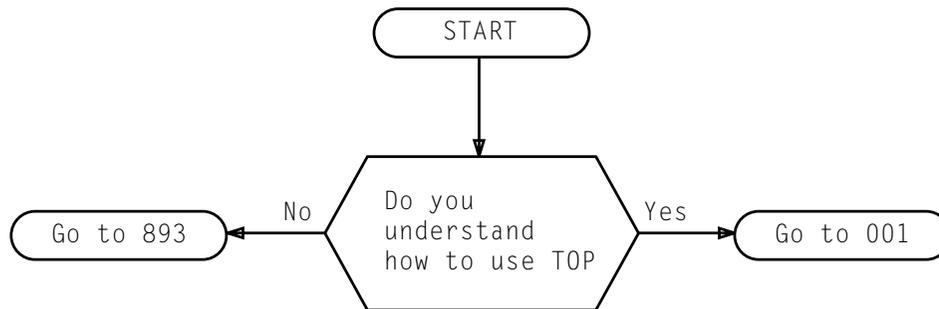




Task Oriented Practice (TOP)

4ESS™ Switch
1B Processor
Growth/Degrowth



TOP Comments Hot Line:

Monday through Friday
8:00 a.m. - 4:00 p.m. (Eastern)
Call: 1-888-LTINFO6
Or FAX to: 1-910-727-3043

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Lucent Technologies Systems for Network Operators Switching and Access Information Development

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FIND YOUR JOB IN THE LIST BELOW THEN GO TO

Acceptance NTP-002

Convert CC and MUP for 1B Processor Extended Call Store – Support to Installer (INST) NTP-003

Add K LW1 Call Store Circuit Packs – Support to Installer (INST) NTP-004

Degrow K LW1 Call Store Circuit Packs – Support to Installer (INST) NTP-005

Back Out CC and MUP Conversion Associated With Extended Call Store – Support to Installer (INST) NTP-006

Degrow Tape Frame – Support to Installer (INST) NTP-007

Convert CC and MUP for 1B Processor Extended Program Store Expansion – Support to Installer (INST). NTP-008

Add K LW2 Program Store Circuit Packs – Support to Installer (INST) NTP-009

Degrow K LW2 Program Store Circuit Packs – Support to Installer (INST) NTP-010

Back Out CC and MUP Conversion Associated With Program Store Expansion – Support to Installer (INST) NTP-011

Degrow DUSs 0 and 1 and TUCs – Support to Installer (INST) NTP-012

Add and Activate IOUC in Operational IOUS (Used by TELCO Personnel Only) NTP-013

Activate IOUC Port in Operational IOUC (Used by TELCO Personnel Only) NTP-014

Add Lower IOUS to Operational Input/Output Processor Frame - Support to Installer (INST) NTP-015

Add Input/Output Microprocessor to Operational IOUS - Support to Installer (INST) NTP-016

Add I/O Processor Frame - Support to Installer (INST) NTP-017

Deactivate and Remove IOUC in Operational IOUS (Used by TELCO Personnel Only) NTP-018

Add Logical Channel (Used by TELCO Personnel Only) NTP-019

Degrow Logical Channel (Used by TELCO Personnel Only) NTP-020

Add Segmented Memory to 1B Processor – Support to Installer (INST) NTP-021

Back Out Segmented Memory From 1B Processor – Support to Installer (INST) NTP-022

Acceptance tests are not required for verification of the growth procedures contained in this volume. The readiness of a frame or unit to become part of the operating system is established by the successful completion of the particular growth procedure in its entirety.

ACCEPTANCE

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

		RESPONSIBILITY	
	<i>WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling</i>		
	<p>NOTES:</p> <ol style="list-style-type: none"> 1. This procedure must be performed during light traffic periods 2. Conversion will be performed in sequence: CC 0 and MUP 0; then CC 1 and MUP 1 3. Overwrites occur while using XAPP. These overwrites must be logged in at the end of each growth shift per local practices 4. If XAPP overwrites were used during a shift, Item 37 must be performed at the end of that shift 5. A listing of XAPP error codes and an explanation of each is listed in DLP-538. These error codes may be received during XAPP I/O message processing 6. This procedure contains soak intervals for verifying system operations and stability during conversion. During the soaking interval, all abnormal conditions (such as interrupts, interjects, and diagnostic failures related to growth) must be investigated and resolved immediately. Conversion equipment, being soaked, must be error free for at least the time specified 7. Daily monitoring of CC and MUP soak counts should be performed to see if soak list is being properly updated or if manual intervention (using SET:SOAK input message) is necessary to reestablish the soak list. DLP-536 can be performed to verify the soak count. The soak count will be decremented by 1 day at 12:30 AM for CC and 2:30 AM for MUP 		
1	Notify Next Higher Technical Support Group That CC 0 and MUP 0 Conversion Will Be Performed	TELCO	—
2	Ensure 4ESS™ Switch Is in Stable Condition	TELCO	DLP-500
3	At MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	—
4	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
5	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter 118	TELCO	—
6	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	—
7	At MTC Terminal, Diagnose Standby CC (Item 6) Using Restore Message (RST:CC a!)	TELCO	DLP-502

**CONVERT CC AND MUP FOR 1B PROCESSOR EXTENDED CS —
SUPPORT TO INSTALLER (INST)**

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

8	Switch CCs (SW:CC!)	TELCO	DLP-503
9	Diagnose New Standby CC Using Restore Message (RST:CC a!)	TELCO	DLP-502
10	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	—
11	If CC 0 Is Not Standby, Switch CCs (SW:CC!)	TELCO	DLP-503
12	Remove CC 0 From Service (RMV:CC 0!)	TELCO	DLP-504
13	Using Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 0 (41-014), Remove CC 0 From Service and Power Down	TELCO	DLP-505
14	In 1B Processor Cabinet 0, at Location 41-086, Remove KLW17 Circuit Pack	INST	—
15	Insert New KLW117 Circuit Pack at Location Vacated in Item 14	INST	—
16	At Location 41-096, Remove KLW5 Circuit Pack	INST	—
17	Insert New KLW105 Circuit Pack at Location Vacated in Item 16	INST	—
18	At 1B Processor Cabinet 0, Remove Old CC Designation Strip and Install New CC Designation Strip	INST	—
19	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
20	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
(Continued on Page 3)			

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

20 (Contd)	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
21	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
22	Allow Library Message Channel:		
	A. If Inputting Message From MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 21 and 22 must be performed before using XAPP input messages		
23	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	-
24	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	-
25	Change and Verify Hardware Version for CC 0	TELCO	DLP-514
26	At KLW11 Circuit Pack (Item 13), Depress ON Pushbutton; Ensure OFF LED Is Off	TELCO/INST	-
27	Diagnose CC 0 Specifying Phases (DGN:CC 0:PH (3,7,19,35,42,51)!)	TELCO/INST	DLP-515
28	At KLW11 Circuit Pack (Item 13), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-516
29	At MTC Terminal, Restore CC 0 to Service (RST:CC 0!)	TELCO/INST	DLP-502
30	Set Soak Count to 3 Days	TELCO/INST	DLP-517
31	Monitor Soak Count Daily for Converted CC During Soak Interval; Do NOT Stop Procedure Here To Wait for Completion of Soak	TELCO	DLP-536
	NOTE: CC will not remain standby during soak period. CC being soaked will be switched between active and standby when REX is run		
32	Safe Point To Temporarily Stop This Procedure. If There Is Insufficient Time To Complete Items 48 Through 74 Before End of Shift, Perform Items 33 Through 38; Otherwise, Go to Item 48	TELCO/INST	-

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

33	At MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	-
34	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
35	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	-
36	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	-
37	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589
38	Stop Procedure for Now. Continue with Item 39 When Resuming	TELCO	-
39	Ensure 4ESS Switch Is in Stable State	TELCO	DLP-500
40	At MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	-
41	Ensure Units Are Restored to Service	TELCO	DLP-501
42	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
43	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
(Continued on Page 5)			

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

43 (Contd)	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
44	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
45	Allow Library Message Channel:		
	A. If Inputting Message From MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a!))	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 44 and 45 must be performed before using XAPP input messages		
46	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
47	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
48	At MTC Terminal, Determine Standby MUP (OP:MUPSTAT!)	TELCO	DLP-520
49	Diagnose Standby MUP Using Restore Message (RST:MUP a!)	TELCO	DLP-521
50	Switch MUPs (SW:MUP!)	TELCO	DLP-522
51	Diagnose New Standby MUP Using Restore Message (RST:MUP a!)	TELCO	DLP-521
52	Determine Standby MUP (OP:MUPSTAT!)	TELCO	DLP-520
53	If MUP 0 Is Not Standby, Switch MUPs (SW:MUP!)	TELCO	DLP-522
54	Remove MUP 0 From Service (RMV:MUP 0!)	TELCO	DLP-523
55	Using Power Switch on KLW25 Circuit Pack in 1B Processor Cabinet 0 (58-086), Remove MUP 0 From Service and Power Down	TELCO	DLP-535
56	In 1B Processor Cabinet 0, at Location 58-078, Remove KLW16 Circuit Pack	INST	—
57	Insert New KLW116 Circuit Pack at Location Vacated in Item 56	INST	—
58	At 1B Processor Cabinet 0, Remove Old MUP Designation Strip and Install New MUP Designation Strip	INST	—

**CONVERT CC AND MUP FOR 1B PROCESSOR EXTENDED CS —
SUPPORT TO INSTALLER (INST)**

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

59	Change and Verify Hardware Version for MUP 0	TELCO	DLP-514
60	At KLW25 Circuit Pack (Item 55), Depress ON Pushbutton; Ensure OFF LED Is Off	TELCO/INST	—
61	Diagnose MUP 0 Specifying Phases (DGN:MUP 0:PH (1-6,11-15,21-25,91!))	TELCO/INST	DLP-524
62	At KLW25 Circuit Pack (Item 55), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-525
63	At MTC Terminal, Restore MUP 0 to Service (RST:MUP 0!)	TELCO/INST	DLP-521
64	Set Soak Count to 3 Days	TELCO/INST	DLP-526
65	At MTC Terminal, Switch MUPs To Make MUP 0 Active (SW:MUP!)	TELCO	DLP-522
66	At 1B Processor MCC Terminal, Enter 100 To Obtain MCC Page Index (100)	TELCO	—
67	Ensure Display Pages 109 and 110 Are Listed	TELCO/INST	—
68	Enter 118 To Obtain 1B Processor Status Page	TELCO	—
69	Notice That 1B Processor Status Page Is Changed From 4E20 Generic Version	TELCO/INST	—
70	Enter 109 To Obtain Program Store Status and Control Page (109)	TELCO	—
71	Ensure Program Store Status and Control Page (109) Is Displayed	TELCO/INST	—
72	Enter 110 To Obtain Call Store Status and Control Page (110)	TELCO	—
73	Ensure Call Store Status and Control Page (110) Is Displayed	TELCO/INST	—
74	At MTC Terminal, Switch MUPs To Make MUP 0 Standby (SW:MUP!)	TELCO	DLP-522
75	Monitor Soak Count Daily for Converted CC and MUP During Soak Interval; Do NOT Stop Procedure Here To Wait for Completion of Soak	TELCO	DLP-536
76	At MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
77	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
78	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
79	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	—
	(Continued on Page 7)		

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

80	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589
81	Notify Next Higher Technical Support Group That CC 0 and MUP 0 Conversion Is Complete and Soak Is Beginning. CC 0 Must Be in Active State for 24 Hours Preceding Start of CC 1 and MUP 1 Conversion With No CC Failures or Interrupts	TELCO	-
	NOTES: 1. MUP will not remain standby during soak period. MUP, being soaked, will be switched between active and standby when REX is run 2. When system is running with MUP 0 active, at 1B Processor MCC terminal, display Pages 100 and 118 are modified, and new display Pages (109 and 110) are available		
82	Wait for CC 0 and MUP 0 To Complete Soaking Before Continuing	TELCO/INST	-
83	Notify Next Higher Technical Support Group That CC 1 and MUP 1 Conversion Will Be Performed. Verify From Next Higher Technical Support Group That No CC Failures or Interrupts Occurred During Previous 24 Hours. Procedure Must Not Be Continued Until CC Is Failure - and Interrupt - Free for 24 Hours	TELCO	-
84	Ensure 4ESS Switch Is in Stable Condition	TELCO	DLP-500
85	At MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	-
86	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
87	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter 118	TELCO	-
88	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	-
89	At MTC Terminal, Diagnose Standby CC (Item 88) Using Restore Message (RST:CC a!)	TELCO	DLP-502
90	Switch CCs (RST:CC a!)	TELCO	DLP-503
91	Diagnose New Standby CC Using Restore Message (RST:CC a!)	TELCO	DLP-502
92	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	-
93	If CC 1 Is Not Standby, Switch CCs (SW:CC!)	TELCO	DLP-503
94	Remove CC 1 From Service (RMV:CC 1!)	TELCO	DLP-504

**CONVERT CC AND MUP FOR 1B PROCESSOR EXTENDED CS -
SUPPORT TO INSTALLER (INST)**

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

95	Using Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 1 (41-014), Remove CC 1 From Service and Power Down	TELCO	DLP-505
96	In 1B Processor Cabinet 1, at Location 41-086, Remove KLW17 Circuit Pack	INST	—
97	Insert New KLW117 Circuit Pack at Location Vacated in Item 96	INST	—
98	At Location 41-096, Remove KLW5 Circuit Pack	INST	—
99	Insert New KLW105 Circuit Pack at Location Vacated in Item 98	INST	—
100	At 1B Processor Cabinet 1, Remove Old CC Designation Strip and Install New CC Designation Strip	INST	—
101	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
102	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
B. For Office Loading a Backup Library Tape	TELCO	DLP-583	
103	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
	(Continued on Page 9)		

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

104	Allow Library Message Channel:		
	A. If Inputting Message From MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a!!))	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 103 and 104 must be performed before using XAPP input messages		
105	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
106	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
107	Change and Verify Hardware Version for CC 1	TELCO	DLP-514
108	At KLW11 Circuit Pack (Item 95), Depress ON Pushbutton; Ensure OFF LED Is Off	TELCO/INST	—
109	Diagnose CC 1 Specifying Phases (DGN:CC 1:PH (3,7,19,35,42,51!!))	TELCO/INST	DLP-515
110	At KLW11 Circuit Pack (Item 95), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-516
111	At MTC Terminal, Restore CC 1 to Service (RST:CC 1!)	TELCO/INST	DLP-502
112	Set Soak Count to 3 Days	TELCO/INST	DLP-517
113	Monitor Soak Count Daily for Converted CC During Soak Interval; Do Not Stop Procedure Here To Wait for Completion of Soak	TELCO	DLP-536
	NOTE: CC will not remain standby during soak period. CC being soaked will be switched between active and standby when REX is run		
114	Safe Point To Temporarily Stop This Procedure. If There Is Insufficient Time To Complete Items 130 Through 157 Before End of Shift, Perform Items 115 Through 120; Otherwise, Go to Item 130	TELCO/INST	—
115	At MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
116	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
117	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
118	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	—

**CONVERT CC AND MUP FOR 1B PROCESSOR EXTENDED CS -
SUPPORT TO INSTALLER (INST)**

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

119	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589
120	Stop Procedure for Now. Continue with Item 121 When Resuming	TELCO	-
121	Ensure 4ESS Switch Is in Stable State	TELCO	DLP-500
122	At MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	-
123	Ensure Units Are Restored to Service	TELCO	DLP-501
124	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
125	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
126	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
127	Allow Library Message Channel:		
	A. If Inputting Message From MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513

**CONVERT CC AND MUP FOR 1B PROCESSOR EXTENDED CS -
SUPPORT TO INSTALLER (INST)**

DO THE ITEMS BELOW IN THE ORDER LISTED

127 (Contd)	B. If Inputting Message From Terminal Other Than MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a!))	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 126 and 127 must be performed before using XAPP input messages		
128	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
129	Enter 801 To Restrict Recent Change (801 – RESTRICT RC Colored Black on White)	TELCO	—
130	At MTC Terminal, Determine Standby MUP (OP:MUPSTAT!)	TELCO	DLP-520
131	Diagnose Standby MUP Using Restore Message (RST:MUP a!)	TELCO	DLP-521
132	Switch MUPs (SW:MUP!)	TELCO	DLP-522
133	Diagnose New Standby MUP Using Restore Message (RST:MUP a!)	TELCO	DLP-521
134	Determine Standby MUP (OP:MUPSTAT!)	TELCO	DLP-520
135	If MUP 1 Is Not Standby, Switch MUPs (SW:MUP!)	TELCO	DLP-522
136	Remove MUP 1 From Service (RMV:MUP 1!)	TELCO	DLP-523
137	Using Power Switch on KLW25 Circuit Pack in 1B Processor Cabinet 1 (58-086), Remove MUP 1 From Service and Power Down	TELCO	DLP-535
138	In 1B Processor Cabinet 1, at Location 58-078, Remove KLW16 Circuit Pack		—
139	Insert New KLW116 Circuit Pack at Location Vacated in Item 138	INST	—
140	At 1B Processor Cabinet 1, Remove Old MUP Designation Strip and Install New MUP Designation Strip	INST	—
141	Change and Verify Hardware Version for MUP 1	TELCO	DLP-514
142	At KLW25 Circuit Pack (Item 137), Depress ON Pushbutton; Ensure OFF LED Is Off	TELCO	—
143	Diagnose MUP 1 Specifying Phases (DGN:MUP 1:PH (1-6,11-15,21-25,91!))	TELCO/INST	DLP-524
144	At KLW25 Circuit Pack (Item 137), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-525
145	At MTC Terminal, Restore MUP 1 to Service (RST:MUP 1!)	TELCO/INST	DLP-521
146	Set Soak Count to 3 Days	TELCO/INST	DLP-526

**CONVERT CC AND MUP FOR 1B PROCESSOR EXTENDED CS –
SUPPORT TO INSTALLER (INST)**

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

147	At MTC Terminal, Switch MUPs To Make MUP 1 Active (SW:MUP!)	TELCO	DLP-522
148	At 1B Processor MCC Terminal, Enter 100 To Obtain MCC Page Index (100)	TELCO	—
149	Ensure Display Pages 109 and 110 Are Listed	TELCO/INST	—
150	Enter 118 To Obtain 1B Processor Status Page	TELCO	—
151	Notice That 1B Processor Status Page Is Changed From 4E20 Generic Version	TELCO/INST	—
152	Enter 109 To Obtain Program Store Status and Control Page (109)	TELCO	—
153	Ensure Program Store Status and Control Page (109) Is Displayed	TELCO/INST	—
154	Enter 110 To Obtain Call Store Status and Control Page (110)	TELCO	—
155	Ensure Call Store Status and Control Page (110) Is Displayed	TELCO/INST	—
156	At MTC Terminal, Switch MUPs To Make MUP 1 Standby (SW:MUP!)	TELCO	DLP-522
157	Monitor Soak Count Daily for Converted CC and MUP During Soak Interval; Do Not Stop Procedure Here To Wait for Completion of Soak	TELCO	DLP-536
	NOTE: MUP will not remain standby during soak period. MUP being soaked will be switched between active and standby when REX is run		
158	Notify Next Higher Technical Support Group That CC 1 and MUP 1 Conversion Is Complete and Soak Is Beginning	TELCO	—
159	If CSs Will Be Grown on This Shift, End of This Procedure; Otherwise, Continue at Item 160	TELCO/INST	—
160	At MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
161	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
162	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
163	Enter 801 To Remove Restrict Recent Change (801 — RESTRICT RC Colored White on Black)	TELCO	—
164	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589

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

		RESPONSIBILITY	
	<i>WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling</i>		
	<p>NOTES:</p> <ol style="list-style-type: none"> 1. This procedure must be performed during light traffic periods 2. All KLW1 circuit packs, that are being grown, will be installed at their proper locations in the 1B Processor cabinets. Call stores are then grown in pairs (lowest member number to highest member number – CSs 10 and 11, CSs 12 and 13, and so on). First call store is grown in 1B Processor cabinet 0 and second call store is grown in 1B Processor cabinet 1 3. Overwrites occur while using XAPP. These overwrites must be logged in at the end of each growth shift per local practices 4. If XAPP overwrites were used during a shift, Item 37 must be performed at the end of that shift 5. A listing of XAPP error codes and an explanation of each is listed in DLP-538. These error codes may be received during XAPP I/O message processing 6. This procedure contains soak intervals for verifying system operation and stability during conversion. During the soaking interval, all abnormal conditions (such as interrupts, interjects, and diagnostic failures related to to growth) must be investigated and resolved immediately. Conversion equipment, being soaked, must be error free for at least the time specified 7. Daily monitoring of CS soak counts should be performed to see if soak list is being properly updated or if manual intervention (using SET:SOAK input message) is necessary to reestablish the soak list. DLP-536 can be performed to verify the soak count 		
1	If CC 1 and MUP 1 Conversion (NTP-003) Was Performed on This Shift, Go to Item 13	TELCO/INST	–
2	At 1B Processor Cabinets 0 and 1, Determine if Following Circuit Packs Have Been Installed at Associated Locations: <ul style="list-style-type: none"> • KLW117/KLW217 at Locations 041-086 and 141-086 • KLW105/KLW205 at Locations 041-096 and 141-096 • KLW216 at Locations 058-078 and 158-078 	TELCO/INST	–
3	If Proper Circuit Packs Are Not Installed (Item 2), This Procedure Must Be Stopped Until CCs 0 and 1, and MUPs 0 and 1 Are Converted	TELCO/INST	–
4	Ensure 4ESS ™ Switch Is in Stable Condition	TELCO	DLP-500

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ADD KLW1 CALL STORE CIRCUIT PACKS – SUPPORT TO INSTALLER (INST)

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

5	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	—
6	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
7	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
8	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
B. For Office Loading a Backup Library Tape	TELCO	DLP-583	
9	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
10	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a!))	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 9 and 10 must be performed before using XAPP input messages		
11	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
12	Enter 801 To Restrict Recent Change (801 — RESTRICT RC Colored Black on White)	TELCO	—

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

13	Determine From Company Order, CSs That Are To Be Grown	TELCO/INST	–
14	Notify Next Higher Technical Support Group That CSs Determined in Item 13 Will Be Grown	TELCO	–
15	Determine Locations in 1B Processor Cabinets for CSs That Are To Be Grown	TELCO/INST	DLP-539
16	At 1B Processor Cabinets 0 and 1, Remove Designation Strips at Level 24	INST	–
17	Remove Plastic Slot Protectors at CS Locations That Will Be Grown	INST	–
18	Ensure ROS/NORM Switch on One Growth KLW1 Circuit Pack Is Set to ROS Position	INST	–
19	At Appropriate 1B Processor Cabinet, Insert and Properly Seat KLW1 CS Circuit Pack That Is Being Grown	INST	–
	NOTE: Do not restore power to KLW1 circuit pack at this time		
20	Repeat Items 18 and 19 for Each CS Being Grown	INST	–
21	At 1B Processor Cabinets 0 and 1, Install Designation Strips at Level 24	INST	–
22	Verify Member Equipage UNEQ for One Growth CS (VER:UTMN:CS a,ME!)	TELCO	DLP-527
23	Change and Verify Member Equipage Unequipped to Grow for Growth CS (Item 22)	TELCO	DLP-528
24	Change and Verify Hardware Generation for Growth CS (HG=1)	TELCO	DLP-537
25	At Growth KLW1 Circuit Pack, (Item 22), Depress ON Pushbutton; Ensure OFF LED Is Off (OS LED Will Remain Off)	INST	–
26	Diagnose Growth CS Specifying Demand Phases (DGN:CS a:PH 1-97!)	TELCO/INST	DLP-529
27	Change and Verify Member Equipage From Grow to SGRO	TELCO	DLP-530
28	Change and Verify Member Equipage From SGRO to OPER (1B Processor MCC Terminal 110 Page Will Display Growth Store OOS)	TELCO	DLP-531
29	At Growth KLW1 Circuit Pack, Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-533
30	Set Soak Count to 3 Days for Growth Call Store	TELCO/INST	DLP-534
	NOTE: Up to four CSs can be soaked at a time. If there are more than four CSs to be soaked, the system will automatically soak these CSs when mcodes become available. During the soak interval, CSs will be put in standby		
	(Continued on Page 4)		

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

31	Monitor Soak Count Daily for Each Growth CS During Soak Interval; Do Not Stop Procedure Here To Wait for Completion of Soak	TELCO	DLP-536
32	Safe Point To Temporarily Stop This Procedure. If There Is Insufficient Time To Complete Next CS Growth, Perform Items 33 Through 38; Otherwise, Go to Item 47	TELCO/INST	-
33	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	-
34	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
35	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	-
36	Enter 801 To Remove Restrict Recent Change (801-RESTRICT RC Colored White on Black)	TELCO	-
37	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589
38	Stop Procedure for Now. When Resuming, Continue With Item 39	TELCO/INST	-
39	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	-
40	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-500
41	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
42	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581	

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

42 (Contd)	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
43	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
44	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 43 and 44 must be performed before using XAPP input messages		
45	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
46	Enter 801 To Restrict Recent Change (801 – RESTRICT RC Colored Black on White)	TELCO	—
	NOTE: Remember, call stores are grown in pairs (lowest member number to highest member number – CSs 10 and 11, CSs 12 and 13, and so on). First call store is grown in 1B Processor cabinet 0 and second call store is grown in 1B Processor cabinet 1		
47	Repeat Items 22 Through 32 for Each Call Store To Be Grown	TELCO/INST	—
48	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
49	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
50	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
51	Enter 801 To Remove Restrict Recent Change (801 – RESTRICT RC Colored White on Black)	TELCO	—
52	Notify Next Higher Technical Support Group CS Growth Is Complete; and System Status Page (108) Will Not Show New CSs Out of Service	TELCO	—
53	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589

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

		RESPONSIBILITY	
	<i>WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling</i>		
	NOTES: 1. This procedure must be performed during light traffic periods 2. Call stores are degrown in pairs (highest member number to lowest member number). First call store is degrown in 1B Processor cabinet 1 and second call store is degrown in 1B Processor cabinet 0 3. Overwrites occur while using XAPP. These overwrites must be logged in at the end of each growth shift per local practices 4. If XAPP overwrites were used during a shift, Item 41 must be performed at the end of that shift 5. A listing of XAPP error codes and an explanation of each is listed in DLP-538. These error codes may be received during XAPP I/O message processing		
1	Ensure 4ESS ™ Switch Is in Stable Condition	TELCO	DLP-500
2	Determine From Company Order, CS Pair That Is To Be Degrown	TELCO/INST	—
3	Determine Locations in 1B Cabinets for CSs That Are To Be Degrown	TELCO/INST	DLP-539
4	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	—
5	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
6	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
7	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	(Continued on Page 2)		

DEGROW KLW1 CALL STORE CIRCUIT PACKS — SUPPORT TO INSTALLER (INST)

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

7 (Contd)	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
8	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
9	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 8 and 9 must be performed before using XAPP input messages		
10	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
11	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
12	At 1B MTC Terminal, Remove One Call Store Being Degrown From Service (RMV:CS a!)	TELCO	DLP-540
13	At Power Switch on KLW1 Circuit Pack Being Degrown, Rotate ROS/NORM Switch to ROS Position; Ensure OS LED Is On	TELCO	—
14	Verify Member Equipage for Degrowth CS (VER:UTMN:CS a,ME!)	TELCO	DLP-541
15	Change and Verify Degrowth CS Member Equipage to UNEQ	TELCO	DLP-532
16	At Power Switch on Degrowth KLW1 Circuit Pack, Depress OFF Pushbutton; Ensure OFF LED Is On	TELCO/INST	—
17	If KLW1 Circuit Pack Is To Be Removed From 1B Processor Cabinet, Perform Items 18 and 19; Otherwise, Go to Item 20	INST	—
18	Remove KLW1 CS Circuit Pack That Was Degrown	INST	—
19	Install Plastic Slot Protector at CS Location That Was Degrown	INST	—

DEGROW KLW1 CALL STORE CIRCUIT PACKS — SUPPORT TO INSTALLER (INST)

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

20	Safe Point To Temporarily Stop This Procedure. If Stopping, Perform Items 21 Through 26; Otherwise, Go to Item 35	TELCO/INST	—
21	At 1B MTC Terminal, Enter Message <code>ALW:MACLI,CLASS MTCE!</code> To Allow REX	TELCO	—
22	Terminate Execution of XAPP Library Program (<code>STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!</code>)	TELCO	DLP-518
23	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
24	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	—
25	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589
26	Stop Procedure for Now. When Resuming, Continue at Item 27	TELCO/INST	—
27	At 1B MTC Terminal, Enter Message <code>INH:MACLI,CLASS MTCE;REX!</code> To Inhibit REX	TELCO	—
28	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-500
29	Determine if Library Package Containing Program XAPP Resides in File System (<code>OP:LIBSTAT,FS!</code>)	TELCO	DLP-506
30	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (<code>SET:TUC a;FUNCTION LIB!</code>)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (<code>ALW:TUC a:RO!</code>)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (<code>LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!</code>)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	(Continued on Page 4)		

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

30 (Contd)	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
31	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
32	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 31 and 32 must be performed before using XAPP input messages		
33	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
34	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
35	Repeat Items 12 Through 20 for Each Call Store To Be Degrown	TELCO/INST	—
36	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
37	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
38	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
39	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	—
40	Change CS Designation Strips in 1B Processor Cabinets 0 and 1 To Remove Degrown Call Stores	INST	—
41	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589

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

		RESPONSIBILITY	
	<i>WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling</i>		
	NOTES: 1. This procedure must be performed during light traffic periods 2. Back out will be performed in sequence: CC 0 and MUP 0; then CC 1 and MUP 1 3. Overwrites occur while using XAPP. These overwrites must be logged in at the end of each growth shift per local practices 4. If XAPP overwrites were used during a shift, Item 38 must be performed at the end of that shift 5. A listing of XAPP error codes and an explanation of each is listed in DLP-538. These error codes may be received during XAPP I/O message processing 6. This procedure contains soak intervals for verifying system operation and stability during conversion. During the soaking interval, all abnormal conditions (such as interrupts, interjects, and diagnostic failures related to growth) must be investigated and resolved immediately. Conversion equipment, being soaked, must be error free for at least the time specified		
1	Ensure 4ESS ™ Switch Is in Stable Condition	TELCO	DLP-500
2	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	—
3	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
	NOTE: Items 4 through 32 are being performed to change CC 0		
4	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter 118	TELCO	—
5	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	—
6	At 1B MTC Terminal, Diagnose Standby CC (Item 5) Using Restore Message (RST:CC a!)	TELCO	DLP-502
7	Switch CCs (SW:CC!)	TELCO	DLP-503
8	Diagnose New Standby CC Using Restore Message (RST:CC a!)	TELCO	DLP-502
9	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	—
10	If CC 0 Is Not Standby, Switch CCs (SW:CC!)	TELCO	DLP-503
11	Remove CC 0 From Service (RMV:CC 0!)	TELCO	DLP-504

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

12	At Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 0 (41-014), Remove CC 0 From Service and Power Down	TELCO	DLP-505
13	In 1B Processor Cabinet 0, at Location 41-086, Remove KLW117 Circuit Pack	INST	—
14	Insert KLW17 Circuit Pack at Location Vacated in Item 13	INST	—
15	At Location 41-096, Remove KLW105 Circuit Pack	INST	—
16	Insert KLW5 Circuit Pack at Location Vacated in Item 15	INST	—
17	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
18	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
B. For Office Loading a Backup Library Tape	TELCO	DLP-583	
19	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
20	Allow Library Message Channel:		
	A. If Inputting Message From MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513

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

	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 19 and 20 must be performed before using XAPP input messages		
21	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	–
22	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	–
23	Change and Verify Hardware Version for CC 0	TELCO	DLP-542
24	At Power Switch on KLW11 Circuit Pack (Item 12), Depress ON Pushbutton; Ensure OFF LED Is Off	TELCO/INST	–
25	At Power Switch on KLW11 Circuit Pack (Item 12), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-516
26	At 1B MTC Terminal, Restore CC 0 to Service (RST:CC 0!)	TELCO/INST	DLP-502
27	Soak CC 0 As Standby for 15 Minutes	TELCO/INST	–
28	Switch CCs To Make CC 0 Active (SW:CC!)	TELCO	DLP-503
29	While CC 0 Is Soaking (Item 30), Perform Item 31	INST	–
30	Soak CC 0 As Active for 1 Hour	TELCO/INST	–
31	Change Designation Strip for CC 0. Do Not Continue With Procedure Until CC 0 Soak Is Complete	INST	–
32	Set Soak Count to 0 Days (SET:SOAK:CC 0,DAYS 0!)	TELCO/INST	DLP-543
33	Safe Point To Temporarily Stop This Procedure. If Stopping, Perform Items 34 Through 39; Otherwise, Go to Item 49	TELCO/INST	–
34	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	–
35	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
36	At 1B Processor MCC Terminal, If System Status Page (108) Is Not Displayed, Enter 108	TELCO	–
37	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	–
38	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589

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

39	Stop Procedure for Now. Continue at Item 40 When Resuming	TELCO	—
40	Ensure 4ESS Switch Is in Stable Condition	TELCO	DLP-500
41	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	—
42	Ensure Units Are Restored to Service	TELCO	DLP-501
43	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
44	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
B. For Office Loading a Backup Library Tape	TELCO	DLP-583	
45	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
46	Allow Library Message Channel:		
	A. If Inputting Message From MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 45 and 46 must be performed before using XAPP input messages		

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

47	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
48	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
	NOTE: Items 49 through 68 are being performed to change MUP 0		
49	At 1B MTC Terminal, Determine Standby MUP (OP:MUPSTAT!)	TELCO	DLP-520
50	Diagnose Standby MUP Using Restore Message (RST:MUP a!)	TELCO	DLP-521
51	Switch MUPs (SW:MUP!)	TELCO	DLP-522
52	Diagnose New Standby MUP Using Restore Message (RST:MUP a!)	TELCO	DLP-521
53	Determine Standby MUP (OP:MUPSTAT!)	TELCO	DLP-520
54	If MUP 0 Is Not Standby, Switch MUPs (SW:MUP!)	TELCO	DLP-522
55	Remove MUP 0 From Service (RMV:MUP 0!)	TELCO	DLP-523
56	At Power Switch on KLW25 Circuit Pack in 1B Processor Cabinet 0 (58-086), Remove MUP 0 From Service and Power Down	TELCO	DLP-535
57	In 1B Processor Cabinet 0, at Location 58-078, Remove KLW116 Circuit Pack	INST	—
58	Insert KLW16 Circuit Pack at Location Vacated in Item 57	INST	—
59	Change and Verify Hardware Version for MUP 0	TELCO	DLP-542
60	At Power Switch on KLW25 Circuit Pack (Item 56), Depress ON Pushbutton; Ensure OFF LED Is Off	TELCO/INST	—
61	At Power Switch on KLW25 Circuit Pack (Item 56), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-525
62	At 1B MTC Terminal, Restore MUP 0 to Service (RST:MUP 0!)	TELCO/INST	DLP-521
63	Soak MUP 0 As Standby for 15 Minutes	TELCO/INST	—
64	Switch MUPs To Make MUP 0 Active (SW:MUP!)	TELCO	DLP-522
65	While MUP 0 Is Soaking (Item 66), Perform Item 67	INST	—
66	Soak MUP 0 As Active for 1 Hour	TELCO/INST	—
67	Change Designation Strip for MUP 0. Do Not Continue With Procedure Until MUP 0 Soak Is Complete	INST	—

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

	NOTE: When system is running with MUP 0 active, at 1B Processor MCC terminal, display pages 100 and 118 are modified back to old version and new display pages (109 and 110) will no longer be available		
68	Set Soak Count to 0 Days (SET:SOAK:MUP 0,DAYS 0!)	TELCO/INST	DLP-544
69	Safe Point To Temporarily Stop This Procedure. If Stopping, Perform Items 70 Through 75; Otherwise, Go to Item 85	TELCO/INST	—
70	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
71	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
72	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
73	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	—
74	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589
75	Stop Procedure for Now. Continue at Item 76 When Resuming	TELCO/INST	—
76	Ensure 4ESS Switch Is in Stable Condition	TELCO	DLP-500
77	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	—
78	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
79	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
80	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	(Continued on Page 7)		

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

80 (Contd)	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
81	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
82	Allow Library Message Channel:		
	A. If Inputting Message From MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a!))	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 81 and 82 must be performed before using XAPP input messages		
83	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
84	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
	NOTE: Items 85 through 113 are being performed to change CC 1		
85	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter 118	TELCO	—
86	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	—
87	At 1B MTC Terminal, Diagnose Standby CC (Item 86) Using Restore Message (RST:CC a!)	TELCO	DLP-502
88	Switch CCs (SW:CC!)	TELCO	DLP-503
89	Diagnose New Standby CC Using Restore Message (RST:CC a!)	TELCO	DLP-502
90	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	—
91	If CC 1 Is Not Standby, Switch CCs (SW:CC!)	TELCO	DLP-503

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

92	Remove CC 1 From Service (RMV:CC 1!)	TELCO	DLP-504
93	At Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 1 (41-014), Remove CC 1 From Service and Power Down	TELCO	DLP-505
94	In 1B Processor Cabinet 1, at Location 41-086, Remove KLW117 Circuit Pack	INST	—
95	Insert KLW17 Circuit Pack at Location Vacated in Item 94	INST	—
96	At Location 41-096, Remove KLW105 Circuit Pack	INST	—
97	Insert KLW5 Circuit Pack at Location Vacated in Item 96	INST	—
98	Change and Verify Hardware Version for CC 1	TELCO	DLP-542
99	At Power Switch on KLW11 Circuit Pack (Item 93), Depress ON Pushbutton; Ensure OFF LED Is Off	TELCO	—
100	At Power Switch on KLW11 Circuit Pack (Item 93), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-516
101	At 1B MTC Terminal, Restore CC 1 to Service (RST:CC 1!)	TELCO/INST	DLP-502
102	Soak CC 1 As Standby for 15 Minutes	TELCO/INST	—
103	Switch CCs To Make CC 1 Active (SW:CC!)	TELCO	DLP-503
104	While CC 1 Is Soaking (Item 105), Perform Item 106	INST	—
105	Soak CC 1 As Active for 1 Hour	TELCO/INST	—
106	Change Designation Strip for CC 1. Do Not Continue With Procedure Until CC 1 Soak Is Complete	INST	—
107	Set Soak Count to 0 Days (SET:SOAK:CC 1,DAYS 0!)	TELCO/INST	DLP-543
108	Safe Point To Temporarily Stop This Procedure. If Stopping, Perform Items 109 Through 114; Otherwise, Go to Item 124	TELCO/INST	—
109	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
110	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
111	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
112	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	—

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

113	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589
114	Stop Procedure for Now. Continue at Item 115 When Resuming	TELCO	—
115	Ensure 4ESS Switch Is in Stable Condition	TELCO	DLP-500
116	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	—
117	Ensure Units Are Restored to Service	TELCO	DLP-501
118	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
119	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
120	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
	(Continued on Page 10)		

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

121	Allow Library Message Channel:		
	A. If Inputting Message From MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 120 and 121 must be performed before using XAPP input messages		
122	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
123	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
	NOTE: Items 124 through 143 are being performed to change MUP 1		
124	At 1B MTC Terminal, Determine Standby MUP (OP:MUPSTAT!)	TELCO	DLP-520
125	Diagnose Standby MUP Using Restore Message (RST:MUP a!)	TELCO	DLP-521
126	Switch MUPs (SW:MUP!)	TELCO	DLP-522
127	Diagnose New Standby MUP Using Restore Message (RST:MUP a!)	TELCO	DLP-521
128	Determine Standby MUP (OP:MUPSTAT!)	TELCO	DLP-520
129	If MUP 1 Is Not Standby, Switch MUPs (SW:MUP!)	TELCO	DLP-522
130	Remove MUP 1 From Service (RMV:MUP 1!)	TELCO	DLP-523
131	At Power Switch on KLW25 Circuit Pack in 1B Processor Cabinet 1 (58-086), Remove MUP 1 From Service and Power Down	TELCO	DLP-535
132	In 1B Processor Cabinet 1, at Location 58-078, Remove KLW116 Circuit Pack	INST	—
133	Insert KLW16 Circuit Pack at Location Vacated in Item 132	INST	—
134	Change and Verify Hardware Version for MUP 1	TELCO	DLP-542
135	At Power Switch on KLW25 Circuit Pack (Item 131), Depress ON Pushbutton; Ensure OFF LED Is Off	TELCO/INST	—
136	At Power Switch on KLW25 Circuit Pack (Item 131), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-525
137	At 1B MTC Terminal, Restore MUP 1 to Service (RST:MUP 1!)	TELCO/INST	DLP-521
138	Soak MUP 1 As Standby for 15 Minutes	TELCO/INST	—

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

139	Switch MUPs To Make MUP 1 Active (SW:MUP!)	TELCO	DLP-522
140	While MUP 1 Is Soaking (Item 141), Perform Item 142	INST	—
141	Soak MUP 1 As Active for 1 Hour	TELCO/INST	—
142	Change Designation Strip for MUP 1. Do Not Continue With Procedure Until MUP 1 Soak Is Complete	INST	—
	NOTE: When system is running with MUP 1 active, at 1B Processor MCC terminal, display pages 100 and 118 are modified back to old version and new display pages (109 and 110) will no longer be available		
143	Set Soak Count to 0 Days (SET:SOAK:MUP 1,DAYS 0!)	TELCO/INST	DLP-544
144	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
145	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
146	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
147	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	—
148	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589

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

		RESPONSIBILITY	
	NOTES: 1. This procedure must be performed during light traffic periods 2. Appropriate Input/Output Manuals must be used if clarification of input message or output message is necessary 3. All input messages, except scoping messages, are to be entered at 1B MTC terminal. SREC, Beltline, or applicable terminal is to be used for scoping 4. Overwrites occur while using XAPP. These overwrites must be logged in at the end of each growth shift per local practices 5. A listing of XAPP error codes and an explanation of each is listed in DLP-538. These error codes may be received during XAPP I/O message processing		
1	Perform Preliminary Installation Activities	INST	—
2	Ensure 4ESS ™ Switch Is in Stable Condition	TELCO	DLP-500
3	Determine From Company Order Tape Frame(s) That Is To Be Degrown	TELCO/INST	—
4	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	—
5	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
6	Execute Phase 99 Diagnostic Scoping Test To Verify DU Bus 0 at BTRs:		
	1. Set Up Storage Oscilloscope	TELCO	DLP-545
	2. Store DU Bus 0 Input Messages on 1B Terminal	TELCO	DLP-546
	3. Enter Execute Messages for Looping on DU Write Bus (EX:DUS 0;START:TUC a! ; Then EX:DUS 0:PH 99,ADR 44-115!)	TELCO	DLP-547
	4. Scope DU Write Bus Bits 0 to 24 at BTRs	TELCO	DLP-549
	5. Enter Stop Looping Message (EX:DUS 0!)	TELCO	—
	6. Enter Execute Message for Looping on DU Address Bus (EX:DUS 0:PH 99,ADR 166-263!)	TELCO	DLP-547
	7. Scope DU Address Bus Bits 0 to 8 at BTRs	TELCO	DLP-551
	8. Enter Stop Looping Message (EX:DUS 0!)	TELCO	—
	9. Enter Execute Message for Looping on DU Reply Bus (EX:DUS 0:PH 99,ADR 115-166!)	TELCO	DLP-547
	10. Scope DU Reply Bus Bits 0 to 24 at BTRs	TELCO	DLP-552

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

6 (Contd)	11. Enter Stop Looping Message (EX:DUS 0!)	TELCO	—
	12. Stop Maintenance Control Program Client	TELCO	DLP-548
	13. Disconnect Storage Oscilloscope	TELCO	—
	14. Restore DU Bus 0 to Service (RST:DUS 0!)	TELCO	DLP-553
7	Execute Phase 99 Diagnostic Scoping Test To Verify DU Bus 1 at BTRs:		
	1. Store DU Bus 1 Input Messages on 1B Terminal	TELCO	DLP-546
	2. Enter Execute Messages for Looping on DU Write Bus (EX:DUS 1;START:TUC a!; Then EX:DUS 1:PH 99,ADR 44-115!)	TELCO	DLP-547
	3. Scope DU Write Bus Bits 0 to 24 at BTRs	TELCO	DLP-549
	4. Enter Stop Looping Message (EX:DUS 1!)	TELCO	—
	5. Enter Execute Message for Looping on DU Address Bus (EX:DUS 1:PH 99,ADR 166-263!)	TELCO	DLP-547
	6. Scope DU Address Bus Bits 0 to 8 at BTRs	TELCO	DLP-551
	7. Enter Stop Looping Message (EX:DUS 1!)	TELCO	—
	8. Enter Execute Message for Looping on DU Reply Bus (EX:DUS 1:PH 99,ADR 115-166!)	TELCO	DLP-547
	9. Scope DU Reply Bus Bits 0 to 24 at BTRs	TELCO	DLP-552
	10. Enter Stop Looping Message (EX:DUS 1!)	TELCO	—
	11. Stop Maintenance Control Program Client	TELCO	DLP-548
	12. Disconnect Storage Oscilloscope	TELCO	—
13. Restore DU Bus 1 to Service (RST:DUS 1!)	TELCO	DLP-553	
8	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
9	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
(Continued on Page 3)			

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

9 (Contd)	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
10	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
11	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 8 and 9 must be performed before using XAPP input messages		
12	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
13	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
14	Remove Each TUC Being Degrown From Service (RMV:TUC a!)	TELCO	DLP-557
15	Remove Power With Power Switch From Each TUC Being Degrown	TELCO	DLP-554
16	Verify Member Equipage for Each TUC Being Degrown (VER:UTMN:TUC a,ME!)	TELCO/INST	DLP-541
17	Change and Verify Member Equipage Operational to Unequipped for Each TUC Being Degrown	TELCO/INST	DLP-532
18	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
19	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—

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

20	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	—
21	At +24V PD Frame, Remove Fuses for TUC(s) Being Degrown (Indicator Fuse Must Be Removed Before Load Fuse)	INST	—
22	At -48V PD Frame, Remove Fuses for TUC(s) Being Degrown (Indicator Fuse Must Be Removed Before Load Fuse)	INST	—
23	Disconnect Power Feeders Between TUC(s) Being Degrown and PD Frame (+24V and -48V)	INST	—
24	Remove Power With Power Switch From DUS 0	TELCO	DLP-554
25	Disconnect Alarm Cable From Degrown TUC(s) and Rewire, if Necessary	INST	—
26	Disconnect Private Cable(s) (SEL, SEL-VER, SC, and SD) at Degrown TUC(s) and DUS 0. At DUS 0, Connect 942C Shorting Plug(s) in Place of Removed Cable(s)	INST	—
27	If TUC(s), Electrically Adjacent to Degrown TUC(s), Are Assigned an Active Function; Reassign That Active Function to Unassigned or Noncritical TUC	TELCO	DLP-556
28	Remove TUC(s), Electrically Adjacent to Degrown TUC(s), From Service (RMV:TUC a!)	TELCO	DLP-557
29	Remove Power With Power Switch From TUC(s) Electrically Adjacent to Degrown TUC(s)	TELCO	DLP-554
30	Disconnect DU Bus 0 Cables From Degrown TUC(s) and Recable if Required	INST	—
31	If TUC Is Being Removed From End of DU Bus, Transfer DU Bus 0 BTRs to TUC Now at End of Bus	INST	—
32	Restore Power to DUS 0 Using Power Switch	TELCO/INST	DLP-555
33	Restore Power to TUC(s), Electrically Adjacent to Degrown TUC(s), Using Power Switch	TELCO/INST	DLP-555
34	Restore TUC(s), Electrically Adjacent to Degrown TUC(s), to Service (RST:TUC a!)	TELCO/INST	DLP-558
35	Execute Phase 99 Diagnostic Scoping Test To Verify DU Bus 0 at BTRs:		
	1. Set Up Storage Oscilloscope (if Not Set Up)	INST	—
	2. Store DU Bus 0 Input Messages on 1B Terminal (if Not Stored)	TELCO	DLP-546
	3. Enter Execute Messages for Looping on DU Write Bus (EX:DUS 0;START:TUC a!; Then EX:DUS 0:PH 99,ADR 44-115!)	TELCO	DLP-547
	4. Scope DU Write Bus Bits 0 to 24 at BTRs	INST	—

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

35 (Contd)	5. Enter Stop-Looping Message (EX:DUS 0!)	TELCO	—
	6. Enter Execute Message for Looping on DU Address Bus (EX:DUS 0:PH 99,ADR 166-263!)	TELCO	DLP-547
	7. Scope DU Address Bus Bits 0 to 8 at BTRs	INST	—
	8. Enter Stop-Looping Message (EX:DUS 0!)	TELCO	—
	9. Enter Execute Message for Looping on DU Reply Bus (EX:DUS 0:PH 99,ADR 115-166!)	TELCO	DLP-547
	10. Scope DU Reply Bus Bits 0 to 24 at BTRs	INST	—
	11. Enter Stop-Looping Message (EX:DUS 0!)	TELCO	—
	12. Stop Maintenance Control Program Client	TELCO	DLP-548
	13. Disconnect Storage Oscilloscope	INST	—
	14. Restore DU Bus 0 to Service (RST:DUS 0!)	TELCO/INST	DLP-553
36	Safe Point To Temporarily Stop This Procedure. If Stopping, Perform Items 37 Through 39; Otherwise, Go to Item 41	TELCO/INST	—
37	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589
38	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
39	Stop Procedure for Now. When Resuming, Continue at Item 40	TELCO/INST	—
40	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	—
41	Remove Power With Power Switch From DUS 1	TELCO	DLP-554
42	Disconnect Private Cable(s) (SEL, SEL-VER, SC, and SD) at Degrown TUC(s) and DUS 1. At DUS 1, Connect 942C Shorting Plug(s) in Place of Removed Cable(s)	INST	—
43	Remove TUC(s), Electrically Adjacent to Degrown TUC(s), From Service (RMV:TUC a!)	TELCO	DLP-557
44	Remove Power With Power Switch From TUC(s) Electrically Adjacent to Degrown TUC(s)	TELCO	DLP-554
45	Disconnect DU Bus 1 Cables From Degrown TUC(s) and Recable if Required	INST	—

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

46	If TUC Is Being Removed From End of DU Bus, Transfer DU Bus 1 BTRs to TUC Now at End of Bus	INST	—
47	Restore Power to DUS 1 Using Power Switch	TELCO/INST	DLP-555
48	Restore Power to TUC(s), Electrically Adjacent to Degrown TUC(s), Using Power Switch	TELCO/INST	DLP-555
49	Restore TUC(s), Electrically Adjacent to Degrown TUC(s), to Service (RST:TUC a!)	TELCO/INST	DLP-558
50	Execute Phase 99 Diagnostic Scoping Test To Verify DU Bus 0 at BTRs:		
	1. Set Up Storage Oscilloscope (if Not Set Up)	INST	—
	2. Store DU Bus 0 Input Messages on 1B Terminal (if Not Stored)	TELCO	DLP-546
	3. Enter Execute Messages for Looping on DU Write Bus (EX:DUS 0;START:TUC a!; Then EX:DUS 0:PH 99,ADR 44-115!)	TELCO	DLP-547
	4. Scope DU Write Bus Bits 0 to 24 at BTRs	INST	—
	5. Enter Stop-Looping Message (EX:DUS 1!)	TELCO	—
	6. Enter Execute Message for Looping on DU Address Bus (EX:DUS 1:PH 99,ADR 166-263!)	TELCO	DLP-547
	7. Scope DU Address Bus Bits 0 to 8 at BTRs	INST	—
	8. Enter Stop-Looping Message (EX:DUS 1!)	TELCO	—
	9. Enter Execute Message for Looping on DU Reply Bus (EX:DUS 1:PH 99,ADR 115-166!)	TELCO	DLP-547
	10. Scope DU Reply Bus Bits 0 to 24 at BTRs	INST	—
	11. Enter Stop-Looping Message (EX:DUS 1!)	TELCO	—
	12. Stop Maintenance Control Program Client	TELCO	DLP-548
	13. Disconnect Storage Oscilloscope	INST	—
14. Restore DU Bus 1 to Service (RST:DUS 1!)	TELCO/INST	DLP-553	
51	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
52	Remove TUC Hardware From Floor	INST	—

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

		RESPONSIBILITY	
	<i>WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling</i>		
	<p>NOTES:</p> <ol style="list-style-type: none"> 1. This procedure must be performed during light traffic periods 2. Conversion will be performed in sequence: CC 0 and MUP 0 (if required); then CC 1 and MUP 1 (if required) 3. Overwrites occur while using XAPP. These overwrites must be logged in at the end of each growth shift per local practices 4. If XAPP overwrites were used during a shift, Item 36 must be performed at the end of that shift 5. A listing of XAPP error codes and an explanation of each is listed in DLP-538. These error codes may be received during XAPP I/O message processing 6. This procedure contains soak intervals for verifying system operation and stability during conversion. During the soaking interval, all abnormal conditions (such as interrupts, interjects, and diagnostic failures related to growth) must be investigated and resolved immediately. Conversion equipment, being soaked, must be error free for at least the time specified 7. Daily monitoring of CC and MUP soak counts should be performed to see if soak list is being properly updated or if manual intervention (using SET:SOAK input message) is necessary to reestablish the soak list. DLP-536 can be performed to verify the soak count. The soak count will be decremented by 1 day at 12:30 AM for CC and 2:30 AM for MUP (if converted) 		
1	Notify Next Higher Technical Support Group That CC 0 and MUP 0 (if Required) Conversion Will Be Performed	TELCO	—
2	Ensure 4ESS ™ Switch Is in Stable Condition	TELCO	DLP-500
3	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	—
4	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
5	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter 118	TELCO	—
6	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	—
	(Continued on Page 2)		

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

7	At 1B MTC Terminal, Diagnose Standby CC (Item 6) Using Restore Message (RST:CC a!)	TELCO	DLP-502
8	Switch CCs (SW:CC!)	TELCO	DLP-503
9	Diagnose New Standby CC Using Restore Message (RST:CC a!)	TELCO	DLP-502
10	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	—
11	If CC 0 Is Not Standby, Switch CCs (SW:CC!)	TELCO	DLP-503
12	Remove CC 0 From Service (RMV:CC 0!)	TELCO	DLP-504
13	Using Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 0 (41-014), Remove CC 0 From Service and Power Down	TELCO	DLP-505
14	In 1B Processor Cabinet 0, at Location 41-120, Remove KLW22 Circuit Pack	INST	—
15	Insert New KLW122 Circuit Pack at Location Vacated in Item 14	INST	—
16	In 1B Processor Cabinet 0, at Level 41, Remove Old CC Designation Strips From Front and Back of Cabinet and Install New CC Designation Strips	INST	—
17	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
18	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
(Continued on Page 3)			

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

18 (Contd)	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
19	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
20	Allow Library Message Channel:		
	A. If Inputting Message From MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 19 and 20 must be performed before using XAPP input messages		
21	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
22	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
23	Change and Verify Hardware Version for CC 0	TELCO	DLP-560
24	At KLW11 Circuit Pack (Item 13), Depress ON Pushbutton; Ensure OFF LED is Off	TELCO/INST	—
25	Diagnose CC 0 Specifying Phases (DGN:CC 0:PH (3,7,19,35,42,51)!)	TELCO/INST	DLP-515
26	At KLW11 Circuit Pack (Item 13), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-516
27	At 1B MTC Terminal, Restore CC 0 to Service (RST:CC 0!)	TELCO/INST	DLP-502
28	Verify Soak Count Is Set to 3 Days	TELCO/INST	DLP-517
	NOTE: CC will not remain standby during soak period. CC being soaked will be switched between active and standby when REX is run		
29	In 1B Processor Cabinet 0, at Location 58-078, Determine if KLW16 or KLW116 Circuit Pack Is Installed	TELCO/INST	—
30	If KLW16 Circuit Pack Is Installed, Continue at Item 31; Otherwise, if KLW116 Circuit Pack Is Installed, Go to Item 74	TELCO/INST	—
31	Safe Point To Temporarily Stop This Procedure. If There Is Insufficient Time To Complete Items 47 Through 73, Perform Items 32 Through 37; Otherwise, Go to Item 47	TELCO/INST	—

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

32	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
33	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
34	At 1B Processor MCC Terminal, If System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
35	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	—
36	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589
37	Stop Procedure for Now. Continue at Item 38 When Resuming	TELCO	—
38	Ensure 4ESS Switch Is in Stable State	TELCO	DLP-500
39	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	—
40	Ensure Units Are Restored to Service	TELCO	DLP-501
41	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
42	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
(Continued on Page 5)			

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

42 (Contd)	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
43	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
44	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 43 and 44 must be performed before using XAPP input messages		
45	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
46	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
47	At 1B MTC Terminal, Determine Standby MUP (OP:MUPSTAT!)	TELCO	DLP-520
48	Diagnose Standby MUP Using Restore Message (RST:MUP a!)	TELCO	DLP-521
49	Switch MUPs (SW:MUP!)	TELCO	DLP-522
50	Diagnose New Standby MUP Using Restore Message (RST:MUP a!)	TELCO	DLP-521
51	Determine Standby MUP (OP:MUPSTAT!)	TELCO	DLP-520
52	If MUP 0 Is Not Standby, Switch MUPs (SW:MUP!)	TELCO	DLP-522
53	Remove MUP 0 From Service (RMV:MUP 0!)	TELCO	DLP-523
54	Using Power Switch on KLW25 Circuit Pack in 1B Processor Cabinet 0 (58-086), Remove MUP 0 From Service and Power Down	TELCO	DLP-535
55	In 1B Processor Cabinet 0, at Location 58-078, Remove KLW16 Circuit Pack	INST	—
56	Insert New KLW116 Circuit Pack at Location Vacated in Item 55	INST	—
57	In 1B Processor Cabinet 0, at Level 58, Remove Old MUP Designation Strips From Front and Back of Cabinet and Install New MUP Designation Strips	INST	—

**CONVERT CC AND MUP FOR 1B PROCESSOR PROGRAM STORE EXPANSION —
SUPPORT TO INSTALLER (INST)**

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

58	Change and Verify Hardware Version for MUP 0	TELCO	DLP-568
59	At KLW25 Circuit Pack (Item 54), Depress ON Pushbutton; Ensure OFF LED Is Off	TELCO/INST	—
60	Diagnose MUP 0 Specifying Phases (DGN:MUP 0:PH (1-6,11-15,21-25,91)!))	TELCO/INST	DLP-524
61	At KLW25 Circuit Pack (Item 54), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-525
62	At 1B MTC Terminal, Restore MUP 0 to Service (RST:MUP 0!)	TELCO/INST	DLP-521
63	Verify Soak Count Is Set to 3 Days	TELCO/INST	DLP-526
64	At 1B MTC Terminal, Switch MUPs To Make MUP 0 Active (SW:MUP!)	TELCO/INST	DLP-522
65	At 1B Processor MCC Terminal, Enter 100 To Obtain MCC Page Index (100)	TELCO	—
66	Ensure Display Pages 109 and 110 Are Listed	TELCO/INST	—
67	Enter 118 To Obtain 1B Processor Status Page (118)	TELCO	—
68	Notice That 1B Processor Status Page Is Changed From 4E21 Generic Version	TELCO/INST	—
69	Enter 109 To Obtain Program Store Status and Control Page (109)	TELCO	—
70	Ensure Program Store Status and Control Page (109) Is Displayed	TELCO/INST	—
71	Enter 110 To Obtain Call Store Status and Control Page (110)	TELCO	—
72	Ensure Call Store Status and Control Page (110) Is Displayed	TELCO/INST	—
73	At 1B MTC Terminal, Switch MUPs To Make MUP 0 Standby (SW:MUP!)	TELCO/INST	DLP-522
74	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
75	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
76	At 1B Processor MCC Terminal, If System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
77	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	—
78	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589
	(Continued on Page 7)		

**CONVERT CC AND MUP FOR 1B PROCESSOR PROGRAM STORE EXPANSION —
SUPPORT TO INSTALLER (INST)**

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

79	Notify Next Higher Technical Support Group That CC 0 and MUP 0 (if Converted) Conversion Is Complete and Soak Is Beginning. CC 0 Must Be in Active State for 24 Hours Preceding Start of CC 1 and MUP 1 (if Required) Conversion With No CC Failures or Interrupts	TELCO	—
	NOTES: 1. If MUP 0 was converted using this procedure, the following Notes will apply 2. MUP will not remain standby during soak period. MUP being soaked will be switched between active and standby when REX is run 3. When system is running with MUP 0 active, at 1B Processor MCC terminal, display pages 100 and 118 are modified and new display pages (109 and 110) are available		
80	Wait for CC 0 and MUP 0 (if Converted) To Complete Soaking Before Continuing	TELCO/INST	—
81	Notify Next Higher Technical Support Group That CC 1 and MUP 1 (if Required) Conversion Will Be Performed. Verify From Next Higher Technical Support Group That No CC Failures or Interrupts Occurred During Previous 24 Hours. Procedure Must Not Be Continued Until CC Is Failure- and Interrupt-Free for 24 Hours	TELCO	—
82	Ensure 4ESS Switch Is in Stable Condition	TELCO	DLP-500
83	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	—
84	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
85	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter 118	TELCO	—
86	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	—
87	At 1B MTC Terminal, Diagnose Standby CC (Item 86) Using Restore Message (RST:CC a!)	TELCO	DLP-502
88	Switch CCs (SW:CC!)	TELCO	DLP-503
89	Diagnose New Standby CC Using Restore Message (RST:CC a!)	TELCO	DLP-502
90	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	—
91	If CC 1 Is Not Standby, Switch CCs (SW:CC!)	TELCO	DLP-503
92	Remove CC 1 From Service (RMV:CC 1!)	TELCO	DLP-504
93	Using Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 1 (41-014), Remove CC 1 From Service and Power Down	TELCO	DLP-505
94	In 1B Processor Cabinet 1, at Location 41-120, Remove KLW22 Circuit Pack	INST	—

**CONVERT CC AND MUP FOR 1B PROCESSOR PROGRAM STORE EXPANSION —
SUPPORT TO INSTALLER (INST)**

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

95	Insert New KLW122 Circuit Pack at Location Vacated in Item 94	INST	—
96	In 1B Processor Cabinet 1, at Level 41, Remove Old CC Designation Strips From Front and Back of Cabinet and Install New CC Designation Strips	INST	—
97	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
98	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
B. For Office Loading a Backup Library Tape	TELCO	DLP-583	
99	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
100	Allow Library Message Channel:		
	A. If Inputting Message From MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 99 and 100 must be performed before using XAPP input messages		
101	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
102	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—

**CONVERT CC AND MUP FOR 1B PROCESSOR PROGRAM STORE EXPANSION —
SUPPORT TO INSTALLER (INST)**

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

103	Change and Verify Hardware Version for CC 1	TELCO	DLP-560
104	At KLW11 Circuit Pack (Item 93), Depress ON Pushbutton; Ensure OFF LED Is Off	TELCO/INST	—
105	Diagnose CC 1 Specifying Phases (DGN:CC 1:PH (3,7,19,35,42,51)!))	TELCO/INST	DLP-515
106	At KLW11 Circuit Pack (Item 93), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-516
107	At 1B MTC Terminal, Restore CC 1 to Service (RST:CC 1!)	TELCO/INST	DLP-502
108	Verify Soak Count Is Set to 3 Days	TELCO/INST	DLP-517
	NOTE: CC will not remain standby during soak period. CC being soaked will be switched between active and standby when REX is run		
109	In 1B Processor Cabinet 1, at Location 58-078, Determine if KLW16 or KLW116 Circuit Pack Is Installed	TELCO/INST	—
110	If KLW16 Circuit Pack Is Installed, Continue at Item 111; Otherwise, if KLW116 Circuit Pack Is Installed, Go to Item 154	TELCO/INST	—
111	Safe Point To Temporarily Stop This Procedure. If There Is Insufficient Time To Complete Items 127 Through 153, Perform Items 112 Through 117; Otherwise, Go to Item 127	TELCO/INST	—
112	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
113	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
114	At 1B Processor MCC Terminal, If System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
115	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	—
116	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589
117	Stop Procedure for Now. Continue at Item 118 When Resuming	TELCO	—
118	Ensure 4ESS Switch Is in Stable State	TELCO	DLP-500
119	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	—
	(Continued on Page 10)		

**CONVERT CC AND MUP FOR 1B PROCESSOR PROGRAM STORE EXPANSION —
SUPPORT TO INSTALLER (INST)**

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

120	Ensure Units Are Restored to Service	TELCO	DLP-501
121	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
122	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
B. For Office Loading a Backup Library Tape	TELCO	DLP-583	
123	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
124	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 123 and 124 must be performed before using XAPP input messages		
125	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
126	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
127	At 1B MTC Terminal, Determine Standby MUP (OP:MUPSTAT!)	TELCO	DLP-520

**CONVERT CC AND MUP FOR 1B PROCESSOR PROGRAM STORE EXPANSION —
SUPPORT TO INSTALLER (INST)**

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

128	Diagnose Standby MUP Using Restore Message (RST:MUP a!)	TELCO	DLP-521
129	Switch MUPs (SW:MUP!)	TELCO	DLP-522
130	Diagnose New Standby MUP Using Restore Message (RST:MUP a!)	TELCO	DLP-521
131	Determine Standby MUP (OP:MUPSTAT!)	TELCO	DLP-520
132	If MUP 1 Is Not Standby, Switch MUPs (SW:MUP!)	TELCO	DLP-522
133	Remove MUP 1 From Service (RMV:MUP 1!)	TELCO	DLP-523
134	Using Power Switch on KLW25 Circuit Pack in 1B Processor Cabinet 1 (58-086), Remove MUP 1 From Service and Power Down	TELCO	DLP-535
135	In 1B Processor Cabinet 1, at Location 58-078, Remove KLW16 Circuit Pack	INST	—
136	Insert New KLW116 Circuit Pack at Location Vacated in Item 135	INST	—
137	In 1B Processor Cabinet 1, at Level 58, Remove Old MUP Designation Strips From Front and Back of Cabinet and Install New MUP Designation Strips	INST	—
138	Change and Verify Hardware Version for MUP 1	TELCO	DLP-568
139	At KLW25 Circuit Pack (Item 134), Depress ON Pushbutton; Ensure OFF LED Is Off	TELCO/INST	—
140	Diagnose MUP 1 Specifying Phases (DGN:MUP 1:PH (1-6,11-15,21-25,91)!)	TELCO/INST	DLP-524
141	At KLW25 Circuit Pack (Item 134), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-525
142	At 1B MTC Terminal, Restore MUP 1 to Service (RST:MUP 1!)	TELCO/INST	DLP-521
143	Verify Soak Count Is Set to 3 Days	TELCO/INST	DLP-526
144	At 1B MTC Terminal, Switch MUPs To Make MUP 1 Active (SW:MUP!)	TELCO/INST	DLP-522
145	At 1B Processor MCC Terminal, Enter 100 To Obtain MCC Page Index (100)	TELCO	—
146	Ensure Display Pages 109 and 110 Are Listed	TELCO/INST	—
147	Enter 118 To Obtain 1B Processor Status Page (118)	TELCO	—
148	Notice That 1B Processor Status Page Is Changed From 4E21 Generic Version	TELCO/INST	—
149	Enter 109 To Obtain Program Store Status and Control Page (109)	TELCO	—
150	Ensure Program Store Status and Control Page (109) Is Displayed	TELCO/INST	—

**CONVERT CC AND MUP FOR 1B PROCESSOR PROGRAM STORE EXPANSION —
SUPPORT TO INSTALLER (INST)**

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

151	Enter 110 To Obtain Call Store Status and Control Page (110)	TELCO	—
152	Ensure Call Store Status and Control Page (110) Is Displayed	TELCO/INST	—
153	At 1B MTC Terminal, Switch MUPs To Make MUP 1 Standby (SW:MUP!)	TELCO/INST	DLP-522
	NOTE: MUP will not remain standby during soak period. MUP being soaked will be switched between active and standby when REX is run		
154	Verify HVTRANS for CCs 0 and 1, and MUPs 0 and 1	TELCO	DLP-567
155	Notify Next Higher Technical Support Group That CC 1 and MUP 1 (if Converted) Conversion Is Completed and Soak Is Beginning	TELCO	—
156	If PSs Will Be Grown on This Shift, [NTP-009], It Is End of This Procedure; Otherwise, Continue at Item 157	TELCO/INST	—
157	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
158	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
159	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
160	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	—
161	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589

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

		RESPONSIBILITY	
	<i>WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling</i>		
	<p>NOTES:</p> <ol style="list-style-type: none"> 1. This procedure must be performed during light traffic periods 2. All KLW2 circuit packs, that are being grown, will be installed at their proper locations in the 1B Processor cabinets. Program stores are then grown in pairs (lowest-member number to highest-member number – PSs 4 and 5, and so on). First program store is grown in 1B Processor cabinet 0 and second program store is grown in 1B Processor cabinet 1 3. Overwrites occur while using XAPP. These overwrites must be logged in at the end of each growth shift per local practices 4. If XAPP overwrites were used during a shift, Item 35 must be performed at the end of that shift 5. A listing of XAPP error codes and an explanation of each is listed in DLP-538. These error codes may be received during XAPP I/O message processing 6. This procedure contains soak intervals for verifying system operation and stability during conversion. During the soaking interval, all abnormal conditions (such as interrupts, interjects, and diagnostic failures related to growth) must be investigated and resolved immediately. Conversion equipment, being soaked, must be error free for at least the time specified 7. Daily monitoring of PS soak counts should be performed to see if soak list is being properly updated or if manual intervention (using SET:SOAK input message) is necessary to reestablish the soak list. DLP-536 can be performed to verify the soak count 		
1	If CC 1 and MUP 1 (if Converted) Conversion Was Completed Within Past 2 Hours, Go to Item 13; Otherwise, Continue at Item 2	TELCO/INST	–
2	At 1B Processor Cabinets 0 and 1, Determine if Following Circuit Packs Have Been Installed at Associated Locations: <ul style="list-style-type: none"> • KLW122/KLW222 at Locations 041-120 and 141-120 • KLW216 at Locations 058-078 and 158-078 	TELCO/INST	–
3	If Proper Circuit Packs Are Not Installed (Item 2), This Procedure Must Be Stopped Until CCs 0 and 1, and MUPs 0 and 1 Are Converted for Program Store Expansion	TELCO/INST	–

ADD KLW2 PROGRAM STORE CIRCUIT PACKS – SUPPORT TO INSTALLER (INST)

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

4	Ensure 4ESS ™ Switch Is in Stable Condition	TELCO	DLP-500
5	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	—
6	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
7	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
8	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
B. For Office Loading a Back Up Library Tape	TELCO	DLP-583	
9	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
10	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 9 and 10 must be performed before using XAPP input messages		
11	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
	(Continued on Page 3)		

ADD KLW2 PROGRAM STORE CIRCUIT PACKS — SUPPORT TO INSTALLER (INST)

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

12	Enter 801 To Restrict Recent Change (801 – RESTRICT RC Colored Black on White)	TELCO	–
13	Determine From Company Order and 109 Page on 1B Processor MCC Terminal, PSs That Are To Be Grown	TELCO/INST	–
14	Notify Next Higher Technical Support Group That PSs Determined in Item 13 Will Be Grown	TELCO	–
15	Determine Locations in 1B Processor Cabinets for PSs That Are To Be Grown	TELCO/INST	DLP-559
16	At 1B Processor Cabinets 0 and 1, Remove Designation Strips at Level 41	INST	–
17	Remove Plastic Slot Protectors at PS Locations That Will Be Grown	INST	–
18	Ensure ROS/NORM Switch on One Growth KLW2 Circuit Pack Being Installed Is Set to ROS Position	INST	–
19	At Appropriate 1B Processor Cabinet, Insert and Properly Seat KLW2 PS Circuit Pack That Is Being Grown	INST	–
	NOTE: Do not restore power to KLW2 circuit pack at this time		
20	Repeat Items 18 and 19 for Each PS Being Grown	INST	–
21	At 1B Processor Cabinets 0 and 1, Reinstall Designation Strips at Level 41	INST	–
22	Verify Member Equipage UNEQ for One Growth PS (VER:UTMN:PS a,ME!)	TELCO/INST	DLP-527
23	Change and Verify PS Member Equipage Unequipped to Grow (1B Processor MCC Terminal 109 Page Will Display Growth Store OOS)	TELCO/INST	DLP-528
24	Change and Verify Hardware Generation for Growth PS (HG=1)	TELCO/INST	DLP-537
25	At Growth KLW2 Circuit Pack, Depress ON Pushbutton; Ensure OFF LED Is Off (OS LED Will Remain Off)	INST	–
26	Diagnose Growth PS (DGN:PS a:PH 1-97!)	TELCO/INST	DLP-561
27	Change and Verify Member Equipage From Grow to SGRO	TELCO	DLP-530
28	Change and Verify Member Equipage From SGRO to OPER (1B Processor MCC Terminal 109 Page Will Display Growth Store OOS)	TELCO	DLP-531
29	At Growth KLW2 Circuit Pack, Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-562
	(Continued on Page 4)		

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

30	Verify Soak Count Is Set to 3 Days	TELCO/INST	DLP-563
31	Safe Point To Temporarily Stop This Procedure. If There Is Insufficient Time To Complete Next PS Growth, Perform Items 32 Through 37; Otherwise, Go to Item 46	TELCO/INST	—
32	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
33	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
34	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
35	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	—
36	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589
37	Stop Procedure for Now. When Resuming, Continue With Item 38	TELCO/INST	—
38	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	—
39	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-500
40	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
41	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	(Continued on Page 5)		

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

41 (Contd)	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
42	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
43	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 42 and 43 must be performed before using XAPP input messages		
44	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
45	Enter 801 To Restrict Recent Change (801 – RESTRICT RC Colored Black on White)	TELCO	—
	NOTE: Remember, program stores are grown in pairs (lowest-member number to highest-member number – PSs 4 and 5, and so on). First program store is grown in 1B Processor cabinet 0 and second program store is grown in 1B Processor cabinet 1		
46	Repeat Items 22 Through 31 for Each Program Store To Be Grown; Continue at Next Item When All Program Stores on This Order Are in OPER State	TELCO/INST	—
47	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
48	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
49	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
50	Enter 801 To Remove Restrict Recent Change (801 – RESTRICT RC Colored White on Black)	TELCO	—
51	Notify Next Higher Technical Support Group PS Growth Is Complete; and System Status Page (108) Will Not Show New PSs Out of Service	TELCO	—
	(Continued on Page 6)		

ADD KLW2 PROGRAM STORE CIRCUIT PACKS – SUPPORT TO INSTALLER (INST)

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

52	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589
53	Two Program Stores Will Be OOS Until Next Generic Allows Additional Stores	TELCO	-

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

		RESPONSIBILITY	
	<i>WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling</i>		
	NOTES: 1. This procedure must be performed during light traffic periods 2. Program stores are degrown in pairs (highest-member number to lowest-member number). First program store is degrown in 1B Processor cabinet 1 and second program store is degrown in 1B Processor cabinet 0 3. Overwrites occur while using XAPP. These overwrites must be logged in at the end of each growth shift per local practices 4. If XAPP overwrites were used during a shift, Item 41 must be performed at the end of that shift 5. A listing of XAPP error codes and an explanation of each is listed in DLP-538. These error codes may be received during XAPP I/O message processing		
1	Ensure 4ESS TM Switch Is in Stable Condition	TELCO	DLP-500
2	Determine From Company Order and 109 Page on 1B Processor MCC Terminal, PS Pair That Is To Be Degrown	TELCO/INST	—
3	Determine Locations in 1B Cabinets for PSs That Are To Be Degrown	TELCO/INST	DLP-559
4	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	—
5	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
6	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
7	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGR0!)	TELCO	DLP-511	

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

7 (Contd)	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Back Up Library Tape	TELCO	DLP-583
8	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
9	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 8 and 9 must be performed before using XAPP input messages		
10	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
11	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
12	At 1B MTC Terminal, Remove One Program Store Being Degrown From Service (RMV:PS a!)	TELCO	DLP-564
13	At Power Switch on KLW2 Circuit Pack Being Degrown, Operate ROS/NORM Switch to ROS Position; Ensure OS LED Is On	TELCO	—
14	Verify Member Equipage for Degrowth PS (VER:UTMN:PS a,ME!)	TELCO	DLP-541
15	Change and Verify Degrowth PS Member Equipage to UNEQ	TELCO	DLP-532
16	At Power Switch on Degrowth KLW2 Circuit Pack, Depress OFF Pushbutton; Ensure OFF LED Is On	TELCO/INST	—
17	If KLW2 Circuit Pack Is To Be Removed From 1B Processor Cabinet, Perform Items 18 and 19; Otherwise, Go to Item 20	INST	—
18	Remove KLW2 PS Circuit Pack That Was Degrown	INST	—
19	Install Plastic Slot Protector at PS Location That Was Degrown	INST	—
	(Continued on Page 3)		

DEGROW KLW2 PROGRAM STORE CIRCUIT PACKS — SUPPORT TO INSTALLER (INST)

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

20	Safe Point To Temporarily Stop This Procedure. If Stopping, Perform Items 21 Through 26; Otherwise, Go to Item 35	TELCO/INST	—
21	At 1B MTC Terminal, Enter Message <code>ALW:MACLI,CLASS MTCE!</code> To Allow REX	TELCO	—
22	Terminate Execution of XAPP Library Program (<code>STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!</code>)	TELCO	DLP-518
23	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
24	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	—
25	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589
26	Stop Procedure for Now. When Resuming, Continue at Item 27	TELCO/INST	—
27	At 1B MTC Terminal, Enter Message <code>INH:MACLI,CLASS MTCE;REX!</code> To Inhibit REX	TELCO	—
28	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-500
29	Determine if Library Package Containing Program XAPP Resides in File System (<code>OP:LIBSTAT,FS!</code>)	TELCO	DLP-506
30	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (<code>SET:TUC a;FUNCTION LIB!</code>)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (<code>ALW:TUC a:RO!</code>)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (<code>LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!</code>)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
(Continued on Page 4)			

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

30 (Contd)	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
31	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
32	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a!))	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 31 and 32 must be performed before using XAPP input messages		
33	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
34	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
35	Repeat Items 12 Through 20 for Each Program Store To Be Degrown	TELCO/INST	—
36	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
37	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
38	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
39	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	—
	NOTE: Items 40 through 43 are being performed to remove degrowth PSs from 109 Page	INST	—
40	Enter 109 To Obtain Program Store Status and Control Page (109)	TELCO	—
41	Determine One PS in Standby State	TELCO	—
42	Enter Restore Message for Standby PS (Item 41) (RST:PS a!)	TELCO	DLP-566
43	At 1B MTC Terminal, Switch MUPs (SW:MUP!)	TELCO	DLP-522
44	Ensure Degrowth PSs Are Not Displayed on 109 Page	TELCO	—
	(Continued on Page 5)		

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

45	Change PS Designation Strips in 1B Processor Cabinets 0 and 1 To Remove Degrown Program Stores	INST	-
46	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589

**DEGROW KWL2 PROGRAM STORE CIRCUIT PACKS - SUPPORT TO
INSTALLER (INST)**

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

		RESPONSIBILITY	
	<i>WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling</i>		
	<p>NOTES:</p> <ol style="list-style-type: none"> 1. This procedure must be performed during light traffic periods 2. Backout will be performed in sequence: CC 0 and MUP 0 (if required); then CC 1 and MUP 1 (if required) 3. Overwrites occur while using XAPP. These overwrites must be logged in at the end of each growth shift per local practices 4. If XAPP overwrites were used during a shift, Item 36 must be performed at the end of that shift 5. A listing of XAPP error codes and an explanation of each is listed in DLP-538. These error codes may be received during XAPP I/O message processing 6. This procedure contains soak intervals for verifying system operation and stability during conversion. During the soaking interval, all abnormal conditions (such as interrupts, interjects, and diagnostic failures related to growth) must be investigated and resolved immediately. Conversion equipment, being soaked, must be error free for at least the time specified 		
1	Ensure 4ESS ™ Switch Is in Stable Condition	TELCO	DLP-500
2	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	–
3	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
	NOTE: Items 4 through 30 are being performed to change CC 0		
4	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter 118	TELCO	–
5	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	–
6	At 1B MTC Terminal, Diagnose Standby CC (Item 5) Using Restore Message (RST:CC a!)	TELCO	DLP-502
7	Switch CCs (SW:CC!)	TELCO	DLP-503
8	Diagnose New Standby CC Using Restore Message (RST:CC a!)	TELCO	DLP-502
9	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	–

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

10	If CC 0 Is Not Standby, Switch CCs (SW:CC!)	TELCO	DLP-503
11	Remove CC 0 From Service (RMV:CC 0!)	TELCO	DLP-504
12	At Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 0 (41-014), Remove CC 0 From Service and Power Down	TELCO	DLP-505
13	At 1B Processor Cabinet 0, at Location 41-120, Remove KLW122 Circuit Pack	INST	—
14	Insert KLW22 Circuit Pack at Location Vacated in Item 13	INST	—
15	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
16	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGR0!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
B. For Office Loading a Backup Library Tape	TELCO	DLP-583	
17	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGR0,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
	(Continued on Page 3)		

BACK OUT CC AND MUP CONVERSION ASSOCIATED WITH PS EXPANSION - SUPPORT TO INSTALLER (INST)

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

18	Allow Library Message Channel:		
	A. If Inputting Message From MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 17 and 18 must be performed before using XAPP input messages		
19	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
20	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
21	Change and Verify Hardware Version for CC 0	TELCO	DLP-565
22	At Power Switch on KLW11 Circuit Pack (Item 12), Depress ON Pushbutton; Ensure OFF LED Is Off	TELCO/INST	—
23	At Power Switch on KLW11 Circuit Pack (Item 12), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-516
24	At 1B MTC Terminal, Restore CC 0 to Service (RST:CC 0!)	TELCO/INST	DLP-502
25	Soak CC 0 As Standby for 15 Minutes	TELCO/INST	—
26	Switch CCs To Make CC 0 Active (SW:CC!)	TELCO	DLP-503
27	While CC 0 Is Soaking (Item 28), Perform Item 29	INST	—
28	Soak CC 0 As Active for 1 Hour	TELCO/INST	—
29	Change Designation Strip for CC 0. Do Not Continue With Procedure Until CC 0 Soak Is Complete	INST	—
30	Set Soak Count to 0 Days (SET:SOAK:CC 0,DAYS 0!)	TELCO/INST	DLP-543
31	Safe Point To Temporarily Stop This Procedure. If Stopping, Perform Items 32 Through 37; Otherwise, Go to Item 47	TELCO/INST	—
32	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
33	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
34	At 1B Processor MCC Terminal, If System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
	(Continued on Page 4)		

**BACK OUT CC AND MUP CONVERSION ASSOCIATED WITH PS EXPANSION -
SUPPORT TO INSTALLER (INST)**

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

35	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	-
36	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589
37	Stop Procedure for Now. Continue at Item 38 When Resuming	TELCO	-
38	Ensure 4ESS Switch Is in Stable Condition	TELCO	DLP-500
39	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	-
40	Ensure Units Are Restored to Service	TELCO	DLP-501
41	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
42	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGR0!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
43	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGR0,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
	(Continued on Page 5)		

**BACK OUT CC AND MUP CONVERSION ASSOCIATED WITH PS EXPANSION -
SUPPORT TO INSTALLER (INST)**

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

44	Allow Library Message Channel:		
	A. If Inputting Message From MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 43 and 44 must be performed before using XAPP input messages		
45	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	-
46	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	-
47	At 1B Processor MCC Terminal, Enter 110 To Obtain CS Status and Control Page (110)	TELCO	-
48	Using CS Status and Control Page, Determine if CSs 10 and 11 Are Equipped	TELCO	-
49	If CSs 10 and 11 Are Not Equipped, Perform Items 50 Through 70 To Change MUP 0; Otherwise, Go to Item 86	TELCO/INST	-
	NOTE: Items 50 through 70 are being performed to change MUP 0		
50	At 1B MTC Terminal, Determine Standby MUP (OP:MUPSTAT!)	TELCO	DLP-520
51	Diagnose Standby MUP Using Restore Message (RST:MUP a!)	TELCO	DLP-521
52	Switch MUPs (SW:MUP!)	TELCO	DLP-522
53	Diagnose New Standby MUP Using Restore Message (RST:MUP a!)	TELCO	DLP-521
54	Determine Standby MUP (OP:MUPSTAT!)	TELCO	DLP-520
55	If MUP 0 Is Not Standby, Switch MUPs (SW:MUP!)	TELCO	DLP-522
56	Remove MUP 0 From Service (RMV:MUP 0!)	TELCO	DLP-523
57	At Power Switch on KLW25 Circuit Pack in 1B Processor Cabinet 0 (58-086), Remove MUP 0 From Service and Power Down	TELCO	DLP-536
58	At 1B Processor Cabinet 0, at Location 58-078, Remove KLW16 Circuit Pack	INST	-
59	Insert KLW16 Circuit Pack at Location Vacated in Item 58	INST	-
60	Change and Verify Hardware Version for MUP 0	TELCO	DLP-542
	(Continued on Page 6)		

**BACK OUT CC AND MUP CONVERSION ASSOCIATED WITH PS EXPANSION -
SUPPORT TO INSTALLER (INST)**

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

61	At Power Switch on KLW25 Circuit Pack (Item 57), Depress ON Pushbutton; Ensure OFF LED Is Off	TELCO/INST	—
62	At Power Switch on KLW25 Circuit Pack (Item 57), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-525
63	At 1B MTC Terminal, Restore MUP 0 to Service (RST:MUP 0!)	TELCO/INST	DLP-521
64	Soak MUP 0 As Standby for 15 Minutes	TELCO/INST	—
65	Switch MUPs To Make MUP 0 Active (SW:MUP!)	TELCO	DLP-522
66	While MUP 0 Is Soaking (Item 67), Perform Item 68	INST	—
67	Soak MUP 0 As Active for 1 Hour	TELCO/INST	—
68	Change Designation Strip for MUP 0. Do Not Continue With Procedure Until MUP 0 Soak Is Complete	INST	—
	NOTE: When system is running with MUP 0 active, at 1B Processor MCC terminal, display pages 100 and 118 are modified back to old version and new display pages (109 and 110) will no longer be available		
69	Set Soak Count to 0 Days (SET:SOAK:MUP 0,DAYS 0!)	TELCO/INST	DLP-544
70	Safe Point To Temporarily Stop This Procedure. If Stopping, Perform Items 71 Through 76; Otherwise, Go to Item 86	TELCO/INST	—
71	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
72	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
73	At 1B Processor MCC Terminal, If System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
74	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	—
75	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589
76	Stop Procedure for Now. Continue at Item 77 When Resuming	TELCO/INST	—
77	Ensure 4ESS Switch Is in Stable Condition	TELCO	DLP-500

BACK OUT CC AND MUP CONVERSION ASSOCIATED WITH PS EXPANSION - SUPPORT TO INSTALLER (INST)

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

78	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	-
79	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
80	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
81	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGR0!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
B. For Office Loading a Back Up Library Tape	TELCO	DLP-583	
82	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGR0,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
83	Allow Library Message Channel:		
	A. If Inputting Message From MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 82 and 83 must be performed before using XAPP input messages		
84	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	-
85	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	-
	(Continued on Page 8)		

BACK OUT CC AND MUP CONVERSION ASSOCIATED WITH PS EXPANSION - SUPPORT TO INSTALLER (INST)

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

	NOTE: Items 86 through 106 are being performed to change CC 1		
86	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) is Not Displayed, Enter 118	TELCO	—
87	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	—
88	At 1B MTC Terminal, Diagnose Standby CC (Item 87) Using Restore Message (RST:CC a!)	TELCO	DLP-502
89	Switch CCs (SW:CC!)	TELCO	DLP-503
90	Diagnose New Standby CC Using Restore Message (RST:CC a!)	TELCO	DLP-502
91	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	—
92	If CC 1 Is Not Standby, Switch CCs (SW:CC!)	TELCO	DLP-503
93	Remove CC 1 From Service (RMV:CC 1!)	TELCO	DLP-504
94	At Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 1 (41-014), Remove CC 1 From Service and Power Down	TELCO	DLP-505
95	In 1B Processor Cabinet 1, at Location 41-120, Remove KLW122 Circuit Pack	INST	—
96	Insert KLW22 Circuit Pack at Location Vacated in Item 95	INST	—
97	Change and Verify Hardware Version for CC 1	TELCO	DLP-565
98	At Power Switch on KLW11 Circuit Pack (Item 94), Depress ON Pushbutton; Ensure OFF LED Is Off	TELCO/INST	—
99	At Power Switch on KLW11 Circuit Pack (Item 94), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-516
100	At 1B MTC Terminal, Restore CC 1 to Service (RST:CC 1!)	TELCO/INST	DLP-502
101	Soak CC 1 As Standby for 15 Minutes	TELCO/INST	—
102	Switch CCs To Make CC 1 Active (SW:CC!)	TELCO	DLP-503
103	While CC 1 Is Soaking (Item 104), Perform Item 105	INST	—
104	Soak CC 1 As Active for 1 Hour	TELCO/INST	—
105	Change Designation Strip for CC 1. Do Not Continue With Procedure Until CC 1 Soak Is Complete	INST	—
	(Continued on Page 9)		

**BACK OUT CC AND MUP CONVERSION ASSOCIATED WITH PS EXPANSION -
SUPPORT TO INSTALLER (INST)**

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

106	Set Soak Count to 0 Days (SET:SOAK:CC 1,DAYS 0!)	TELCO/INST	DLP-543
107	At 1B Processor MCC Terminal, Enter 110 To Obtain CS Status and Control Page (110)	TELCO	—
108	Using CS Status and Control Page (110), Determine if CSs 10 and 11 Are Equipped	TELCO	—
109	If CSs 10 and 11 Are Not Equipped, Continue at Item 110 To Change MUP 1; Otherwise, Go to Item 146	TELCO/INST	—
110	Safe Point To Temporarily Stop This Procedure. If Stopping, Perform Items 111 Through 116; Otherwise, Go to Item 126	TELCO/INST	—
111	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
112	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
113	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
114	Enter 801 To Remove Restrict Recent Change (801 — RESTRICT RC Colored White on Black)	TELCO	—
115	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589
116	Stop Procedure for Now. Continue with Item 117 When Resuming	TELCO	—
117	Ensure 4ESS Switch Is in Stable State	TELCO	DLP-500
118	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	—
119	Ensure Units Are Restored to Service	TELCO	DLP-501
120	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
121	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	(Continued on Page 10)		

**BACK OUT CC AND MUP CONVERSION ASSOCIATED WITH PS EXPANSION -
SUPPORT TO INSTALLER (INST)**

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

121 (Contd)	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
122	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0 CLIENT 0!)	TELCO	DLP-512
123	Allow Library Message Channel:		
	A. If Inputting Message From MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a!))	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 122 and 123 must be performed before using XAPP input messages		
124	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
125	Enter 801 To Restrict Recent Change (801 — RESTRICT RC Colored Black on White)	TELCO	—
	NOTE: Items 126 through 145 are being performed to change MUP 1		
126	At 1B MTC Terminal, Determine Standby MUP (OP:MUPSTAT!)	TELCO	DLP-520
127	Diagnose Standby MUP Using Restore Message (RST:MUP a!)	TELCO	DLP-521
128	Switch MUPs (SW:MUP!)	TELCO	DLP-522
129	Diagnose New Standby MUP Using Restore Message (RST:MUP a!)	TELCO	DLP-521
130	Determine Standby MUP (OP:MUPSTAT!)	TELCO	DLP-520
131	If MUP 1 Is Not Standby, Switch MUPs (SW:MUP!)	TELCO	DLP-522
132	Remove MUP 1 From Service (RMV:MUP 1!)	TELCO	DLP-523

**BACK OUT CC AND MUP CONVERSION ASSOCIATED WITH PS EXPANSION -
SUPPORT TO INSTALLER (INST)**

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

133	At Power Switch on KLW25 Circuit Pack in 1B Processor Cabinet 1 (58-086), Remove MUP 1 From Service and Power Down	TELCO	DLP-535
134	In 1B Processor Cabinet 1, at Location 58-078, Remove KLW116 Circuit Pack	INST	—
135	Insert New KLW16 Circuit Pack at Location Vacated in Item 134	INST	—
136	Change and Verify Hardware Version for MUP 1	TELCO	DLP-542
137	At Power Switch on KLW25 Circuit Pack (Item 133), Depress ON Pushbutton; Ensure OFF LED Is Off	TELCO/INST	—
138	At Power Switch on KLW25 Circuit Pack (Item 133), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-525
139	At 1B MTC Terminal, Restore MUP 1 to Service (RST:MUP 1!)	TELCO/INST	DLP-521
140	Soak MUP 1 As Standby for 15 Minutes	TELCO/INST	—
141	Switch MUPs To Make MUP 1 Active (SW:MUP!)	TELCO	DLP-522
142	While MUP 1 Is Soaking (Item 143), Perform Item 144	INST	—
143	Soak MUP 1 As Active for 1 Hour	TELCO/INST	—
144	Change Designation Strip for MUP 1. Do Not Continue With Procedure Until MUP 1 Soak Is Complete	INST	—
	NOTE: When system is running with MUP 1 active, at 1B Processor MCC terminal, display pages 100 and 118 are modified back to old version and new display pages (109 and 110) will no longer be available		
145	Set Soak Count to 0 Days (SET:SOAK:MUP 1,DAYS 0!)	TELCO/INST	DLP-544
146	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
147	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
148	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
	(Continued on Page 12)		

**BACK OUT CC AND MUP CONVERSION ASSOCIATED WITH PS EXPANSION -
SUPPORT TO INSTALLER (INST)**

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

149	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	-
150	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589

**BACK OUT CC AND MUP CONVERSION ASSOCIATED WITH PS EXPANSION -
SUPPORT TO INSTALLER (INST)**

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

		RESPONSIBILITY	
	<p>WARNINGS: 1. No other growth or maintenance activity is allowed during this procedure 2. No software updates of 1B, 3B, SCS, SCS-ASR, or XTSI is allowed during this procedure</p>		
	<p>NOTES: 1. Overwrites occur while using XAPP Library Program. These overwrites must be logged in per local practice 2. A listing of XAPP error codes and an explanation of each is listed in DLP-538. These error codes may be received during XAPP I/O message processing 3. Appropriate Input/Output manuals must be used if clarification of input message or output message is necessary 4. This procedure must be performed during light traffic periods 5. This procedure contains soak interval for verifying system operation and stability during conversion switch removal. During soak interval, all abnormal conditions (such as interrupts, interjects, and diagnostic failures related to removal) must be investigated and resolved immediately. 6. 4ESS™ switch and 3B APS operation must be closely monitored during this procedure</p>		
1	Run New AUB Cables Between 1B Processor and API Frame (Do Not Connect at This Time)	INST	—
2	At 1B MTC Terminal, Enter Message VER:OFFICE! and Determine Generic Office Is Running On. If Office Generic Is Not 4E22R1 or Later, This Procedure Must Not Be Performed	TELCO	—
3	Notify Next Higher Support Organization That DUS/TUC (AUB 0) Degrowth Is Being Performed. Obtain Information for Items 4 Through 6 From Next Higher Support Organization	TELCO	—
4	Ensure 1B Processor Routine Exerciser (REX) Successfully Diagnosed 1B Processor Equipment Within 24 Hours of Performing This Procedure	TELCO	—
5	Ensure No API Interjects, Interrupts, or BLMs Have Occurred Within 24 Hours of Performing This Procedure	TELCO	—
6	Ensure 4ESS Switch Is in Stable Condition	TELCO	DLP-500
7	Ensure 1B Processor and Peripheral Units Are Operating in Normal Duplex Mode	TELCO	DLP-501
8	Set Up Storage Oscilloscope	TELCO	DLP-545
	(Continued on Page 2)		

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

9	Store AUB 0 Input Messages on 1B Processor Terminal for AUB-Looping Test	TELCO	DLP-569
10	At APS MCRT, Verify API-DLN Stream (OP:DLNCM;STREAM!)	TELCO	DLP-570
11	Enter Following Messages To Inhibit Automatic Diagnostics: <ul style="list-style-type: none"> • INH:DMQ;SRC REX! • INH:DMQ;SRC ADP! 	TELCO	–
12	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	–
13	Determine Which API Is Standby (OP:APSTATUS!)	TELCO	DLP-571
14	Diagnose AUB (Same Member Number as Standby API) Using Restore Message (RST:AUB a!)	TELCO	DLP-572
15	Diagnose Standby API Using Restore Message (RST:API a!)	TELCO	DLP-573
	NOTE: Procedure must not be continued until API is restored to service		
16	At 1B MTC Terminal, Switch APIs To Make Other API Standby (SW:APS 0!)	TELCO	DLP-574
17	Diagnose AUB (Same Member Number as Standby API) Using Restore Message (RST:AUB a!)	TELCO	DLP-572
18	Diagnose Standby API Using Restore Message (RST:API a!)	TELCO	DLP-573
	NOTE: Procedure must not be continued until API is restored to service		
19	At 1B MTC Terminal, Determine Which API Is Standby (OP:APSTATUS!)	TELCO	DLP-571
20	If API 0 Is Not Standby, Switch APIs To Make API 0 Standby (SW:APS 0!)	TELCO	DLP-574
21	Remove AUB 0 From Service (RMV:AUB 0!) (Removing AUB 0 Will Also Remove DUS 0 and API 0 From Service)	TELCO	DLP-575
	NOTE: Installer should observe scoping to verify there are no problems with AUB 0		
22	Execute Phase 99 Diagnostic Scoping Test To Verify AUB 0:		
	1. Enter Execute Messages for Looping on AU Write Bus (EX:AUB 0;START! and EX:AUB 0:PH 99,ADR 42-75!)	TELCO	DLP-576
	2. Scope AU Write Bus Bits 0 to 23 at BTRs in API 0	TELCO/INST	DLP-577
	3. Enter Stop Looping Message (EX:AUB 0!)	TELCO	–
	(Continued on Page 3)		

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

22 (Contd)	4. Enter Execute Message for Looping on AU Address Bus (EX:AUB 0:PH 99,ADR 75-120!)	TELCO	DLP-576
	5. Scope AU Address Bus Bits 0 to 15 at BTRs in API 0	TELCO/INST	DLP-578
	6. Enter Stop Looping Message (EX:AUB 0!)	TELCO	—
	7. Enter Execute Message for Looping on AU Store Address Bus (EX:AUB 0:PH 99,ADR 163-212!)	TELCO	DLP-576
	8. Scope AU Store Address Bus Bits 0 to 21 at BTRs in API 0	TELCO/INST	DLP-579
	9. Enter Stop Looping Message (EX:AUB 0!)	TELCO	—
	10. Enter Execute Message for Looping on AU Reply Bus (EX:AUB 0:PH 99,ADR 120-163!)	TELCO	DLP-576
	11. Scope AU Reply Bus Bits 0 to 23 at BTRs in API 0	TELCO/INST	DLP-580
	12. Enter Stop Looping Message (EX:AUB 0!)	TELCO	—
	13. Stop Maintenance Control Program Client	TELCO	DLP-548
14. Disconnect Storage Oscilloscope From API 0	TELCO	—	
23	Demount Tape From All Degrowth TUCs That Have Tape Mounted	TELCO	DLP-509
24	At 1B MTC Terminal, Enter Message RMV:TUC a! for One Even-Numbered TUC Equipped in Office	TELCO	DLP-557
25	Repeat Item 24 for Each Even-Numbered Equipped TUC	TELCO	—
26	At One Even-Numbered TUC Equipped in Office, Open Door at Level 036 and Operate ON/OFF Switch to OFF ; Then Close Door	TELCO	—
27	Remove Power From TUC (Item 26) Using Power Switch	TELCO	DLP-554
28	Repeat Items 26 and 27 for Each Even-Numbered Equipped TUC	TELCO	—
29	At API 0 Power Switch, Rotate ROS/OFF Switch to ROS Position (Do Not Remove Power)	TELCO	—
30	Remove Power From DUS 0 Using Power Switch	TELCO	DLP-554
31	Using Office Records, Determine Locations of +24V and -48V Fuses Used To Power DUSs 0 and 1 and Equipped TUCs. Record for Later Use	TELCO	—
	(Continued on Page 4)		

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

	<i>CAUTION: You must be careful to ensure proper fuses are being removed. Wrong fuse removal may cause service interruption</i>		
32	Remove +24V and -48V Power for Degrowth DUS 0 and Even-Numbered Equipped TUCs:		
	1. At -48V BDFB, Remove Indicator Fuse for DUS 0	TELCO	—
	2. At -48V BDFB, Remove Load Fuse for DUS 0	TELCO	—
	3. Using Clamp-on D.C. Ammeter, Verify There Is No Current on Lead Associated With Fuse Just Removed in Item 32.2; Then Remove Power Cables Associated With DUS 0 From Cabinet	INST	—
	4. Repeat Items 32.1 Through 32.3 for Each Even-Numbered Equipped TUC	TELCO/INST	—
	5. If +24V Is Being Supplied to Degrowth DUS/TUC From J5A007B PCD Frame, Perform Items 32.6 and 32.7; Otherwise, Go to Item 32.8	TELCO	—
	6. At 1B MTC Terminal, Enter Message RMV:PCD 0,DAMON 0!; Ensure RMV: PCD 0, DAMON 0 COMPL Message Is Received	TELCO	—
	7. Go to Item 32.9	TELCO	—
	8. At PD Frame Associated With +24V Power to Degrowth DUS 0, Remove +24V Indicator Fuse (BDFB) or Indicator LED (J5A007C PCD) for DUS 0	TELCO	—
	9. At PD Frame, Remove +24V Load Fuse for DUS 0	TELCO	—
	10. Using Clamp-on D.C. Ammeter, Verify There Is No Current on Lead Associated With Fuse Just Removed in Item 32.9; Then Remove Power Cables Associated With DUS 0 From Cabinet	INST	—
	11. Repeat Items 32.8 Through 32.10 for Each Even-Numbered Equipped TUC	TELCO/INST	—
	12. If +24V Was Supplied to DUS 0 From J5A007B PCD Frame, at 1B MTC Terminal, Enter Message RST:PCD 0,DAMON 0!; Ensure RST: PCD 0, DAMON 0 COMPL Message Is Received	TELCO	—
33	At 1B Processor MCC Terminal, if System Display Page (108) Is Not Displayed, Enter 108 To Obtain System Display Page (108 Page)	TELCO	—
34	Enter 801 To Inhibit Recent Changes (801 - RESTRICT RC Colored Black on White)	TELCO	—
	(Continued on Page 5)		

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

35	At 1B MTC Terminal, Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
36	If Library Package Containing Program XAPP Does Not Reside in File System:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
37	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
38	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC Terminal (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
39	Verify Member Equipage for One Even-Numbered Equipped TUC (VER:UTMN:TUC a,ME!)	TELCO	DLP-541
40	Change and Verify Member Equipage Operational to Unequipped for TUC (Item 39)	TELCO	DLP-532
41	Repeat Items 39 and 40 for Each Even-Numbered Equipped TUC	TELCO	—
42	Verify Member Equipage for DUS 0 (VER:UTMN:DUS 0,ME!)	TELCO	DLP-541
43	Change and Verify Member Equipage Operational to Unequipped for DUS 0	TELCO	DLP-532
44	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
45	At 1B Processor MCC Terminal, if System Display Page (108) Is Not Displayed, Enter 108 To Obtain System Display Page (108 Page)	TELCO	—
46	Enter 801 To Allow Recent Changes (801 - RESTRICT RC Colored White on Black)	TELCO	—
47	At 1B Processor MCC Terminal, Enter 118 To Obtain 1B Processor Status Display Page (118 Page)	TELCO	—
48	Determine State of AUI 0 (ACT or STBY)	TELCO	—
49	If AUI 0 Is STBY, at 1B MTC Terminal, Enter Message SW:AUI! To Make AUI 0 Active	TELCO	—

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

50	Connect New AUB 0 Cables to API 0		
	1. At 1B MTC Terminal, Enter Message TEST:AUB 0!; Ensure TEST:AUB 0 NTR Message Is Received. If NTR Message Is Received, Continue at Item 50.2; Otherwise, Repeat Items 13 Through 21 Before Continuing	TELCO	—
	2. At API 0 Frame, Disconnect One AUB 0 Cable Associate With Signal Family	INST	—
	3. Connect New Corresponding AUB 0 Cable to Location Just Vacated (Item 50.2)	INST	—
	4. At 1B Processor Cabinet 1, Disconnect Associated AUB 0 Cable (Cable Going Between DUS 0 and 1B Processor) and Remove Cable From Cabinet	INST	—
	5. Connect New AUB 0 Cable to Location Just Vacated (Item 50.4). Ensure Cable Is Supported To Avoid Strain on Connector	INST	—
	6. Repeat Items 50.1 Through 50.5 for Each AUB 0 Cable in One Signal Family Group	TELCO/INST	—
	7. At 1B MTC Terminal, Diagnose AUB 0 (DGN:AUB 0!)	TELCO/INST	DLP-585
	8. Repeat Items 50.1 Through 50.7 for Next Signal Family	TELCO/INST	—
51	Connect Alarm Cable(s) to API 0	INST	—
52	Test Major Alarm for API 0:		
	1. At API 0 Fuse Panel, Install Blown Indicator Fuse Into Vacant Indicator Fuse Location	TELCO	—
	2. Ensure Major Alarm Is Received	INST	—
	3. Remove Blown Indicator Fuse (Item 52.1)	TELCO	—
	4. At API 0 Power Switch, Depress ON Pushbutton To Retire Major Alarm	TELCO	—
53	At 1B Processor, Disconnect Scan and SD Cables Associated With DUS 0	INST	—
54	Place Cover Over API 0 To Protect Unit From Possible Damage	INST	—
55	At DUS 0, Disconnect All Connected Cables	INST	—
56	Dress and Secure Cables To Appropriate Towel Bar Supports	INST	—
	<i>WARNING: At least two people are required to remove DUS 0 from frame</i>		
57	Remove DUS 0 From Frame	INST	—
	(Continued on Page 7)		

