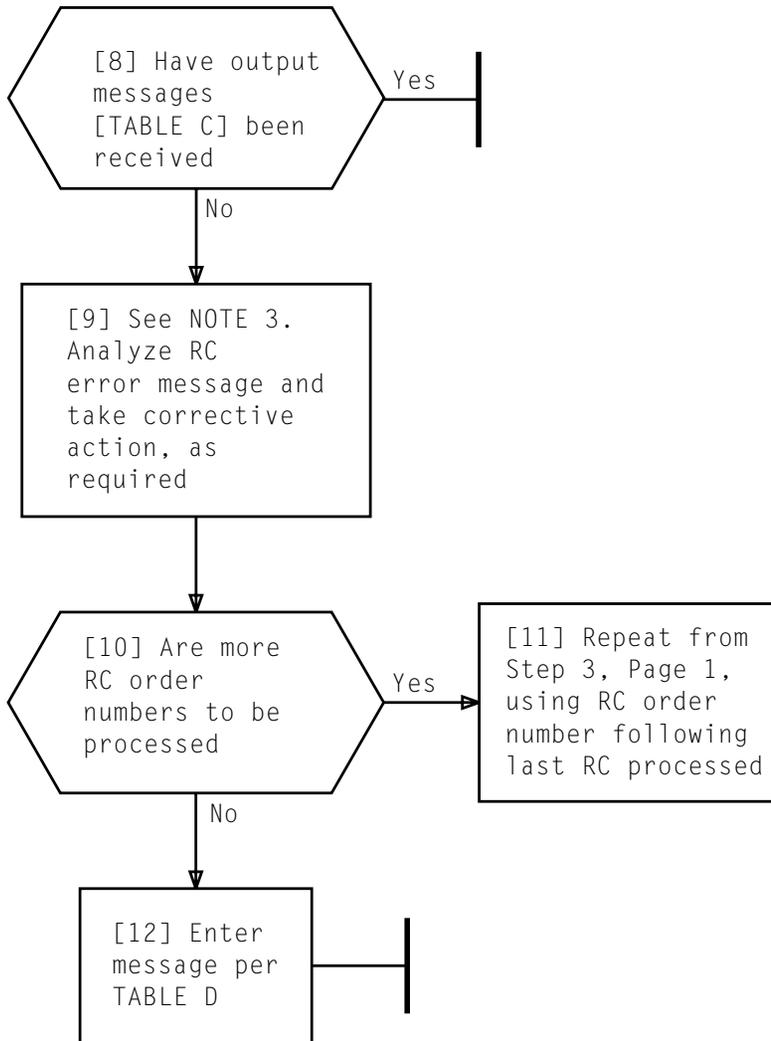
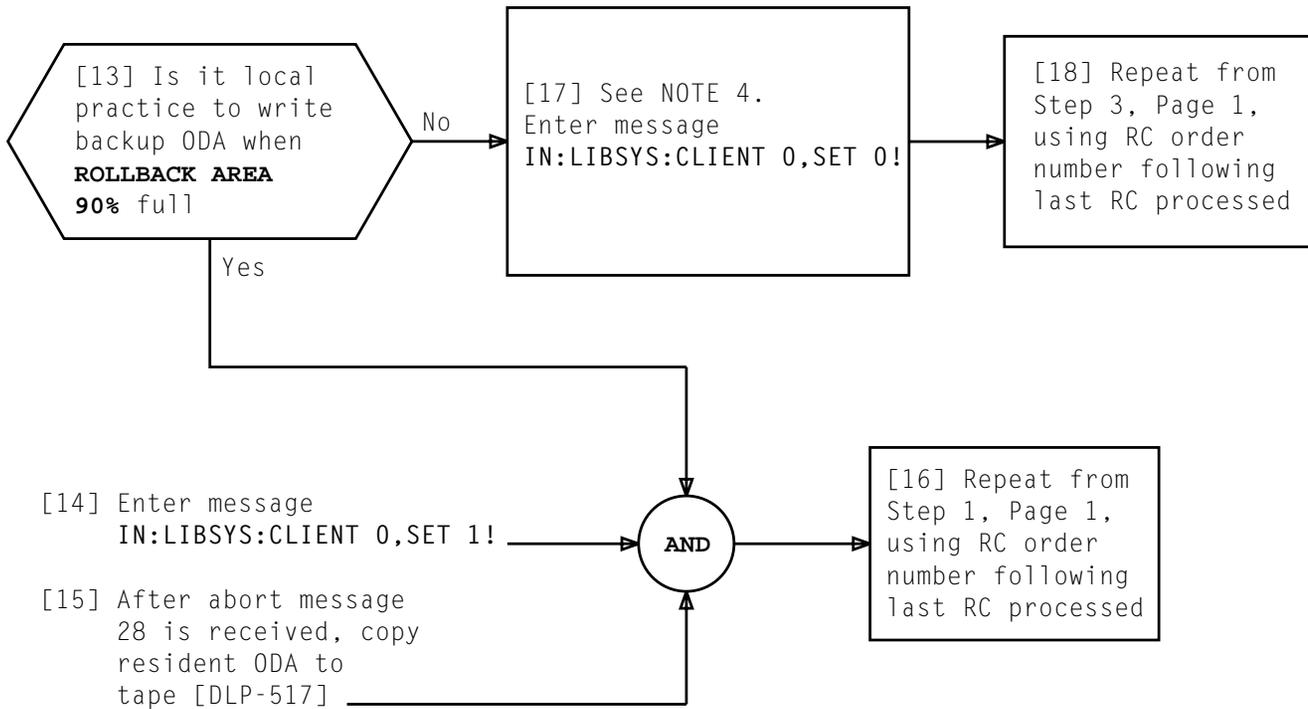