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

58	Remove Protective Covering From API 0	INST	—
59	At 1B MTC Terminal, Diagnose AUB 0 (DGN:AUB 0!)	TELCO/INST	DLP-585
60	Office Technician Must Observe AUB 0 Scoping (Item 61) Since Successful Completion of This Scoping Will Be Considered Acceptance of DUS 0 Degrowth. During Item 61, if any Error Is Encountered, Notify Next Higher Support Organization and Abort Test Until Error Is Resolved	TELCO	—
61	Execute Phase 99 Diagnostic Scoping Test To Verify AUB 0:		
	1. Enter Execute Messages for Looping on AU Write Bus (EX:AUB 0;START! and EX:AUB 0:PH 99,ADR 42-75!)	TELCO	DLP-576
	2. Scope AU Write Bus Bits 0 to 23 at BTRs in API 0	INST/TELCO	DLP-577
	3. Enter Stop Looping Message (EX:AUB 0!)	TELCO	—
	4. Enter Execute Message for Looping on AU Address Bus (EX:AUB 0:PH 99,ADR 75-120!)	TELCO	DLP-576
	5. Scope AU Address Bus Bits 0 to 15 at BTRs in API 0	INST/TELCO	DLP-578
	6. Enter Stop Looping Message (EX:AUB 0!)	TELCO	—
	7. Enter Execute Message for Looping on AU Store Address Bus (EX:AUB 0:PH 99,ADR 163-212!)	TELCO	DLP-576
	8. Scope AU Store Address Bus Bits 0 to 21 at BTRs in API 0	INST/TELCO	DLP-579
	9. Enter Stop Looping Message (EX:AUB 0!)	TELCO	—
	10. Enter Execute Message for Looping on AU Reply Bus (EX:AUB 0:PH 99,ADR 120-163!)	TELCO	DLP-576
	11. Scope AU Reply Bus Bits 0 to 23 at BTRs in API 0	INST/TELCO	DLP-580
	12. Enter Stop Looping Message (EX:AUB 0!)	TELCO	—
	13. Stop Maintenance Control Program Client	TELCO	DLP-548
14. Disconnect Storage Oscilloscope From API 0	INST	—	
62	At API 0 Power Switch, Rotate ROS/OFF Switch to Normal Position (API 0 Will Remain Out of Service)	TELCO/INST	DLP-586
63	At 1B MTC Terminal, Restore AUB 0 to Service (RST:AUB 0!)	TELCO/INST	DLP-572
	(Continued on Page 8)		

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

64	Diagnose API 0 (DGN:API 0!)	TELCO/INST	DLP-587
65	Switch CCs (SW:CC!)	TELCO	DLP-588
66	Diagnose API 0 (DGN:API 0!)	TELCO/INST	DLP-587
67	Restore API 0 to Service (RST:API 0!)	TELCO/INST	DLP-573
68	Diagnose AUB 0 Using Restore Message (ATP Required) (RST:AUB 0!)	TELCO/INST	DLP-572
69	Switch APIs To Make API 0 Active (SW:APS 0!)	TELCO	DLP-574
70	Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
71	At APS MCRT, Enter Following Messages To Allow Automatic Diagnostics: • ALW:DMQ;SRC REX! • ALW:DMQ;SRC ADP!	TELCO	—
72	Notify Next Higher Support Organization That DUS 0 Has Been Degrown From AUB 0	TELCO/INST	—
73	Soak AUB 0 in Active State for at Least One Non-Cabling Shift Before Proceeding	TELCO/INST	—
74	Notify Next Higher Support Organization That DUS/TUC (AUB 1) Degrowth Is Being Performed	TELCO	—
75	Set Up Storage Oscilloscope	INST	DLP-545
76	Store AUB 1 Input Messages on 1B Processor Terminal for AUB-Looping Test	TELCO	DLP-569
77	At APS MCRT, Verify API-DLN Stream (OP:DLNCM;STREAM!)	TELCO	DLP-570
78	Enter Following Messages To Inhibit Automatic Diagnostics: • INH:DMQ;SRC REX! • INH:DMQ;SRC ADP!	TELCO	—
79	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	TELCO	—
80	Determine Which API Is Standby (OP:APSTATUS!)	TELCO	DLP-571
81	Diagnose AUB (Same Member Number as Standby API) Using Restore Message (RST:AUB a!)	TELCO	DLP-572
82	Diagnose Standby API Using Restore Message (RST:API a!)	TELCO	DLP-573
	NOTE: Procedure must not be continued until API is restored to service		
	(Continued on Page 9)		

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

83	At 1B MTC Terminal, Switch APIs To Make Other API Standby (SW:APS 0!)	TELCO	DLP-574
84	Diagnose AUB (Same Member Number as Standby API) Using Restore Message (RST:AUB a!)	TELCO	DLP-572
85	Diagnose Standby API Using Restore Message (RST:API a!)	TELCO	DLP-573
	NOTE: Procedure must not be continued until API is restored to service		
86	At 1B MTC Terminal, Determine Which API Is Standby (OP:APSTATUS!)	TELCO	DLP-571
87	If API 1 Is Not Standby, Switch APIs To Make API 1 Standby (SW:APS 0!)	TELCO	DLP-574
88	At 1B MTC Terminal, Enter Message RMV:TUC a! for One Odd-Numbered TUC Equipped in Office	TELCO	DLP-557
89	Repeat Item 88 for Each Odd-Numbered Equipped TUC	TELCO	—
90	Remove DUS 1 From Service (RMV:DUS 1!)	TELCO	DLP-590
91	Remove AUB 1 From Service (RMV:AUB 1!)	TELCO	DLP-575
	NOTE: Installer should observe scoping to verify there are no problems with AUB 1		
92	Execute Phase 99 Diagnostic Scoping Test To Verify AUB 1:		
	1. Enter Execute Messages for Looping on AU Write Bus (EX:AUB 1;START! and EX:AUB 1:PH 99,ADR 216-251!)	TELCO	DLP-576
	2. Scope AU Write Bus Bits 0 to 23 at BTRs in API 1	TELCO/INST	DLP-577
	3. Enter Stop Looping Message (EX:AUB 1!)	TELCO	—
	4. Enter Execute Message for Looping on AU Address Bus (EX:AUB 1:PH 99,ADR 251-274!)	TELCO	DLP-576
	5. Scope AU Address Bus Bits 0 to 15 at BTRs in API 1	TELCO/INST	DLP-578
	6. Enter Stop Looping Message (EX:AUB 1!)	TELCO	—
	7. Enter Execute Message for Looping on AU Store Address Bus (EX:AUB 1:PH 99,ADR 337-366!)	TELCO	DLP-576
	8. Scope AU Store Address Bus Bits 0 to 21 at BTRs in API 1	TELCO/INST	DLP-579
	9. Enter Stop Looping Message (EX:AUB 1!)	TELCO	—
(Continued on Page 10)			

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

92 (Contd)	10. Enter Execute Message for Looping on AU Reply Bus (EX:AUB 1:PH 99,ADR 274-337!)	TELCO	DLP-576
	11. Scope AU Reply Bus Bits 0 to 23 at BTRs in API 1	TELCO/INST	DLP-580
	12. Enter Stop Looping Message (EX:AUB 1!)	TELCO	–
	13. Stop Maintenance Control Program Client	TELCO	DLP-548
	14. Disconnect Storage Oscilloscope From API 1	TELCO	–
93	At One Odd-Numbered TUC Equipped in Office, Open Door at Level 036 and Operate ON/OFF Switch to OFF ; Then Close Door	TELCO	–
94	Remove Power From TUC (Item 93) Using Power Switch	TELCO	DLP-554
95	Repeat Items 93 and 94 for Each Odd-Numbered Equipped TUC	TELCO	–
96	At API 1 Power Switch, Rotate ROS/OFF Switch to ROS Position (Do Not Remove Power)	TELCO	–
97	Remove Power From DUS 1 Using Power Switch	TELCO	DLP-554
<i>CAUTION: You must be careful to ensure proper fuses are being removed. Wrong fuse removal may cause service interruption</i>			
98	Remove +24V and -48V Power for Degrowth DUS 1 and Odd-Numbered Equipped TUCs:		
	1. At -48V BDFB, Remove Indicator Fuse for DUS 1	TELCO	–
	2. At -48V BDFB, Remove Load Fuse for DUS 1	TELCO	–
	3. Using Clamp-on D.C. Ammeter, Verify There Is No Current on Lead Associated With Fuse Just Removed in Item 98.2; Then Remove Power Cables Associated With DUS 1 From Cabinet	INST	–
	4. Repeat Items 98.1 Through 98.3 for Each Odd-Numbered Equipped TUC	TELCO/INST	–
	5. If +24V Is Being Supplied to Degrowth DUS/TUC From J5A007B PCD Frame, Perform Items 98.6 and 98.7; Otherwise, Go to Item 98.8	TELCO	–
	6. At 1B MTC Terminal, Enter Message RMV:PCD 1,DAMON 0!; Ensure RMV: PCD 1, DAMON 0 COMPL Message Is Received	TELCO	–
	7. Go to Item 98.9	TELCO	–
(Continued on Page 11)			

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

98 (Contd)	8. At PD Frame Associated With +24V Power to Degrowth DUS 1, Remove +24V Indicator Fuse (BDFB) or Indicator LED (J5A007C PCD) for DUS 1	TELCO	-
	9. At PD Frame, Remove +24V Load Fuse for DUS 1	TELCO	-
	10. Using Clamp-on D.C. Ammeter, Verify There Is No Current on Lead Associated With Fuse Just Removed in Item 98.9; Then Remove Power Cables Associated With DUS 1 From Cabinet	INST	-
	11. Repeat Items 98.8 Through 98.10 for Each Odd-Numbered Equipped TUC	TELCO/INST	-
	12. If +24V Was Supplied to DUS 1 From J5A007B PCD Frame, at 1B MTC Terminal, Enter Message RST:PCD 1,DAMON 0!; Ensure RST: PCD 1, DAMON 0 COMPL Message Is Received	TELCO	-
99	At 1B Processor MCC Terminal, if System Display Page (108) Is Not Displayed, Enter 108 To Obtain System Display Page (108 Page)	TELCO	-
100	Enter 801 To Inhibit Recent Changes (801 - RESTRICT RC Colored Black on White)	TELCO	-
101	At 1B MTC Terminal, Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
102	If Library Package Containing Program XAPP Does Not Reside in File System:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
103	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
104	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC Terminal (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a!))	TELCO	DLP-513
105	Verify Member Equipage for One Odd-Numbered Equipped TUC (VER:UTMN:TUC a,ME!)	TELCO	DLP-541
106	Change and Verify Member Equipage Operational to Unequipped for TUC (Item 105)	TELCO	DLP-532
	(Continued on Page 12)		

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

107	Repeat Items 105 and 106 for Each Odd-Numbered Equipped TUC	TELCO	–
108	Verify Member Equipage for DUS 1 (VER:UTMN:DUS 1,ME!)	TELCO	DLP-541
109	Change and Verify Member Equipage Operational to Unequipped for DUS 1	TELCO	DLP-532
110	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
111	At 1B Processor MCC Terminal, if System Display Page (108) Is Not Displayed, Enter 108 To Obtain System Display Page (108 Page)	TELCO	–
112	Enter 801 To Allow Recent Changes (801 - RESTRICT RC Colored White on Black)	TELCO	–
113	At 1B Processor MCC Terminal, Enter 118 To Obtain 1B Processor Status Display Page (118 Page)	TELCO	–
114	Determine State of AUI 1 (ACT or STBY)	TELCO	–
115	If AUI 1 Is STBY, at 1B MTC Terminal, Enter Message SW:AUI! To Make AUI 1 Active	TELCO	–
116	Connect New AUB 1 Cables to API 1		
	1. At 1B MTC Terminal, Enter Message TEST:AUB 1!; Ensure TEST:AUB 1 NTR Message Is Received. If NTR Message Is Received, Continue at Item 116.2; Otherwise, Repeat Items 80 Through 89 Before Continuing	TELCO	–
	2. At API 1 Frame, Disconnect One AUB 1 Cable Associate With Signal Family	INST	–
	3. Connect New Corresponding AUB 1 Cable to Location Just Vacated (Item 116.2)	INST	–
	4. At 1B Processor Cabinet 0, Disconnect Associated AUB 1 Cable (Cable Going Between DUS 1 and 1B Processor) and Remove Cable From Cabinet	INST	–
	5. Connect New AUB 1 Cable to Location Just Vacated (Item 116.4). Ensure Cable Is Supported To Avoid Strain on Connector	INST	–
	6. Repeat Items 116.1 Through 116.5 for Each AUB 1 Cable in One Signal Family Group	TELCO/INST	–
	7. At 1B MTC Terminal, Diagnose AUB 1 (DGN:AUB 1!)	TELCO/INST	DLP-585
8. Repeat Items 116.1 Through 116.7 for Next Signal Family	TELCO/INST	–	
117	Connect Alarm Cable(s) to API 1	INST	–
	(Continued on Page 13)		

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

118	Test Major Alarm for API 1:		
	1. At API 1 Fuse Panel, Install Blown Indicator Fuse Into Vacant Indicator Fuse Location	TELCO	–
	2. Ensure Major Alarm Is Received	INST	–
	3. Remove Blown Indicator Fuse (Item 118.1)	TELCO	–
	4. At API 1 Power Switch, Depress ON Pushbutton To Retire Major Alarm	TELCO	–
119	At 1B Processor, Disconnect Scan and SD Cables Associated With DUS 1	INST	–
120	Place Cover Over API 1 To Protect Unit From Possible Damage	INST	–
121	At DUS 1, Disconnect All Connected Cables	INST	–
122	Dress and Secure Cables To Appropriate Towel Bar Supports	INST	–
	<i>WARNING: At least two people are required to remove DUS 1 from frame</i>		
123	Remove DUS 1 From Frame	INST	–
124	Remove Protective Covering From API 1	INST	–
125	At 1B MTC Terminal, Diagnose AUB 1 (DGN:AUB 1!)	TELCO/INST	DLP-585
126	Office Technician Must Observe AUB 1 Scoping (Item 127) Since Successful Completion of This Scoping Will Be Considered Acceptance of DUS 1 Degrowth. During Item 127, if Any Error Is Encountered, Notify Next Higher Support Organization and Abort Test Until Error Is Resolved	TELCO	–
127	Execute Phase 99 Diagnostic Scoping Test To Verify AUB 1:		
	1. Enter Execute Messages for Looping on AU Write Bus (EX:AUB 1;START! and EX:AUB 1:PH 99,ADR 216-251!)	TELCO	DLP-576
	2. Scope AU Write Bus Bits 0 to 23 at BTRs in API 1	INST/TELCO	DLP-577
	3. Enter Stop Looping Message (EX:AUB 1!)	TELCO	–
	4. Enter Execute Message for Looping on AU Address Bus (EX:AUB 1:PH 99,ADR 251-274!)	TELCO	DLP-576
	5. Scope AU Address Bus Bits 0 to 15 at BTRs in API 1	INST/TELCO	DLP-578
	(Continued on Page 14)		

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

127 (Contd)	6. Enter Stop Looping Message (EX:AUB 1!)	TELCO	—
	7. Enter Execute Message for Looping on AU Store Address Bus (EX:AUB 1:PH 99,ADR 337-366!)	TELCO	DLP-576
	8. Scope AU Store Address Bus Bits 0 to 21 at BTRs in API 1	INST/TELCO	DLP-579
	9. Enter Stop Looping Message (EX:AUB 1!)	TELCO	—
	10. Enter Execute Message for Looping on AU Reply Bus (EX:AUB 1:PH 99,ADR 274-337!)	INST/TELCO	DLP-576
	11. Scope AU Reply Bus Bits 0 to 23 at BTRs in API 1	INST/TELCO	DLP-580
	12. Enter Stop Looping Message (EX:AUB 1!)	TELCO	—
	13. Stop Maintenance Control Program Client	TELCO	DLP-548
14. Disconnect Storage Oscilloscope From API 1	INST	—	
128	At API 1 Power Switch, Rotate ROS/OFF Switch to Normal Position (API 1 Will Remain Out of Service)	TELCO/INST	DLP-586
129	At 1B MTC Terminal, Restore AUB 1 to Service (RST:AUB 1!)	TELCO/INST	DLP-572
130	Diagnose API 1 (DGN:API 1!)	TELCO/INST	DLP-587
131	Switch CCs (SW:CC!)	TELCO	DLP-588
132	Diagnose API 1 (DGN:API 1!)	TELCO/INST	DLP-587
133	Restore API 1 to Service (RST:API 1!)	TELCO/INST	DLP-573
134	Diagnose AUB 1 Using Restore Message (ATP Required) (RST:AUB 1!)	TELCO/INST	DLP-572
135	Switch APIs To Make API 1 Active (SW:APS 0!)	TELCO	DLP-574
136	Test Major Alarm for API 0:		
	1. At API 0 Power Switch, Rotate ROS/OFF Switch to ROS Position	TELCO	—
	2. At API 0 Fuse Panel, Install Blown Indicator Fuse Into Vacant Indicator Fuse Location	TELCO	—
	3. Ensure Major Alarm Is Received	INST	—
	4. Remove Blown Indicator Fuse (Item 136.1)	TELCO	—
(Continued on Page 15)			

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

136 (Contd)	5. At API 0 Power Switch, Depress ON Pushbutton To Retire Major Alarm	TELCO	—
	6. Rotate ROS/OFF Switch to Normal Position; Ensure RST: API 0 COMPLETED Message Is Received	TELCO	—
137	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	TELCO	—
138	At APS MCRT, Enter Following Messages To Allow Automatic Diagnostics: • ALW:DMQ;SRC REX! • ALW:DMQ;SRC ADP!	TELCO	—
139	Notify Next Higher Support Organization That DUS 1 and Odd-Numbered TUCs Have Been Degrown From AUB 1	TELCO/INST	—
140	Write New ODA Tape	TELCO	DLP-589
141	Soak AUB 1 in Active State for at Least One Non-Cabling Shift Before Proceeding	TELCO/INST	—
142	Notify Next Higher Support Organization That Cable Mining Is Being Performed	TELCO	—
143	Remove Cables Associated With DUSs and TUCs From Cable Rack	INST	—
144	Notify Next Higher Support Organization That Cable Mining Is Completed	TELCO	—

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

		RESPONSIBILITY	
	<i>WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling</i>		
	NOTES: 1. This procedure must be performed during light traffic periods 2. Overwrites occur while using XAPP. These overwrites must be logged in at the end of each growth shift per local practices 3. If XAPP overwrites were used during a shift, Item 39 must be performed at the end of that shift 4. A listing of XAPP error codes and an explanation of each is listed in DLP-538. These error codes may be received during XAPP I/O message processing		
1	Ensure 4ESS ™ Switch Is in Stable Condition	TELCO	DLP-500
2	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
3	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
4	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
B. For Office Loading a Backup Library Tape	TELCO	DLP-583	

ADD AND ACTIVATE IOUC IN OPERATIONAL IOUS

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

5	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
6	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 5 and 6 must be performed before using XAPP input messages		
7	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
8	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
9	Determine From Equipment Order Input/Output Unit Controller (IOUC) To Be Added	TELCO	—
10	Verify UNEQ State of IOUC Channel and Port Equipage	TELCO	DLP-592
	NOTE: Items 11 and 12 must be performed without interruption		
11	Change and Verify Channel Data	TELCO	DLP-595
12	Change and Verify Channel Equipage Unequipped to Grow	TELCO	DLP-596
13	Remove Power From IOUC To Be Added:		
	A. If I/O Is SD-5A021: Depress PWR OFF CHANNEL Key of IOUC To Be Added (PWR OFF CHANNEL Lamp ON)	TELCO	—
	B. If I/O Is SD-5A049 or 5A052:		
	1. Request Users of Other Channels on Growth Associated IOMP To Transfer to Their Backup Channel	TELCO	—
	2. Remove Growth Associated IOMP From Service (RMV:IOUS a,IOMP b!)	TELCO	DLP-597
	3. Power Down Growth Associated IOMP	TELCO	DLP-598
	C. If I/O Is SD-4C049:		
	1. Request Users of Other Channels on Growth Associated IOMP To Transfer to Their Backup Channel	TELCO	—
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ADD AND ACTIVATE IOUC IN OPERATIONAL IOUS

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

13 (Contd)	2. Remove Growth Associated IOMP From Service (RMV:IOUS a,IOMP b!)	TELCO	DLP-597
	3. Power Down Growth Associated IOMP	TELCO	DLP-599
14	If Data Set(s) Are Required:		
	1. If Existing Data Sets Have To Be Powered Down To Add New Data Sets:		
	1. Remove Working IOUC(s) Associated With Data Sets From Service (RMV:IOUS a,IOUC b!)	TELCO	DLP-600
	2. Power Down Data Set(s)	TELCO	—
	2. Install New Data Set(s) With Interframe Cables	TELCO	—
	3. Power Up New Data Set(s)	TELCO	—
	4. If Existing Data Sets Were Powered Down:		
	1. Power Up Data Set(s)	TELCO	—
15	2. Restore IOUC(s) Removed From Service in Item 14.1.1 to Service (RST:IOUS a,IOUC b!)	TELCO	DLP-601
	Connect Port Cable(s) at I/O Frame (if Not Equipped):		
	A. If I/O Frame Is J5A006A: Connect Port Cable(s) for Each Port To Be Added on Growth IOUC	TELCO	DLP-602
	B. If I/O Frame Is J5A006C: Connect Port Cable(s) for Each Port To Be Added on Growth IOUC	TELCO	DLP-603
16	C. If I/O Frame Is J5A006D: Connect Port Cable(s) for Each Port To Be Added on Growth IOUC	TELCO	DLP-604
	If I/O Is SD-5A021: Select IOUC Operating Speed	TELCO	DLP-605
	If I/O Is SD-5A021 and Signaling Converters Required: Add Signaling Converters to I/O Frame	TELCO	DLP-606
	(Continued to Page 4)		

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

18	Install Circuit Pack(s) for Growth IOUC:		
	A. If I/O Is SD-5A021	TELCO	DLP-607
	B. If I/O Is SD-5A049 or 5A052	TELCO	DLP-608
	C. If I/O Is SD-4C049	TELCO	DLP-609
19	Restore Power to IOUC To Be Added:		
	A. If I/O Is SD-5A021: Depress PWR OFF CHANNEL Key (PWR OFF CHANNEL Lamp OFF)	TELCO	—
	B. If I/O Is SD-5A049 or 5A052: Restore Power to Growth Associated IOMP	TELCO	DLP-610
	C. If I/O Is SD-4C049: Restore Power to Growth Associated IOMP	TELCO	DLP-611
	NOTE: If data set is required and high speed channel is associated with IOUC, data set must be connected for diagnostics to pass		
20	Diagnose Growth IOUC (DGN:IOUS a,IOUC b!)	TELCO	DLP-612
21	Change and Verify Channel Equipage Grow to Special Growth	TELCO	DLP-613
22	Change and Verify Channel Equipage Special Growth to Operational	TELCO	DLP-614
23	Determine From Equipment Order IOUC Port(s) To Be Activated	TELCO	—
	NOTE: Items 24 through 27 must be performed without interruption	TELCO	
24	Change and Verify Port Data	TELCO	DLP-615
25	Repeat Item 24 for Each Additional IOUC Port To Be Activated Within This Growth IOUC	TELCO	—
26	Change and Verify Port Equipage Unequipped to Grow	TELCO	DLP-616
27	Repeat Item 26 for Each Additional IOUC Port To Be Activated Within This Growth IOUC	TELCO	—
28	If Terminal Device Is Equipped With Answer-Back Option: Perform Answer-Back Test (DGN:IOUS a,IOUC b:PORT c!)	TELCO	DLP-617
29	Repeat Item 28 for Each Port To Be Activated on This Growth IOUC	TELCO	—
30	Change and Verify Port Equipage Grow to Special Growth	TELCO	DLP-618
31	Repeat Item 30 for Each Additional IOUC Port To Be Activated Within This Growth IOUC	TELCO	—
32	Change and Verify Port Equipage Special Growth to Operational	TELCO	DLP-619

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

33	Repeat Item 32 for Each Additional IOUC Port To Be Activated Within This Growth IOUC	TELCO	–
34	Restore Growth IOUC to Service:		
	A. If I/O Is SD-5A021: (RST:IOUS a,IOUC b!)	TELCO	DLP-601
	B. If I/O Is SD-5A049 or 5A052 or 4C049:		
	1. Restore IOMP to Service (RST:IOUS a,IOMP b!)	TELCO	DLP-620
	2. Request Users of Other Channels on Growth Associated IOMP to Return to Their Primary Channel	TELCO	–
	3. Restore Growth IOUC to Service (RST:IOUS a,IOUC b!)	TELCO	DLP-601
35	Test Terminal Device(s) Connecting to Port(s) on This IOUC (if Required)	TELCO	DLP-621
36	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0 ,CLIENT 0!)	TELCO	DLP-518
37	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	–
38	Enter 801 To Remove Restrict Recent Change (801 – RESTRICT RC Colored White on Black)	TELCO	–
39	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589

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

		RESPONSIBILITY	
	<i>WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling</i>		
	NOTES: 1. This procedure must be performed during light traffic periods 2. Overwrites occur while using XAPP. These overwrites must be logged in at the end of each growth shift per local practices 3. If XAPP overwrites were used during a shift, Item 27 must be performed at the end of that shift 4. A listing of XAPP error codes and an explanation of each is listed in DLP-538. These error codes may be received during XAPP I/O message processing		
1	Ensure 4ESS ™ Switch Is in Stable Condition	TELCO	DLP-500
2	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
3	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
4	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
B. For Office Loading a Backup Library Tape	TELCO	DLP-583	

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

5	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
6	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 5 and 6 must be performed before using XAPP input messages		
7	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
8	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
9	Determine From Equipment Order Input/Output Unit Controller (IOUC) Port To Be Activated	TELCO	—
10	Verify UNEQ State of IOUC Port Equipage	TELCO	DLP-592
11	If IOUC Is in Service: Remove IOUC From Service (RMV:IOUS a, IOUC b!)	TELCO	DLP-600
12	Remove Power From Growth Associated IOUC:		
	A. If I/O Is SD-5A021: Depress PWR OFF CHANNEL Key of IOUC To Be Added (PWR OFF CHANNEL Lamp ON)	TELCO	—
	B. If I/O Is SD-5A049 or 5A052:		
	1. Request Users of Other Channels on Growth Associated IOMP To Transfer to Their Backup Channel	TELCO	—
	2. Remove Growth Associated IOMP From Service (RMV:IOUS a,IOMP b!)	TELCO	DLP-597
	3. Power Down Growth Associated IOMP	TELCO	DLP-598
	C. If I/O Is SD-4C049:		
	1. Request Users of Other Channels on Growth Associated IOMP To Transfer to Their Backup Channel	TELCO	—
	2. Remove Growth Associated IOMP From Service (RMV:IOUS a,IOMP b!)	TELCO	DLP-597
3. Power Down Growth Associated IOMP	TELCO	DLP-599	
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ACTIVATE IOUC PORT IN OPERATIONAL IOUC

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

13	If Data Set Are Required:		
	1. If Existing Data Sets Have To Be Powered Down To Add New Data Sets:		
	1. Remove Working IOUC(s) Associated With Data Sets From Service (RMV:IOUS a,IOUC b!)	TELCO	DLP-600
	2. Power Down Data Set(s)	TELCO	—
	2. Install New Data Set(s) With Interframe Cables	TELCO	—
	3. Power Up New Data Set	TELCO	—
	4. If Existing Data Sets Were Powered Down:		
	1. Power Up Data Set(s)	TELCO	—
2. Restore IOUC(s) Removed From Service in Item 13.1.1 to Service (RST:IOUS a,IOUC b!)	TELCO	DLP-601	
14	Connect Cable of Port To Be Activated at IOUC and Terminal Strip and Ensure That They Are Firmly Seated:		
	A. If I/O Frame Is J5A006A	TELCO	DLP-602
	B. If I/O Frame Is J5A006C	TELCO	DLP-603
	C. If I/O Frame Is J5A006D	TELCO	DLP-604
15	If I/O Is SD-5A021 and Signaling Conveter Required: Add Signaling Converter to I/O Frame	TELCO	DLP-606
16	Restore Power to IOUC To Be Added:		
	A. If I/O Is SD-5A021: Depress PWR OFF CHANNEL Key (PWR OFF CHANNEL Lamp OFF)	TELCO	—
	B. If I/O Is SD-5A049 or 5A052: Restore Power to Growth Associated IOMP	TELCO	DLP-610
	C. If I/O Is SD-4C049: Restore Power to Growth Associated IOMP	TELCO	DLP-611
	NOTE: Items 17 and 18 must be performed without interruption		
17	Change and Verify Port Data	TELCO	DLP-615
18	Change and Verify Port Equipage Unequipped to Grow	TELCO	DLP-616
	(Continued to Page 4)		

ACTIVATE IOUC PORT IN OPERATIONAL IOUC

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

19	If Terminal Device Is Equipped With Answer-Back Option: Perform Answer-Back Test (DGN:IOUS a,IOUC b:PORT c!)	TELCO	DLP-617
20	Change and Verify Port Equipage Grow to Special Growth	TELCO	DLP-618
21	Change and Verify Port Equipage Special Growth to Operational	TELCO	DLP-619
22	Restore Growth IOUC to Service:		
	A. If I/O Is SD-5A021: (RST:IOUS a,IOUC b!)	TELCO	DLP-601
	B. If I/O Is SD-5A049 or 5A052 or 4C049:		
	1. Restore IOMP to Service (RST:IOUS a,IOMP b!)	TELCO	DLP-620
	2. Request Users of Other Channels on Growth Associated IOMP to Return to Their Primary Channel	TELCO	-
	3. Restore Growth Associated IOUC to Service (RST:IOUS a,IOUC b!)	TELCO	DLP-601
23	Test Terminal Device(s) Connecting to Port(s) on This IOUC (if Required)	TELCO	DLP-621
24	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0 ,CLIENT 0!)	TELCO	DLP-518
25	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	-
26	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	-
27	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589

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

		RESPONSIBILITY	
	<i>WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling</i>		
	NOTES: 1. This procedure must be performed during light traffic periods 2. Overwrites occur while using XAPP. These overwrites must be logged in at the end of each growth shift per local practices 3. If XAPP overwrites were used during a shift, Item 63 must be performed at the end of that shift 4. A listing of XAPP error codes and an explanation of each is listed in DLP-538. These error codes may be received during XAPP I/O message processing		
1	Perform Preliminary Installation Activities	INST	—
2	Ensure 4ESS ™ Switch Is in Stable Condition	TELCO	DLP-500
3	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
4	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
5	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
B. For Office Loading a Backup Library Tape	TELCO	DLP-583	

**ADD LOWER IOUS TO OPERATIONAL INPUT/OUTPUT PROCESSOR FRAME —
SUPPORT TO INSTALLER (INST)**

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

6	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
7	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 6 and 7 must be performed before using XAPP input messages		
8	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
9	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
10	Verify Member Equipage UNEQ for Growth Input/Output Unit Selector (IOUS) (VER:UTMN:a b,ME!)	TELCO/INST	DLP-527
11	Verify Words 1 Through 8 in Growth IOUS Unit Type Translator (Using Verify Entry Message):		
	A. Growth IOUS Is Member Number 1 or 3	TELCO/INST	DLP-622
	B. Growth IOUS Is Member Number 5 or 7	TELCO/INST	DLP-624
12	Change and Verify Hardware Generation for Growth IOUS	TELCO/INST	DLP-537
13	Change and Verify Member Type for Growth IOUS	TELCO/INST	DLP-627
14	Change and Verify Member Equipage Unequipped to Grow (Growth IOUS)	TELCO/INST	DLP-528
15	Request Users of Channels on Upper IOUS to Transfer to Backup Channel	TELCO	—
16	Remove Power With Power Switch (Upper IOUS)	TELCO	—
17	Remove Power With Power Switch (Bus Interface Unit 0)	TELCO	—
18	Remove Power With Power Switch (Bus Interface Unit 1)	TELCO	—
19	Remove Power Conversion and Distribution (PCD) Frame Fuses for Upper and Lower IOUS and Bus Interface Units 0 and 1	TELCO	—
20	Install Lower IOUS	INST	—
21	Connect Power Feeders to Lower IOUS	INST	—
22	Run Loose Wire	INST	—

**ADD LOWER IOUS TO OPERATIONAL INPUT/OUTPUT PROCESSOR FRAME —
SUPPORT TO INSTALLER (INST)**

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

23	Install Tape Cables in 82A Apparatus Mountings on Growth IOUS Backplane	INST	—
24	Replace PCD Fuses Removed in Item 19	TELCO	—
25	Test IOP Frame Major Alarms for Lower IOUS	INST	—
26	Verify Scan and SD Points for Lower IOUS	INST	—
27	Remove PUB 0 From Service (RMV:PUB 0!)	TELCO	DLP-628
28	Restore Power With Power Switch (Bus Interface Unit 0)	TELCO/INST	DLP-629
29	Restore Power With Power Switch (Upper IOUS)	TELCO/INST	DLP-629
30	Rotate OFF Switch Counterclockwise to Normal Position and Depress ON Switch for Lower IOUS	INST	—
31	Diagnose Upper IOUS and Lower IOUS Using PUB 0	INST	—
32	Remove Power With Power Switch (Bus Interface Unit 0)	TELCO	—
33	Restore PUB 0 to Service (RST:PUB 0!)	TELCO/INST	DLP-630
34	Remove PUB 1 From Service (RMV:PUB 1!)	TELCO	DLP-628
35	Restore Power With Power Switch (Bus Interface Unit 1)	TELCO/INST	DLP-629
36	Diagnose Upper IOUS and Lower IOUS Using PUB 1	INST	—
37	If Any Repairs or Maintenance Was Required to Either Bus Interface Circuit or IOUS:		
	1. Remove Power With Power Switch (Bus Interface Unit 1)	TELCO	—
	2. Restore PUB 1 to Service (RST:PUB 1!)	TELCO/INST	DLP-630
	3. Repeat From Item 27	TELCO/INST	—
38	Restore PUB 1 to Service (RST:PUB 1!)	TELCO/INST	DLP-630
39	Restore Power With Power Switch (Bus Interface Unit 0)	TELCO/INST	DLP-629
40	Power Up Lower IOUS	INST	—
41	Diagnose Lower IOUS	INST	—
42	Restore Power With Power Switch (Upper IOUS)	TELCO/INST	DLP-629
43	Request Users of Channels on Upper IOUS To Return to Their Primary Channels	TELCO	—

**ADD LOWER IOUS TO OPERATIONAL INPUT/OUTPUT PROCESSOR FRAME —
SUPPORT TO INSTALLER (INST)**

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

44	Change and Verify Member Equipage Grow to Special Growth (Growth IOUS)	TELCO/INST	DLP-530
45	Change and Verify Member Equipage Special Growth to Operational (Growth IOUS)	TELCO/INST	DLP-531
46	Restore IOUS to Service (Lower IOUS) (RST:IOUS a!)	TELCO	DLP-631
47	Add an Input/Output Micro-Processor (IOMP) to Growth IOUS:		
	1. Change and Verify Submember Hardware Generation for Growth IOMP	TELCO/INST	DLP-632
	2. Change and Verify Submember Equipage Unequipped to Grow (Growth IOMP)	TELCO/INST	DLP-633
	3. Diagnose Growth IOMP	INST	—
	4. Change and Verify Submember Equipage Grow to Special Growth (Growth IOMP)	TELCO/INST	DLP-634
	5. Change and Verify Submember Equipage Special Growth to Operational (Growth IOMP)	TELCO/INST	DLP-635
	6. Restore Growth IOMP to Service (RST:IOUS a,IOMP b!)	TELCO/INST	DLP-620
48	Determine From Equipment Order Input/Output Unit Controller(s) [IOUC(s)] To Be Added to Grown IOMP	INST	—
49	Remove Power From Grown IOMP:		
	1. Remove Grown IOMP From Service (RMV:IOUS a,IOMP b!)	TELCO	DLP-597
	2. Power Down Grown IOMP:		
	A. If I/O Is SD-5A049 or 5A052	TELCO	DLP-598
	B. If I/O Is SD-4C049	TELCO	DLP-599
50	For Each Growth IOUC:		
	NOTE: Items 50.1 and 50.2 must be performed without interruption		
	1. Change and Verify Channel Data	TELCO/INST	DLP-595
	2. Change and Verify Channel Equipage Unequipped to Grow	TELCO/INST	DLP-596
	(Continued on Page 5)		

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

51	If Data Set(s) Are Required:		
	1. If Existing Data Sets Have To Be Powered Down To Add New Data Sets:		
	1. Remove Working IOUC(s) Associated With Data Sets From Service (RMV:IOUS a,IOUC b!)	TELCO	DLP-600
	2. Power Down Data Set(s)	TELCO	—
	2. Install New Data Set(s) With Interframe Cables	INST	—
	3. Power Up New Data Set(s)	TELCO	—
	4. If Existing Data Sets Were Powered Down:		
	1. Power Up Data Set(s)	TELCO	—
2. Restore IOUC(s) Removed From Service in Item 51.1.1 to Service (RST:IOUS a,IOUC b!)	TELCO	DLP-601	
52	Connect Cables at Terminal Device(s) and I/O Frame for All Growth IOUCs	INST	—
53	Verify or Install Circuit Packs for All Growth IOUCs in Grown IOMP	INST	—
54	Restore Power to Grown IOMP:		
	A. If I/O Is SD-5A049 or 5A052	TELCO	DLP-610
	B. If I/O Is SD-4C049	TELCO	DLP-611
55	For Each Growth IOUS:		
	1. Diagnose Growth IOUS (DGN:IOUS a,IOUC b!)	TELCO	DLP-612
	2. Change and Verify Channel Equipage Grow to Special Growth	TELCO/INST	DLP-613
	3. Change and Verify Channel Equipage Special Growth to Operational	TELCO/INST	DLP-614
	4. Determine From Equipment Order IOUC Port(s) To Be Activated	INST	—
(Continued on Page 6)			

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

55 (Contd)	5. For Each Port To Be Activated:		
	NOTE: Items 55.5.1 and 55.5.2 must be performed without interruption		
	1. Change and Verify Port Data	TELCO/INST	DLP-615
	2. Change and Verify Port Equipage Unequipped to Grow	TELCO/INST	DLP-616
	3. If Terminal Device Connected to Port Is Equipped With Answer-Back Option: Perform Answer-Back Test (DGN:IOUS a,IOUC b:PORT c!)	TELCO	DLP-617
	4. Change and Verify Port Equipage Grow to Special Growth	TELCO/INST	DLP-618
	5. Change and Verify Port Equipage Special Growth to Operational	TELCO/INST	DLP-619
56	Restore Grown IOMP to Service (RST:IOUS a,IOMP b!)	TELCO	DLP-620
57	Restore All Grown IOUCs to Service (RST:IOUS a,IOUC b!)	TELCO	DLP-601
58	Test All Terminal Devices Connecting to Grown Ports	TELCO	DLP-621
59	If Second IOMP Is To Be Equipped on This Order: Repeat Items 47 Through 58for Remaining IOMP	TELCO/INST	-
60	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
61	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	-
62	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	-
63	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589

**ADD LOWER IOUS TO OPERATIONAL INPUT/OUTPUT PROCESSOR FRAME -
SUPPORT TO INSTALLER (INST)**

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

		RESPONSIBILITY	
	<i>WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling</i>		
	NOTES: 1. This procedure must be performed during light traffic periods 2. Overwrites occur while using XAPP. These overwrites must be logged in at the end of each growth shift per local practices 3. If XAPP overwrites were used during a shift, Item 41 must be performed at the end of that shift 4. A listing of XAPP error codes and an explanation of each is listed in DLP-538. These error codes may be received during XAPP I/O message processing		
1	Perform Preliminary Installation Activities	INST	—
2	Ensure 4ESS ™ Switch Is in Stable Condition	TELCO	DLP-500
3	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
4	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
5	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
B. For Office Loading a Backup Library Tape	TELCO	DLP-583	

**ADD INPUT/OUTPUT MICROPROCESSOR TO OPERATIONAL IOUS —
SUPPORT TO INSTALLER (INST)**

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

6	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
7	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a!))	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 6 and 7 must be performed before using XAPP input messages		
8	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
9	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
10	Verify Submember Equipage UNEQ for Growth Input/Output Microprocessor (IOMP) (VER:UTMN:IOUS a,SUBMEM b,SME!)	TELCO/INST	DLP-636
11	Remove IOUS From Service (RMV:IOUS a!)	TELCO	DLP-638
12	Remove Power With Power Switch (Growth Associated IOUS)(IOMP 1)	TELCO	—
13	Remove Power Conversion and Distribution (PCD) Frame Fuses for Growth Associated IOUS	TELCO	—
14	Install and Connect IOMP 1	INST	—
15	Replace PCD Fuses Removed in Item 13	TELCO	—
16	At Growth Associated IOUS Power Switch Depress ON Switch Leaving OFF Switch in ROS	TELCO	—
17	Change and Verify Submember Hardware Generation for Growth IOMP 1	TELCO/INST	DLP-632
18	Change and Verify Submember Equipage Unequipped to Grow (Growth IOMP 1)	TELCO/INST	DLP-633
19	Diagnose Growth IOUC IOMP 1 (DGN:IOUS a,IOMP 1!)	TELCO	DLP-639
20	Restore Power Switch to Normal Position (Growth Associated IOUS)	TELCO/INST	DLP-640
21	Restore IOUS to Service (RST:IOUS a!)	TELCO	DLP-631
22	Change and Verify Submember Equipage Grow to Special Growth (Growth IOMP) (IOMP 1)	TELCO/INST	DLP-634
23	Change and Verify Submember Equipage Special Growth to Operational (Growth IOMP) (IOMP 1)	TELCO/INST	DLP-635
24	Restore Growth IOMP 1 to Service (RST:IOUS a,IOMP 1!)	TELCO/INST	DLP-620

**ADD INPUT/OUTPUT MICROPROCESSOR TO OPERATIONAL IOUS —
SUPPORT TO INSTALLER (INST)**

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

25	Safe Point to Temporarily Stop This Procedure	TELCO/INST	—
26	Remove Power From Grown IOMP 1:		
	1. Remove Grown IOMP From Service (RMV:IOUS a,IOMP 1!)	TELCO	DLP-597
	2. Power Down Grown IOMP:	TELCO	DLP-599
27	For Each Growth IOUC (8-15):		
	NOTE: Items 33.1 and 33.2 must be performed without interruption		
	1. Change and Verify Channel Data	TELCO/INST	DLP-595
	2. Change and Verify Channel Equipage Unequipped to Grow	TELCO/INST	DLP-596
28	If Data Set Is Required:		
	1. If Existing Data Sets Have To Be Powered Down To Add New Data Sets:		
	1. Remove Working IOUC(s) Associated With Data Sets From Service (RMV:IOUS a,IOUC b!)	TELCO	DLP-600
	2. Power Down Data Set(s)	TELCO	—
	2. Install New Data Set With Interface Cables	INST	—
	3. Power Up New Data Set	TELCO	—
	4. If Existing Data Sets Were Powered Down:		
	1. Power Up Data Set(s)	TELCO	—
	2. Restore IOUC(s) Removed From Service in Item 28.1.1 to Service (RST:IOUS a,IOUC b!)	TELCO	DLP-601
29	Connect Cables at Data Sets and I/O Frame for All Growth IOUCs (8-15)	INST	—
30	Verify or Install TN82 Circuit Packs for All Growth IOUCs in Grown IOMP 1	INST	—
31	Restore Power to Growth IOMP (IOMP 1)	TELCO	DLP-611
32	Grow IOUCs in IOMP 1:		
	1. Diagnose One Growth IOUC (DGN:IOUS a,IOUC b!)	TELCO	DLP-612
	2. Change and Verify Channel Equipage Grow to Special Growth	TELCO/INST	DLP-613
	(Continued on Page 4)		

**ADD INPUT/OUTPUT MICROPROCESSOR TO OPERATIONAL IOUS —
SUPPORT TO INSTALLER (INST)**

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

32 (Contd)	3. Change and Verify Channel Equipage Special Growth to Operational	TELCO/INST	DLP-614
	4. For Each Port to Be Activated:		
	NOTE: Items 32.4.1 and 32.4.2 must be performed without interruption		
	1. Change and Verify Data for Growth IOUC Port 1	TELCO/INST	DLP-615
	2. Change and Verify Port Data Equipage Unequipped to Grow	TELCO/INST	DLP-616
	3. Change and Verify Port Data Equipage Grow to Special Growth	TELCO/INST	DLP-618
	4. Change and Verify Port Data Equipage Special Growth to Operational	TELCO/INST	DLP-619
33	Repeat From 32.1 for Each Growth IOUC	TELCO/INST	—
34	Restore Grown IOMP 1 to Service (RST:IOUS a,IOMP b!)	TELCO	DLP-620
35	Restore All Grown IOUCs to Service (RST:IOUS a,IOUC b!)	TELCO	DLP-601
36	Safe Point to Temporarily Stop This Procedure	TELCO/INST	—
37	Test All Terminal Devices Connecting to Grown Ports	TELCO	DLP-621
38	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
39	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
40	Enter 801 To Remove Restrict Recent Change (801 – RESTRICT RC Colored White on Black)	TELCO	—
41	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589

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

		RESPONSIBILITY	
	<i>WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling</i>		
	NOTES: 1. This procedure must be performed during light traffic periods 2. Overwrites occur while using XAPP. These overwrites must be logged in at the end of each growth shift per local practices 3. If XAPP overwrites were used during a shift, Item 60 must be performed at the end of that shift 4. A listing of XAPP error codes and an explanation of each is listed in DLP-538. These error codes may be received during XAPP I/O message processing		
1	Perform Preliminary Installation Activities	INST	—
2	Ensure 4ESS ™ Switch Is in Stable Condition	TELCO	DLP-500
3	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
4	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
5	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
B. For Office Loading a Backup Library Tape	TELCO	DLP-583	

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

6	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
7	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a!))	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 6 and 7 must be performed before using XAPP input messages		
8	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
9	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
10	Verify Member Equipage UNEQ for Growth Input/Output Unit Selector (IOUS) (Upper IOUS) (VER:UTMN:IOUS a,ME!)	TELCO/INST	DLP-527
11	If Lower IOUS Is To Be Equipped: Verify Member Equipage UNEQ for Growth IOUS (Lower IOUS) (VER:UTMN:IOUS a,ME!)	TELCO/INST	DLP-527
12	Verify Words 1 Through 8 in Growth IOUS Unit Type Translator (Upper IOUS – Using Verify Enter Message):		
	A. Growth IOUS Is Member Number 2	TELCO/INST	DLP-622
	B. Growth IOUS Is Member Number 4 or 6	TELCO/INST	DLP-624
13	If Lower IOUS Is To Be Equipped: Verify Words 1 Through 8 in Growth IOUS Unit Type Translator (Lower IOUS – Using Verify Entry Message):		
	A. Growth IOUS Is Member Number 3	TELCO/INST	DLP-622
	B. Growth IOUS Is Member Number 5 or 7	TELCO/INST	DLP-624
14	Connect and Test I/O Processor Frame Major Alarm	INST	—
15	Connect All Scan, Signal Distributor (SD), and Pulse Point Wiring	INST	—
16	Change and Verify Hardware Generation for Growth IOUS (Upper IOUS)	TELCO/INST	DLP-537
17	If Lower IOUS Is To Be Equipped: Change and Verify Hardware Generation for Growth IOUS (Lower IOUS)	TELCO/INST	DLP-537

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

18	Change and Verify Member Type for Growth IOUS (Upper IOUS)	TELCO/INST	DLP-627
19	If Lower IOUS Is To Be Equipped: Change and Verify Member Type for Growth IOUS (Lower IOUS)	TELCO/INST	DLP-627
20	Change and Verify Member Equipage Unequipped to Grow (Upper IOUS)	TELCO/INST	DLP-528
21	If Lower IOUS Is To Be Equipped: Change and Verify Member Equipage Unequipped to Grow (Lower IOUS)	TELCO/INST	DLP-528
22	Verify Scan and SD Points for Bus Interface Units 0 and 1, Upper IOUS, and Lower IOUS (if Equipped)	INST	—
23	Extend or Insert Peripheral Unit Bus (PUB) per TOP 234-353-045. Continue Procedure at Item 24 Upon Completion	TELCO/INST	—
24	Remove PUB 0 From Service (RMV:PUB 0!)	TELCO	DLP-628
25	Rotate OFF Switches Counterclockwise to Normal Position and Depress ON Switch for Bus Interface Unit 0, Upper IOUS, and Lower IOUS (if Equipped)	INST	—
26	Diagnose Upper IOUS and Lower IOUS (if Equipped) Using PUB 0. TELCO Enter DGN:IOUS a:PUB 0,PH (1,2)!	TELCO/INST	—
27	Rotate OFF Switch Clockwise to ROS Position and Depress for Bus Interface Unit 0	INST	—
28	Restore PUB 0 to Service (RST:PUB 0!)	TELCO/INST	DLP-630
29	Remove PUB 1 From Service (RMV:PUB 1!)	TELCO	DLP-628
30	Rotate OFF Switch Counterclockwise to Normal Position and Depress ON Switch for Bus Interface Unit 1	INST	—
31	Diagnose Upper IOUS and Lower IOUS (if Equipped) Using PUB 1. TELCO Enter DGN:IOUS a:PUB 1,PH (1,3)!	TELCO/INST	—
32	If Any Repairs or Maintenance Was Required to Either Bus Interface Circuit or IOUS:		
	1. Rotate OFF Switch Clockwise to ROS Position and Depress for Bus Interface Unit 1	INST	—
	2. Restore PUB 1 to Service (RST:PUB 1!)	TELCO/INST	DLP-630
	3. Repeat From Item 25	TELCO/INST	
33	Restore PUB 1 to Service (RST:PUB 1!)	TELCO/INST	DLP-630

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

34	Rotate OFF Switch Counterclockwise to Normal Position and Depress ON Switch for Bus Interface Unit 0	INST	—
35	Diagnose Upper IOUS	INST	—
36	If Lower IOUS Is To Be Equipped: Diagnose Lower IOUS	INST	—
37	Change and Verify Member Equipage Grow to Special Growth (Upper IOUS)	TELCO/INST	DLP-530
38	If Lower IOUS Is To Be Equipped: Change and Verify Member Equipage Grow to Special Growth (Lower IOUS)	TELCO/INST	DLP-530
39	Change and Verify Member Equipage Special Growth to Operational (Upper IOUS)	TELCO/INST	DLP-531
40	Restore IOUS to Service (Upper IOUS) (RST:IOUS a!)	TELCO/INST	DLP-631
41	If Lower IOUS Is To Be Equipped: Change and Verify Member Equipage Special Growth to Operational (Lower IOUS)	TELCO/INST	DLP-531
42	If Lower IOUS Is To Be Equipped: Restore IOUS to Service (Lower IOUS) (RST:IOUS a!)	TELCO/INST	DLP-631
43	Add an Input/Output Microprocessor (IOMP) to Growth IOUS:		
	1. Change and Verify Submember Hardware Generation for Growth IOMP	TELCO/INST	DLP-632
	2. Change and Verify Submember Equipage Unequipped to Grow (Growth IOMP)	TELCO/INST	DLP-633
	3. Diagnose Growth IOMP	INST	—
	4. Change and Verify Submember Equipage Grow to Special Growth (Growth IOMP)	TELCO/INST	DLP-634
	5. Change and Verify Submember Equipage Special Growth to Operational (Growth IOMP)	TELCO/INST	DLP-635
	6. Restore Grown IOMP to Service (RST:IOUS a,IOMP b!)	TELCO/INST	DLP-620
44	Determine From Equipment Order Input/Output Unit Controller(s) [IOUC(s)] To Be Added to Grown IOMP	INST	—
45	Remove Power From Grown IOMP:		
	1. Remove Grown IOMP From Service (RMV:IOUS a,IOMP b!)	TELCO	DLP-597
	2. Power Down Grown IOMP:		
	A. If I/O Is SD-5A049 or 5A052	TELCO	DLP-598
	B. If I/O Is SD-4C049	TELCO	DLP-599

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

46	For Each Growth IOUC:		
	NOTE: Items 46.1 and 46.2 must be performed without interruption		
	1. Change and Verify Channel Data	TELCO/INST	DLP-595
	2. Change and Verify Channel Equipage Unequipped to Grow	TELCO/INST	DLP-596
47	If Data Set(s) Are Required:		
	1. If Existing Data Sets Have To Be Powered Down To Add New Data Sets:		
	1. Remove Working IOUC(s) Associated With Data Sets From Service (RMV:IOUS a,IOUC b!)	TELCO	DLP-600
	2. Power Down Data Set(s)	TELCO	—
	2. Install New Data Set(s) With Interframe Cables	INST	—
	3. Power Up New Data Set(s)	TELCO	—
	4. If Existing Data Sets Were Powered Down:		
	1. Power Up Data Set(s)	TELCO	—
	2. Restore IOUC(s) Removed From Service in Item 47.1.1 to Service (RST:IOUS a,IOUC b!)	TELCO	DLP-601
48	Connect Cables at Terminal Device(s) and I/O Frame for All Growth IOUCs	INST	—
49	Verify or Install Circuit Packs for All Growth IOUCs in Grown IOMP	INST	—
50	Restore Power to Grown IOMP:		
	A. If I/O Is SD-5A049 or 5A052	TELCO	DLP-610
	B. If I/O Is SD-4C049	TELCO	DLP-611
51	For Each Growth IOUC:		
	1. Diagnose Growth IOUC (DGN:IOUS a,IOUC b!)	TELCO	DLP-612
	2. Change and Verify Channel Equipage Grow to Special Growth	TELCO/INST	DLP-613
	3. Change and Verify Channel Equipage Special Growth to Operational	TELCO/INST	DLP-614
	4. Determine From Equipment Order IOUC Port(s) To Be Activated	INST	—

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

51 (Contd)	5. For Each Port To Be Activated:		
	NOTE: Items 51.5.1 and 51.5.2 must be performed without interruption		
	1. Change and Verify Port Data	TELCO/INST	DLP-615
	2. Change and Verify Port Equipage Unequipped to Grow	TELCO/INST	DLP-616
	3. If Terminal Device Connected to Port Is Equipped With Answer-Back Option: Perform Answer-Back Test (DGN:IOUS a,IOUC b:PORT c!)	TELCO	DLP-617
	4. Change and Verify Port Equipage Grow to Special Growth	TELCO/INST	DLP-618
	5. Change and Verify Port Equipage Special Growth to Operational	TELCO/INST	DLP-619
52	Restore Grown IOMP to Service (RST:IOUS a,IOMP b!)	TELCO	DLP-620
53	Restore All Grown IOUCs to Service (RST:IOUS a,IOUC b!)	TELCO	DLP-601
54	Test All Terminal Devices Connecting to Grown Ports	TELCO	DLP-621
55	If Second IOMP Is To Be Equipped on This Order: Repeat Items 43 Through 54 for Remaining IOMP	TELCO/INST	-
56	If Lower IOUS Is Equipped: Repeat Items 43 Through 54	TELCO/INST	-
57	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
58	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	-
59	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	-
60	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589

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

		RESPONSIBILITY	
	<i>WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling</i>		
	NOTES: 1. This procedure must be performed during light traffic periods 2. Overwrites occur while using XAPP. These overwrites must be logged in at the end of each growth shift per local practices 3. If XAPP overwrites were used during a shift, Item 22 must be performed at the end of that shift 4. A listing of XAPP error codes and an explanation of each is listed in DLP-538. These error codes may be received during XAPP I/O message processing		
1	Ensure 4ESS ™ Switch Is in Stable Condition	TELCO	DLP-500
2	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
3	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
4	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
	4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511
	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
B. For Office Loading a Backup Library Tape	TELCO	DLP-583	

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

5	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
6	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a!))	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 5 and 6 must be performed before using XAPP input messages		
7	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
8	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
9	Determine From Equipment Order Input/Output Unit Controller (IOUC) To Be Added	TELCO	—
10	Remove IOUC Being Removed From Service (RMV:IOUS a,IOUC b!)	TELCO	DLP-600
11	Degrow Port Equipage to Unequipped on IOUC Being Removed	TELCO	DLP-593
12	Repeat Item 11 For Each Port That Is Equipped in IOUC Being Removed	TELCO	—
13	Degrow IOUC Equipage to Unequipped	TELCO	DLP-594
14	Remove Power From IOUC To Be Removed:		
	A. If I/O Is SD-5A021: Depress PWR OFF CHANNEL Key of IOUC To Be Added (PWR OFF CHANNEL Lamp Lighted)	TELCO	—
	B. If I/O Is SD-5A049, 5A052, or 4C049:		
	1. Request Users of Other Channels on Associated IOMP To Transfer to Their Backup Channel	TELCO	—
	2. Remove Associated IOMP From Service (RMV:IOUS a,IOMP b!)	TELCO	DLP-597
	3. Power Down Associated IOMP:		
	A. If I/O Is SD-5A049 or 5A052	TELCO	DLP-598
B. If I/O Is SD-4C049	TELCO	DLP-599	

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

15	Remove Circuit Packs for IOUC Being Removed:		
	A. If I/O Is SD-5A021	TELCO	DLP-641
	B. If I/O Is SD-5A049 or 5A052	TELCO	DLP-642
	C. If I/O Is SD-4C049	TELCO	DLP-643
16	If Data Set(s) Are Connected to IOUC Being Removed:		
	1. If Existing Data Set(s) Have To Be Powered Down Before Removal of Data Set(s):		
	1. Remove Working IOUC(s) Associated With Data Set(s) From Service (RMV:IOUS a,IOUC b!)	TELCO	DLP-600
	2. Power Down Existing Data Set(s)	TELCO	—
	2. Power Down Data Set(s) Being Removed	TELCO	—
	3. Remove Data Set(s) and Disconnect Interface Cables	TELCO	—
	4. If Existing Data Set(s) Were Powered Down:		
	1. Power Up Data Set(s) Removed in Item 16.1.2	TELCO	—
2. Restore IOUC(s) Removed From Service in Item 16.1.1 (RST:IOUS a,IOUC b!)	TELCO	DLP-601	
17	Remove Port Cables:		
	A. If I/O Frame Is J5A006A	TELCO	DLP-644
	B. If I/O Frame Is J5A006C	TELCO	DLP-645
	C. If I/O Frame Is J5A006D	TELCO	DLP-646
18	If I/O Is SD-5A049, 5A052, or 4C049:		
	1. Power Up IOMP:		
	A. If I/O Is SD-5A049 or 5A052	TELCO	DLP-610
	B. If I/O Is SD-4C049	TELCO	DLP-611
	2. Restore IOMP to Service (RST:IOUS a,IOMP b!)	TELCO	DLP-620
3. Request Users of Channels Restored To Return to Their Primary Channel	TELCO	—	

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

19	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
20	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	-
21	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	-
22	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589

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

		RESPONSIBILITY	
	<i>WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling</i>		
	NOTES: 1. This procedure must be performed during light traffic periods 2. Overwrites occur while using XAPP. These overwrites must be logged in at the end of each growth shift per local practices 3. If XAPP overwrites were used during a shift, Item 16 must be performed at the end of that shift 4. A listing of XAPP error codes and an explanation of each is listed in DLP-538. These error codes may be received during XAPP I/O message processing		
1	Using Office Records, Determine if Logical Channel Being Grown Is Assigned to an IOUC	TELCO	–
2	If Logical Channel Is Assigned to an IOUC, Deactivate and Remove IOUC in Operational IOUS Using NTP-018. Upon Completion, Continue at Item 3	TELCO	–
3	Ensure 4ESS ™ Switch Is in Stable Condition	TELCO	DLP-500
4	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
5	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
6	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511	
	(Continued on Page 2)		

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

6 (Contd)	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
7	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
8	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 7 and 8 must be performed before using XAPP input messages		
9	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
10	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
11	Assign Growth Logical Channel for Logical Operation	TELCO	DLP-647
12	At MTC Channel, Enter Message OP:LCHAN! To Verify Logical Channel Has Been Assigned. Ensure STATUS for Growth Logical Channel Is ELIGIBLE	TELCO	—
13	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
14	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
15	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	—
16	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589

ADD LOGICAL CHANNEL

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

		RESPONSIBILITY	
	<i>WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling</i>		
	NOTES: 1. This procedure must be performed during light traffic periods 2. Overwrites occur while using XAPP. These overwrites must be logged in at the end of each growth shift per local practices 3. If XAPP overwrites were used during a shift, Item 14 must be performed at the end of that shift 4. A listing of XAPP error codes and an explanation of each is listed in DLP-538. These error codes may be received during XAPP I/O message processing		
1	Ensure Logical Channel Being Degrown Is Not Active; Then Inhibit	TELCO	DLP-648
2	Ensure 4ESS ™ Switch Is in Stable Condition	TELCO	DLP-500
3	Ensure 1B Processor and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
4	Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
5	If Library Package Containing Program XAPP Does Not Reside in File System:		
	A. If Office Is Running on 4E21 Generic or Earlier:		
	1. Mount Tape Containing Program XAPP on Tape Transport	TELCO	DLP-507
	2. Set TUC to Library Function (SET:TUC a;FUNCTION LIB!)	TELCO	DLP-508
	3. Allow TUC Read-Only Access (ALW:TUC a:RO!)	TELCO	DLP-510
4. Load Library Package Containing Program XAPP in File System (LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!)	TELCO	DLP-511	
	(Continued on Page 2)		

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

5 (Contd)	B. If Office Is Running on 4E22 Generic or Later:		
	1. Mount Library Tape on 3B Tape Unit	TELCO	DLP-581
	2. Load Library Tape in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
6	Execute XAPP Library Program (EX:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
7	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 6 and 7 must be performed before using XAPP input messages		
8	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
9	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White)	TELCO	—
10	Change Logical Channel to UNEQ	TELCO	DLP-649
11	Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
12	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
13	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black)	TELCO	—
14	Write New ODA TWRP Tape:		
	A. If Office Is Running on 4E21 Generic or Earlier	TELCO	DLP-519
	B. If Office Is Running on 4E22 Generic or Later	TELCO	DLP-589

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

2	Notify Next Higher Support Group That Segmented Memory Will Be Added to CC 0	TELCO	–
3	Ensure 4ESS ™ Switch Is in Stable Condition	TELCO	DLP-500
4	At 1B MTC Terminal, Enter Message VER:OFFICE! and Verify That Your Office Is Operating in 4E25R4 Generic or Later <i>Response:</i> VER:OFFICE GENERIC INFO TOWN ST BL NBS PCF OPC NSN 4E<xx>4A.nn yy aaaa aa aa aa a a a Where xx is 25 and yy is R4 or later generic	TELCO	–
5	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX <i>Response:</i> MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED	TELCO	–
6	At 1B MTC Terminal, Enter Message STOP:TEST;PUSYS! To Stop Peripheral System Tests <i>Response:</i> OK	TELCO	–
7	Ensure 1B Processor, 3B APS, and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
8	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter 118	TELCO	–
9	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	–
10	At 1B MTC Terminal, Diagnose Standby CC (Item 9) Using Restore Message (RST:CC a!)	TELCO	DLP-502
11	At 1B MTC Terminal, Switch CCs (SW:CC!)	TELCO	DLP-503
12	At 1B MTC Terminal, Diagnose New Standby CC Using Restore Message (RST:CC a!)	TELCO	DLP-502
13	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	–
14	If CC 0 Is Not Standby, at 1B MTC Terminal, Switch CCs (SW:CC!)	TELCO	DLP-503
15	At 1B MTC Terminal, Remove CC 0 From Service (RMV:CC 0!)	TELCO	DLP-504

ADD SEGMENTED MEMORY TO 1B PROCESSOR – SUPPORT TO INSTALLER (INST)

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

16	Using Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 0 (EQL 41-014), Remove CC 0 From Service and Power Down	TELCO	DLP-505
	<i>WARNING: Locate, place, and press on the cable retainer clips with Extreme Caution due to live voltage being present. When pressing on the cable retainer clips, be very careful not to bend backplane pins</i>		
17	Using a Retainer Tool (KS-22898 or R-6047), at Back of 1B Processor Cabinet 0, Install Three 2x24 (127C) Cable Retainer Clips (Comcode 103342119) for the Utility Matcher Cable on CC 0 Backplane: <ul style="list-style-type: none"> • 41-120-232T • 41-086-100T • 41-030-200T 	INST	—
18	At Back of 1B Processor Cabinet 0, Install Appropriate Connectors of Utility Matcher Cable ED4A257-20,G 20G660 to Their Respective Following Locations on CC 0 Backplane: <ul style="list-style-type: none"> • 41-120-245T • 41-086-100T • 41-030-200T 	INST	—
19	Dress the Utility Matcher Cable in Place	INST	—
20	In 1B Processor Cabinet 0, at Location 41-030, Remove KLW10 Circuit Pack and Insert Into an Approved Anti-static Bag; Then Place Into a Circuit Pack Box	INST	—
21	Obtain a KLW210 Circuit Pack and Remove it From its Packaging	INST	—
	NOTE: Excessive force is not required to properly seat circuit packs. If equal pressure applied at top and bottom of circuit pack (using pack seating mechanism) does not smoothly seat circuit pack, identify reason that circuit pack cannot be properly seated		
22	In 1B Processor Cabinet 0, at Location 41-030, Insert the New KLW210 Circuit Pack and Properly Seat	INST	—
	(Continued on Page 4)		

ADD SEGMENTED MEMORY TO 1B PROCESSOR — SUPPORT TO INSTALLER (INST)

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

23	In 1B Processor Cabinet 0, at Location 41-120, Remove KLW122 Circuit Pack and Insert Into an Approved Anti-static Bag; Then Place Into a Circuit Pack Box	INST	—
24	Obtain a KLW222 Circuit Pack and Remove it From its Packaging	INST	—
25	In 1B Processor Cabinet 0, at Location 41-120, Insert the New KLW222 Circuit Pack and Properly Seat	INST	—
26	If KLW217 Circuit Pack Is Part of This MMO, Perform Items 27 Through 29; Otherwise, if KLW217 Circuit Pack Is Not Part of This MMO, Go to Item 30	INST	—
27	In 1B Processor Cabinet 0, at Location 41-086, Remove KLW117 Circuit Pack and Insert Into an Approved Anti-static Bag; Then Place Into a Circuit Pack Box	INST	—
28	Obtain a KLW217 Circuit Pack and Remove it From its Packaging	INST	—
29	In 1B Processor Cabinet 0, at Location 41-086, Insert the New KLW217 Circuit Pack and Properly Seat	INST	—
30	At 1B Processor Cabinet 0, at Level 41, Remove Old Designation Strip and Install New Level 41 Designation Strip. Retain Old Designation Strip in Case Back Out Is Required	INST	—
31	At 1B MTC Terminal, Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
32	If Library Package Containing Program XAPP Does Not Reside in File System:		
	1. Insert Library Tape Containing Program XAPP in 3B APS DAT Unit	TELCO	DLP-581
	2. Load Library Package Containing Program XAPP in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
33	At 1B MTC Terminal, Execute XAPP Library Program (EX:LIBSYS:PKG LGaaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
34	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC Terminal (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513

ADD SEGMENTED MEMORY TO 1B PROCESSOR — SUPPORT TO INSTALLER (INST)

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

	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 33 and 34 must be performed before using XAPP input messages		
35	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	–
36	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White) <i>Response:</i> INH:RC MSG, RESTRICTED TO MOC	TELCO	–
37	At 1B MTC Terminal, Change and Verify Hardware Version To Indicate Segmented Memory for CC 0	TELCO	DLP-650
38	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	–
39	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black) <i>Response:</i> ALW:RC MSG, MOC RESTRICTION RMVD	TELCO	–
40	At 1B MTC Terminal, Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
41	At Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 0 (EQL 41-014), Depress ON Pushbutton; Ensure OFF LED Is Off <i>Response:</i> REPT: PWR RSTD CC 0	TELCO	–
	NOTE: If Phase 28 fails when restoring CC 0, check utility matcher cable and retainers to ensure proper installation		
42	At Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 0 (EQL 41-014), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-516
43	At 1B MTC Terminal, Restore CC 0 to Service (RST:CC 0!)	TELCO/INST	DLP-502
44	Soak CC 0 as Standby (MATCH) for 15 Minutes	TELCO/INST	–
45	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX <i>Response:</i> REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED	TELCO	–
46	At 1B MTC Terminal, Verify Soak Count for CC 0 Is Set to 3 Days (OP:CCSTATUS!)	TELCO/INST	DLP-517
47	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter 118	TELCO	–

ADD SEGMENTED MEMORY TO 1B PROCESSOR – SUPPORT TO INSTALLER (INST)

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

48	On 1B Processor Status Page (118), Determine if CC 0 Is Active CC	TELCO	–
49	If CC 0 Is Not Active, at 1B MTC Terminal, Switch CCs To Make CC 0 Active (SW:CC!)	TELCO	DLP-503
50	Write New ODA TWRP Tape	TELCO	DLP-589
51	Notify Next Higher Support Group That CC 0 Conversion Is Complete and a 3-Day Soak Is Beginning.	TELCO	–
	NOTE: Frequent monitoring of CC soak count should be performed to see if soak list is being properly updated or if manual intervention (using SET:SOAK input message) is necessary to reestablish the soak list. DLP-536 can be performed to verify the soak count. The soak count will be decremented by 1 day at 12:30 AM for the CC		
52	Monitor Soak Count Daily for Converted CC During Soak Interval. No CC Failures or Interrupts Are Allowed During the Soak Interval	TELCO	DLP-536
	NOTE: CC will not remain active during entire soak period. CC being soaked will be switched between active and standby when REX is run		
53	Wait for Soak Count To Be 0 or Set Soak Count to 0 if This Is The Third Night After Converting CC 0 and Soak Count Is 1 Before Continuing	TELCO	DLP-536
54	Notify Next Higher Support Group That Segmented Memory Will Be Added to CC 1 and a CS Pair Is Being Grown	TELCO	–
55	Ensure 4ESS™ Switch Is in Stable Condition	TELCO	DLP-500
56	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX <i>Response:</i> MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED	TELCO	–
57	At 1B MTC Terminal, Enter Message STOP:TEST;PUSYS! To Stop Peripheral System Tests <i>Response:</i> OK	TELCO	–
58	Ensure 1B Processor, 3B APS, and Peripheral Units Are Running in Normal Duplex Mode	TELCO	DLP-501
59	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter 118	TELCO	–

ADD SEGMENTED MEMORY TO 1B PROCESSOR – SUPPORT TO INSTALLER (INST)

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

60	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	–
61	At 1B MTC Terminal, Diagnose Standby CC (Item 60) Using Restore Message (RST:CC a!)	TELCO	DLP-502
62	At 1B MTC Terminal, Switch CCs (SW:CC!)	TELCO	DLP-503
63	At 1B MTC Terminal, Diagnose New Standby CC Using Restore Message (RST:CC a!)	TELCO	DLP-502
64	On 1B Processor Status Page (118), Determine Standby CC (MATCH)	TELCO	–
65	If CC 1 Is Not Standby, at 1B MTC Terminal, Switch CCs (SW:CC!)	TELCO	DLP-503
66	At 1B MTC Terminal, Remove CC 1 From Service (RMV:CC 1!)	TELCO	DLP-504
67	Using Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 1 (EQL 41-014), Remove CC 1 From Service and Power Down	TELCO	DLP-505
	<i>WARNING: Locate, place, and press on the cable retainer clips with Extreme Caution due to live voltage being present. When pressing on the cable retainer clips, be very careful not to bend backplane pins</i>		
68	Using a Retainer Tool (KS-22898 or R-6047), at Back of 1B Processor Cabinet 1, Install Three 2x24 (127C) Cable Retainer Clips (Comcode 103342119) for the Utility Matcher Cable on CC 1 Backplane: <ul style="list-style-type: none"> • 41-120-232T • 41-086-100T • 41-030-200T 	INST	–
69	At Back of 1B Processor Cabinet 1, Install Appropriate Connectors of Utility Matcher Cable ED4A257-20,G 20G661 to Their Respective Following Locations on CC 1 Backplane: <ul style="list-style-type: none"> • 41-120-245T • 41-086-100T • 41-030-200T 	INST	–
70	Dress the Utility Matcher Cable in Place	INST	–

ADD SEGMENTED MEMORY TO 1B PROCESSOR – SUPPORT TO INSTALLER (INST)

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

71	In 1B Processor Cabinet 1, at Location 41-030, Remove KLW10 Circuit Pack and Insert Into an Approved Anti-static Bag; Then Place Into a Circuit Pack Box	INST	—
72	Obtain a KLW210 Circuit Pack and Remove it From its Packaging	INST	—
	NOTE: Excessive force is not required to properly seat circuit packs. If equal pressure applied at top and bottom of circuit pack (using pack seating mechanism) does not smoothly seat circuit pack, identify reason that circuit pack cannot be properly seated		
73	In 1B Processor Cabinet 1, at Location 41-030, Insert the New KLW210 Circuit Pack and Properly Seat	INST	—
74	In 1B Processor Cabinet 1, at Location 41-120, Remove KLW122 Circuit Pack and Insert Into an Approved Anti-static Bag; Then Place Into a Circuit Pack Box	INST	—
75	Obtain a KLW222 Circuit Pack and Remove it From its Packaging	INST	—
76	In 1B Processor Cabinet 1, at Location 41-120, Insert the New KLW222 Circuit Pack and Properly Seat	INST	—
77	If KLW217 Circuit Pack Is Part of This MMO, Perform Items 78 Through 80; Otherwise, if KLW217 Circuit Pack Is Not Part of This MMO, Go to Item 81	INST	—
78	In 1B Processor Cabinet 1, at Location 41-086, Remove KLW117 Circuit Pack and Insert Into an Approved Anti-static Bag; Then Place Into a Circuit Pack Box	INST	—
79	Obtain a KLW217 Circuit Pack and Remove it From its Packaging	INST	—
80	In 1B Processor Cabinet 1, at Location 41-086, Insert the New KLW217 Circuit Pack and Properly Seat	INST	—
81	At 1B Processor Cabinet 1, at Level 41, Remove Old Designation Strip and Install New Level 41 Designation Strip. Retain Old Designation Strip in Case Back Out Is Required	INST	—
82	At 1B MTC Terminal, Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
	(Continued on Page 9)		

ADD SEGMENTED MEMORY TO 1B PROCESSOR — SUPPORT TO INSTALLER (INST)

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

83	If Library Package Containing Program XAPP Does Not Reside in File System:		
	1. Insert Library Tape Containing Program XAPP in 3B APS DAT Unit	TELCO	DLP-581
	2. Load Library Package Containing Program XAPP in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
84	At 1B MTC Terminal, Execute XAPP Library Program (EX:LIBSYS:PKG LGaaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
85	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC Terminal (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 84 and 85 must be performed before using XAPP input messages		
86	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	—
87	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White) <i>Response:</i> INH:RC MSG, RESTRICTED TO MOC	TELCO	—
88	At 1B MTC Terminal, Change and Verify Hardware Version To Indicate Segmented Memory for CC 1	TELCO	DLP-650
89	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	—
90	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black) <i>Response:</i> ALW:RC MSG, MOC RESTRICTION RMVD	TELCO	—
91	At 1B MTC Terminal, Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
92	At Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 1 (EQL 41-014), Depress ON Pushbutton; Ensure OFF LED Is Off <i>Response:</i> REPT: PWR RSTD CC 1	TELCO	—

ADD SEGMENTED MEMORY TO 1B PROCESSOR — SUPPORT TO INSTALLER (INST)

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

	NOTE: If Phase 28 fails when restoring CC 1, check utility matcher cable and retainers to ensure proper installation		
93	At Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 1 (EQL 41-014), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-516
94	At 1B MTC Terminal, Restore CC 1 to Service (RST:CC 1!)	TELCO/INST	DLP-502
95	Soak CC 1 as Standby (MATCH) for 15 Minutes	TELCO/INST	–
96	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX <i>Response:</i> REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED	TELCO	–
97	At 1B MTC Terminal, Verify Soak Count for CC 1 Is Set to 3 Days (OP:CCSTATUS!)	TELCO/INST	DLP-517
98	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter 118	TELCO	–
99	On 1B Processor Status Page (118), Determine if CC 1 Is Active CC	TELCO	–
100	If CC 1 Is Not Active, at 1B MTC Terminal, Switch CCs To Make CC 1 Active (SW:CC!)	TELCO	DLP-503
101	Grow One Pair of Call Stores (CSs) Using 234-353-010, NTP-004. Return to This NTP and Soak Segmented Memory and CSs Together	TELCO/INST	–
102	Notify Next Higher Support Group That CC 1 Conversion and CS Growth Are Complete and Soak Is Beginning	TELCO	–
	NOTE: Frequent monitoring of CC and CS soak count should be performed to see if soak list is being properly updated or if manual intervention (using SET:SOAK input message) is necessary to reestablish the soak list. DLP-536 can be performed to verify the soak count. The soak count will be decremented by 1 day at 12:30 AM for the CC		
103	Monitor Soak Count Daily for Converted CC and Grown CSs During Soak Interval. Do Not Stop Procedure Here To Wait for Completion of Soak	TELCO	DLP-536
	NOTE: CC will not remain active during entire soak period. CC being soaked will be switched between active and standby when REX is run		
104	Write New ODA TWRP Tape	TELCO	DLP-589
105	Send KLW10, KLW117, KLW122, and Associated Spare Circuit Packs to the Factory After Soak Interval Is Complete	TELCO/INST	–

ADD SEGMENTED MEMORY TO 1B PROCESSOR – SUPPORT TO INSTALLER (INST)

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

		RESPONSIBILITY	
	<i>WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling</i>		
	<p>NOTES:</p> <ol style="list-style-type: none"> 1. This procedure must be performed during light traffic periods 2. Back out of Segmented Memory from the 1B Processor will be performed in CC 1 first and then CC 0, as required 3. Overwrites occur while using XAPP. These overwrites must be logged in at the end of each growth shift per local practices 4. If XAPP overwrites were used during a shift, DLP-589 must be performed at the end of that shift 5. A listing of XAPP error codes and an explanation of each is listed in DLP-538 These error codes may be received during XAPP I/O message processing 6. This procedure contains soak intervals for verifying system operation and stability during conversion. During the soaking interval, all abnormal conditions (such as interrupts, interjects, and diagnostic failures related to growth) must be investigated and resolved immediately. Conversion equipment, being soaked, must be error free for at least the time specified 		
1	Ensure 4ESS ™ Switch Is in Stable Condition	TELCO	DLP-500
2	At 1B MTC Terminal, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX <i>Response:</i> MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED	TELCO	-
3	At 1B MTC Terminal, Enter Message DUMP:CSS,ADR 7775000! and Determine From Printout if Second Rightmost Octal Digit in Data Word Is Either 0 (Pre-Fetch Feature Is Not Installed) or 1 (Pre-Fetch Feature Is Installed) for Later Use <i>Response:</i> DUMP:CSS,INDIR 0,ADR 7747775000,INC +0 COMPLETED 7747775000 000000ab Where a is 0 (Pre-Fetch Feature Is Not Installed) or 1 (Pre-Fetch Feature Is Installed)	TELCO	-
	(Continued on Page 2)		

BACK OUT SEGMENTED MEMORY 1B PROCESSOR – SUPPORT TO INSTALLER (INST)

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

4	If Backout Is Required Before Starting Segmented Memory Conversion for CC 1 (Only CC 0 Has Been Converted), Go to Item 41; Otherwise, if Both CCs Have Been Converted, Go to Item 5	TELCO/INST	–
	NOTE: Items 5 through 40 are being performed to back out CC 1		
5	At 1B Processor MCC Terminal, if 1B Processor Status Page (118) Is Not Displayed, Enter 118	TELCO	–
6	On 1B Processor Status Page (118), Determine if CC 1 Is MATCH (Standby)	TELCO	–
7	If CC 1 Is Not Standby, at 1B MTC Terminal, Switch CCs (SW:CC!)	TELCO	DLP-503
8	At 1B MTC Terminal, Remove CC 1 From Service (RMV:CC 1!)	TELCO	DLP-504
9	Using Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 1 (EQL 41-014), Remove CC 1 From Service and Power Down	TELCO	DLP-505
10	At Back of 1B Processor Cabinet 1, Disconnect Appropriate Connectors of Utility Matcher Cable ED4A257-20,G 20G661 From Their Respective Following Locations on CC 1 Backplane: <ul style="list-style-type: none"> • 41-120-245T • 41-086-100T • 41-030-200T 	INST	–
11	Temporarily Insulate the Three Ends of the Utility Matcher Cable ED4A257-20,G 20G661	INST	–
12	If Pre-Fetch Feature Is Not Installed (Item 3), Perform Items 13 Through 15; Otherwise, if Pre-Fetch Feature Is Installed (Item 3), Go to Item 16	INST	–
13	In 1B Processor Cabinet 1, at Location 41-086, Remove KLW217 FA Circuit Pack and Insert Into an Approved Anti-static Bag; Then Place Into a Circuit Pack Box	INST	–
14	Obtain a KLW117 FA Circuit Pack and Remove it From its Packaging	INST	–
	NOTE: Excessive force is not required to properly seat circuit packs. If equal pressure applied at top and bottom of circuit pack (using pack seating mechanism) does not smoothly seat circuit pack, identify reason that circuit pack cannot be properly seated		

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

15	In 1B Processor Cabinet 1, at Location 41-086, Insert the KLW117 FA Circuit Pack and Properly Seat	INST	—
16	In 1B Processor Cabinet 1, at Location 41-120, Remove KLW222 BNAD Circuit Pack and Insert Into an Approved Anti-static Bag; Then Place Into a Circuit Pack Box	INST	—
17	Obtain a KLW122 BNAD Circuit Pack and Remove it From its Packaging	INST	—
	NOTE: Excessive force is not required to properly seat circuit packs. If equal pressure applied at top and bottom of circuit pack (using pack seating mechanism) does not smoothly seat circuit pack, identify reason that circuit pack cannot be properly seated		
18	In 1B Processor Cabinet 1, at Location 41-120, Insert the KLW122 BNAD Circuit Pack and Properly Seat	INST	—
19	In 1B Processor Cabinet 1, at Location 41-030, Remove KLW210 UM Circuit Pack and Insert Into an Approved Anti-static Bag; Then Place Into a Circuit Pack Box	INST	—
20	Obtain a KLW10 UM Circuit Pack and Remove it From its Packaging	INST	—
21	In 1B Processor Cabinet 1, at Location 41-030, Insert the KLW10 UM Circuit Pack and Properly Seat	INST	—
22	At 1B MTC Terminal, Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
23	If Library Package Containing Program XAPP Does Not Reside in File System:		
	1. Insert Library Tape Containing Program XAPP in 3B APS DAT Unit	TELCO	DLP-581
	2. Load Library Package Containing Program XAPP in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
24	At 1B MTC Terminal, Execute XAPP Library Program (EX:LIBSYS:PKG LGaaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
	(Continued on Page 4)		

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

25	Allow Library Message Channel:		
	A. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	B. If Inputting Message From Terminal Other Than 1B MTC Terminal (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513
	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 24 and 25 must be performed before using XAPP input messages		
26	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	-
27	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White) <i>Response:</i> INH:RC MSG, RESTRICTED TO MOC	TELCO	-
28	At 1B MTC Terminal, Change and Verify Hardware Version To Remove Segmented Memory Being Enabled From CC 1	TELCO	DLP-651
29	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	-
30	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black) <i>Response:</i> ALW:RC MSG, MOC RESTRICTION RMVD	TELCO	-
31	At Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 1 (EQL 41-014), Depress ON Pushbutton; Ensure OFF LED Is Off <i>Response:</i> REPT: PWR RSTD CC 1	TELCO	-
32	At Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 1 (EQL 41-014), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-516
33	At 1B MTC Terminal, Restore CC 1 to Service (RST:CC 1!)	TELCO/INST	DLP-502
34	Soak CC 1 as Standby for 15 Minutes	TELCO/INST	-
35	On 1B Processor Status Page (118), Determine if CC 1 Is MATCH (Standby)	TELCO	-
36	If CC 1 Is Standby, at 1B MTC Terminal, Switch CCs To Make CC 1 Active (SW:CC!)	TELCO	DLP-503
37	While CC 1 Is Soaking (Item 38), Perform Item 39	INST	-
38	Soak CC 1 as Active for 1 Hour	TELCO/INST	-

BACK OUT SEGMENTED MEMORY 1B PROCESSOR – SUPPORT TO INSTALLER (INST)

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

39	At 1B Processor Cabinet 1, at Level 41, Remove Designation Strip Decal and Install Old Level 41 Designation Strip Decal	INST	–
40	At 1B MTC Terminal, Set Soak Count to 0 Days (SET:SOAK:CC 1,DAYS 0!)	TELCO	DLP-543
	NOTE: Items 41 through 76 are being performed to back out CC 0		
41	At 1B MTC Terminal, Remove CC 0 From Service (RMV:CC 0!)	TELCO	DLP-504
42	Using Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 0 (EQL 41-014), Remove CC 0 From Service and Power Down	TELCO	DLP-505
43	At Back of 1B Processor Cabinet 0, Disconnect Appropriate Connectors of Utility Matcher Cable ED4A257-20,G 20G660 From Their Respective Following Locations on CC 0 Backplane: <ul style="list-style-type: none"> • 41-120-245T • 41-086-100T • 41-030-200T 	INST	–
44	Temporarily Insulate the Three Ends of the Utility Matcher Cable ED4A257-20,G 20G660	INST	–
45	If Pre-Fetch Feature Is Not Installed (Item 3), Perform Items 46 Through 48; Otherwise, if Pre-Fetch Feature Is Installed (Item 3), Go to Item 49	INST	–
46	In 1B Processor Cabinet 0, at Location 41-086, Remove KLW217 FA Circuit Pack and Insert Into an Approved Anti-static Bag; Then Place Into a Circuit Pack Box	INST	–
47	Obtain a KLW117 FA Circuit Pack and Remove it From its Packaging	INST	–
	NOTE: Excessive force is not required to properly seat circuit packs. If equal pressure applied at top and bottom of circuit pack (using pack seating mechanism) does not smoothly seat circuit pack, identify reason that circuit pack cannot be properly seated		
48	In 1B Processor Cabinet 0, at Location 41-086, Insert the KLW117 FA Circuit Pack and Properly Seat	INST	–
49	In 1B Processor Cabinet 0, at Location 41-120, Remove KLW222 BNAD Circuit Pack and Insert Into an Approved Anti-static Bag; Then Place Into a Circuit Pack Box	INST	–
	(Continued on Page 6)		

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

50	Obtain a KLW122 BNAD Circuit Pack and Remove it From its Packaging	INST	—
	NOTE: Excessive force is not required to properly seat circuit packs. If equal pressure applied at top and bottom of circuit pack (using pack seating mechanism) does not smoothly seat circuit pack, identify reason that circuit pack cannot be properly seated		
51	In 1B Processor Cabinet 0, at Location 41-120, Insert the KLW122 BNAD Circuit Pack and Properly Seat	INST	—
52	In 1B Processor Cabinet 0, at Location 41-030, Remove KLW210 UM Circuit Pack and Insert Into an Approved Anti-static Bag; Then Place Into a Circuit Pack Box	INST	—
53	Obtain a KLW10 UM Circuit Pack and Remove it From its Packaging	INST	—
54	In 1B Processor Cabinet 0, at Location 41-030, Insert the KLW10 UM Circuit Pack and Properly Seat	INST	—
55	If Back Out of Segmented Memory for CC 1 Was Not Required, Perform Items 56 Through 59; Otherwise, if Back Out of Segmented Memory From CC 1 Was Required, Go to Item 60	INST	—
56	At 1B MTC Terminal, Determine if Library Package Containing Program XAPP Resides in File System (OP:LIBSTAT,FS!)	TELCO	DLP-506
57	If Library Package Containing Program XAPP Does Not Reside in File System:		
	1. Insert Library Tape Containing Program XAPP in 3B APS DAT Unit	TELCO	DLP-581
	2. Load Library Package Containing Program XAPP in File System:		
	A. For Office Loading an Original Library Tape (LOAD:LIBSYS,FS;TAPE:TD a!)	TELCO	DLP-582
	B. For Office Loading a Backup Library Tape	TELCO	DLP-583
58	At 1B MTC Terminal, Execute XAPP Library Program (EX:LIBSYS:PKG LGaaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-512
59	Allow Library Message Channel:		
	1. If Inputting Message From 1B MTC Terminal (ALW:LIBMSG:CLIENT 0!)	TELCO	DLP-513
	2. If Inputting Message From Terminal Other Than 1B MTC Terminal (ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!)	TELCO	DLP-513

**BACK OUT SEGMENTED MEMORY 1B PROCESSOR — SUPPORT TO
INSTALLER (INST)**

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

	NOTE: XAPP Library Program times out after 2 hours of inactivity. If XAPP does time out, Items 58 and 59 must be performed before using XAPP input messages		
60	At 1B Processor MCC Terminal, Enter 108 To Obtain System Status Page (108)	TELCO	–
61	Enter 801 To Restrict Recent Change (801 - RESTRICT RC Colored Black on White) <i>Response:</i> INH:RC MSG, RESTRICTED TO MOC	TELCO	–
62	At 1B MTC Terminal, Change and Verify Hardware Version To Remove Segmented Memory Being Enabled From CC 0	TELCO	DLP-651
63	At 1B Processor MCC Terminal, if System Status Page (108) Is Not Displayed, Enter 108	TELCO	–
64	Enter 801 To Remove Restrict Recent Change (801 - RESTRICT RC Colored White on Black) <i>Response:</i> ALW:RC MSG, MOC RESTRICTION RMVD	TELCO	–
65	At 1B MTC Terminal, Terminate Execution of XAPP Library Program (STOP:LIBSYS:PKG LGaaPGRO,PGM XAPP,TASK 0,CLIENT 0!)	TELCO	DLP-518
66	At Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 0 (EQL 41-014), Depress ON Pushbutton; Ensure OFF LED Is Off <i>Response:</i> REPT: PWR RSTD CC 0	TELCO	–
67	At Power Switch on KLW11 Circuit Pack in 1B Processor Cabinet 0 (EQL 41-014), Operate ROS/NORM Switch to NORM	TELCO/INST	DLP-516
68	At 1B MTC Terminal, Restore CC 0 to Service (RST:CC 0!)	TELCO/INST	DLP-502
69	At 1B MTC Terminal, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX <i>Response:</i> REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED	TELCO	–
70	Soak CC 0 as Standby for 15 Minutes	TELCO/INST	–
71	On 1B Processor Status Page (118), Determine if CC 0 Is MATCH (Standby)	TELCO	–
72	If CC 0 Is Standby, at 1B MTC Terminal, Switch CCs To Make CC 0 Active (SW:CC!)	TELCO	DLP-503
73	While CC 0 Is Soaking (Item 74), Perform Item 75	INST	–
	(Continued on Page 8)		

BACK OUT SEGMENTED MEMORY 1B PROCESSOR – SUPPORT TO INSTALLER (INST)

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

74	Soak CC 0 as Active for 1 Hour	TELCO/INST	-
75	At 1B Processor Cabinet 0, at Level 41, Remove Designation Strip Decal and Install Old Level 41 Designation Strip Decal	INST	-
76	At 1B MTC Terminal, Set Soak Count to 0 Days (SET:SOAK:CC 0,DAYS 0!)	TELCO	DLP-543
77	Write New ODA TWRP Tape	TELCO	DLP-589

**BACK OUT SEGMENTED MEMORY 1B PROCESSOR – SUPPORT TO
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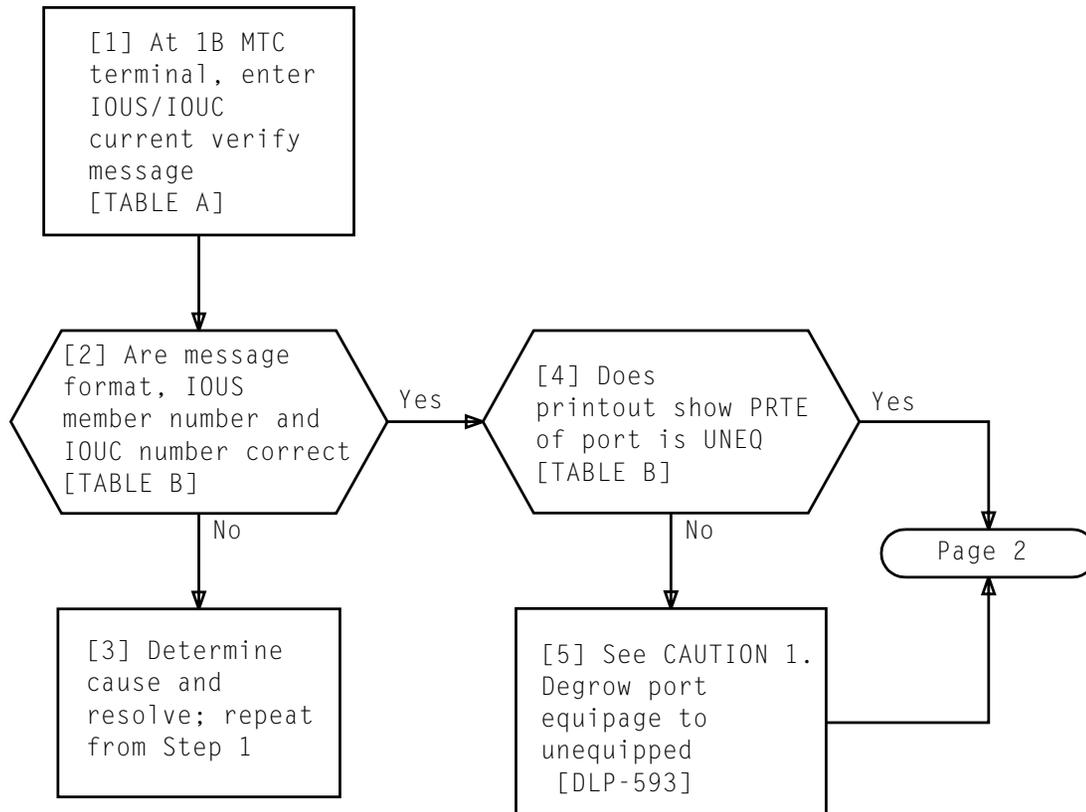
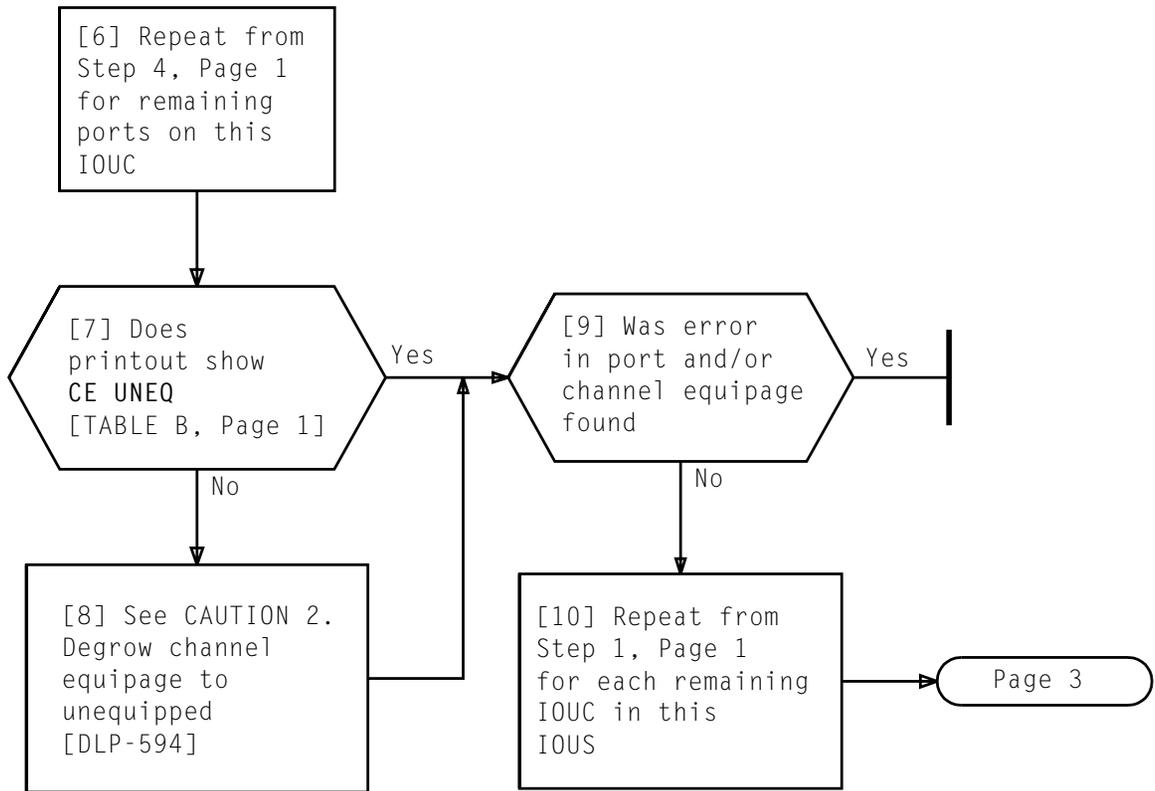


TABLE A
VER:UTMN:IOUS a,IOUC b!
a = Member number of IOUS in growth frame
b = Submember number of IOUC in IOUS

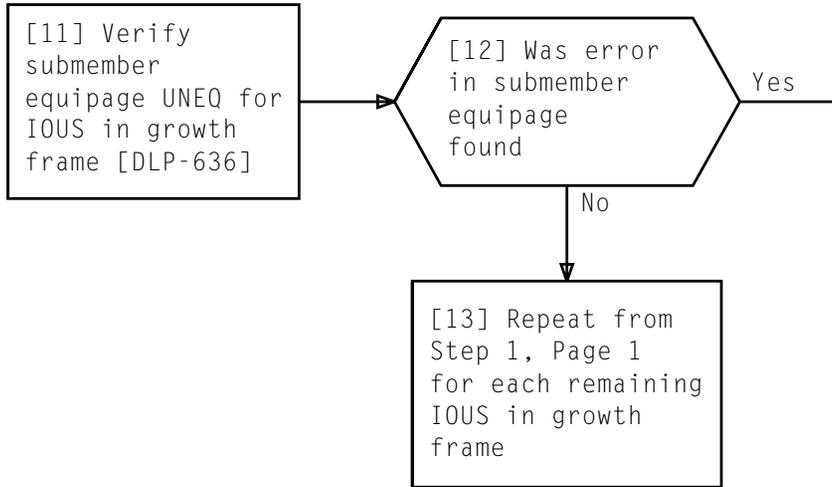
TABLE B	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	
CURRENT DATA:	
CE = UNEQ	
•	
•	
•	
•	
•	
PORT 0 ,PRTE=UNEQ	
•	
•	
PORT 1,PRTE=UNEQ	
•	
•	
PORT 2,PRTE=UNEQ	
•	
•	

CAUTION 1
 Depending on local procedures, supervisory or TELCO engineering approval must be obtained prior to performing any data changes

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<i>CAUTION 2 Depending on local procedures, supervisory or TELCO engineering approval must be obtained prior to performing any data changes</i>	
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CLEAR ERROR IN PORT AND/OR CHANNEL OR SUBMEMBER EQUIPAGE

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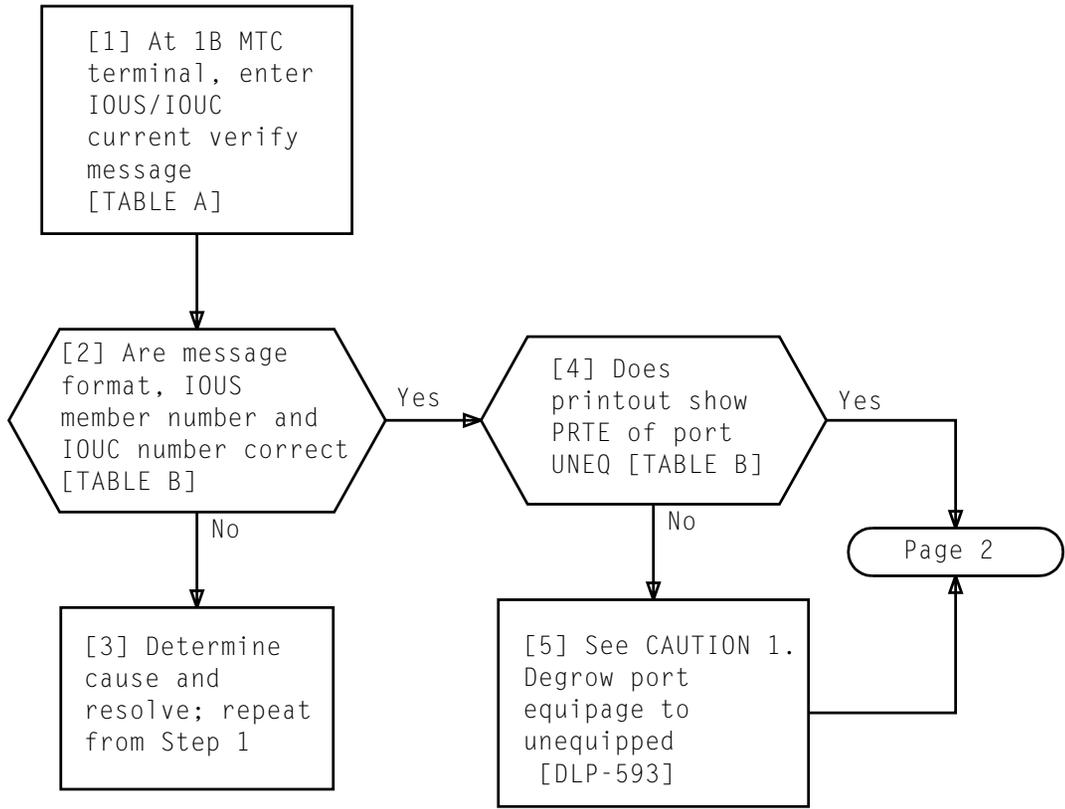


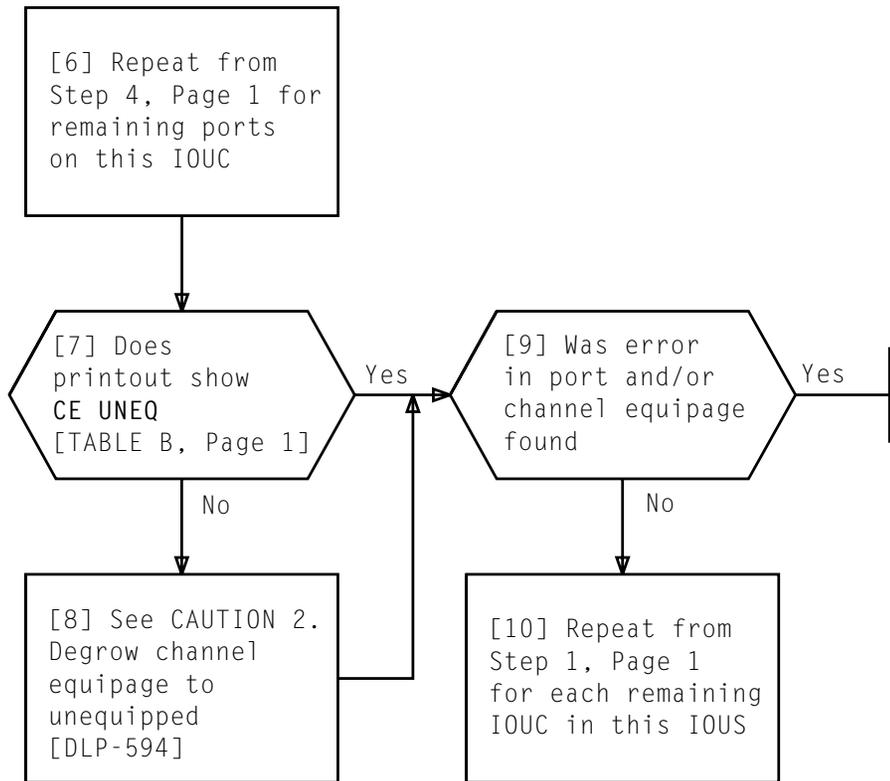
TABLE A
VER:UTMN:IOUS a,IOUC b!
a = Member number of IOUS in growth frame
b = Submember number of IOUC in IOUS

TABLE B	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	
CURRENT DATA:	
CE=UNEQ	
•	
•	
•	
•	
•	
PORT 0 ,PRTE=UNEQ	
•	
•	
PORT 1,PRTE=UNEQ	
•	
•	
PORT 2,PRTE=UNEQ	
•	
•	