TABLE C	
MESSAGE NUMBER	OUTPUT MESSAGE
1	REPT:RCLI CONTROL REPORT TASK NUMBER 3 COUNT OF RCDM MESSAGES ON INPUT TAPE (RCLIMnyymmddhhmm):nnnn COUNT OF RCDM MESSAGES SENT TO RC GENERIC PGM:nnnn COUNT OF UNIT TYPE MESSAGES ACTIVATED:nnnn nnnn = Number of messages nyymmddhhmm = Part of Tape filename
2	REPT:RCLI,TASK COMPLETED SUCCESSFULLY
3	EX:LIBSYS:PKG LG21RCUA,PGM RCLI,TASK 3,CLIENT 0 COMPLETED REPT:DEMOUNT TAPE FROM TUC a

TABLE D	
OUTPUT MESSAGE	INPUT MESSAGE
1	STOP:LIBSYS:PKG LG21RCUA,PGM RCLI,TASK 3,CLIENT 0!

NOTE 3 Recent change in error must be entered manually, if required	
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**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	
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**EXECUTE RC UPDATE LIBRARY PROGRAM TASK 3 TO REENTER RECENT CHANGES INTO SYSTEM**

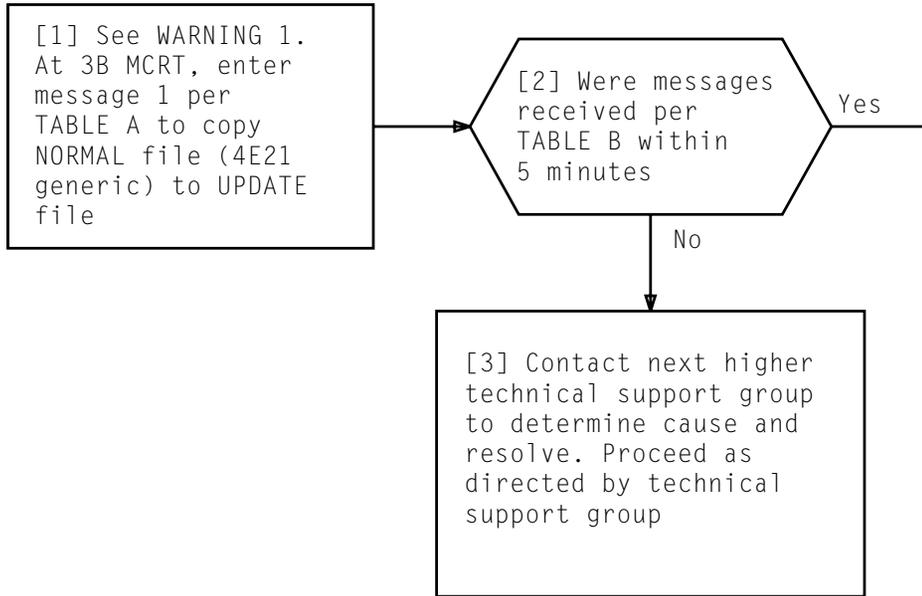
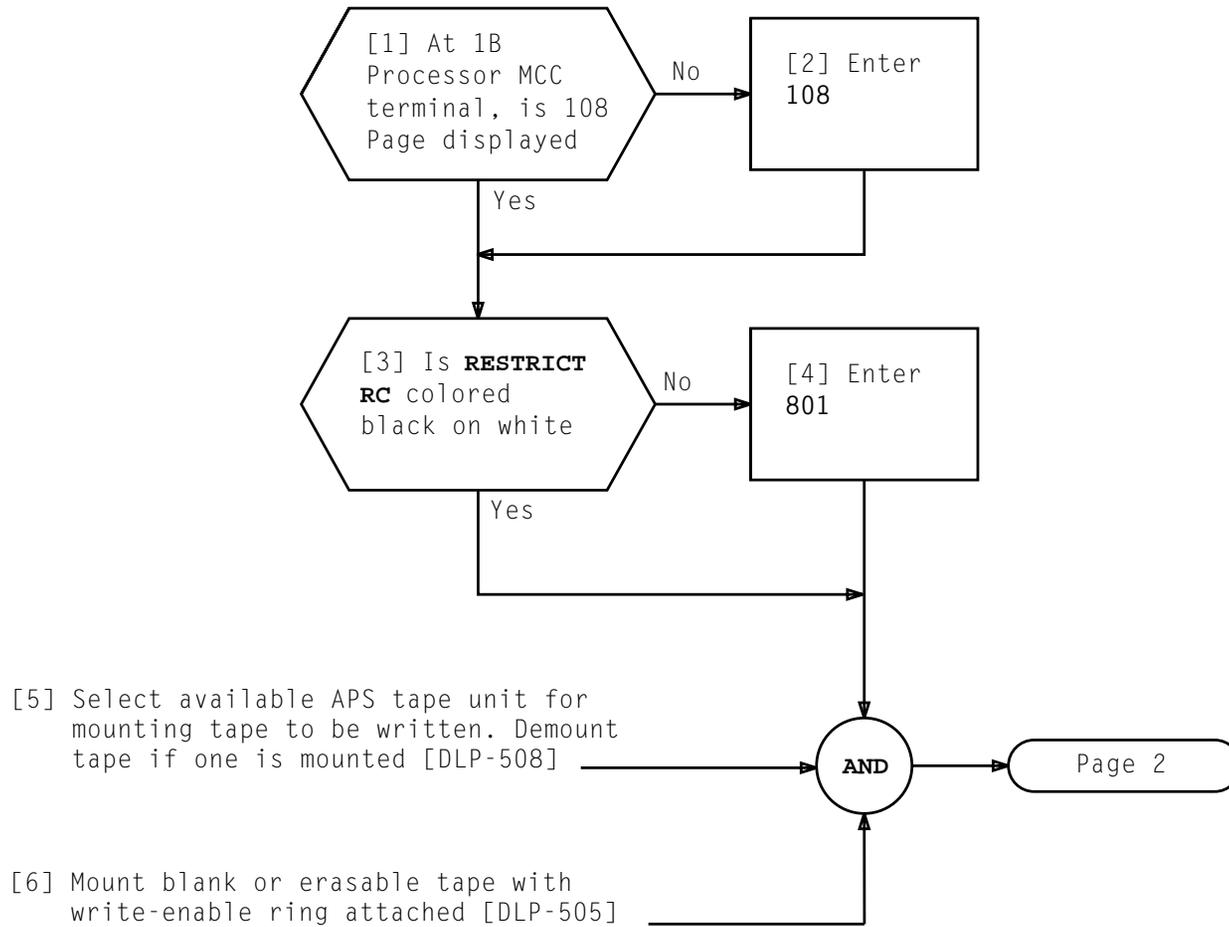


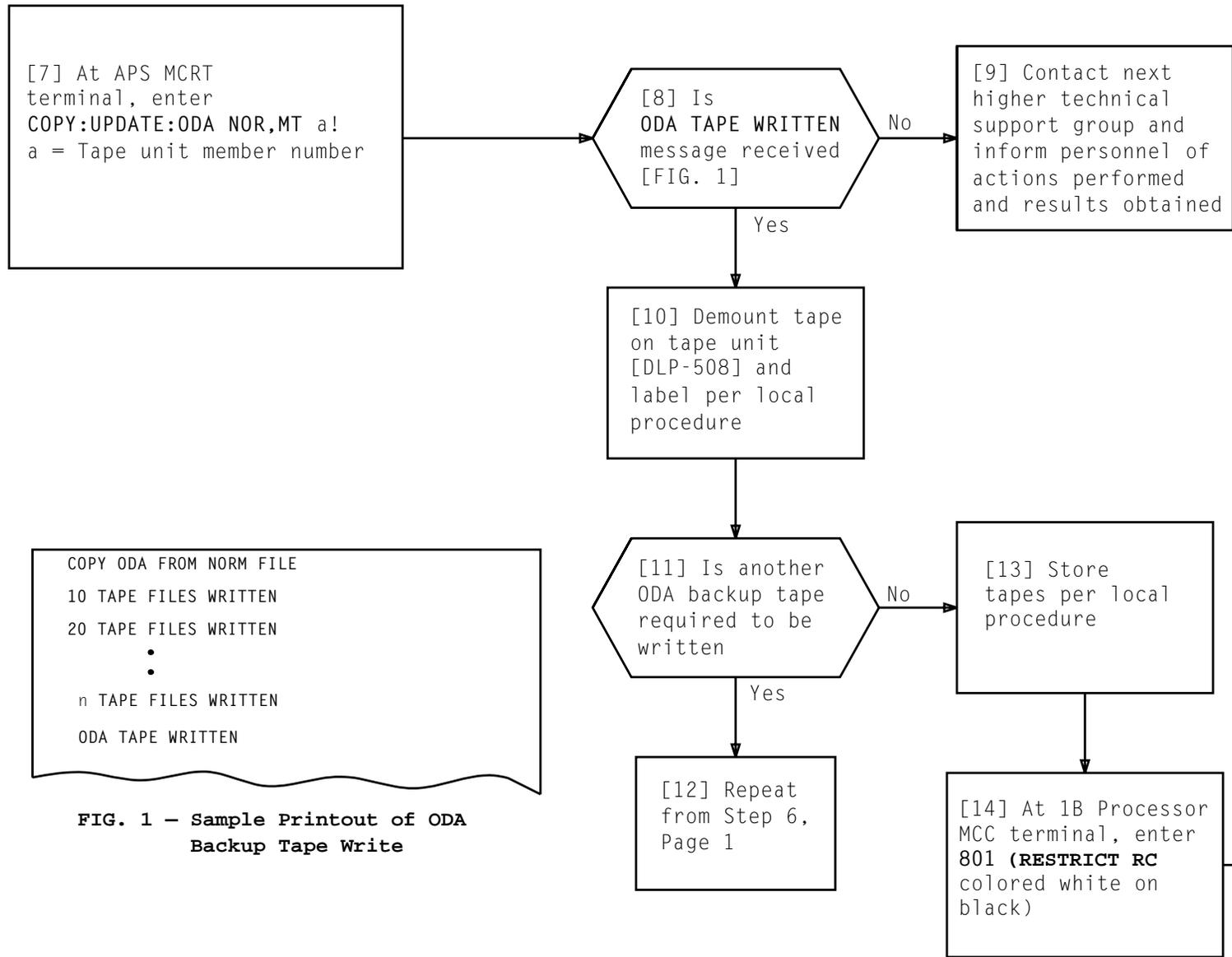
TABLE A	
MESSAGE NUMBER	INPUT MESSAGES
1	COPY:APPFILE NORM;UCL!

TABLE B	
MESSAGE NUMBER	OUTPUT MESSAGES
1	/etc/vcp /dev/lafileX /dev/lafileY 131072 >/dev/null STARTED  COPY:APPFILE COMPLETED