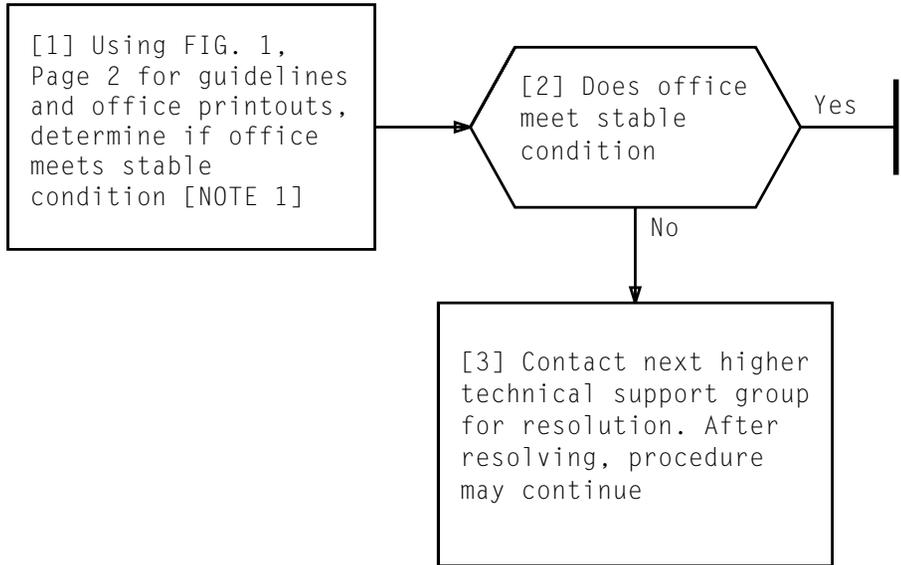
CAUTION 1
 Depending on local procedures, supervisory or TELCO engineering approval must be obtained prior to performing any data changes

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CLEAR ERROR IN PORT AND/OR CHANNEL EQUIPAGE



<i>CAUTION 2</i>	
<i>Depending on local procedures supervisory or TELCO engineering approval must be obtained prior to performing any data changes</i>	
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DETERMINE IF OFFICE IS STABLE

NOTE 1	
FIG. 1 is based on 7-day rolling average for all per-day measures; all other measures are as indicated. All resolved troubles are discounted from measures	
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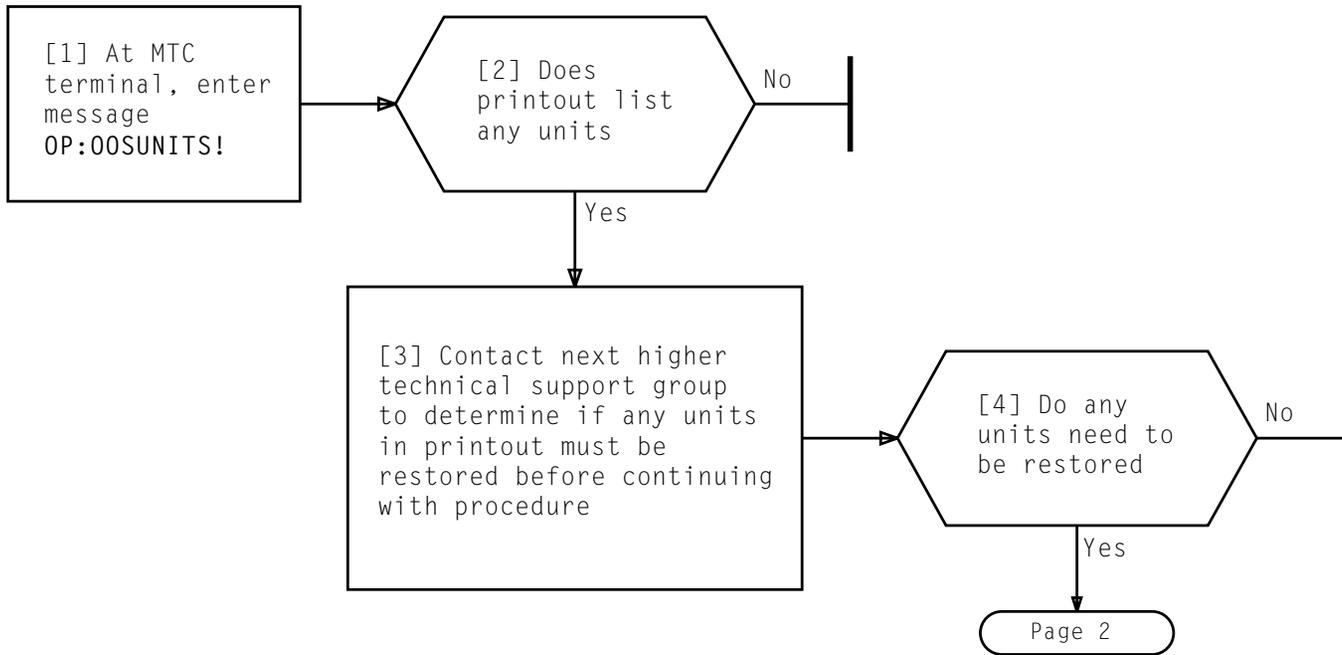
- INTERRUPTS
 - 1B PROCESSOR ≤ 1 PER MEMBER NUMBER PER DAY
≤ 3 PER DAY TOTAL
 - TMS, NC, PUB, IO, CCIS ≤ 2 PER MEMBER NUMBER PER DAY
≤ 4 PER DAY TOTAL
 - PERIPHERY, PER OPERATIONAL SP CORE (SP, DT, TSI, XTSI) OR DIF (DIF, TSI COMPLEX) (THE ALLOWABLE DAILY INTERRUPT COUNT SHALL NOT EXCEED 25, REGARDLESS OF OFFICE SIZE) ≤ 3 PER DAY
 - PBFRs ≤ 1 PER DAY
- INTERJECTS ≤ 2 PER MEMBER NUMBER PER DAY
≤ 5 PER DAY TOTAL
- BASE LEVEL
ANALYZED, CORRECTED AND/OR UNDERSTOOD
- PHASES/DUPLEX FAILURES
 - DIRECTED PHASE 1 ≤ 1 IN 2 WEEKS
 - SYSTEM PHASE 1 ≤ 1 IN 1 WEEK
 - PHASE 2 OR 3 ≤ 1 IN 4 WEEKS
 - DT, VIF, OR EST ≤ 1 IN 4 WEEKS
 - TGR/TER LINK PAIR ≤ 1 IN 2 WEEKS
- OUT-OF-SERVICE UNITS ≤ 5 AT ANYTIME
 - NUMBER OUT-OF-SERVICE
 - CRITICAL UNITS:

CC	DIF	PS	TMS
CS	LN	PUB	TSI/XTSI
CU	NCLK	SP	
- 3B COMPUTER
 - INTERRUPTS ≤ 3 PER DAY
 - PHASE 1 ≤ 1 IN 4 WEEKS
 - PHASE 2 OR 3 ≤ 1 IN 4 WEEKS
 - CNI RING INIT ≤ 1 IN 2 WEEKS
 - CNI RING TRANSPORT ERRORS ≤ 2 PER DAY
 - DLNE ERRORS ≤ 1 PER DAY

FIG. 1 - Office Stability Guidelines

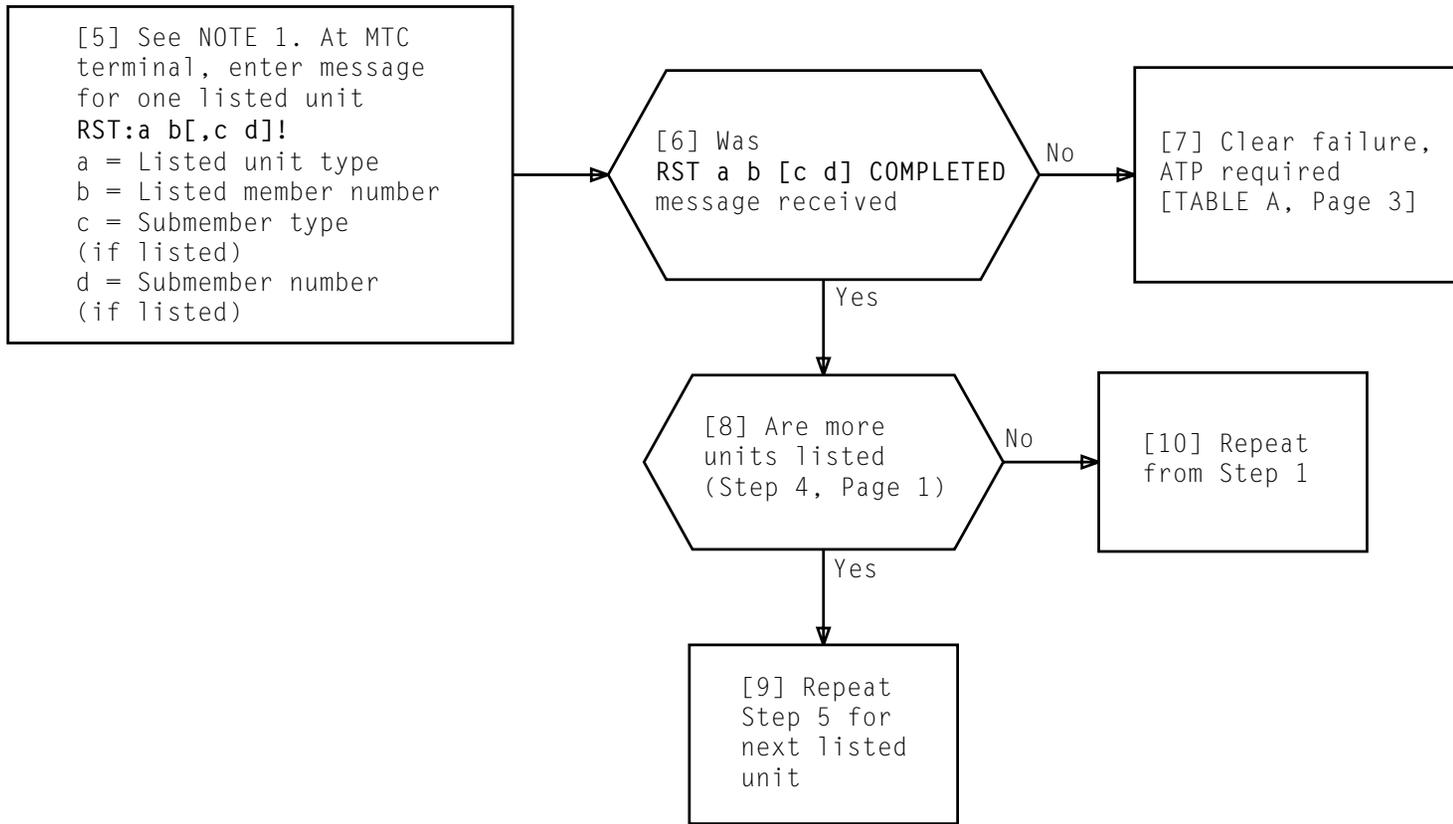
DETERMINE IF OFFICE IS STABLE

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ENSURE ALL UNITS ARE IN-SERVICE

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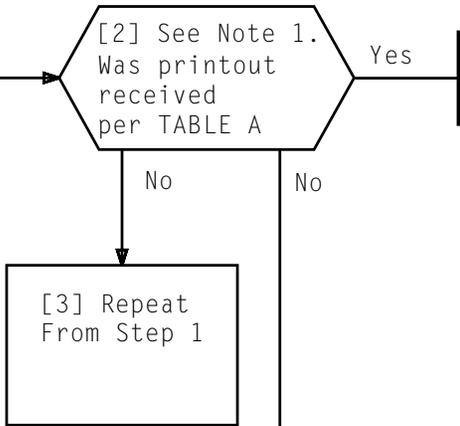
NOTE 1	
Variables c and d are only to be used if submember is listed	
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TABLE A			
UNIT TYPE	TROUBLE-CLEARING VOLUME	UNIT TYPE	TROUBLE-CLEARING VOLUME
3B Computer Model 1	254-301-812	MISC A, B, C	234-151-043
	254-301-813	NCLK	234-151-013
3B Computer Model 2/3	254-302-812	PCDF J5A007B	234-351-025
3B21D	254-303-107	PCDF J5A007C	234-351-026
API	234-351-016	PUBB	234-151-015
AUB	234-351-010	SCS	234-151-077
CNI	234-151-120	SP1	234-151-031
DIF	234-151-055	SP2	234-151-032
DT	234-151-045	TGR	234-151-033
EST	234-151-050	TMS	234-151-011
IO J5A006A	234-351-020	TSI	234-151-012
IO J5A006C	234-351-021	VIF	234-151-025
IO J5A006D	234-351-022	XTSI	234-351-017
MFS	234-151-041		

ENSURE ALL UNITS ARE IN-SERVICE

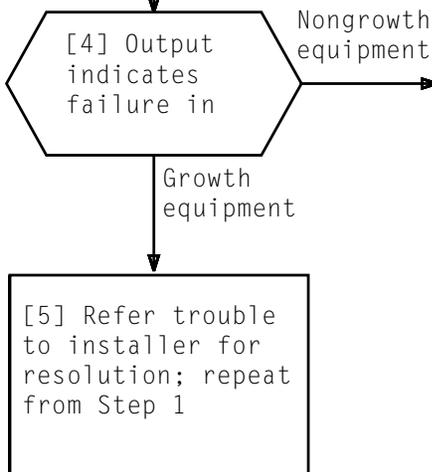
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[1] At 1B MTC terminal,
enter message
RST:CC a!
a = standby CC member
number (0 or 1)



[3] Repeat
From Step 1

TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN: CC a COMPLETED ATP MSG COMPL TEST:CC a DFR ATP RST: CC a COMPLETED
a = Standby CC member number (0 or 1)	

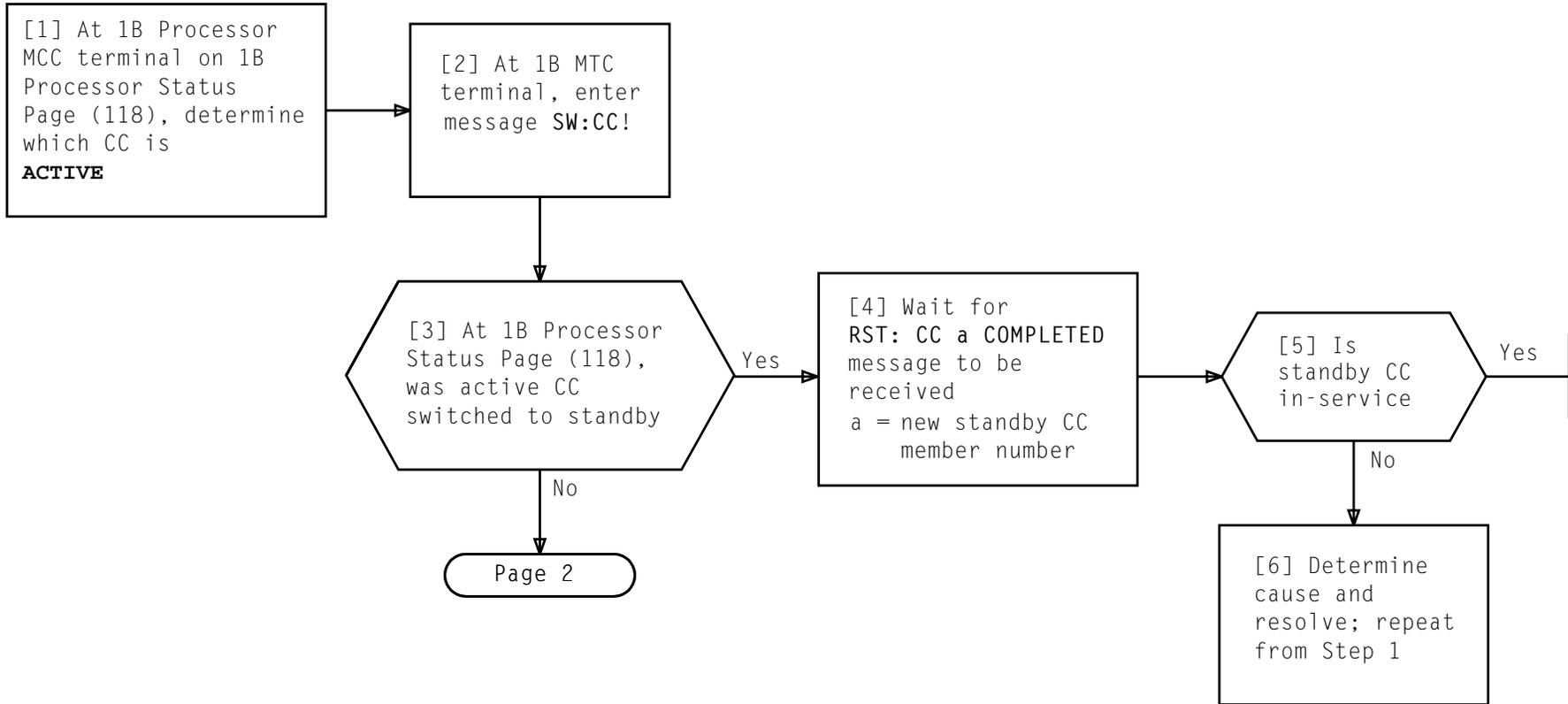


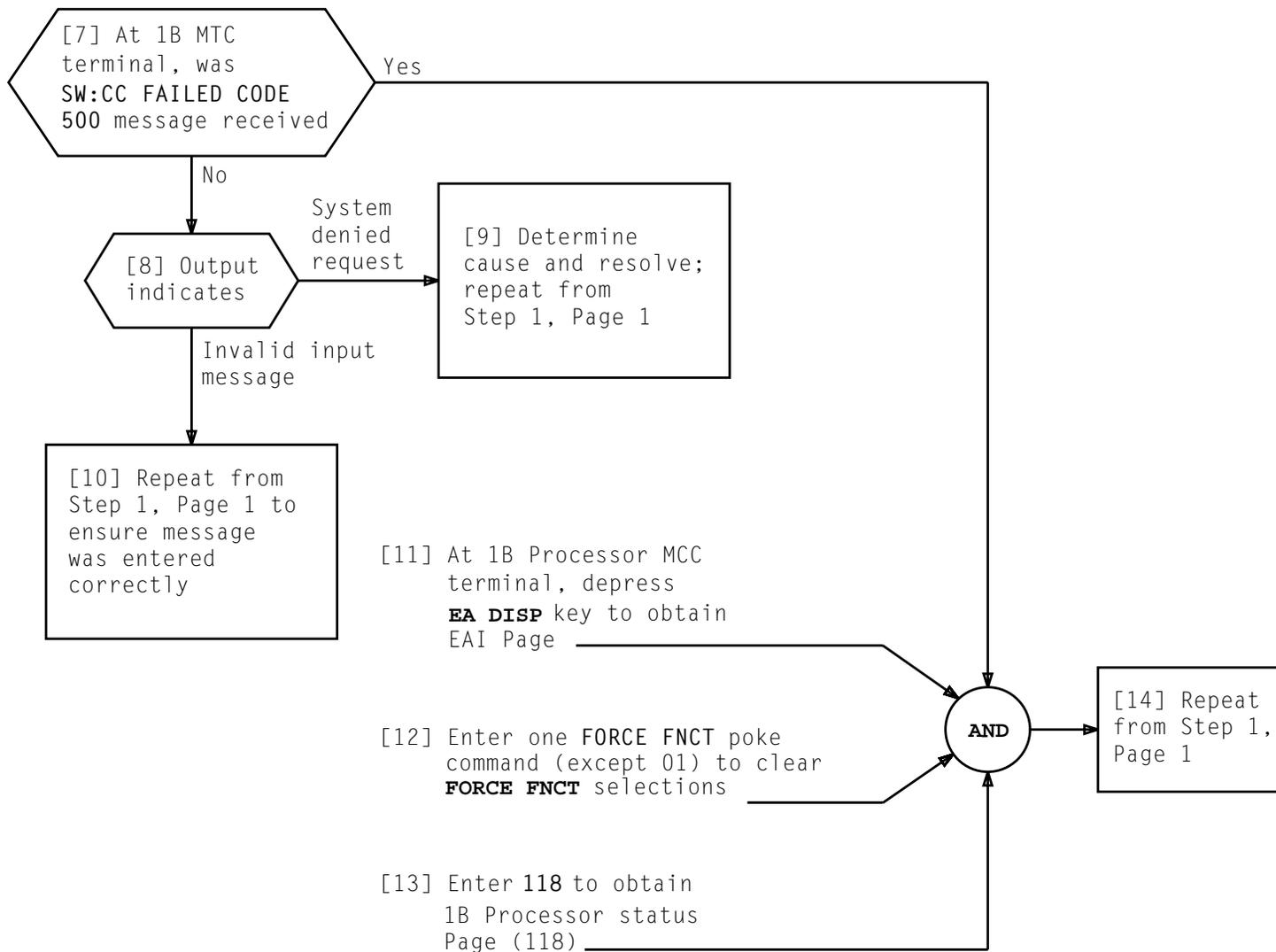
[6] Correct error
per TOP 234-351-004;
ATP required

[5] Refer trouble
to installer for
resolution; repeat
from Step 1

NOTE 1
It will take
approximately 12
minutes before
printout is received

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SWITCH 1B PROCESSOR CENTRAL CONTROLS (CCs)

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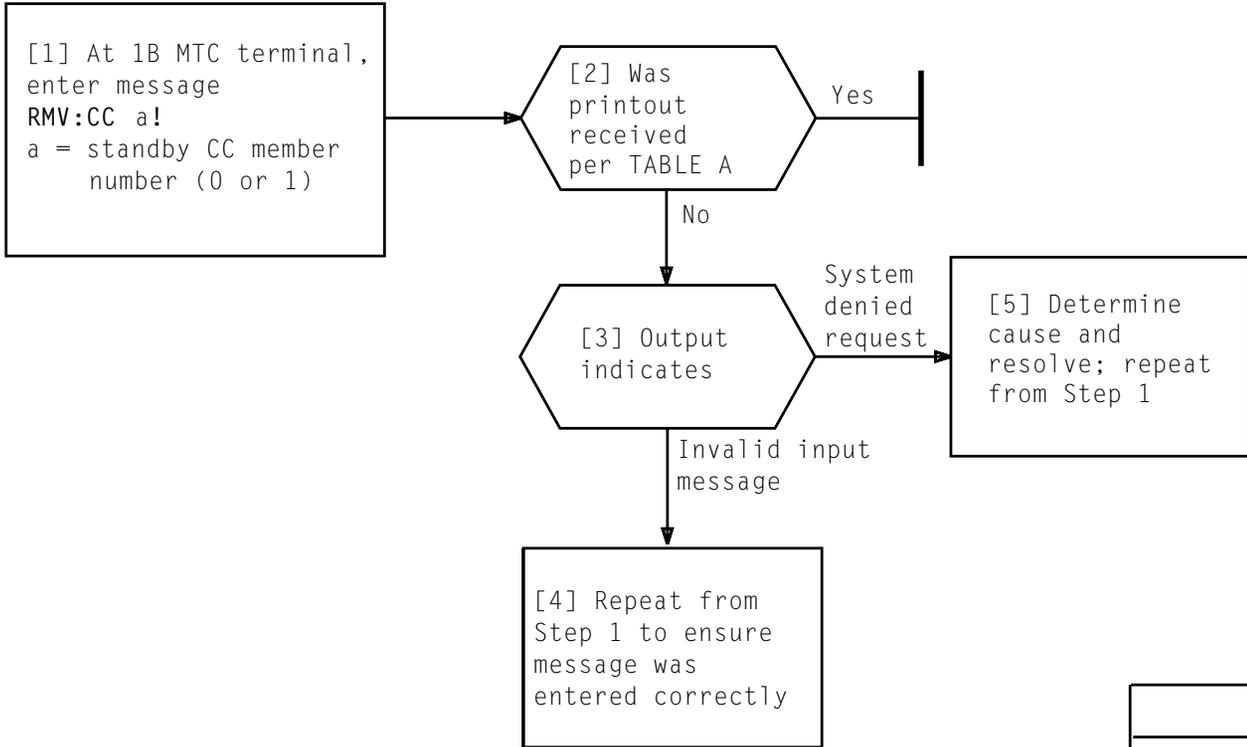


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	RMV: CC a COMPLETED
a = Standby CC member number (0 or 1)	

[1] Using TABLE A, determine location of power control switch on circuit pack **KLW11** associated with standby CC

[2] At power control switch on circuit pack **KLW11**, determined in Step 1, operate **ROS/NORM** switch to **ROS** and observe LEDs for TABLE B indications

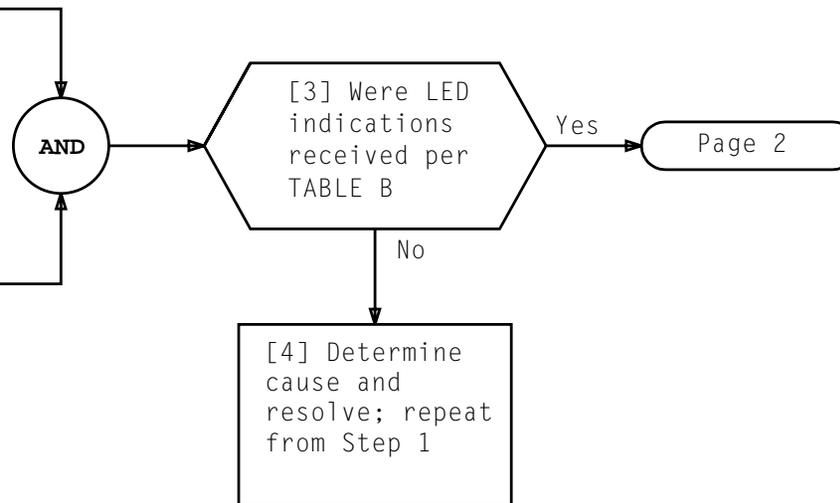
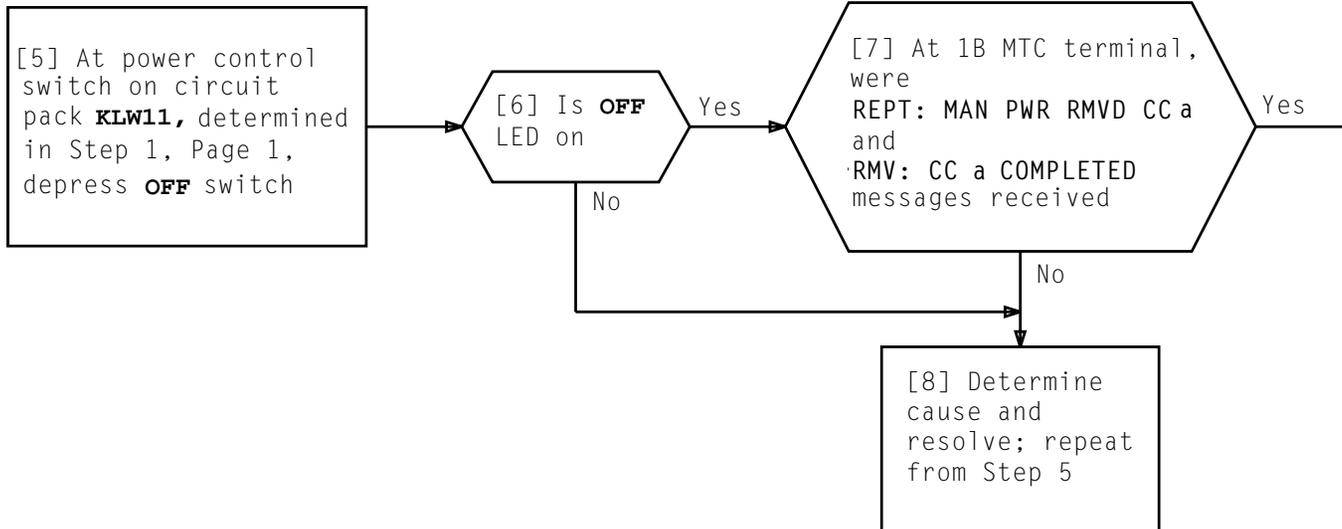


TABLE A		
CC	CABINET	EQUIPMENT LOCATION
0	0	041-014
1	1	141-014

TABLE B	
LED	INDICATION
ACK*	On then Off
OS**	On

* expected indication may take a short period of time to be received
 ** OS LED is already on from RMV:CC message



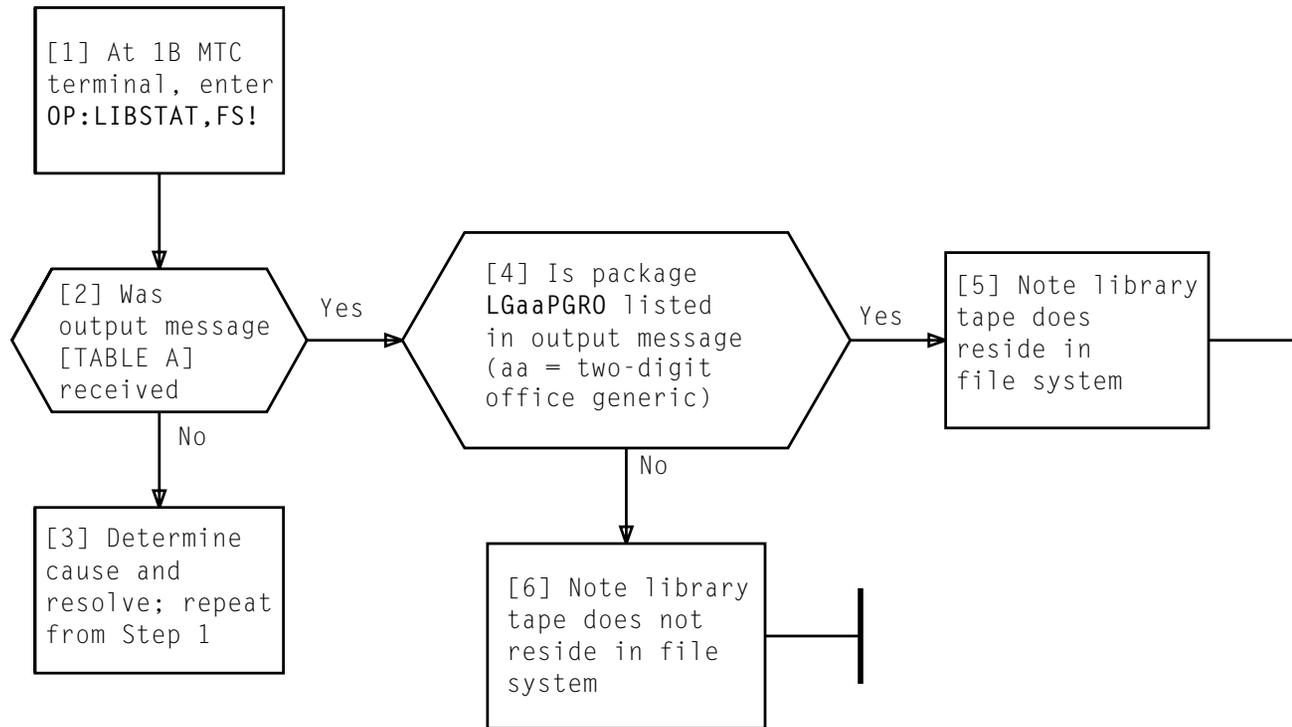


TABLE A													
MESSAGE NUMBER	OUTPUT MESSAGE												
1	OP:LIBSTAT FS PF OP:LIBSTAT COMPLETED FS LIBRARY DIRECTORY												
	<table border="0"> <thead> <tr> <th>PKG NAME</th> <th>ADDRESS</th> <th>LENGTH</th> </tr> </thead> <tbody> <tr> <td>.</td> <td>.</td> <td>.</td> </tr> <tr> <td>.</td> <td>.</td> <td>.</td> </tr> <tr> <td>.....</td> <td></td> <td></td> </tr> </tbody> </table>	PKG NAME	ADDRESS	LENGTH		
PKG NAME	ADDRESS	LENGTH											
.	.	.											
.	.	.											
.....													

DETERMINE IF LIBRARY TAPE CONTAINING PROGRAM TO BE USED RESIDES IN FILE SYSTEM

At tape transport:

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

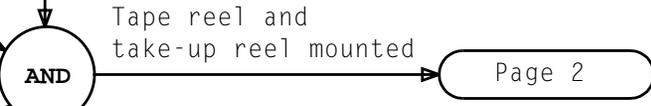
[2] Operate **LOCAL/REMOTE**
switch to obtain **LOCAL**
lighted condition

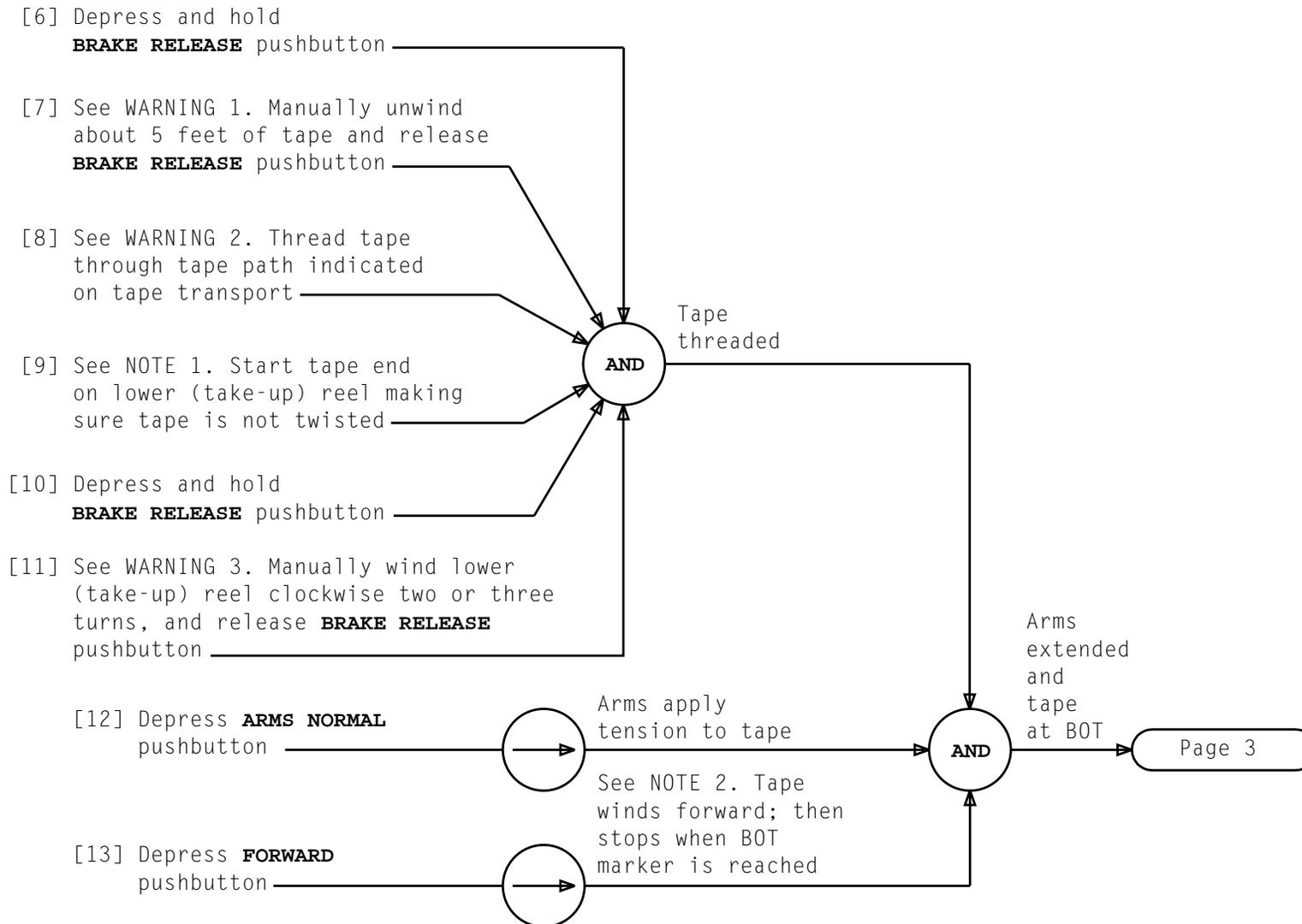


[3] Verify that empty lower (take-up) tape reel is
same size or larger than tape reel to be mounted

[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

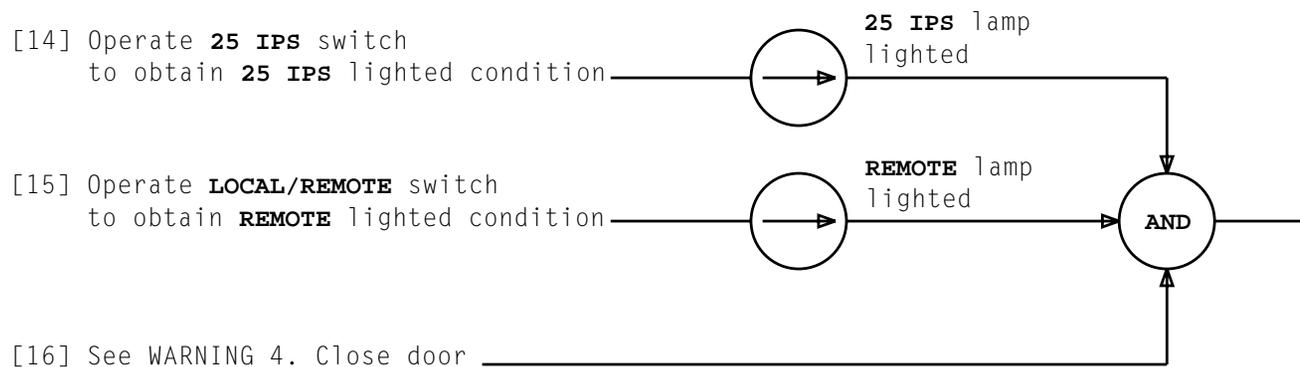
WARNINGS

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

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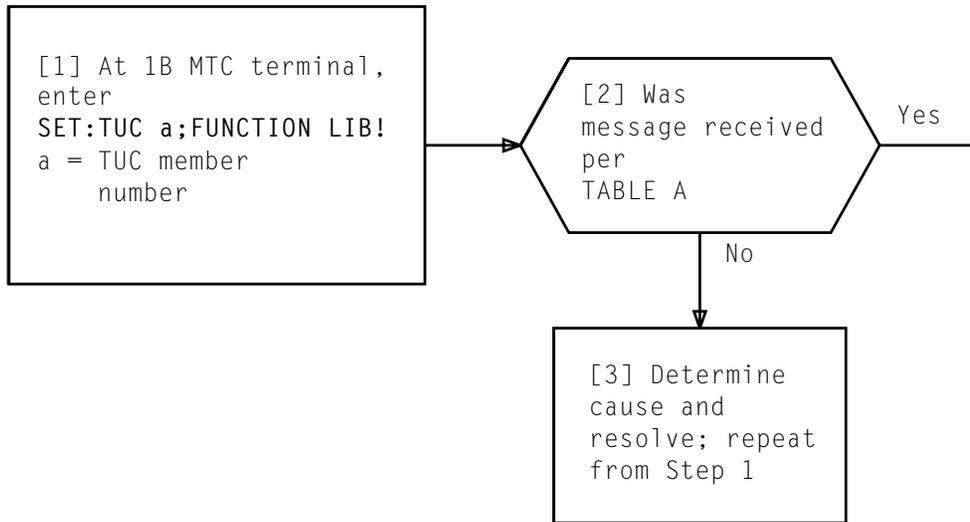
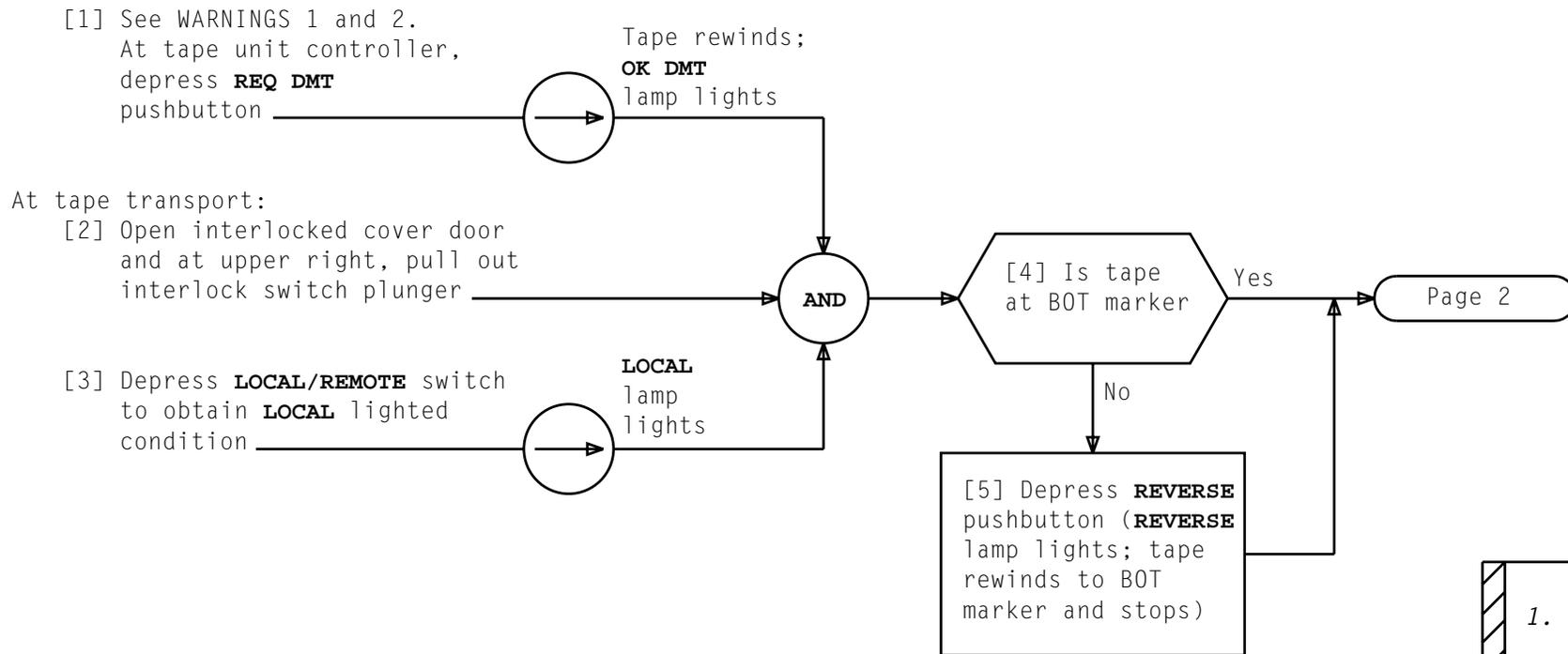


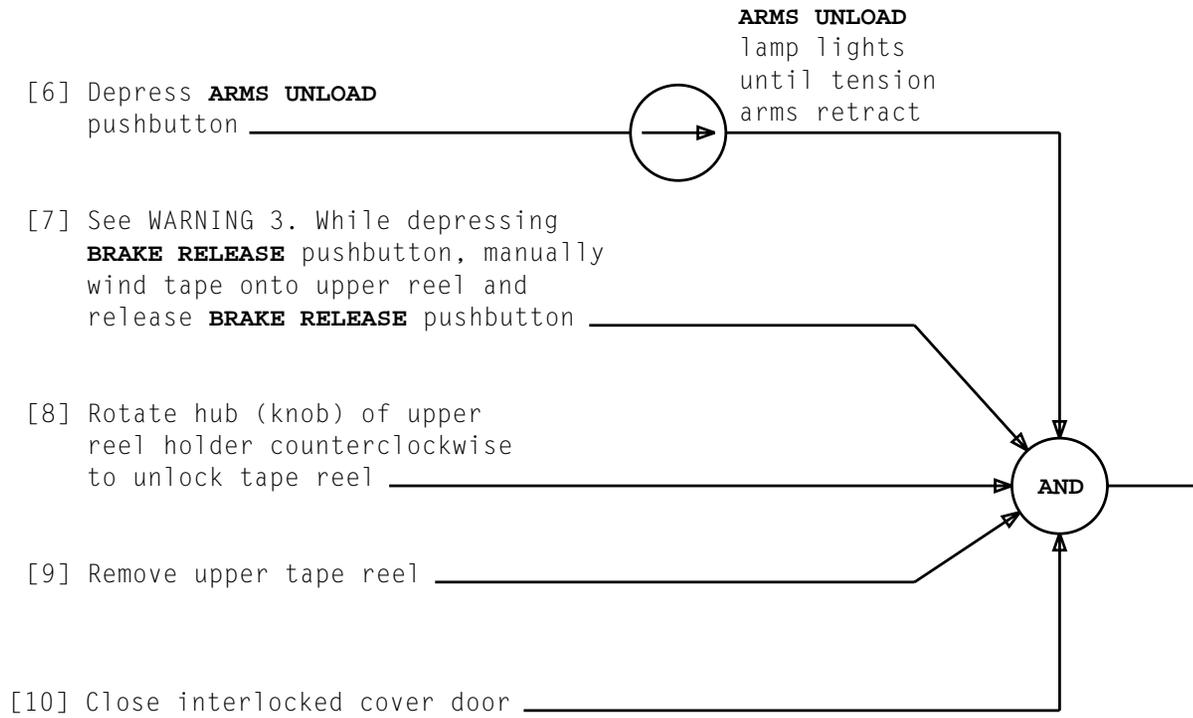
TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	SET:TUC a TAPE MOUNTED ON TUC TAPE TYPE: LIB OK TO PROCESS TAPE?
a = TUC member number	



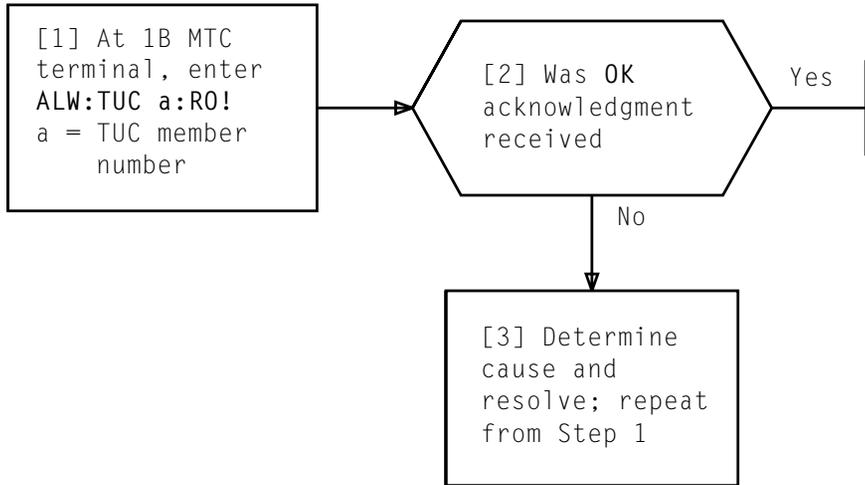
WARNINGS

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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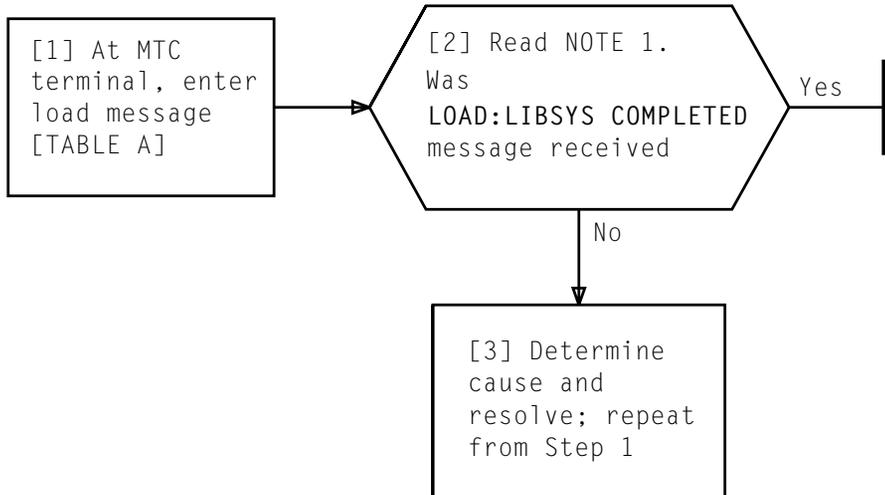


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	LOAD:LIBSYS,FS;TAPE:PKG LGaPGRO!
a = Office generic (that is, 20 for 4E20)	

NOTE 1 System will not respond COMPLETED until tape loaded	
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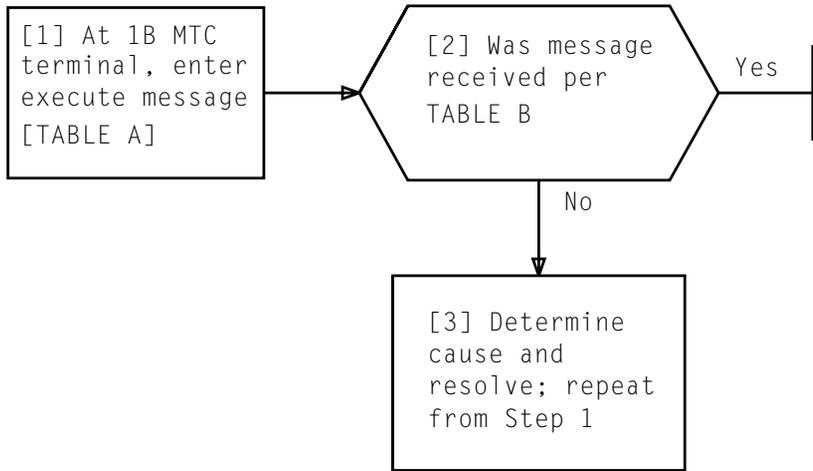


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	EX:LIBSYS:PKG LGaaPGRO,PGM XAPP,TASK 0,CLIENT 0!
aa = Office generic (that is, 25 for 4E25)	

TABLE B	
MESSAGE NUMBER	OUTPUT MESSAGE
1	EX:LIBSYS:PKG LGaaPGRO,PGM XAPP,TASK 0,CLIENT 0! STARTED
aa = Office generic	

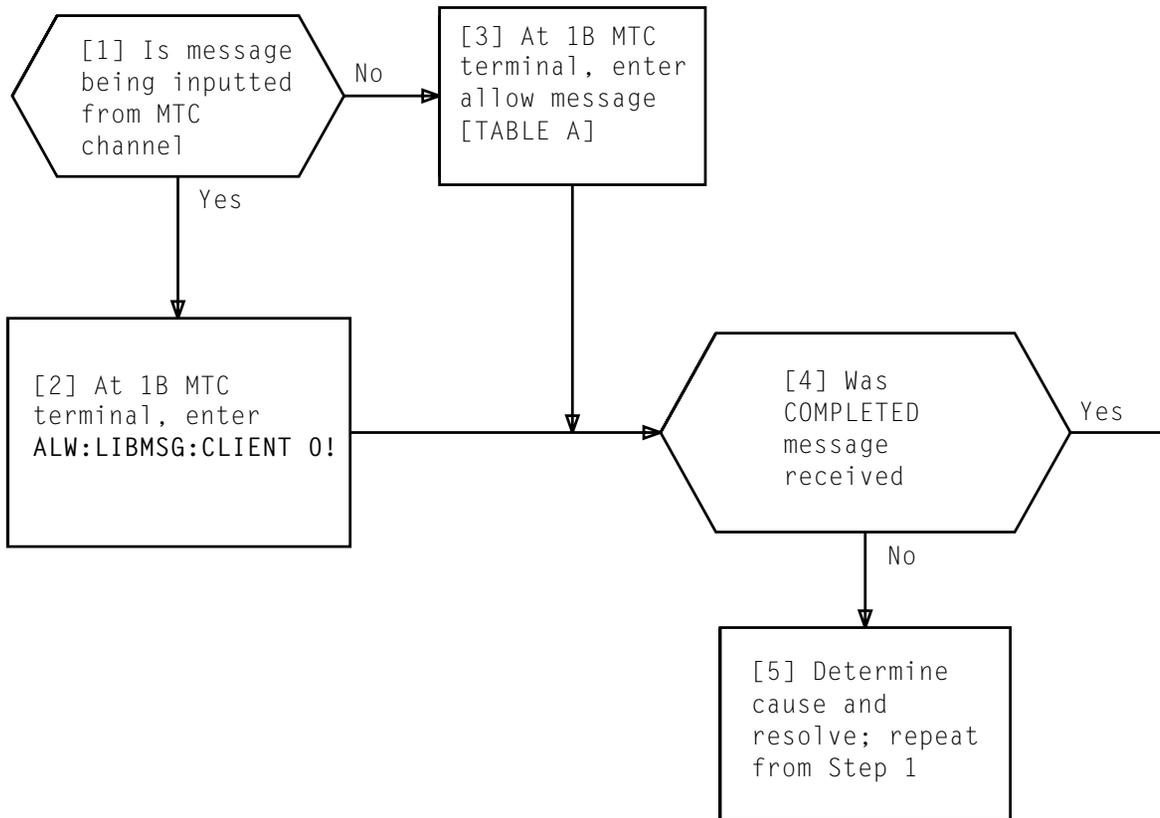


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	ALW:LIBMSG:CLIENT 0,CHAN (MTC,a)!
a = Channel name on which the message is to be inputted	

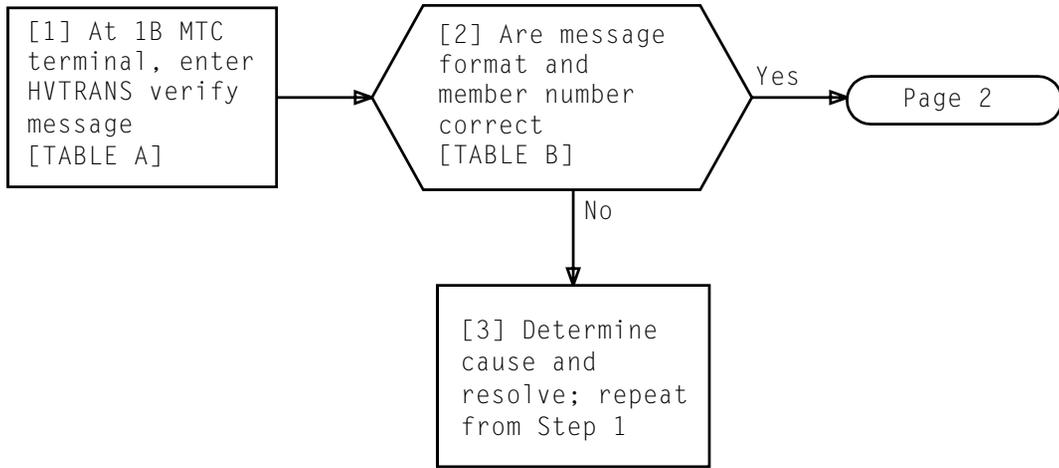


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN;BOTH:a b,HVTRANS!
a = Unit type being changed (CC or MUP) b = Member number of unit type	

TABLE B	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA NONE CURRENT DATA EXTENDED MEMORY = N
a = Unit type being changed (CC or MUP) b = Member number of unit type	

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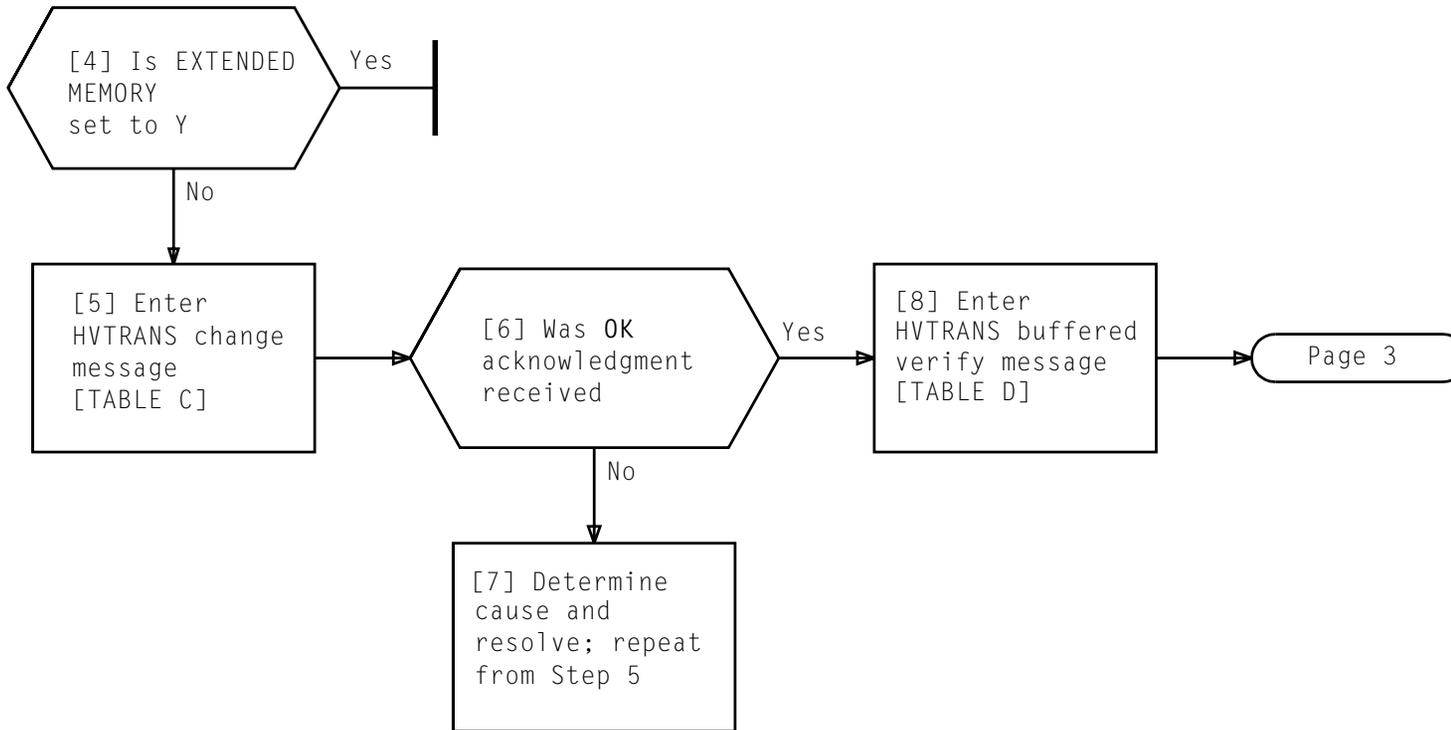


TABLE C	
MESSAGE NUMBER	INPUT MESSAGE
1	IN:XLBUF:a b,HVTRANS (XMA,Y)!
a = Unit type being changed (CC or MUP) b = Member number	

TABLE D	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN;BUF:a b,HVTRANS!
a = Unit type being changed (CC or MUP) b = Member number of unit type	

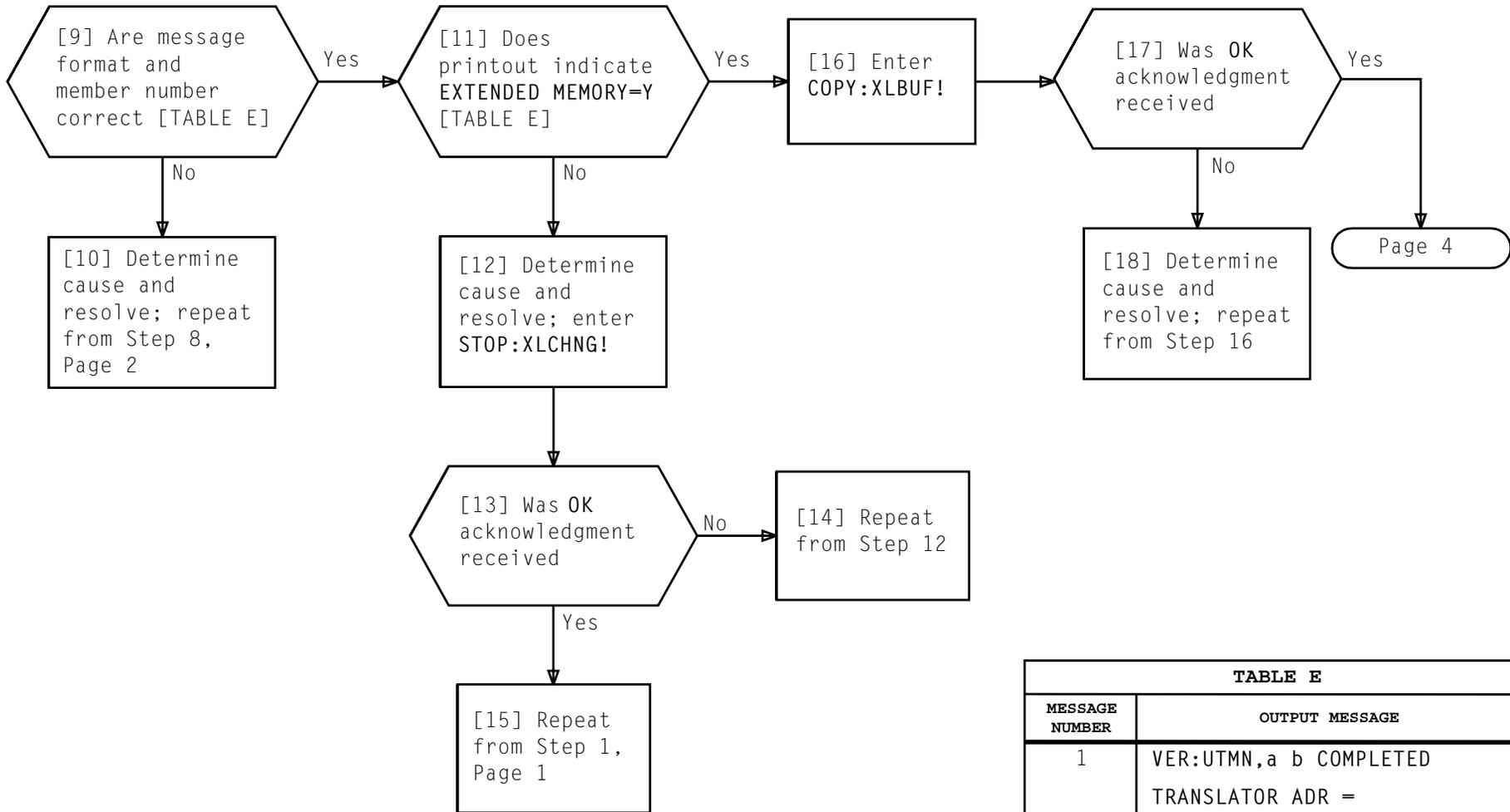


TABLE E	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA EXTENDED MEMORY=Y
a = Unit type being changed (CC or MUP) b = Member number of unit type	

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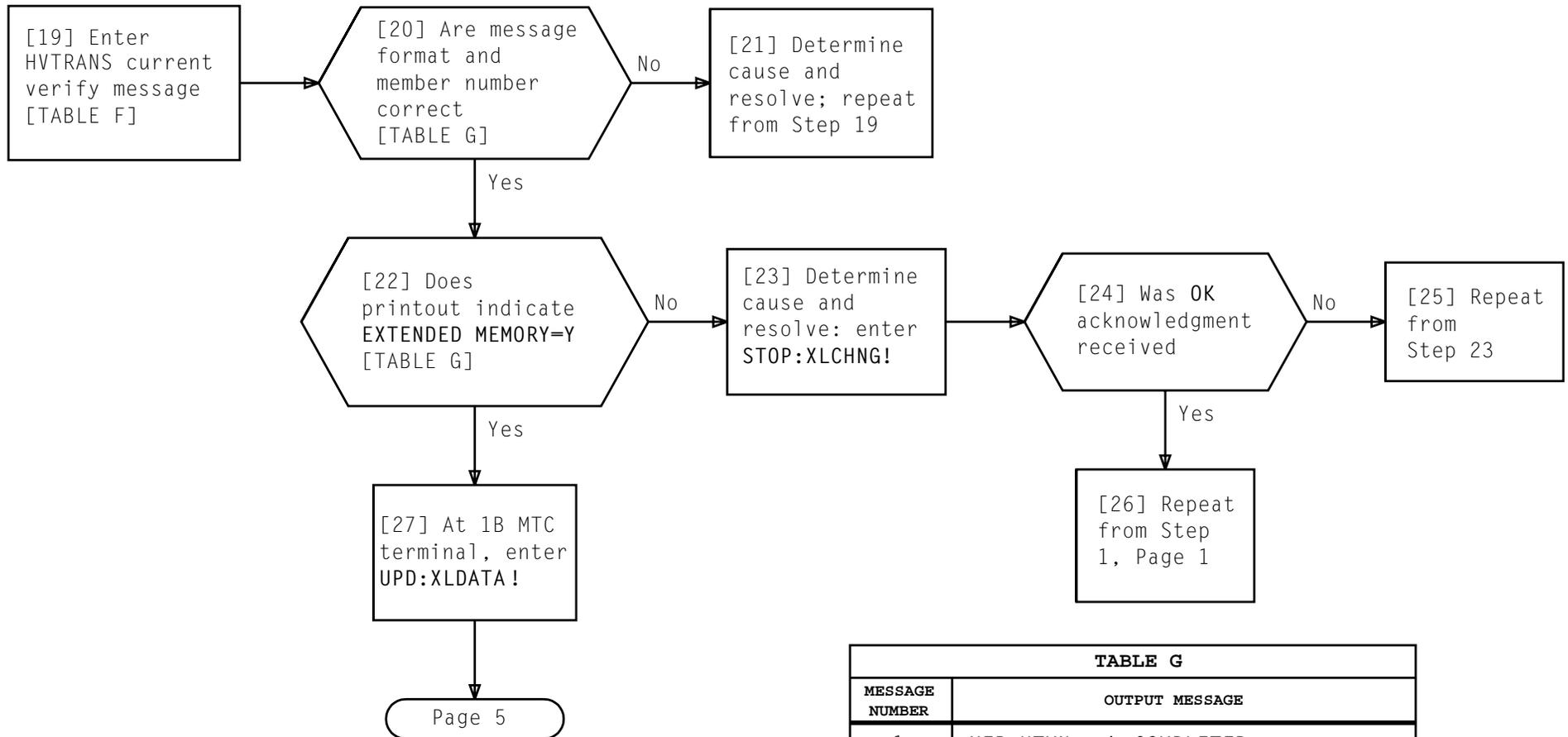


TABLE F	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:a b,HVTRANS!
a = Unit type being changed (CC or MUP) b = Member number of unit type	

TABLE G	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA EXTENDED MEMORY = Y
a = Unit type being changed (CC or MUP) b = Member number of unit type	

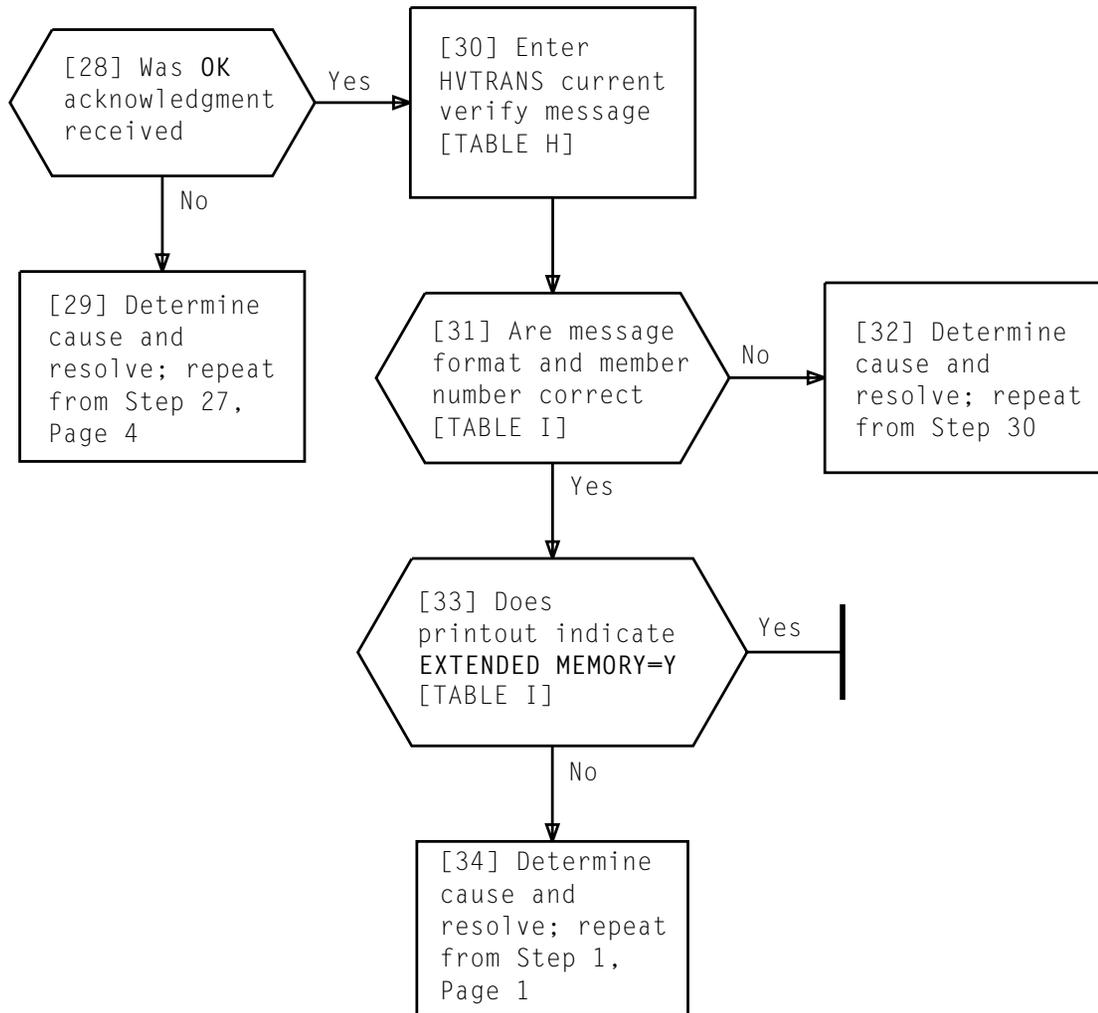


TABLE H	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:a b,HVTRANS!
a = Unit type being changed (CC or MUP) b = Member number of unit type	

TABLE I	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA EXTENDED MEMORY = Y
a = Unit type being changed (CC or MUP) b = Member number of unit type	

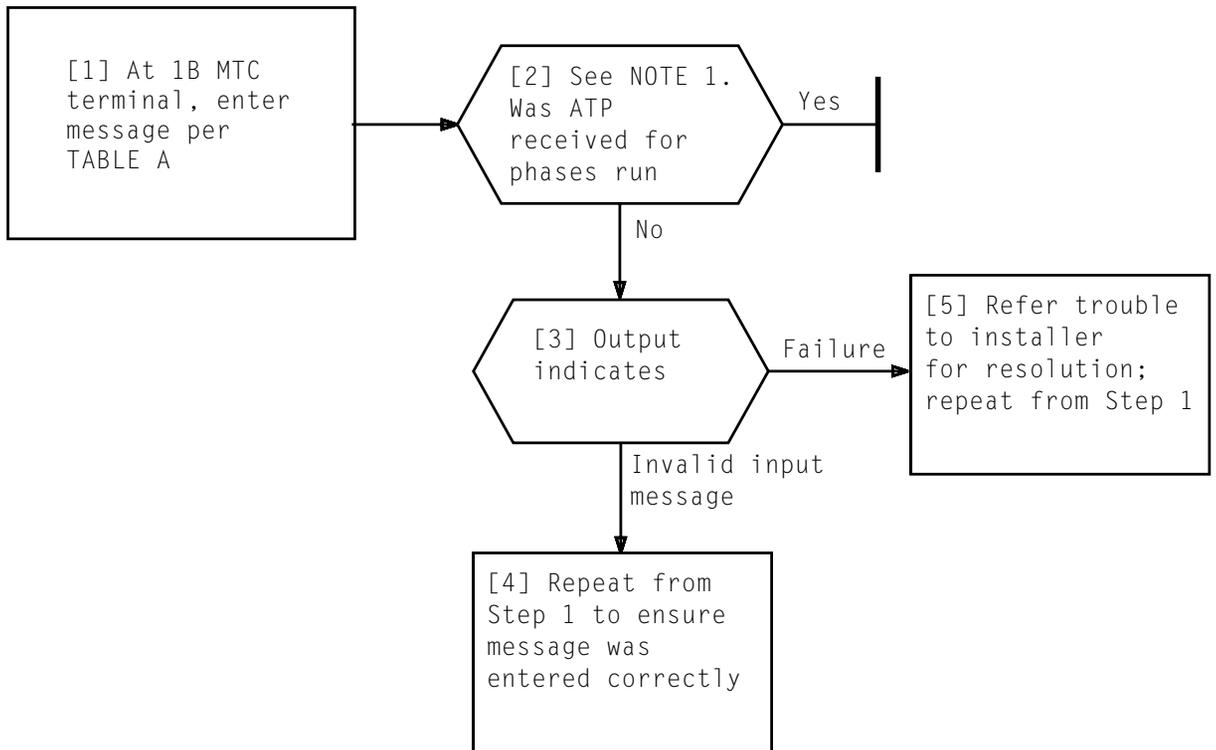


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	DGN:CC a:PH (3,7,19,35,42,51)!
a = Standby CC member number (0 or 1)	

NOTE 1	
NTR will be received for phase 51 if KLW105 circuit packs are not installed at locations 041-096 and 141-096	
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[1] At power control switch on circuit pack **KLW11** for standby CC, operate **ROS/NORM** switch to **NORM** and observe LEDs for TABLE A indications

[2] At SREC1 terminal, determine if printout was received per TABLE B

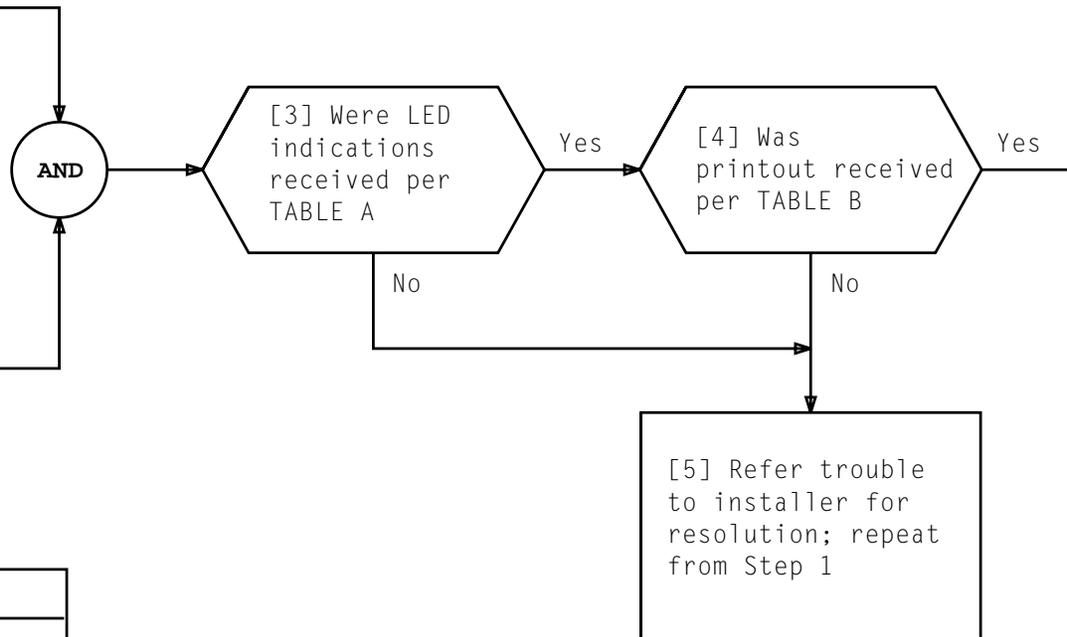
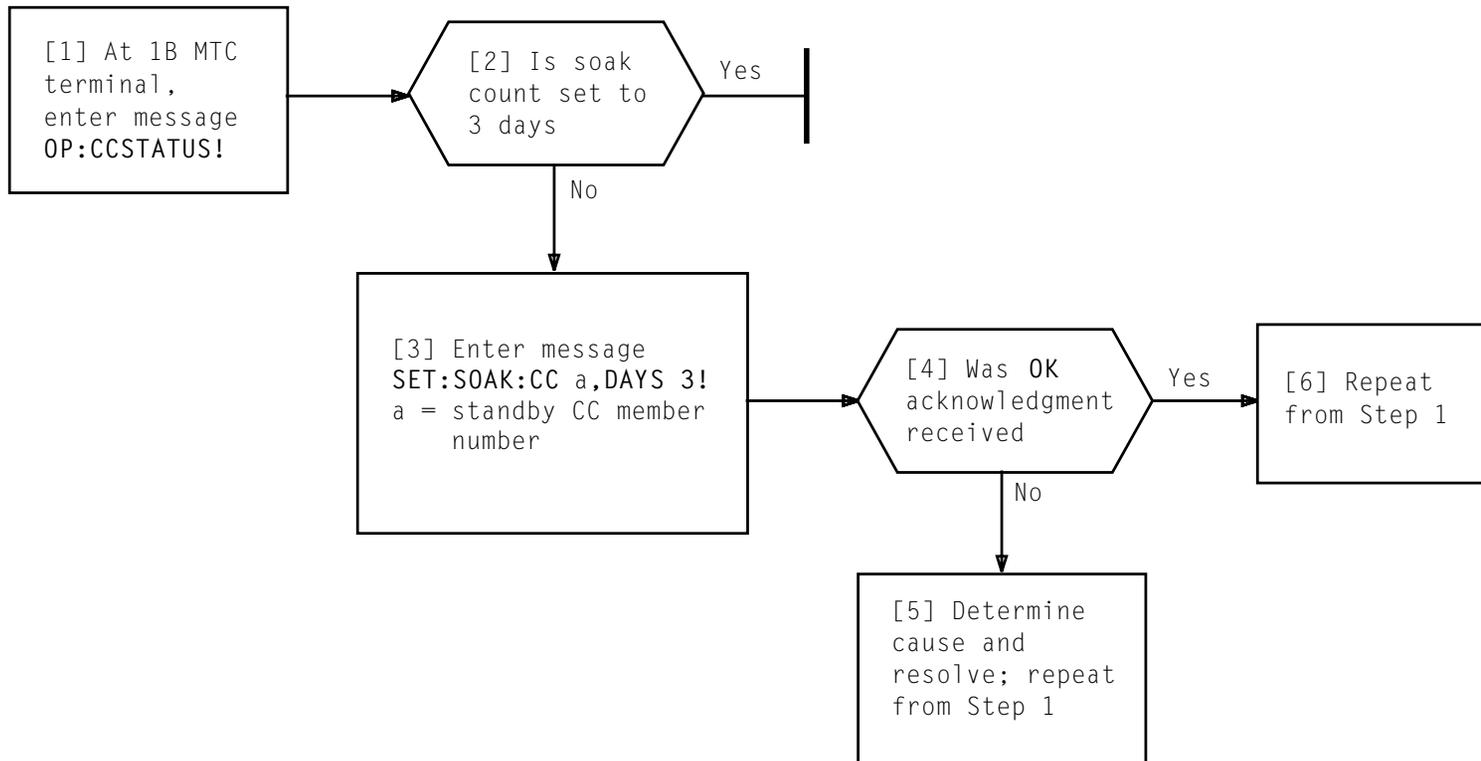


TABLE A	
LED	INDICATION
ACK*	On then Off
OS	Remains On
* expected indication will not be received until diagnostic is complete (approximately 12 minutes)	

TABLE B	
MESSAGE NUMBER	OUTPUT MESSAGES (NOTE)
1	DGN: CC a COMPLETED [ATP CATP (20000000 00000000)] MSG COMPL TEST:CC a DFR ATP RST: CC a STOPPED OOS REMOVED
NOTE: Either ATP or CATP results can be received for the diagnostics a = member number of standby CC	

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SET SOAK COUNT FOR STANDBY CC

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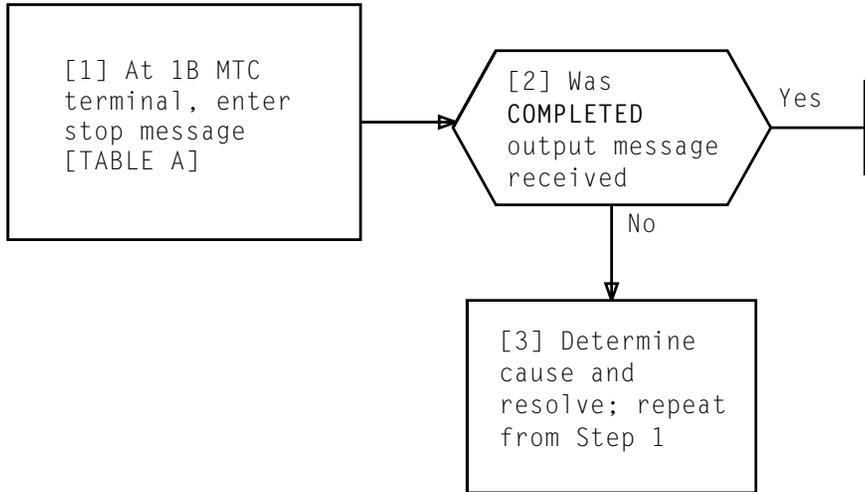
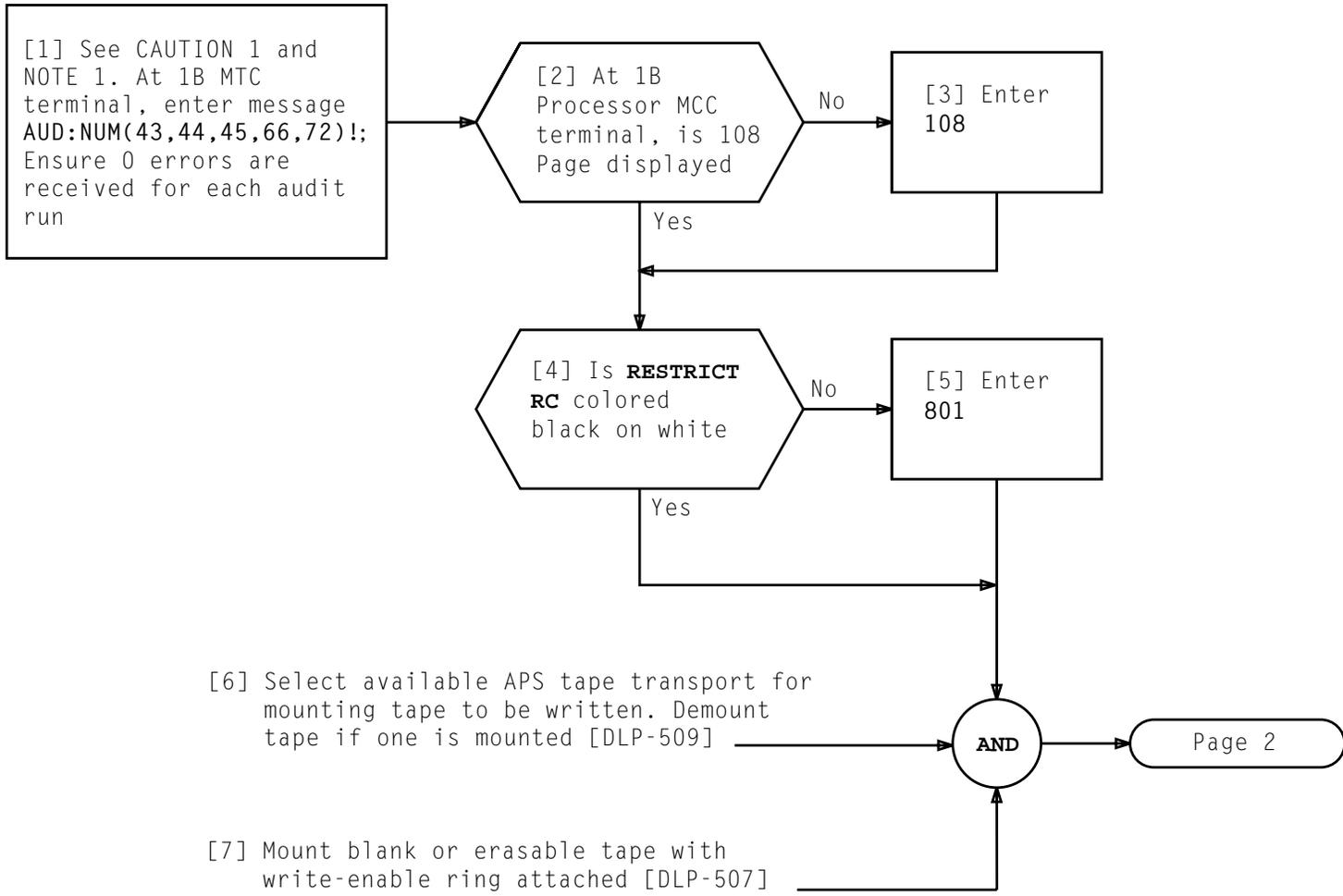


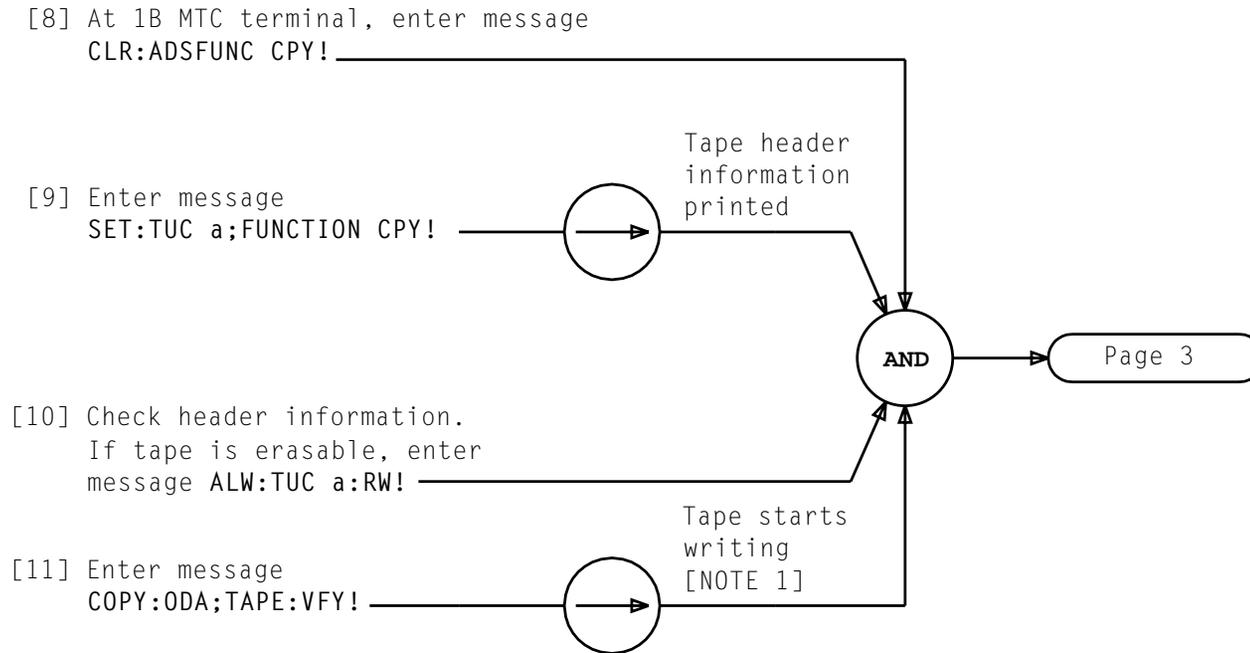
TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	STOP:LIBSYS:PKG LGaaPGRO,PGM XAPP,TASK 0,CLIENT 0!
	aa = Office generic (for example, 25 for 4E25)



NOTE 1
It will take approximately 20-40 minutes for audits to run

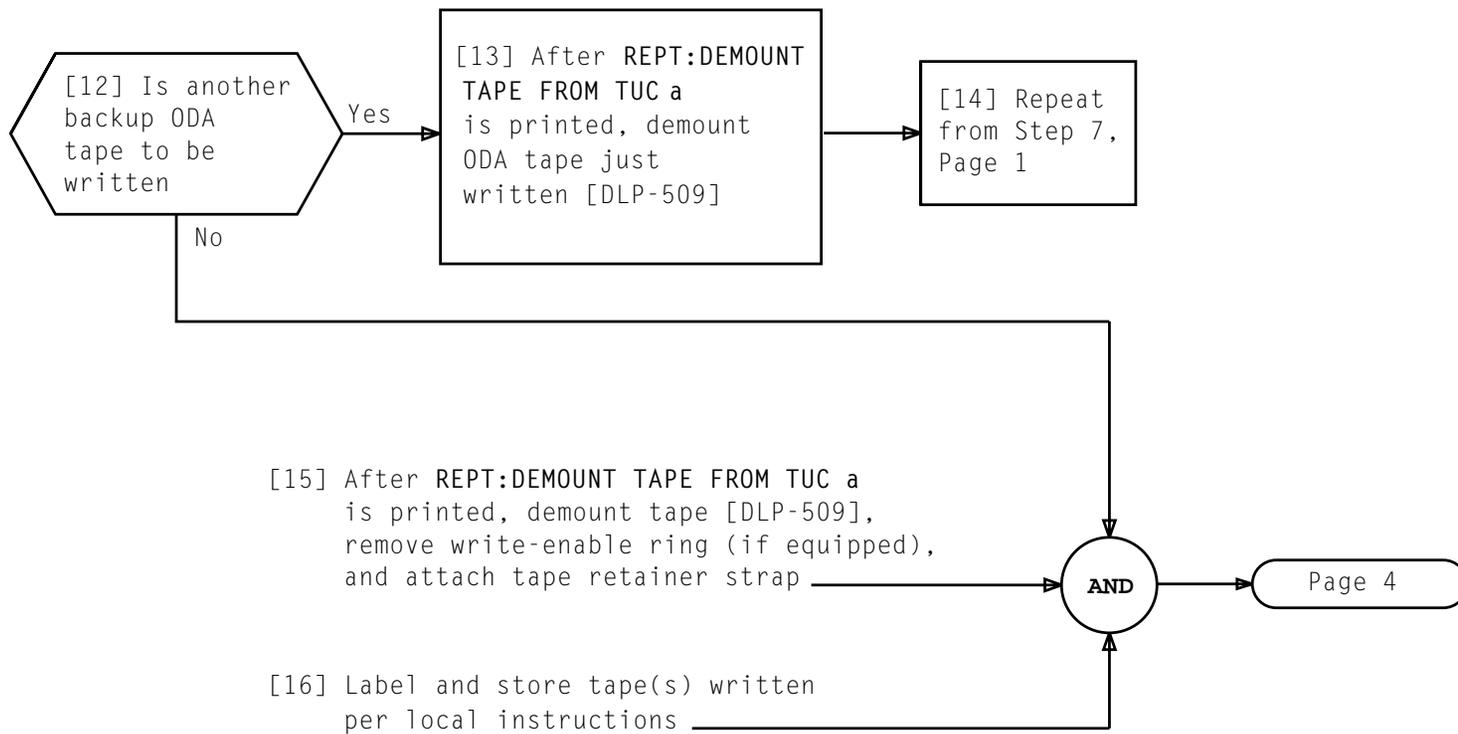
CAUTION 1
Certain system audits are inhibited during tape writing; therefore, tape writing should be done during light traffic periods

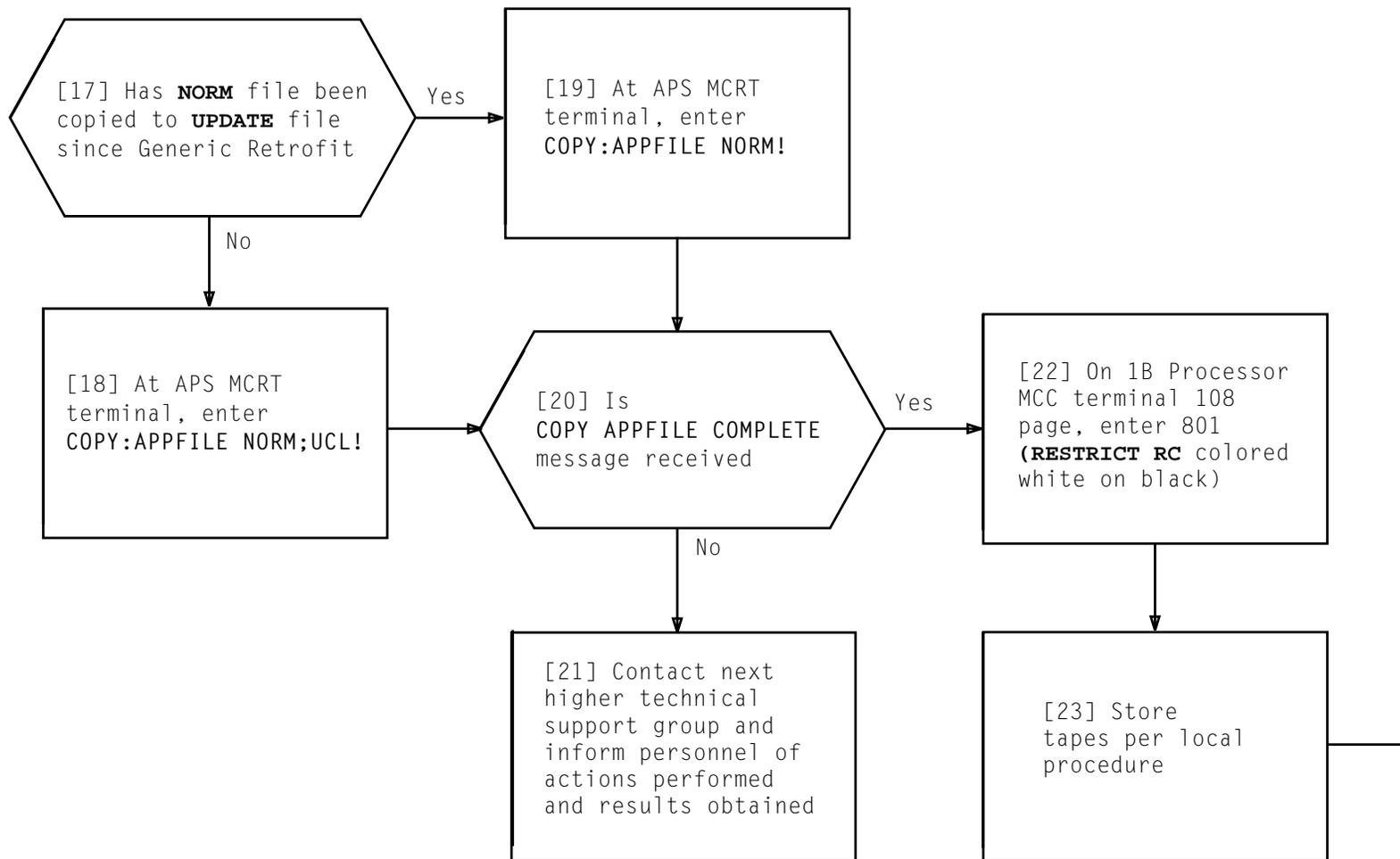
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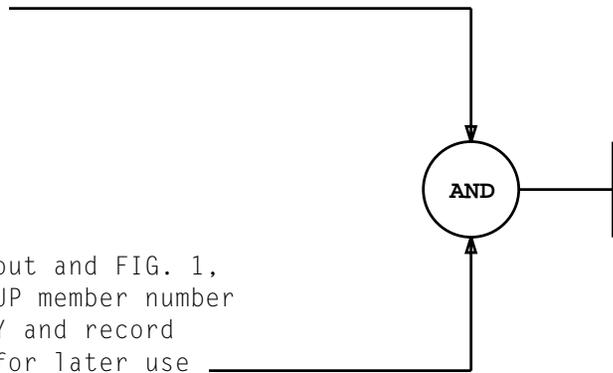
NOTE 1
 After ODA tape is written, COPY:ODA;TAPE COMPL date and time are printed. Tape will then rewind and be verified. After verification has been completed, COPY:VFY;TAPE COMPL is printed followed by REPT:DEMOUNT TAPE FROM TUC a

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



[2] Using printout and FIG. 1,
determine MUP member number
assigned SBY and record
as standby for later use

```
OP:MUPSTAT
MUP 0 - a
MUP 1 - b
      •
      •
a = ACT or SBY
b = SBY or ACT
```

FIG. 1 - Sample OP:MUPSTAT Printout

[1] At 1B MTC terminal, enter message
RST:MUP a!
a = standby MUP member number (0 or 1)

[2] See NOTE 1.
Was printout received per TABLE A

Yes

No

[3] Output indicates failure in

Nongrowth equipment

[5] Correct error per TOP 234-351-004; ATP required

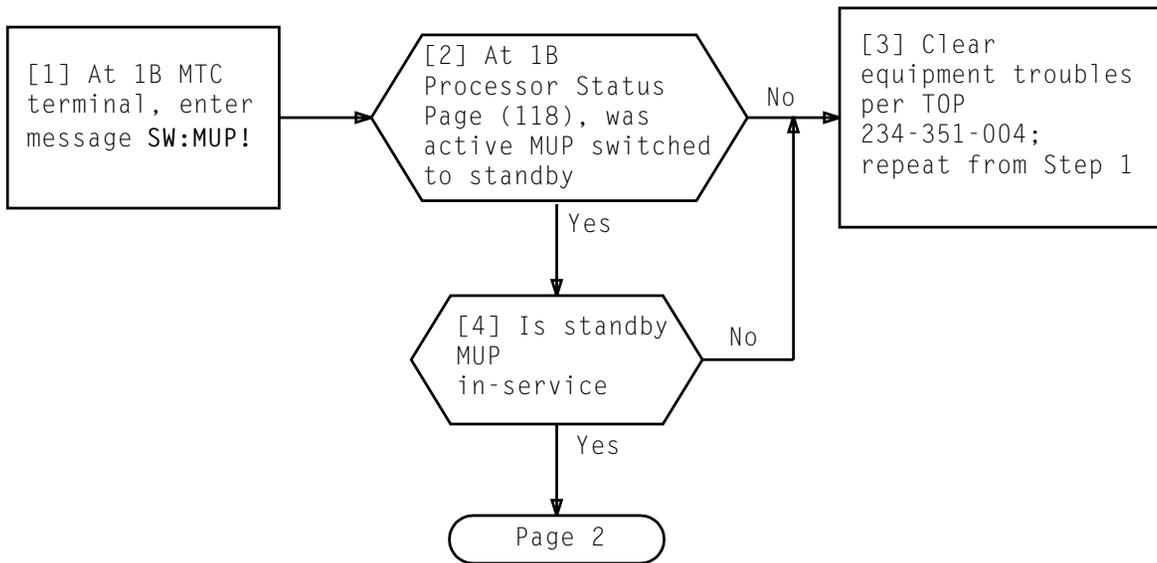
Growth equipment

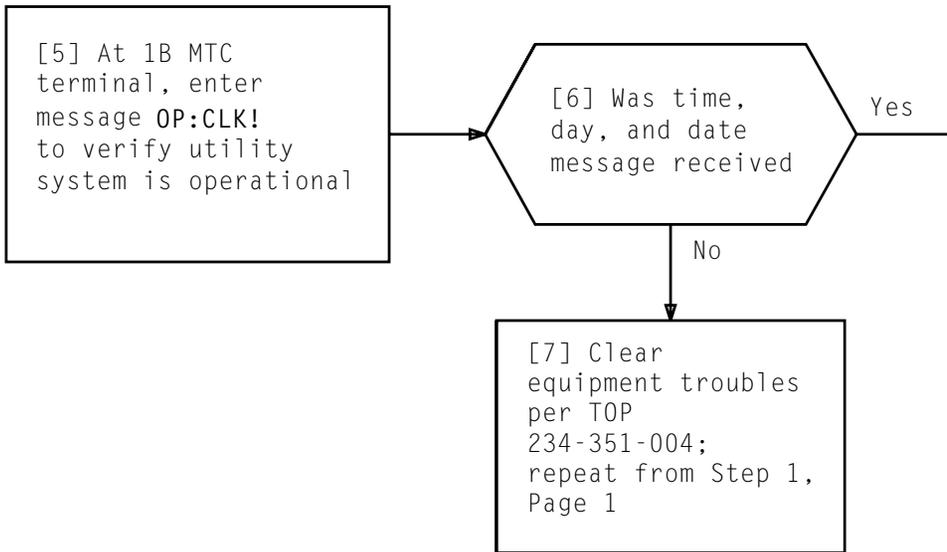
[4] Refer trouble to installer for resolution; repeat from Step 1

TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGES
1	RMV: MUP a COMPLETED* DGN: MUP a COMPLETED ATP MSG COMPL TEST:MUP a ATP RST: MUP a COMPLETED
* Message will not be received if MUP is already out of service a = Standby MUP member number (0 or 1)	

NOTE 1	
It will take approximately 10 minutes before printout is received	
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RESTORE STANDBY MUP TO SERVICE





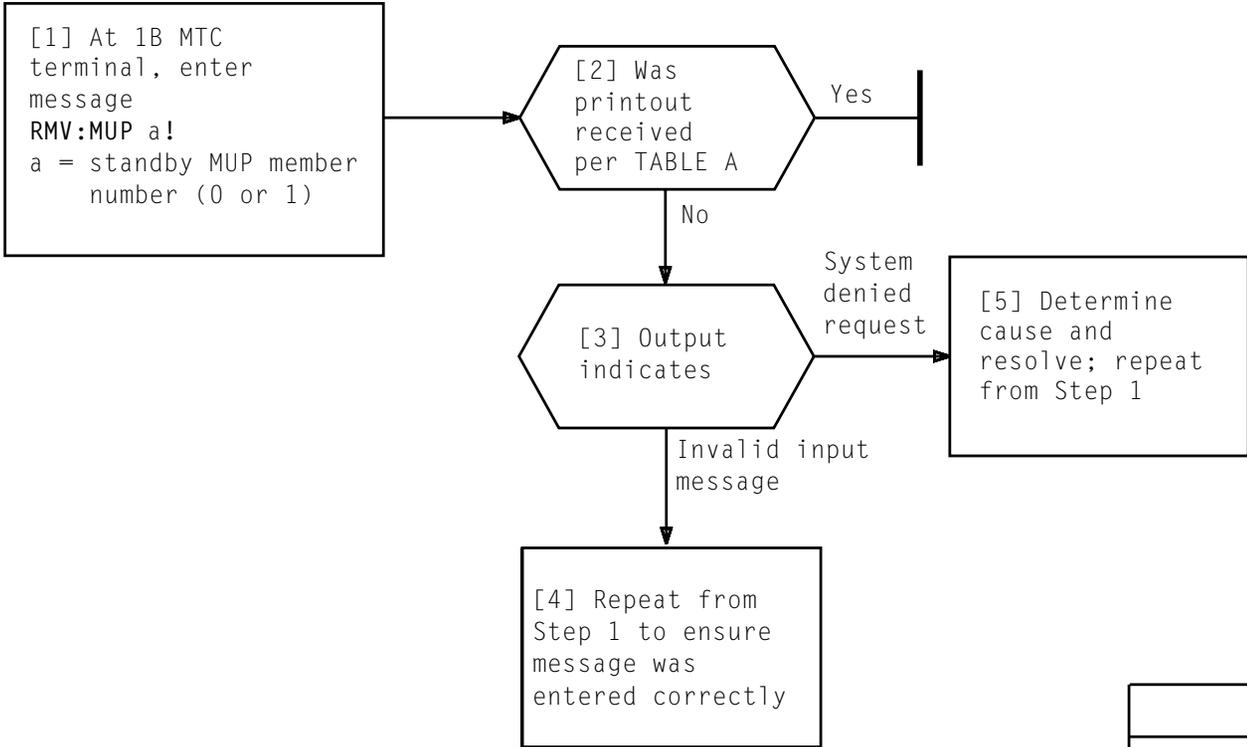


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	RMV: MUP a COMPLETED
a = Standby MUP member number (0 or 1)	

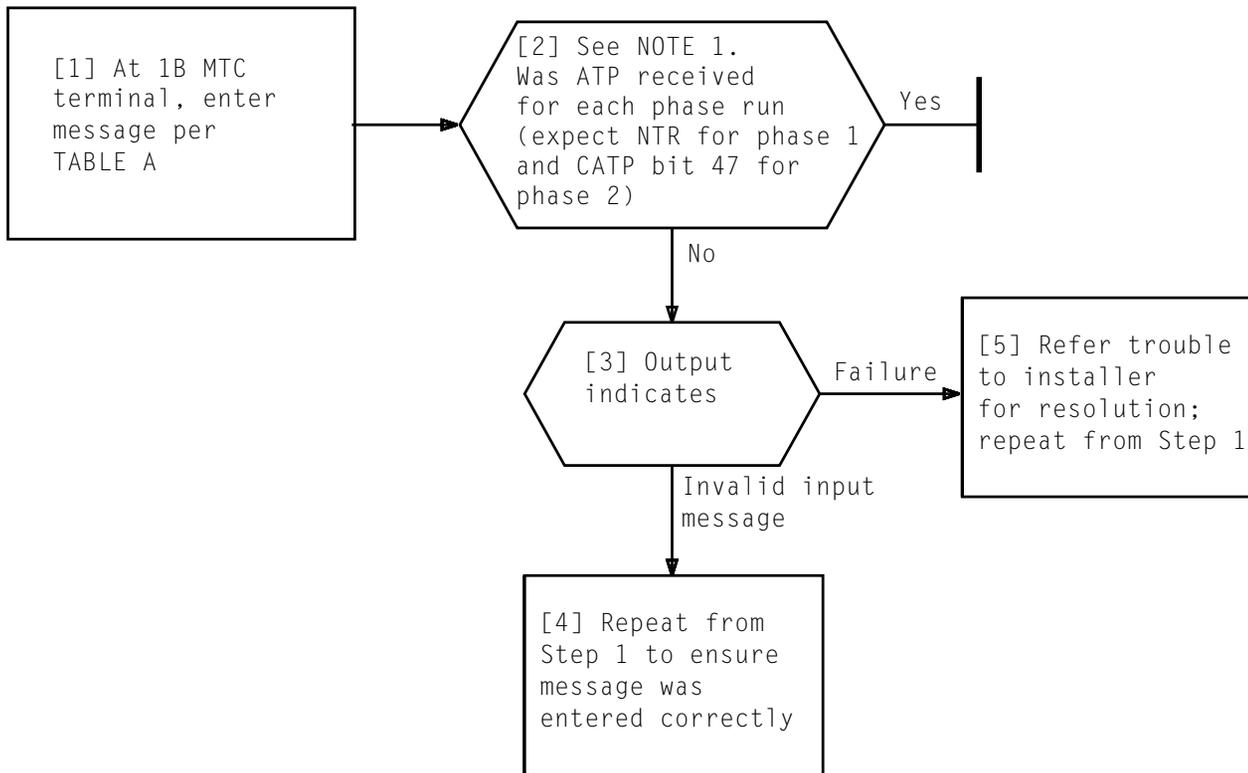


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	DGN:MUP a:PH (1-6,11-15,21-25,91)!
a = Standby MUP member number (0 or 1)	