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

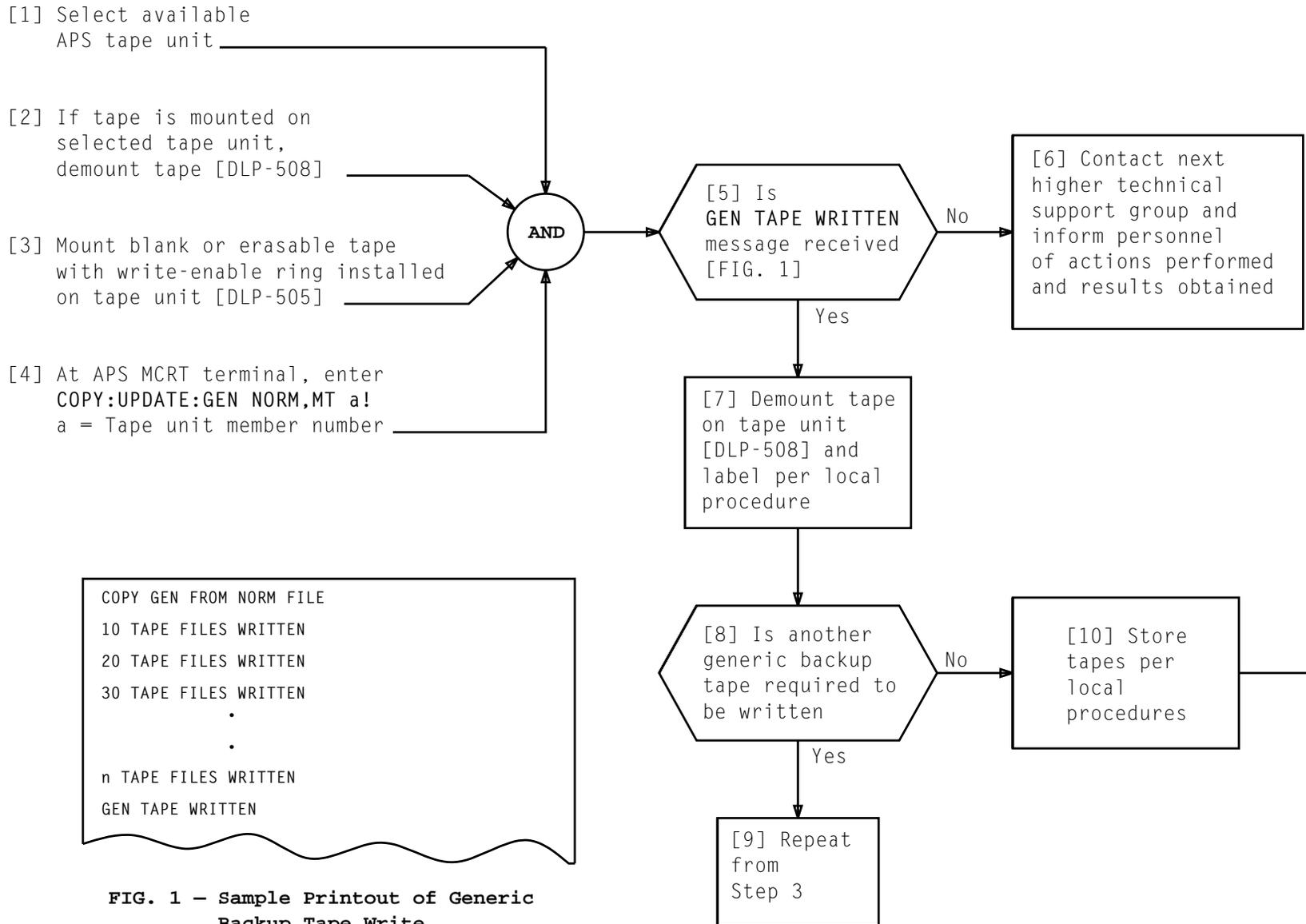
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COPY ODA FROM NORM FILE  
 10 TAPE FILES WRITTEN  
 20 TAPE FILES WRITTEN  
 .  
 n TAPE FILES WRITTEN  
 ODA TAPE WRITTEN

FIG. 1 - Sample Printout of ODA Backup Tape Write



```

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

ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE
IXL-001		DLP-527									
NTP-002		DLP-528									
NTP-003		DLP-529									
NTP-004		DLP-530									
NTP-005		DLP-531									
NTP-006		DLP-532									
NTP-007		DLP-533									
NTP-008		DLP-534									
DLP-500		DLP-535									
DLP-501		DLP-536									
DLP-502		DLP-537									
DLP-503		DLP-538									
DLP-504		DLP-539									
DLP-505		DLP-540									
DLP-506		DLP-541									
DLP-507		DLP-542									
DLP-508		DLP-543									
DLP-509		DLP-544									
DLP-510		DLP-545									
DLP-511		DLP-546									
DLP-512		CKL-891									
DLP-513		TNG-893									
DLP-514											
DLP-515											
DLP-516											
DLP-517											
DLP-518											
DLP-519											
DLP-520											
DLP-521											
DLP-522											
DLP-523											
DLP-524											
DLP-525											
DLP-526											

● REVISED OR ADDED ITEM

□ CANCELED ITEM

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CKL

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**CHECKLIST**