NOTE 1 It will take approximately 10 minutes for diagnostics to complete	
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[1] At power control switch on circuit pack **KLW25** for standby MUP, operate **ROS/NORM** switch to **NORM** and observe LEDs for TABLE A indications

[2] At SREC1 terminal, determine if printout was received per TABLE B

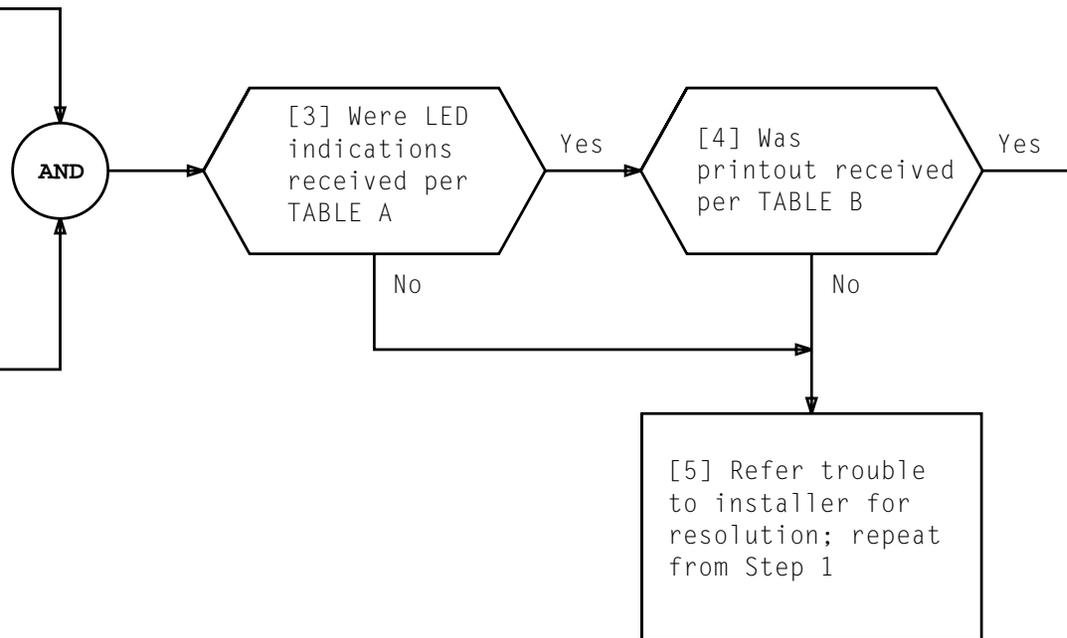
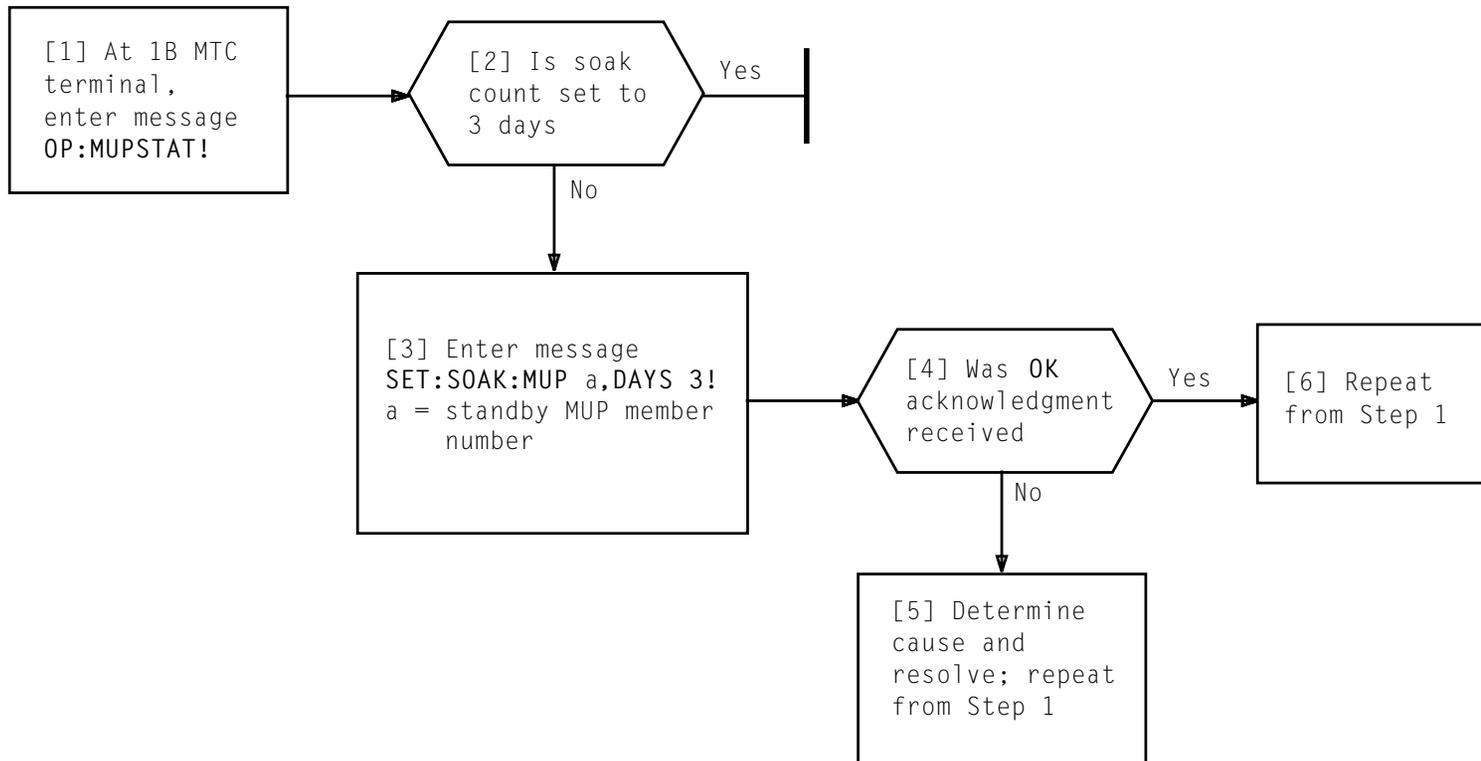


TABLE A	
LED	INDICATION
ACK*	On then Off
OS	Remains On
* expected indication may take a short period of time to be received	

TABLE B	
MESSAGE NUMBER	OUTPUT MESSAGES (NOTE)
1	DGN: MUP a COMPLETED [ATP CATP (20000000 00000000)] MSG COMPL TEST: MUP a DFR ATP RST: MUP a STOPPED OOS REMOVED
NOTE: Either ATP or CATP results can be received for the diagnostics a = member number of standby MUP	



SET SOAK COUNT FOR STANDBY CC

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SUMMARY

Using verify input message, verify that member equipage (ME) for growth unit type is UNEQ. If equipage is in error, change ME to UNEQ

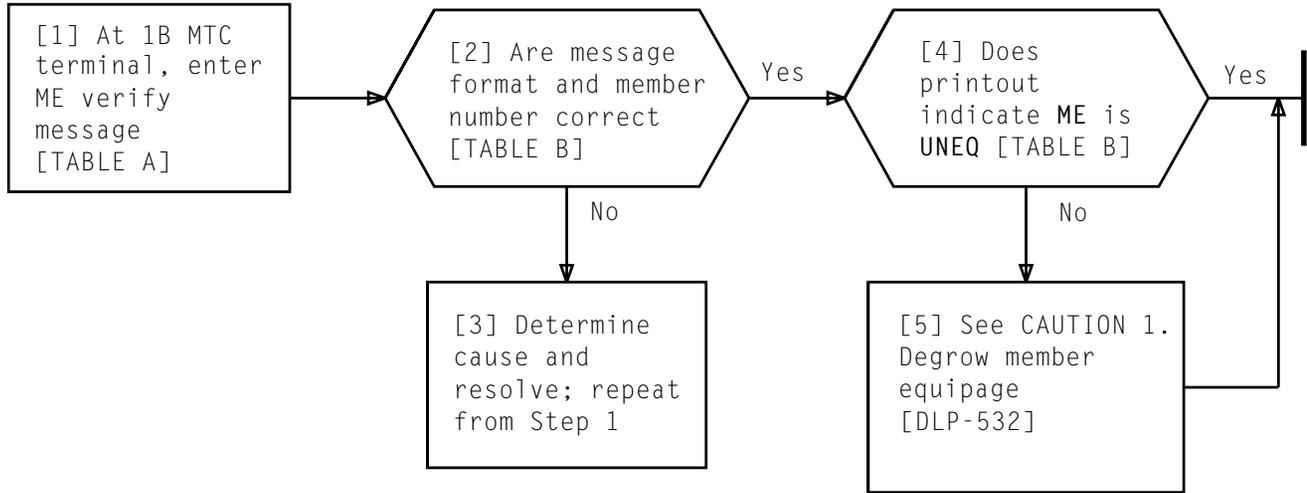


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:a b,ME!
a = Unit type – CS, IOUS, PS, or TUC b = Member number of growth unit	

TABLE B	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA ME UNEQ
a = Growth unit type b = Member number of growth unit	

CAUTION 1
Depending on local procedures, supervisory or TELCO engineering approval must be obtained prior to performing any data changes

SUMMARY

Enter change message to grow member equipage (ME) from UNEQ to GROW. Verify buffered ME, enter copy message, verify current ME, and then enter update message. If after each verify, ME is not in right state, enter stop message and start change from beginning

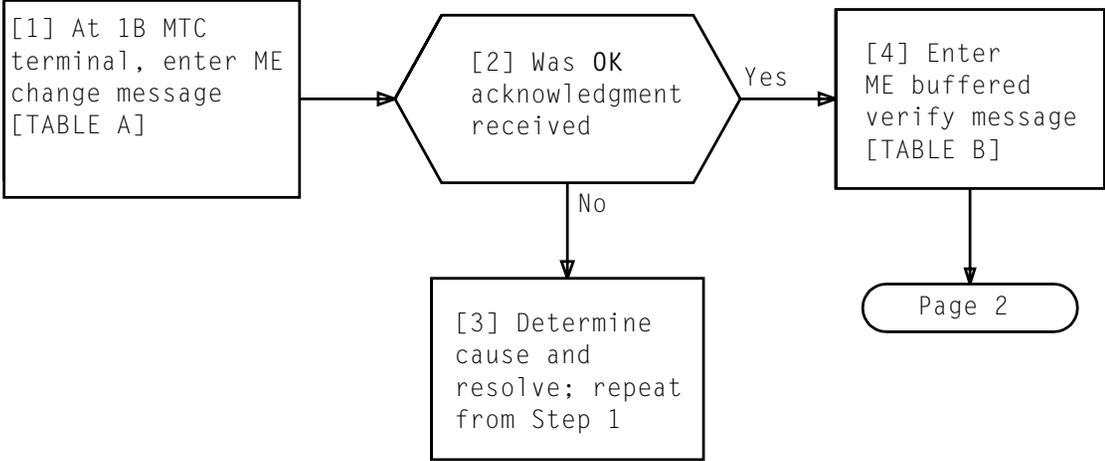


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	IN:XLBUF:a b,ME (UNEQ,GROW)!
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

TABLE B	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN;BUF:a b,ME!
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

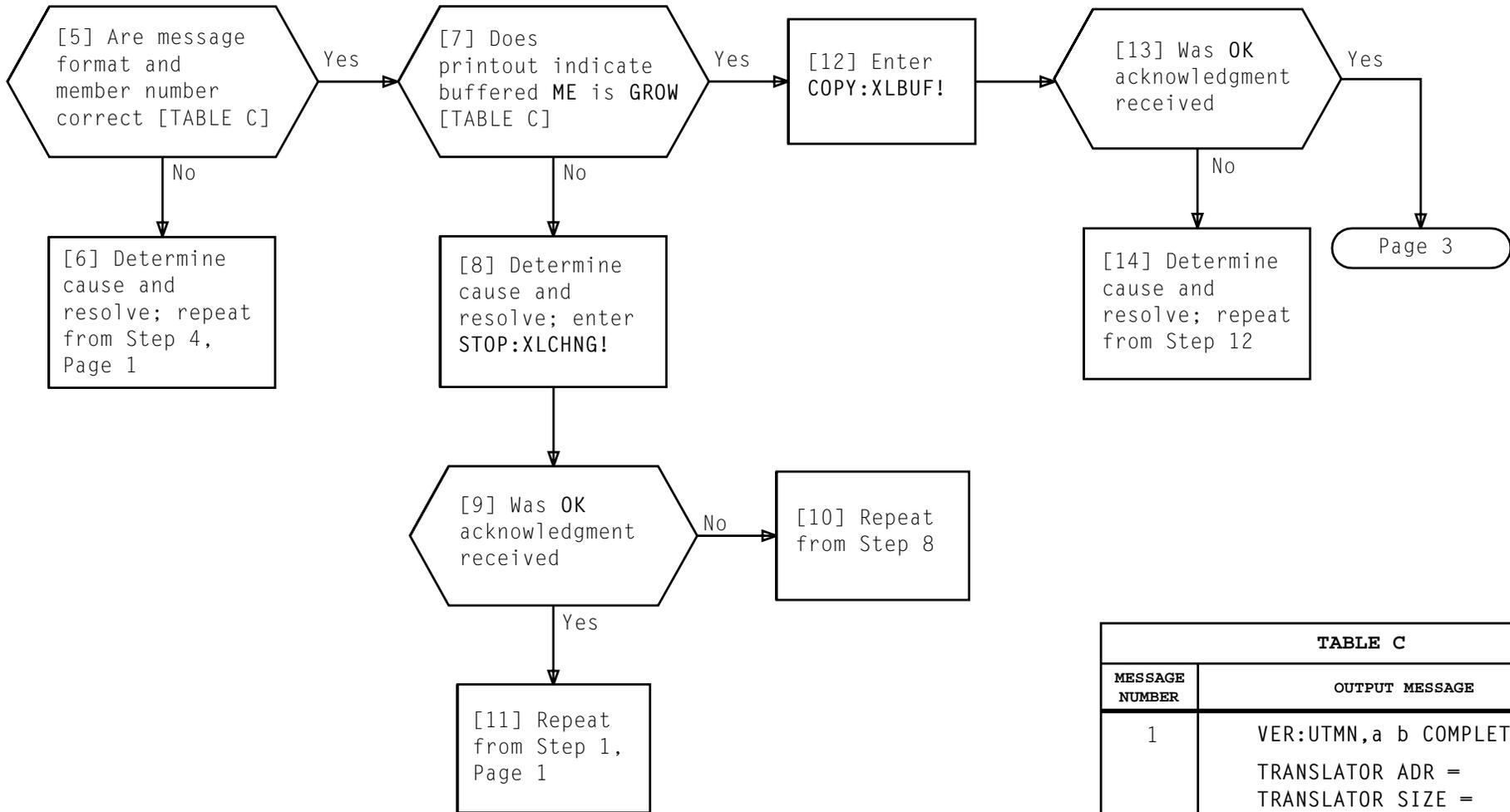


TABLE C	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA ME GROW
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

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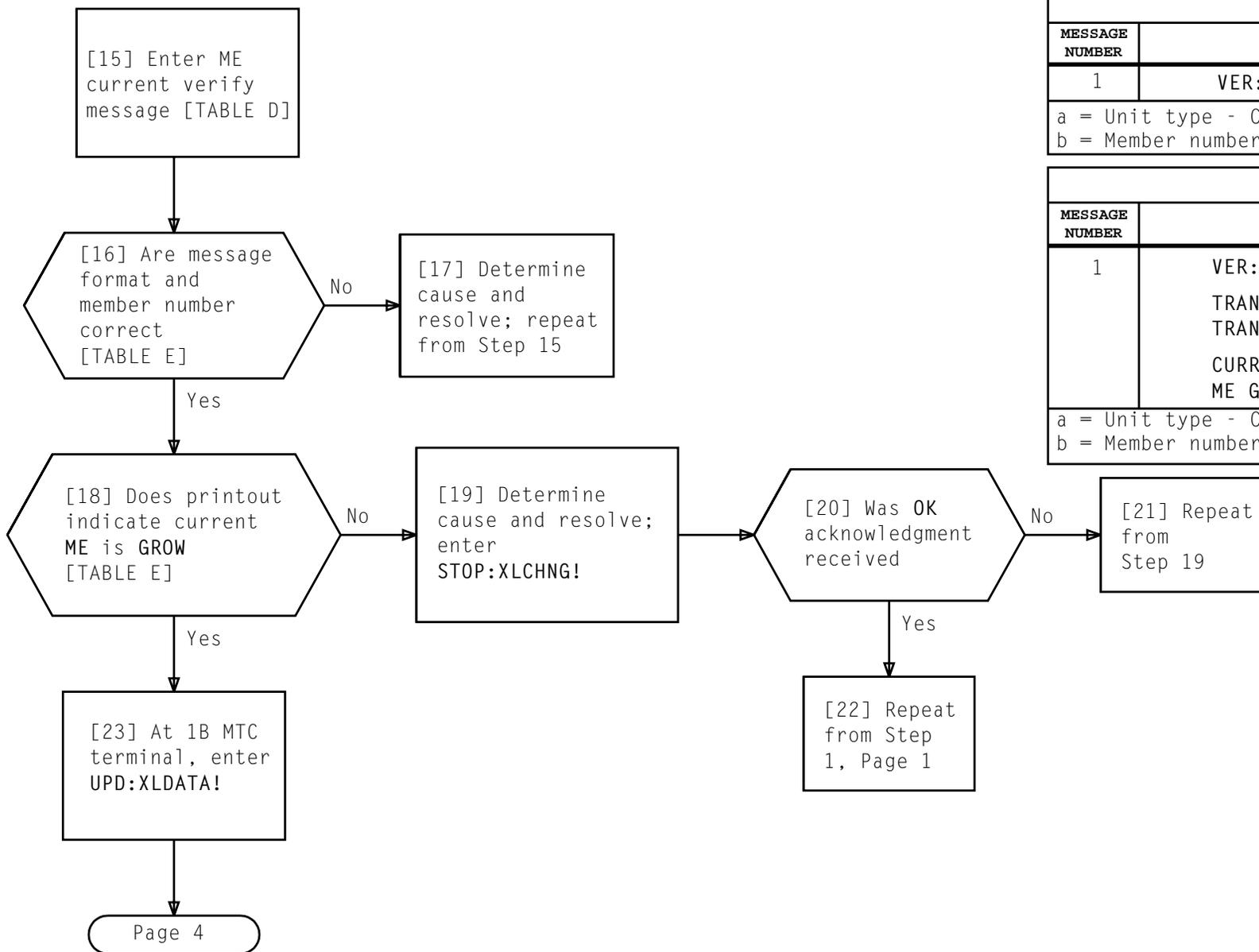


TABLE D	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:a b,ME!
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

TABLE E	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA ME GROW
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

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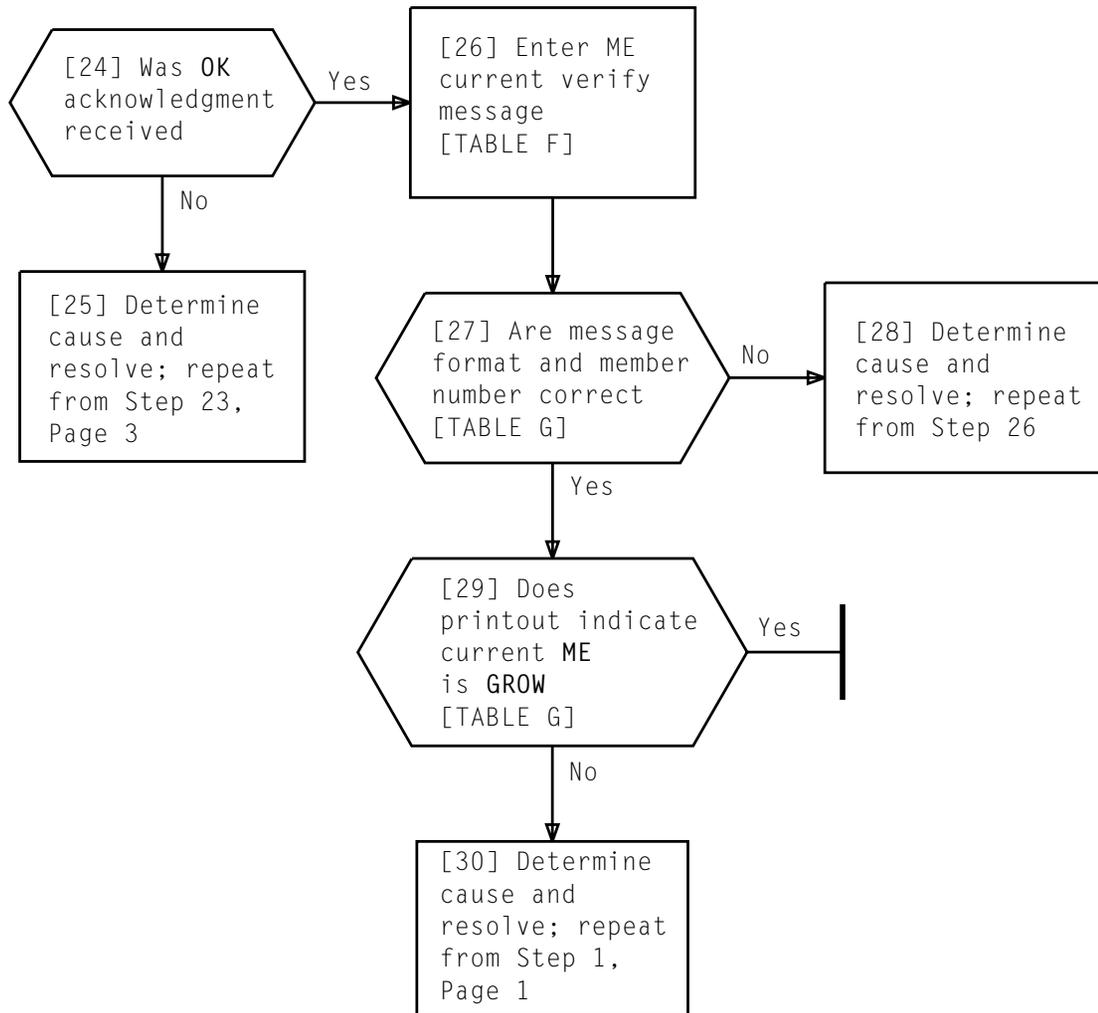


TABLE F	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:a b,ME!
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

TABLE G	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA ME GROW
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

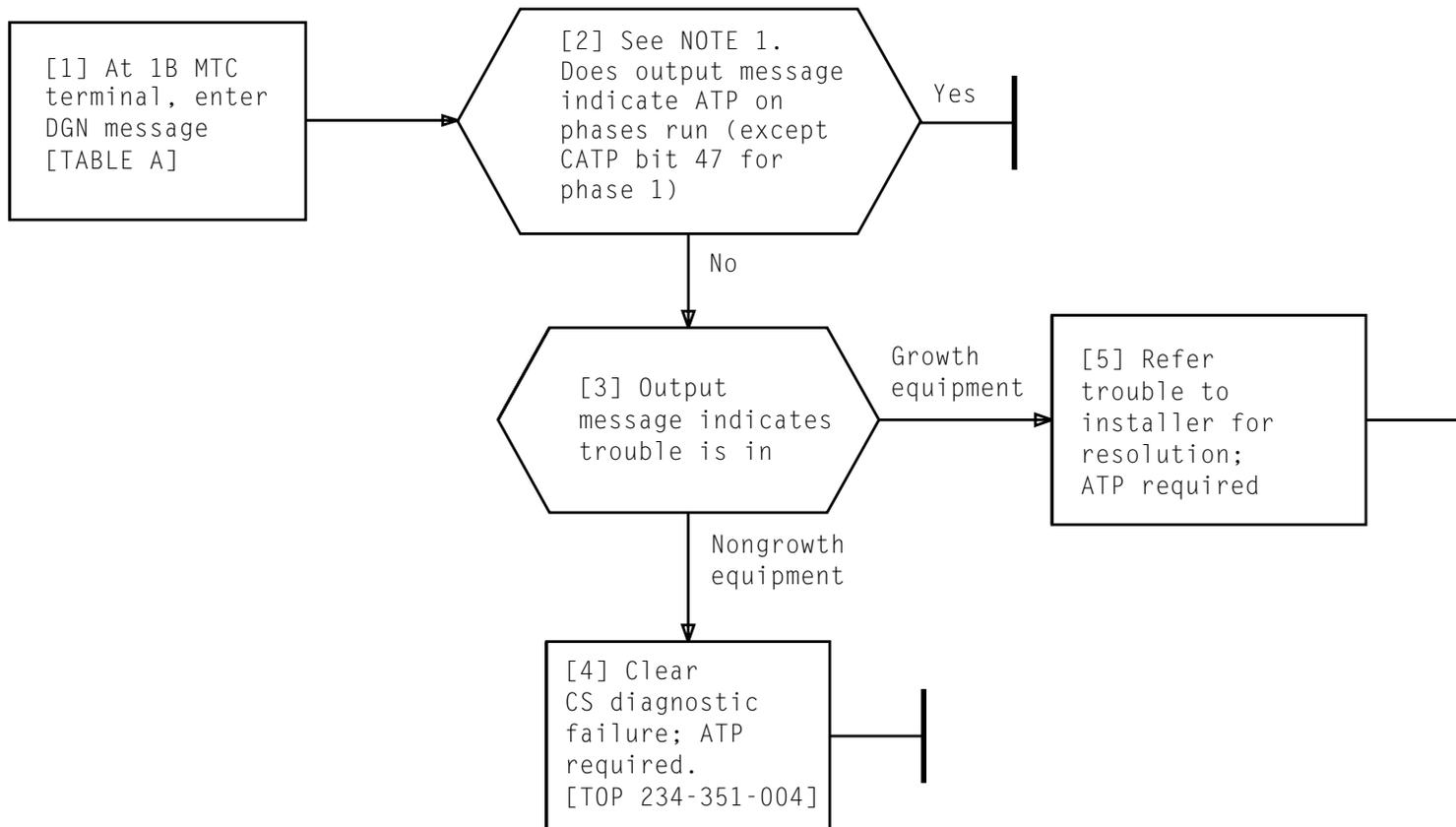


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	DGN:CS a:PH 1-97!
a = Member number of growth CS	

NOTE 1	
It will take approximately 11 minutes for diagnostics to complete	
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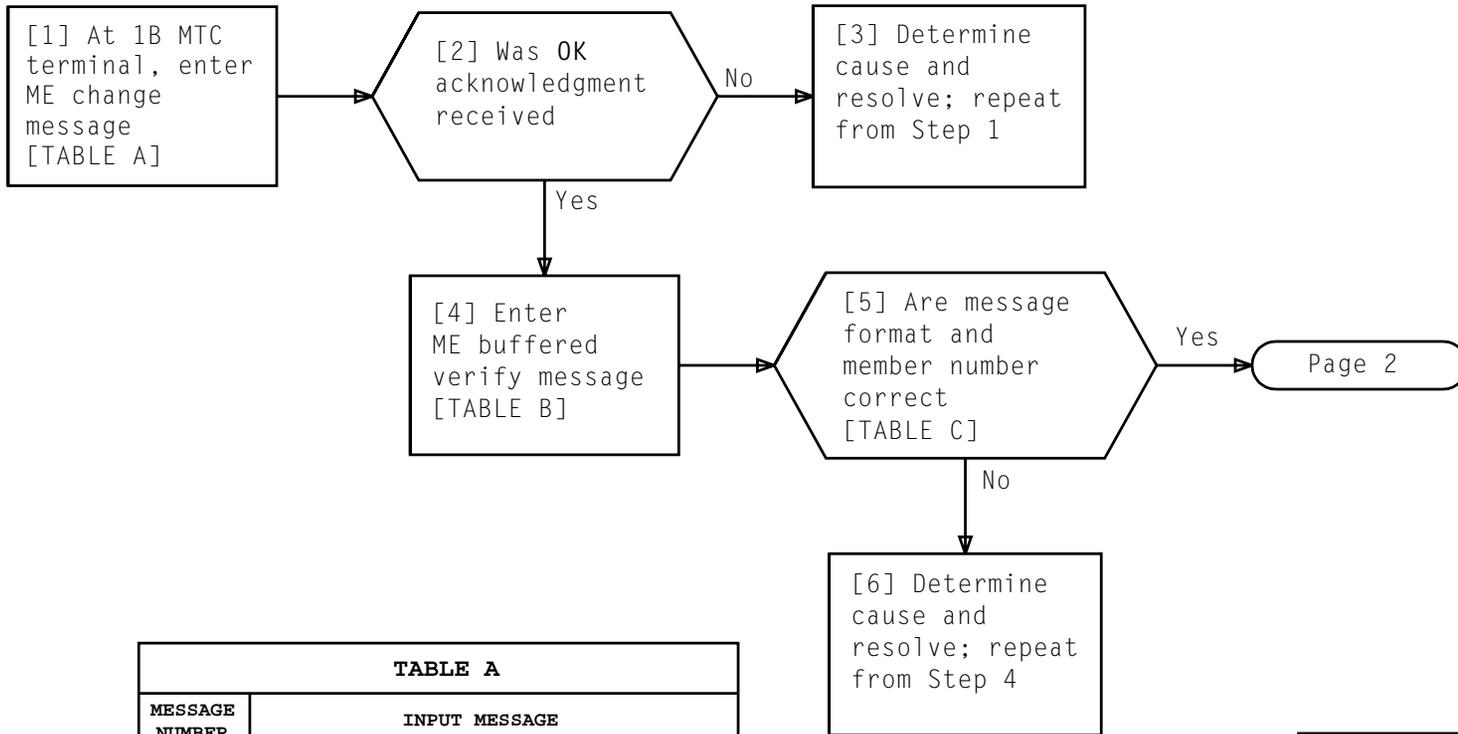


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	IN:XLBUF:a b,ME (GROW,SGRO)!
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

TABLE B	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN;BUF:a b,ME!
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

TABLE C	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA ME SGRO
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

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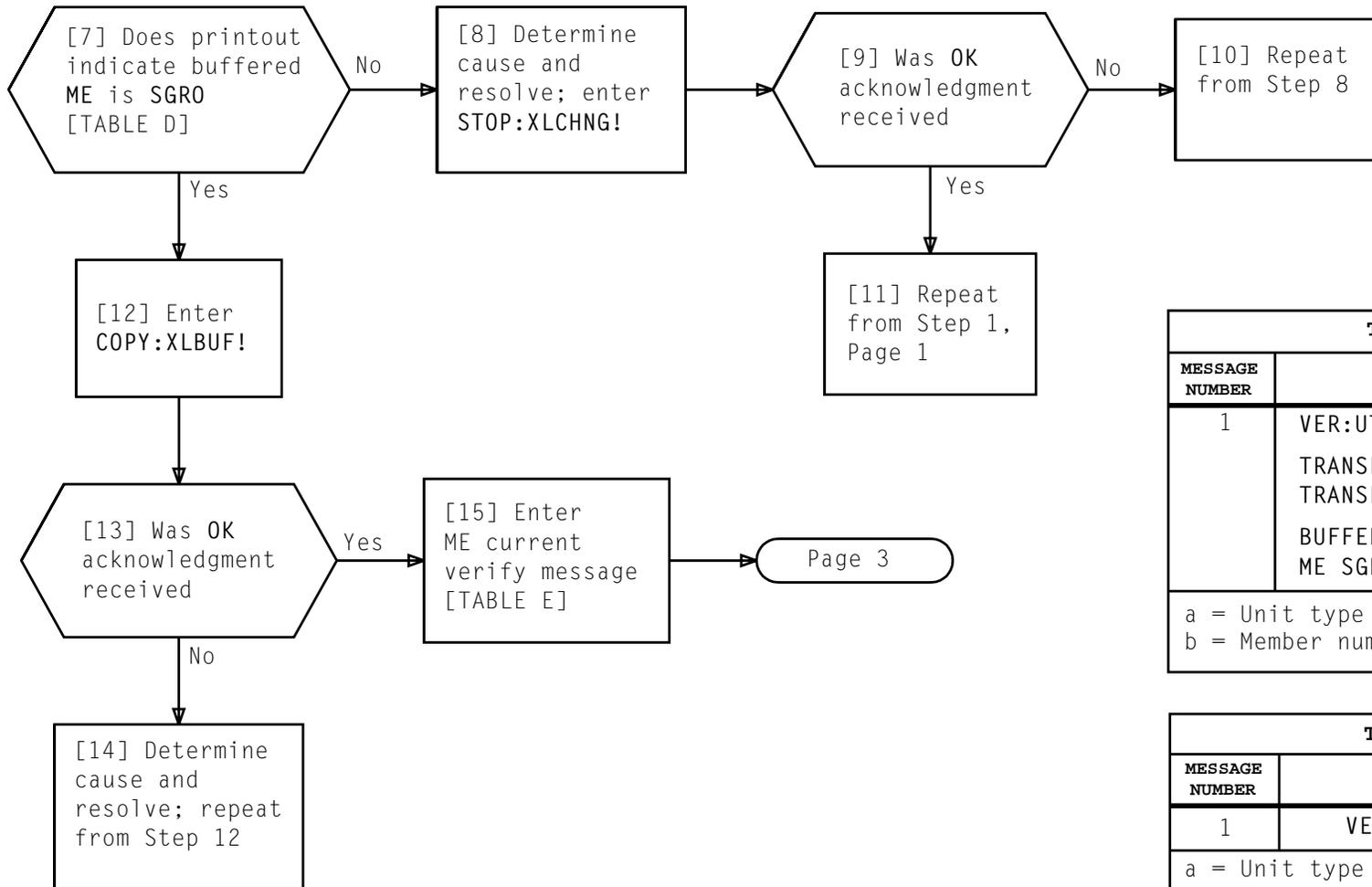


TABLE D	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA ME SGRO
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

TABLE E	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:a b,ME!
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

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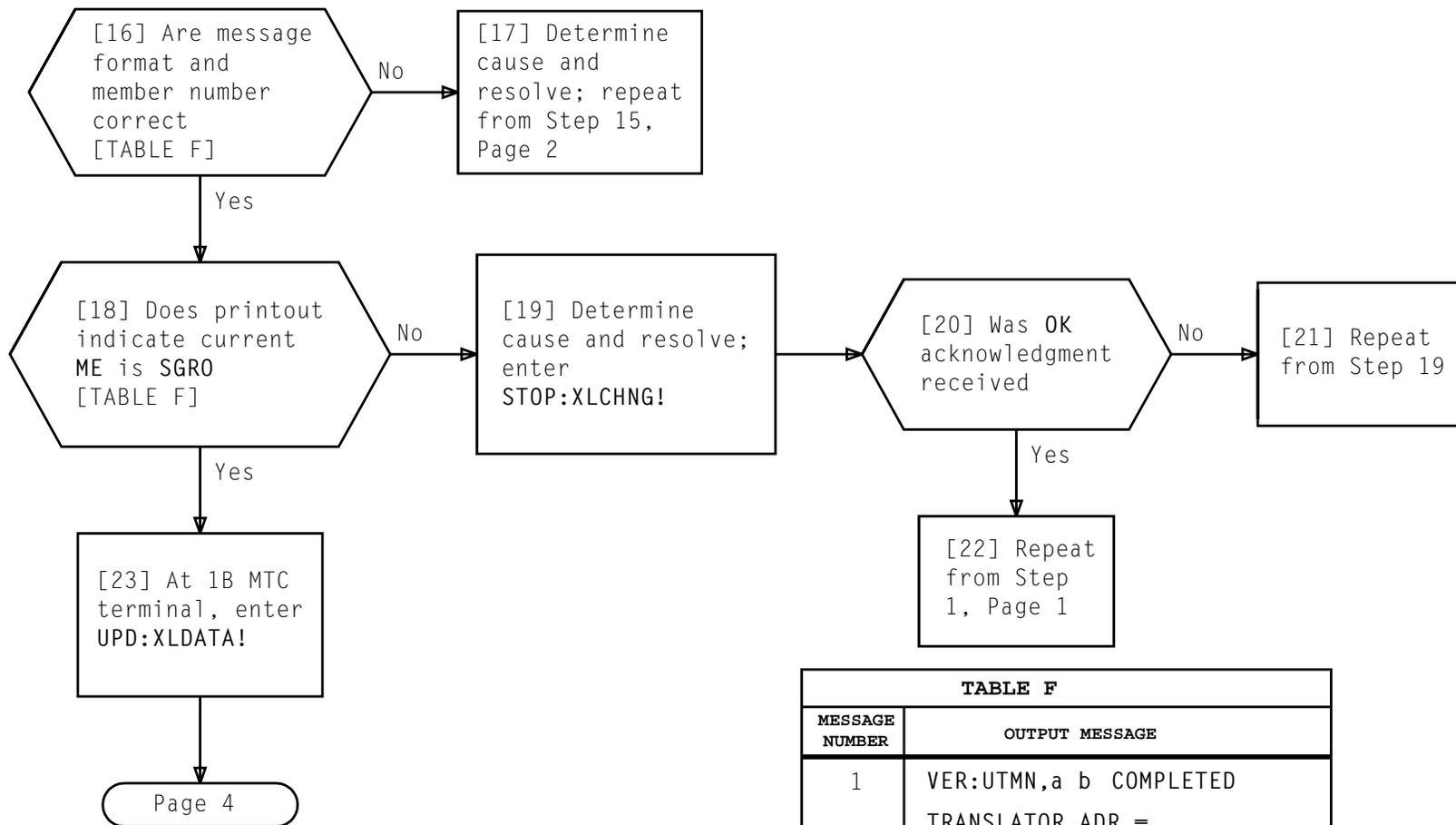


TABLE F	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA ME SGRO
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

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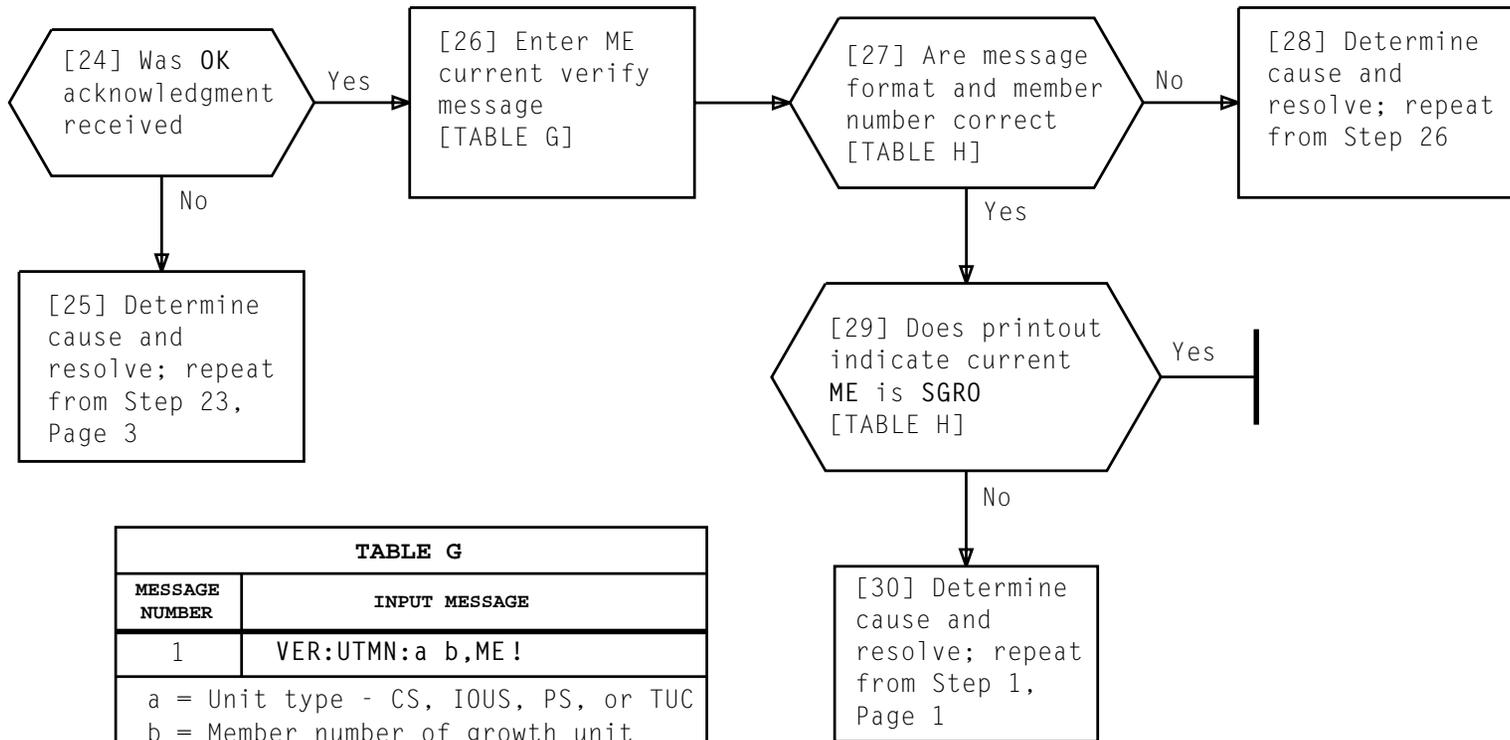


TABLE G	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:a b,ME!
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

TABLE H	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA ME SGRO
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

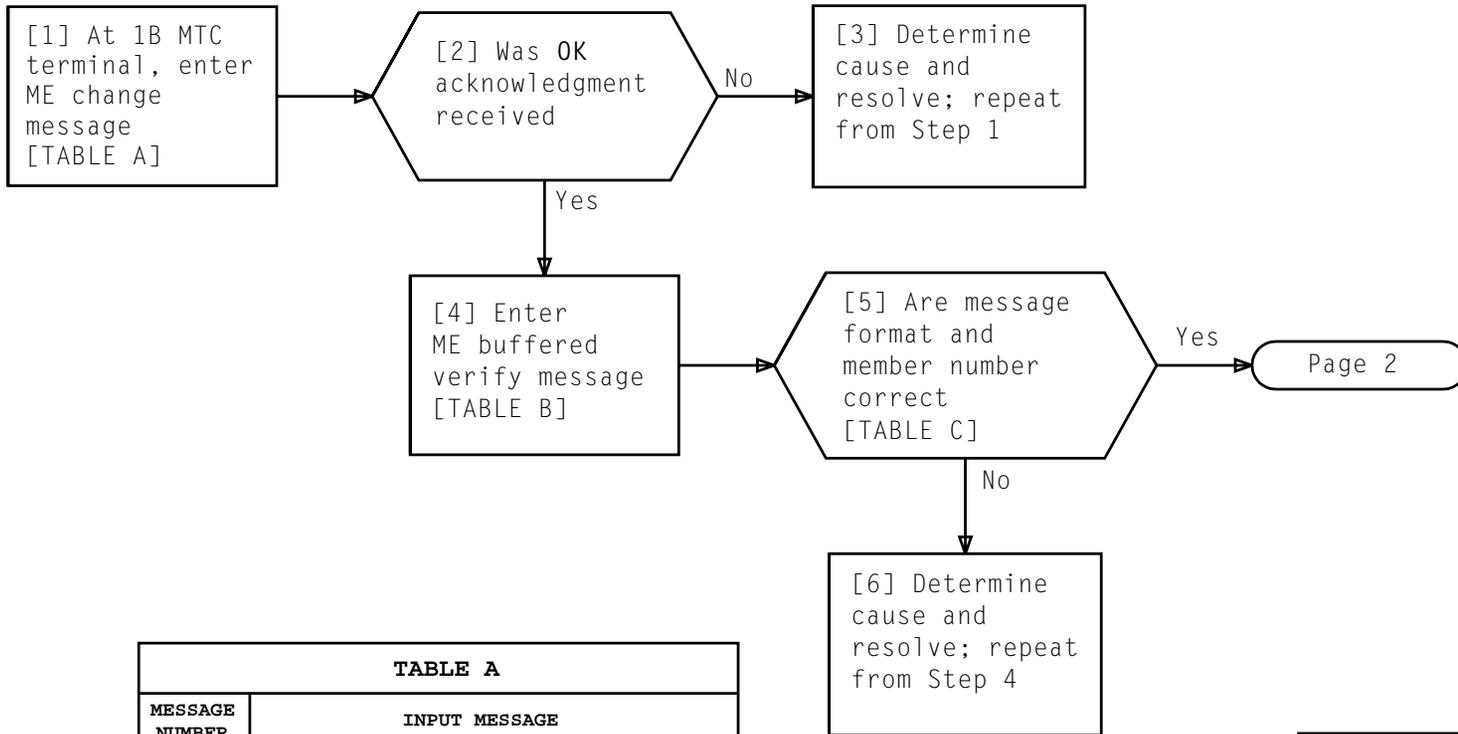


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	IN:XLBUF:a b,ME (SGRO,OPER)!
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

TABLE B	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN;BUF:a b,ME!
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

TABLE C	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA ME OPER
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

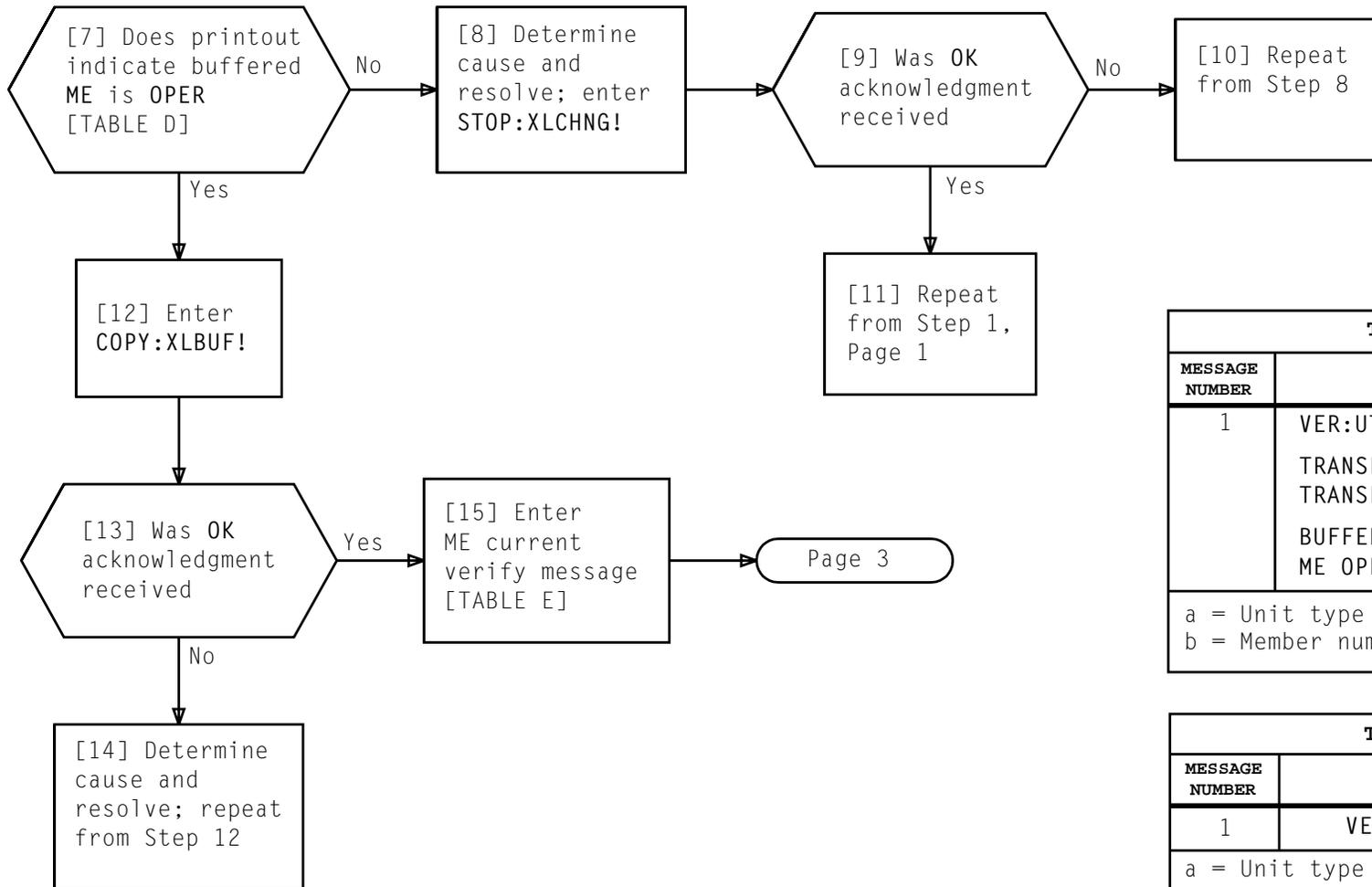


TABLE D	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA ME OPER
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

TABLE E	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:a b,ME!
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

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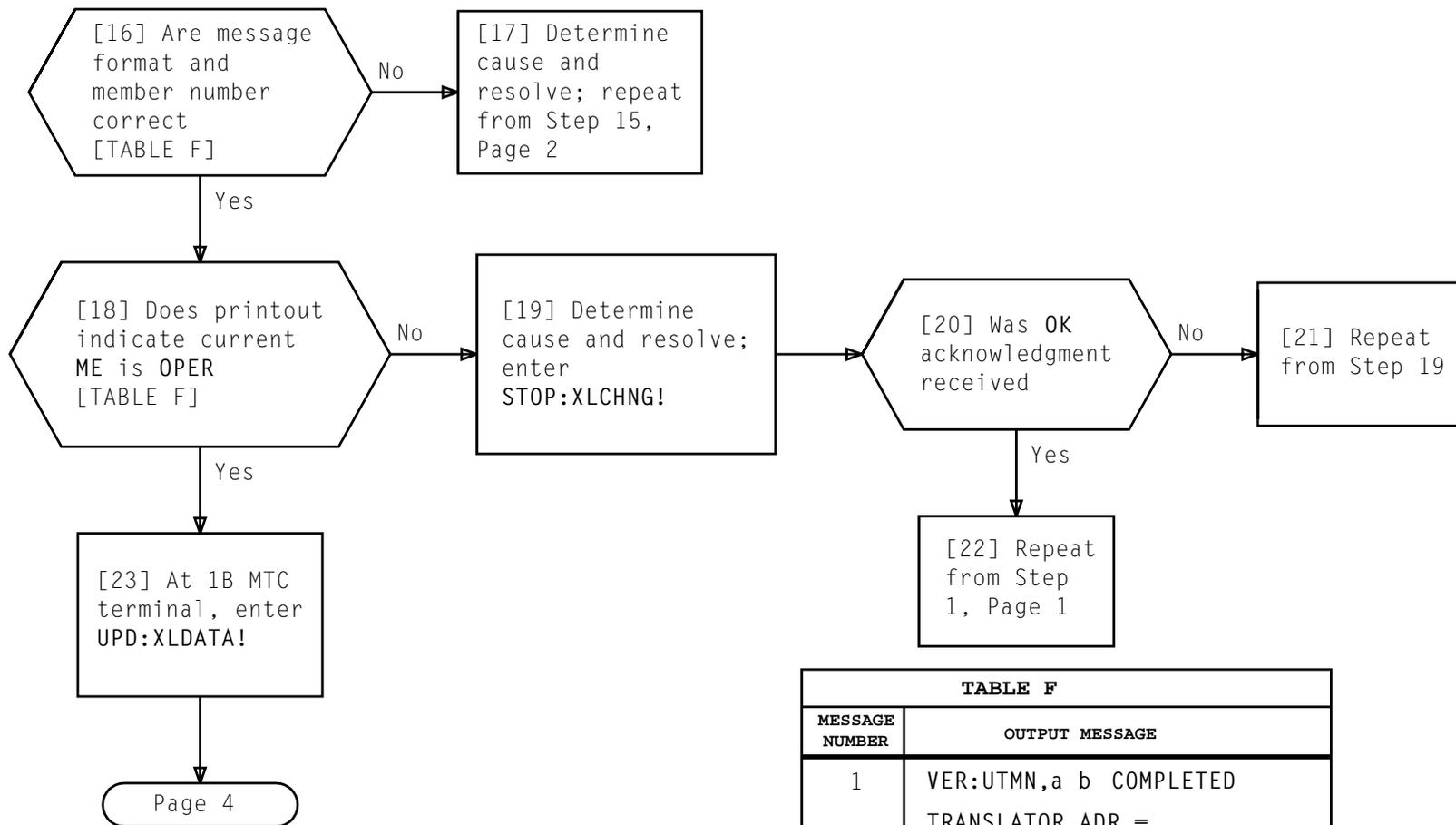


TABLE F	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA ME OPER
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

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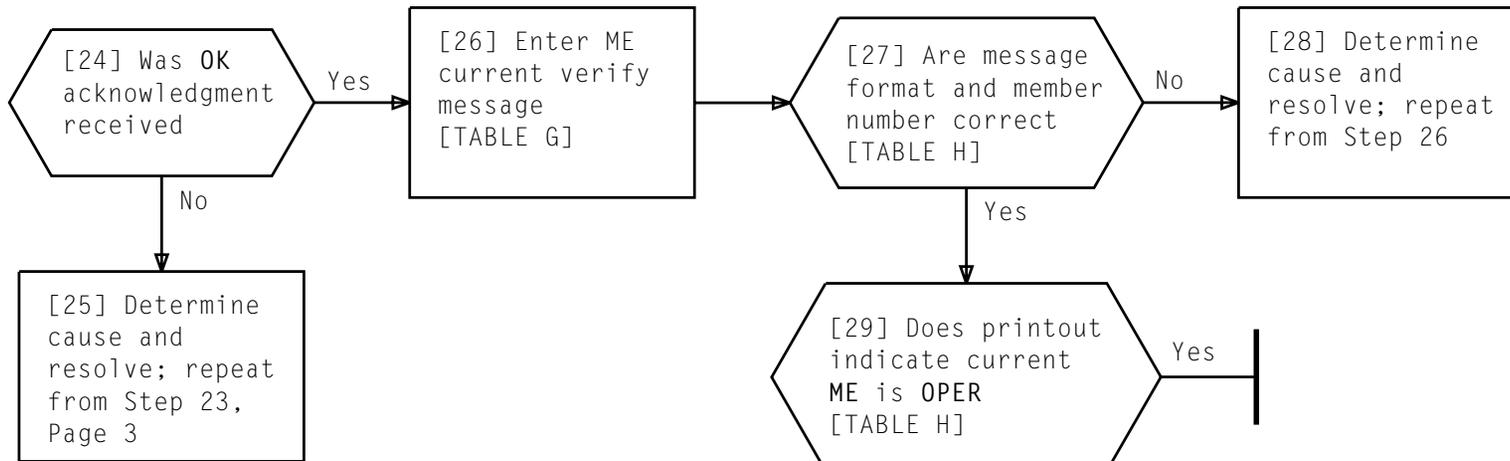


TABLE G	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:a b,ME!
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

TABLE H	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA ME OPER
a = Unit type - CS, IOUS, PS, or TUC b = Member number of growth unit	

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SUMMARY

Enter change message to degrow member equipage (ME) from OPER to SGRO, and/or from SGRO to GROW, and/or from GROW to UNEQ. Verify buffered ME, enter copy message, and verify current ME for each required change in state. If after

each verify, ME is not in right state, enter stop message and start change from beginning. After all required changes in equipage are in copy state, enter update message and verify current ME

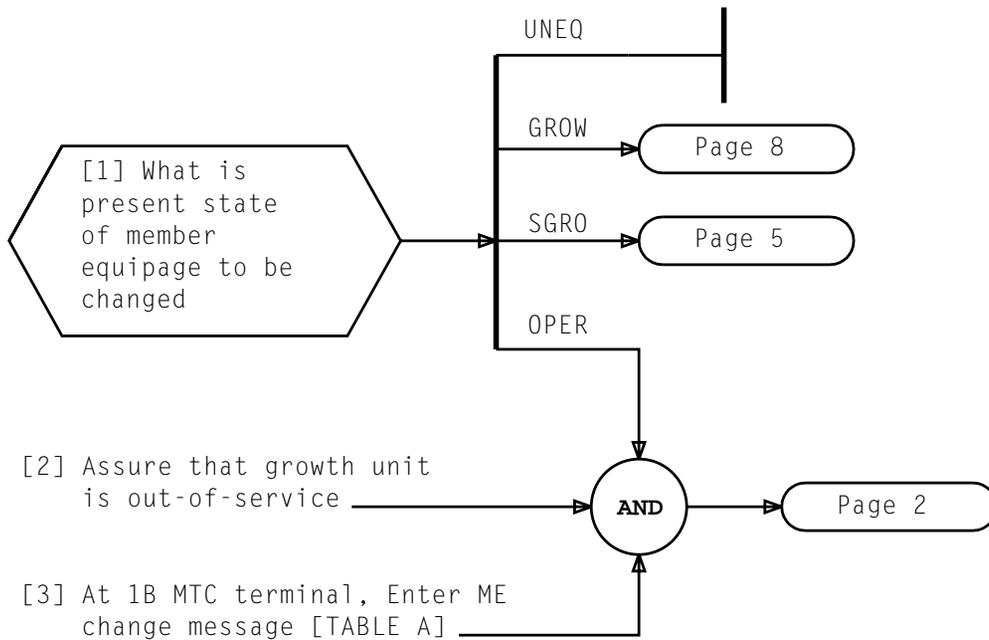


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	IN:XLBUF:a b,ME (OPER,SGRO)!
a = Unit type - CS, DUS, IOUS, PS, or TUC b = Member number of unit	

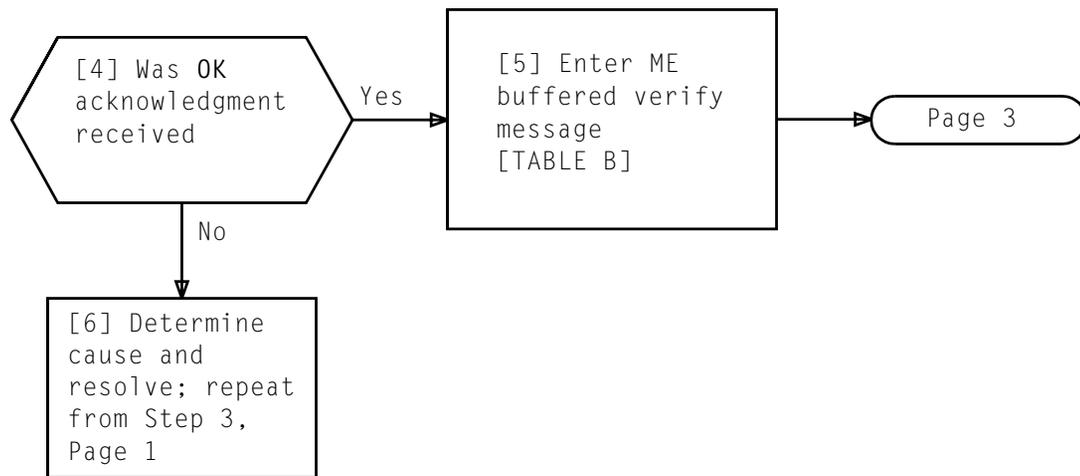


TABLE B	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN;BUF:a b,ME!
a = Unit type – CS, DUS, IOUS, PS, or TUC b = Member number of unit	

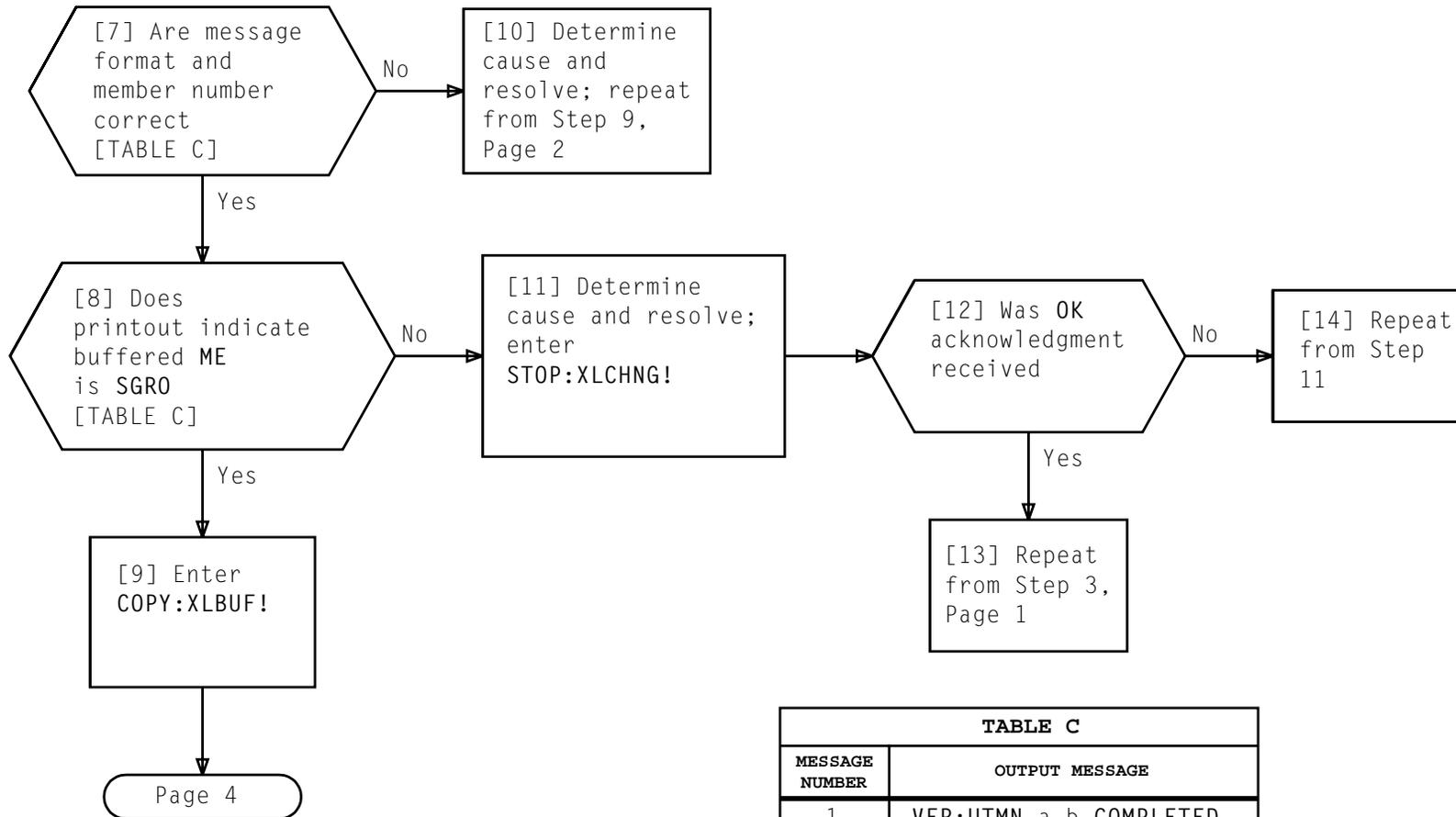


TABLE C	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN, a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA ME SGRO
a = Unit type b = Member number of unit	

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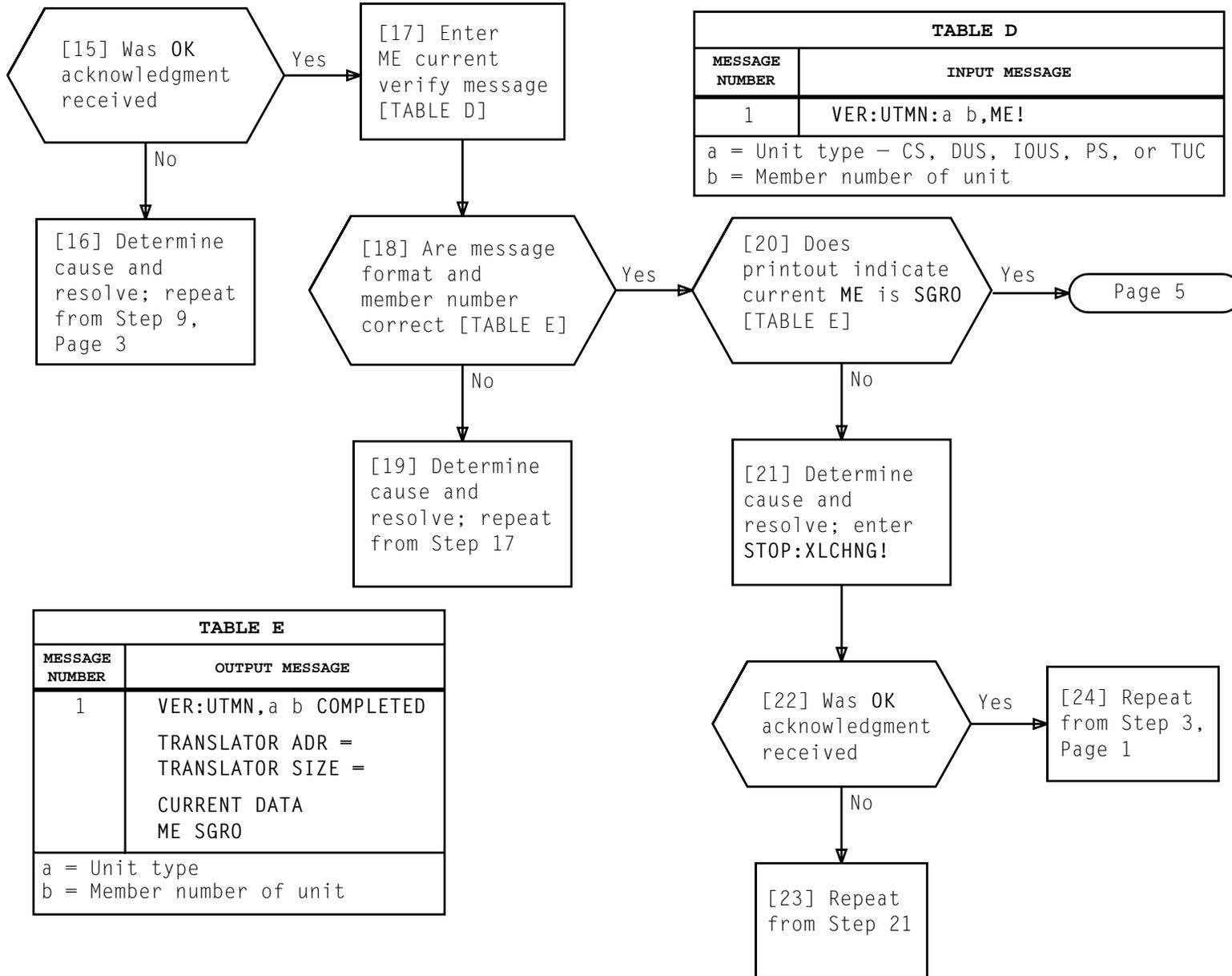


TABLE D	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:a b,ME!
a = Unit type - CS, DUS, IOUS, PS, or TUC b = Member number of unit	

TABLE E	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA ME SGRO
a = Unit type b = Member number of unit	

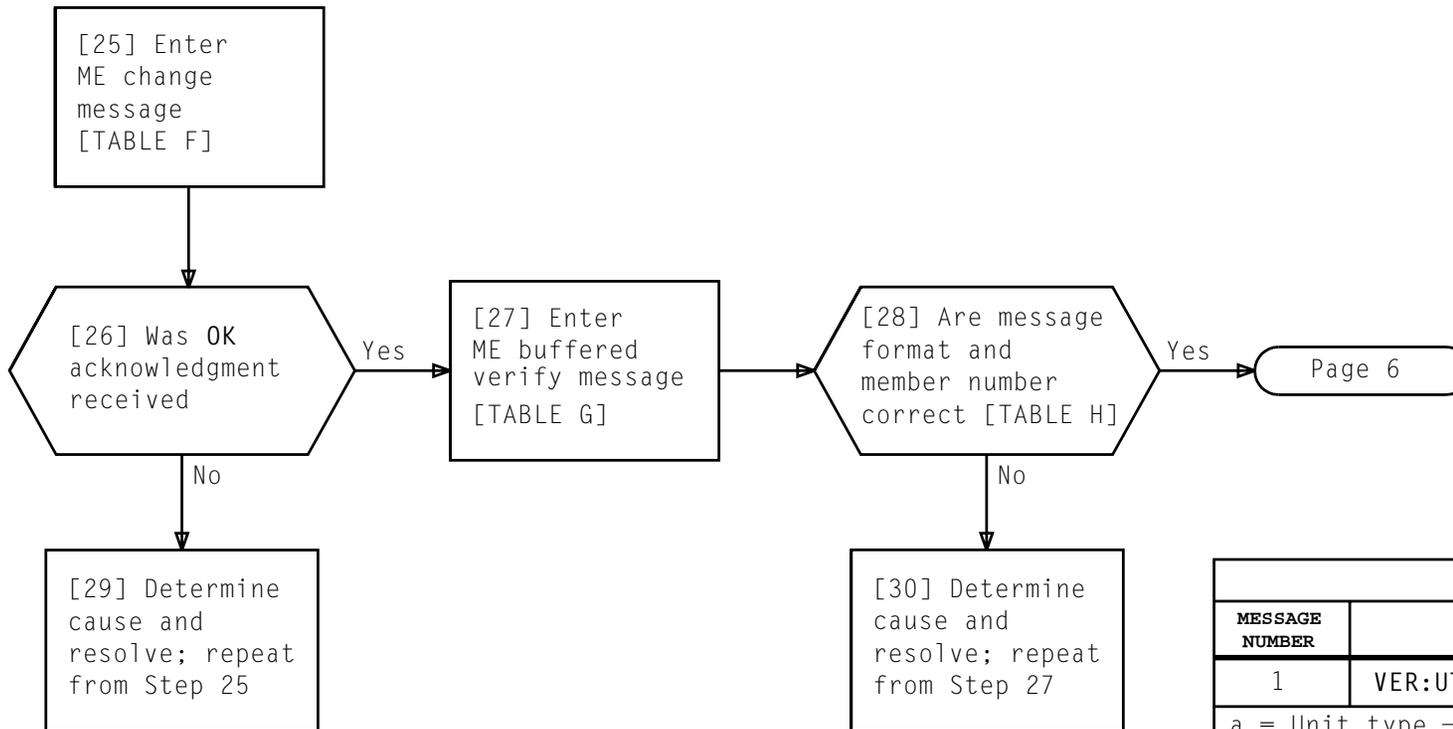


TABLE G	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN;BUF:a b,ME!
a = Unit type – CS, DUS, IOUS, PS, or TUC b = Member number of unit	

TABLE F	
MESSAGE NUMBER	INPUT MESSAGE
1	IN:XLBUF:a b,ME (SGRO,GROW)!
a = Unit type – CS, DUS, IOUS, PS, or TUC b = Member number of unit	

TABLE H	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA ME GROW
a = Unit type b = Member number of unit	

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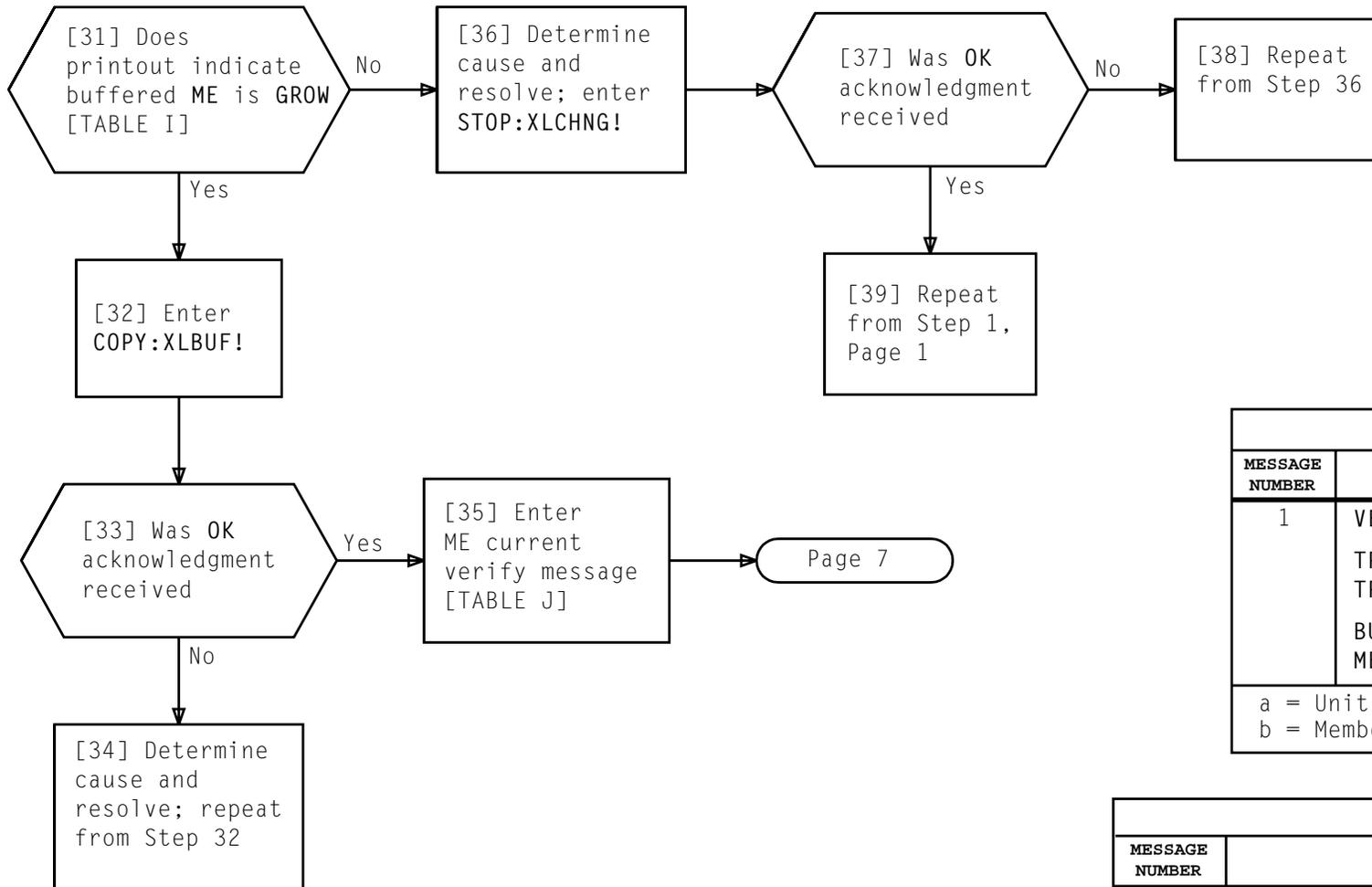


TABLE I	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA ME GROW
a = Unit type b = Member number of unit	

TABLE J	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:a b,ME!
a = Unit type - CS, DUS, IOUS, PS, or TUC b = Member number of unit	

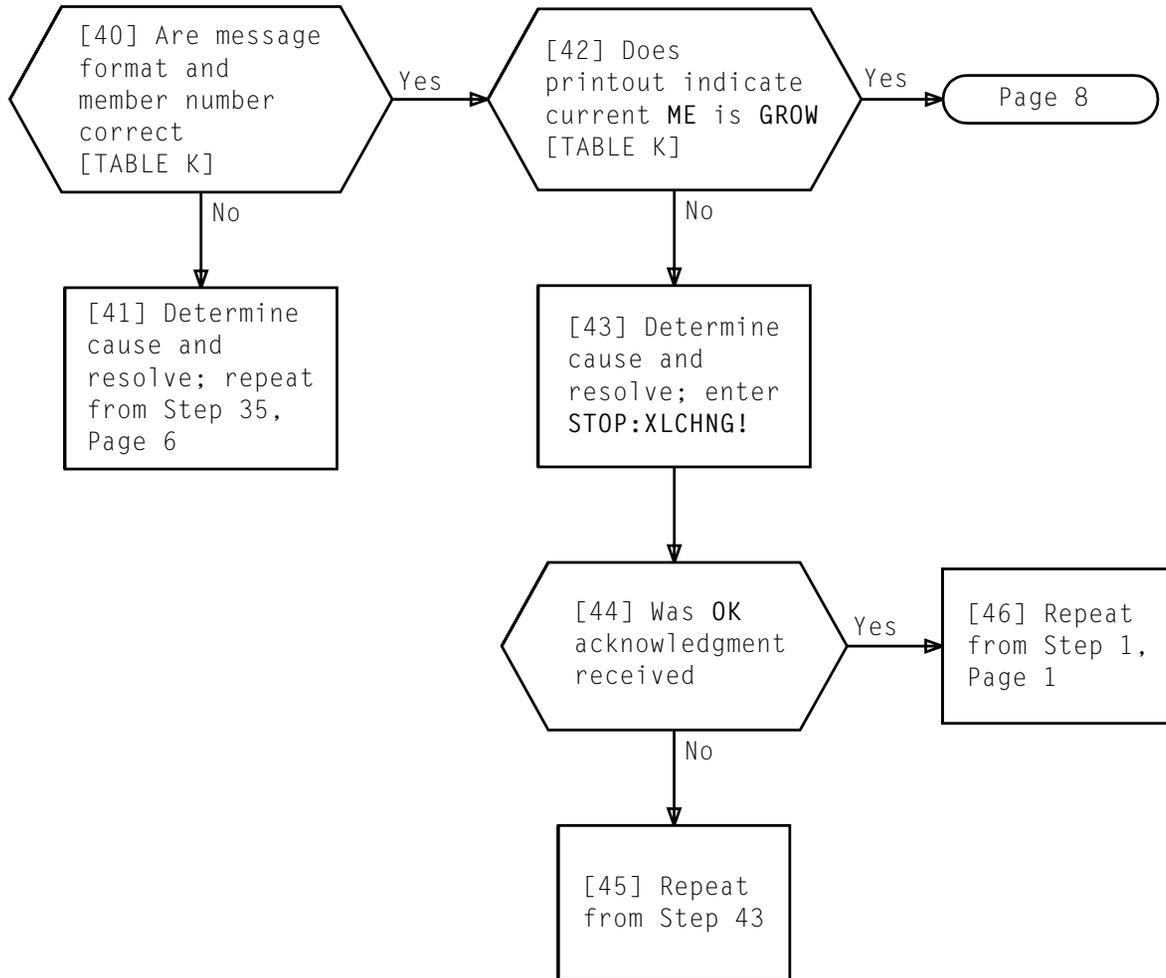


TABLE K	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA ME GROW
a = Unit type b = Member number of unit	

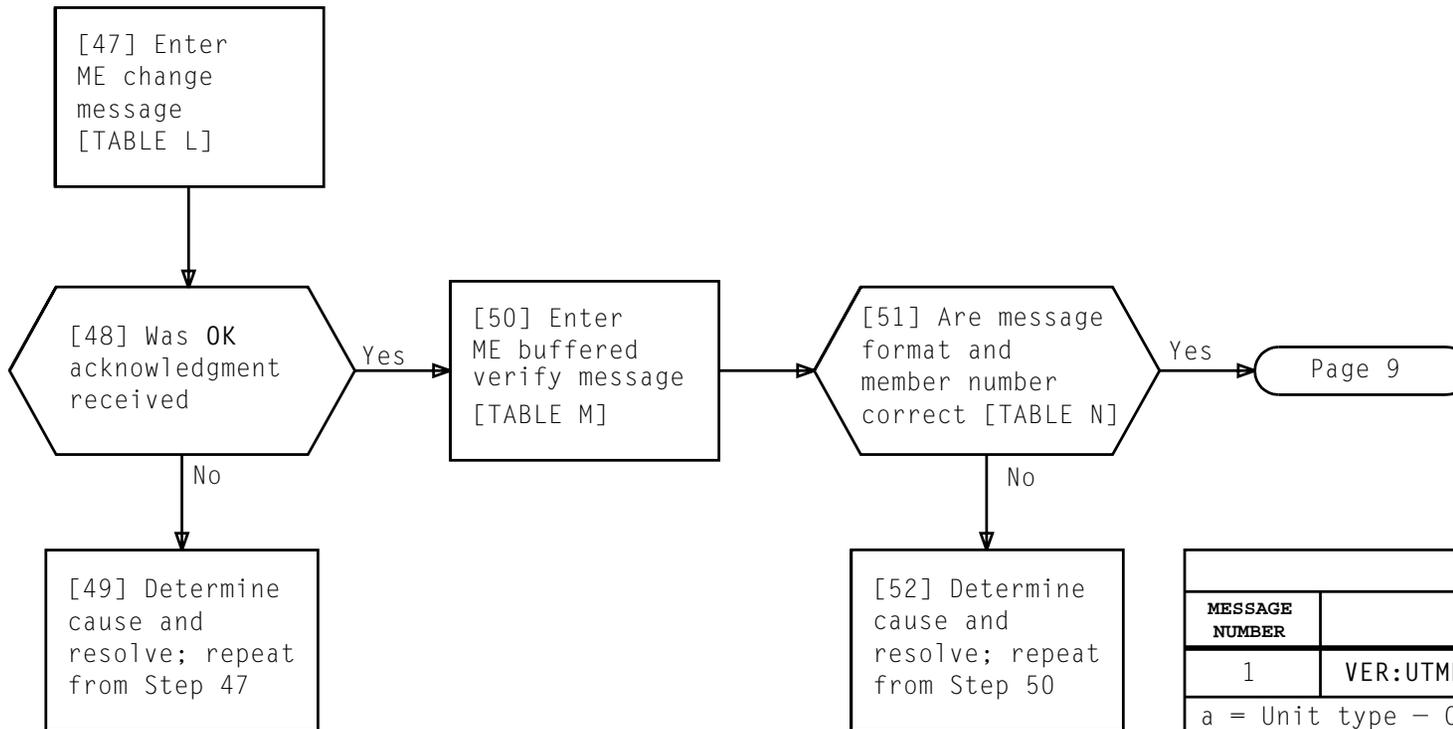


TABLE M	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN;BUF:a b,ME!
a = Unit type – CS, DUS, IOUS, PS, or TUC b = Member number of unit	

TABLE L	
MESSAGE NUMBER	INPUT MESSAGE
1	IN:XLBUF:a b,ME (GROW,UNEQ)!
a = Unit type – CS, DUS, IOUS, PS, or TUC b = Member number of unit	

TABLE N	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA ME UNEQ
a = Unit type b = Member number of unit	

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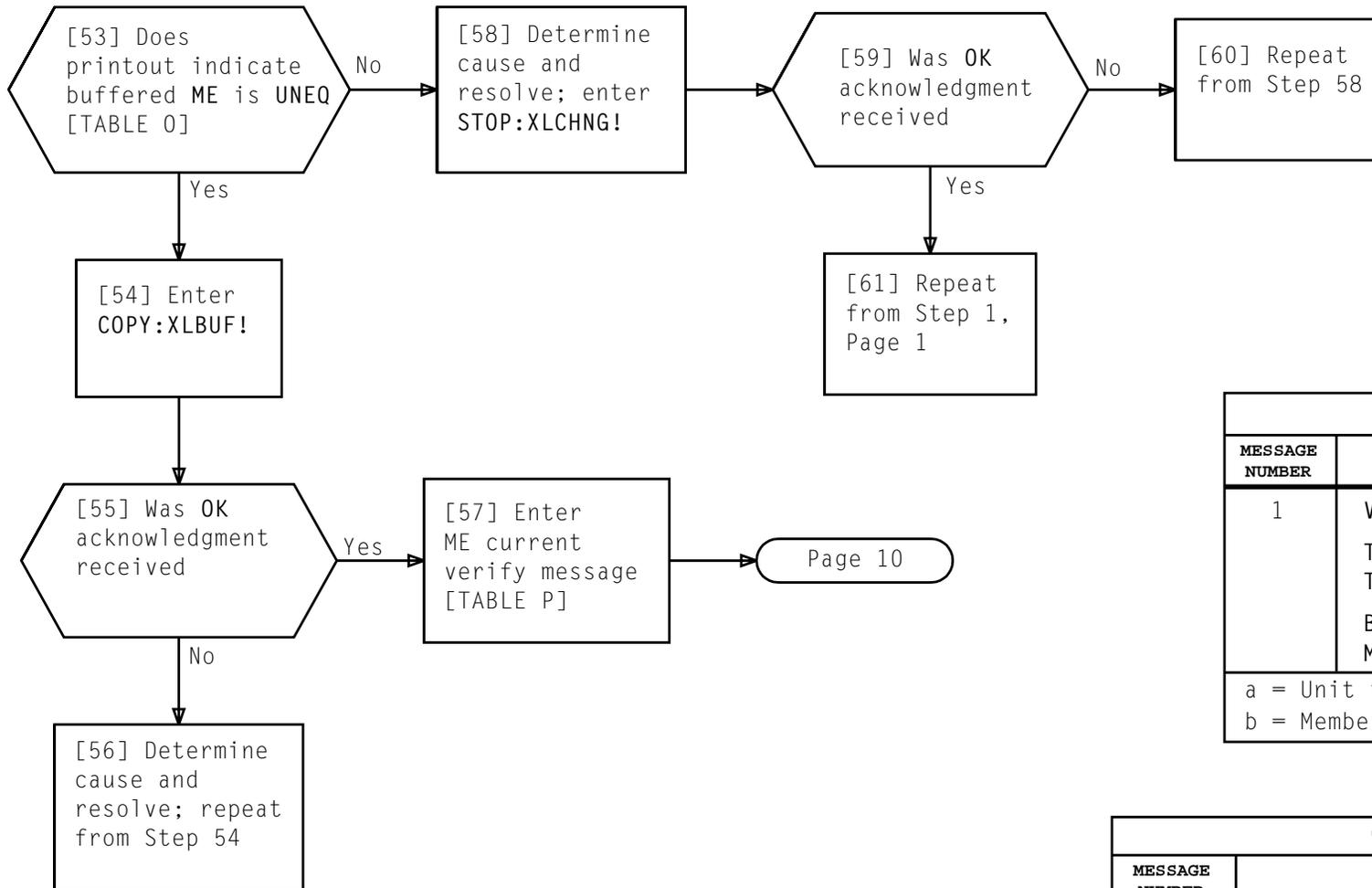


TABLE O	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA ME UNEQ
a = Unit type b = Member number of unit	

TABLE P	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:a b,ME!
a = Unit type - CS, DUS, IOUS, PS, or TUC b = Member number of unit	

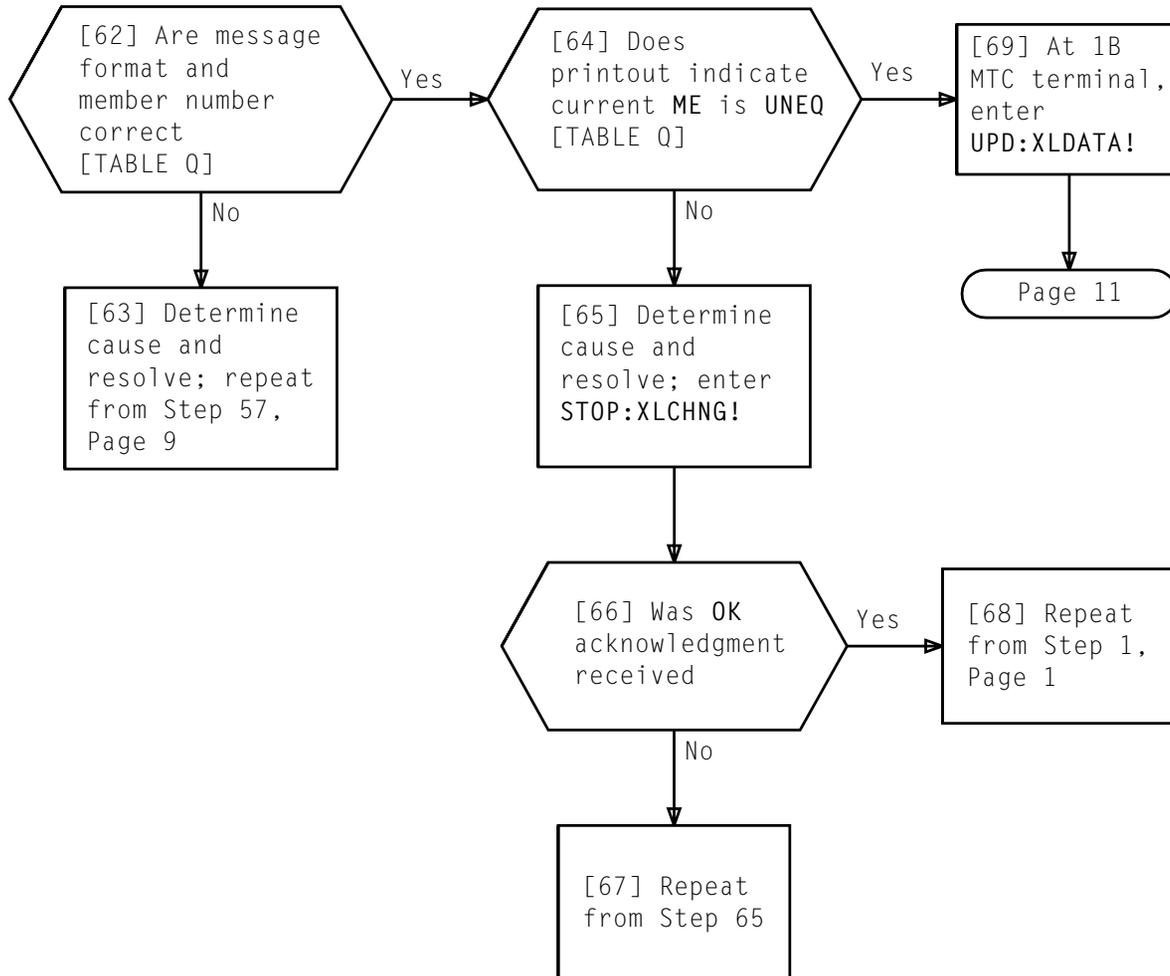


TABLE Q	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA ME UNEQ
a = Unit type b = Member number of unit	

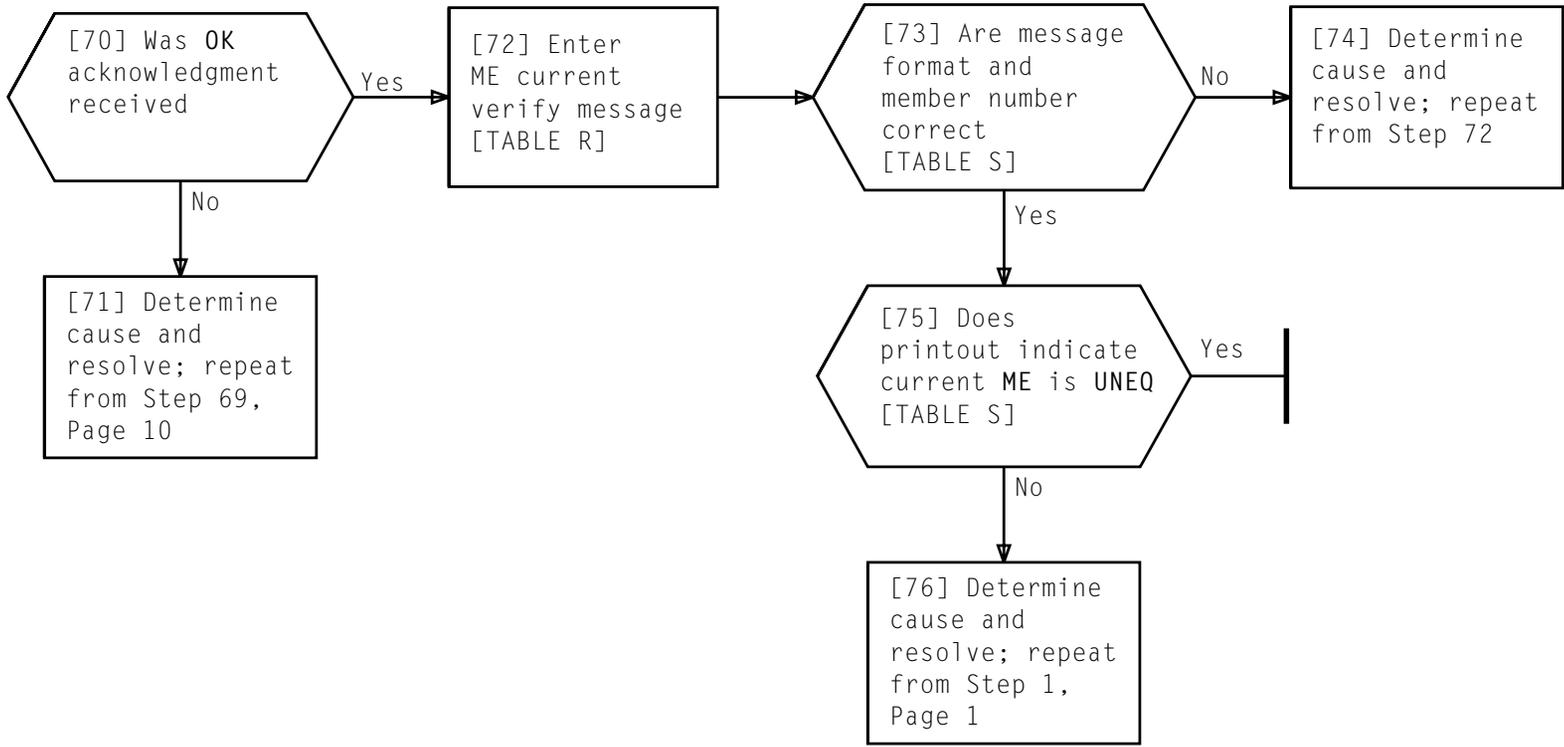


TABLE R	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:a b,ME!
a = Unit type - CS, DUS, IOUS, PS, or TUC b = Member number of unit	

TABLE S	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA ME UNEQ
a = Unit type b = Member number of unit	

[1] At power control switch on circuit pack, **KLW1** for growth CS, operate **ROS/NORM** switch to **NORM** and observe LEDs for TABLE A indications

[2] At SREC1 terminal, determine if printout was received per TABLE B

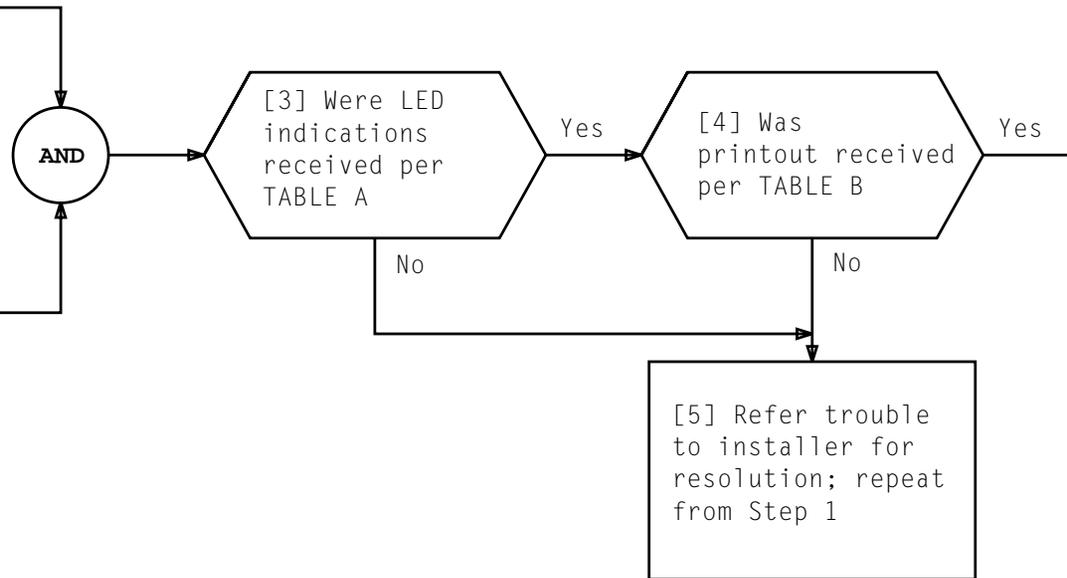
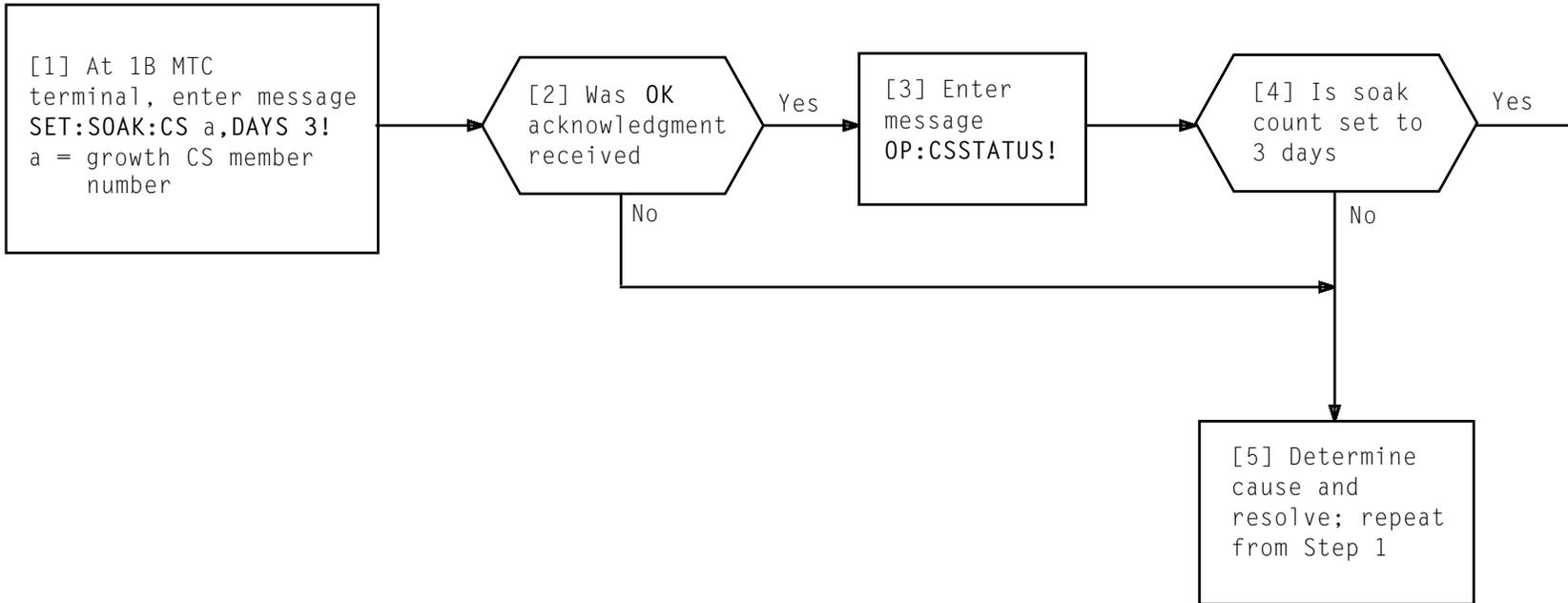


TABLE A	
LED	INDICATION
ACK*	On then Off
OS	Remains On

* expected indication may take a short period of time to be received

TABLE B	
MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN: CS a COMPLETED CATP (20000000 00000000) MSG COMPL RST: CS a STOPPED MCODE ALREADY DUPLICATED

a = member number of growth CS



[1] Using TABLE A, determine location of power control switch on circuit pack **KLW25** associated with standby MUP

[2] At power control switch on circuit pack **KLW25**, determined in Step 1, operate **ROS/NORM** switch to **ROS** and observe LEDs for TABLE B indications

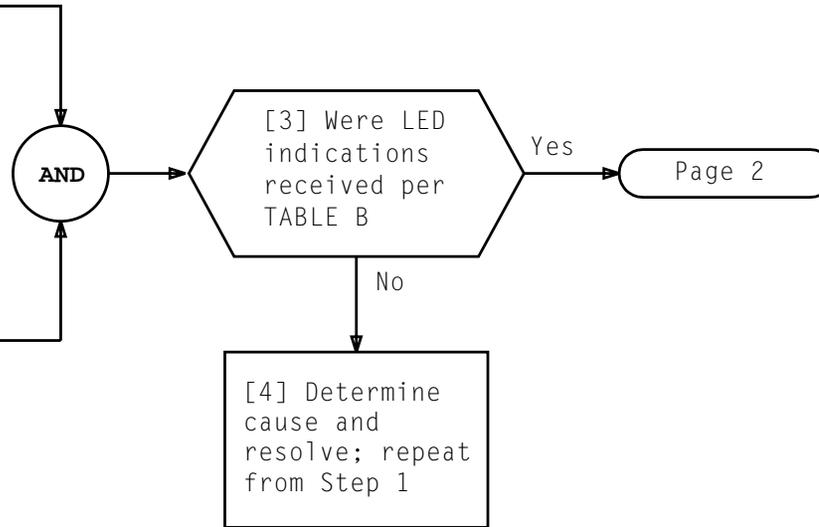
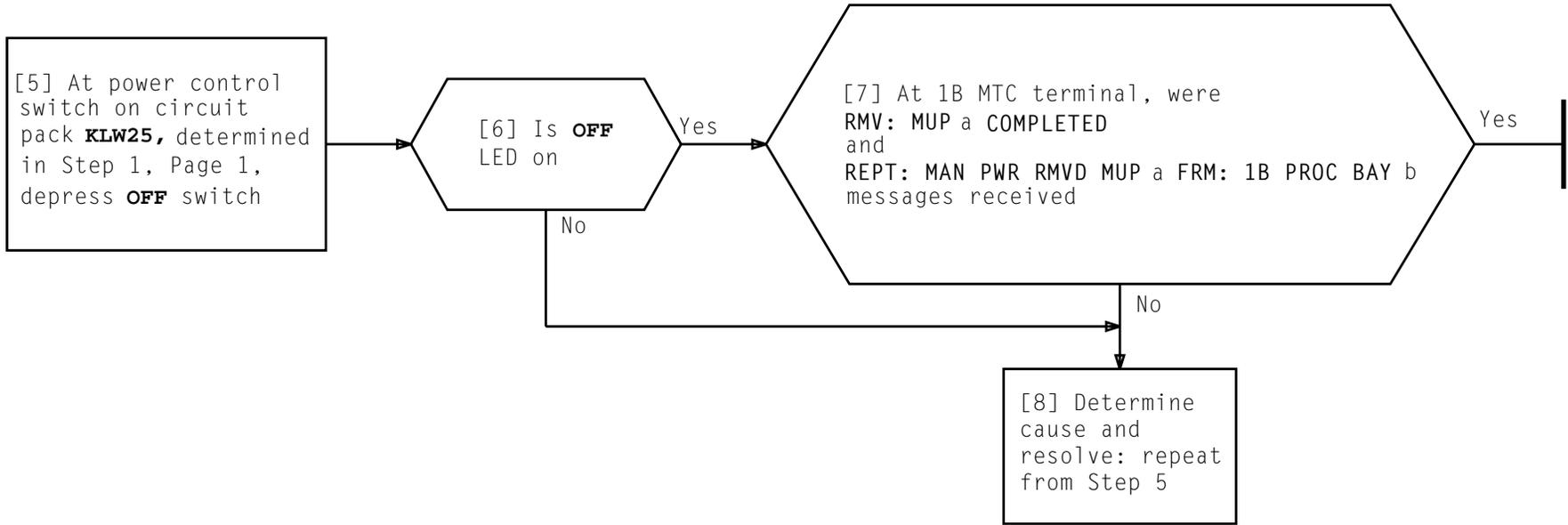
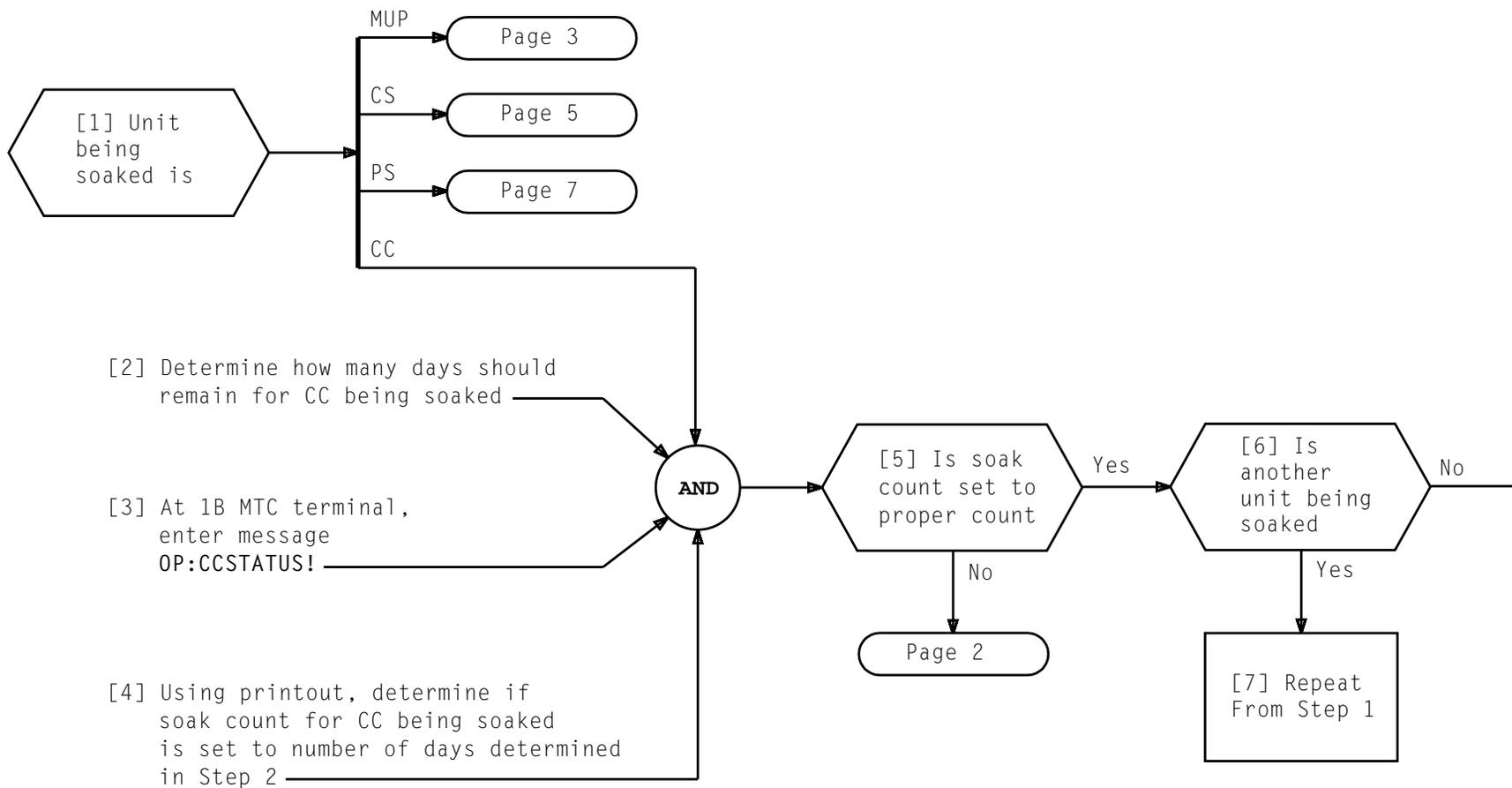


TABLE A		
MUP	CABINET	EQUIPMENT LOCATION
0	0	058-086
1	1	158-086

TABLE B	
LED	INDICATION
ACK*	On then Off
OS	On

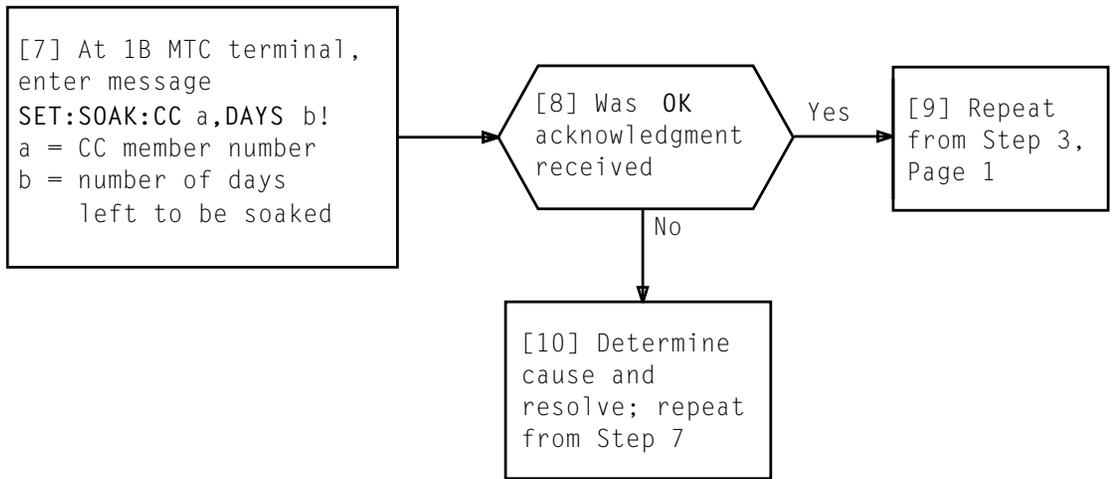
* expected indication may take a short period of time to be received





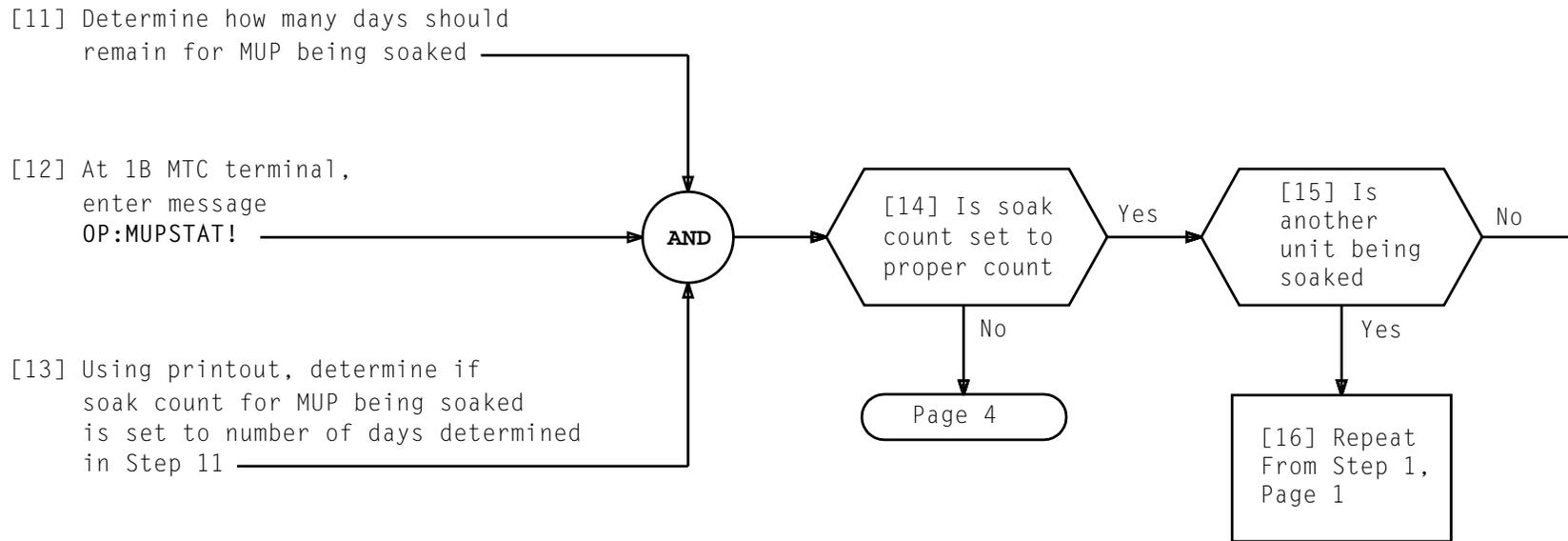
VERIFY SOAK COUNT AFTER FAILURE HAS OCCURRED

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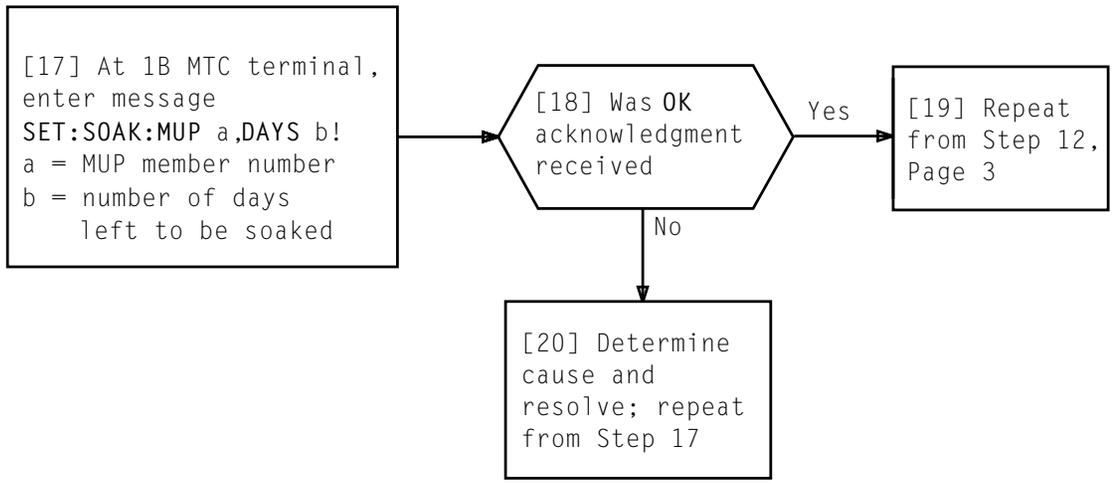
VERIFY SOAK COUNT AFTER FAILURE HAS OCCURRED

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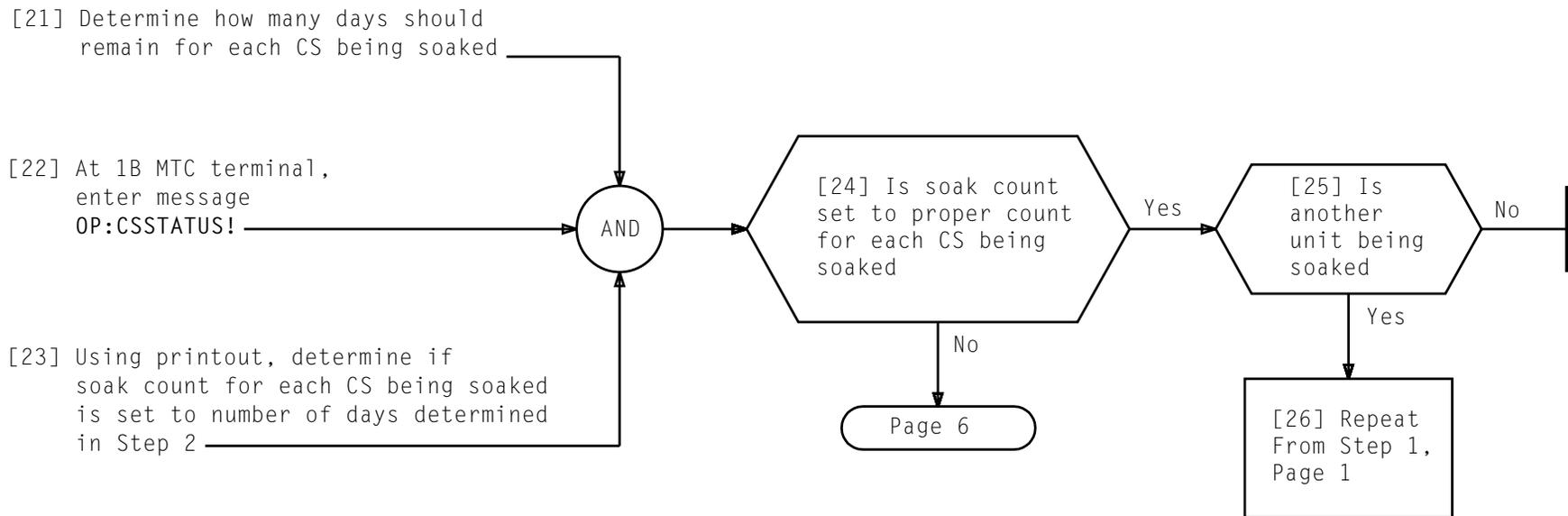
VERIFY SOAK COUNT AFTER FAILURE HAS OCCURRED

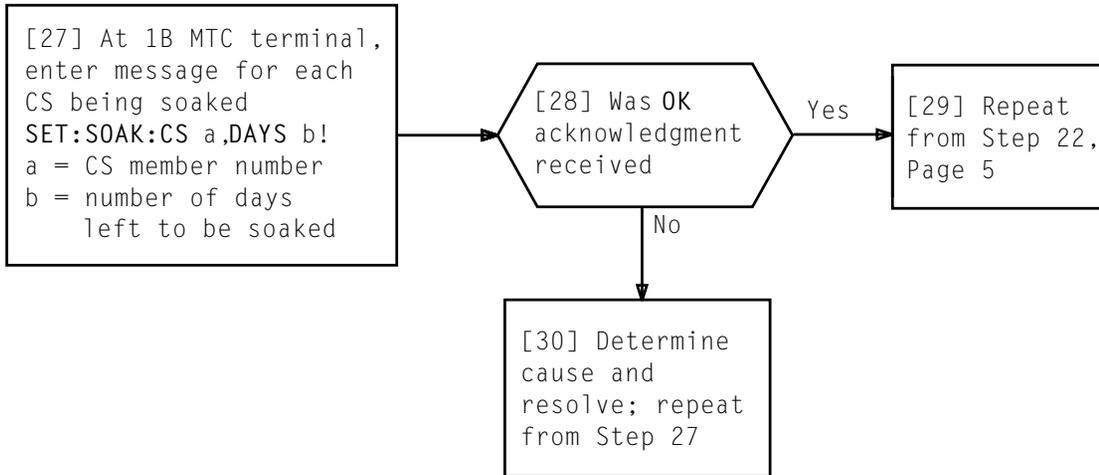
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VERIFY SOAK COUNT AFTER FAILURE HAS OCCURRED

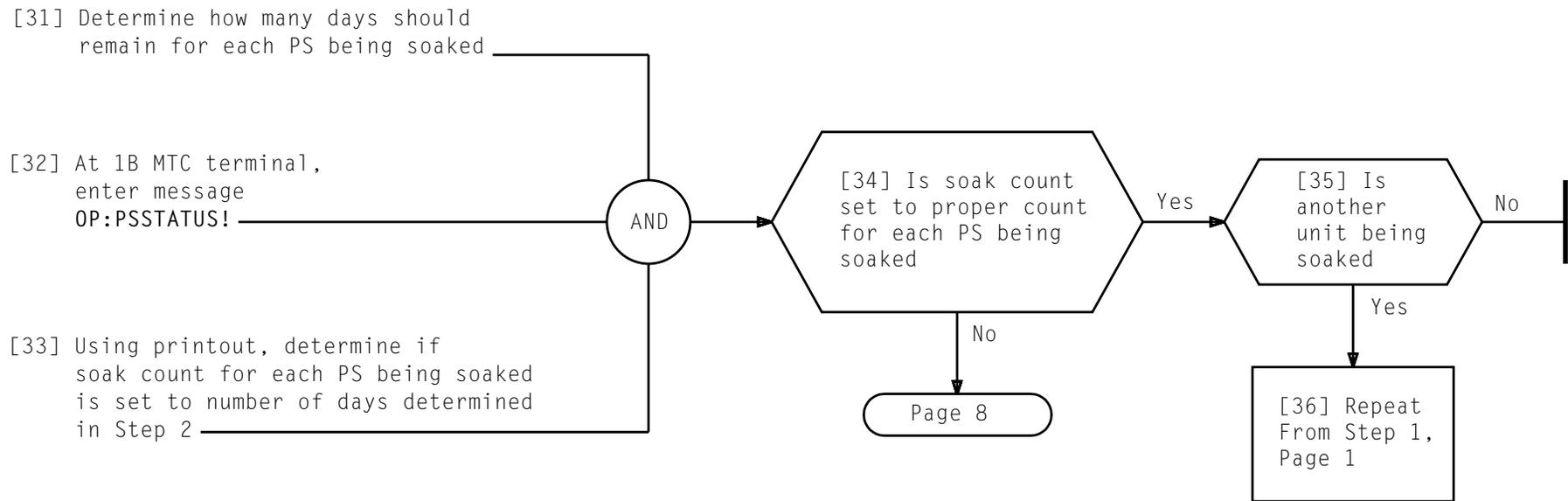
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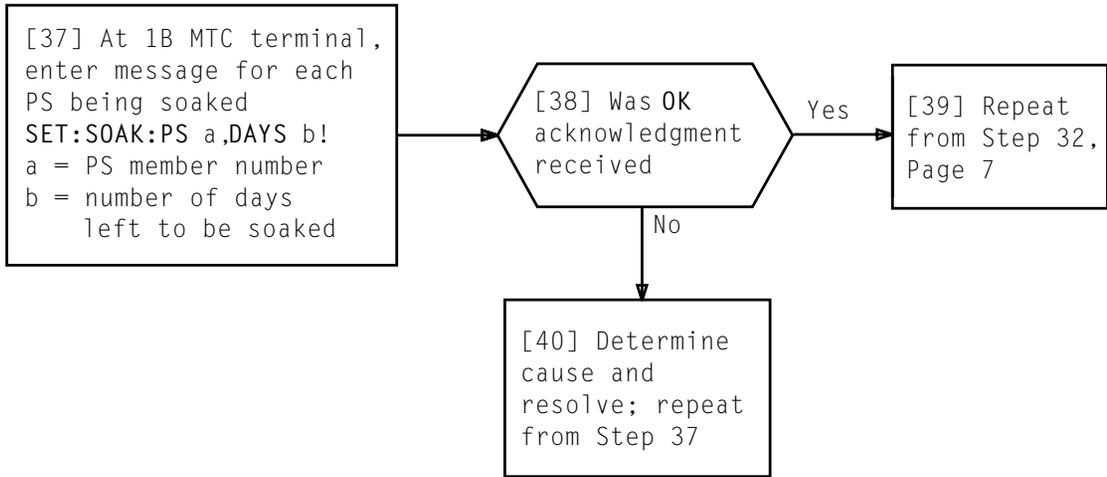
VERIFY SOAK COUNT AFTER FAILURE HAS OCCURRED

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VERIFY SOAK COUNT AFTER FAILURE HAS OCCURRED

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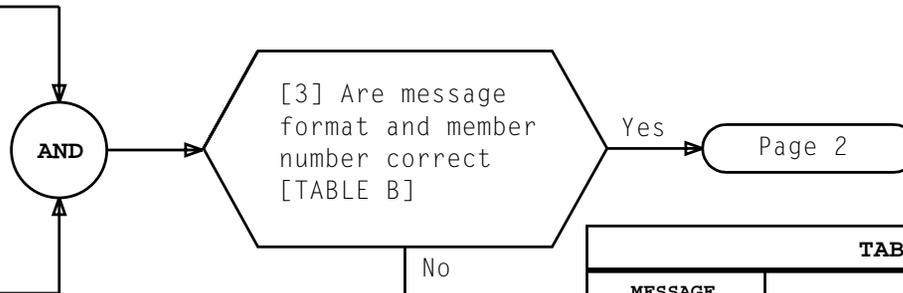
VERIFY SOAK COUNT AFTER FAILURE HAS OCCURRED

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[1] See NOTE 1. Obtain HG for growth unit type from functional ODA listing or TG-4 and record for later use

[2] Enter HG verify message [TABLE A]

TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN;BOTH:a b,HG!
a = Unit type being changed (CS, IOUS, or PS)	
b = Member number of unit type	



[4] Determine cause and resolve; repeat from Step 2

TABLE B	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA NONE CURRENT DATA HG = c
a = Unit type being changed (CS, IOUS, or PS) b = Member number of unit type c = HG value to be used as old data in change message	

NOTE 1
If data cannot be determined from office record drawing, consult with office engineer

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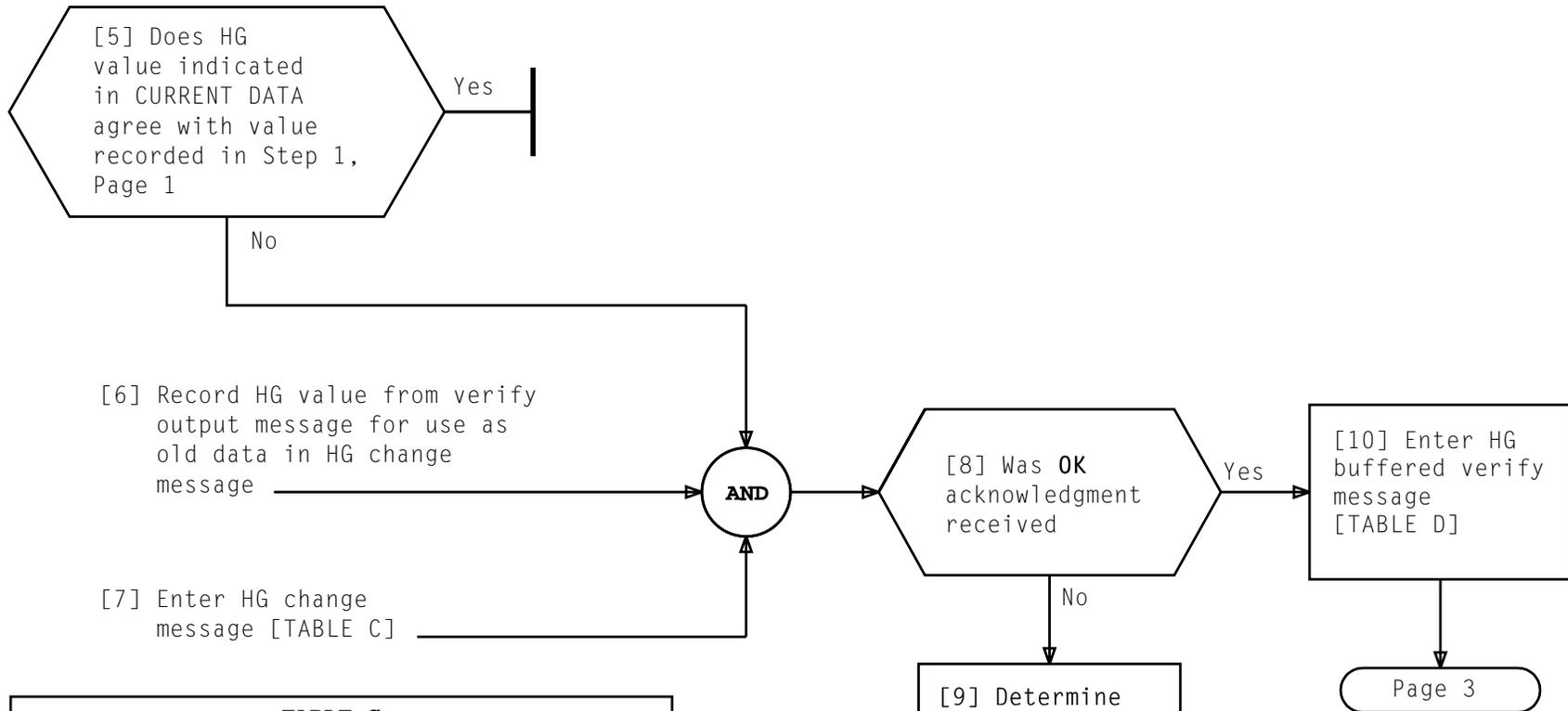


TABLE C	
MESSAGE NUMBER	INPUT MESSAGE
1	IN:XLBUF:a b,HG (c,d)!
a = Unit type being changed (CS, IOUS, or PS)	
b = Member number	
c = Old data recorded from HG current verify	
d = New data recorded from office record drawing	

TABLE D	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN;BUF:a b,HG!
a = Unit type being changed (CS, IOUS, or PS)	
b = Member number of unit type	

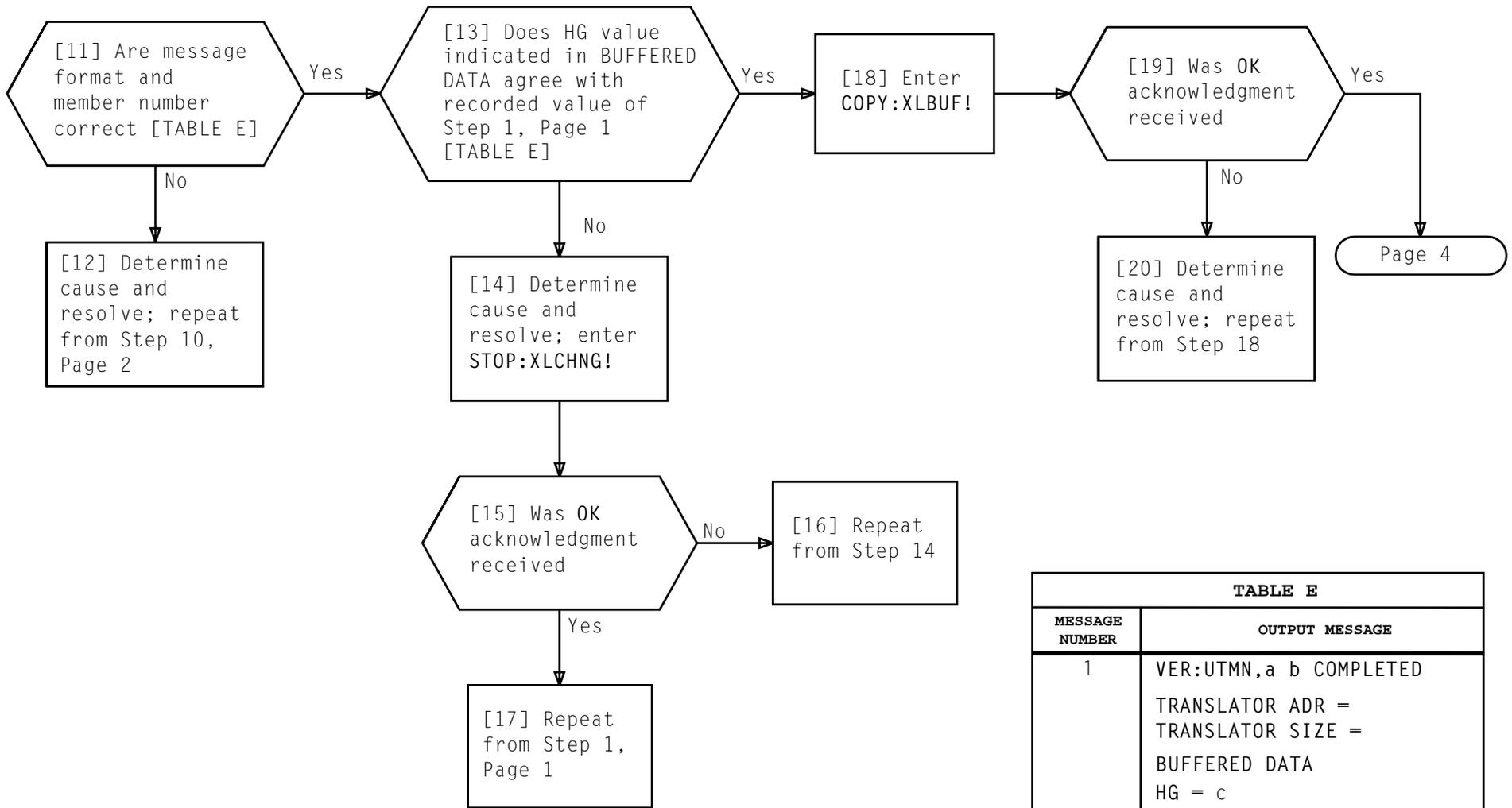


TABLE E	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA HG = c
a = Unit type being changed (CS, IOUS, or PS) b = Member number of unit type c = HG value of unit type	

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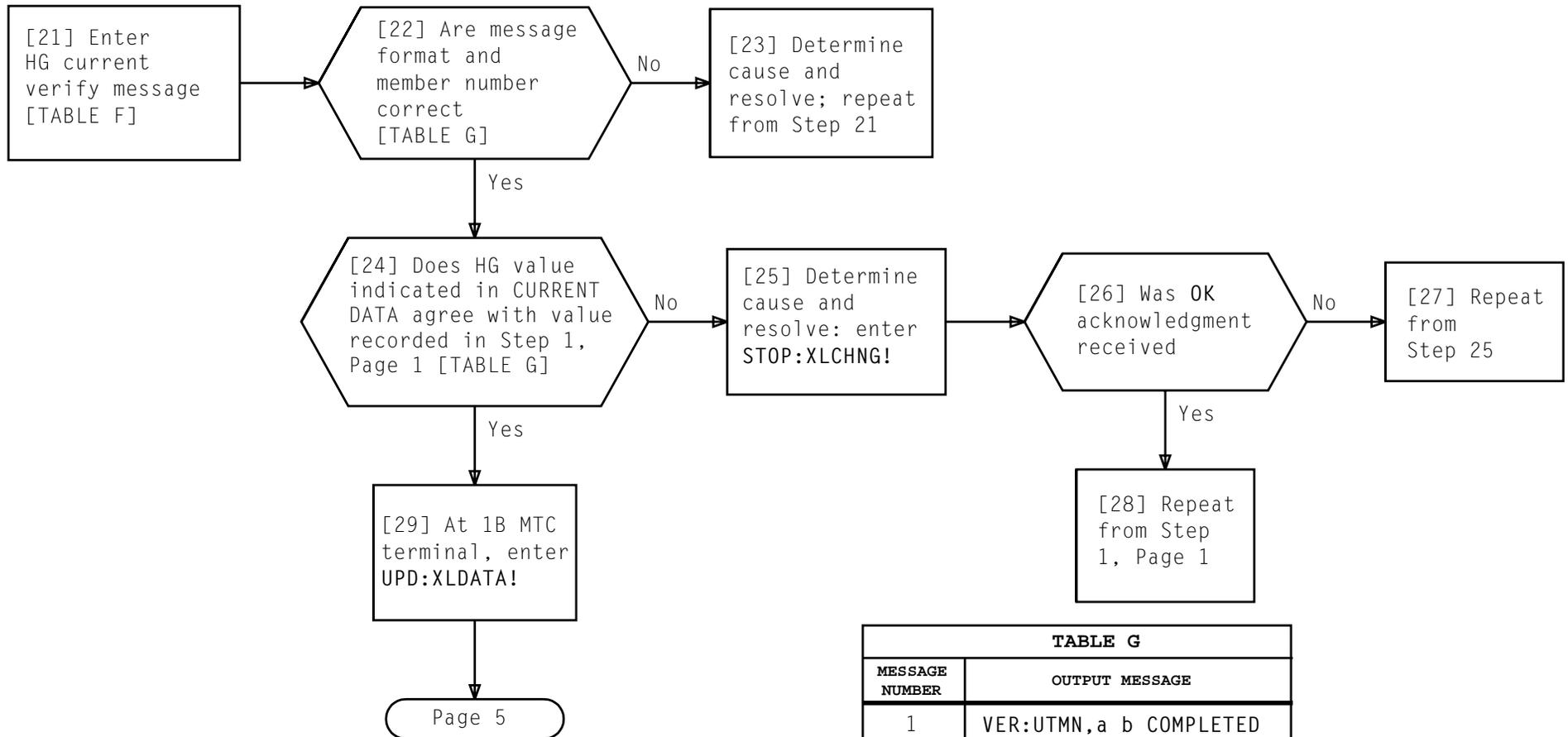


TABLE F	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:a b,HG!
a = Unit type being changed (CS, IOUS, or PS)	
b = Member number of unit type	

TABLE G	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA HG = c
a = Unit type being changed (CS, IOUS, or PS)	
b = Member number of unit type	
c = HG value of unit type	

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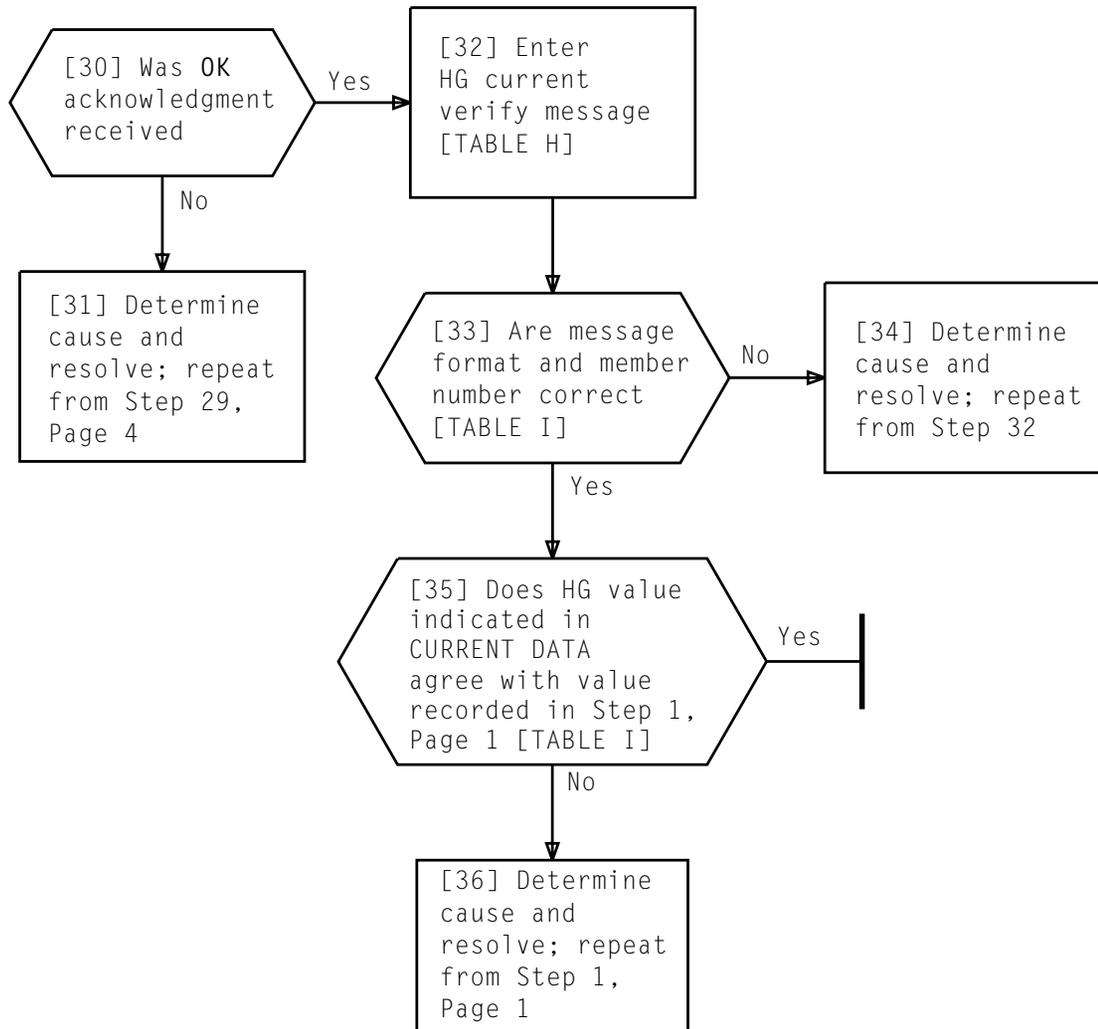


TABLE H	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:a b,HG!
a = Unit type being changed (CS, IOUS, or PS) b = Member number of unit type	

TABLE I	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA HG = c
a = Unit type being changed (CS, IOUS, or PS) b = Member number of unit type c = HG value of unit type	

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TABLE A

ERROR CODE	EXPLANATION
11	ERROR IN OR INVALID MSG FLG. (ADDED TO ABORT PREFIX)
12	TIMEOUT. NO MSG INPUT
201	UPD:XLDAPATA MESSAGE INPUT ON ILLEGAL CHANNEL The UPD:XLDAPATA message may be inputted only from the maintenance channel. If it is out-of-service, then the message will be accepted from the maintenance backup channel. This restriction is to assist user to avoid making permanent translation changes if those changes are causing interrupts and/or audits (which will be reported on the maintenance channel)
202	ATTEMPT MADE TO CHANGE EQUIPAGE STATE MORE THAN ONE STEP To avoid masking problems by skipping equipage states, only the following equipage state changes are allowed: UNEQ to GROW GROW to SGRO SGRO to OPER OPER to SGRO SGRO to GROW GROW to UNEQ
203	EQUIPAGE STATE INPUT AS CURRENT SYSTEM VALUE DOES NOT MATCH CURRENT SYSTEM VALUE Use VER:UTMN to determine current system value
204	INVALID EQUIPAGE MNEMONIC INPUT Valid mnemonics for equipage are: UNEQ GROW SGRO OPER
205	INVALID MESSAGE SEQUENCE No COPY:XLBUF message has been received. This must precede the UPD:XLDAPATA message
206	Unused
207	Unused
208	VALUE INPUT FOR GIVEN MNEMONIC EXCEEDS MAXIMUM VALUE ALLOWED FOR THAT FIELD Recheck input message section for limit on item size

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TABLE A (Contd)

ERROR CODE	EXPLANATION
209	Unused
210	Unused
211	MEMBER NUMBER INPUT IS GREATER THAN MAXIMUM ALLOWED FOR GIVEN UNIT TYPE Designated unit does not exist. Recheck message
212	Unused
213	MAIN MEMORY ADDRESS HAS NO FILE STORE BACKUP NOTE: Internal error. May indicate memory mutilation. Run SAWS audit. Seek aid
214	Unused
215	Unused
216	NO NEW EQUIPAGE DETECTED IN INPUT MESSAGE Recheck message and reenter
217	NO NEW VALUE DETECTED IN INPUT MESSAGE Recheck message and reenter
218	NO CURRENT EQUIPAGE DETECTED IN INPUT MESSAGE Recheck message and reenter
219	NO CURRENT VALUE DETECTED IN INPUT MESSAGE Recheck message and reenter
220	TRANSLATION CHANGE PROCEDURE NOT IN PROGRESS
221	DESIGNATED UNIT IS NOT OUT-OF-SERVICE OR IN NONOPERATIONAL EQUIPAGE STATE If translations must be changed for designated unit, use standard message to remove unit from service
222	NO UNIT TYPE, MEMBER NUMBER DETECTED IN INPUT MESSAGE Recheck message and reenter
223	VALUE INPUT AS CURRENT SYSTEM DATA DOES NOT MATCH CURRENT SYSTEM VALUE To determine current system value, use VER:UTMN
224	Unused

TABLE A (Contd)

ERROR CODE	EXPLANATION
225	ILLEGAL KEYWORD COMBINATION DETECTED Recheck message and reenter
226	DESIGNATED UNIT TYPE NOT SUPPORTED BY XAPP Check unit type mnemonic for typographical error. Recheck GENERAL INFORMATION for list of unit types supported by XAPP
227	EXTRA ARGUMENTS DETECTED IN INPUT MESSAGE Recheck message and reenter
228	SYSTEM HASH SUM UPDATE FAILURE DETECTED This failure MAY cause unrecoverable SAWS errors. If so, the system backup tape covering translation data must be mounted and SAST must be run to detect and correct the hash problem NOTE: If SAST correct mode is invoked, all XAPP changes made since tape was written will be removed. Such an action may not be consistent with current hardware configuration. If in doubt, seek aid
229	MERGE LOCKOUT INPUT FAILURE DETECTED NOTE: Internal error. May indicate memory mutilation. Run SAWS audit. Seek aid
230	MERGE LOCKOUT Another merge data changing client is in progress. This may be the tape-writing program (TWRP), recent change (RC), or any client which changes merge data or requires a stable copy of merge data. Wait until client completes; then reenter message
231	PREVIOUS COPY:XLBUF DID NOT COMPLETE Enter STOP:XLCHNG! This will require all changes since last UPD:XLDAPATA to be reentered
232	PREVIOUS UPD:XLDAPATA DID NOT COMPLETE Enter STOP:XLCHNG! This will require all changes entered since last UPD:XLDAPATA to be reentered
233	NO ARGUMENT DETECTED FOR KEYWORD 'IOUC' Recheck message and reenter
234	Unused
235	IOUS EQUIPAGE IS LESS THAN ATTACHED IOUC EQUIPAGE A subordinate unit cannot be in an equipage state higher than the controlling unit. If growing, grow the controlling unit first. If degrowing, degrow the subordinate unit first

TABLE A (Contd)

ERROR CODE	EXPLANATION
236	IOUC EQUIPAGE IS LESS THAN ATTACHED PORT EQUIPAGE A subordinate unit cannot be in an equipage state higher than the controlling unit. If growing, grow the controlling unit first. If degrowing, degrow the subordinate unit first
237	ONE OR MORE REQUIRED IOUC PARAMETERS HAVE NOT BEEN INPUTTED In order to build related IO tables, all channel parameters must be inputted before channel is moved from UNEQ equipage state
238	ATTEMPT TO CHANGE CHANNEL PARAMETER WHEN CHANNEL IS OPERATIONAL In order to build related IO tables, most channel parameters may be changed only if channel is not in the OPER equipage state. Degrow channel to SGRO, make change, and grow to OPER
239	INVALID ARGUMENT MNEMONIC DETECTED Acceptable arguments for this keyword are: Y (indicates YES or EQUIPPED) N (indicates NO or NOT EQUIPPED)
240	NO ARGUMENT DETECTED FOR KEYWORD 'SPD' Recheck message and reenter
241	INVALID CHANNEL SPEED INPUT Recheck message and reenter
242	NO ARGUMENT DETECTED FOR KEYWORD 'TRMTYP' Recheck message and reenter
(Continued on Page 5)	

TABLE A (Contd)

ERROR CODE	EXPLANATION
243	INVALID TERMINAL TYPE INPUT Valid mnemonics are: NONE – no terminal equipment P – printer T – tape KD – keyboard, display KP – keyboard, printer PT – printer, tape KDP – keyboard, display, printer KPT – keyboard, printer, tape KDPT – keyboard, display, printer, tape KDT – keyboard, display, tape
244	DUPLICATE CHANNEL ASSIGNMENT DETECTED Given channel name (or number) is already assigned to a channel. Select another name
245	ATTEMPT DETECTED TO CHANGE CHANNEL ASSIGNMENT ILLEGALLY Channel name may be changed only when channel is in the UNEQ equipage state. Several related IO tables are indexed with channel name (number) and these tables have to be rebuilt when channel name (number) changes
246	PORT EQUIPAGE IS GREATER THAN PARENT IOUC EQUIPAGE A subordinate unit cannot be in an equipage state higher than the controlling unit. If growing, grow the controlling unit first. If degrowing, degrow the subordinate unit first
247	NO ARGUMENT DETECTED FOR KEYWORD 'PORT' Recheck message and reenter
248	INPUT PORT NUMBER IS INVALID Recheck message and reenter
249	UNABLE TO FIND IDLE CHANNEL MEMORY BLOCK NOTE: Seek aid
250	ONE OR MORE REQUIRED PORT PARAMETERS HAVE NOT BEEN INPUT All port parameters must be input before port equipage may be moved from UNEQ equipage state

TABLE A (Contd)

ERROR CODE	EXPLANATION
251	IOUS HARDWARE GENERATION IS INVALID Recheck message and reenter
252	IOUC EQUIPAGE IS GREATER THAN PARENT IOP EQUIPAGE A subordinate unit cannot be in an equipage state higher than the controlling unit. If growing, grow the controlling unit first. If degrowing, degrow the subordinate unit first
253	SPEED CAPABILITY OF IO MICRO PROCESSOR HAS BEEN EXCEEDED Current IOP capability is 19,200 baud. Total of all attached channels may not exceed this number
254	NO ARGUMENT FOR KEYWORD 'SUBMEM' DETECTED Recheck message and reenter
255	ARGUMENT FOR 'SUBMEM' IS INVALID Recheck message and reenter
256	IOMP EQUIPAGE IS LESS THAN ATTACHED IOUC EQUIPAGE A subordinate unit cannot be in an equipage state higher than the controlling unit. If growing, grow the controlling unit first. If degrowing, degrow the subordinate unit first
257	IOMP EQUIPAGE IS GREATER THAN IOUS EQUIPAGE A subordinage unit cannot be in an equipage state higher than the controlling unit. If growing, grow the controlling unit first. If degrowing, degrow the subordinate unit first
258	ATTEMPT TO ASSIGN CHANNEL 0 TO IOUS 0, IOUC X Channel 0 must be assigned to IOUS 0, IOUC 0
259	ATTEMPT TO ASSIGN CHANNEL 0 TO IOUS X Channel 0 must be assigned to IOUS 0, IOUC 0
260	ATTEMPT TO ASSIGN CHANNEL X TO IOUS 0, IOUC 0 Channel 0 must be assigned to IOUS 0, IOUC 0
261	INVALID IOUC NUMBER DETECTED Recheck message and reenter
262	NON ZERO BUS SCAN POINT DETECTED New bus scan point must be zero (growth of semiconductor stores)
263	ILLEGAL CS SCAN POINT DETECTED New CS scan point can replace only an unequipped CS or a CSB frame

TABLE A (Contd)

ERROR CODE	EXPLANATION
264	ILLEGAL PS SCAN POINT DETECTED New PS scan point can replace only an unequipped PS or a PSB frame
265	INVALID SCAN POINT ROW DETECTED Scan point row must be greater than or equal to 48
266	INVALID SCAN POINT COLUMN DETECTED Scan point column must be less than or equal to D(22)
267	PARITY OVER SCAN POINT ROW IS INCORRECT Parity must be odd
268	SCAN POINT COLUMN IS ODD Scan point column must be even
269	ATTEMPT TO REASSIGN SCAN POINT OF EQUIPPED UNIT When reassigning scan points, only those of unequipped units may be used. Recheck message and reenter
270	MNEMONIC FOR 'CHNAME' NOT RECOGNIZED Recheck message and reenter
271	CHANNEL NUMBER IS GREATER THAN MAXIMUM (CURRENTLY 95) Recheck message and reenter
272	ATTEMPT TO CHANGE PARAMETER OF OPERATIONAL PORT Port must be in nonoperational equipage state to change parameters. Degrow port to SGR0, make parameter change, grow port to OPER
273	WORD GIVEN IS BEYOND END OF TRANSLATOR
274	Unused
279	Unused
280	ABORT CODE PREFIX
281	Unused
299	Unused

TABLE A (Contd)

ERROR CODE	EXPLANATION
300	FILE STORE QUEUE FULL Reenter message
301	INPUTS TO DKAD FAILED NOTE: Internal error. Seek aid
302	Unused
324	Unused
325	NO HARDWARE VERSION TRANSLATOR ADR WAS FOUND. AN INVALID UNIT NUMBER OR UNIT TYPE WAS ENTERED
326	NO HVTRANS MNEMONIC TERM WAS ENTERED
327	NO 2ND ARGUMENT WAS ENTERED FOR KEYWORD 'HVTRANS'
328	AN INVALID HVTRANS ITEM WAS ENTERED
329	CC HV XMA MUST BE SET BEFORE SETTING CC HV SGM OR PRF
330	THE CHG VALUE MUST BE 3 TO EQUIP THE CHANNEL WITH DIALUP
331	THE ARGUMENT ENTERED FOR THE KEYWORD PTC IS MISSING OR INVALID
332	Unused
333	THE 'CHNAME' KEYWORD HAS ALREADY BEEN ENTERED. TO CHANGE THE CHNAME AT THIS POINT, ENTER STOP:XLCHNG OR CHANGE THE REST OF THE CHANNEL PARAMETERS AND GROW THE CHANNEL
334	THE KEYWORD 'CHNAME' HAS TO BE ENTERED BEFORE ANY OTHER CHANNEL (IOUC) KEYWORDS CAN BE PROCESSED
335	NO MODE MNEMONIC ITEM WAS INPUT
336	AN INVALID MODE MNEMONIC WAS INPUT. VALID MNEMONICS ARE: FLDPX – FULL DUPLEX HLDPX – HALF DUPLEX
337	AN INVALID APPLICATION ID WAS INPUT VALID APPLICATION ID'S ARE (0 THROUGH 7) 0 MEANING 'NONE'
338	INVALID DATASET TYPE INPUT. VALID DATASET TYPES ARE: 212A,201CDD,201CPL,208A,208B,209A,201CPD,208APD,202108
339	NO ARGUMENT FOR DATASET TYPE WAS ENTERED

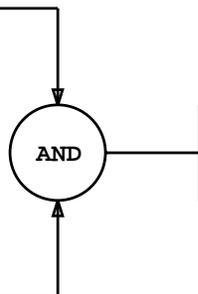
TABLE A (Contd)

ERROR CODE	EXPLANATION
340	ITEM ENTERED IS VALID ONLY FOR A CHANNEL WITH A CHG VALUE OF 4 OR GREATER AND PORT 0
341	NO ARGUMENT FOR 'ORIGNDA' INPUT
342	NO ARGUMENT FOR 'ORIGAHP' INPUT
343	NO ARGUMENT FOR 'DESTNDA' INPUT
344	NO ARGUMENT FOR 'DESTAHP' INPUT
345	NO ARGUMENT FOR 'MXBLKSZ' INPUT
346	MAXIMUM DATA BLOCK SIZE INVALID. THE ARGUMENT FOR 'MXBLKSZ!' MUST BE A MULTIPLE OF 3 AND LESS THAN OR EQUAL TO DECIMAL 510
347	INVALID ARGUMENT FOR ORIGIN NODE ADDRESS. VALID ARGUMENTS ARE HEXADECIMAL (00 THROUGH FF)
348	INVALID ARGUMENT FOR ORIGIN APPLICATION HOST PROCESSOR IDENTIFIER. VALID ARGUMENTS ARE HEXADECIMAL (0 THROUGH F)
349	INVALID ARGUMENT FOR DESTINATION APPLICATION HOST PROCESSOR IDENTIFIER. VALID ARGUMENTS ARE HEXADECIMAL (0 THROUGH F)
350	INVALID ARGUMENT FOR DESTINATION NODE ADDRESS. VALID ARGUMENTS ARE HEXADECIMAL (00 THROUGH FF)
351	INVALID KEYWORD WAS ENTERED FOR VER:UTMN; MESSAGE
352	Unused
353	DISK FILE IS MARKED ESSENTIAL AND THEREFORE CANNOT BE DEGROWN
354	Unused
359	Unused
360	THE IOP UNIT IS EQUIPPED WITH A TN82 CIRCUIT PACK, WHICH IS A FULL DUPLEX BOARD IO cannot operate in the half duplex mode
361	THE IOP IS EQUIPPED WITH A TN82 CIRCUIT PACK, WHICH ALLOWS ONLY PORT 0 TO BE EQUIPPED
362	THE IOP IS EQUIPPED WITH A TN82 CIRCUIT PACK Port 0 Data Set Indicator can only be Private Line
363	THE IOP IS EQUIPPED WITH A TN82 CIRCUIT PACK, WHICH DOES NOT SUPPORT THE ANSWER BACK EQUIPAGE

TABLE A (Contd)

ERROR CODE	EXPLANATION
364	THE IO UNIT MUST BE EQUIPPED WITH A TN82 CIRCUIT PACK TO HANDLE 56K BPS SPEED CAPABILITY
365	NO ARGUMENT WAS ENTERED FOR STATION TYPE
366	INVALID STATION TYPE WAS ENTERED Valid Station Types are DCE or DTE
367	Unused
370	Unused
371	INVALID CHANNEL NUMBER
372	CHANNEL IS HARDWARE EQUIPPED
373	CHTYP ARGUMENT IS OUT OF RANGE
374	CHANNEL IS NOT LOGICALLY DEFINED
375	CHANNEL IS IN USE
376	MISSING ARGUMENT FOR CHANNEL PARAMETER
377	Unused
378	MISSING ARGUMENT FOR CHTYP PARAMETER
379	NO ITEMS ARE CURRENTLY DEFINED FOR API UNIT TYPE IN HVTRANS TABLE
380	Unused
381	SOAK LIST IS FULL
382	Unused
389	Unused
390	SCHAN ONLY VALID ON IOMP 1 PHASE 2 (SUBMEM=1 AND SMHG=2)

[1] In column for 1B Processor cabinet 0,
determine location where growth CSs
(or degrowth CSs) are to be installed
(or removed) and record _____



[2] In column for 1B Processor cabinet 1,
determine location where growth CSs
(or degrowth CSs) are to be installed
(or removed) and record _____

TABLE A			
1B PROCESSOR CABINET 0		1B PROCESSOR CABINET 1	
CS MEMBER NUMBER	LOCATION	CS MEMBER NUMBER	LOCATION
10	24-160	11	24-160
12	24-030	13	24-030
14	24-152	15	24-152
16	24-038	17	24-038
18	24-144	19	24-144
20	24-046	21	24-046
22	24-136	23	24-136
24	24-054	25	24-054
26	24-128	27	24-128
28	24-062	29	24-062
30	24-120	31	24-120
32	24-070	33	24-070
34	24-112	35	24-112
36	24-078	37	24-078
38	24-104	39	24-104

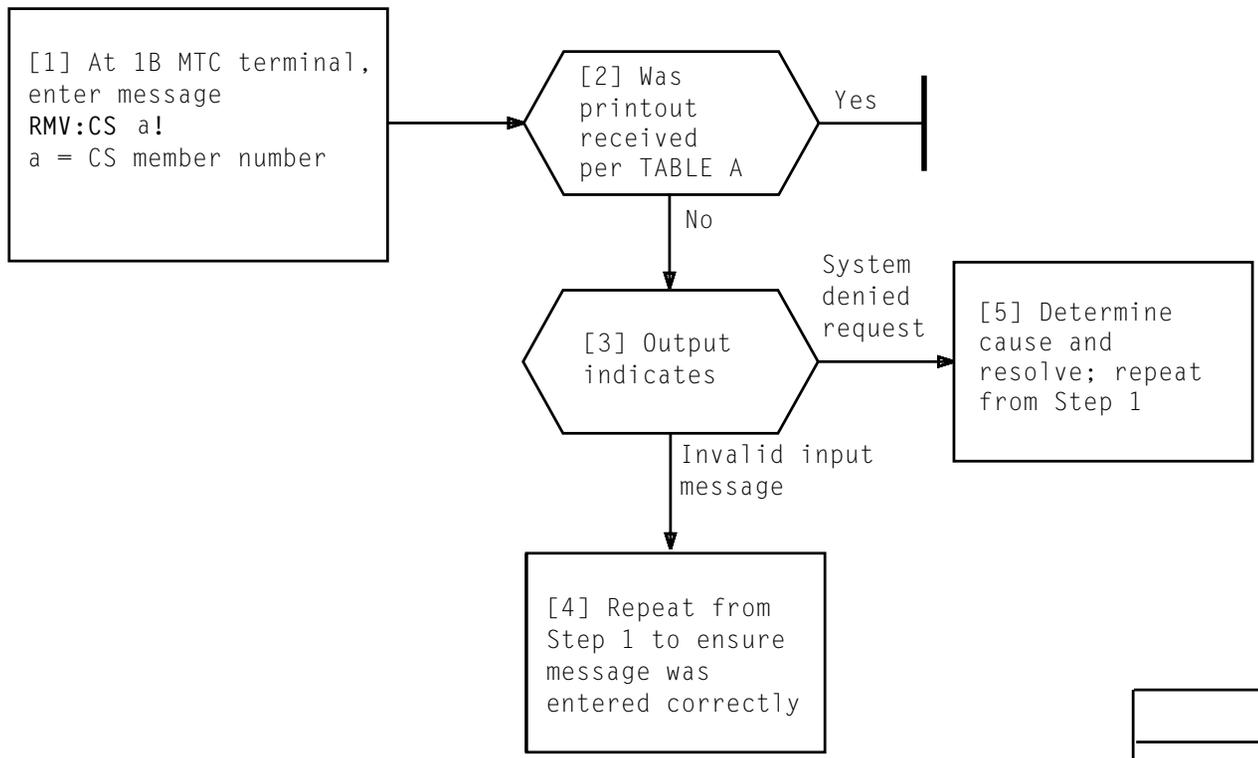


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	RMV: CS a COMPLETED
a = CS member number	

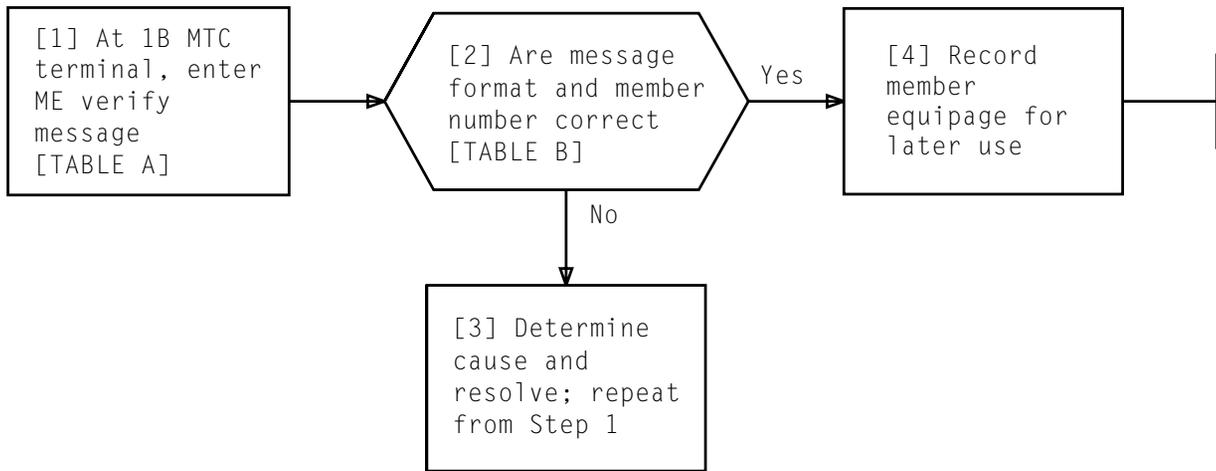


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:a b,ME!
a = Unit type – CS, DUS, IOUS, PS, or TUC b = Member number of degrowth unit	

TABLE B	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA ME c
a = Unit type b = Member number of degrowth unit c = Member equipage	

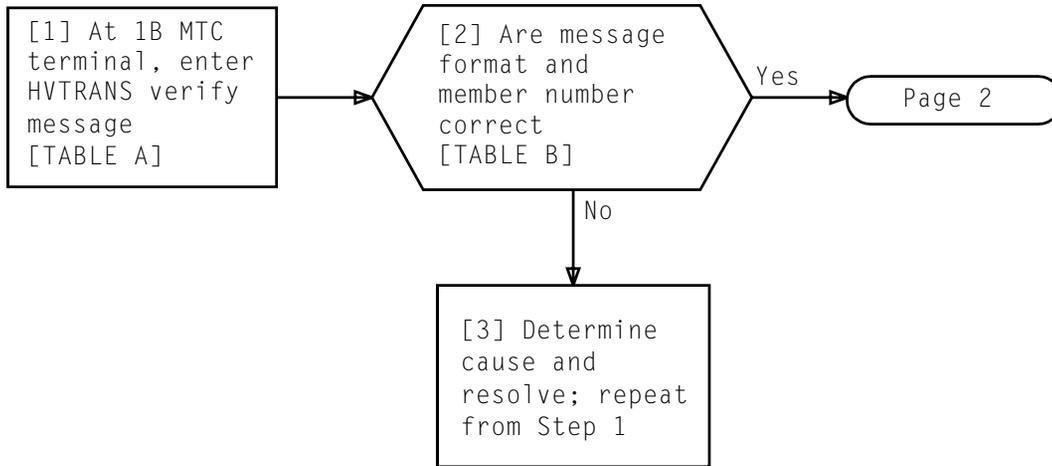


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN;BOTH:a b,HVTRANS!
a = Unit type being changed (CC or MUP) b = Member number of unit type	

TABLE B	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA NONE CURRENT DATA EXTENDED MEMORY = Y
a = Unit type being changed (CC or MUP) b = Member number of unit type	

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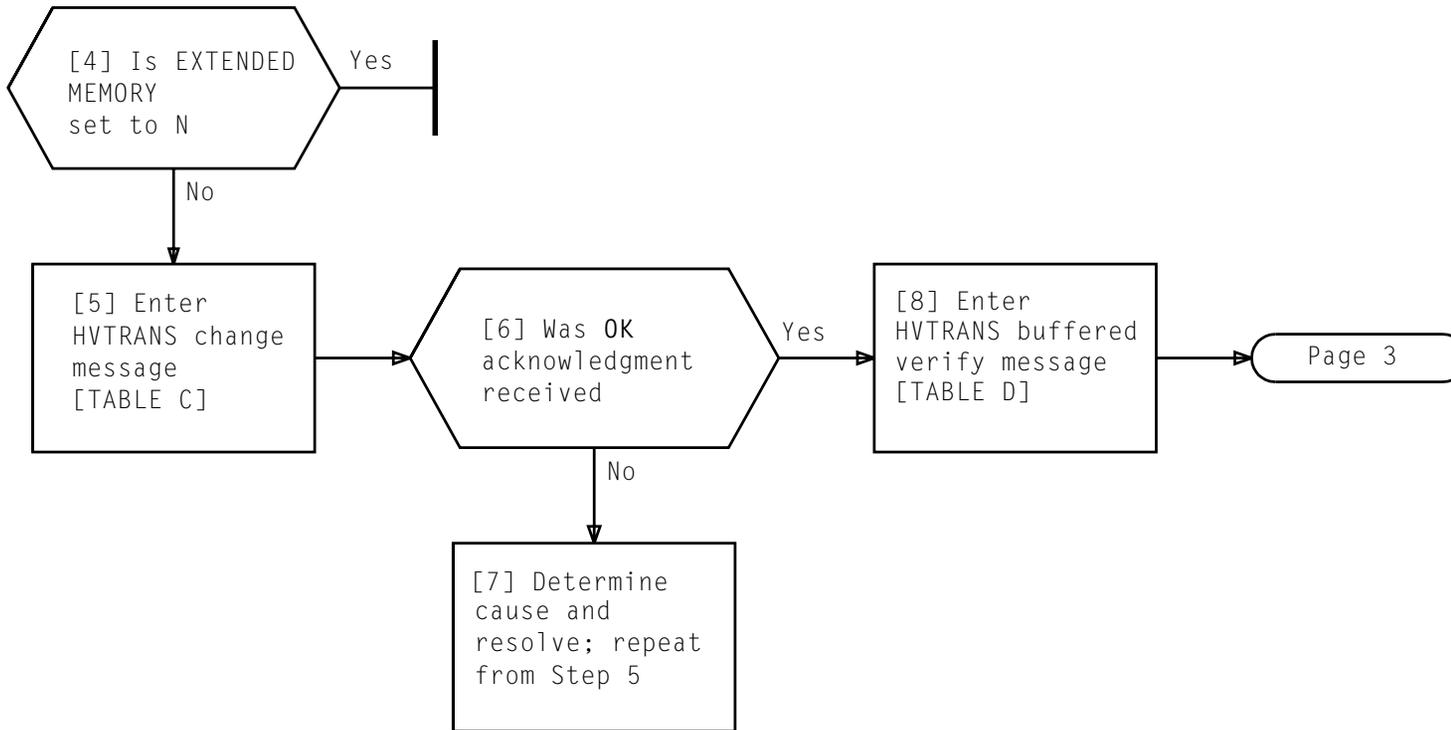


TABLE C	
MESSAGE NUMBER	INPUT MESSAGE
1	IN:XLBUF:a b,HVTRANS (XMA,N)!
a = Unit type being changed (CC or MUP) b = Member number	

TABLE D	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN;BUF:a b,HVTRANS!
a = Unit type being changed (CC or MUP) b = Member number of unit type	

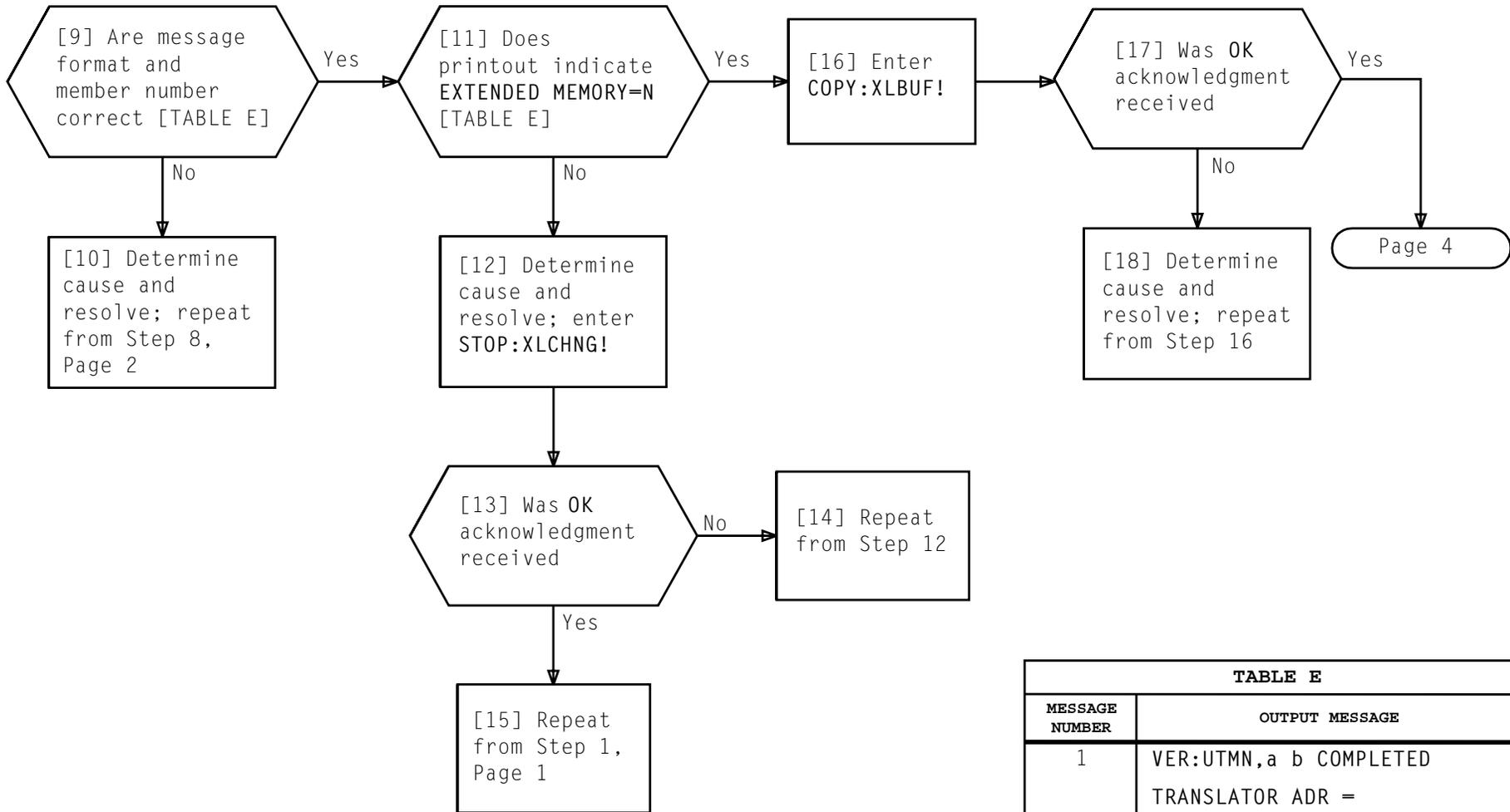


TABLE E	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA EXTENDED MEMORY=N
a = Unit type being changed (CC or MUP) b = Member number of unit type	

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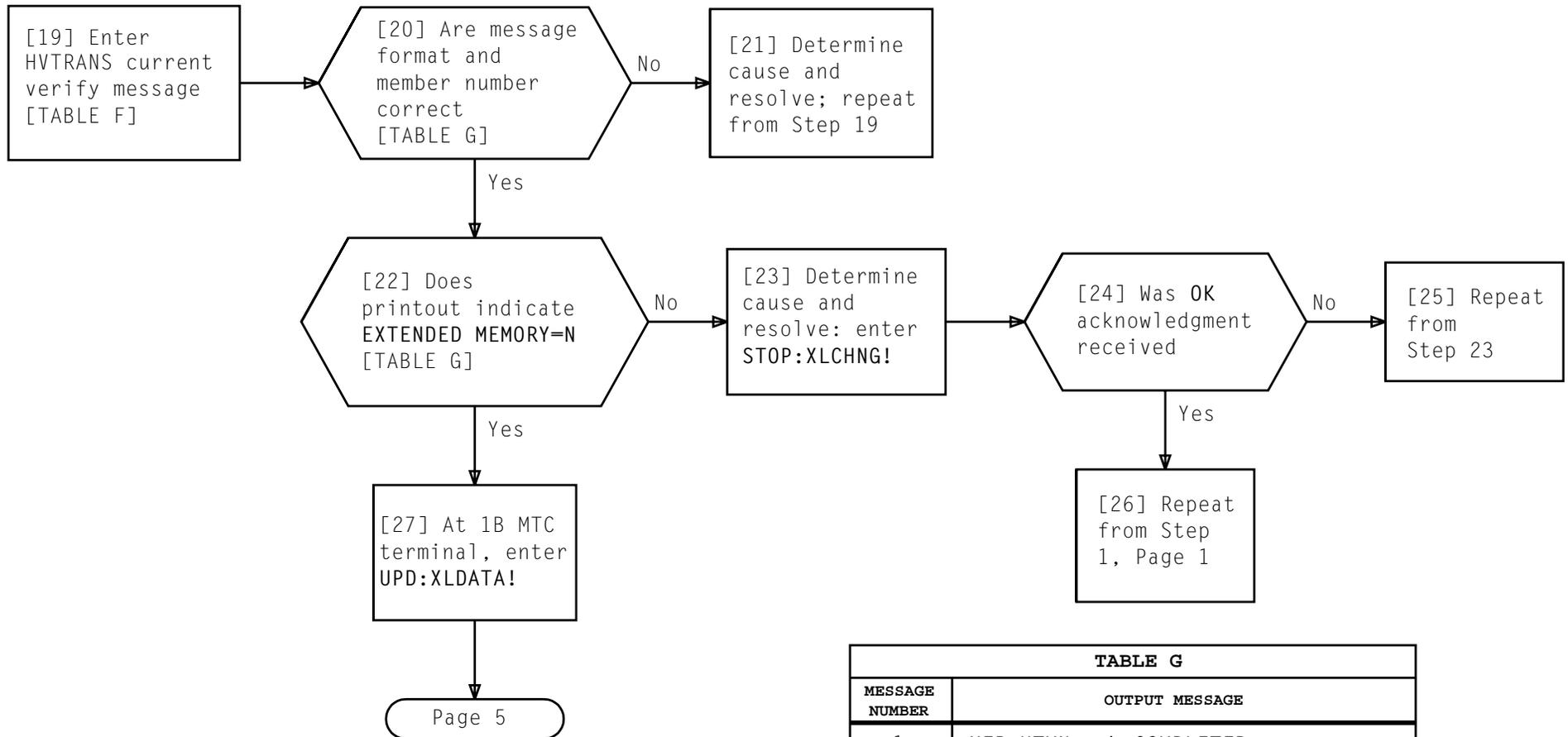


TABLE F	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:a b,HVTRANS!
a = Unit type being changed (CC or MUP) b = Member number of unit type	

TABLE G	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA EXTENDED MEMORY = N
a = Unit type being changed (CC or MUP) b = Member number of unit type	

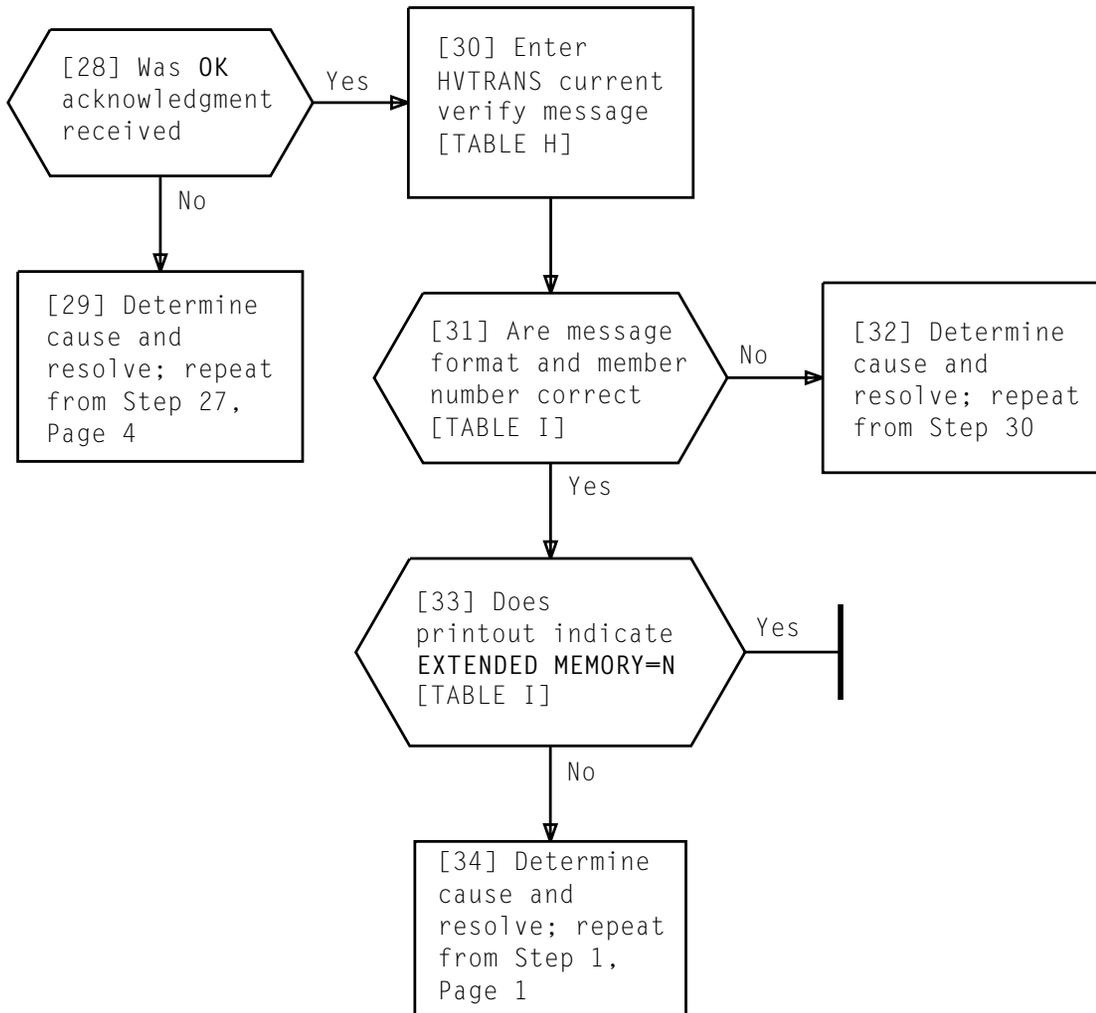
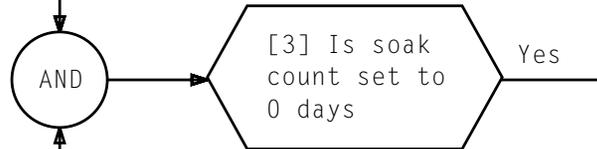


TABLE H	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:a b,HVTRANS!
a = Unit type being changed (CC or MUP) b = Member number of unit type	

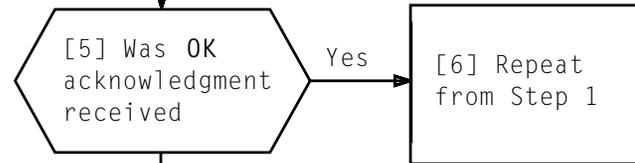
TABLE I	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA EXTENDED MEMORY = N
a = Unit type being changed (CC or MUP) b = Member number of unit type	

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

[2] Using printout, determine if
soak count for CC being converted
is set to 0 days



[4] At MTC terminal,
enter message
SET:SOAK:CC a,DAYS 0!
a = standby CC member
number



[6] Repeat
from Step 1

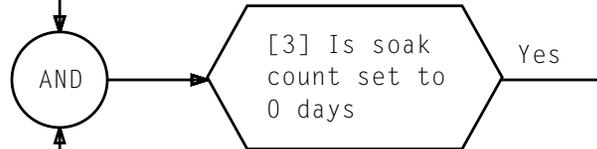
[7] Determine
cause and
resolve; repeat
from Step 1

VERIFY SOAK COUNT FOR STANDBY CC

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

[2] Using printout, determine if
soak count for MUP being converted
is set to 0 days



Yes

No

[4] At 1B MTC terminal,
enter message
SET:SOAK:MUP a,DAYS 0!
a = standby MUP member
number



Yes

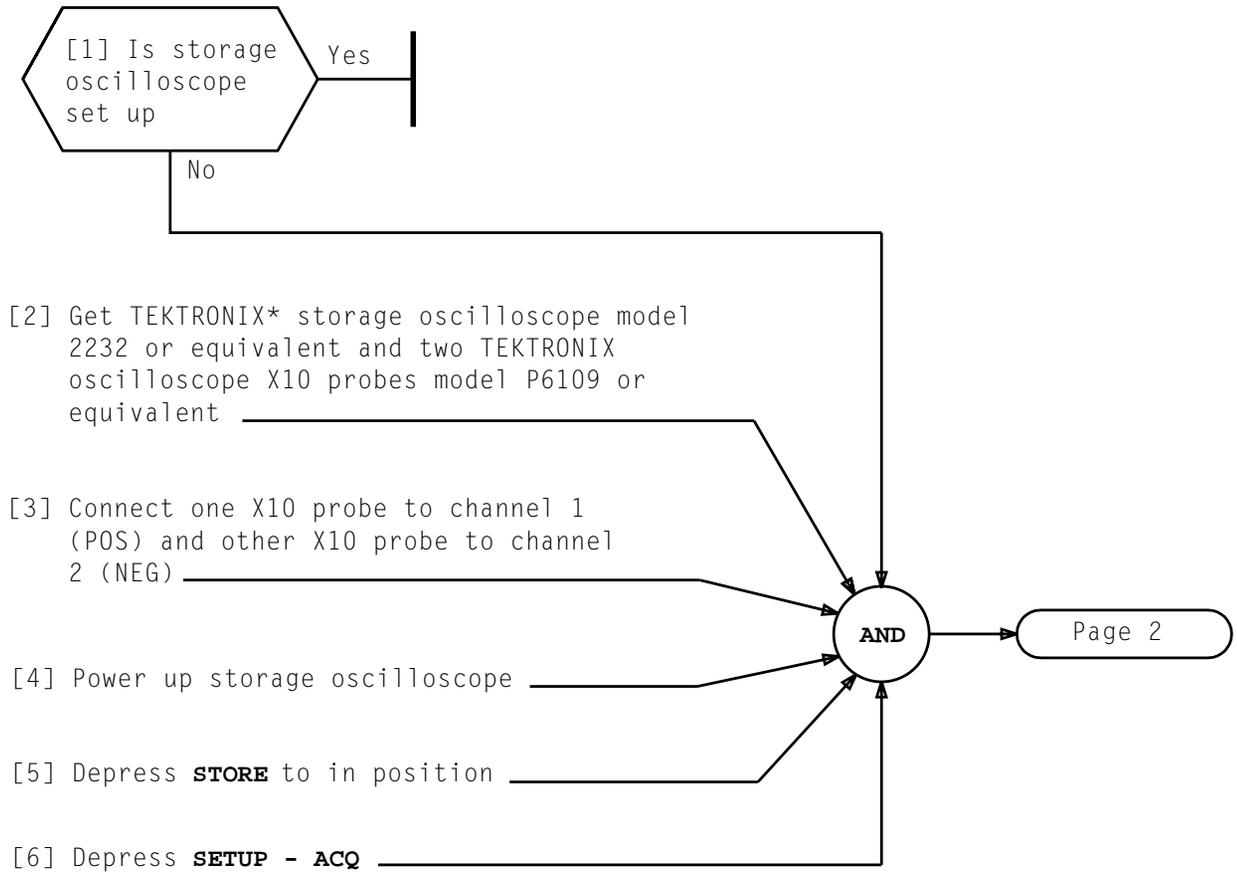
No

[6] Repeat
from Step 1

[7] Determine
cause and
resolve; repeat
from Step 1

VERIFY SOAK COUNT FOR STANDBY MUP

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SET UP STORAGE OSCILLOSCOPE FOR SCOPING AU BUS

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[7] Under storage oscilloscope screen, depress **3** switch for Default

[8] Depress **SETUP - DISPLAY**

[9] Observe storage oscilloscope screen and set DISPLAY controls per TABLE A by depressing switch associated with control not set correctly

[10] Depress **SETUP - REF**

[11] Observe storage oscilloscope screen and set REF controls per TABLE B by depressing switch associated with control not set correctly

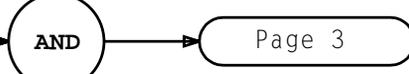


TABLE A		
COLUMN	CONTROLS	SWITCH*
1	ΔT	SAVE REF
2	ON	1
3	ON	2

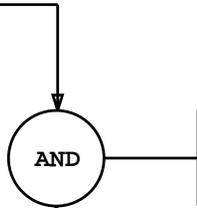
*Switches under display screen are associated with column that they are under

TABLE B		
COLUMN	CONTROLS	SWITCH*
1	Format	SAVE REF
2	Ref1	1
3	CH1	2
4	X1	3
5	Vert Gain: 0.2V	4K (for Vert Gain:) and adjust CURSORS to obtain 0.2V

*Switches under display screen are associated with column that they are under

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[12] Depress **SETUP - REF**
to return to screen



[13] Set 2232 storage oscilloscope
controls per TABLE C, Page 4

SET UP STORAGE OSCILLOSCOPE FOR SCOPING AU BUS

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TABLE C – OSCILLOSCOPE CONTROL SETTINGS FOR MODEL 2232	
CONTROLS	POSITION
CURSORS	Don't Care
SAVE/CONT	Depress until SAVE is not displayed
STORE	Depress (in)
VAR HOLDOFF	Don't Care
VERTICAL – POSITION (left)	Rotate to 11 o'clock position
VERTICAL – A/B SWP SEP	Don't Care
VERTICAL – POSITION (right)	Rotate to 12 o'clock position
VERTICAL MODE – CH 1 BOTH CH 2	BOTH
VERTICAL MODE – X-Y	Out position
VERTICAL MODE – BW LIMIT	Out position
VERTICAL MODE – ADD ALT CHOP	ADD
VERTICAL – CH 1 VOLTS/DIV	2
VERTICAL – CH 1 VOLTS/DIV – AC GND DC	DC
VERTICAL – INVERT	Depress (in)
VERTICAL – CH 2 VOLTS/DIV	2
VERTICAL – CH 2 VOLTS/DIV – AC GND DC	DC
HORIZONTAL – POSITION	Rotate to 1 o'clock position
HORIZONTAL – MODE	A
HORIZONTAL – A and B SEC/DIV	.1 μ s
B TRIGGER – SLOPE	Don't Care
B TRIGGER – LEVEL	Don't Care
A TRIGGER – TV FIELD – NORM	Depress (in)
A TRIGGER – SLOPE	Out position
A TRIGGER – LEVEL	Rotate to 1 o'clock position
A TRIGGER – A & B SOURCE	CH 1
A TRIGGER – A COUPL	NORM
A TRIGGER – A EXT COUPL	Don't Care

At SREC or Beltline Terminal:

[1] Depress **FORM ENTER**
key to ON

[2] Read NOTE 1. Type
input messages per
TABLE A

[3] Depress **FORM ENTER**
key to OFF

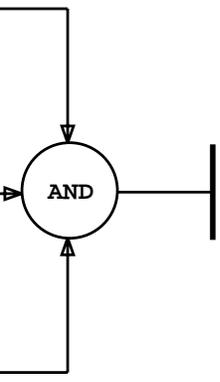
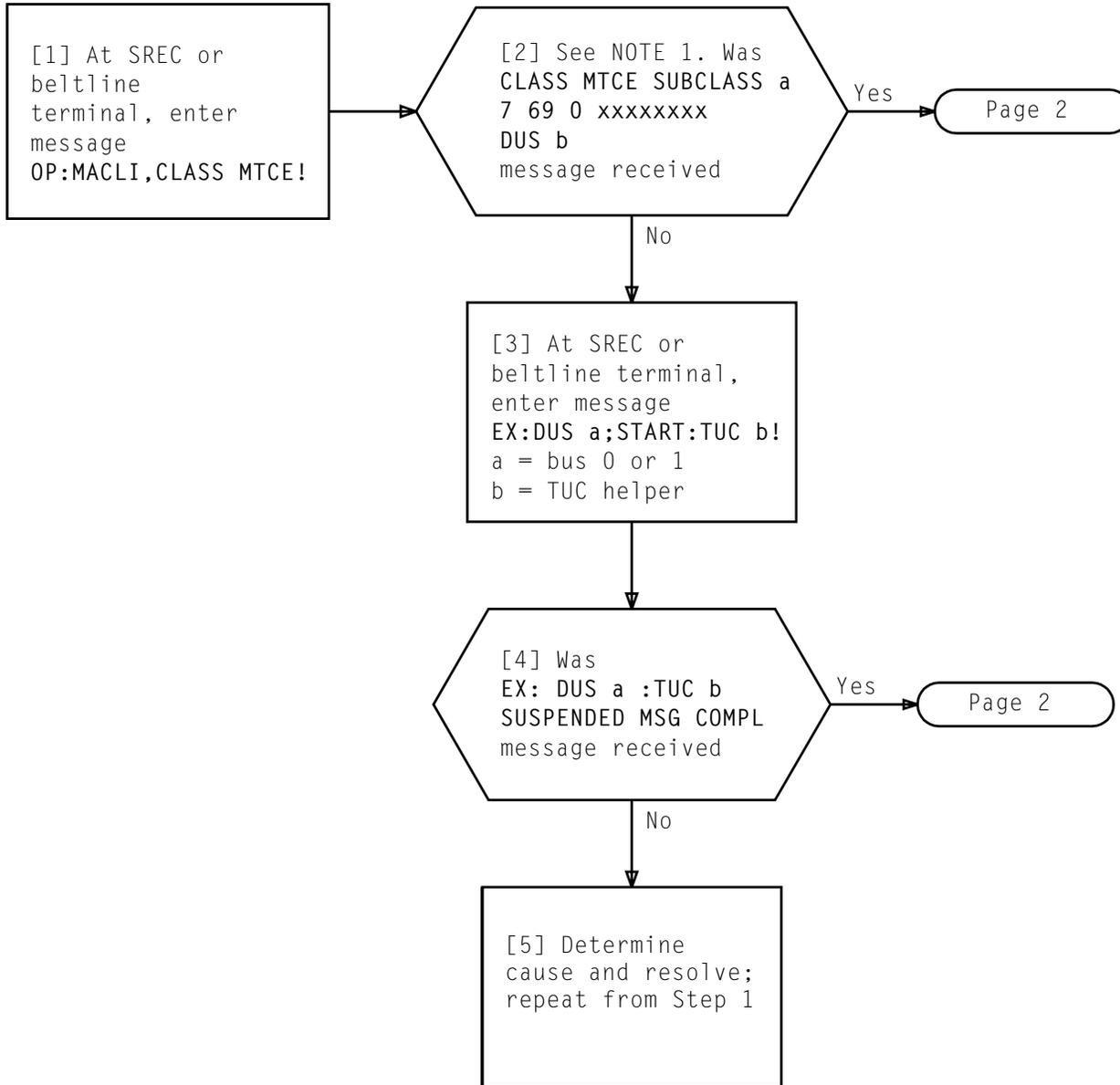


TABLE A			
NUMBER	INPUT MESSAGES	NUMBER	INPUT MESSAGES
1	EX:DUS a;START:TUC b! a = DUS member number - 0 or 1 b = Available in-service, unassigned TUC where BTRs are located	4	EX:DUS a:PH 99,ADR 115-166! a = DUS member number - 0 or 1
2	EX:DUS a:PH 99,ADR 44-115! a = DUS member number - 0 or 1	5	EX:DUS a! a = DUS member number
3	EX:DUS a:PH 99,ADR 166-263! a = DUS member number - 0 or 1	6	OP:MACLI,CLASS MTCE!
		7	STOP:MACLI,CLASS MTCE,SUBCLASS a! a = CLASS MTCE SUBCLASS number from OP:MACLI output message assigned to PHASE 99 diagnostics

NOTE 1	
Messages must not be entered into system at this time	
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NOTE 1	
If problem occurs when setting up loop, use program listing ABDG99	
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ENTER EXECUTE MESSAGES FOR LOOPING ON SPECIFIED DU BUS

[6] Using TABLE A, determine TABLE that contains input message for DU bus to be scoped _____

[7] At SREC or beltline terminal, enter in looping message determined in Step 6 _____

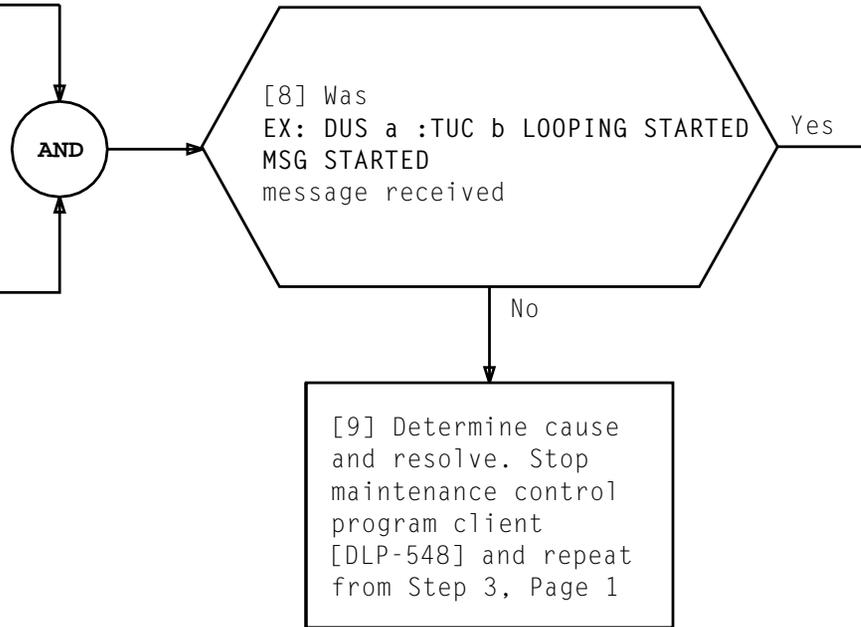


TABLE A	
AU BUS	TABLE
Write	B
Address	C
Reply	D

ENTER EXECUTE MESSAGES FOR LOOPING ON SPECIFIED AU BUS

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TABLE B – DU WRITE BUS
EX:DUS a:PH 99,ADR 44-115!
a = DUS member number – 0 or 1

TABLE C – DU ADDRESS BUS
EX:DUS a:PH 99,ADR 166-263!
a = DUS member number – 0 or 1

TABLE D – DU REPLY BUS
EX:DUS a:PH 99,ADR 115-166!
a = DUS member number – 0 or 1

ENTER EXECUTE MESSAGES FOR LOOPING ON SPECIFIED DU BUS

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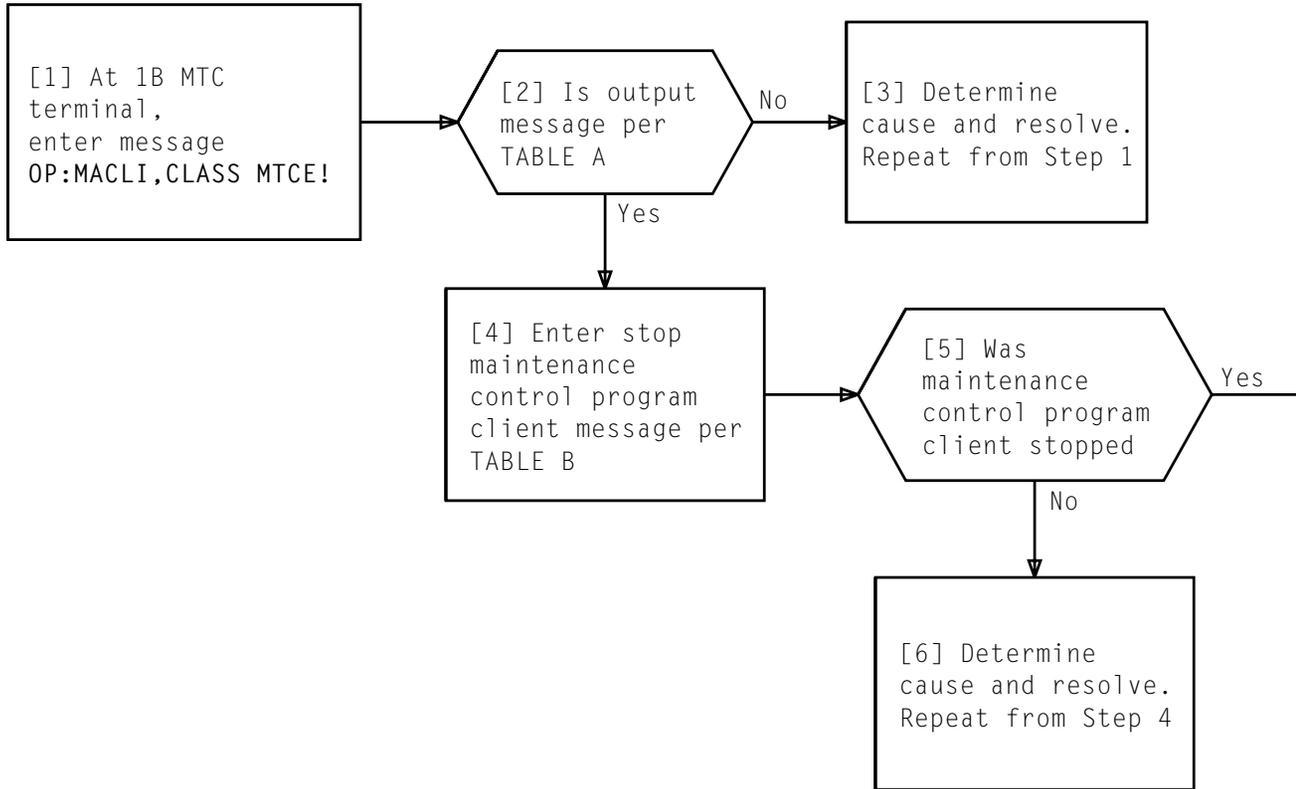


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	OP:MACLI CLASS MTCE SUBCLASS 0 a - d e f CLASS MTCE SUBCLASS 1 a - d e f CLASS MTCE SUBCLASS 2 a - d e f
a - d = NONE or variable data e = Unit type f = Member number	

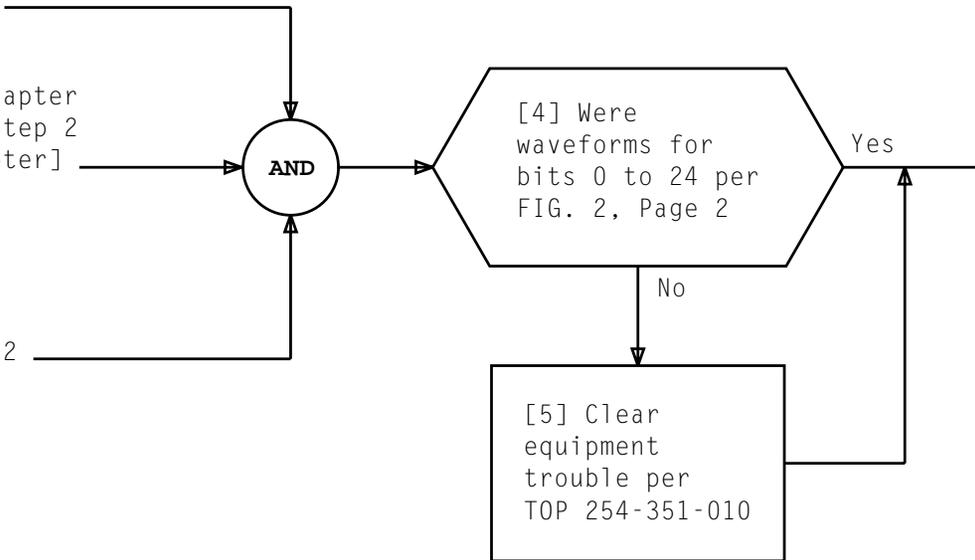
TABLE B	
MESSAGE NUMBER	INPUT MESSAGE
1	STOP:MACLI, CLASS MTCE, SUBCLASS a!
a = CLASS MTCE SUBCLASS number from output message assigned to DU bus diagnostics	

STOP MAINTENANCE CONTROL PROGRAM CLIENT

[1] Locate connector locations in FIG. 1, Page 2, for bus section to be scoped

[2] Connect storage scope with scoping adapter to connector location determined in Step 2 [see DLP-550 on how to use scope adapter]

[3] See NOTE 1. Scope bits 0 through 24 at connector locations determined in Step 2 for waveform per FIG. 2, Page 2



NOTE 1

It is recommended to depress **STORE** twice at storage scope between scoping each bit

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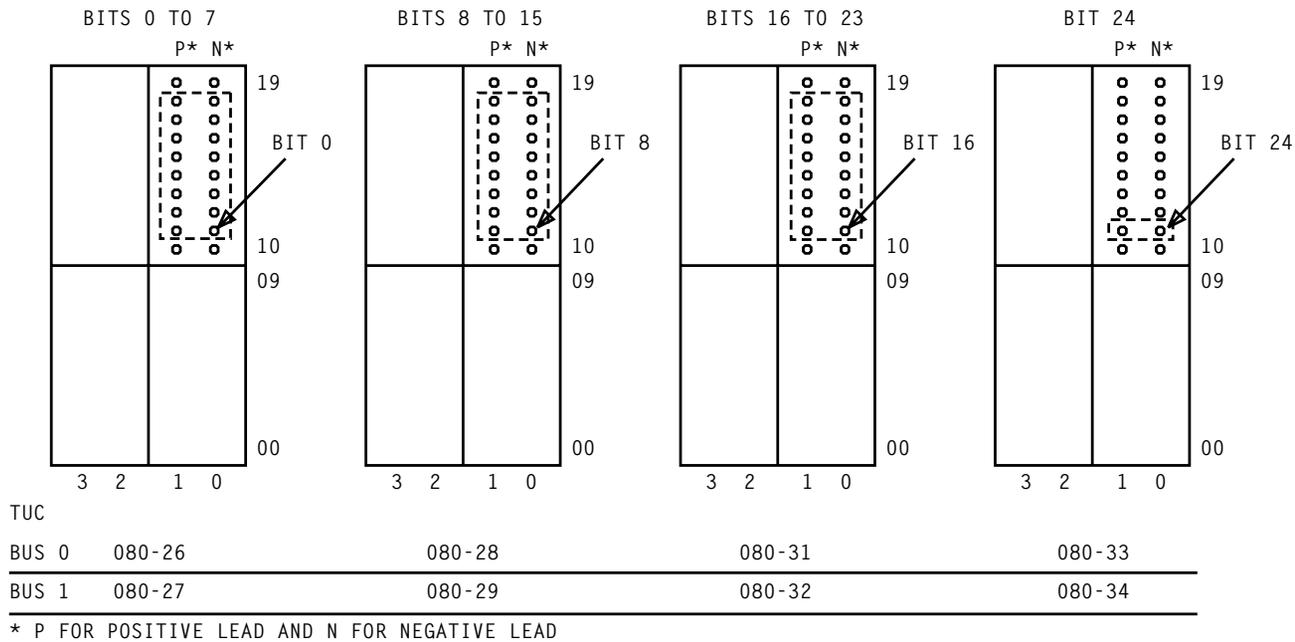


FIG. 1

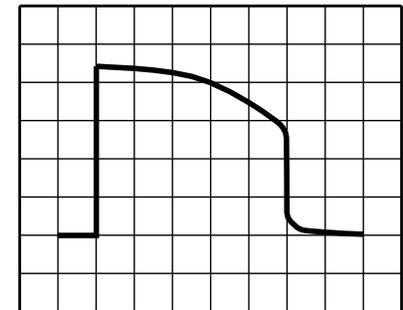


FIG. 2 - Typical Waveform

[1] Ensure scope probes from storage scope are wrapped around each other with positive lead connected to channel 1 and negative lead connected to channel 2 and ground leads are attached together

[2] See FIG. 1, Page 2. At bus-scoping adapter, connect probe from channel 1 to P connector and channel 2 to N connector

[3] Connect bus-scoping adapter connector to connector at unit/frame to be scoped [FIG. 1, Page 2]

[4] Using bus-scoping adapter, starting at position 0, scope each bit, as required through range 0 to 7

[5] If more than one connector is to be scoped, disconnect bus-scoping adapter connector and reconnect to another connector to be scoped. Repeat Steps 4 and 5 for each connector to be scoped. See TABLE A for scope adapter position to associated bit

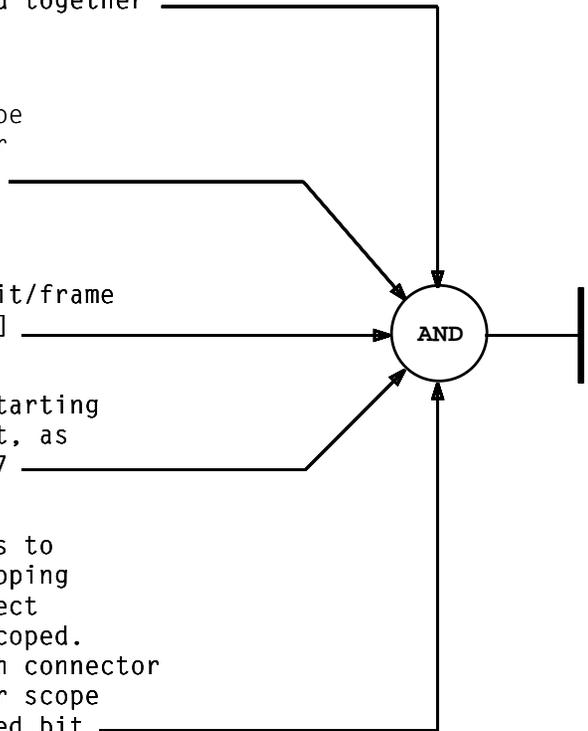


TABLE A			
BIT	ASSOCIATED SCOPE ADAPTER POSITION	BIT	ASSOCIATED SCOPE ADAPTER POSITION
0	0	16	0
1	1	17	1
2	2	18	2
3	3	19	3
4	4	20	4
5	5	21	5
6	6	22	6
7	7	23	7
8	0		
9	1		
10	2		
11	3		
12	4		
13	5		
14	6		
15	7		

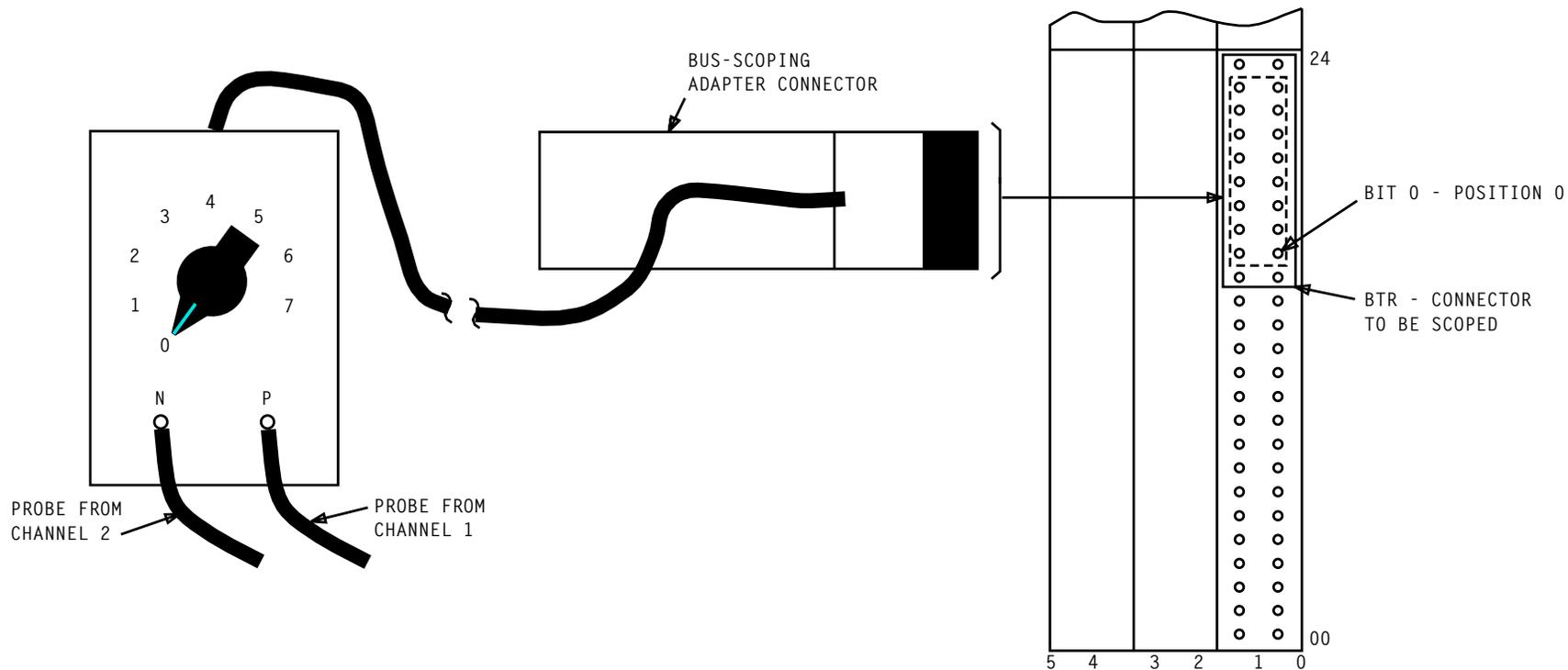
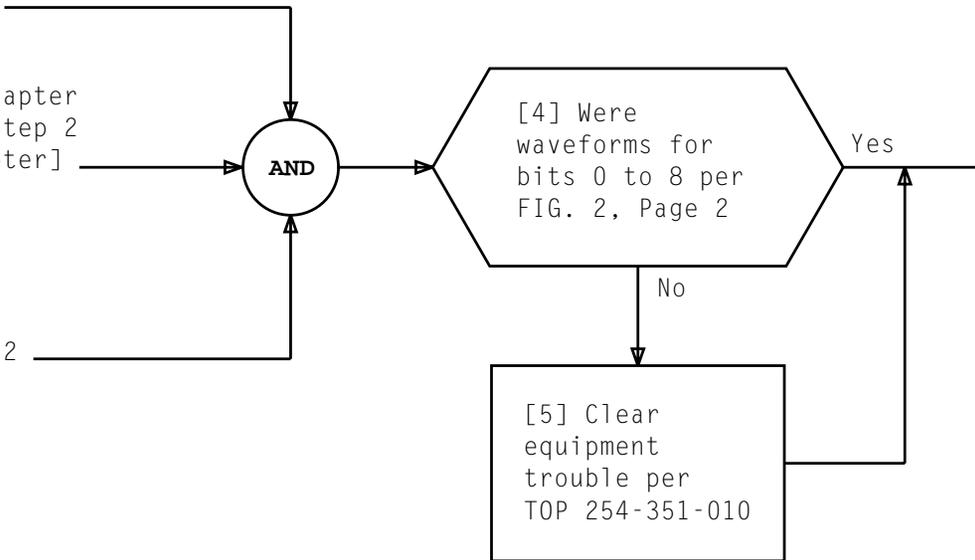


FIG. 1 - Bus-Scoping Adapter Connections

[1] Locate connector locations in FIG. 1, Page 2, for bus section to be scoped

[2] Connect storage scope with scoping adapter to connector location determined in Step 2 [see DLP-550 on how to use scope adapter]

[3] See NOTE 1. Scope bits 0 through 8 at connector locations determined in Step 2 for waveform per FIG. 2, Page 2



NOTE 1

It is recommended to depress **STORE** twice at storage scope between scoping each bit

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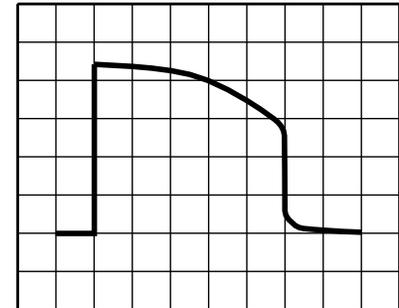
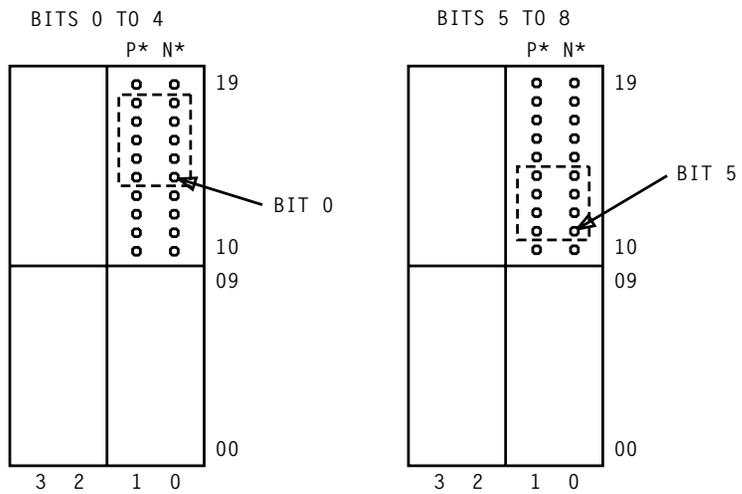


FIG. 2 - Typical Waveform

TUC		
BUS 0	080-33	080-35
BUS 1	080-34	080-36

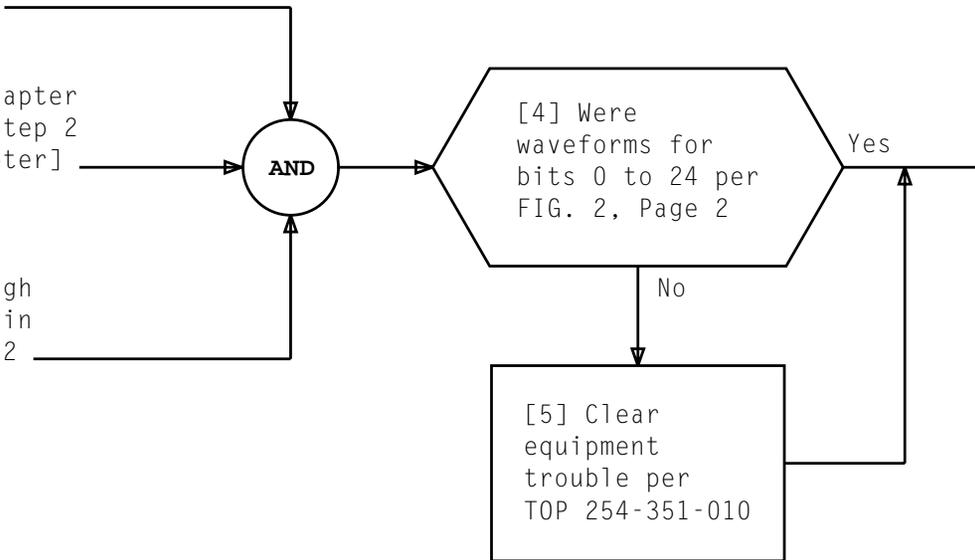
* P FOR POSITIVE LEAD AND N FOR NEGATIVE LEAD

FIG. 1

[1] Locate connector locations in FIG. 1, Page 2, for bus section to be scoped

[2] Connect storage scope with scoping adapter to connector location determined in Step 2 [see DLP-550 on how to use scope adapter]

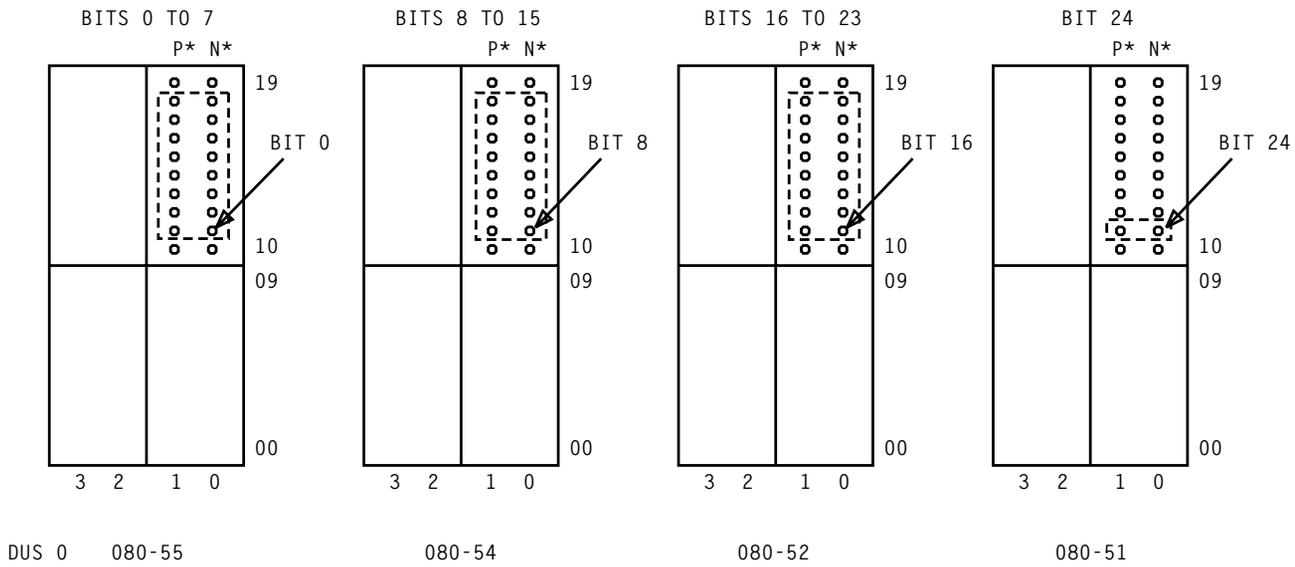
[3] See NOTES 1 and 2. Scope bits 0 through 24 at connector locations determined in Step 2 for waveform per FIG. 2, Page 2



NOTES

1. It is recommended to depress **STORE** twice at storage scope between scoping each bit
2. Pulse width may vary from one bit to another (0.35 μ s to 0.5 μ s)

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* P FOR POSITIVE LEAD AND N FOR NEGATIVE LEAD

FIG. 1

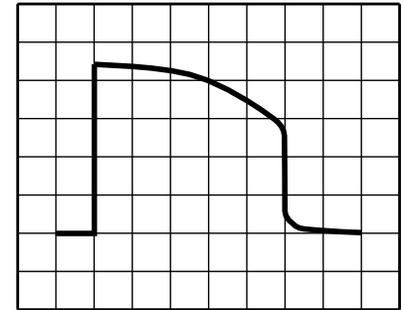


FIG. 2 - Typical Waveform

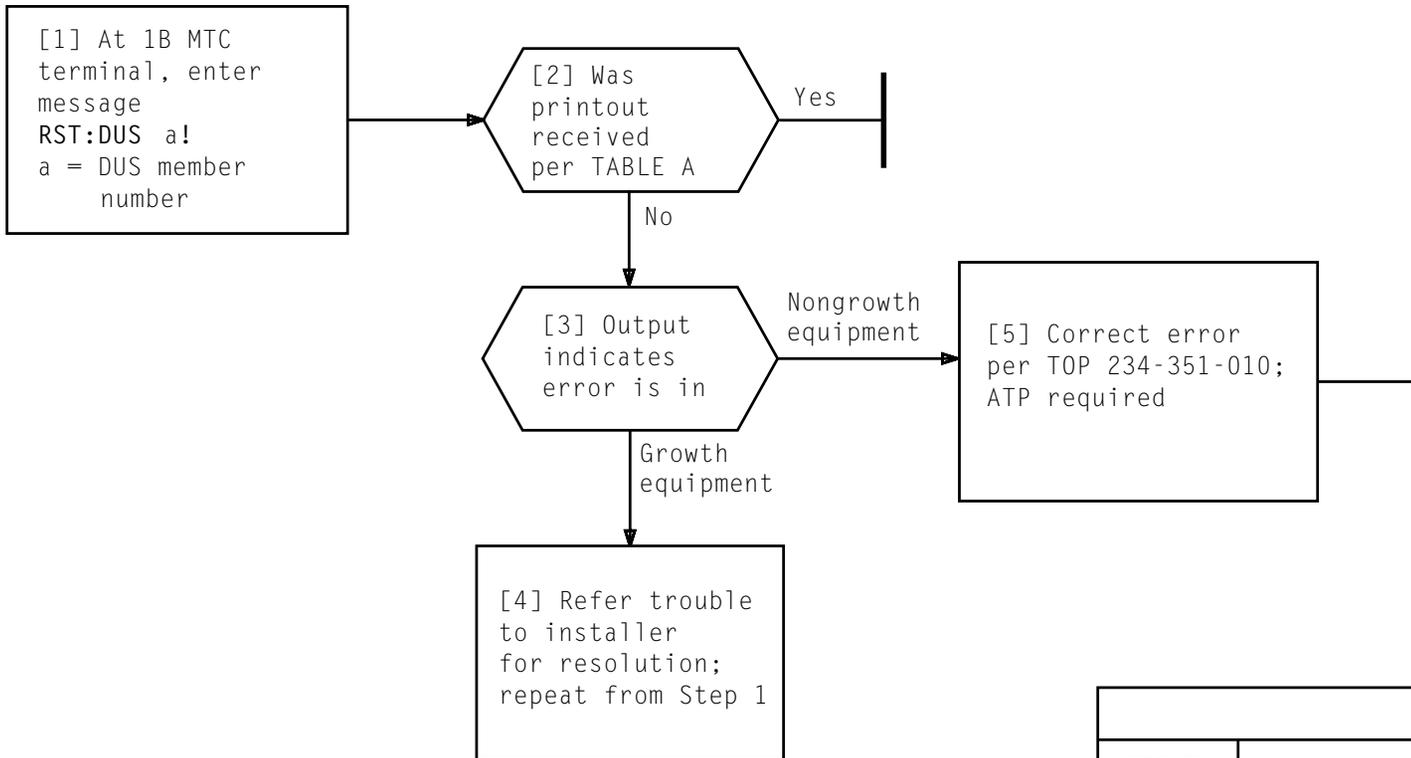
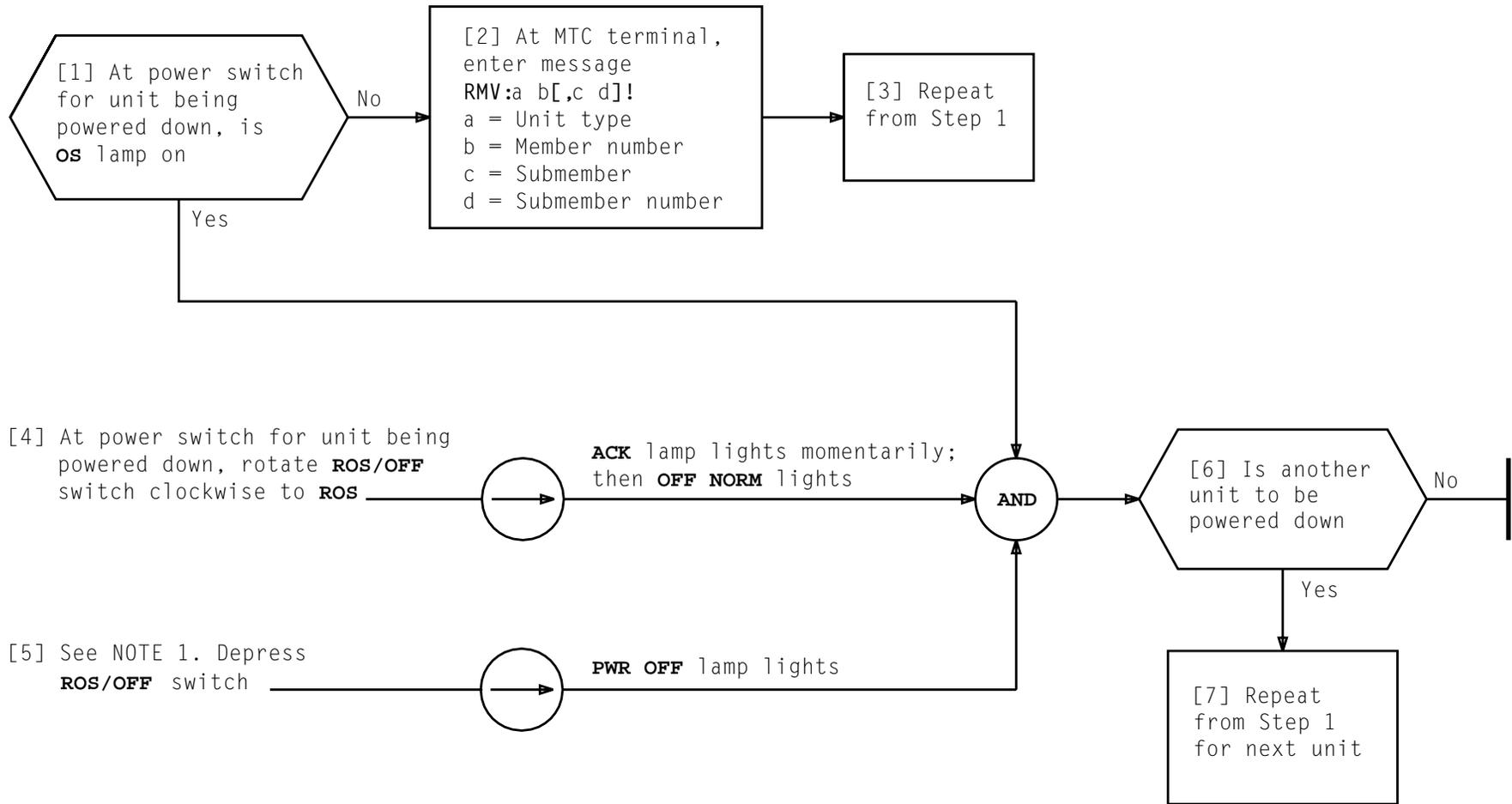
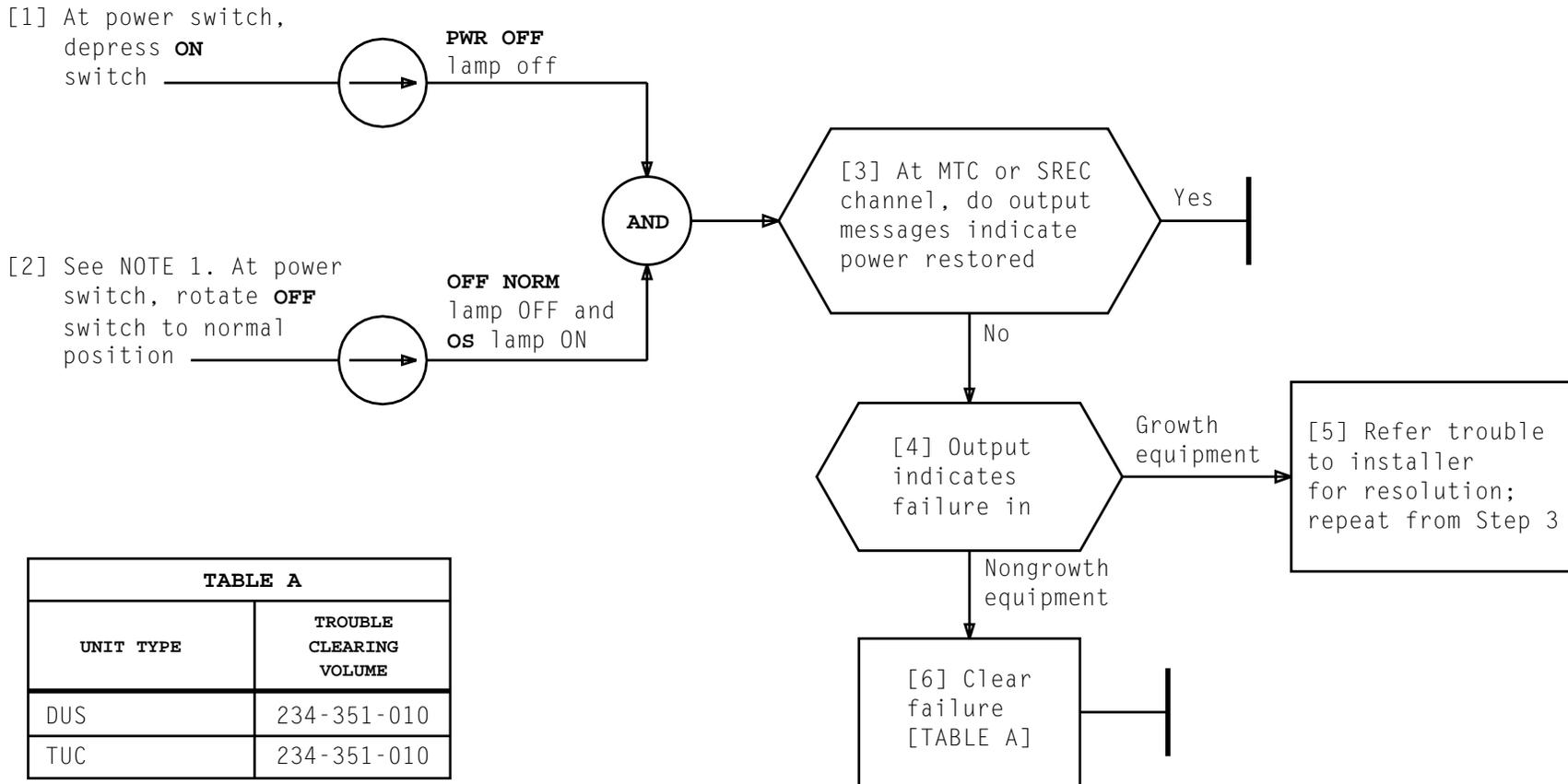


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN: DUS a :TUC b COMPLETED ATP MSG COMPL TEST:DUS a : TUC b ATP RST: DUS a COMPLETED



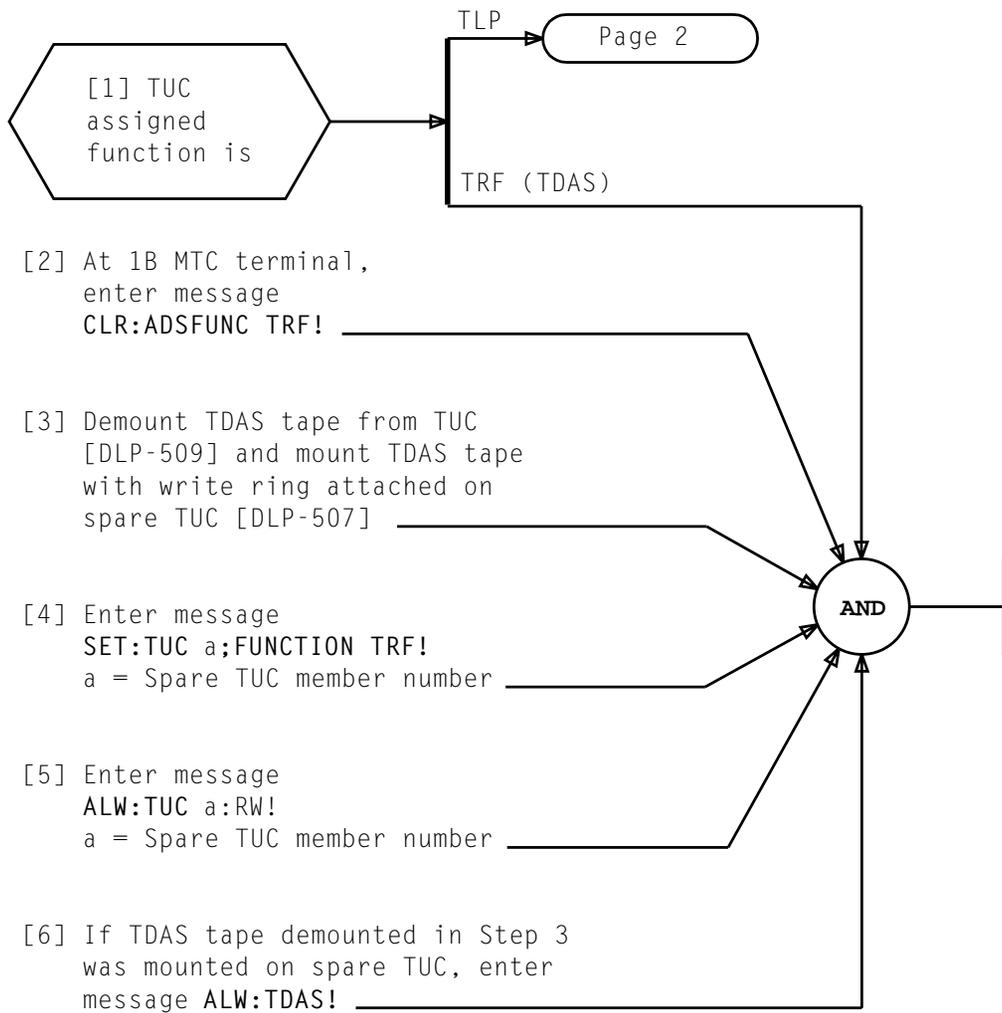
NOTE 1
 If power is being removed from converter in PCDF, switch S2 will be set automatically to **OFF** when power is removed

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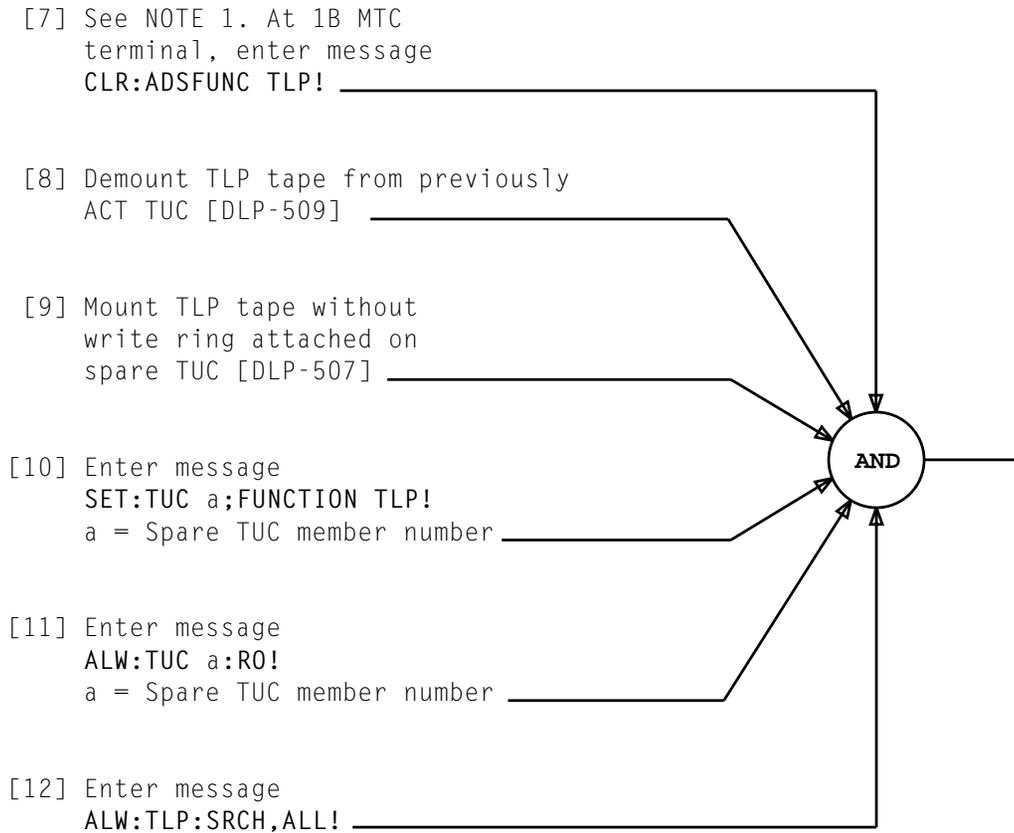
RESTORE POWER WITH POWER SWITCH

NOTE 1 Operation of OFF switch will cause diagnostic to be run	
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REASSIGN TUC FUNCTION TO SPARE TUC

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NOTE 1	
Office personnel must judge when TLP function can be cleared and new TUC assigned for this function	
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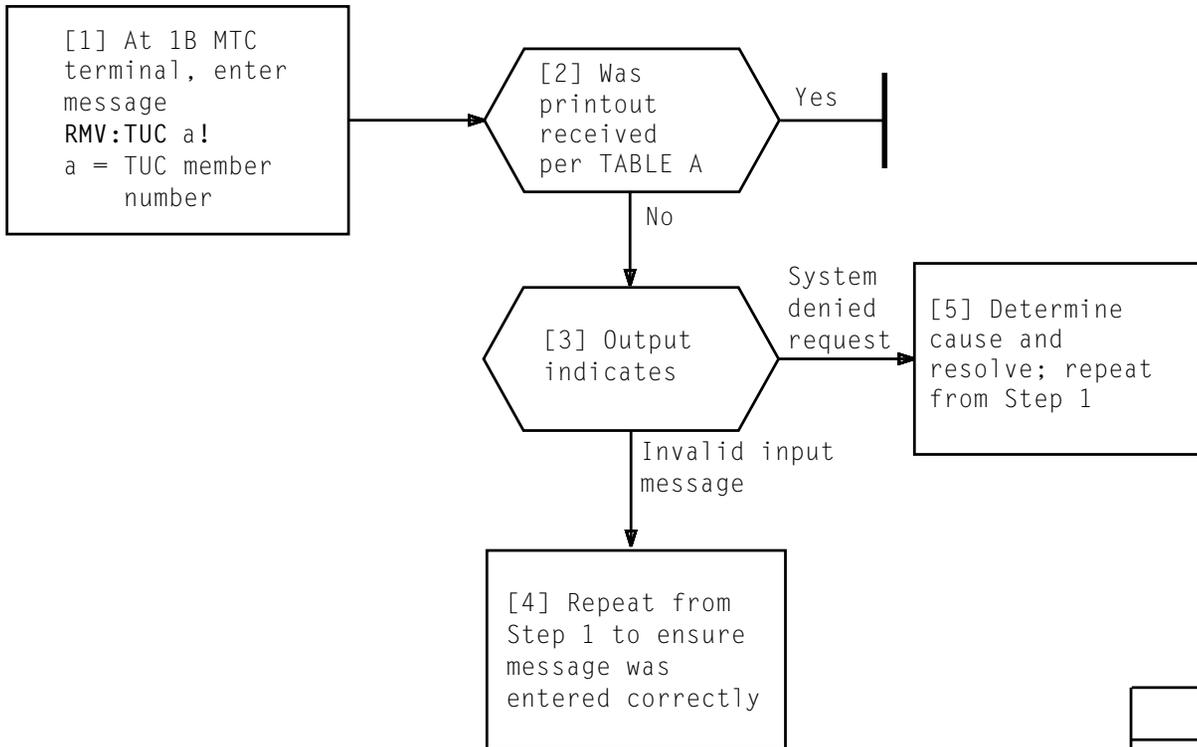


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	RMV: TUC a COMPLETED
a = TUC member number	

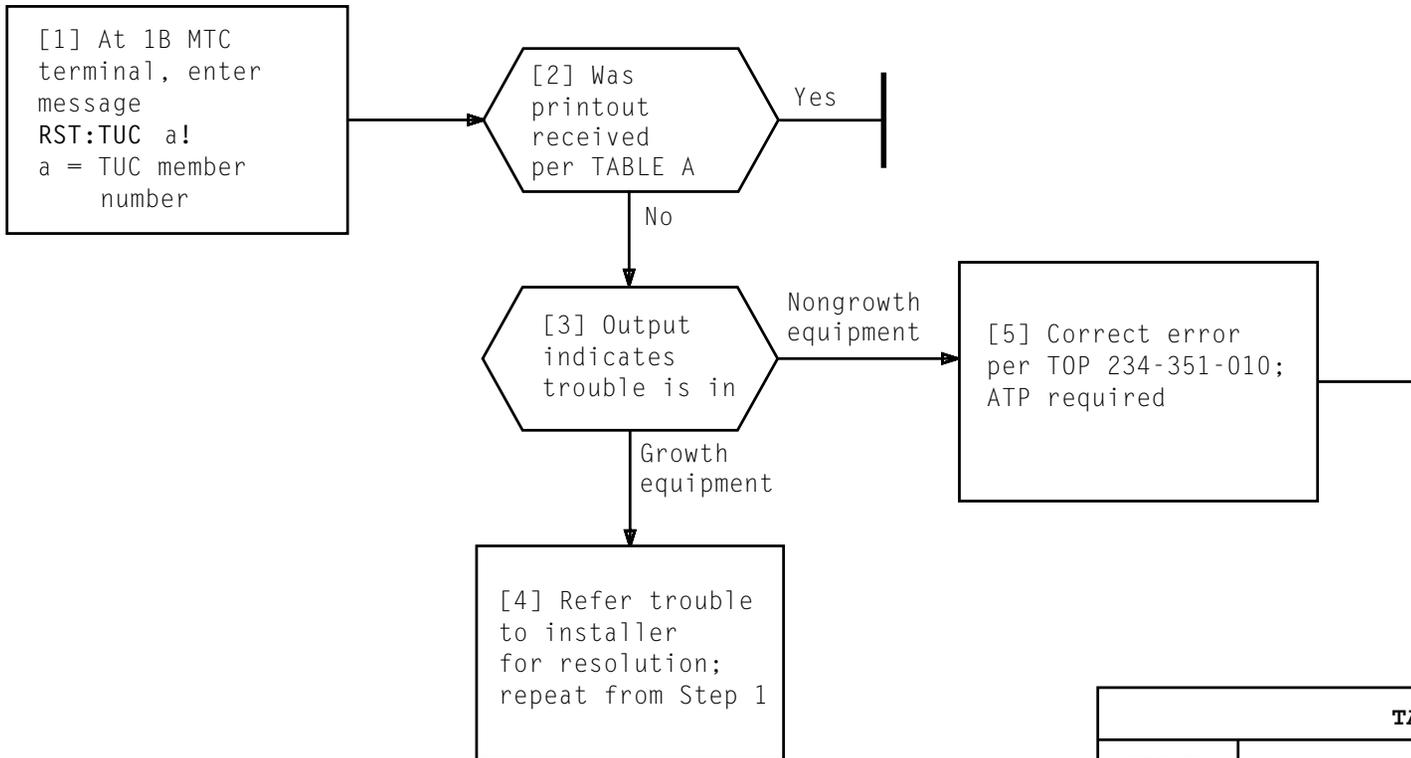
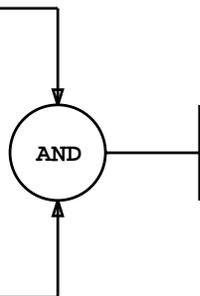


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN: TUC a COMPLETED ATP MSG COMPL RST: TUC a COMPLETED
a = TUC member number	

[1] In column for 1B Processor cabinet 0,
determine location where growth PSs
(or degrowth PSs) are to be installed
(or removed) and record _____



[2] In column for 1B Processor cabinet 1,
determine location where growth PSs
(or degrowth PSs) are to be installed
(or removed) and record _____

TABLE A			
1B PROCESSOR CABINET 0		1B PROCESSOR CABINET 1	
PS MEMBER NUMBER	LOCATION	PS MEMBER NUMBER	LOCATION
4	41-144	5	41-144
6	41-152	7	41-152
8	41-160	9	41-160
10	41-168	11	41-168
12	41-176	13	41-176

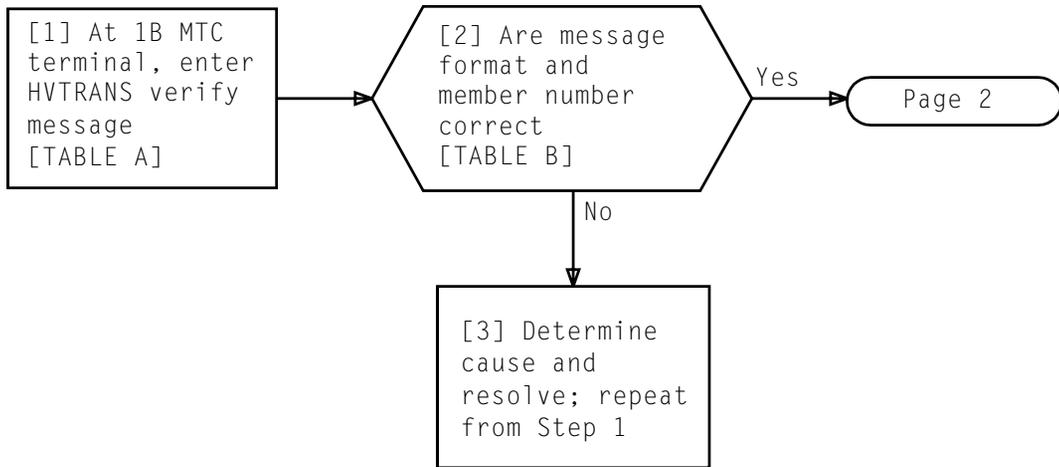


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN;BOTH:CC a,HVTRANS!
a = Member number of unit type	

TABLE B	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,CC a COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA NONE CURRENT DATA EXTENDED MEMORY=b PROGRAM STORE EXPANSION=N
a = Member number of unit type b = Y or N	

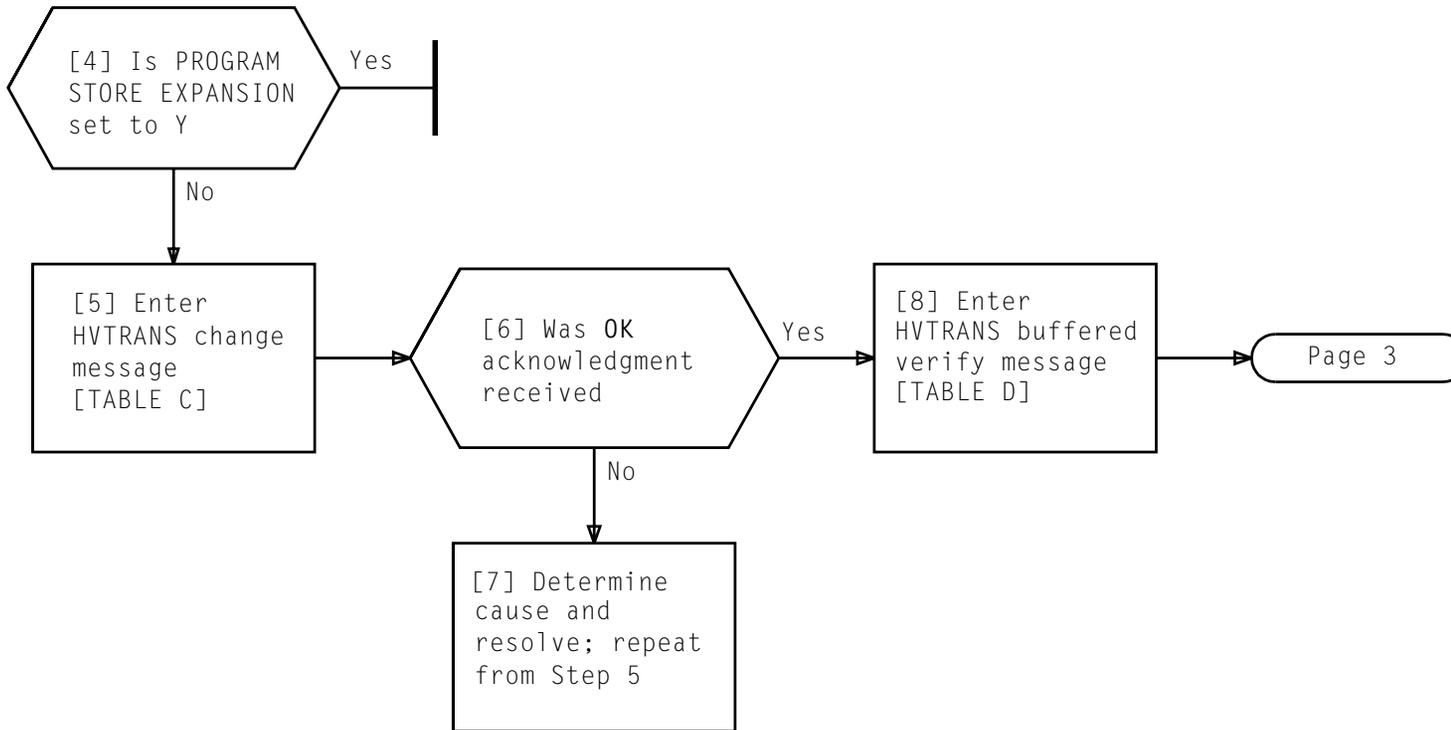


TABLE C	
MESSAGE NUMBER	INPUT MESSAGE
1	IN:XLBUF:CC a,HVTRANS (PSE,Y)!
a = Member number of unit type	

TABLE D	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN;BUF:CC a,HVTRANS!
a = Member number of unit type	

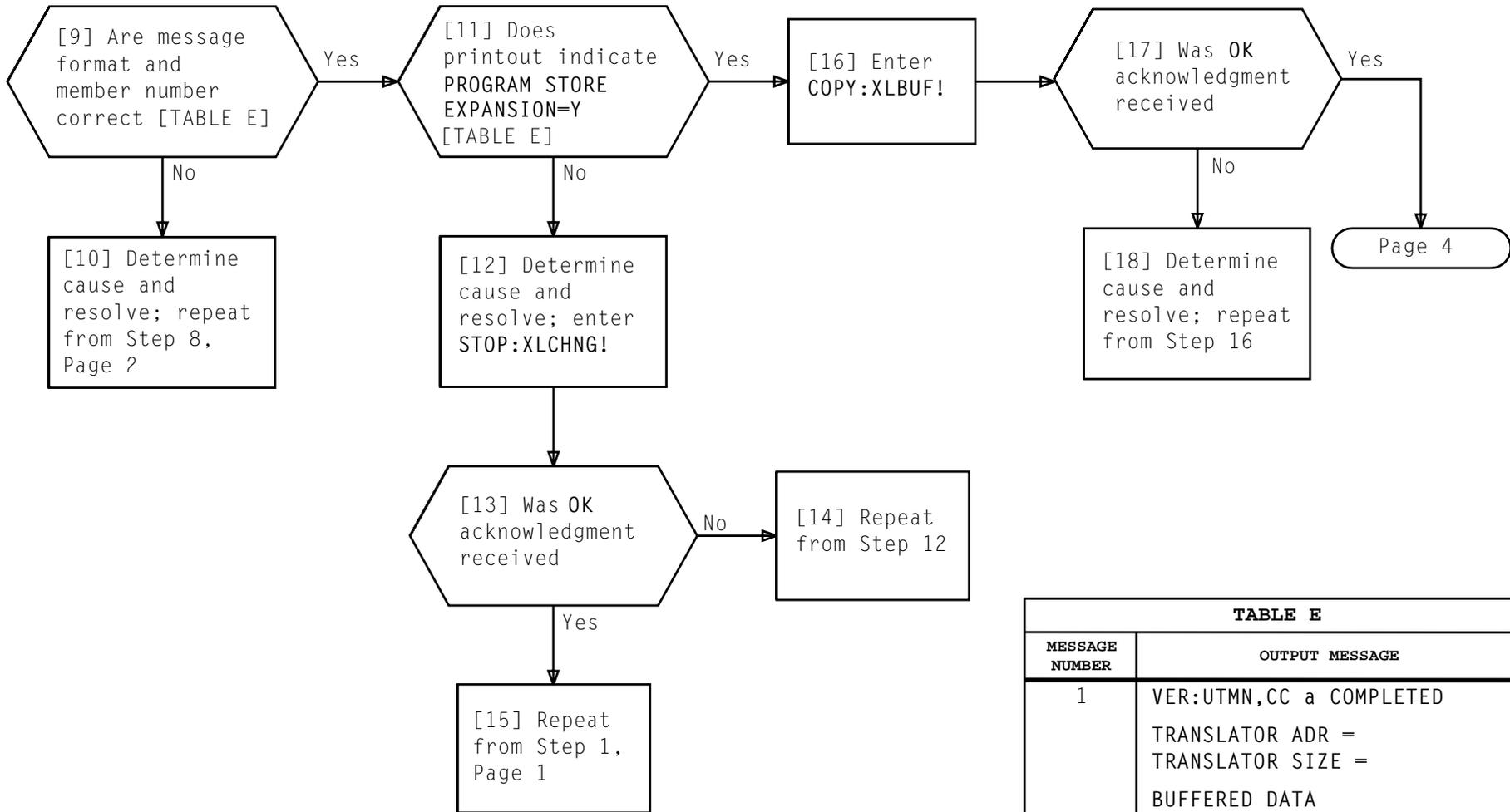


TABLE E	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,CC a COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA EXTENDED MEMORY=b PROGRAM STORE EXPANSION=Y
a = Member number of unit type b = Y or N	

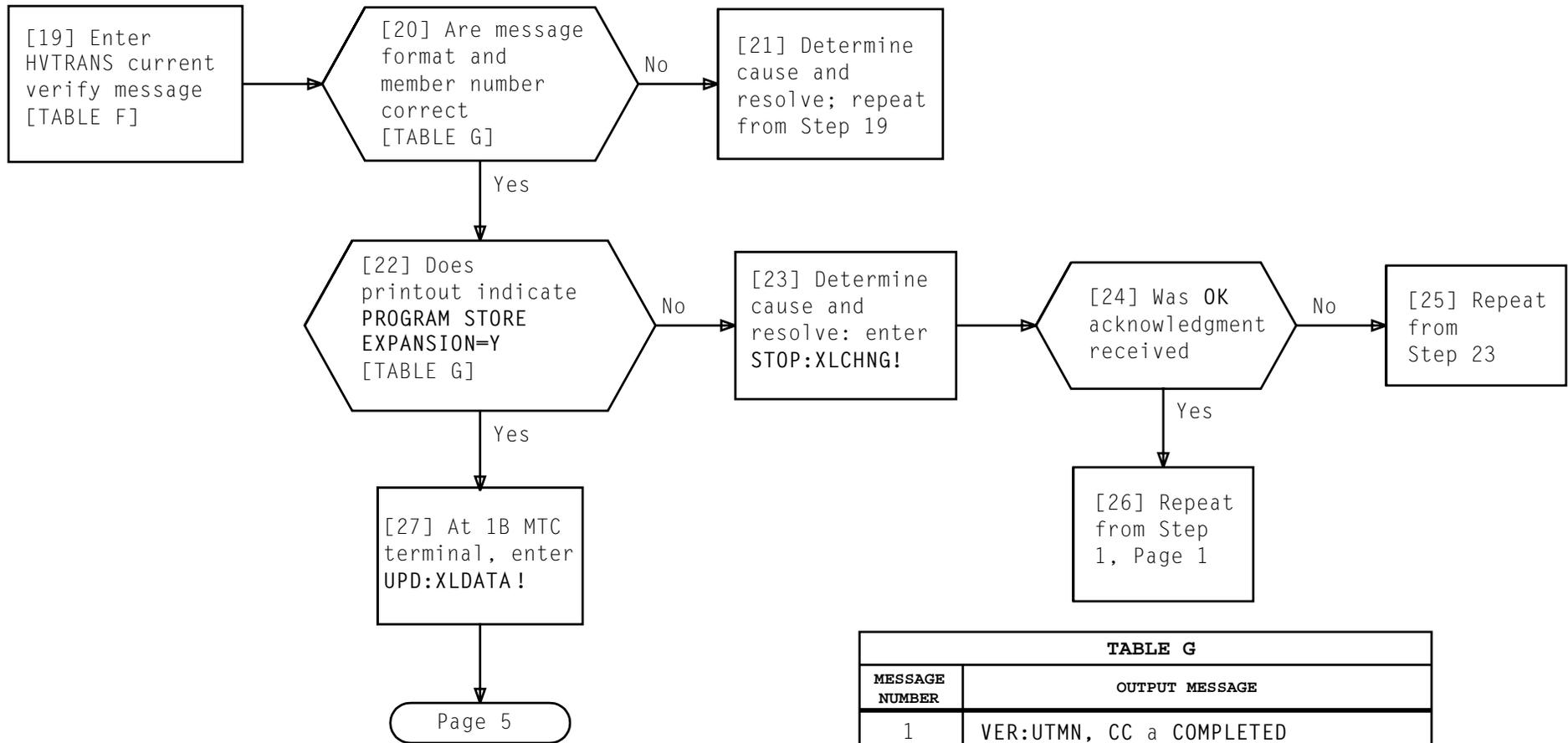


TABLE F	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:CC a,HVTRANS!
a = Member number of unit type	

TABLE G	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN, CC a COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA EXTENDED MEMORY=b PROGRAM STORE EXPANSION=Y
a = Member number of unit type b = Y or N	

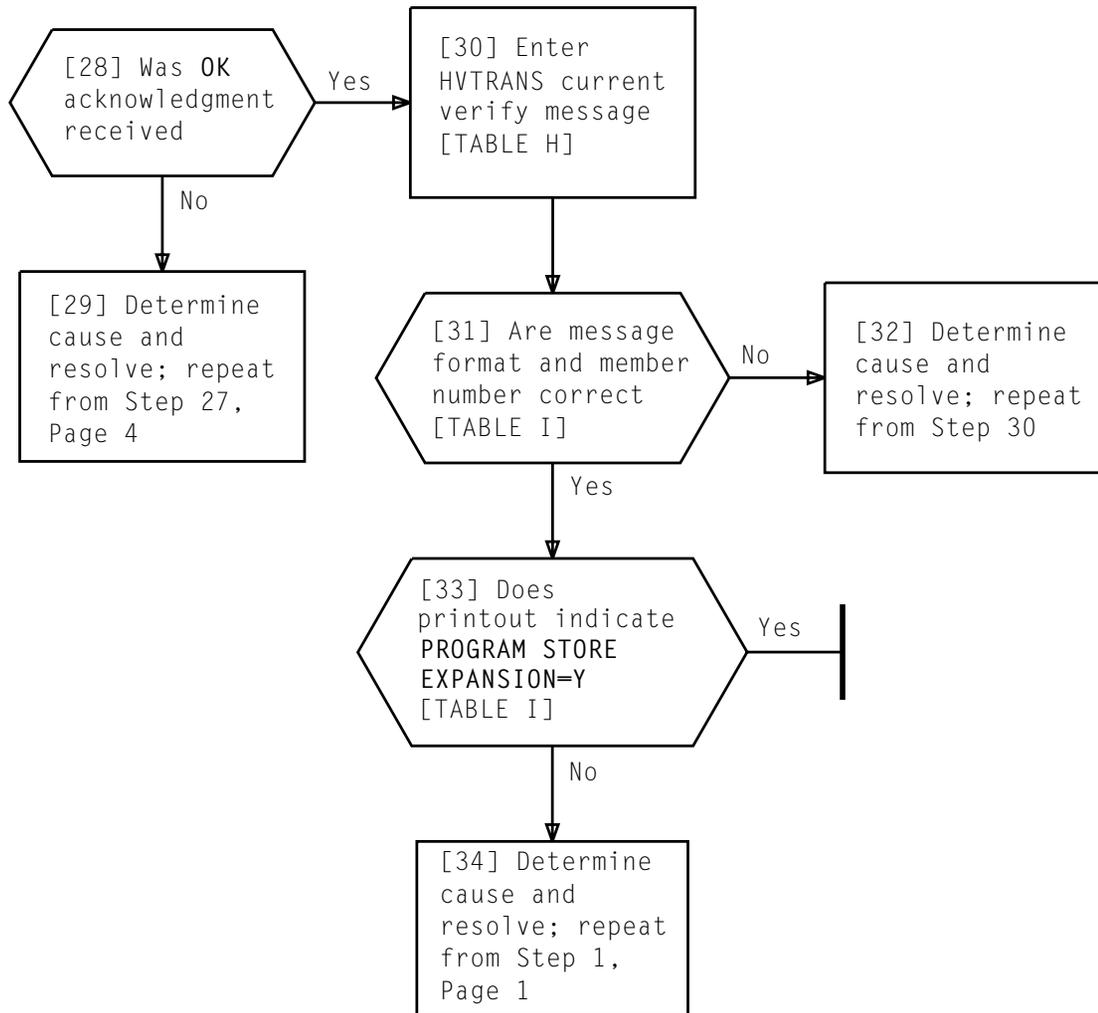


TABLE H	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:CC a,HVTRANS!
a = Member number of unit type	

TABLE I	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,CC a COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA EXTENDED MEMORY=b PROGRAM STORE EXPANSION=Y
a = Member number of unit type b = Y or N	

CHANGE AND VERIFY CC HARDWARE VERSION TRANSLATOR FOR PS EXPANSION

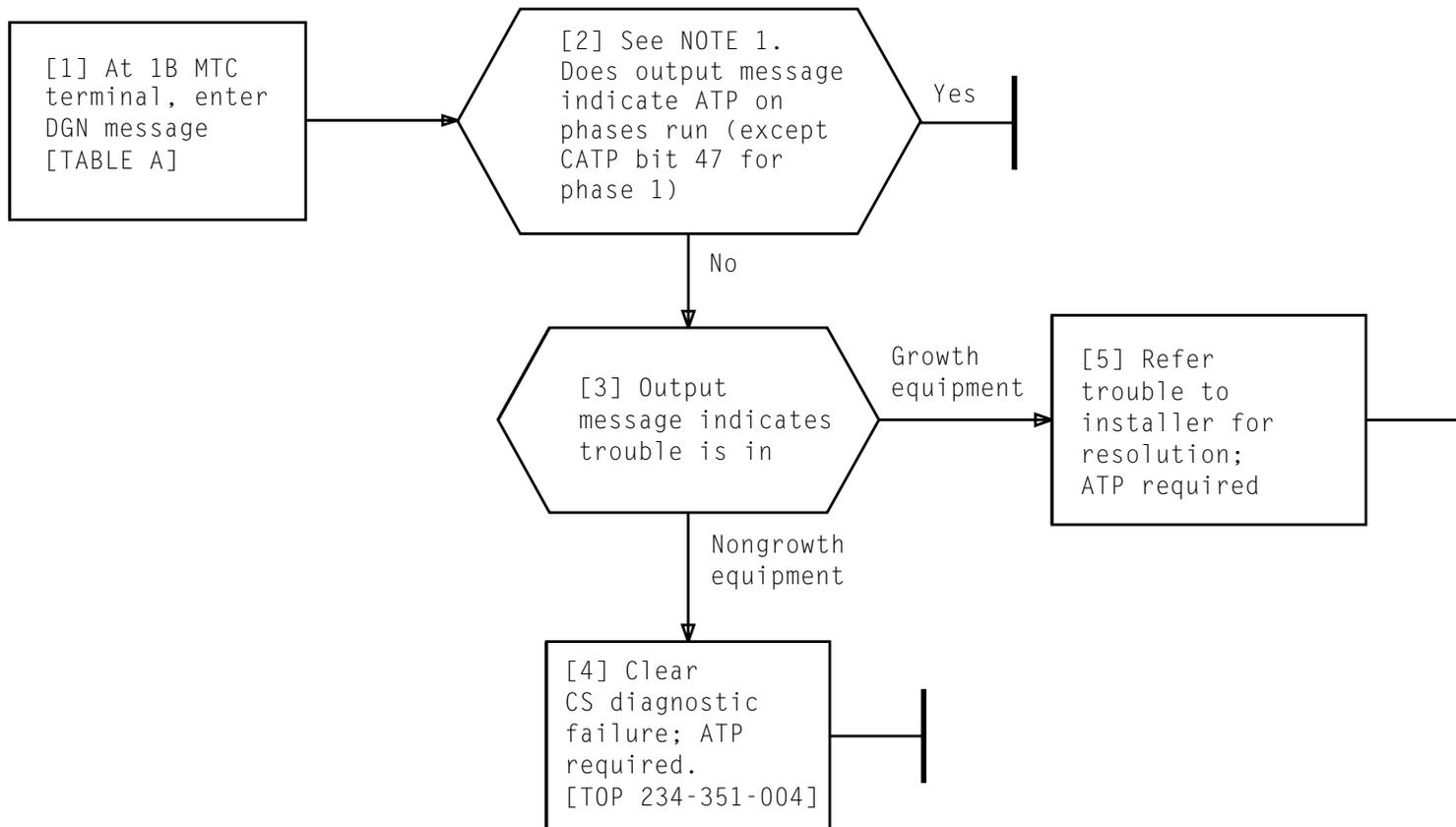


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	DGN:PS a:PH 1-97!
a = Member number of growth PS	

NOTE 1	
It will take approximately 11 minutes for diagnostics to complete	
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[1] At power control switch on circuit pack, **KLW1** for growth PS, operate **ROS/NORM** switch to **NORM** and observe LEDs for TABLE A indications

[2] At SREC1 terminal, determine if printout was received per TABLE B

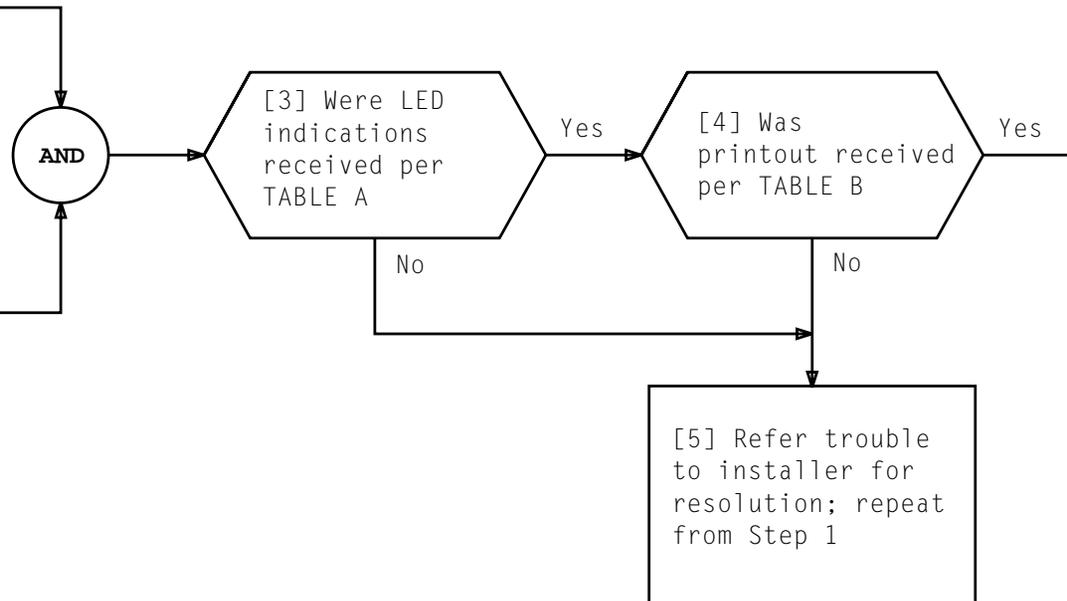
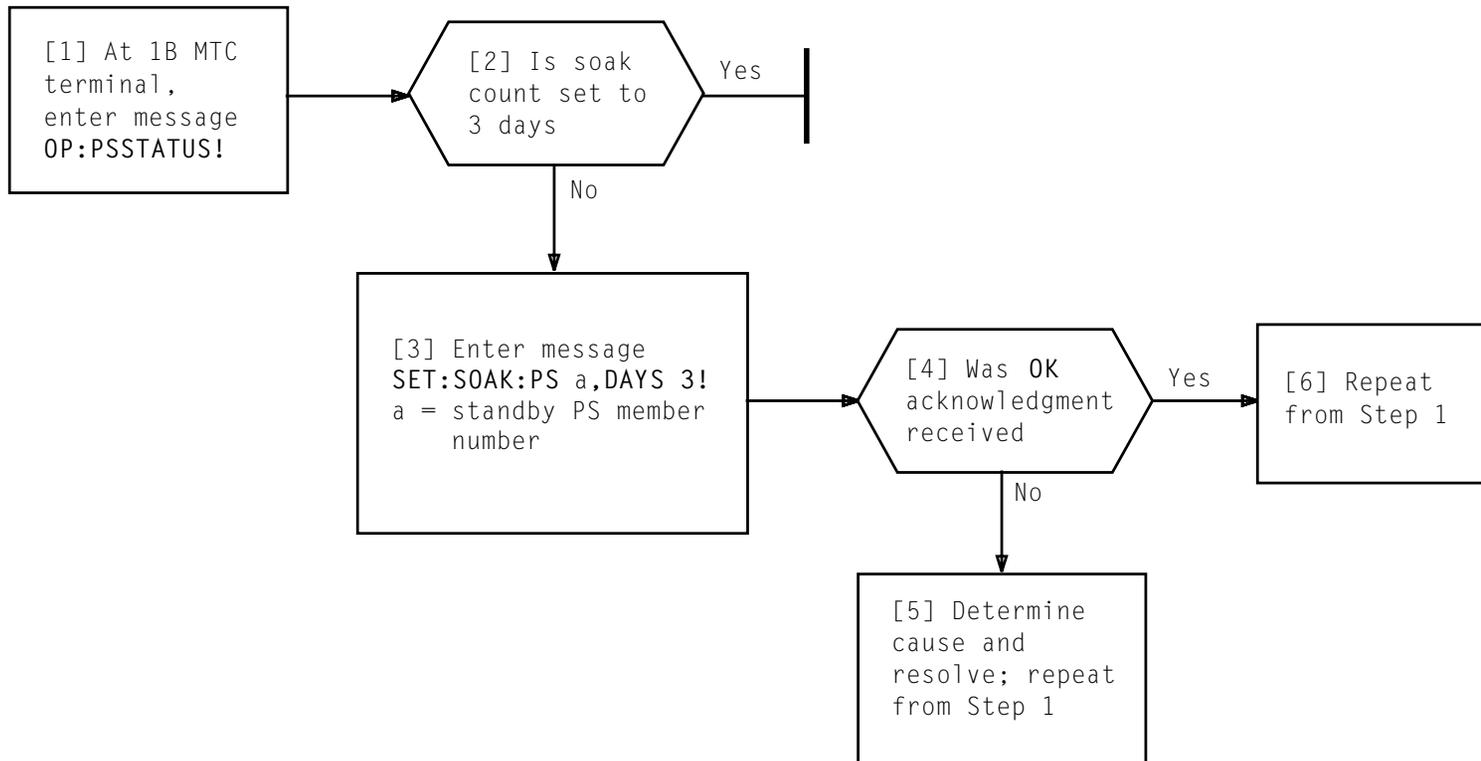


TABLE A	
LED	INDICATION
ACK*	On then Off
OS	Remains On

* expected indication may take a short period of time to be received

TABLE B	
MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN: PS a COMPLETED CATP (20000000 00000000) MSG COMPL RST: PS a STOPPED MCODE ALREADY DUPLICATED

a = member number of growth PS



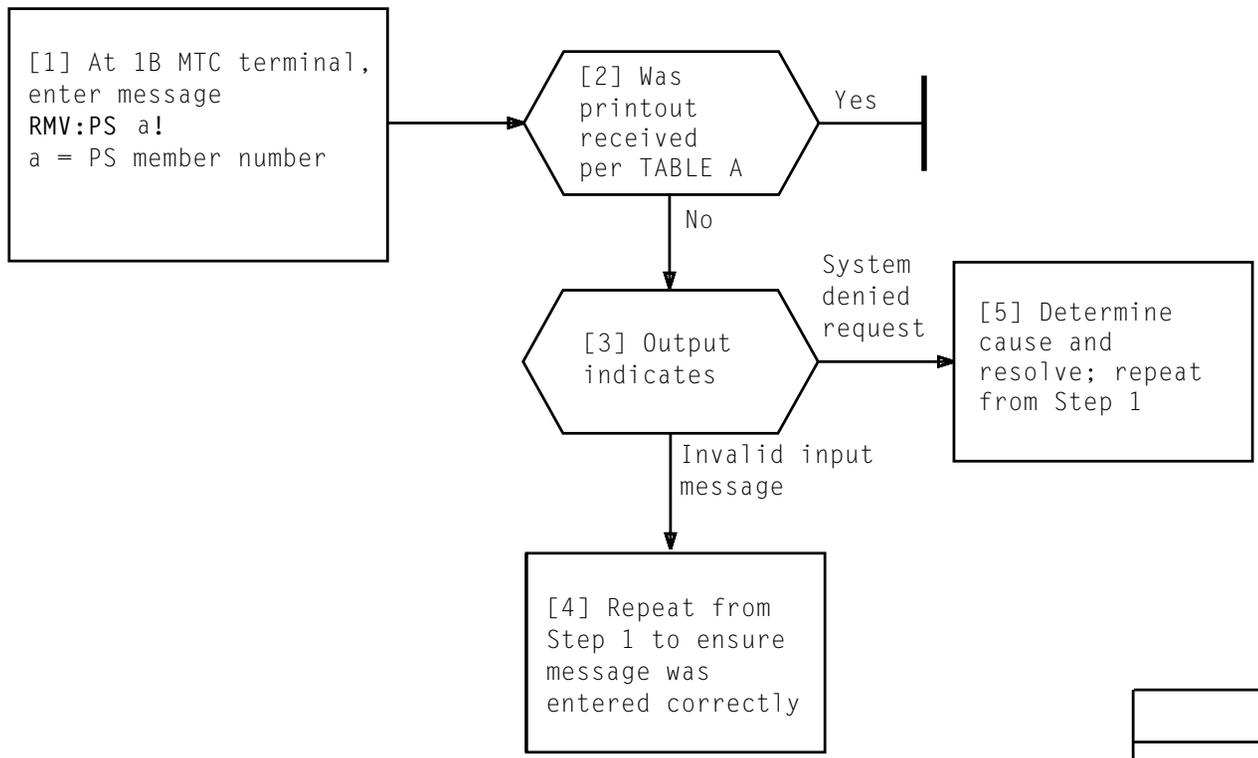


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	RMV:PS a COMPLETED
a = PS member number	

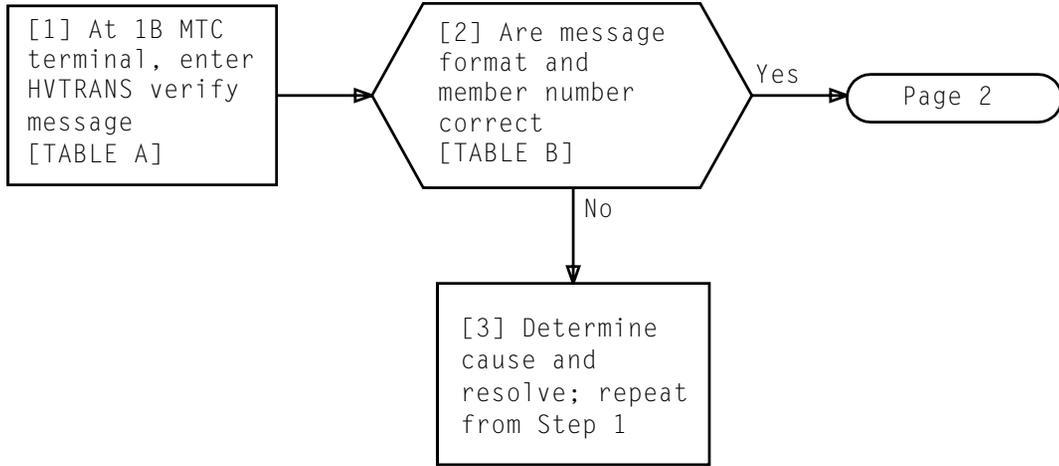


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN;BOTH:CC a,HVTRANS!
a = Member number of unit type	

TABLE B	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,CC a COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA NONE CURRENT DATA EXTENDED MEMORY=b PROGRAM STORE EXPANSION=Y
a = Member number of unit type b = Y or N	

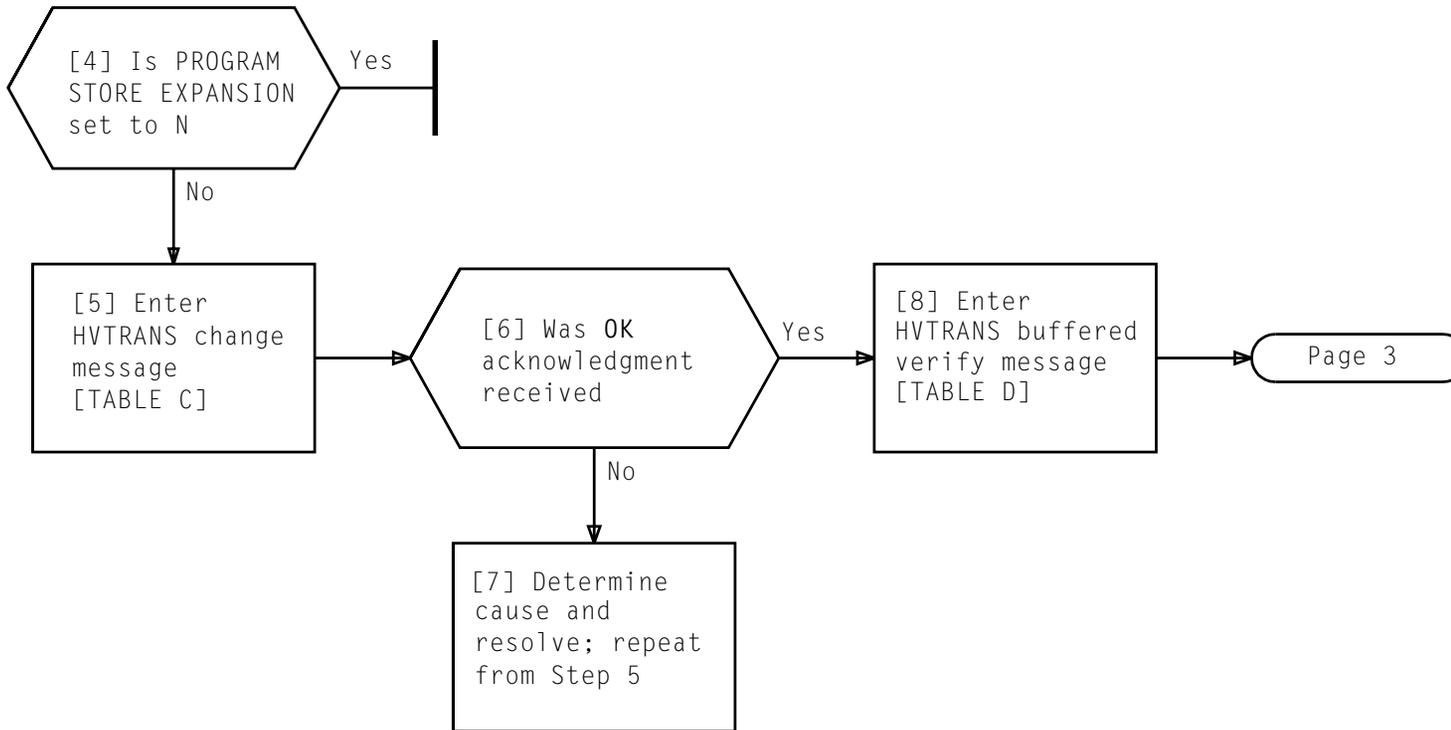


TABLE C	
MESSAGE NUMBER	INPUT MESSAGE
1	IN:XLBUF:CC a,HVTRANS (PSE,N)!
a = Member number of unit type	

TABLE D	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN;BUF:CC a,HVTRANS!
a = Member number of unit type	

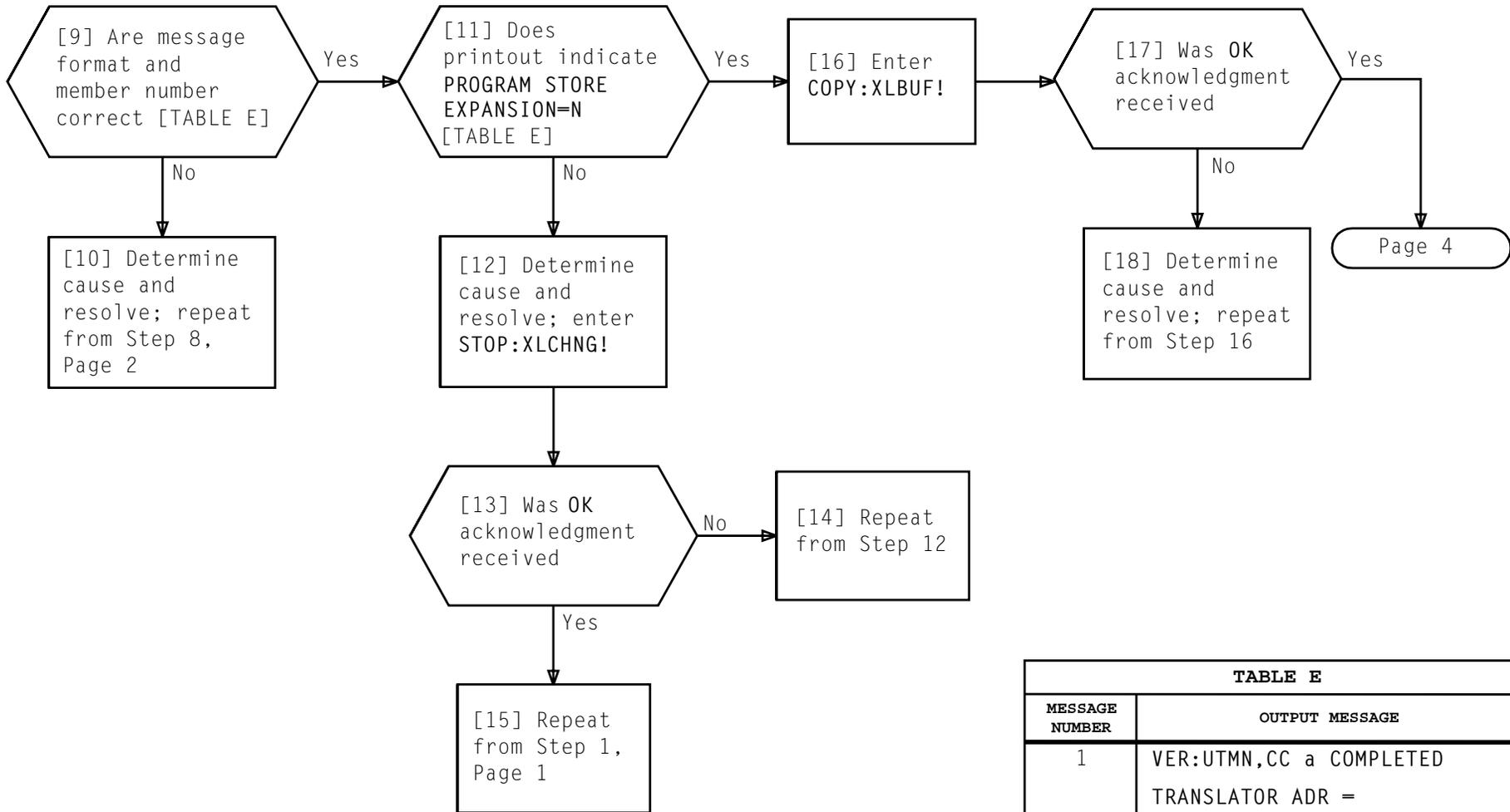


TABLE E	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,CC a COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA EXTENDED MEMORY=b PROGRAM STORE EXPANSION=N
a = Member number of unit type b = Y or N	

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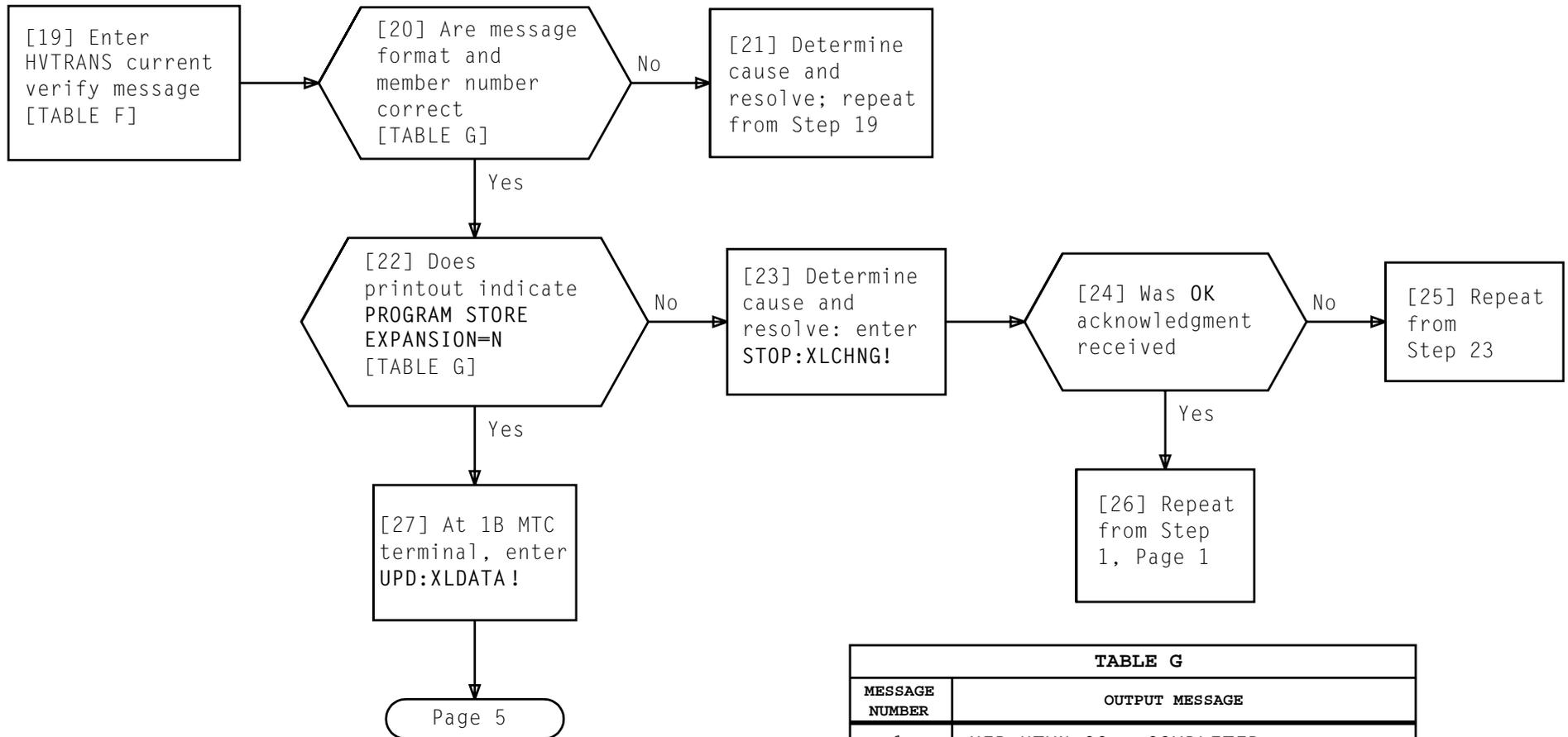


TABLE F	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:CC a,HVTRANS!
a = Member number of unit type	

TABLE G	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,CC a COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA EXTENDED MEMORY=b PROGRAM STORE EXPANSION=N
a = Member number of unit type b = Y or N	

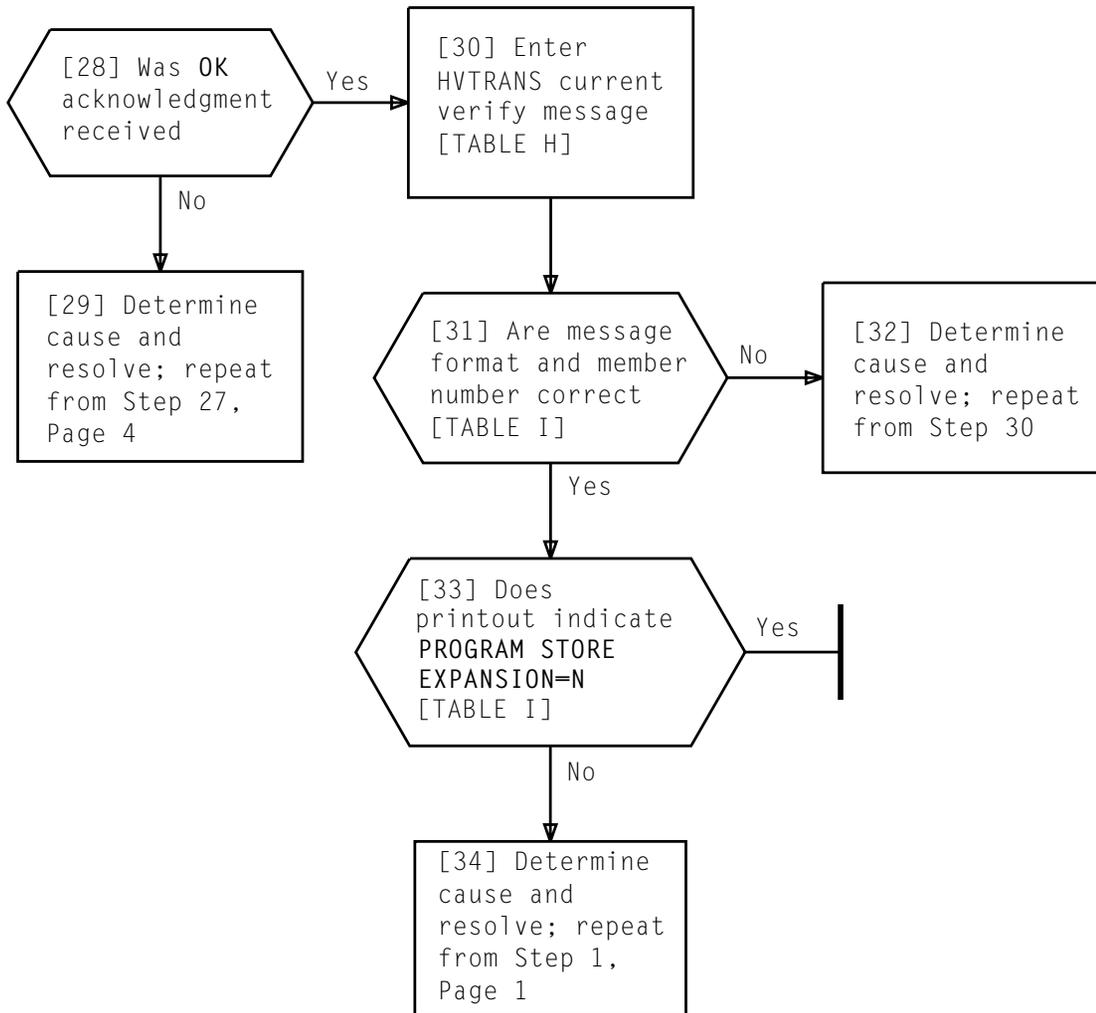


TABLE H	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:CC a,HVTRANS!
a = Member number of unit type	

TABLE I	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,CC a COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA EXTENDED MEMORY=b PROGRAM STORE EXPANSION=N
a = Member number of unit type b = Y or N	

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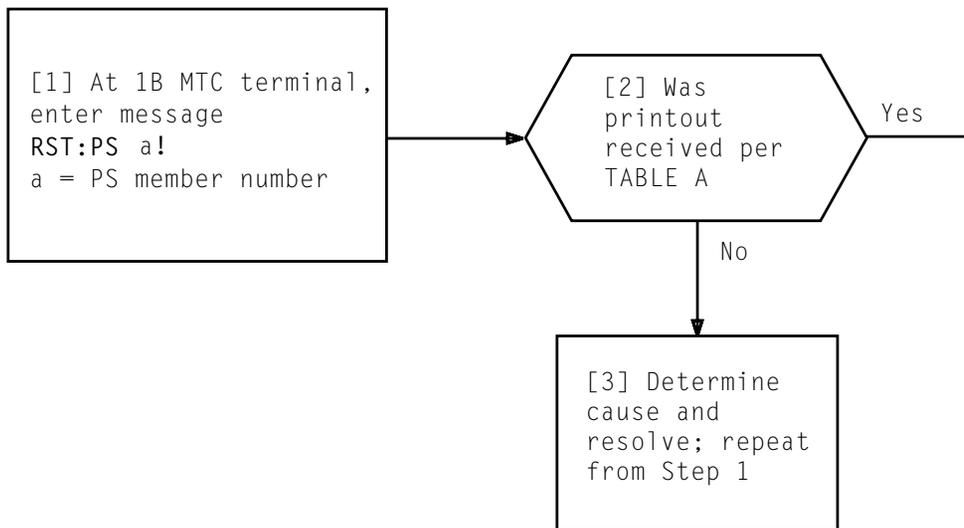


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN: PS a COMPLETED ATP MSG COMPL RST: PS a MCODE b COMPLETED
a = Standby CC member number (0 or 1) b = MCODE assigned to PS	

[1] Using TABLE A for locations,
determine circuit packs
installed in 1B Processor
cabinets 0 and 1

[2] At 1B MTC terminal,
enter message
DUMP:CSS,ADR 7775000,L2!

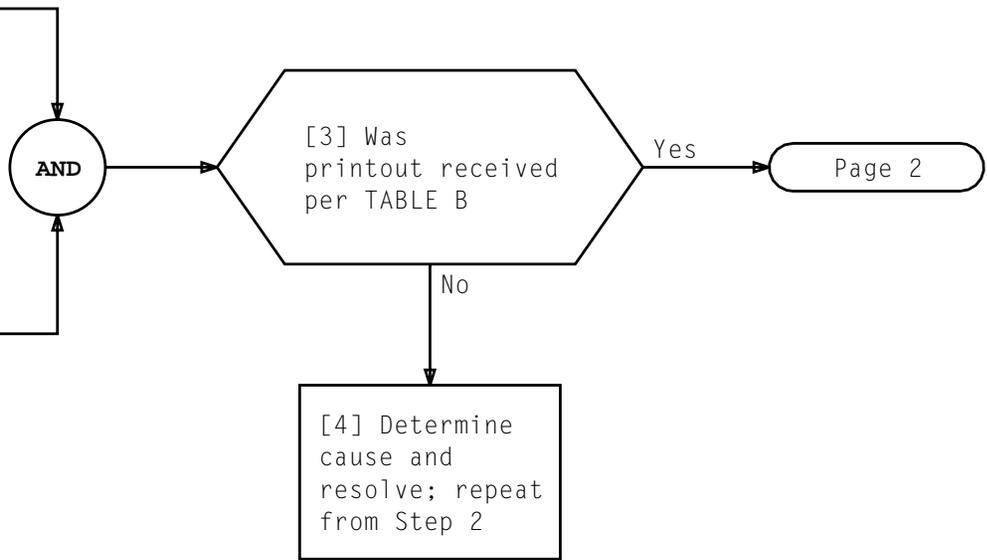
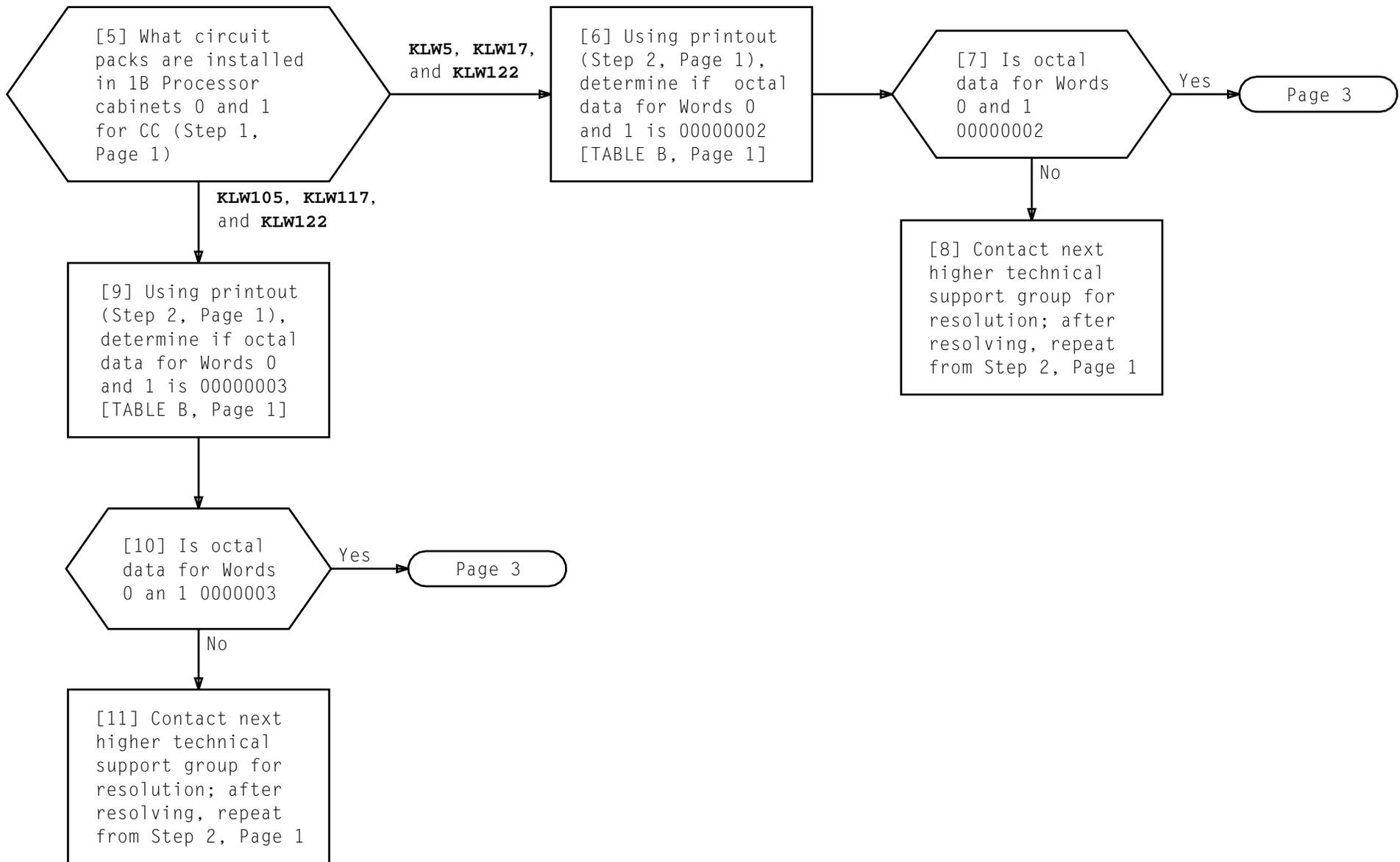


TABLE A			
UNIT TYPE	EQUIPMENT LOCATION	CIRCUIT PACKS	
CC	041-086	KLW17	KLW117
	041-096	KLW5	KLW105
	041-120	KLW22	KLW122
MUP	058-078	KLW16	KLW116

TABLE B	
MESSAGE NUMBER	OUTPUT MESSAGE
1	DUMP:CSS,INDIR 0,ADR 000775000,INC +0 COMPLETED 7747775000 (WORD 0) (WORD 1)

VERIFY HVTRANS FOR CCs 0 AND 1, AND MUPs 0 AND 1



[12] At 1B MTC terminal, enter message
DUMP:CSS,ADR 7775146,L2!

[13] Was printout received per TABLE C

[14] Determine cause and resolve; repeat from Step 12

[15] Using printout (Step 12), determine if octal data for Words 1 and 2 is 00000001 [TABLE C]

[16] Is octal data for Words 0 and 1 00000001

[17] Contact next higher technical support group for resolution; after resolving, repeat from Step 12

TABLE C	
MESSAGE NUMBER	OUTPUT MESSAGE
1	DUMP:CSS,INDIR 0,ADR 000775146,INC +0 COMPLETED 7747775146 (WORD 0) (WORD 1)

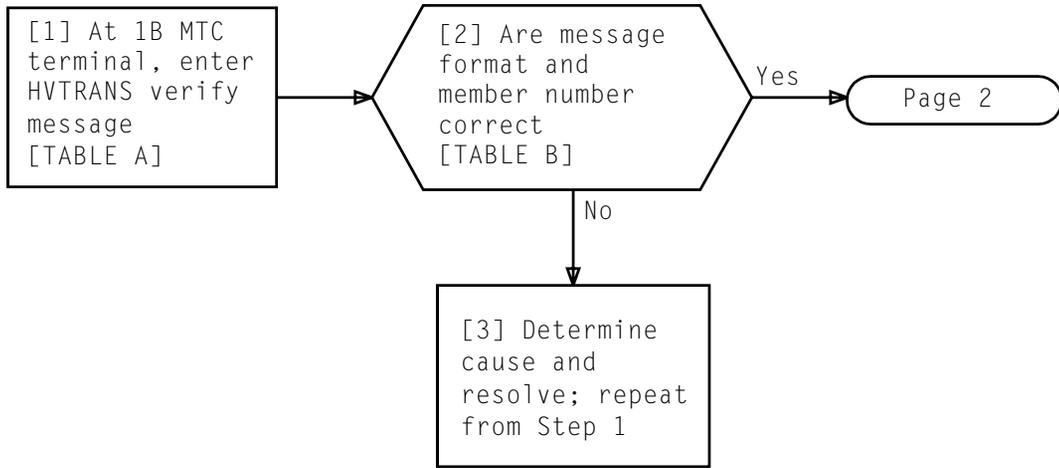


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN;BOTH:MUP a,HVTRANS!
a = Member number of unit type	

TABLE B	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,MUP a COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA NONE CURRENT DATA EXTENDED MEMORY = N
a = Member number of unit type	

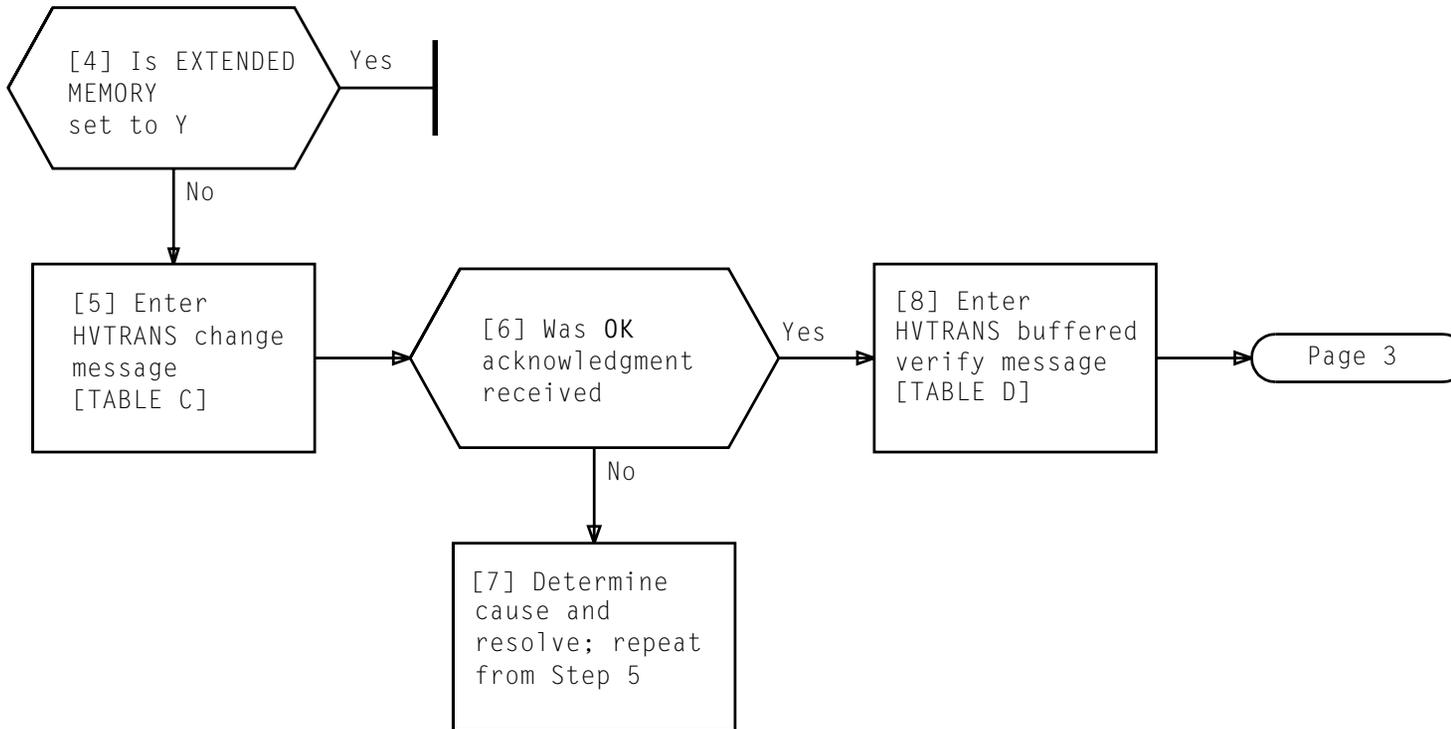


TABLE C	
MESSAGE NUMBER	INPUT MESSAGE
1	IN:XLBUF:MUP a,HVTRANS (XMA,Y)!
a = Member number	

TABLE D	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN;BUF:MUP a,HVTRANS!
a = Member number of unit type	

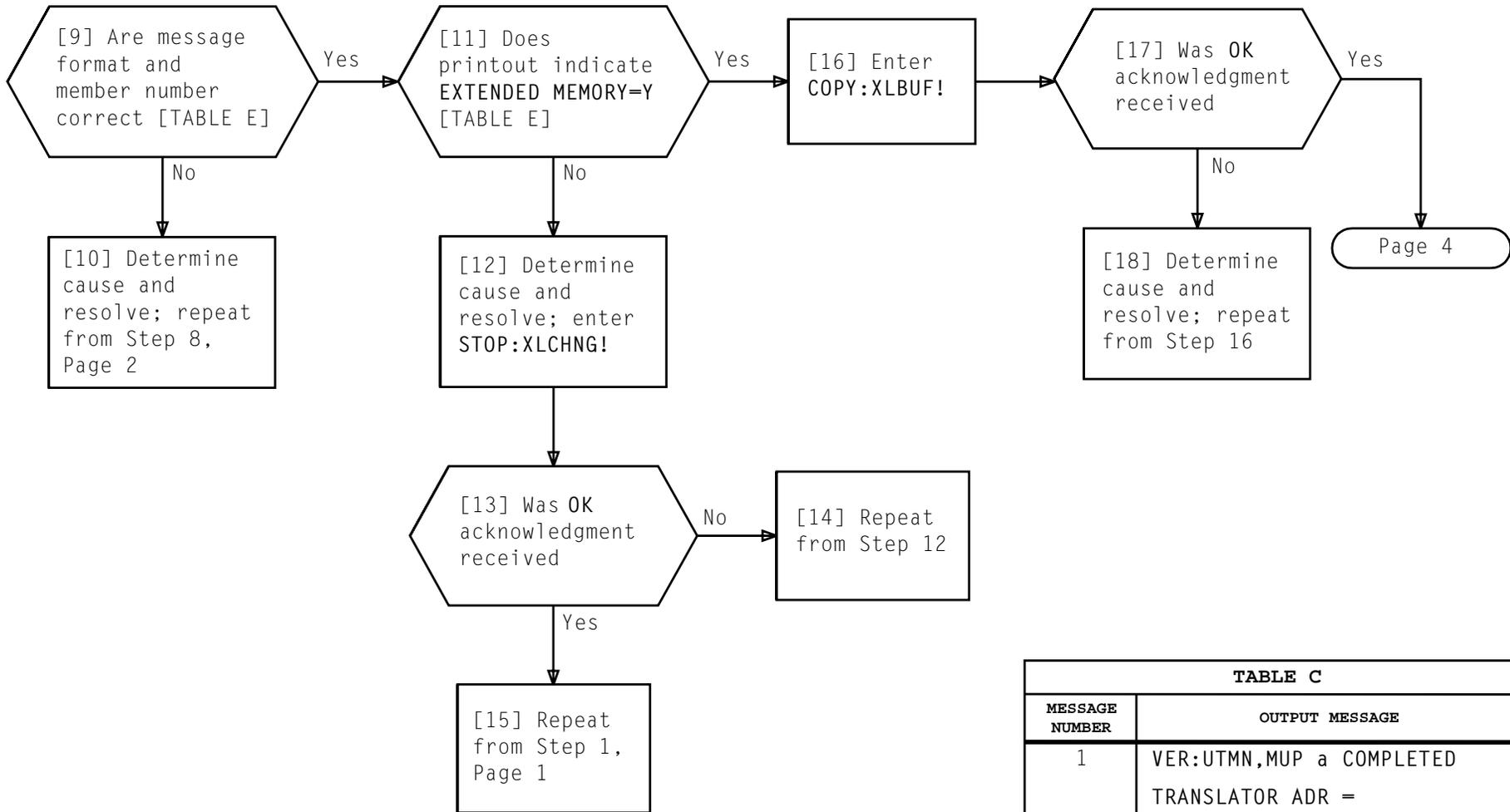


TABLE C	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,MUP a COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA EXTENDED MEMORY=Y
a = Member number of unit type	

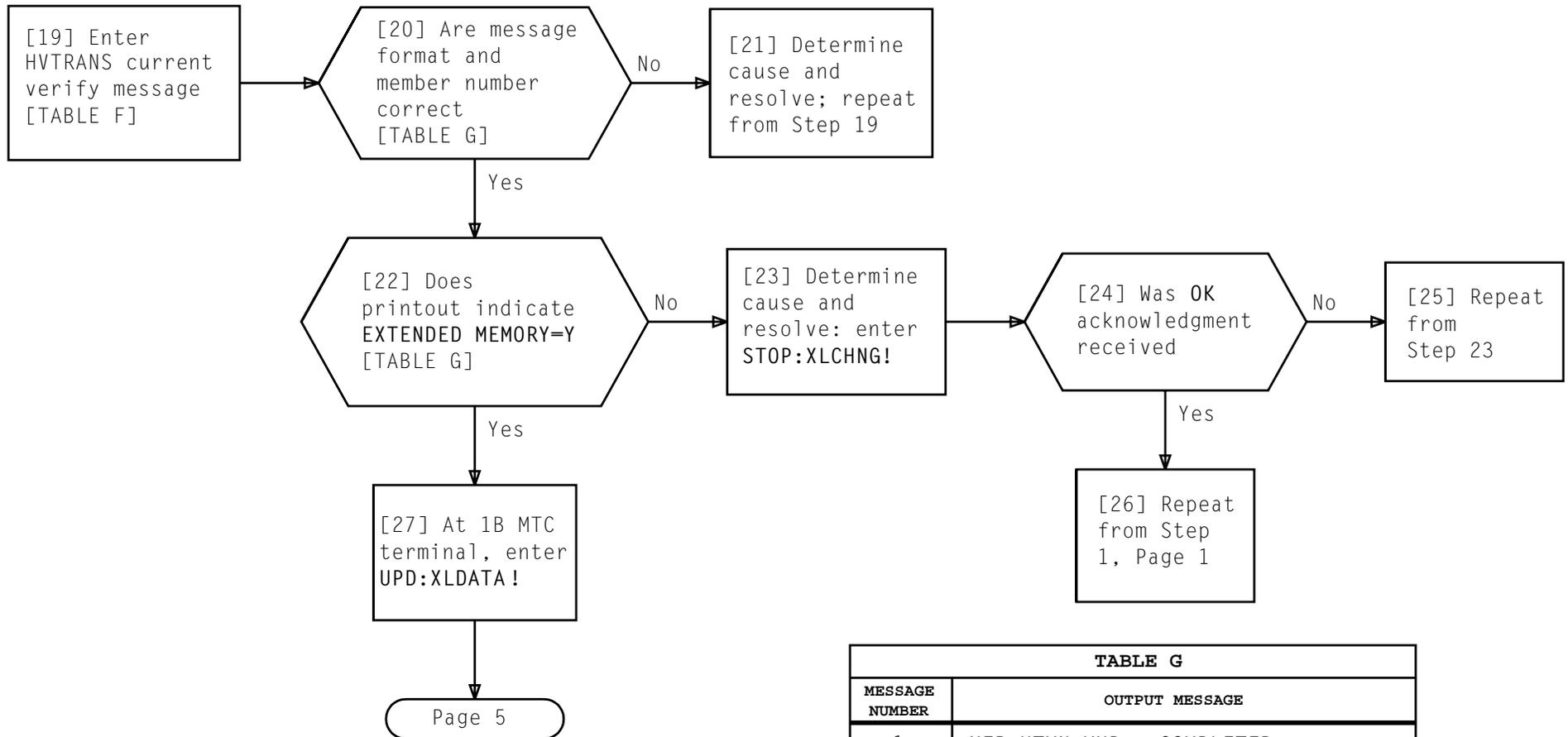


TABLE F	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:MUP a,HVTRANS!
a = Member number of unit type	

TABLE G	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,MUP a COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA EXTENDED MEMORY = Y
a = Member number of unit type	

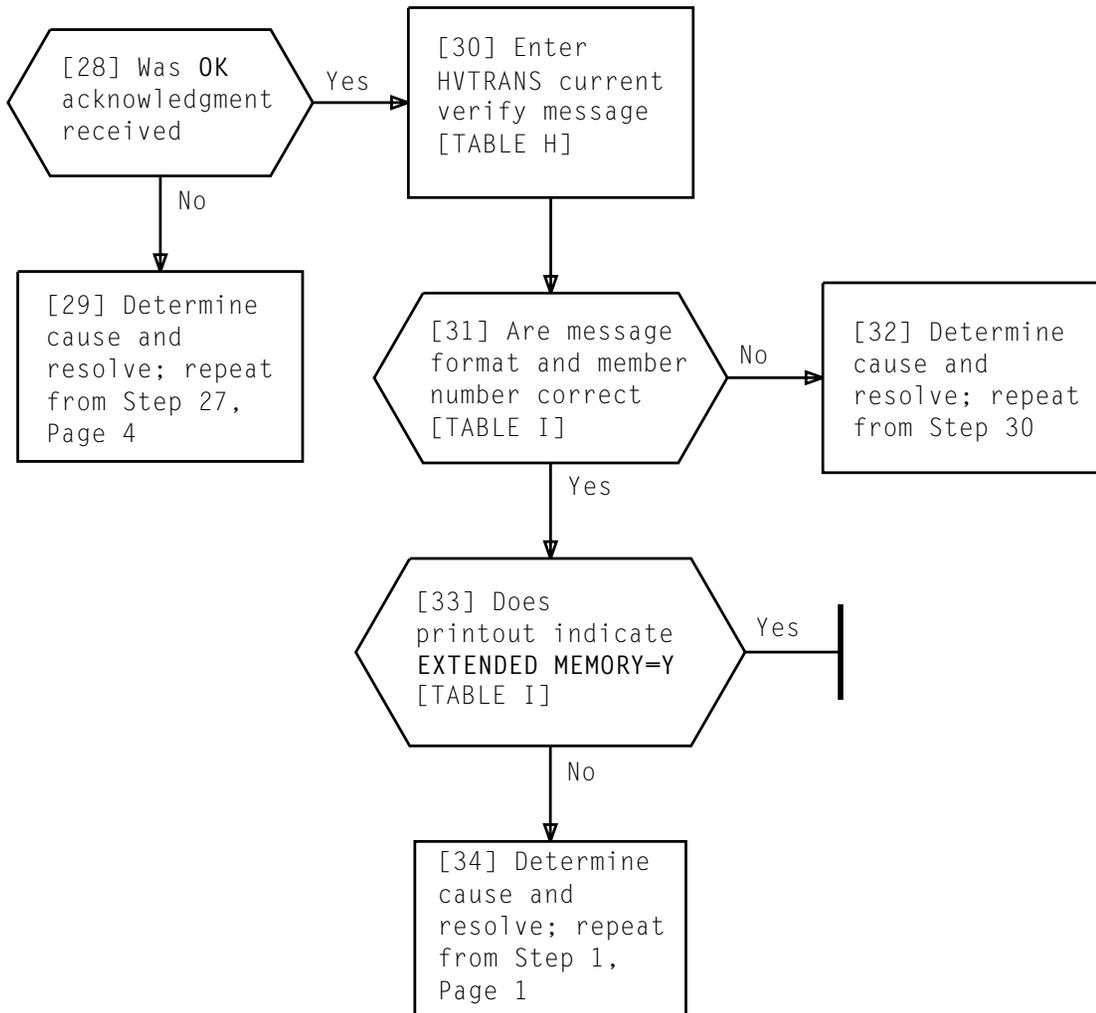


TABLE H	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:MUP a,HVTRANS!
a = Member number of unit type	

TABLE I	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,MUP a COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = CURRENT DATA EXTENDED MEMORY = Y
a = Member number of unit type	

At SREC or Beltline Terminal:

[1] Depress **FORM ENTER**
key to **ON**

[2] Read NOTE 1. Type
input messages per
TABLE A

[3] Depress **FORM ENTER**
key to **OFF**

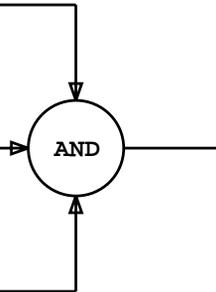
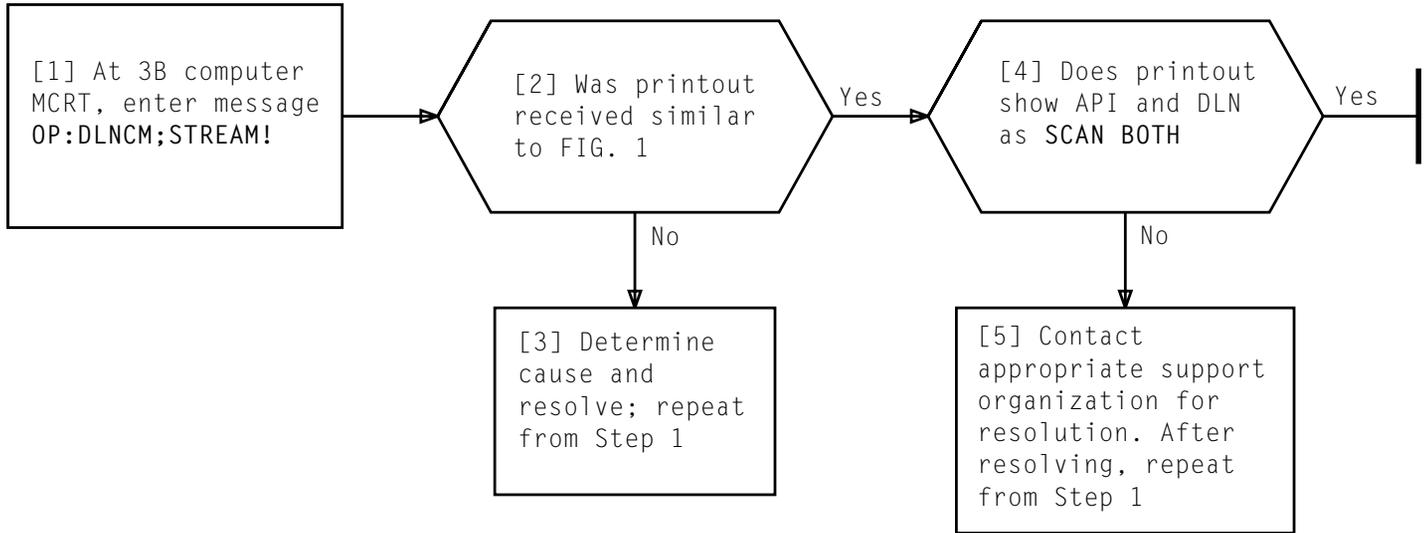


TABLE A			
NUMBER	INPUT MESSAGES	NUMBER	INPUT MESSAGES
1	INH:MACLI,CLASS MTCE;REX!	6	EX:AUB a:PH 99,ADR b a = Bus 0 or 1 b = 120-163 (for bus 0) or 274-337 (for bus 1)
2	EX:AUB a;START! a = Bus 0 or 1	7	EX:AUB a! a = Bus 0 or 1
3	EX:AUB a:PH 99,ADR b a = Bus 0 or 1 b = 42-75 (for bus 0) or 216-251 (for bus 1)	8	OP:MACLI,CLASS MTCE!
4	EX:AUB a:PH 99,ADR b a = Bus 0 or 1 b = 75-120 (for bus 0) or 251-274 (for bus 1)	9	STOP:MACLI,CLASS MTCE,SUBCLASS a! a = CLASS MTCE SUBCLASS number from OP:MACLI output message assigned to AUB diagnostics.
5	EX:AUB a:PH 99,ADR b a = Bus 0 or 1 b = 163-212 (for bus 0) or 337-366 (for bus 1)	10	ALW:MACLI,CLASS MTCE!

NOTE 1	
Messages must not be entered into system at this time	
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STORE AU BUS PHASE 99 INPUT MESSAGES (AUB CONVERSION SWITCH REMOVAL)



OP DLNCM STREAM COMPLETED

API-DLN STREAM STATUS

API: SCAN BOTH

DLN: SCAN BOTH

INCOMING BUFFER

START X'-----
 END X'-----
 LOAD POINTER X'-----
 UNLOAD POINTER X'-----
 END POINTER X'-----

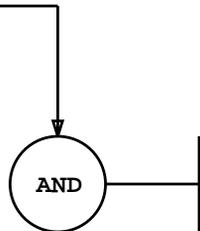
OUTGOING BUFFER

START X'-----
 END X'-----
 LOAD POINTER X'-----
 UNLOAD POINTER X'-----
 END POINTER X'-----

----- = VARIABLE HEX DATA

FIG. 1 - Sample OP:DLNCM Printout

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



[2] Using printout and FIG. 1,
determine API member number
assigned SBY and record as
standby for later use

Record this value

↓

APS 0 API a ACT API b SBY

a = Active API member number
b = Standby API member number

FIG. 1 - Sample OP:APSTATUS Printout

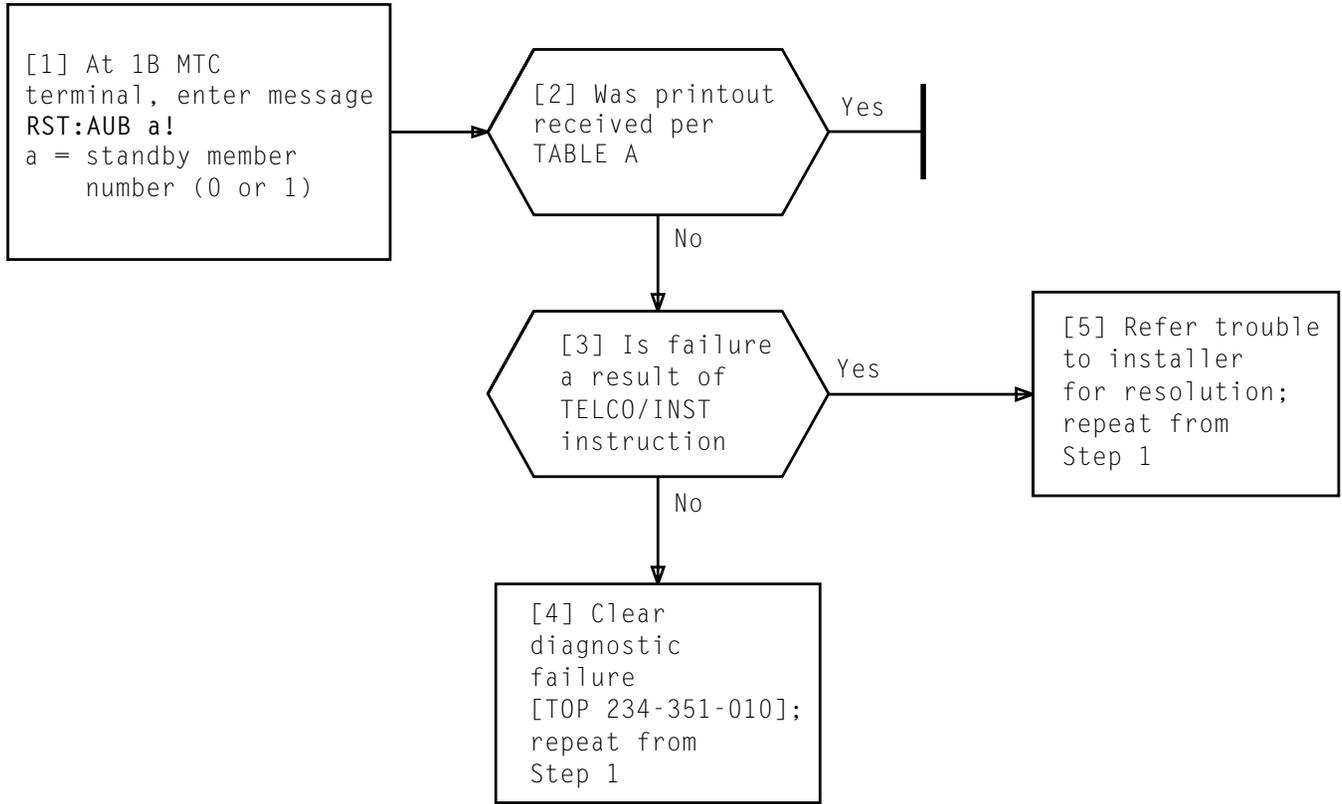


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN: AUB a COMPLETED ATP MSG COMPL TEST: AUB a {ATP NTR} RST: AUB a COMPL

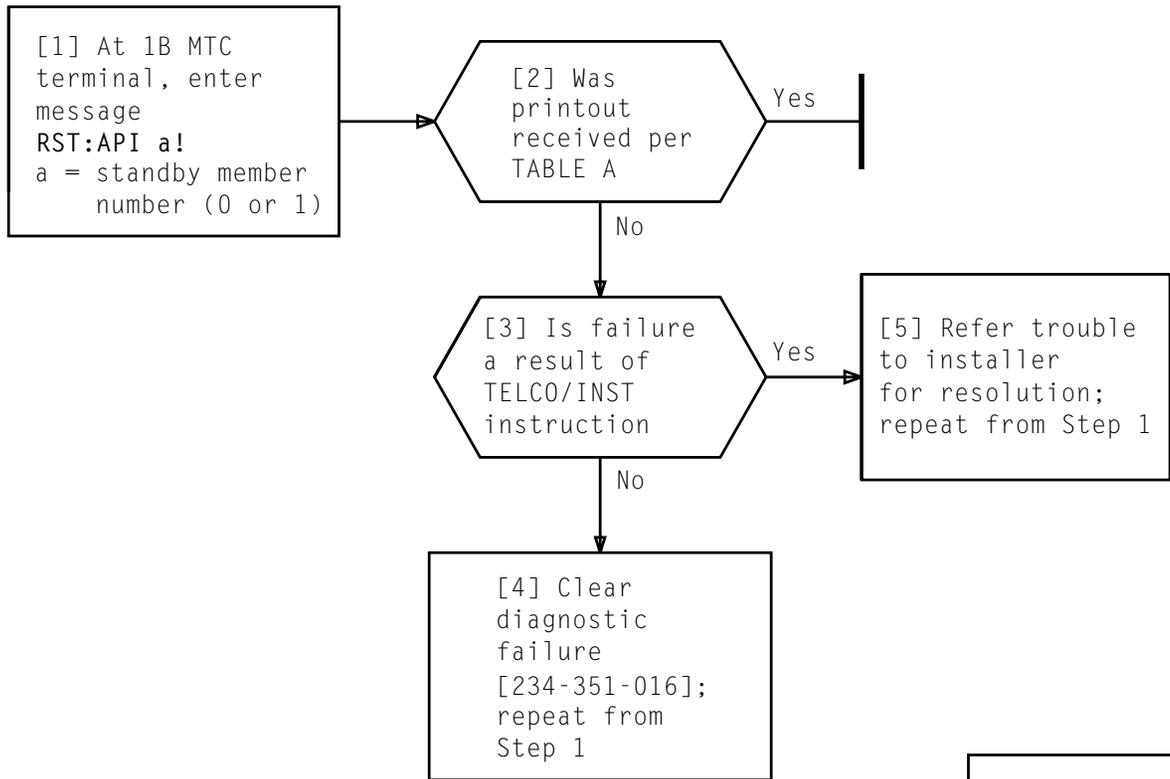
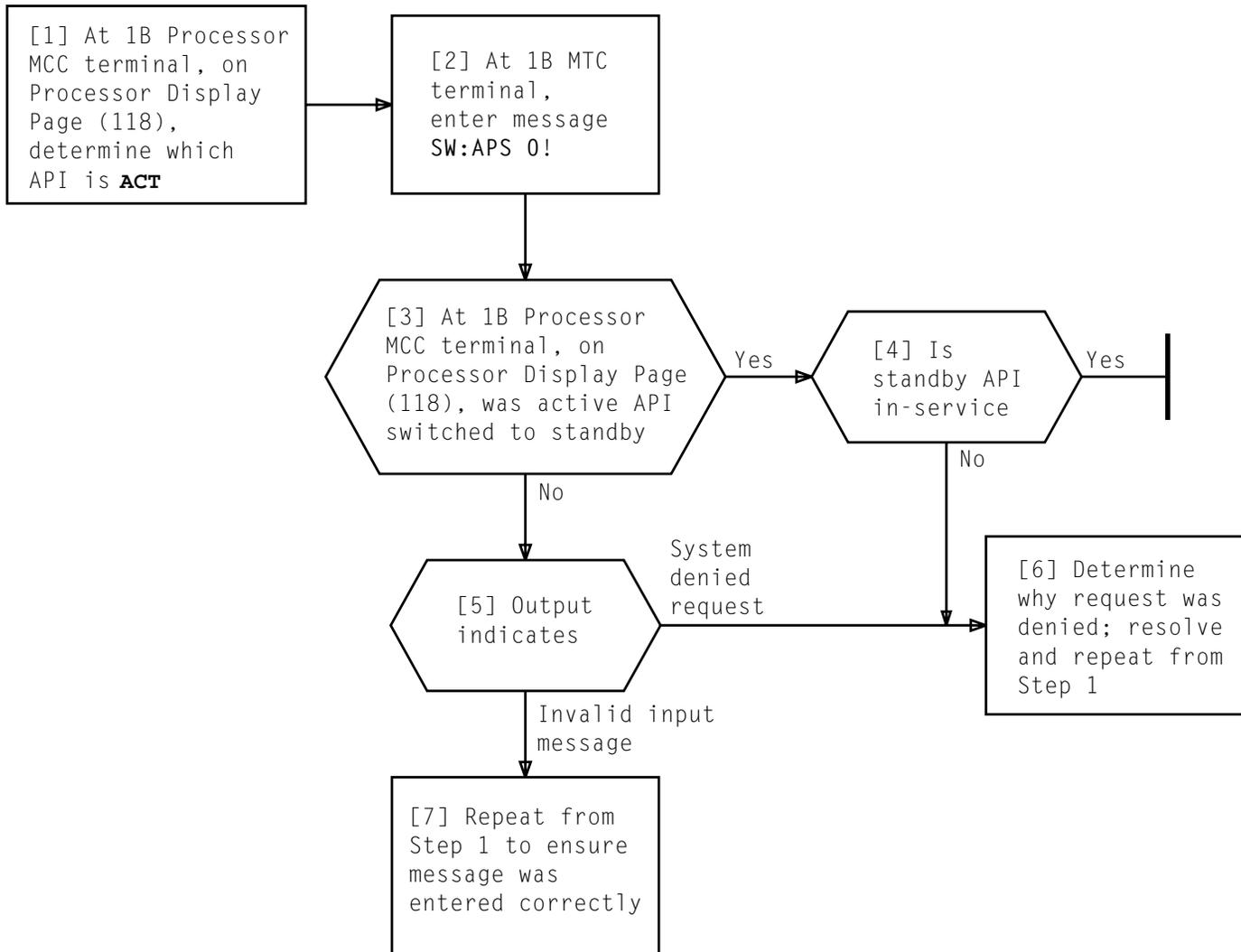


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN: API a COMPLETED ATP MSG COMPL TEST: API a ATP RST: API a COMPLETED



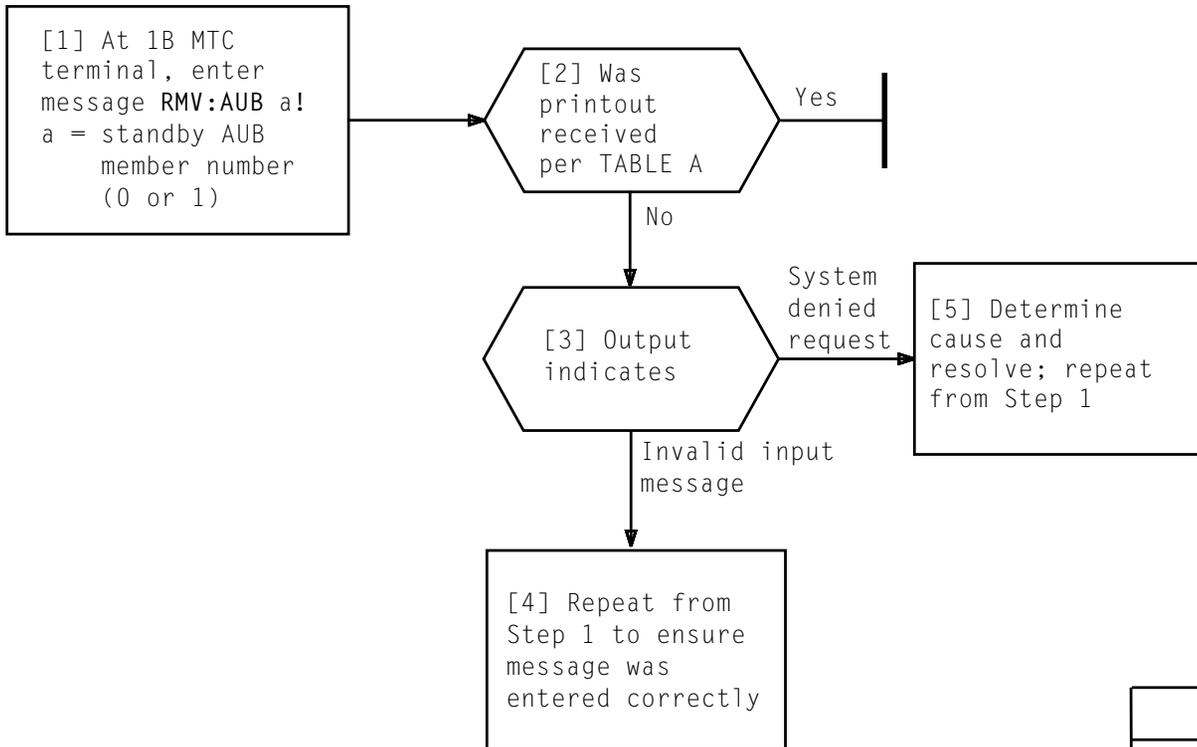
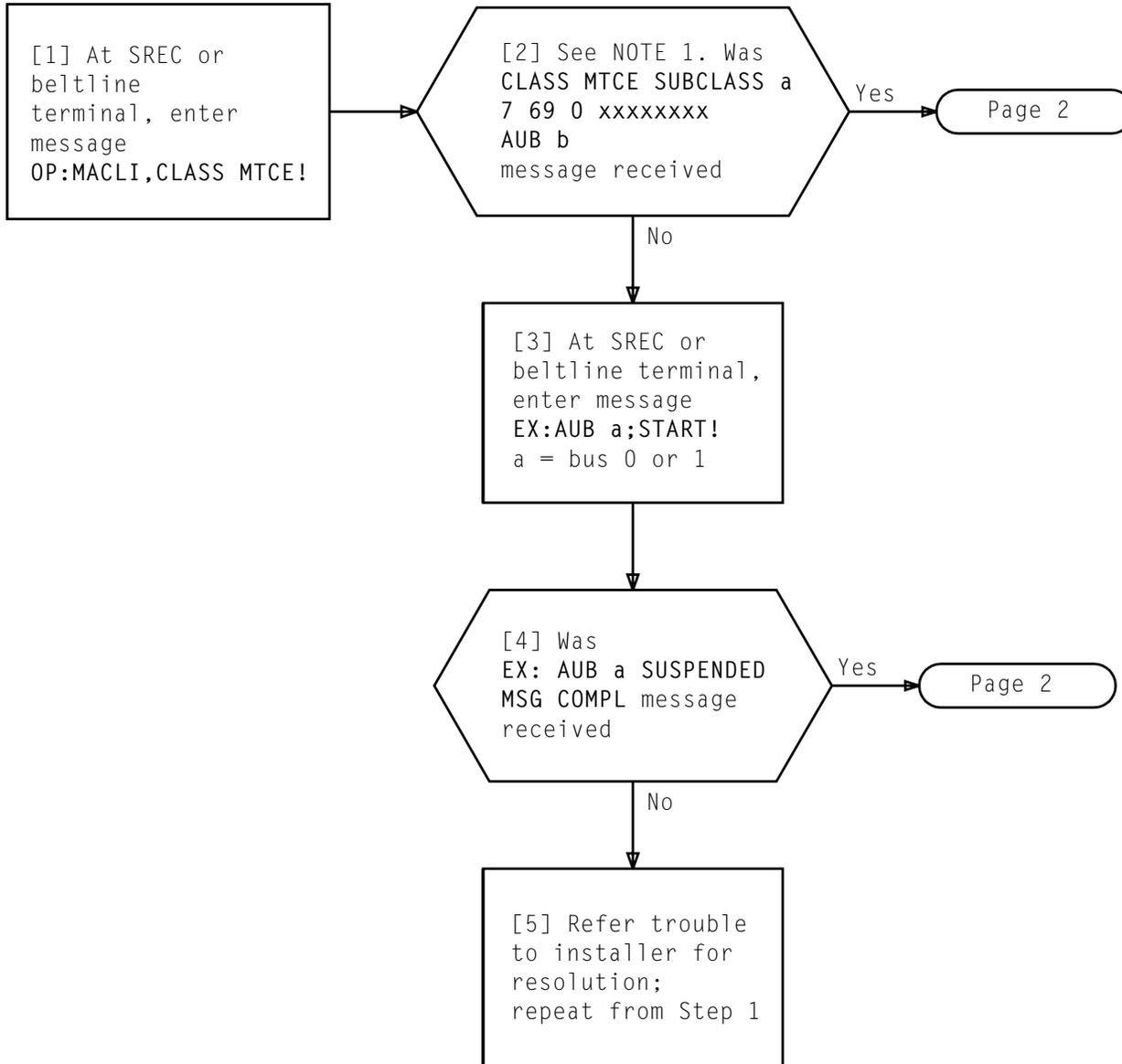


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	RMV: AUB a COMPLETED

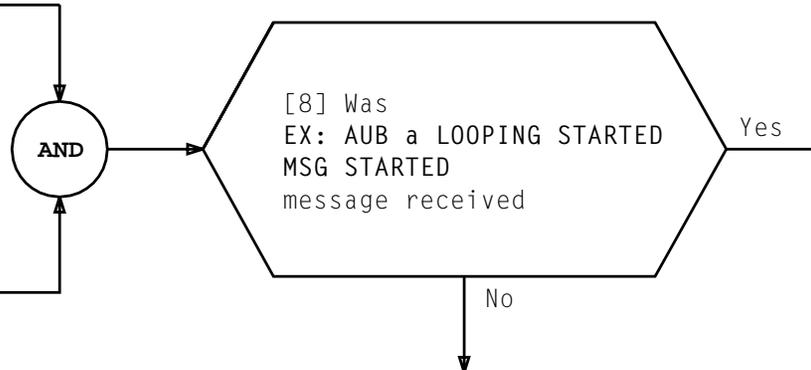


NOTE 1	
If problem occurs when setting up loop, use program listing ABDG99 (PR-5A737)	
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ENTER EXECUTE MESSAGES FOR LOOPING ON SPECIFIED AU BUS

[6] Using TABLE A, determine TABLE that contains input message for AU bus to be scoped _____

[7] At SREC or beltline terminal, enter in looping message determined in Step 6 _____



[9] Determine cause and resolve. Stop maintenance control program client [DLP-548] and repeat from Step 3, Page 1

TABLE A	
AU BUS	TABLE (PAGE 3)
Write	B
Address	C
Store-Address	D
Reply	E

ENTER EXECUTE MESSAGES FOR LOOPING ON SPECIFIED AU BUS

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TABLE B – AU WRITE BUS	
MESSAGE NUMBER	INPUT MESSAGE
1	EX:AUB a:PH 99,ADR b!
a = Bus 0 or 1 b = 42-75 (for bus 0) or 216-251 (for bus 1)	

TABLE C – AU ADDRESS BUS	
MESSAGE NUMBER	INPUT MESSAGE
1	EX:AUB a:PH 99,ADR b!
a = Bus 0 or 1 b = 75-120 (for bus 0) or 251-274 (for bus 1)	

TABLE D – AU STORE ADDRESS BUS	
MESSAGE NUMBER	INPUT MESSAGE
1	EX:AUB a:PH 99,ADR b!
a = Bus 0 or 1 b = 163-212 (for bus 0) or 337-366 (for bus 1)	

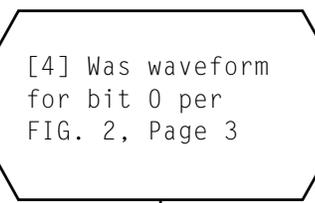
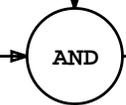
TABLE E – AU REPLY BUS	
MESSAGE NUMBER	INPUT MESSAGE
1	EX:AUB a:PH 99,ADR b!
a = Bus 0 or 1 b = 120-163 (for bus 0) or 274-337 (for bus 1)	

ENTER EXECUTE MESSAGES FOR LOOPING ON SPECIFIED AU BUS

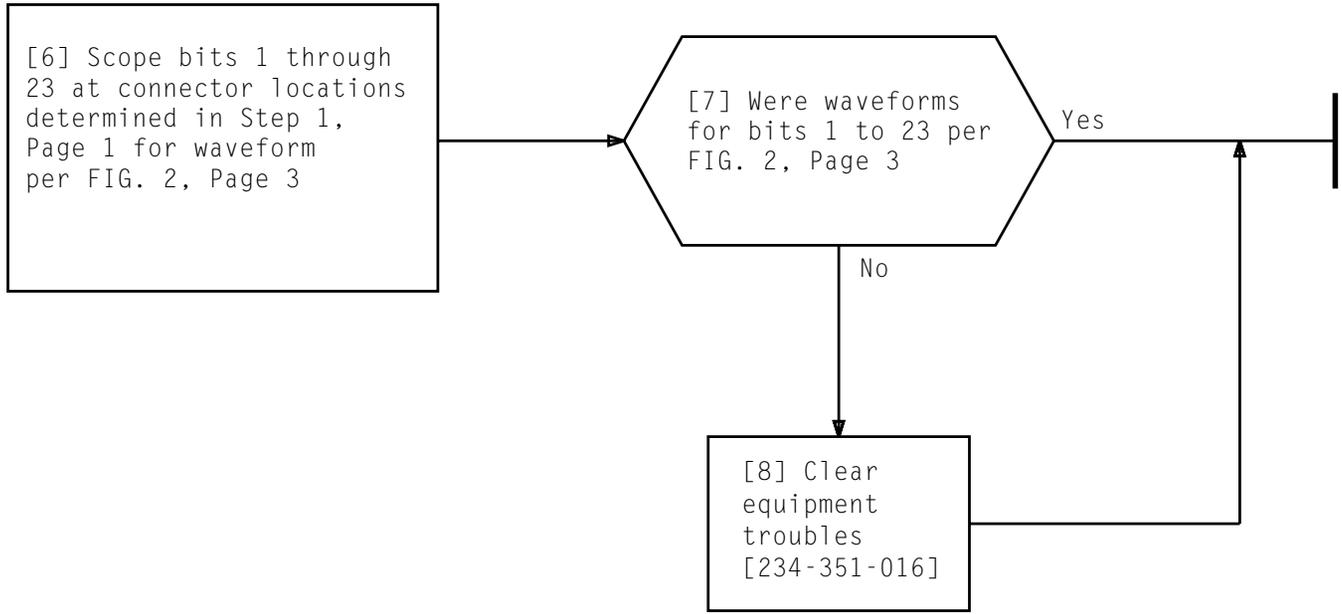
[1] Locate connector locations in FIG. 1, Page 3 for bus section to be scoped

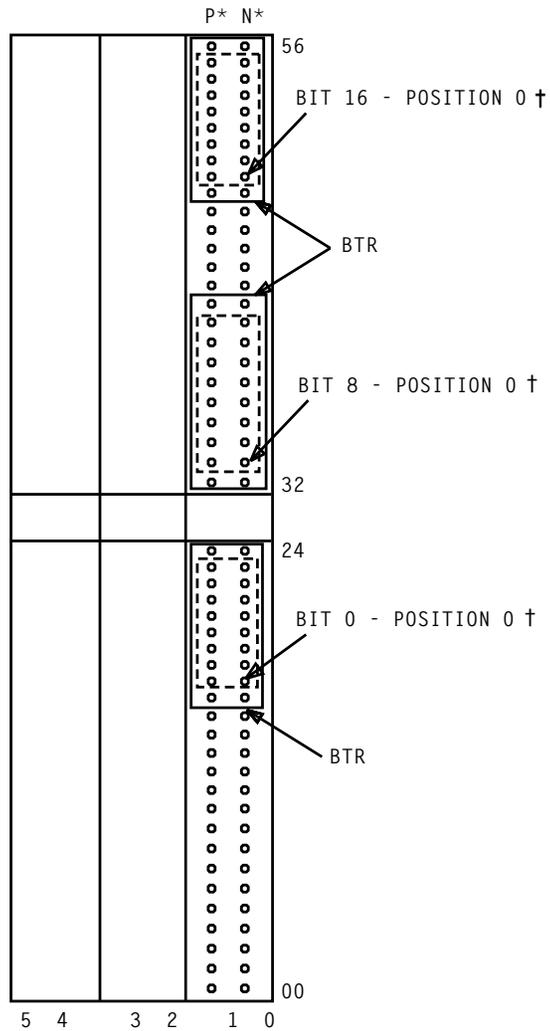
[2] Connect storage scope with bus-scoping adapter to connector location determined in Step 1 [see DLP-550 on how to use bus-scoping adapter]

[3] See NOTE 1. Adjust storage scope to observe waveform for bit 0 pattern per FIG. 2, Page 3



NOTE 1 CURSORS may also need to be adjusted to observe bit pattern	
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API -253

* P FOR POSITIVE LEAD
 N FOR NEGATIVE LEAD
 † POSITION 0 IS ON BUS SCOPING ADAPTER

FIG. 1

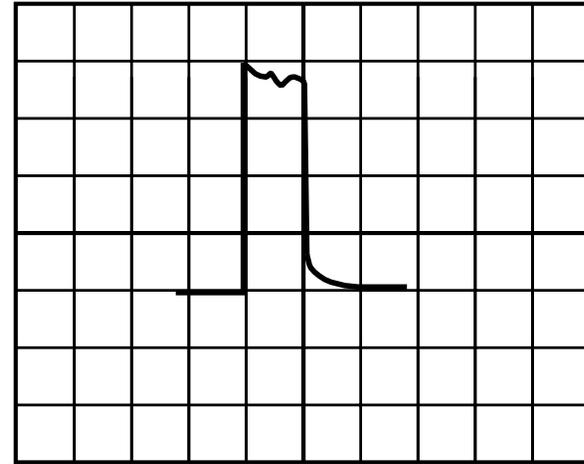
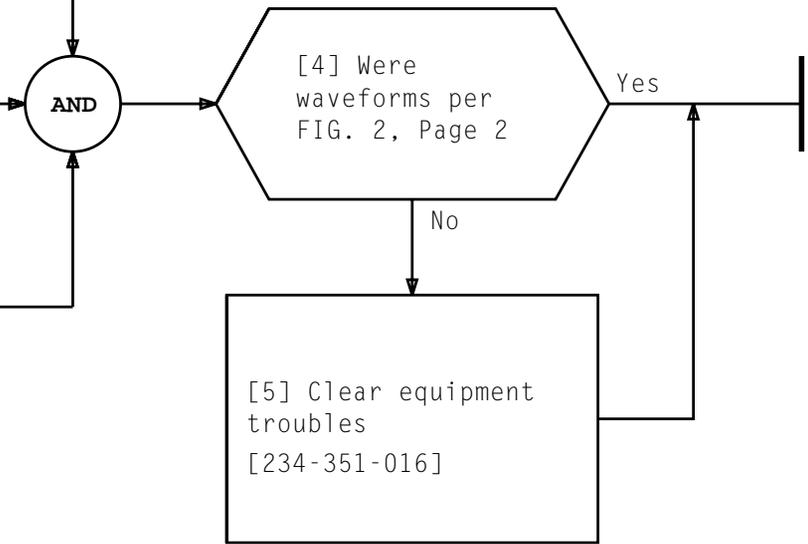


FIG. 2 - Typical Waveform

[1] Locate connector locations in FIG 1, Page 2, for bus section to be scoped

[2] Connect storage scope with bus-scoping adapter to connector location determined in Step 1 [see DLP-550 on how to use scope adapter]

[3] See NOTE 1. Scope bits 0 through 15 at connector locations determined in Step 1 for waveform per FIG. 2, Page 2



NOTE 1	
CURSORS may need to be adjusted to observe bit pattern	
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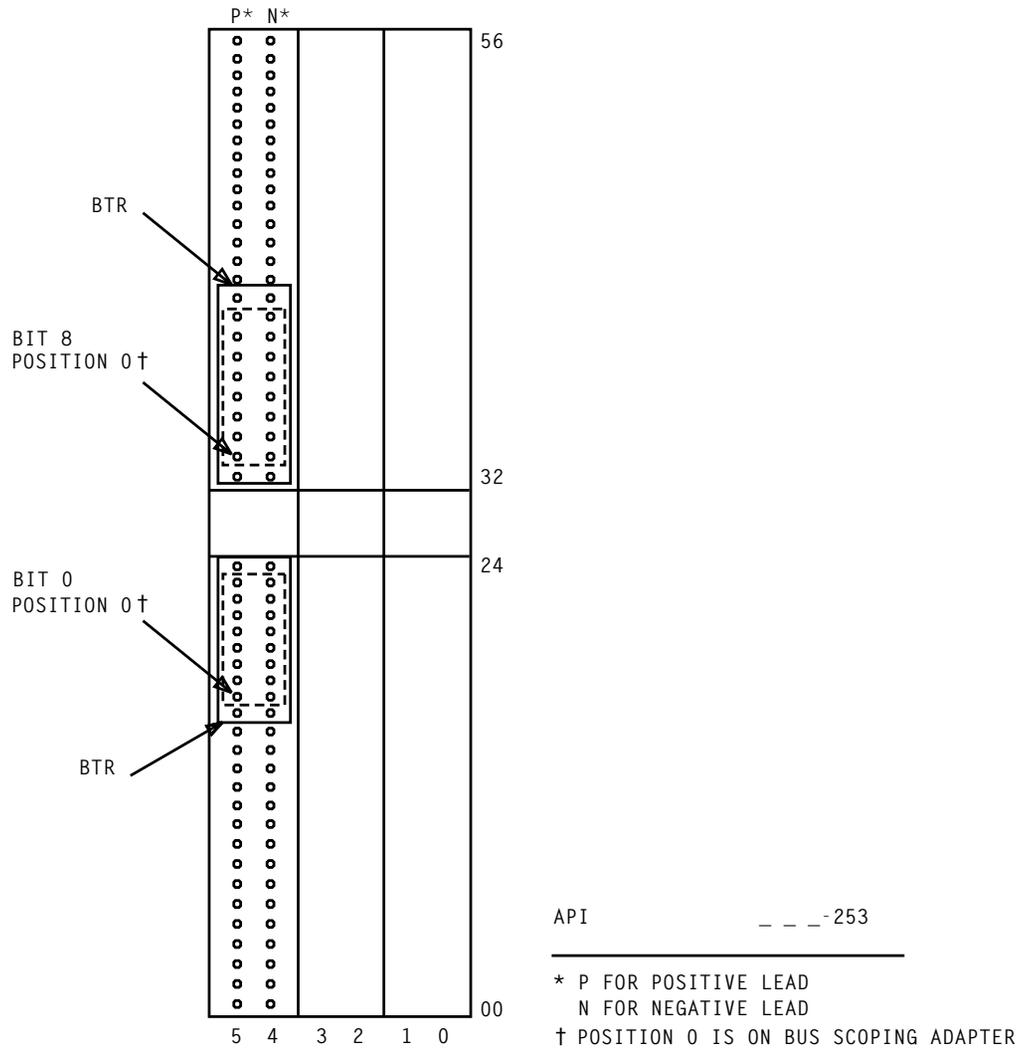


FIG. 1

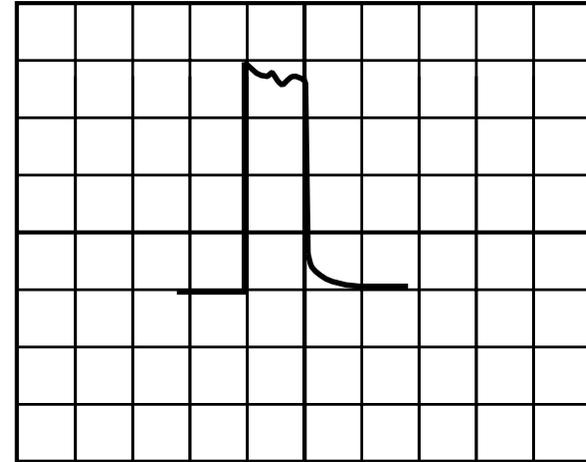
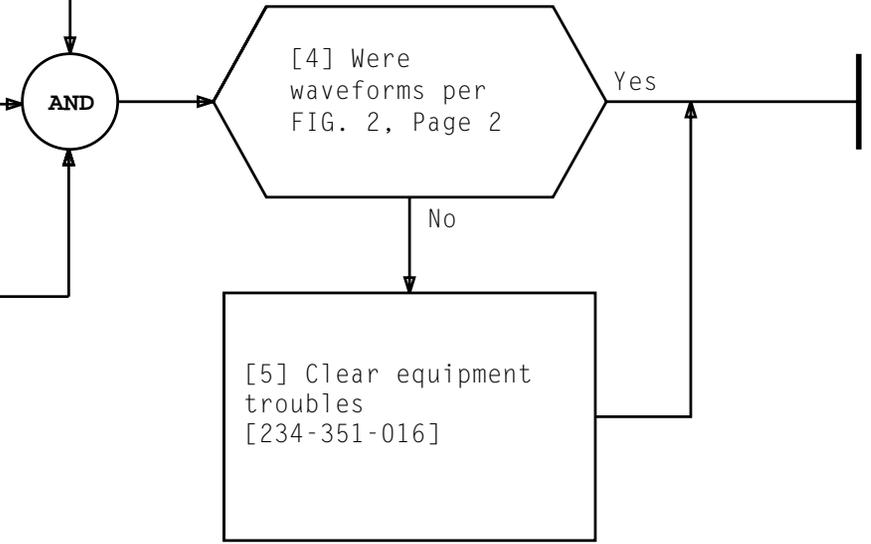


FIG. 2 - Typical Waveform

[1] Locate connector locations in FIG.1, Page2
for bus section to scoped

[2] Connect storage scope with scoping adapter to
connector location determined in Step 1
[See DLP-550 on how to use scope adapter]

[3] See NOTE 1. Scope bits 0 through 21 at
connector locations determined in Step 1 for
waveform per FIG. 2, Page 2



NOTE 1	
CURSORS may need to be adjusted to observe bit pattern	
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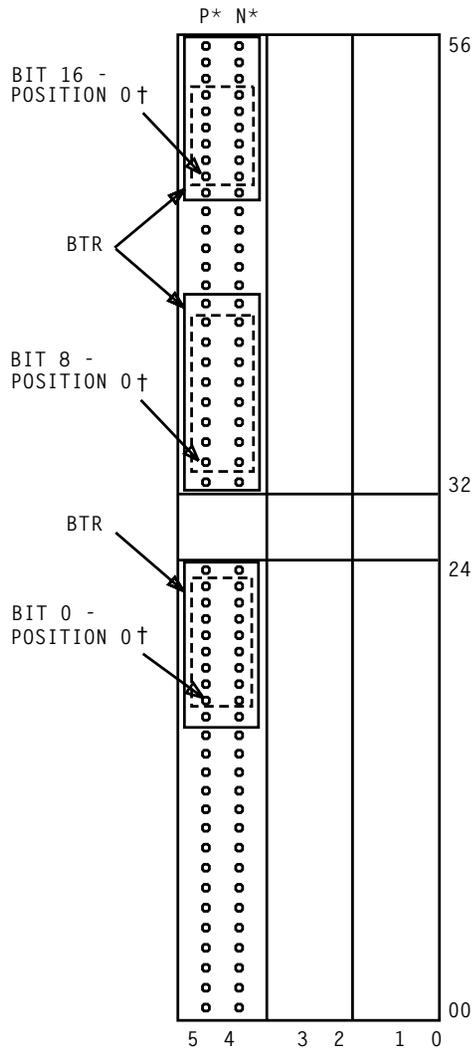


FIG. 1

API - - - -265

* P FOR POSITIVE LEAD
 N FOR NEGATIVE LEAD
 † POSITION 0 IS ON BUS SCOPING ADAPTER

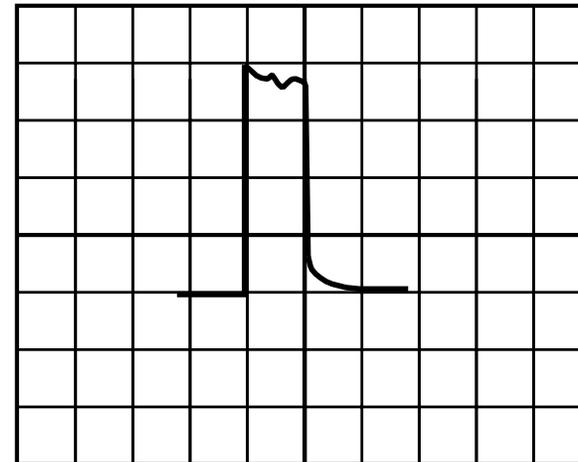
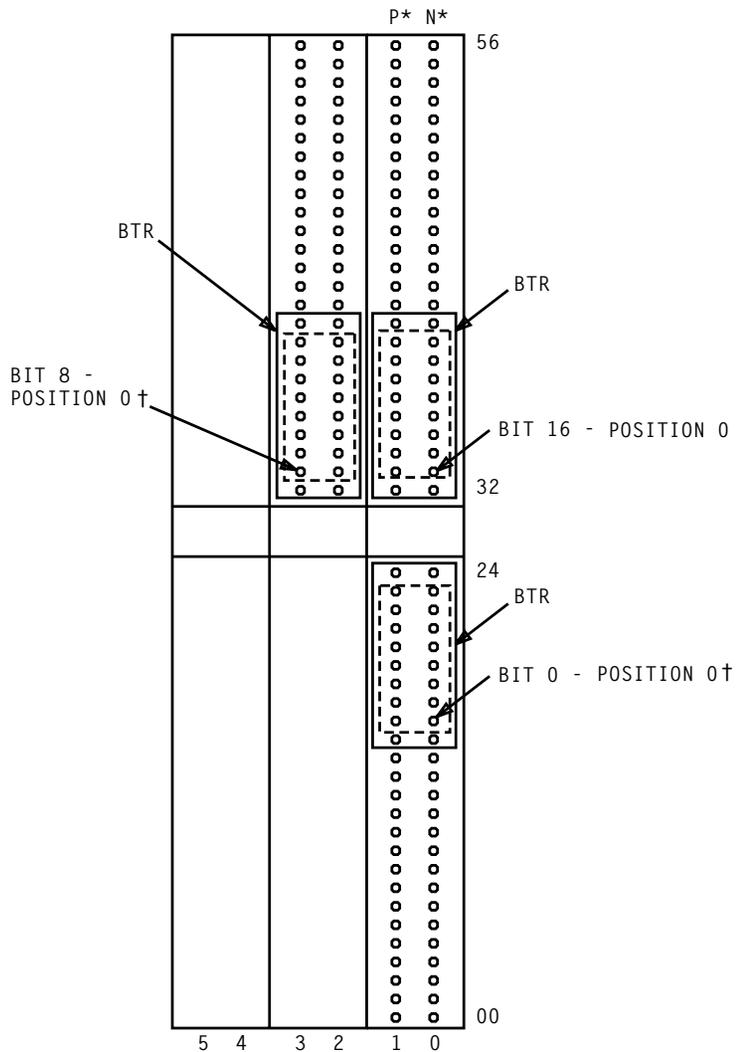


FIG. 2 - Typical Waveform



API _ _ _ 265

* P FOR POSITIVE LEAD
 N FOR NEGATIVE LEAD
 † POSITION 0 IS ON BUS SCOPING ADAPTER

FIG. 1

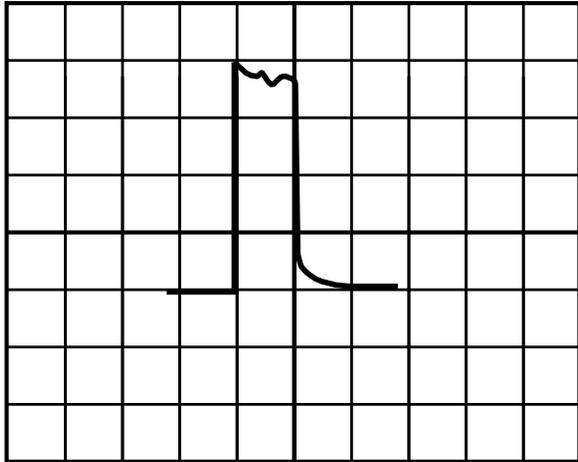


FIG. 2 - Typical Waveform

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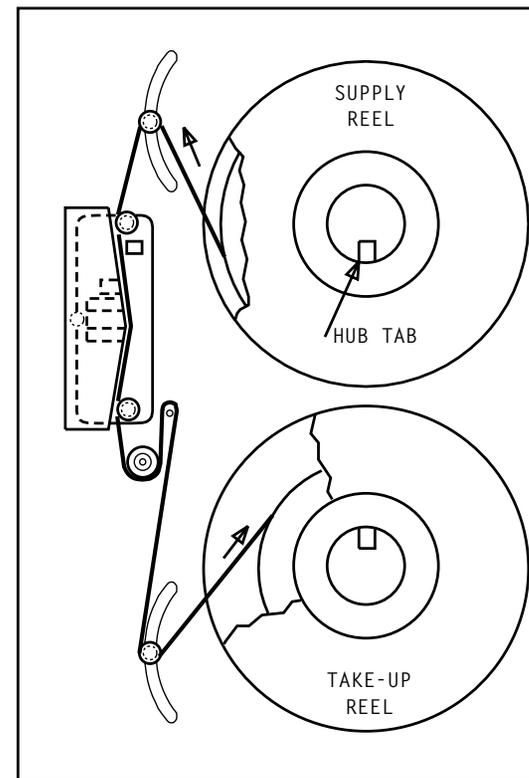
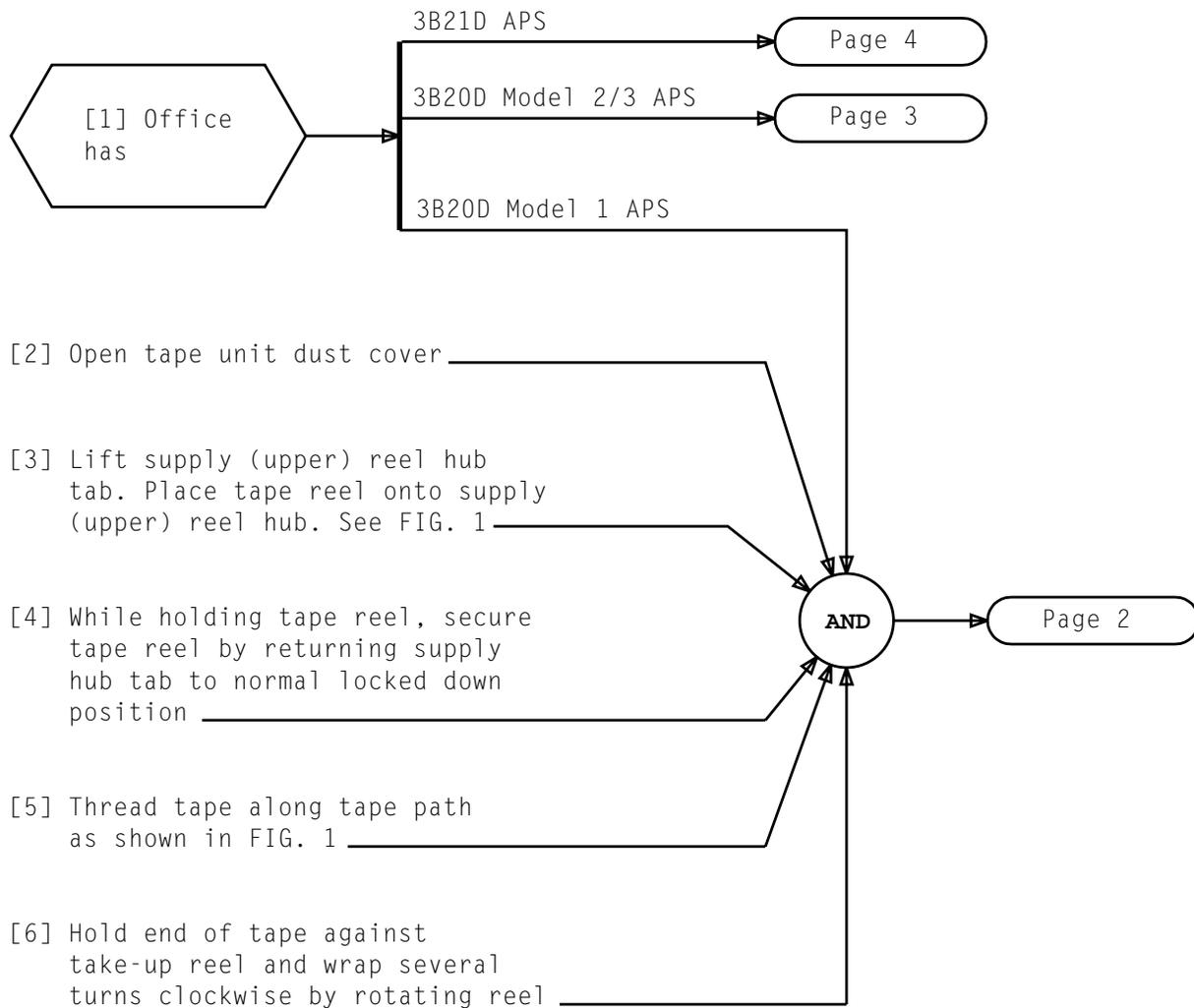
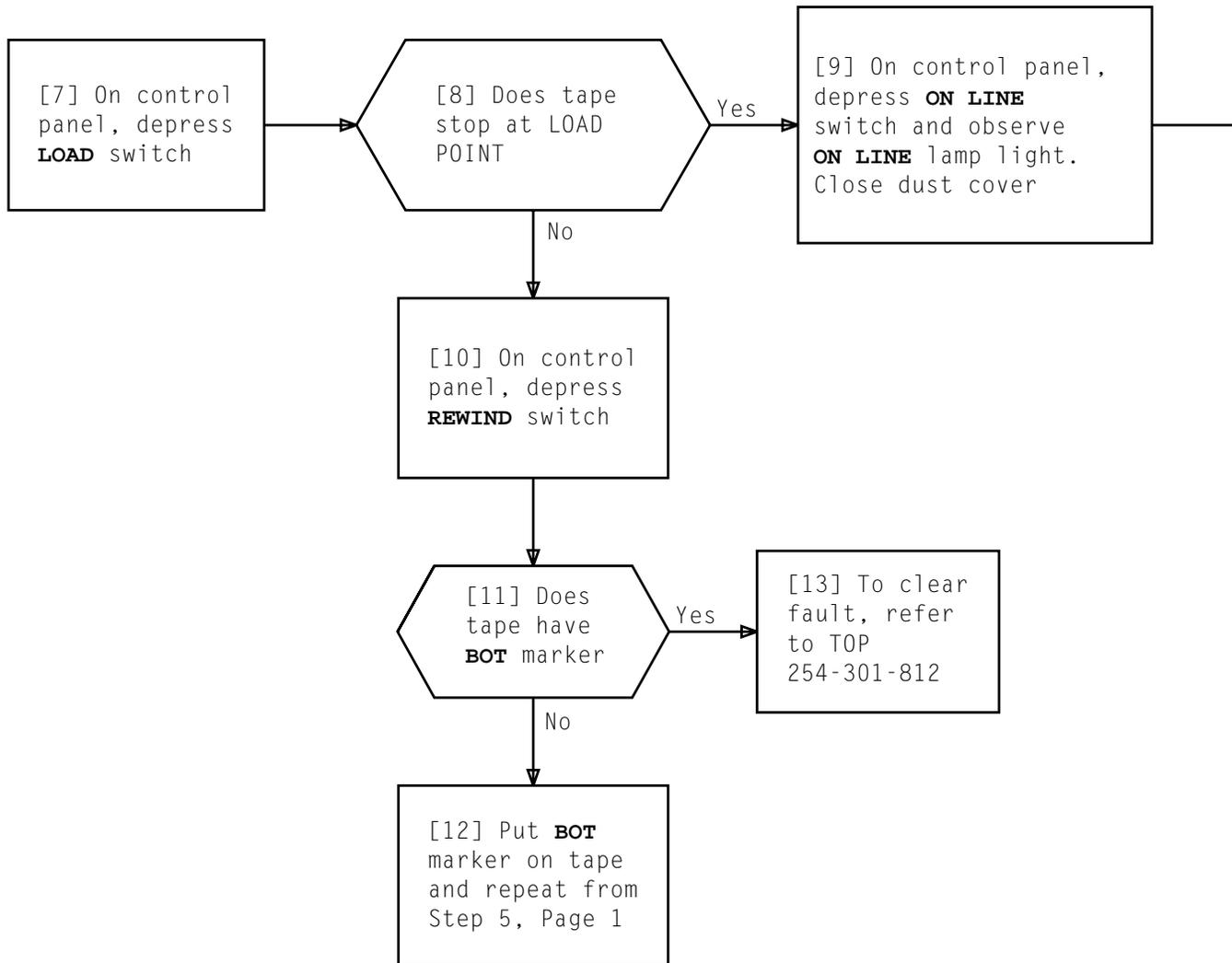


FIG. 1



MOUNT TAPE ON 3B TAPE UNIT OR DIGITAL AUDIO TAPE (DAT) 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

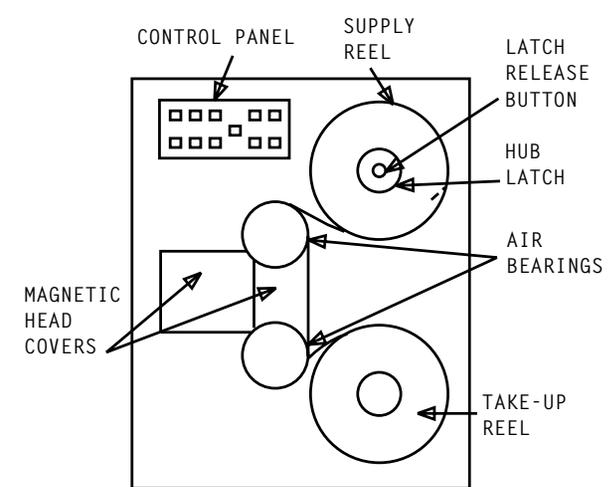
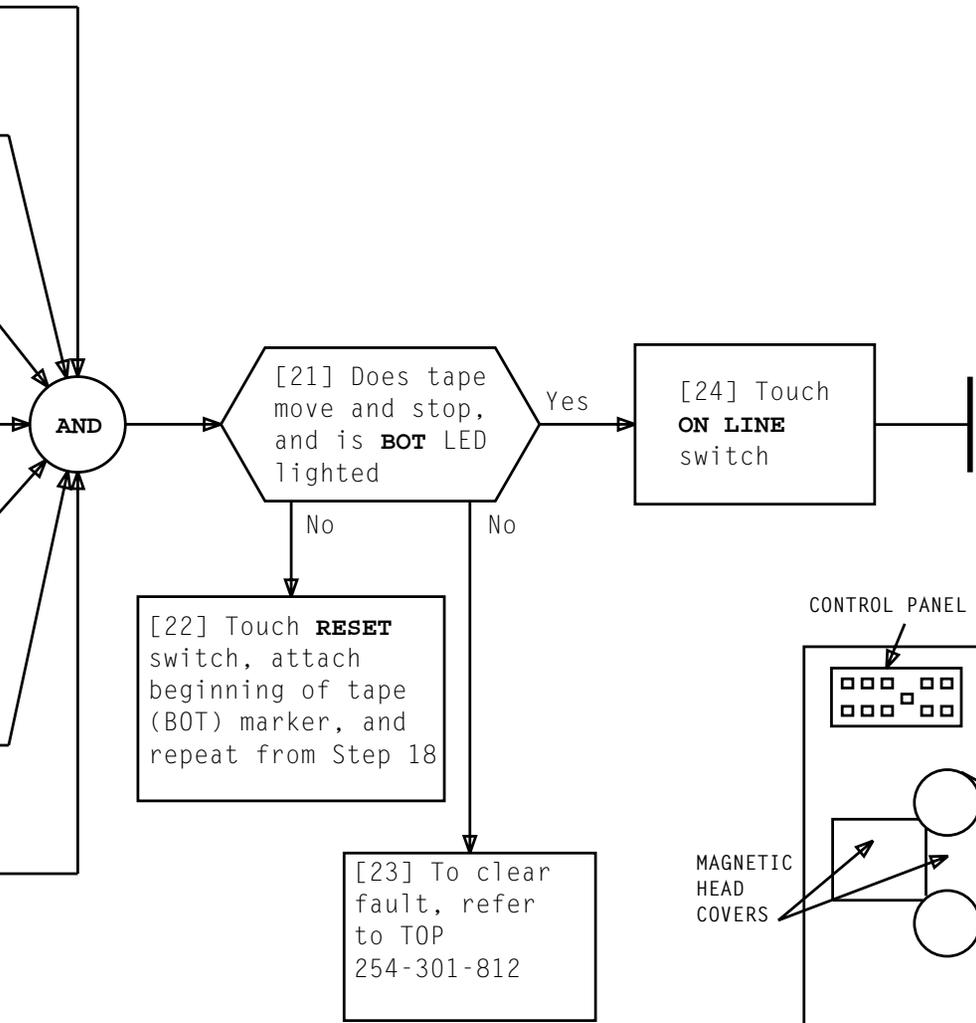


FIG. 2

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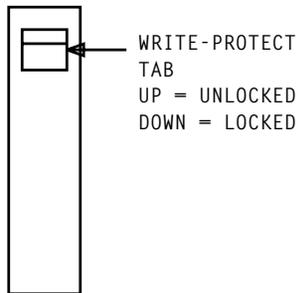
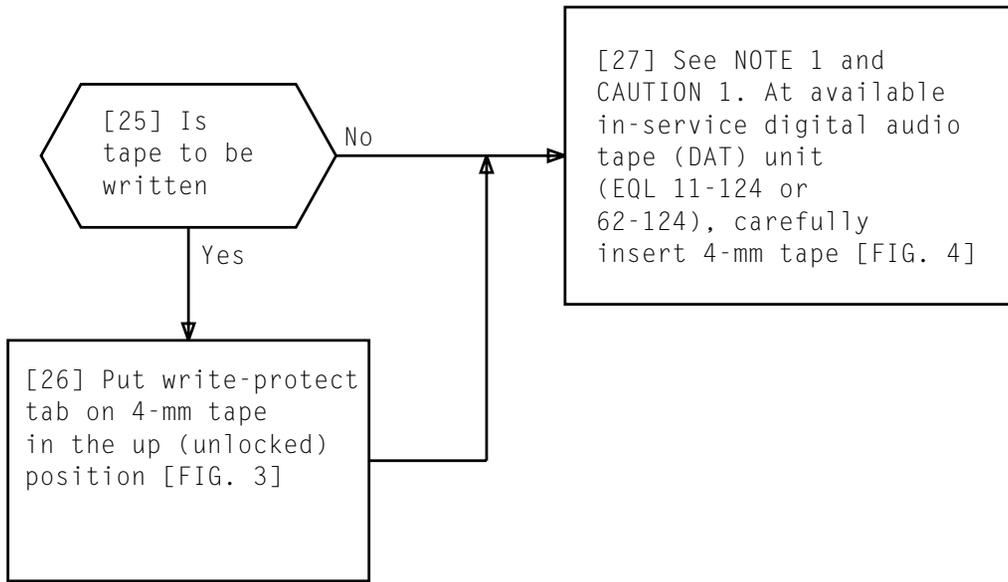


FIG. 3 - 4-mm Tape

[27] See NOTE 1 and CAUTION 1. At available in-service digital audio tape (DAT) unit (EQL 11-124 or 62-124), carefully insert 4-mm tape [FIG. 4]

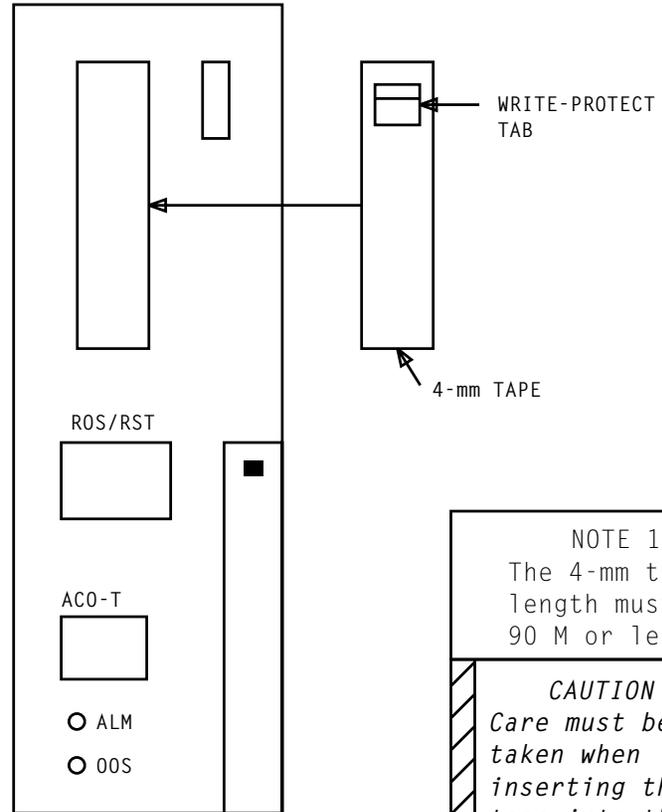


FIG. 4 - DAT Unit

NOTE 1
The 4-mm tape length must be 90 M or less

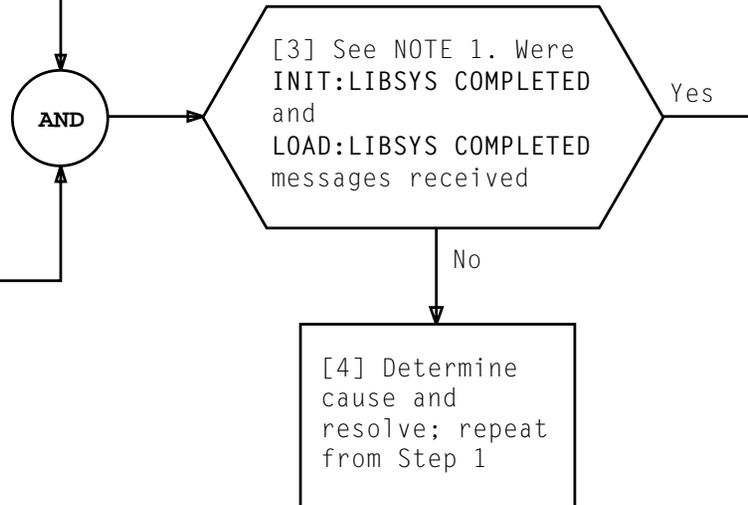
CAUTION 1
Care must be taken when inserting the tape into the DAT unit. Tape must not be forced

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MOUNT TAPE ON 3B TAPE UNIT OR DIGITAL AUDIO TAPE (DAT) UNIT

[1] At 1B MTC terminal, enter message
 LOAD:LIBSYS,FS;TAPE:TD a!
 (a = tape unit with library tape
 mounted)

[2] Wait for INIT:LIBSYS COMPLETED
 and LOAD:LIBSYS COMPLETED
 messages to be received



NOTE 1 It will take approximately 8 minutes to load the library tape	
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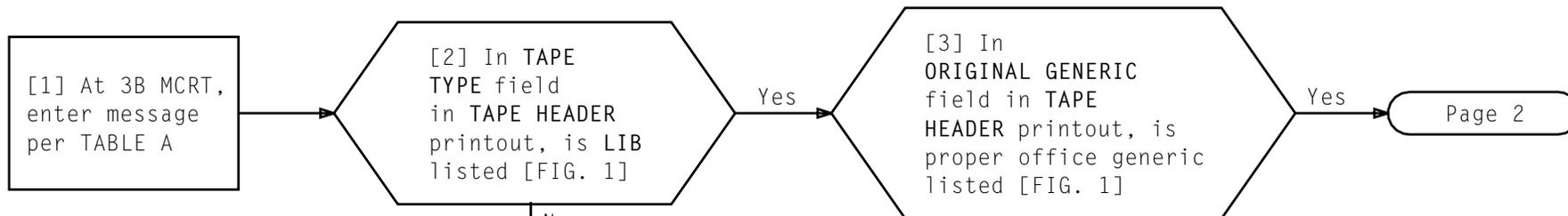


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UPDATE:TAPE,MT a
a = Tape unit number that library tape is mounted	

[4] Demount tape [DLP-584] and mount proper library tape [DLP-581] repeat from Step 1

THIS VALUE MUST BE SAME AS GENERIC OFFICE IS RUNNING ON

TAPE HEADER

TAPE TYPE: LIB

ORIGINAL GENERIC 4E<(xx)>5A.00 R1

MOST RECENT OFL GENERATION:

THIS TAPE WRITTEN:

FS IDS:

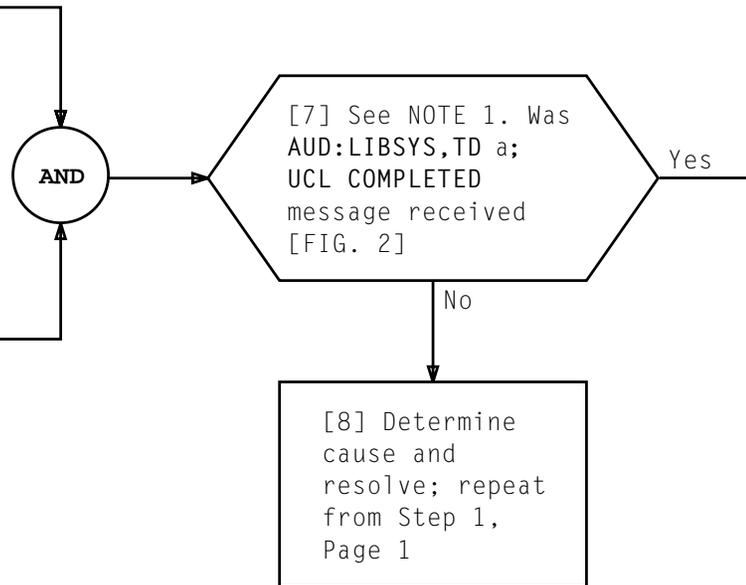
PARTL UPD FLG:

FIG. 1 - Example of TAPE HEADER Printout

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[5] At 1B MTC terminal,
 enter message
 AUD:LIBSYS,TD a;UCL!
 a = Tape unit number
 that library tape
 is mounted

[6] At 1B MTC terminal,
 follow loading
 progress per FIG. 2



AUD:LIBSYS,TD a;UCL IN PROGRESS
 0 ERROR(S) IN CS2FS MAP DETECTED

AUD:LIBSYS,TD a;UCL IN PROGRESS
 0 ERROR(S) IN ID2SEG MAP DETECTED

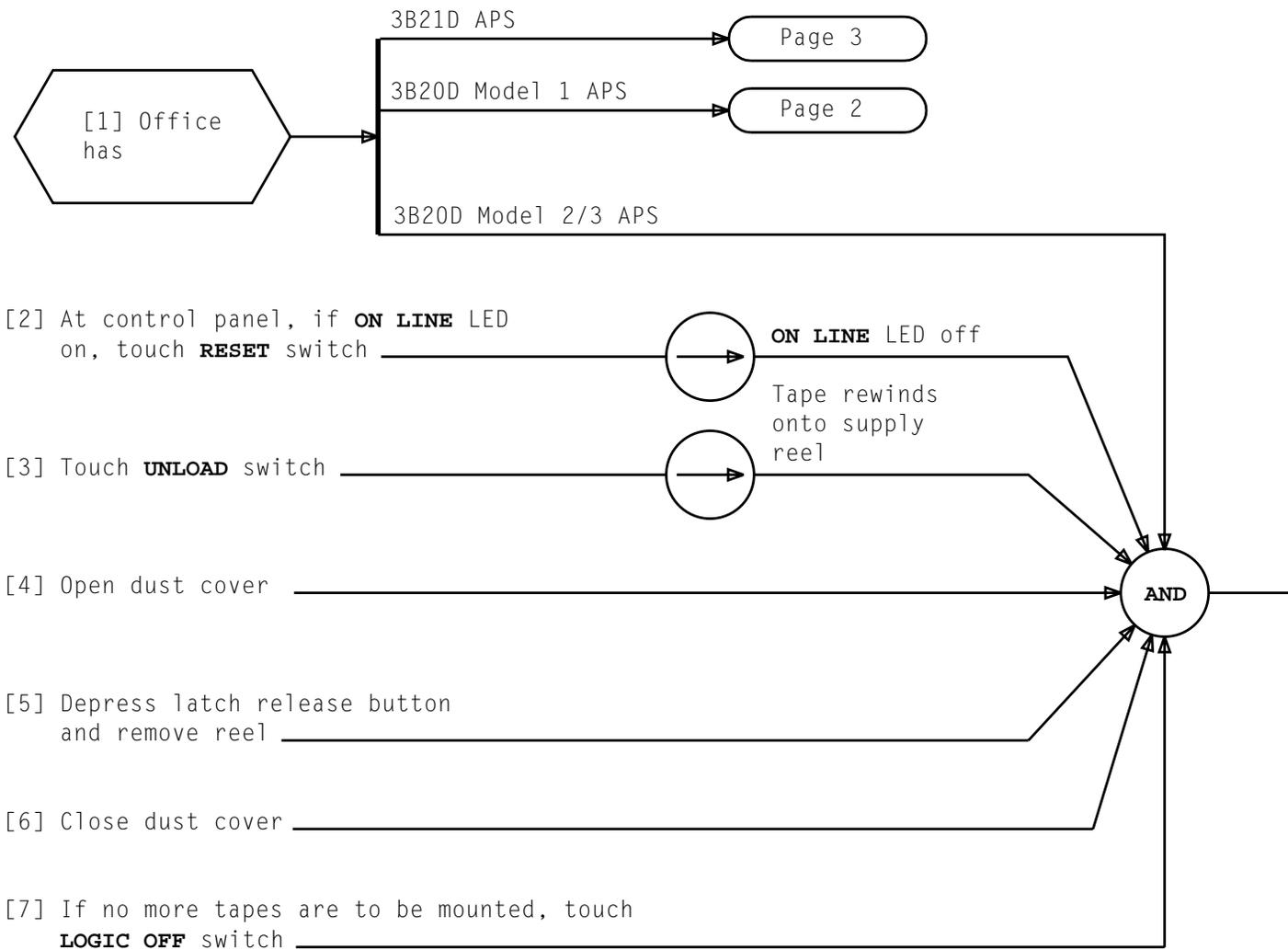
AUD:LIBSYS,TD a;UCL IN PROGRESS
 0 ERROR(S) IN SEGPRTRS MAP DETECTED

AUD:LIBSYS,TD a;UCL IN PROGRESS
 0 ERROR(S) IN ID2FS MAP DETECTED

AUD:LIBSYS,TD a;UCL COMPLETED

FIG. 2 - Load Library Printout

NOTE 1 It will take approximately 8 minutes to load the library tape	
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REMOVE TAPE FROM 3B TAPE UNIT OR DIGITAL AUDIO TAPE (DAT) 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

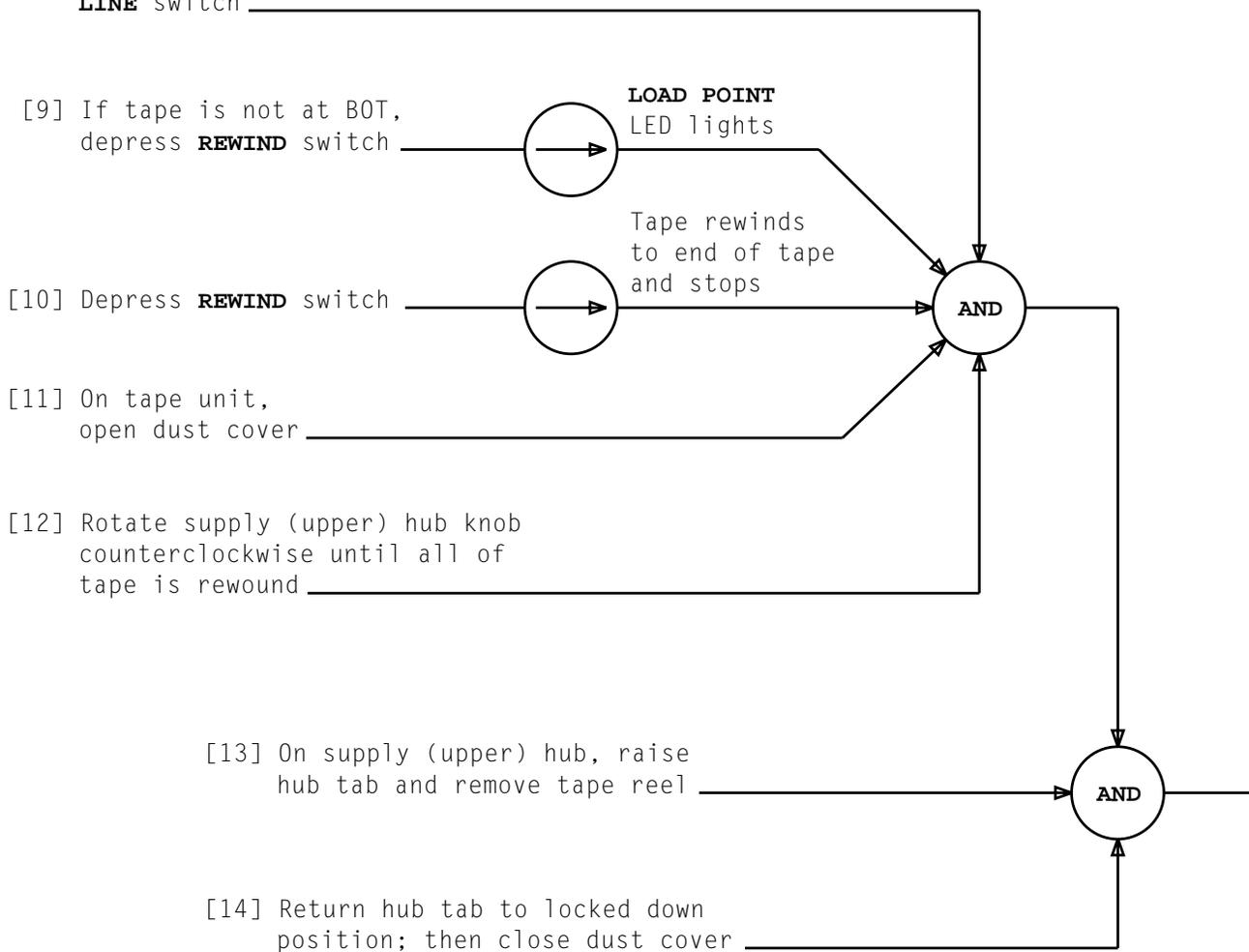
[10] Depress **REWIND** switch

[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



REMOVE TAPE FROM 3B TAPE UNIT OR DIGITAL AUDIO TAPE (DAT) UNIT

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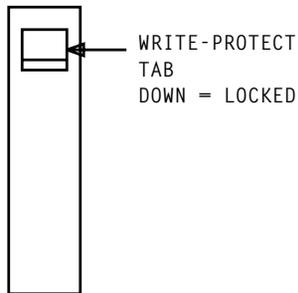
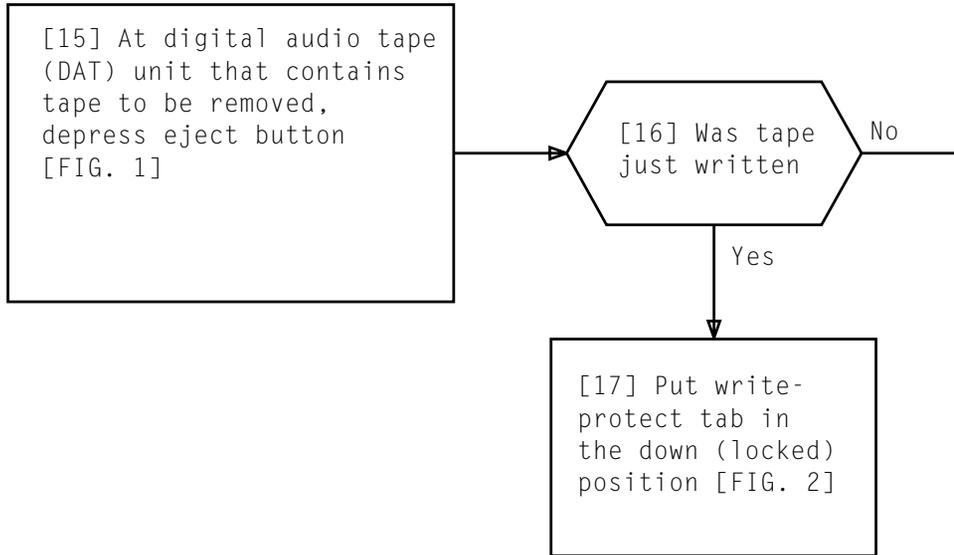


FIG. 2 - 4-mm Tape

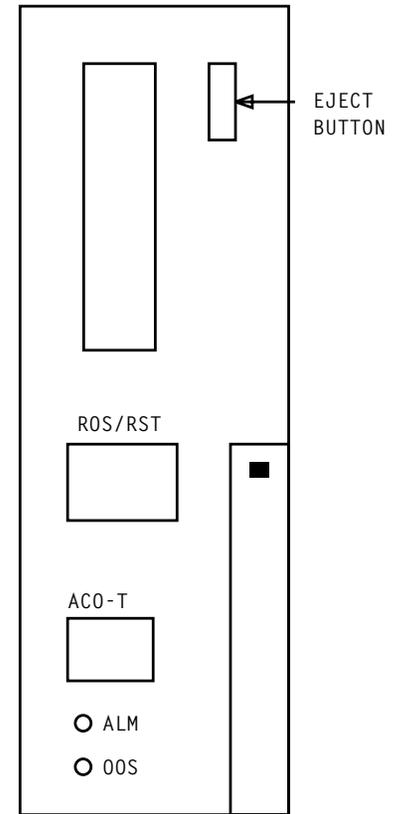


FIG. 1 - DAT Unit

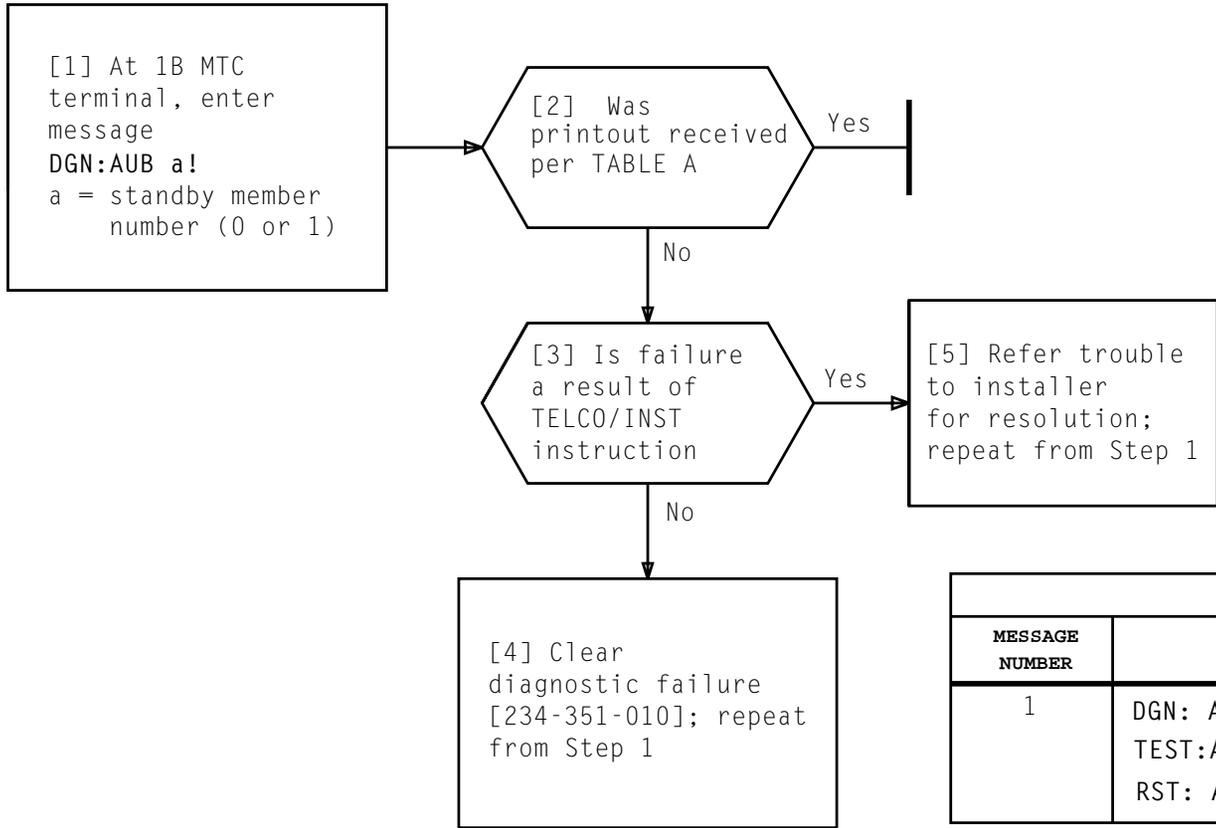
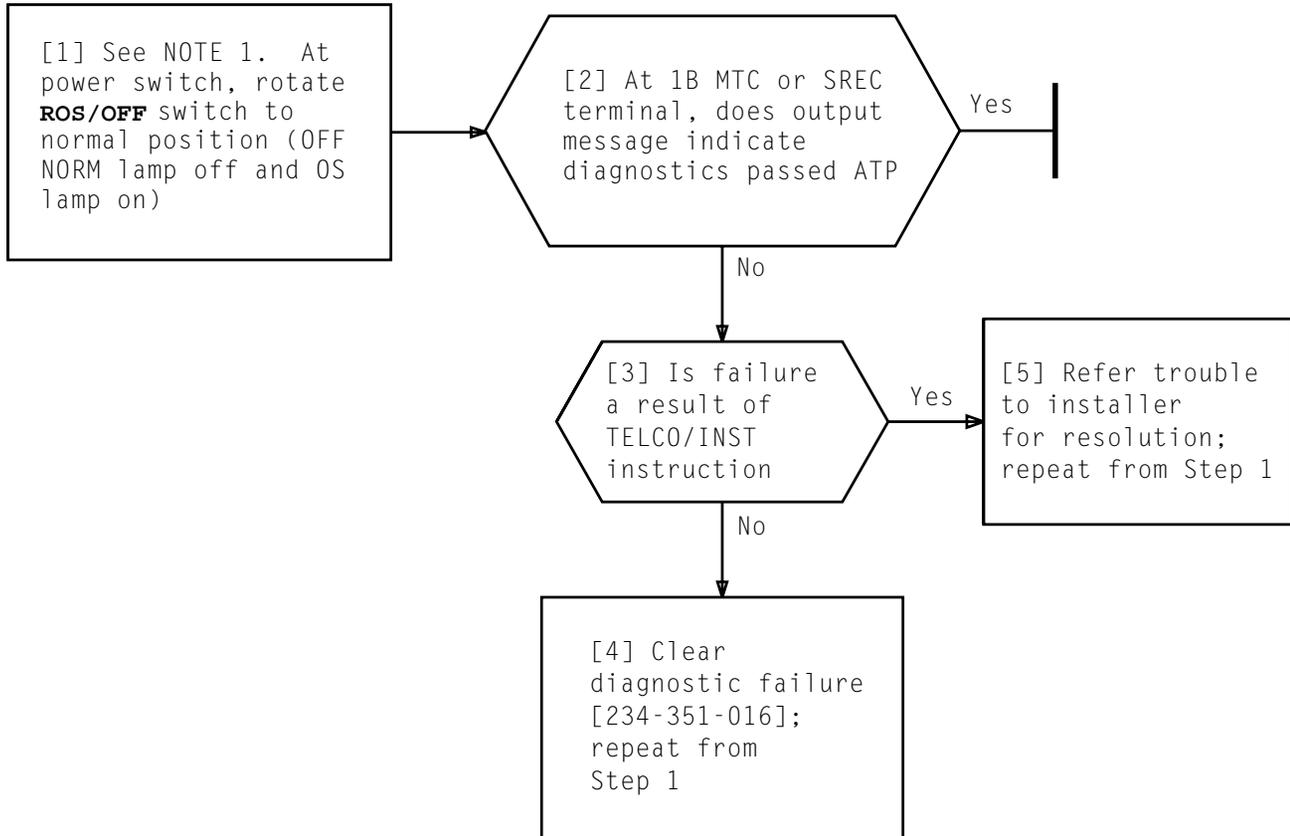


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN: AUB a COMPLETED ATP MSG COMPL TEST:AUB a NTR RST: AUB a STOPPED OOS DIAGNOSE



NOTE 1	
Operation of ROS/OFF switch will cause diagnostic to be run	
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ROTATE ROS/OFF SWITCH TO NORMAL POSITION FOR STANDBY API

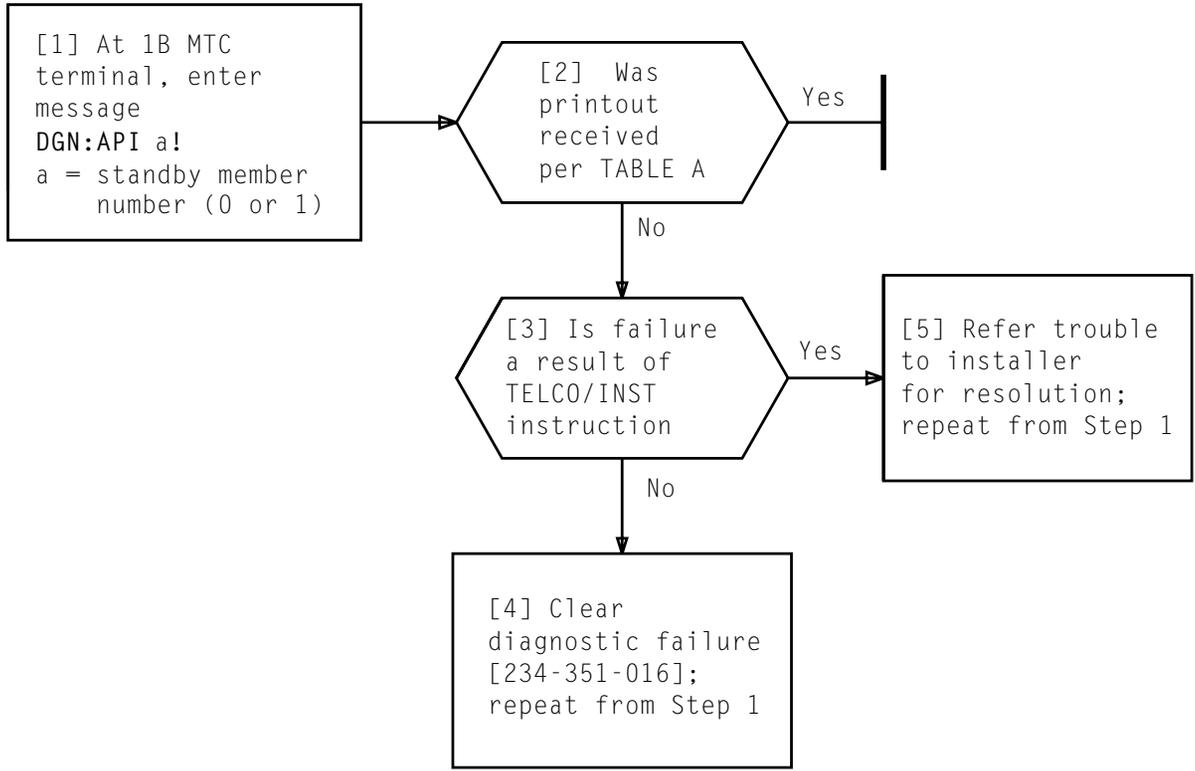
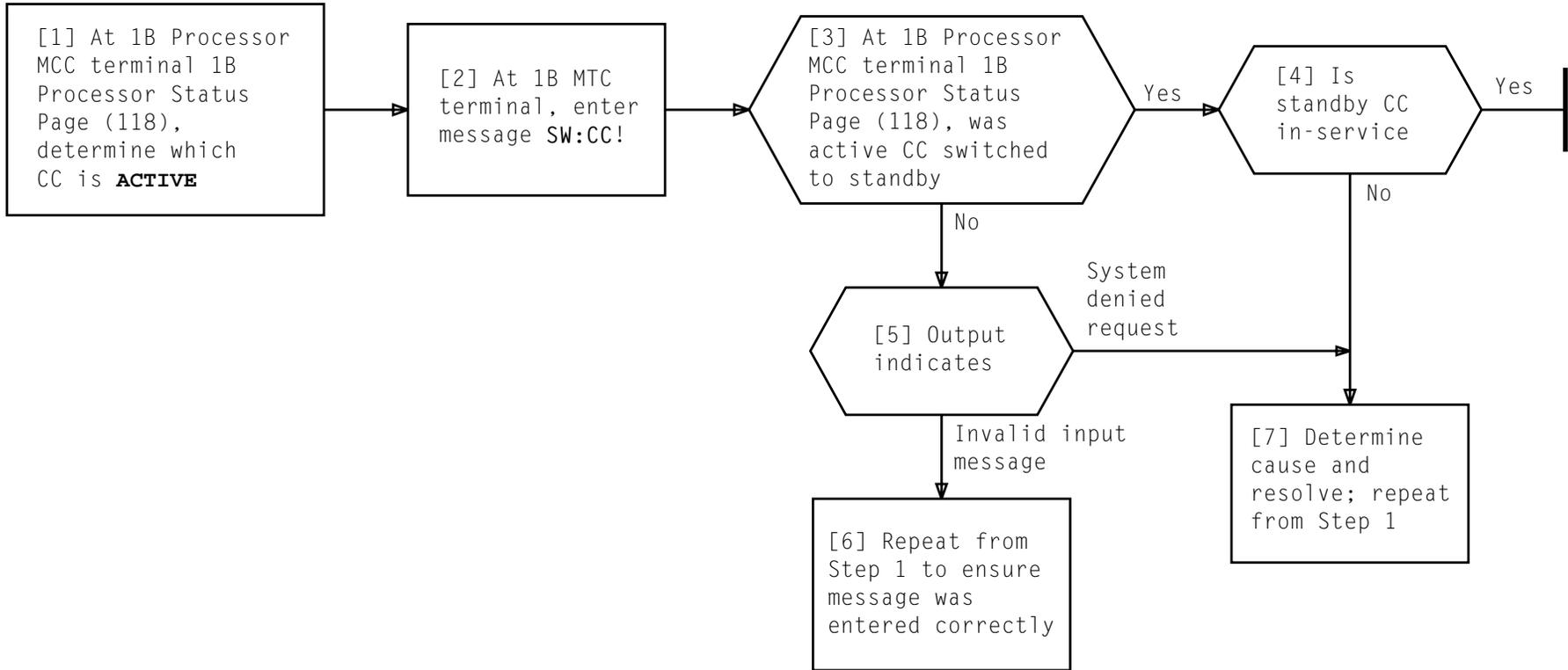
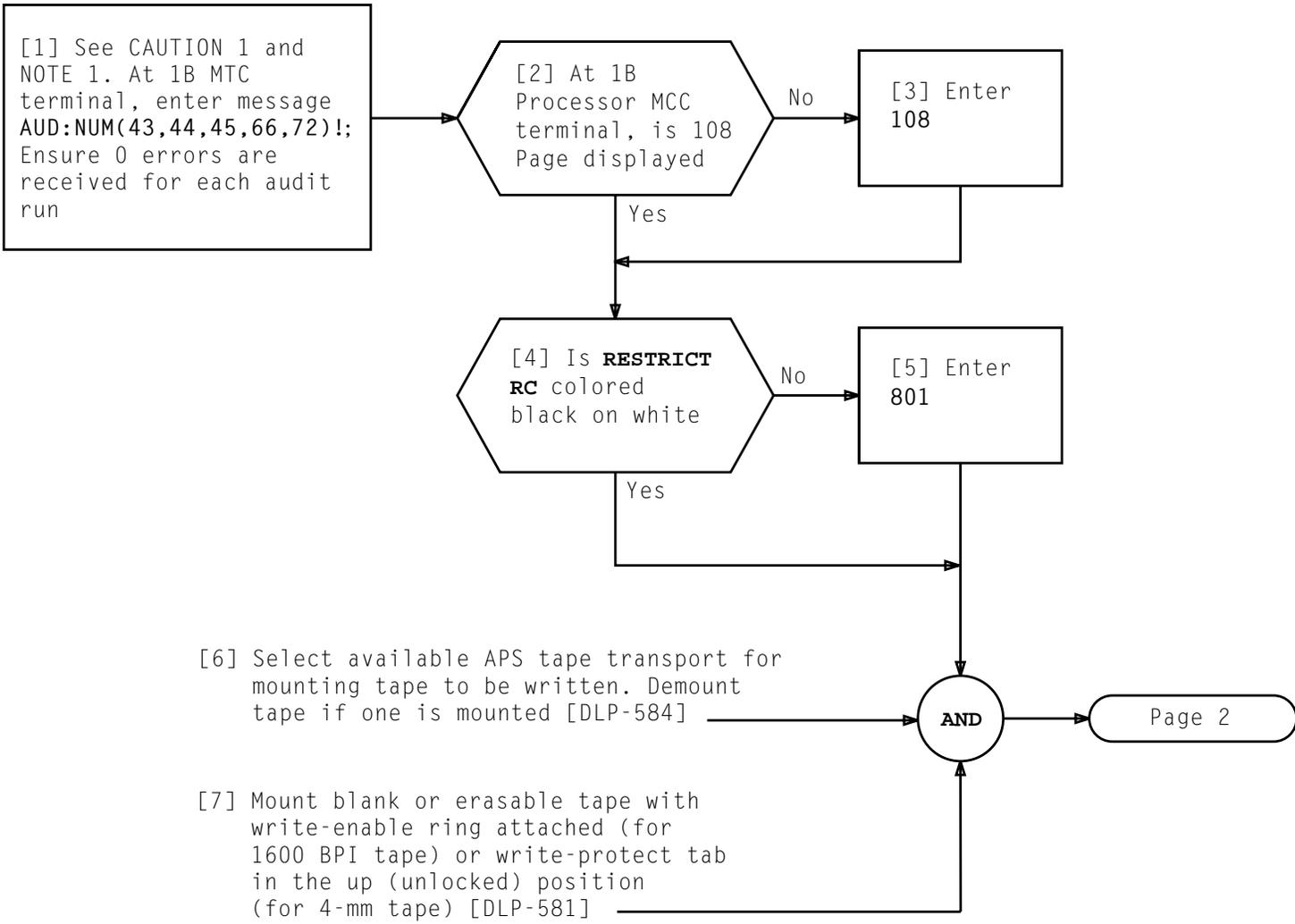


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGES
1	DGN: API a COMPLETED ATP MSG COMPL TEST: API a ATP RST: API a STOPPED OOS DIAGNOSE



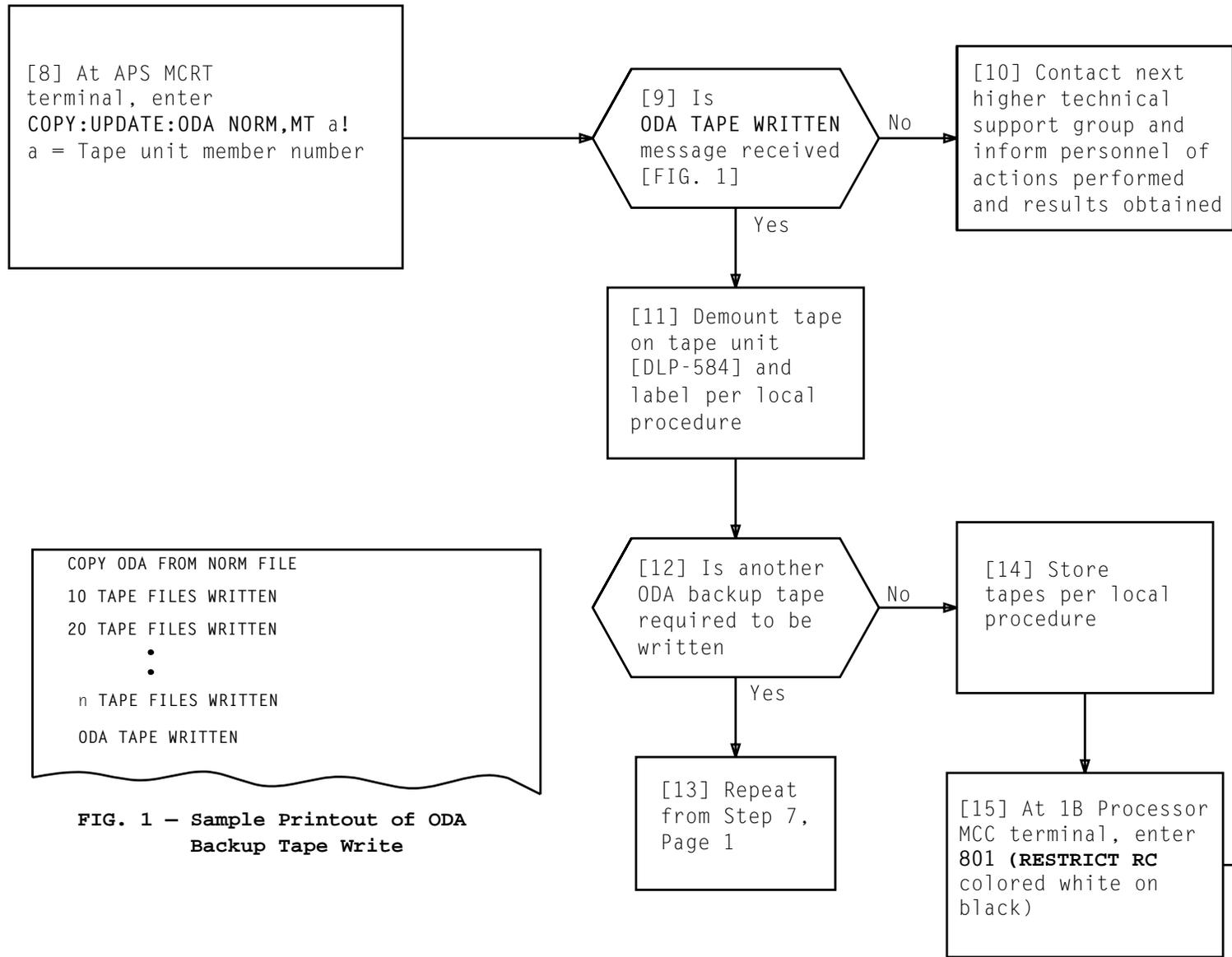


NOTE 1
It will take approximately 20-40 minutes for audits to run

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

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WRITE BACKUP 1B PROCESSOR ODA TAPE



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

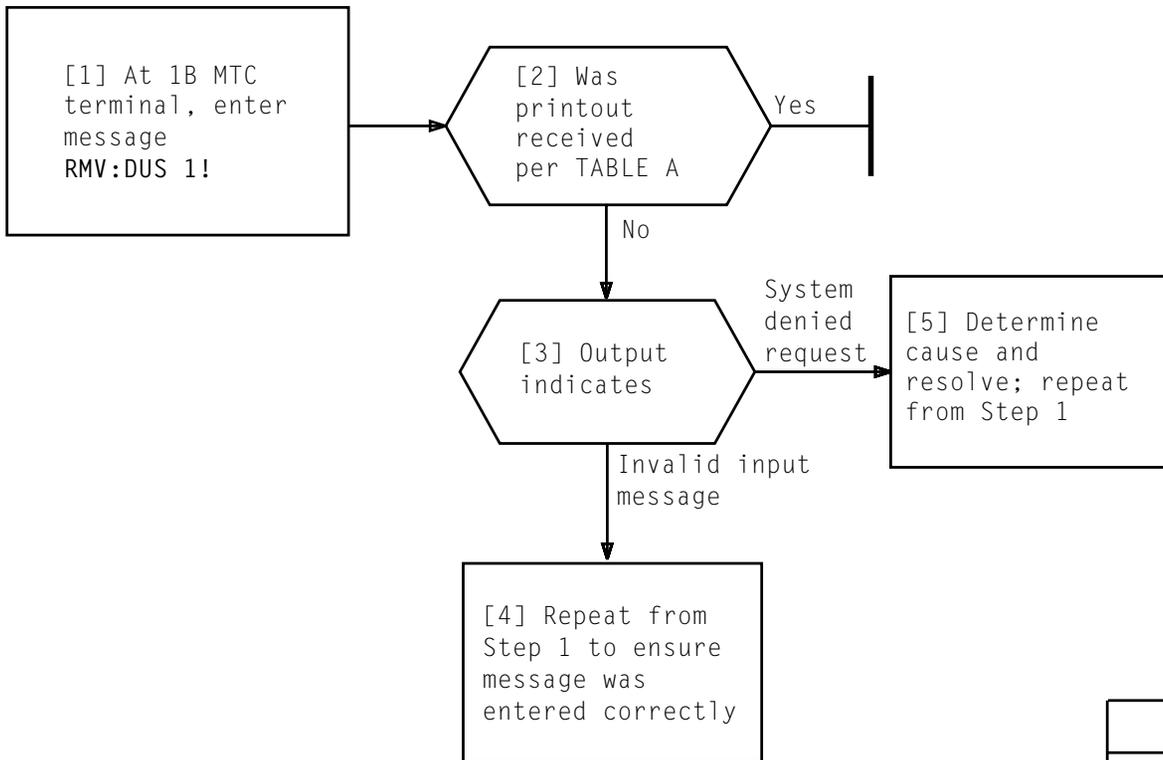


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	RMV: DUS 1 COMPLETED

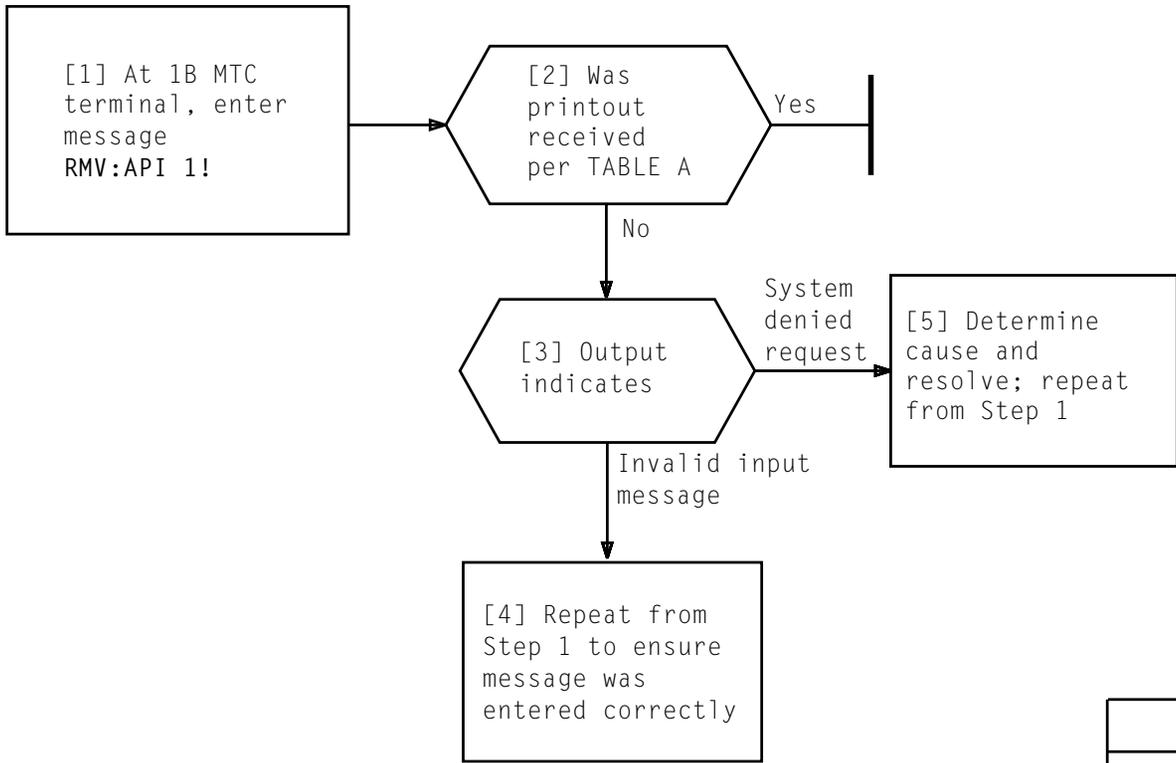


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	RMV: API 1 COMPLETED

SUMMARY

Using verify input message, verify that channel equipage (CE) and/or port equipage (PRTE) is UNEQ. If equipage is in error and supervisor determines change is required, change CE and/or PRTE to UNEQ

[1] At 1B MTC terminal, enter IOUS/IOUC current verify message [TABLE A]

TABLE A
VER:UTMN:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

[2] Are message format, IOUS member number and IOUC number correct [TABLE B]

Yes

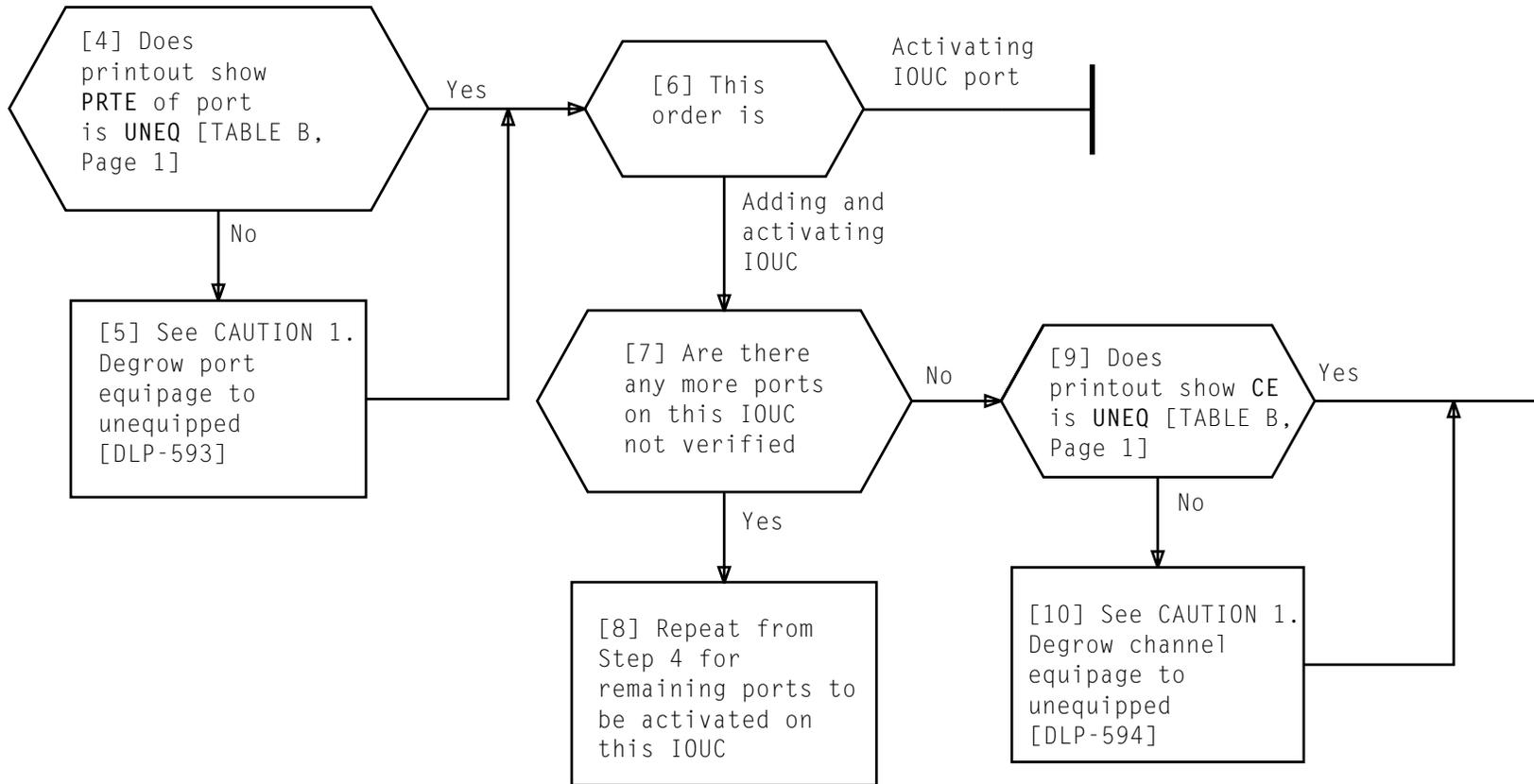
Page 2

No

[3] Determine cause and resolve; repeat from Step 1

TABLE B

VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	c = Channel equipage
CURRENT DATA:	d = Port 0 equipage
CE=c	e = Port 1 equipage
.	f = Port 2 equipage
.	
.	
.	
.	
PORT 0,PRTE	
.	
.	
.	
PORT 1,PRTE=e	
.	
.	
PORT 2,PRTE=f	
.	
.	



CAUTION 1
 Depending on local procedures supervisory or TELCO engineering approval must be obtained prior to performing any data changes

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SUMMARY

Enter change message to degrow port equipage (PRTE) from OPER to SGRO and/or from SGRO to GROW and/or from GROW to UNEQ. Verify buffered PRTE, enter copy message, verify current PRTE, and enter update message for each change in state. If after each verify, PRTE is not in right state, enter stop message and start change from beginning.

[1] At 1B MTC terminal, enter IOUS/IOUC current verify message [TABLE A]

[2] Are message format, IOUS member number and IOUC number correct [TABLE B]

No

[3] Determine cause and resolve; repeat from Step 1

Yes

Page 2

TABLE A

VER:UTMN:IOUS a,IOUC b!

a = Member number of growth associated IOUS

b = Submember number of growth IOUC

TABLE B

VER:UTMN,IOUS a,IOUC b COMPLETED

a = Member number

TRANSLATOR ADR=

b = Submember number

TRANSLATOR SIZE=43

CURRENT DATA:

c = Port 0 equipage

.

.

.

.

.

.

.

.

PORT 0,PRTE=c

d = Port 1 equipage

.

.

.

PORT 1,PRTE=d

e = Port 2 equipage

.

.

PORT 2,PRTE=e

.

.

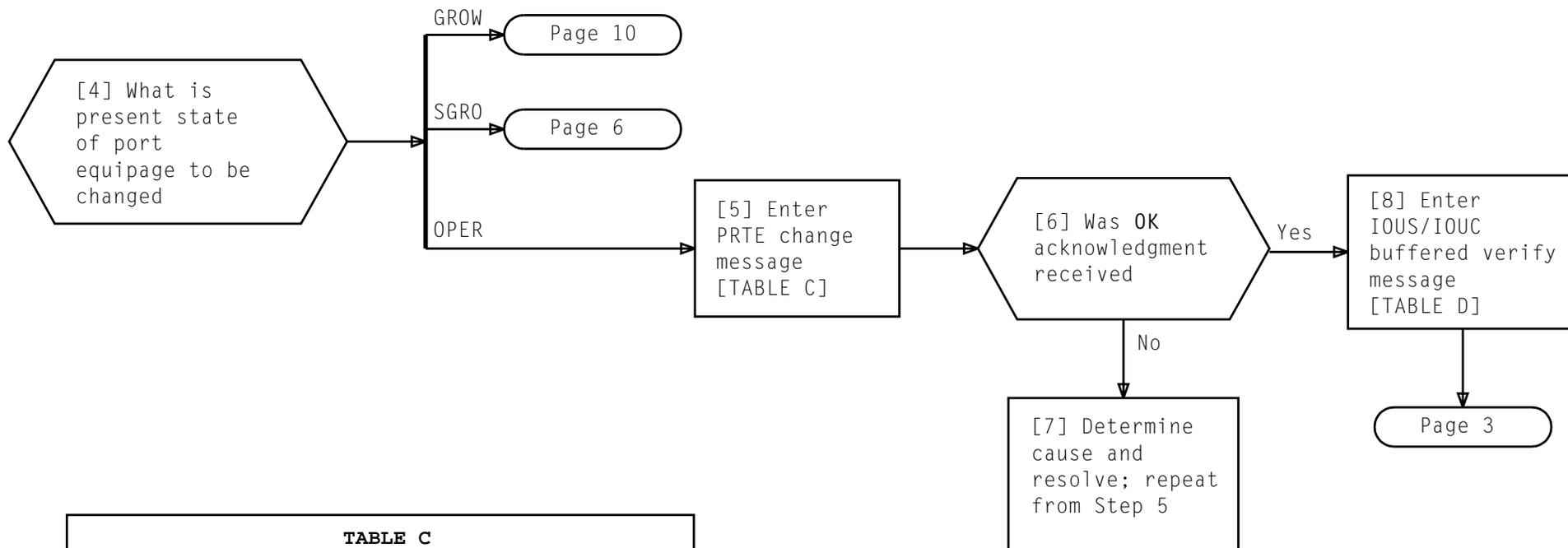


TABLE C
IN:XLBUF:IOUS a,IOUC b,PORT c,PRTE (OPER,SGRO)!
a = Member number of growth associated IOUS b = Submember number of growth IOUC c = Growth port number

TABLE D
VER:UTMN;BUF:IOUS a,IOUC b!
a = Member number of growth associated IOUS b = Submember number of growth IOUC

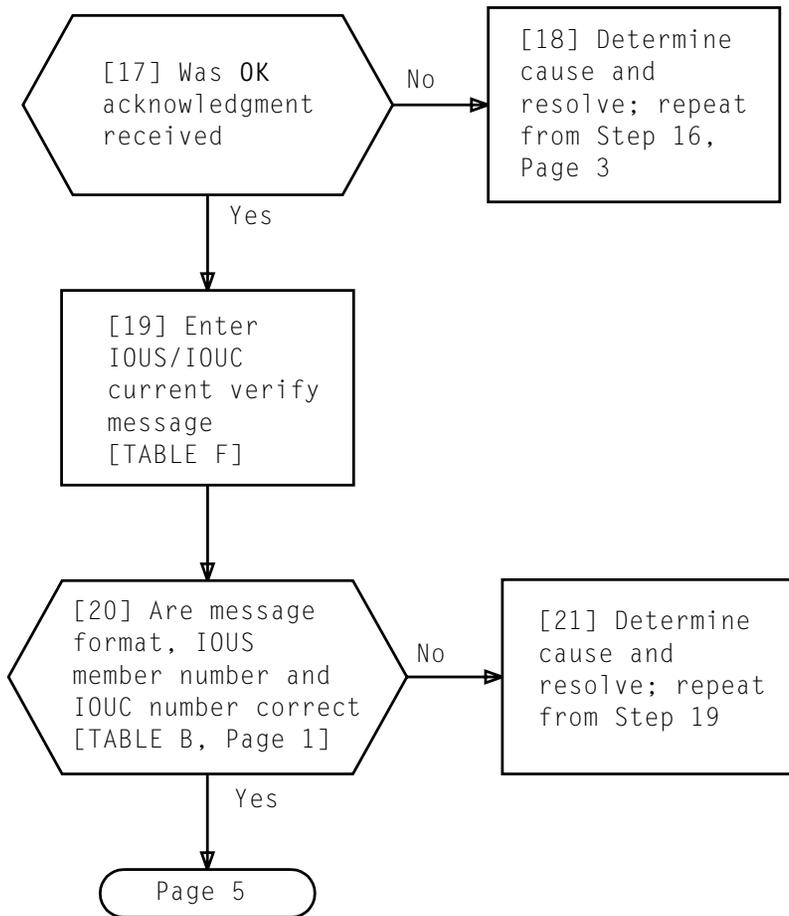
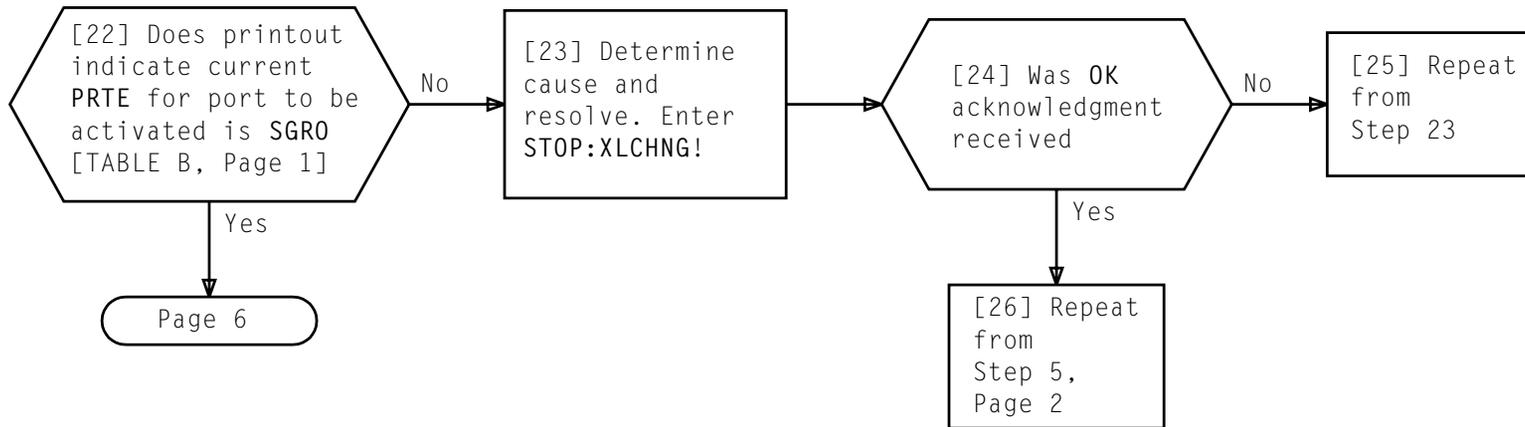


TABLE F
VER:UTMN:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC



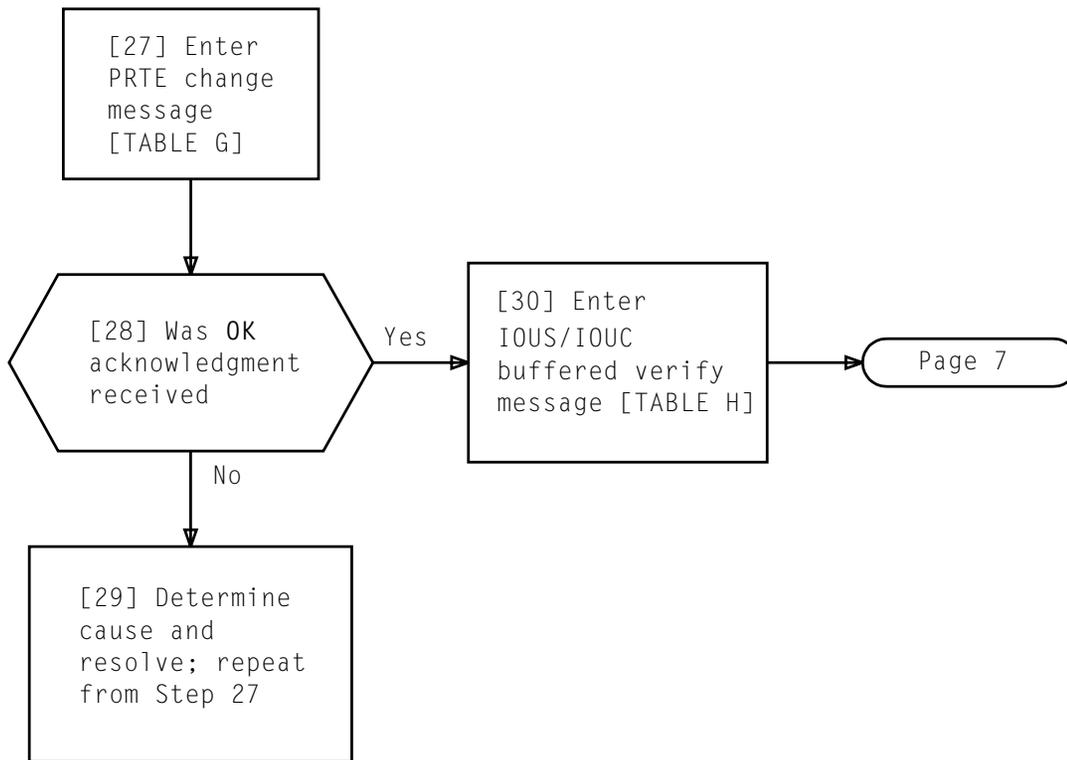


TABLE G
IN:XLBUF:IOUS a,IOUC b,PORT c,PRTE (SGRO,GROW)!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC
c = Growth port number

TABLE H
VER:UTMN;BUF:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

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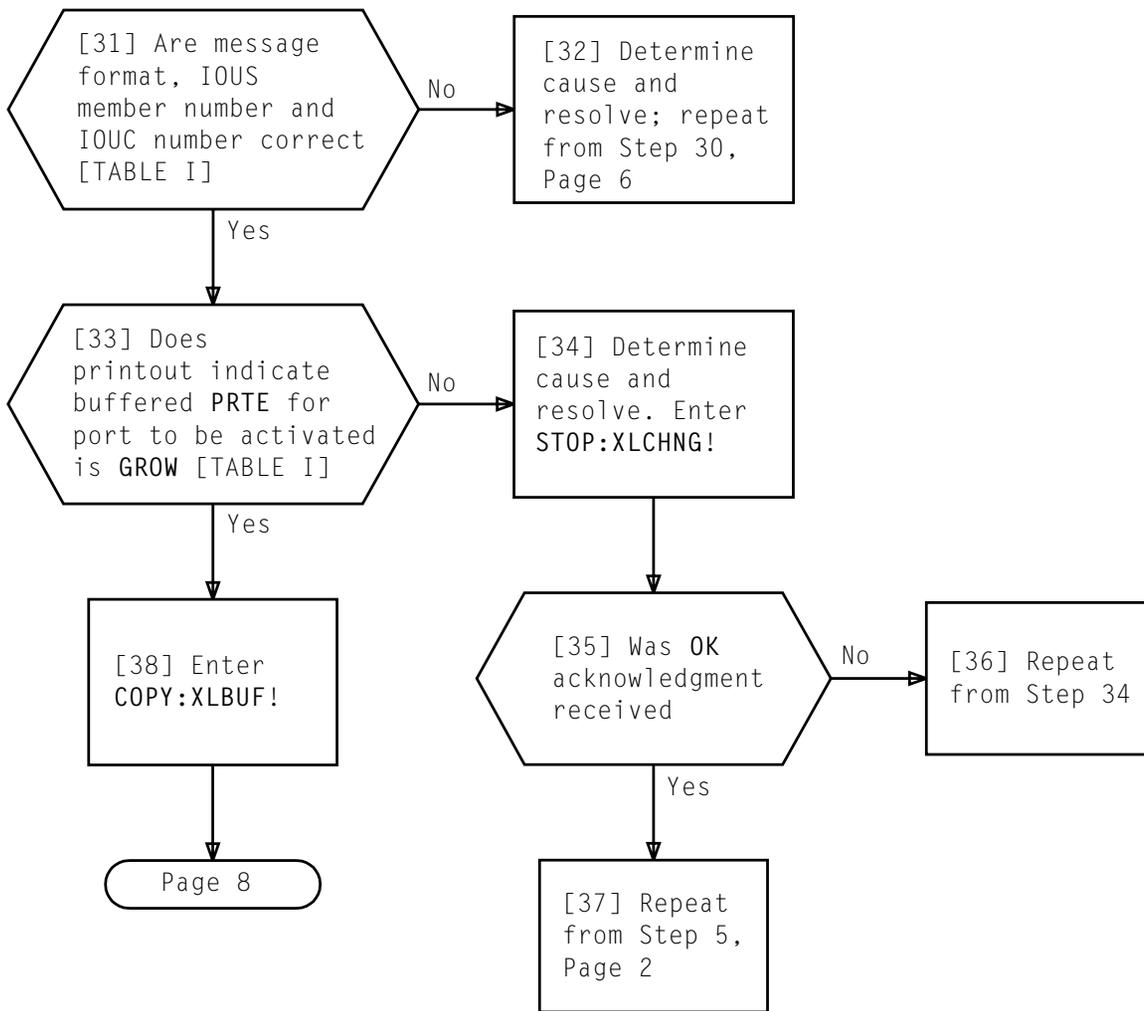


TABLE I	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	c = Port 0 equipage
BUFFERED DATA:	d = Port 1 equipage
.	e = Port 2 equipage
.	
.	
.	
.	
.	
.	
PORT 0,PRTE=c	
.	
.	
.	
PORT 1,PRTE=d	
.	
.	
PORT 2,PRTE=e	
.	
.	

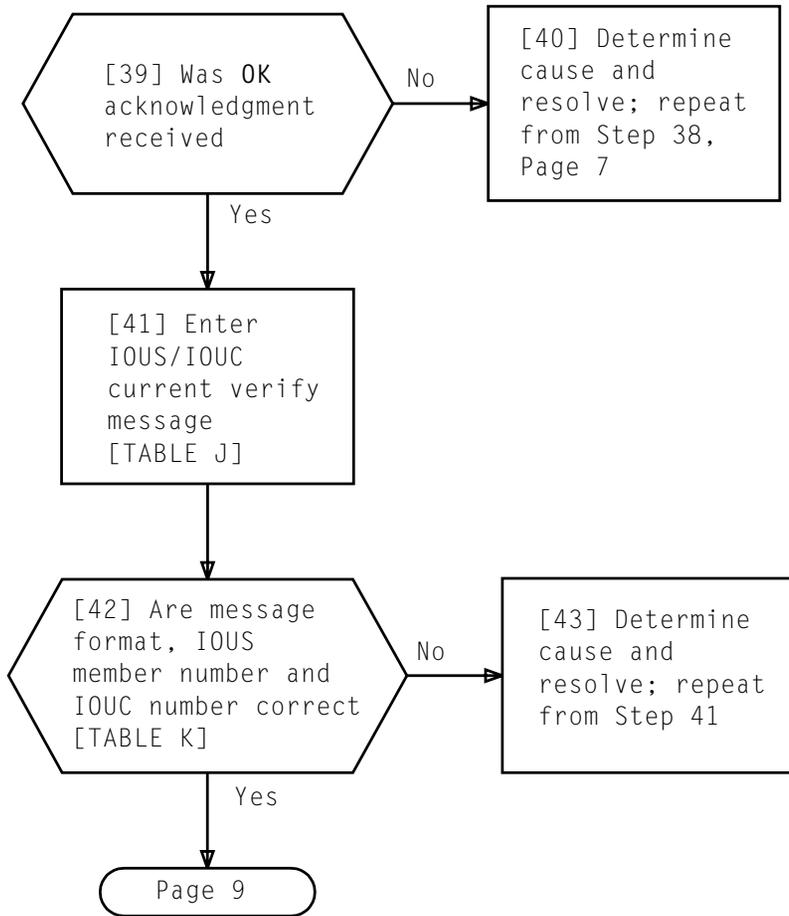
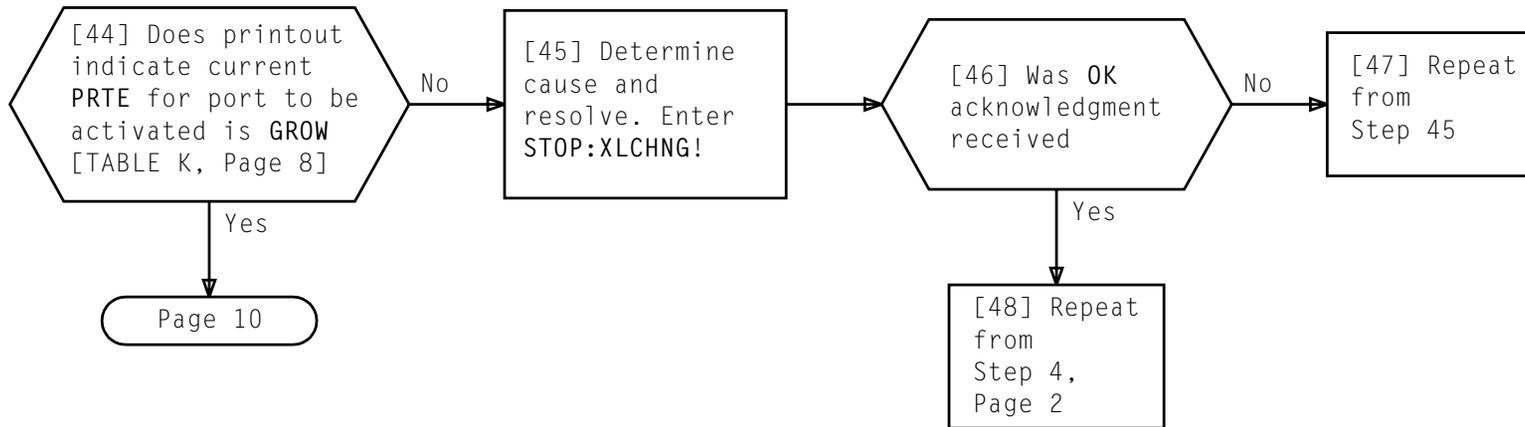


TABLE J
VER:UTMN:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

TABLE K	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	c = Port 0 equipage
CURRENT DATA:	d = Port 1 equipage
.	e = Port 2 equipage
.	
.	
.	
.	
.	
.	
PORT 0,PRTE=c	
.	
.	
.	
PORT 1,PRTE=d	
.	
.	
PORT 2,PRTE=e	
.	
.	



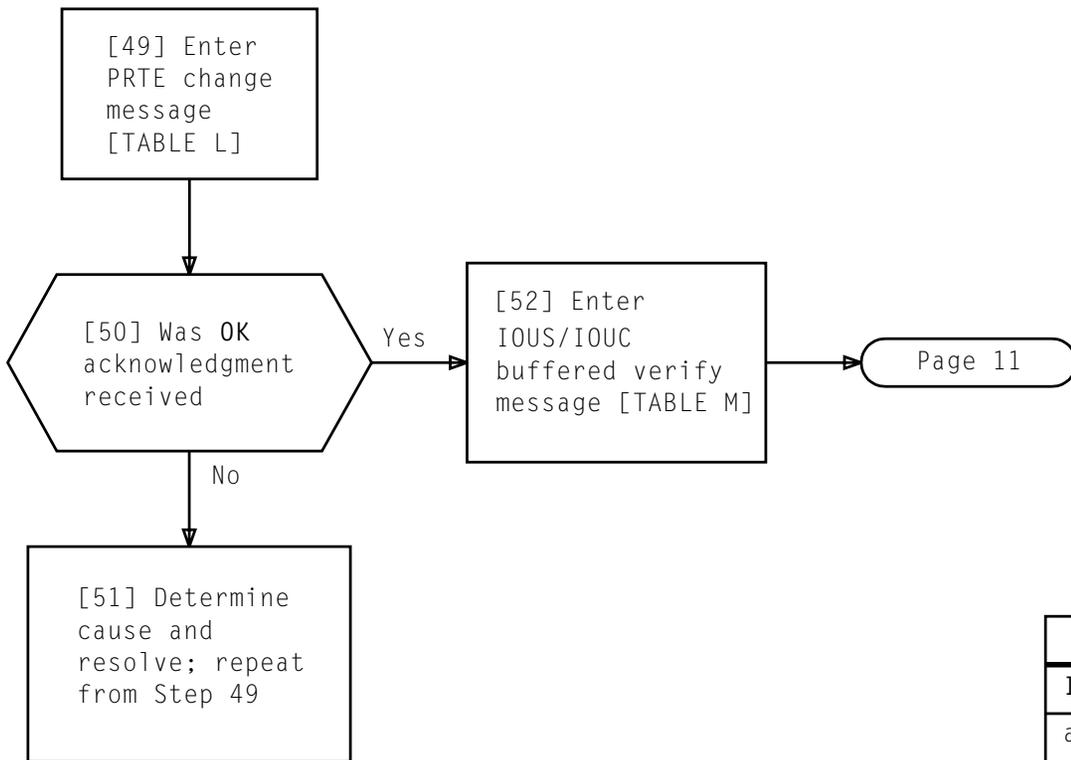


TABLE L
IN:XLBUF:IOUS a,IOUC b,PORT c,PRT (GROW,UNEQ)!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC
c = Growth port number

TABLE M
VER:UTMN;BUF:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

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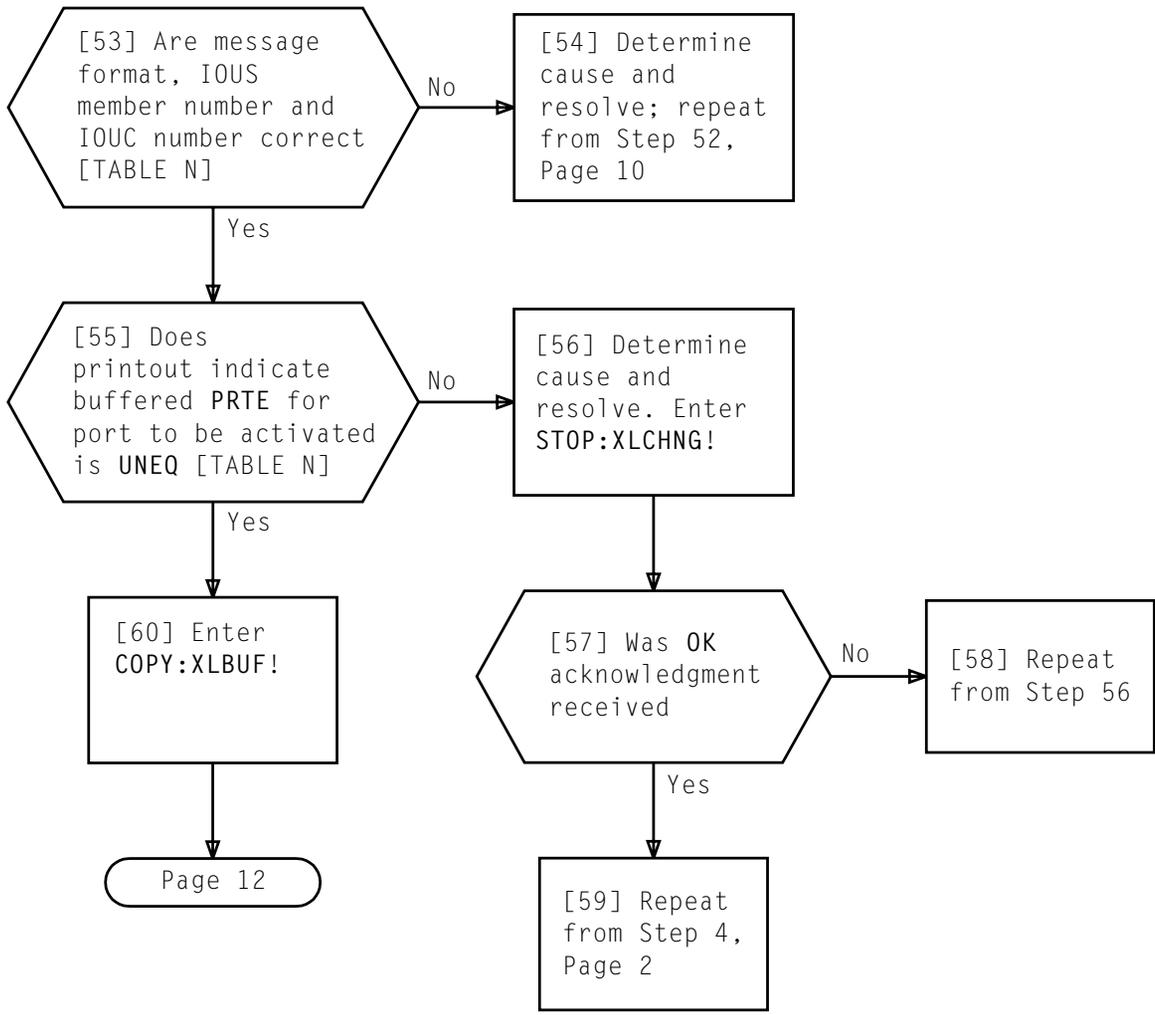


TABLE N	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	c = Port 0 equipage
BUFFERED DATA:	d = Port 1 equipage
.	e = Port 2 equipage
.	
.	
.	
.	
.	
.	
PORT 0 PRTE=c	
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.	
.	
.	
PORT 1,PRTE=d	
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.	
PORT 2,PRTE=e	
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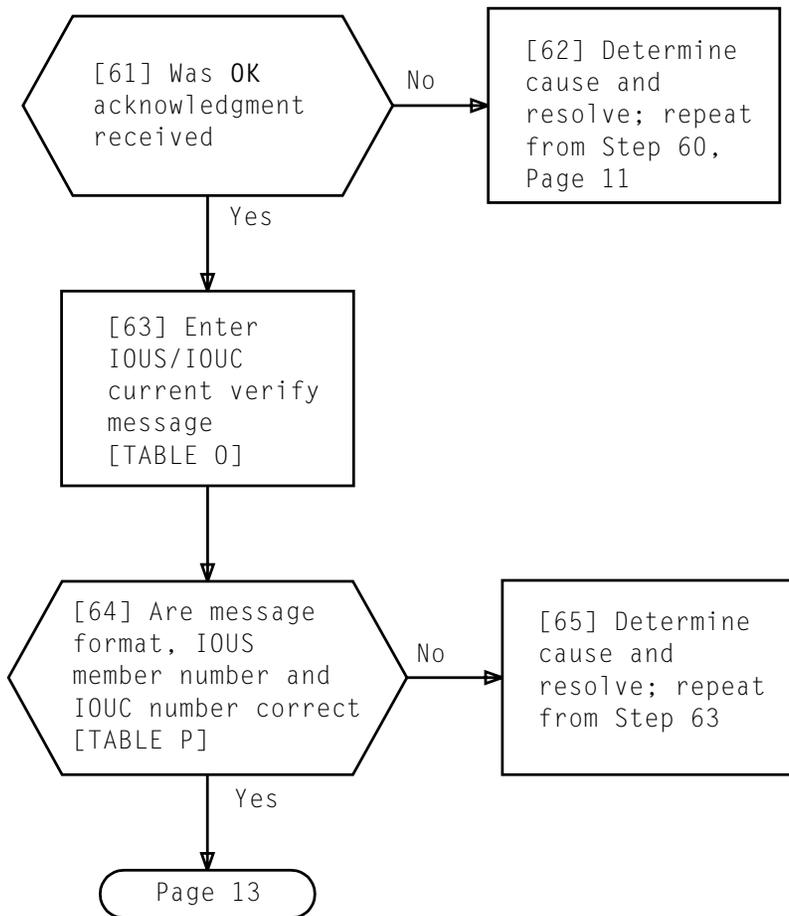


TABLE O
VER:UTMN:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

TABLE P	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	c = Port 0 equipage
CURRENT DATA:	d = Port 1 equipage
.	e = Port 2 equipage
.	
.	
.	
.	
.	
PORT 0,PRTE=c	
.	
.	
.	
PORT 1,PRTE=d	
.	
.	
PORT 2,PRTE=e	
.	
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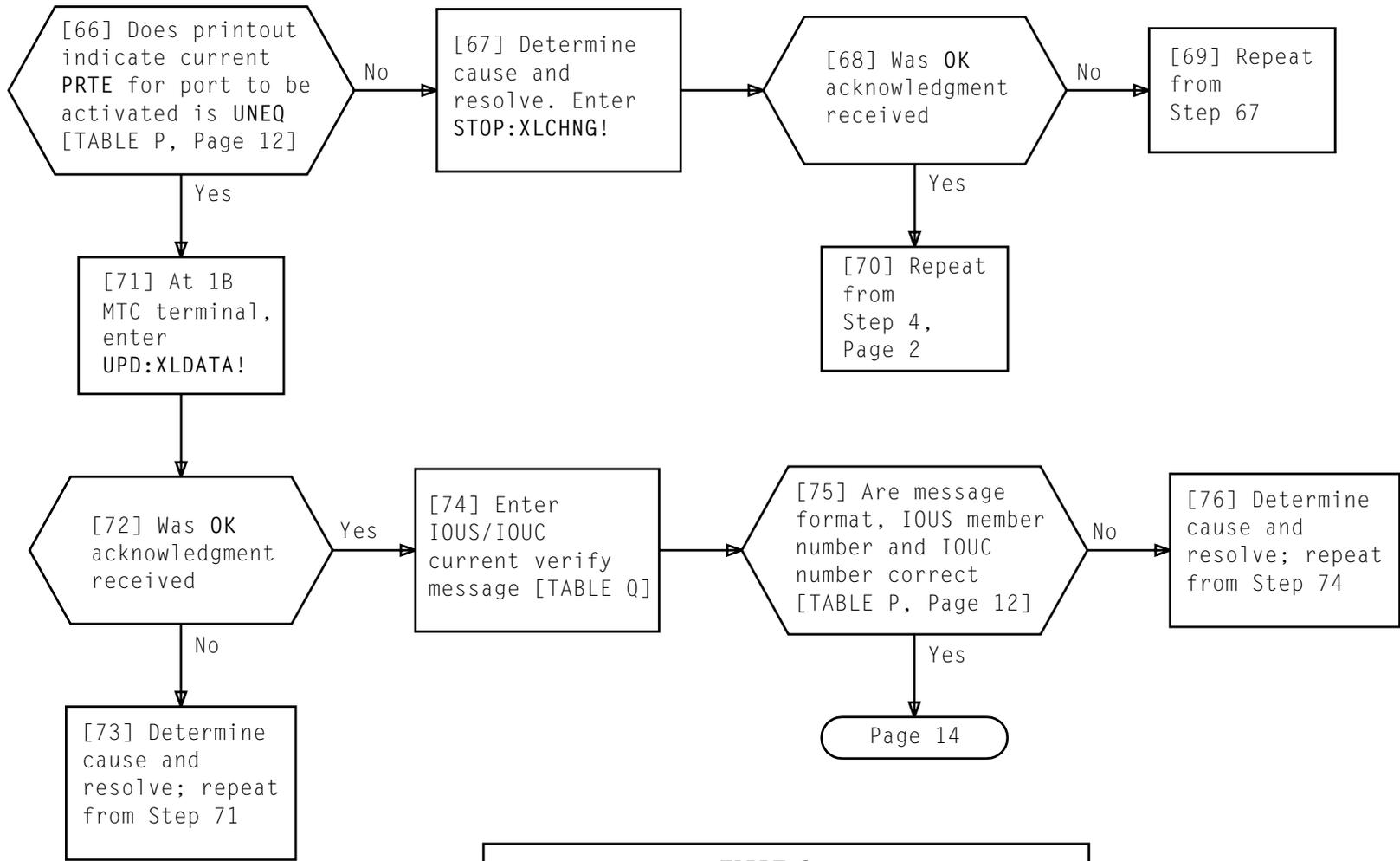
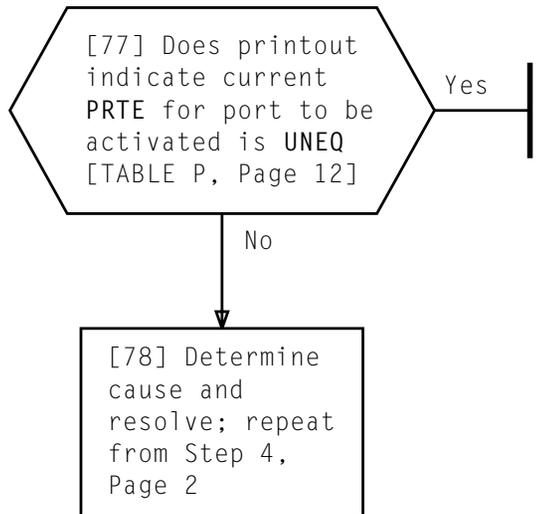


TABLE Q
VER:UTMN:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC



SUMMARY

Enter change message to degrow channel equipage (CE) from OPER to SGRO and/or from SGRO to GROW and/or from GROW to UNEQ. Verify buffered CE, enter copy message and verify

current CE for each change in state. If after each verify, CE is not in right state, enter stop message and start change from beginning. After all required changes in equipage are in copy state, enter update message and verify current CE.

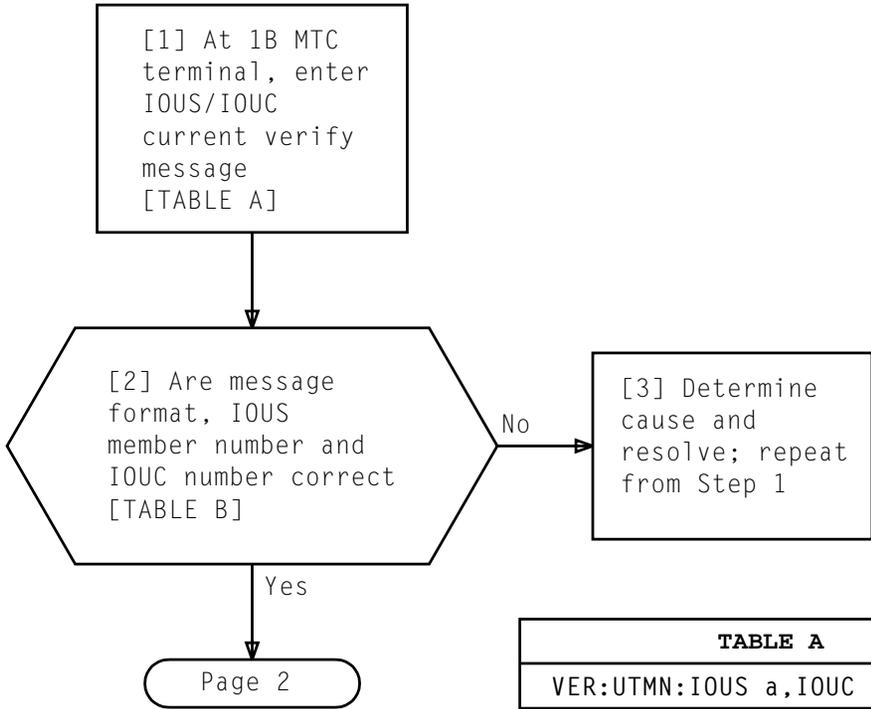


TABLE B	
VER:UTMN,IOUS a,IOUC b COMPLETED TRANSLATOR ADR= TRANSLATOR SIZE=43 CURRENT DATA: CE=c	a = Member number b = Submember number c = Channel equipage

TABLE A
VER:UTMN:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUS

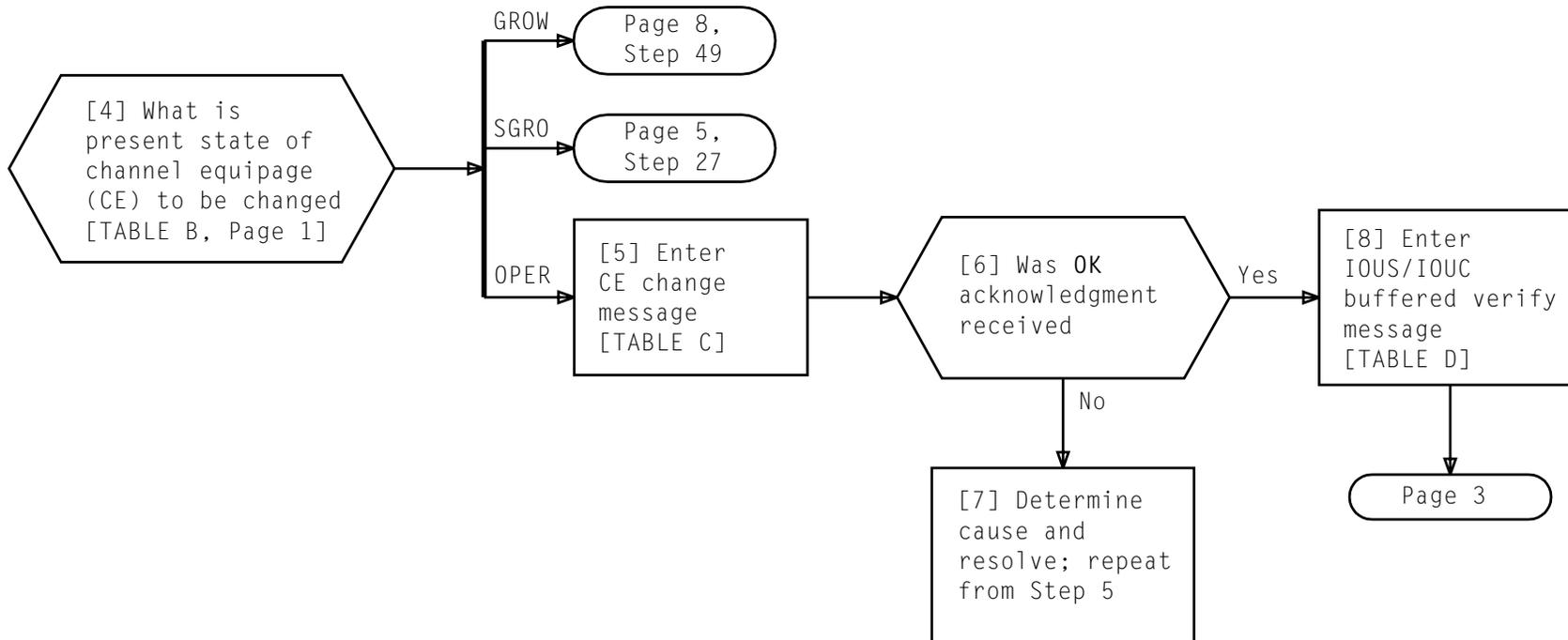


TABLE C
IN:XLBUF:IOUS a,IOUC b,CE (OPER,SGRO)!
a = Member number of growth associated IOUS b = Submember number of growth IOUC

TABLE D
VER:UTMN;BUF:IOUS a,IOUC b!
a = Member number of growth associated IOUS b = Submember number of growth IOUC

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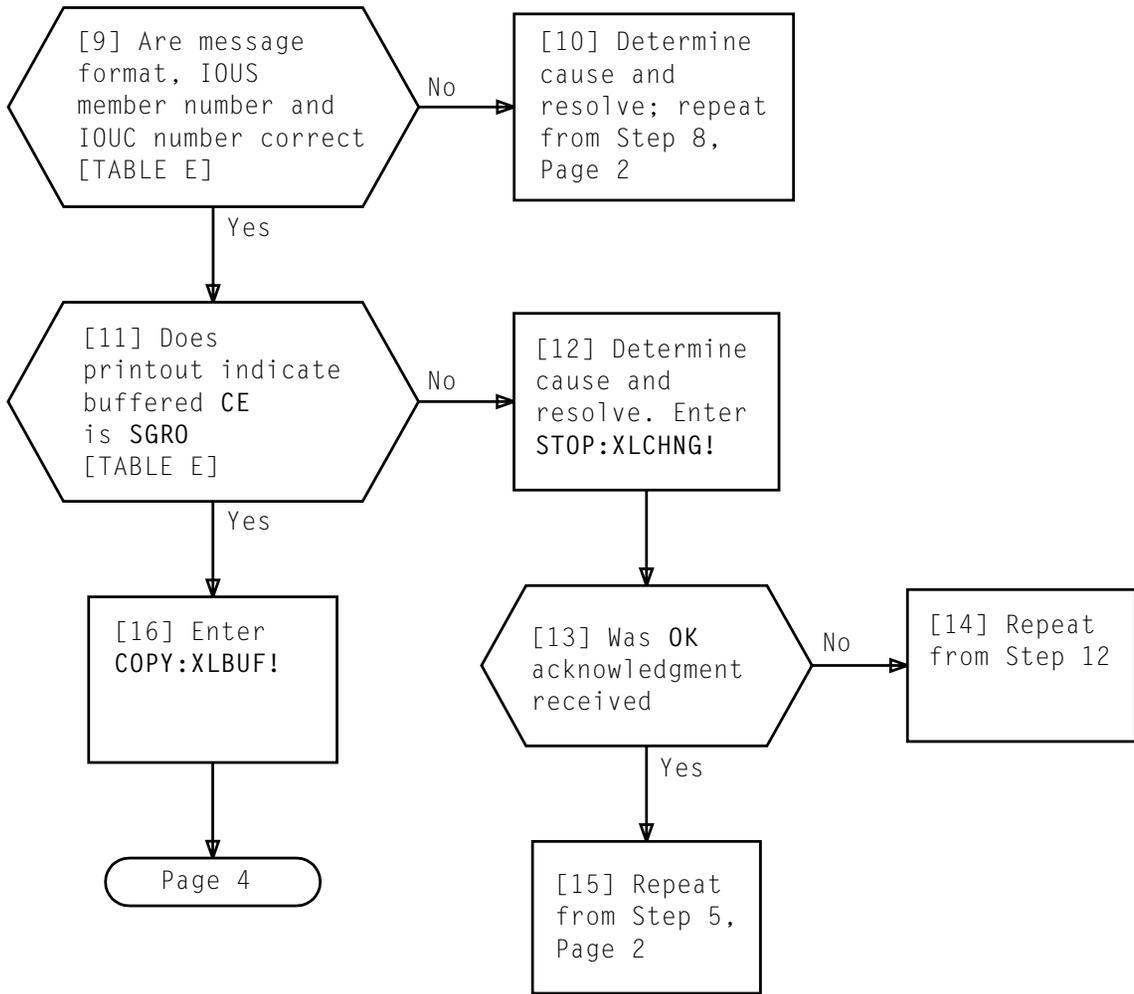


TABLE E	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	
TRANSLATOR SIZE=43	b = Submember number
BUFFERED DATA:	
CE=SGRO	
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.	
.	
.	
.	
.	
.	

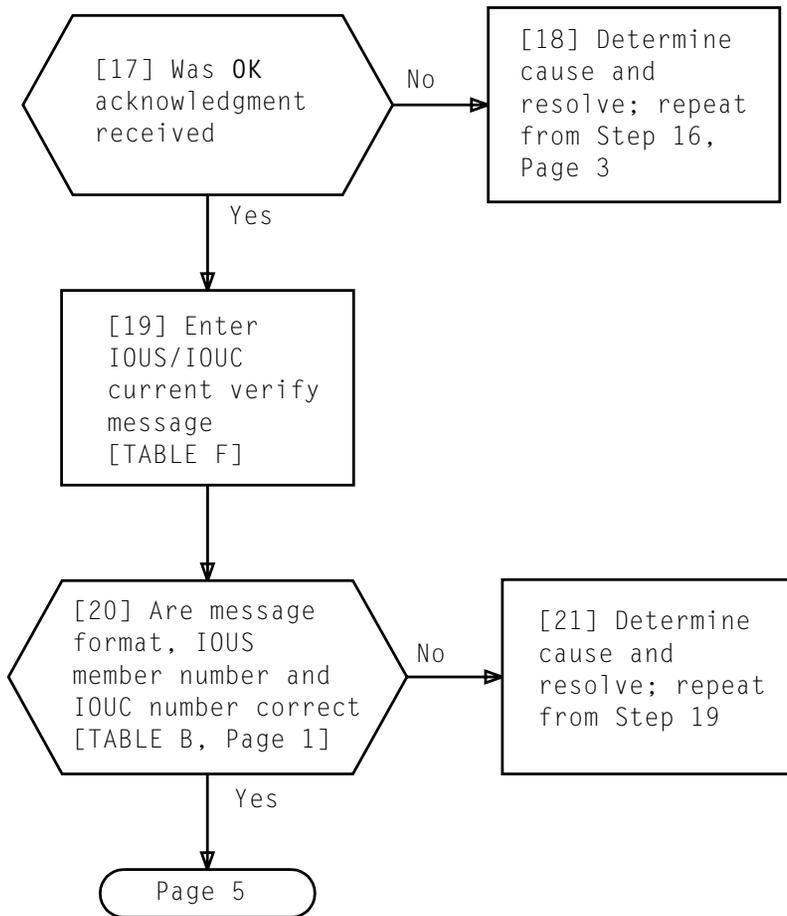


TABLE F	
VER:UTMN:IOUS a,IOUC b!	
a =	Member number of growth associated IOUS
b =	Submember number of growth IOUC

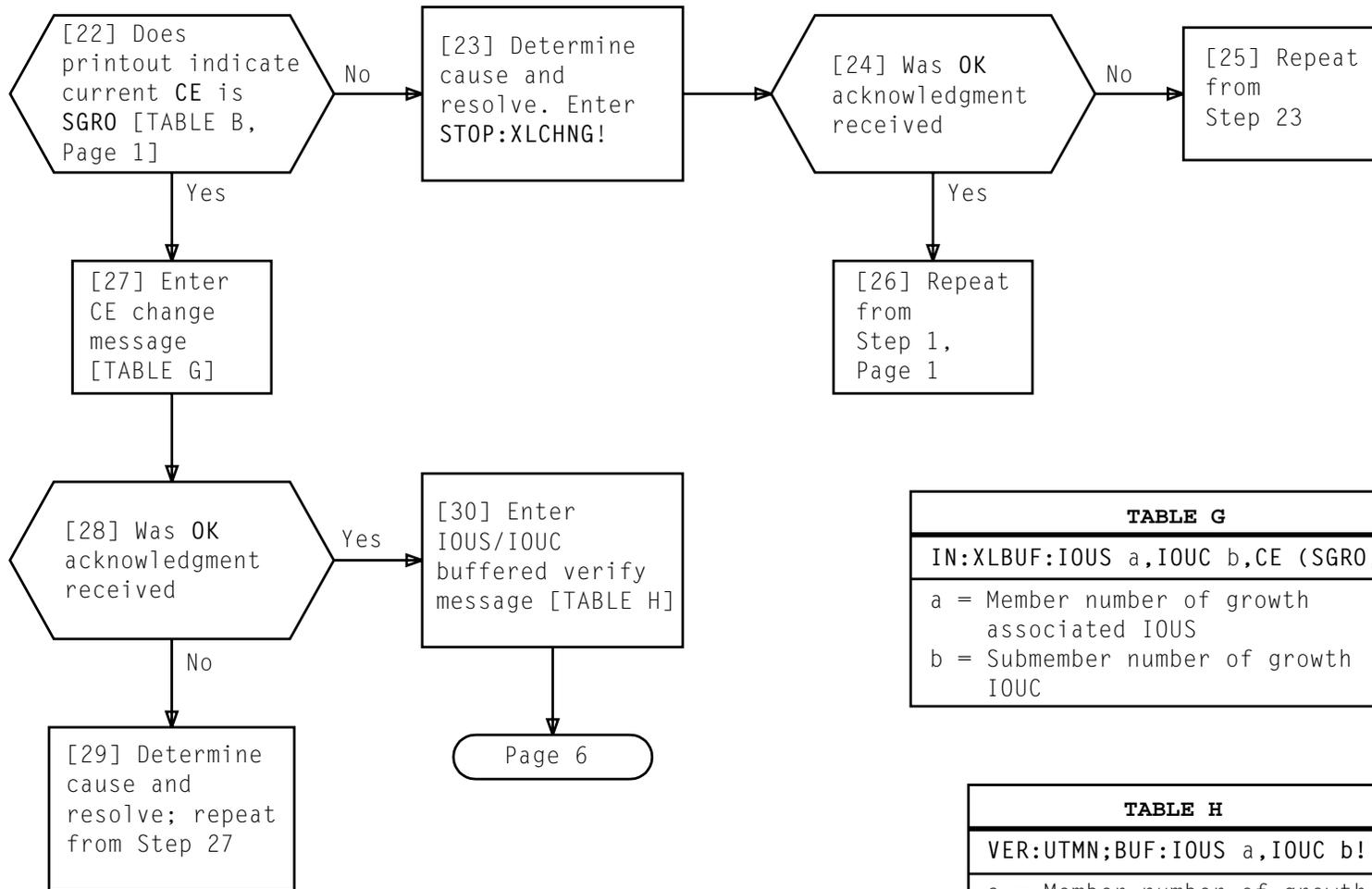


TABLE G
IN:XLBUF:IOUS a,IOUC b,CE (SGRO,GROW)!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

TABLE H
VER:UTMN;BUF:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

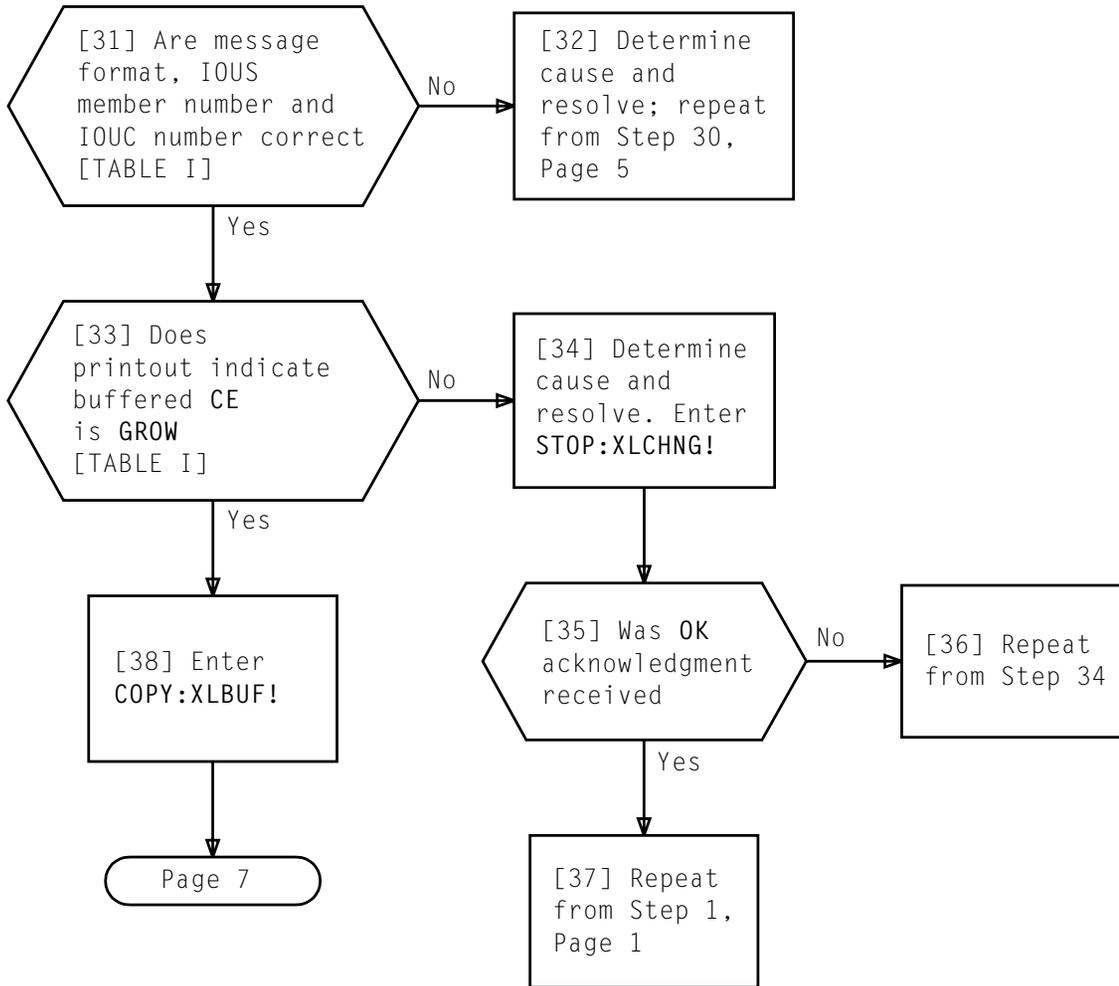
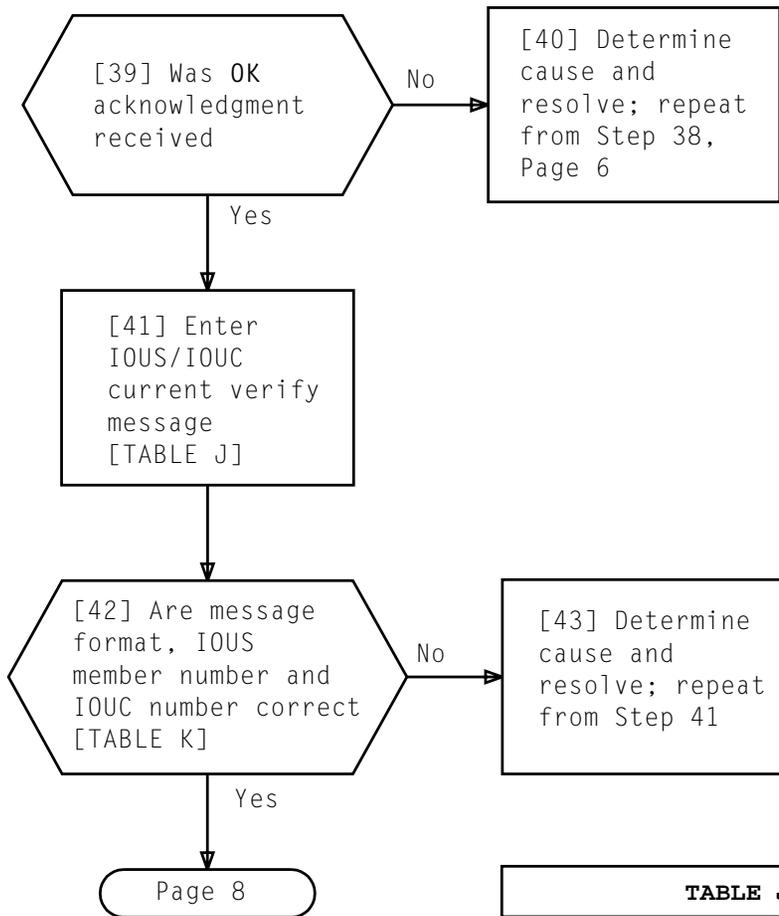


TABLE I	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	
BUFFERED DATA:	
CE=GROW	
.	
.	
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.	
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[40] Determine cause and resolve; repeat from Step 38, Page 6

[41] Enter IOUS/IOUC current verify message [TABLE J]

[43] Determine cause and resolve; repeat from Step 41

TABLE J
VER:UTMN:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

TABLE K	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	number
TRANSLATOR SIZE=43	b = Submember number
CURRENT DATA:	
CE=GROW	
.	
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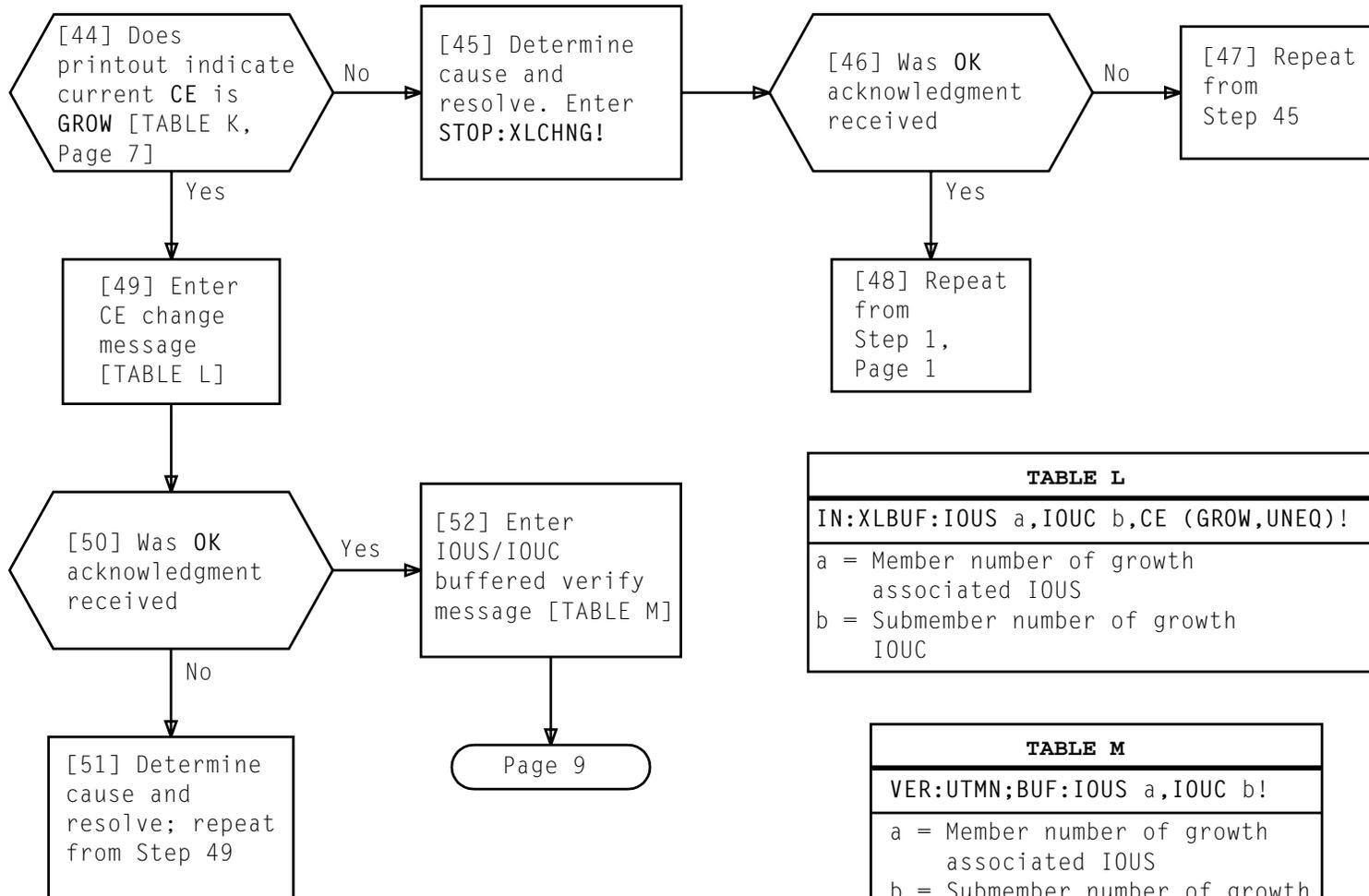


TABLE L
IN:XLBUF:IOUS a,IOUC b,CE (GROW,UNEQ)!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

TABLE M
VER:UTMN;BUF:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

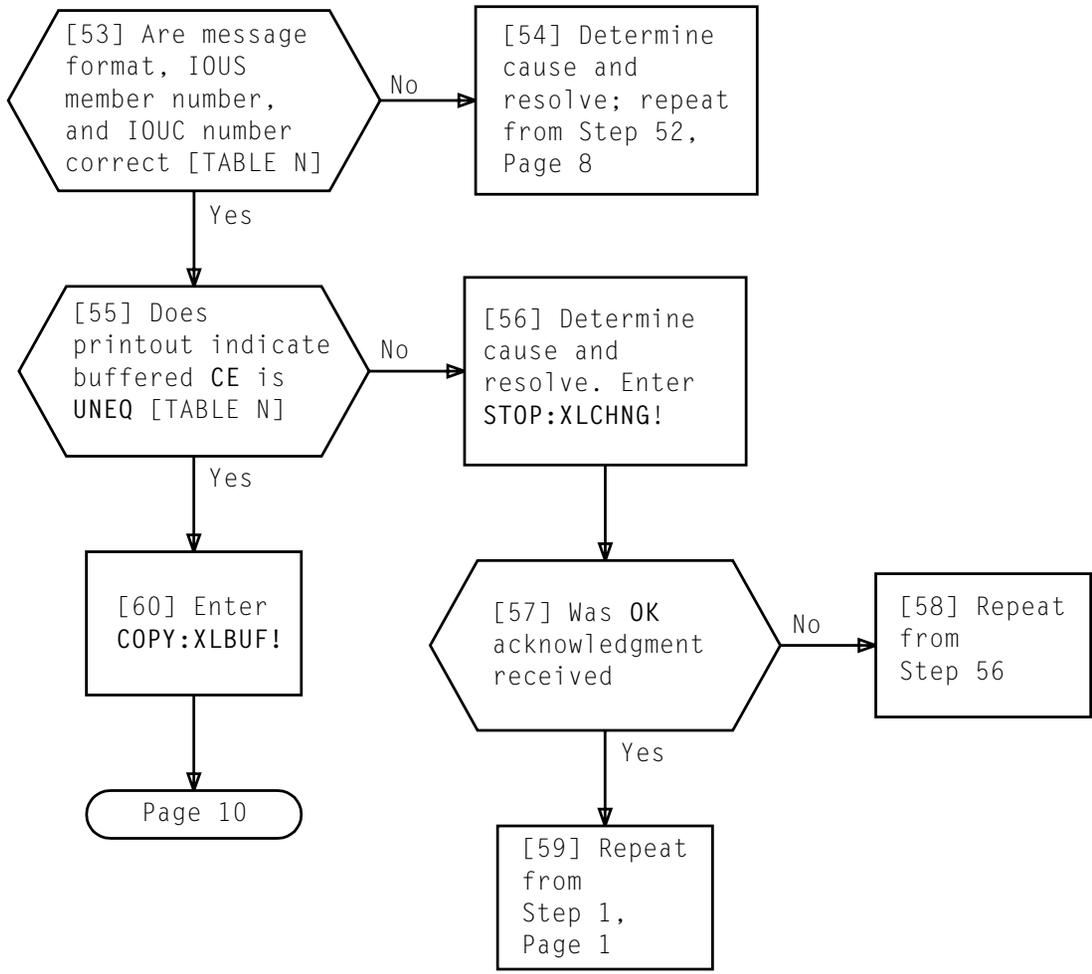


TABLE N	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	
BUFFERED DATA:	
CE=UNEQ	
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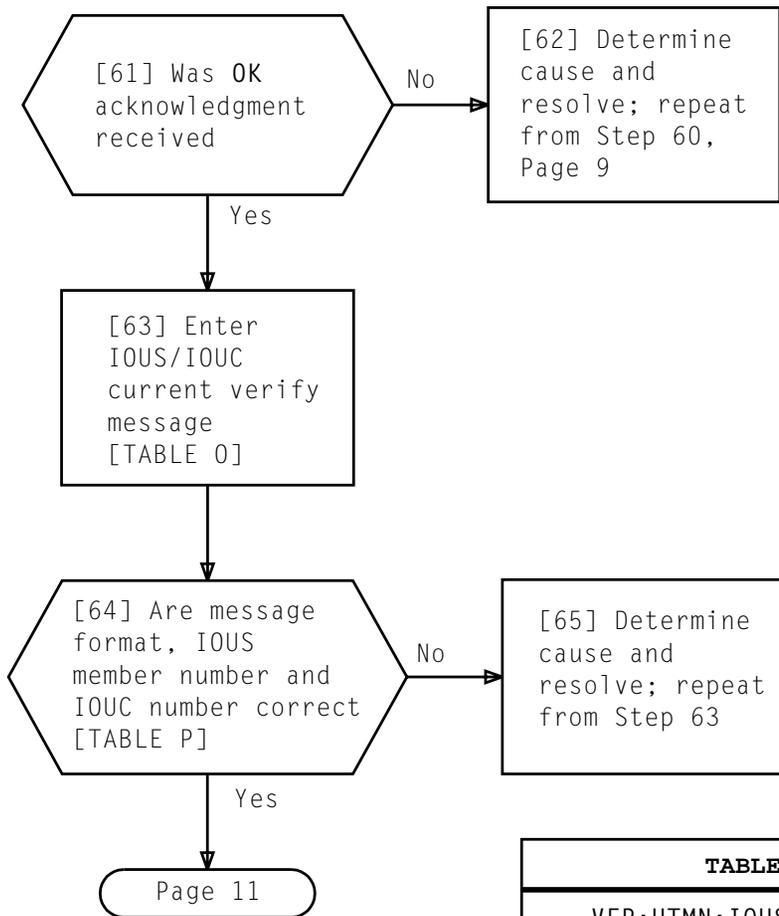


TABLE P	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	number
TRANSLATOR SIZE=43	b = Submember number
CURRENT DATA:	
CE=UNEQ	
.	
.	
.	
.	
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.	
.	

TABLE O
VER:UTMN:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

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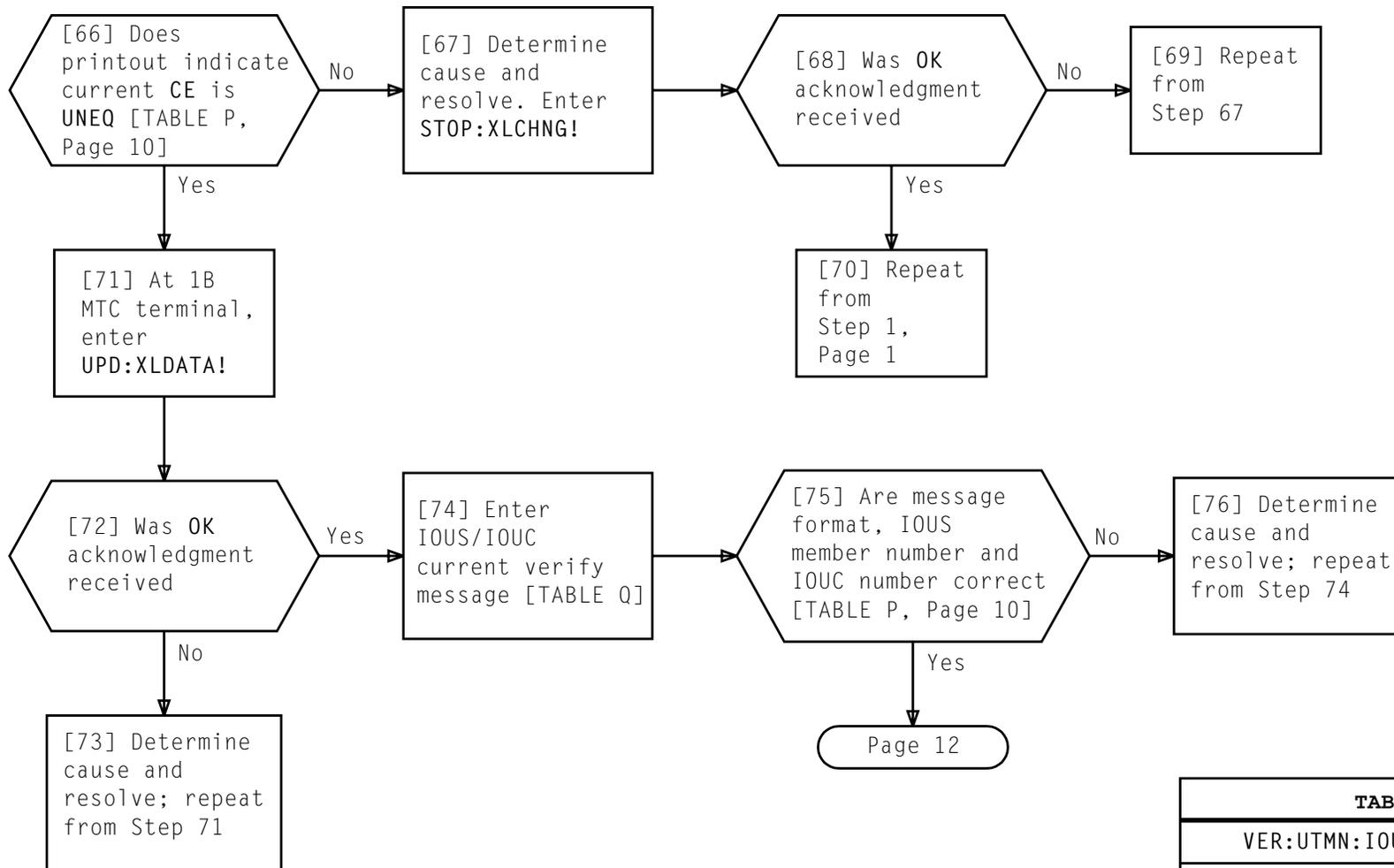
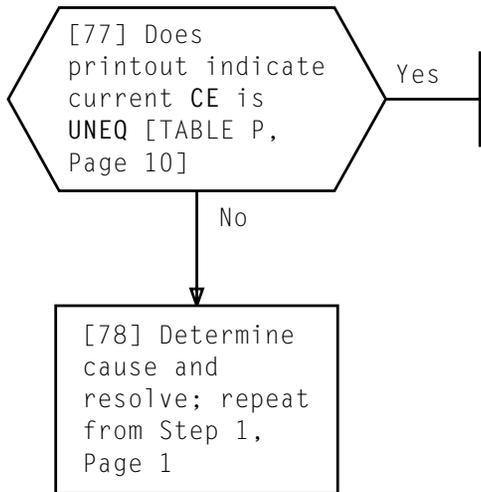


TABLE Q	
VER:UTMN:IOUS a,IOUC b!	
a = Member number of growth associated IOUS	
b = Submember number of growth IOUC	

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SUMMARY

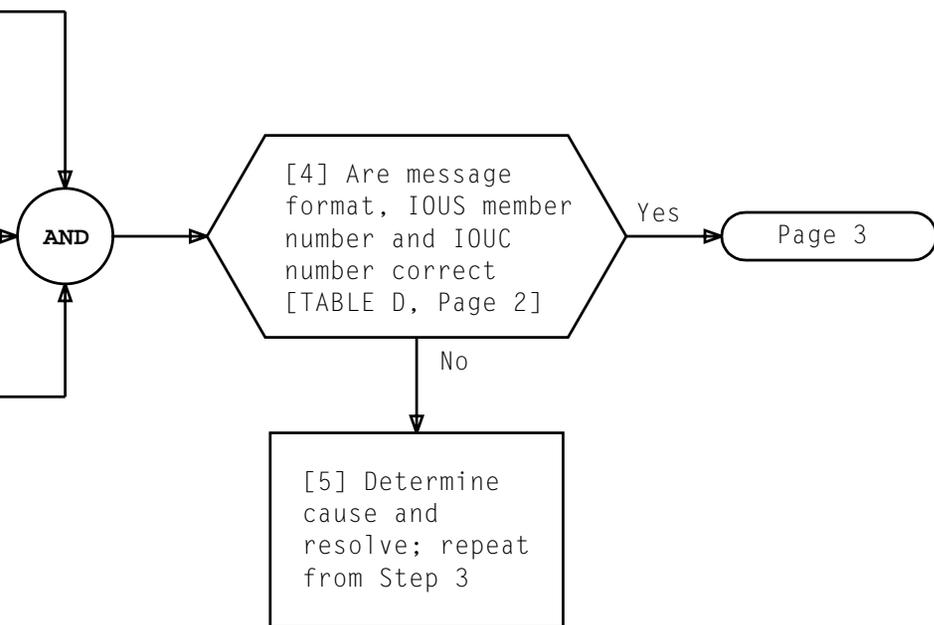
Using appropriate office record drawings, determine IOUC data for CHG, CHNAME, BKUP, SPD, MODE, DIALUP, TRMTYP, TAPE, CHTYP, PHAPPLID, STATYP, and ACU. Enter change messages to change IOUC data. Verify buffered IOUC data, enter copy

message, then verify current IOUC data. If after each verify, IOUC data is in error, enter stop message and start change from beginning. If IOUC data is correct after current verify, enter update message and verify that data is correct.

[1] See NOTE 1. Determine from functional ODA listing and/or TG-4, channel data in TABLE A, Page 2 and record for later use

[2] See NOTE 1. If network protocol application ID is not zero: determine from TG-4 application data in TABLE B, Page 2 and record for later use

[3] Enter IOUS/IOUC current verify message [TABLE C, Page 2] to obtain CE state and CHG code



NOTE 1

If data cannot be determined from office record drawing, consult with office engineer

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TABLE A			
ITEM	CHANNEL DATA	ITEM	CHANNEL DATA
1	Hardware generation (CHG)	10	Network protocol application ID (PHAPPLID) – CHANNEL = VALUE CMSH1 & 2 = 1 EADASH1 = 2 EADASH2 = 3 Remaining Channels = 0
2	Name (CHNAME)		
3	Backup name (BKUP)		
4	Speed (SPD)		
5	Mode (MODE)		
6	Dialup security (DIALUP)		
7	Terminal type (TRMTYP)	11	Station type (STATYP) = DCE
8	Paper tape (TAPE)	12	Automatic calling unit (ACU) = Y (for DUP 1 through 6) N (for remaining channels)
9	Special handling (CHTYP)		

TABLE B	
ITEM	APPLICATION DATA
1	Origin node address (ORIGNDA)
2	Origin AHP number (ORIGAHP)
3	Destination node address (DESTNDA)
4	Destination AHP number (DESTAHP)
5	Maximum data block size (MXBLKSZ)

TABLE C
VER:UTMN:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

TABLE D	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number b = Submember number
TRANSLATOR ADR=	c = Channel hardware generation
TRANSLATOR SIZE=43	d = Channel name e = Backup channel name
CURRENT DATA:	f = Channel speed
CE=UNEQ	g = HLFDPX or FLLDPX
CHG=c	h = Y or N
CHNAME=d	i = KD KDT P PT KP KPT KDP KDPT T NONE
BKUP=e	j = Y or N
SPD=f	k = Channel type
MODE=g	l = Protocol handler application ID
DIALUP=h	m = Station type
TRMTYP=i	n = Automatic calling unit
TAPE=j	
CHTYP=k	
PHAPPLID=l	
STATYP=m	
ACU=n	
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.	

CHANGE AND VERIFY CHANNEL DATA

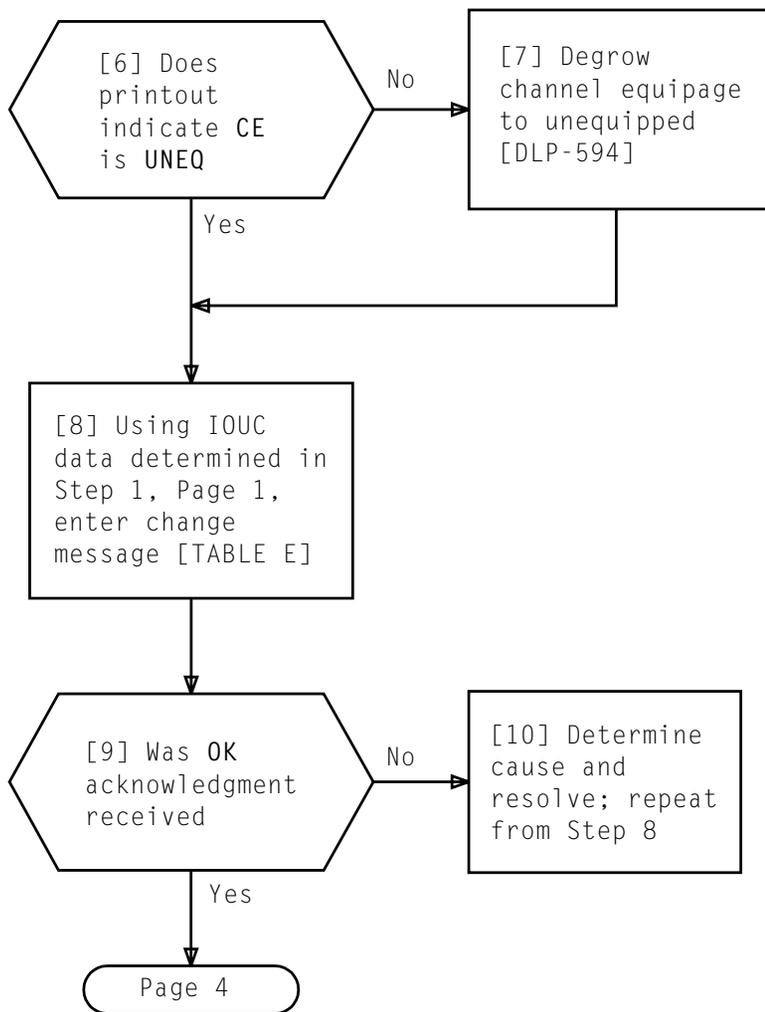


TABLE E				
IN:XLBUF:IOUS a,IOUC b,CHNAME c!				
a = Member number of growth associated IOUS				
b = Submember number of growth IOUC				
c = Channel name of growth channel -				
CHANNEL NAME				
BELT1	DUP4	NMNOC1	RMT1	TCA7
BELT2	DUP5	NMPR1	SCC1	TCA8
CMS1	DUP6	NMPR2	SREC1	TCA9
CMS2	EDASNM	NSCS	SREC2	TCA10
CMS3	EDASH1	RCDT1	SVOBS	TEC1
CMS4	EDASH2	RCDT2	TCA1	TEC2
CMSH1	ISCC	RCDT3	TCA2	TEC3
CMSH2	MTC	RCMOC	TCA3	TEC4
DUP1	NMDT1	RCREC	TCA4	TEC5
DUP2	NMDT2	RCRRT1	TCA5	TRF1
DUP3	NMDT3	RCRRT2	TCA6	TRF2

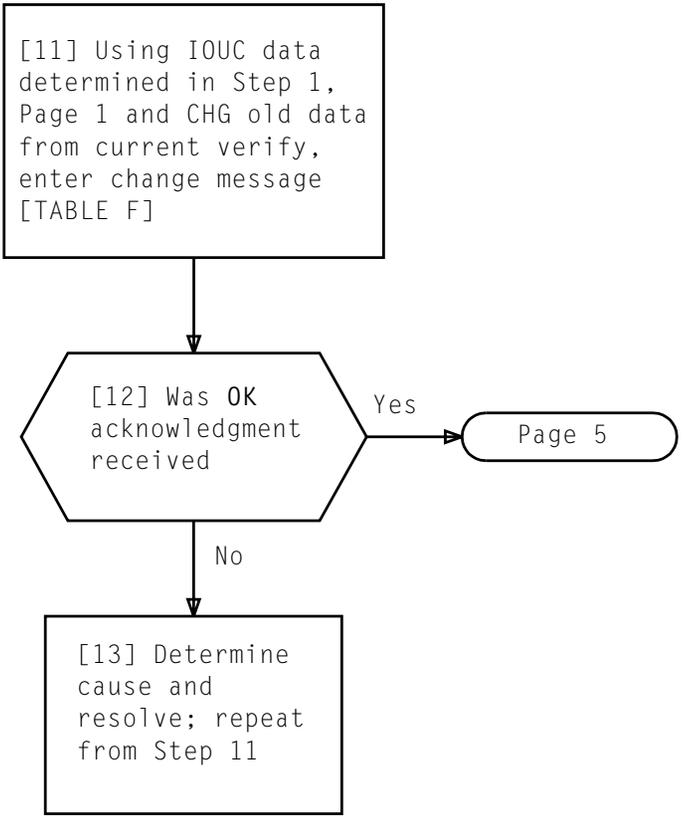


TABLE F
IN:XLBUF:IOUS a,IOUC b,CHG (c,d)!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC
c = Old CHG data from current verify
d = New CHG data recorded from office record drawing

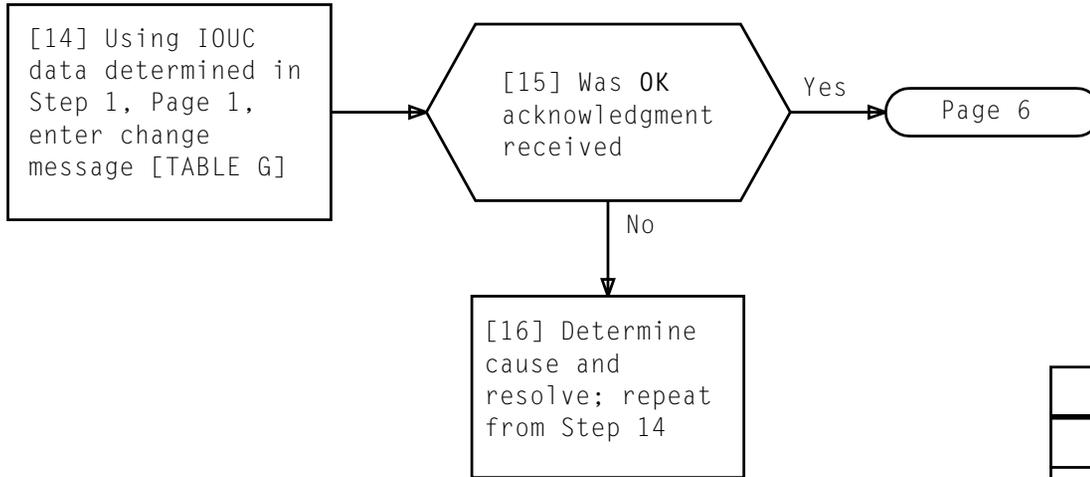


TABLE G			
IN:XLBUF:IOUS a,IOUC b,BKUP c!			
a = Member number of growth associated IOUS			
b = Submember number of growth IOUC			
c = Backup channel name of growth channel -			
CHANNEL NAME			
BELT1	NMDT1	RMT1	TCA7
BELT2	NMDT2	SCC1	TCA8
CMS1	NMPR1	SREC1	TCA9
CMS2	NMPR2	SREC2	TCA10
CMS3	RCDT1	SV0BS	TEC1
CMS4	RCDT2	TCA1	TEC2
CMSH1	RCDT3	TCA2	TEC3
CMSH2	RCMOC	TCA3	TEC4
EADASNM	RCREC	TCA4	TEC5
ISCC	RCRRT1	TCA5	TRF1
MTC	RCRRT2	TCA6	TRF2

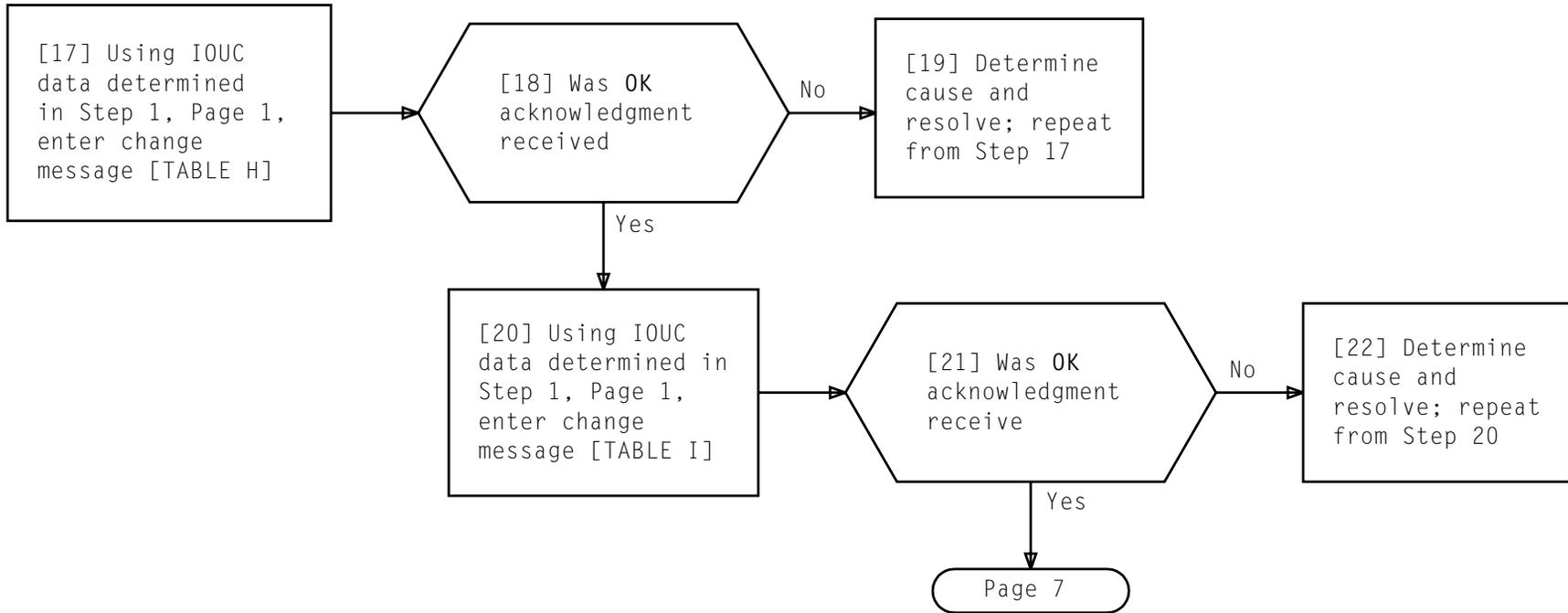


TABLE H
IN:XLBUF:IOUS a,IOUC b,SPD c!
a = Member number of growth associated IOUS b = Submember number of growth IOUC c = Channel speed – 110, 1200, 1800, 2400, 4800, or 9600

TABLE I
IN:XLBUF:IOUS a,IOUC b,MODE c!
a = Member number of growth associated IOUS b = Submember number of growth IOUC c = Channel mode = HLFDPX or FLLDPX

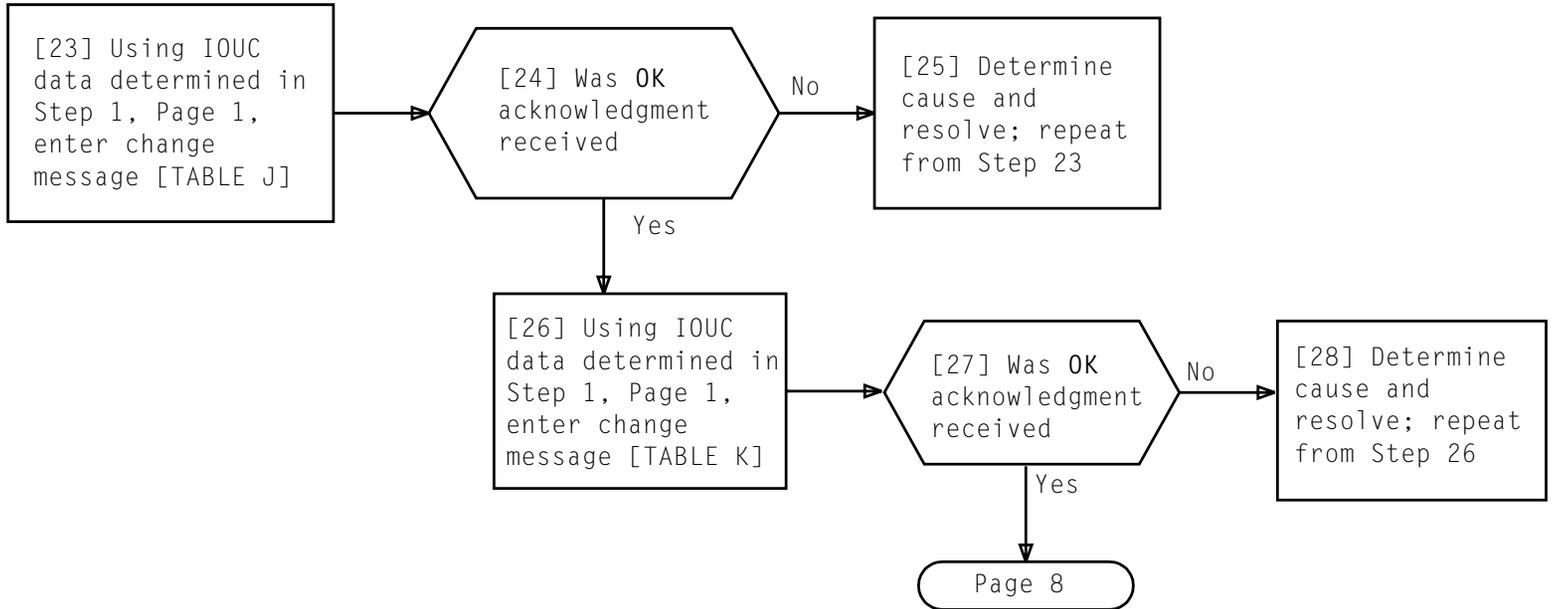


TABLE J
IN:XLBUF:IOUS a,IOUC b,DIALUP c!
a = Member number of growth associated IOUS b = Submember number of growth IOUC c = Dial up data set port connection – Y if dialup port is connected N if dialup port is not connected

TABLE K
IN:XLBUF:IOUS a,IOUC b,TRMTYP c!
a = Member number of growth associated IOUS b = Submember number of growth IOUC c = Terminal type – KD P KP KDP T KDT PT KPT KDPT NONE

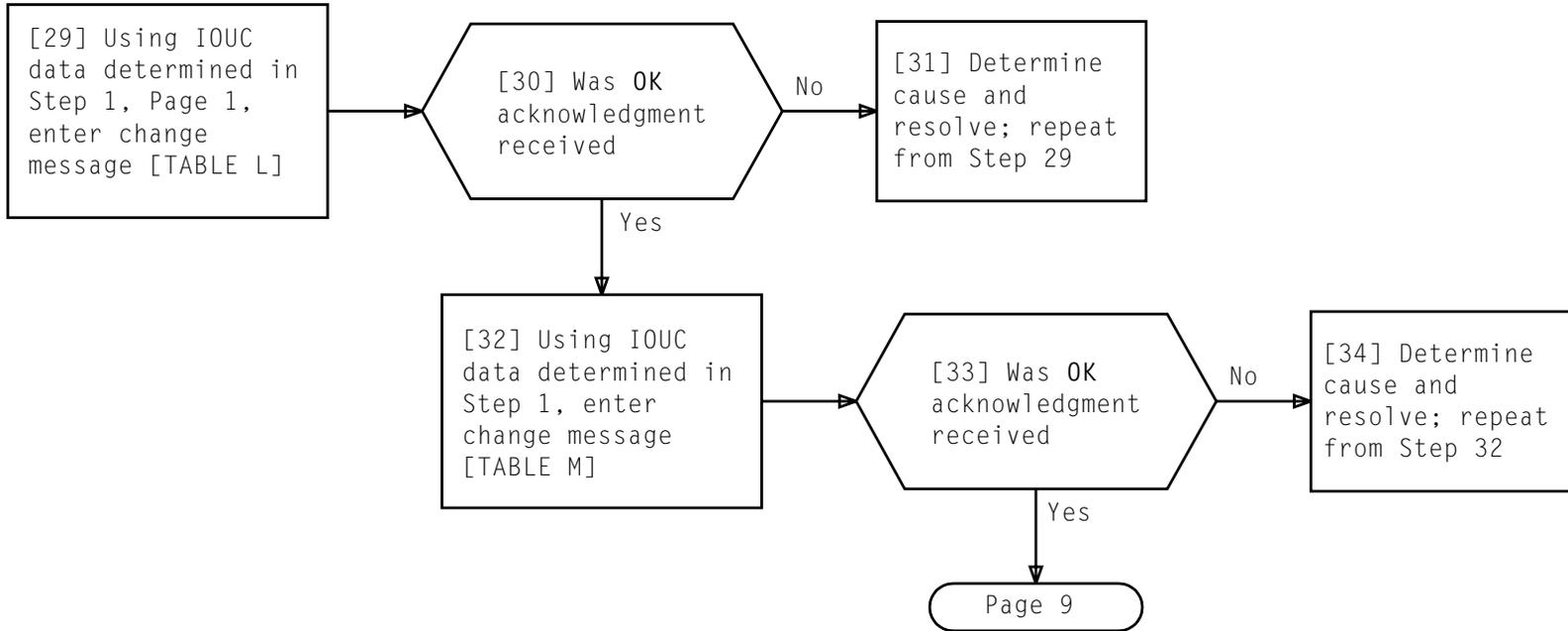


TABLE L
IN:XLBUF:IOUS a,IOUC b,TAPE c!
a = Member number of growth associated IOUS b = Submember number of growth IOUC c = Tape – Y if channel equipped with paper tape or N if channel not equipped with paper tape

TABLE M																
IN:XLBUF:IOUS a,IOUC b,CHTYP c!																
a = Member number of growth associated IOUS b = Submember number of growth IOUC c = Channel type – <table style="margin-left: 20px;"> <tr> <td>2 (for NMDT1)</td> <td>10 (for DUP2)</td> </tr> <tr> <td>3 (for NMDT2)</td> <td>10 (for DUP3)</td> </tr> <tr> <td>4 (for NMDT3)</td> <td>10 (for DUP4)</td> </tr> <tr> <td>6 (for SVOBS)</td> <td>10 (for DUP5)</td> </tr> <tr> <td>7 (for EDASNM)</td> <td>10 (for DUP6)</td> </tr> <tr> <td>10 (for DUP1)</td> <td>11 (for EDASH1)</td> </tr> <tr> <td></td> <td>11 (for EDASH2)</td> </tr> <tr> <td></td> <td>0 (for all other channels)</td> </tr> </table>	2 (for NMDT1)	10 (for DUP2)	3 (for NMDT2)	10 (for DUP3)	4 (for NMDT3)	10 (for DUP4)	6 (for SVOBS)	10 (for DUP5)	7 (for EDASNM)	10 (for DUP6)	10 (for DUP1)	11 (for EDASH1)		11 (for EDASH2)		0 (for all other channels)
2 (for NMDT1)	10 (for DUP2)															
3 (for NMDT2)	10 (for DUP3)															
4 (for NMDT3)	10 (for DUP4)															
6 (for SVOBS)	10 (for DUP5)															
7 (for EDASNM)	10 (for DUP6)															
10 (for DUP1)	11 (for EDASH1)															
	11 (for EDASH2)															
	0 (for all other channels)															

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[35] Using IOUC data determined in Step 1, Page 1, enter change message [TABLE N]

[36] Was OK acknowledgment received

No

[37] Determine cause and resolve; repeat from Step 35

Yes

[38] Was protocol handler application ID specified in Step 35, 1 through 7

Yes

[39] Enter application ID current verify message to obtain ORIGNDA, ORIGAHP, DESTNDA, DESTAHP, and MXBLKSZ [TABLE O]

No

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TABLE P
VER:APPLID a COMPLETED
TRANSLATOR ADR= TRANSLATOR SIZE=2
CURRENT DATA: ORIGNDA=b ORIGAHP=c DESTNDA=d DESTAHP=e MXBLKSZ=f
a = Protocol handler application ID (1-7) b = Origin node address X (00-FF) c = Origin AHP identifier X (0-F) d = Destination node address X (00-FF) e = Destination AHP identifier X(0-F) f = Maximum block size (0-510) in multiples of 3

TABLE N
IN:XLBUF:IOUS a,IOUC b,PHAPPLID c!
a = Member number of growth associated IOUS b = Submember number of growth IOUC c = Protocol handler application ID - 0 (NONE) or 1 through 7

[40] Are message format and application ID number correct [TABLE P]

Yes

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No

[41] Determine cause and resolve; repeat from Step 39

TABLE O
VER:UTMN:APPLID a!
a = Protocol handler application ID number associated with growth IOUC - 1 through 7

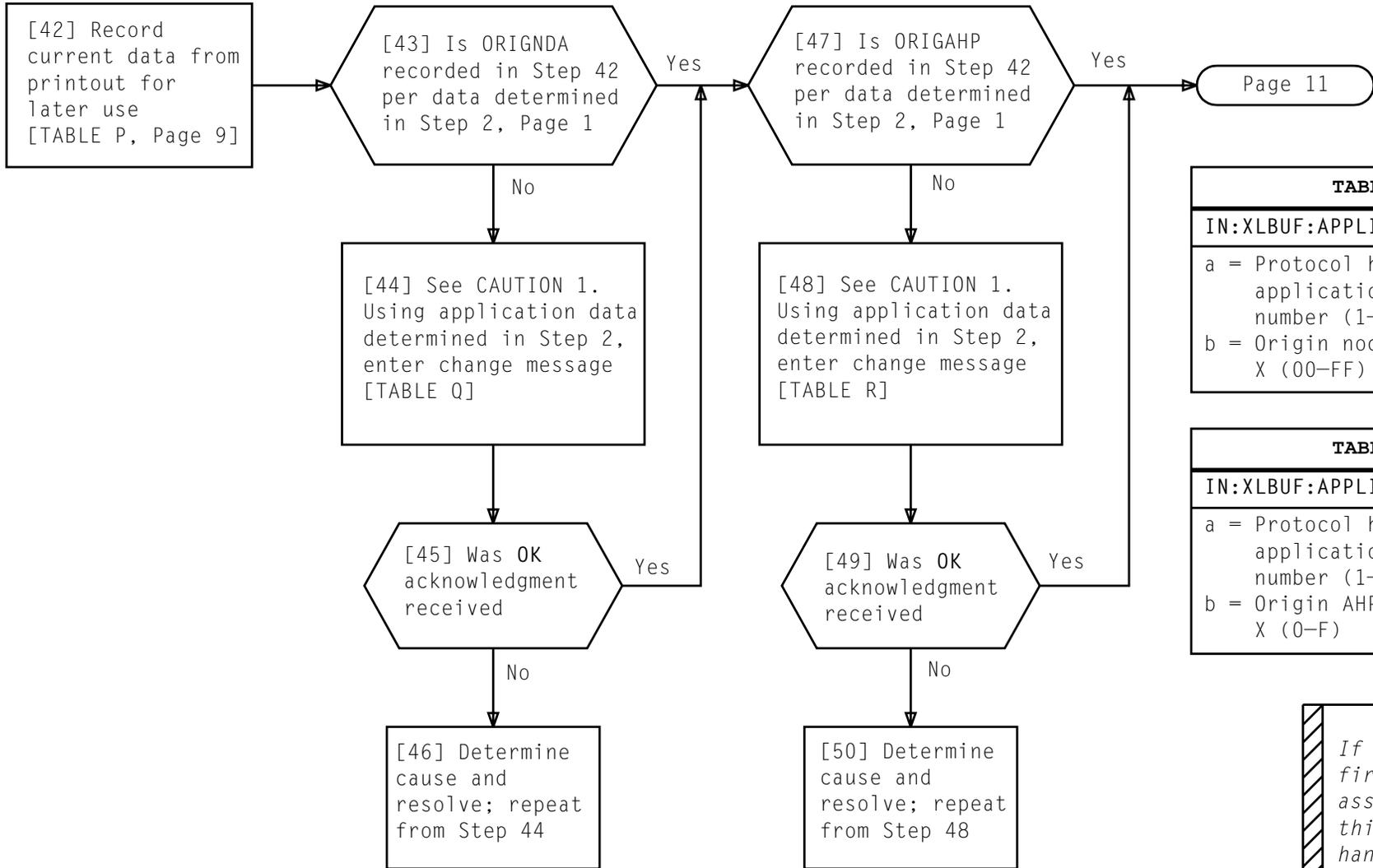


TABLE Q
IN:XLBUF:APPLID a,ORIGNDA b!
a = Protocol handler application ID number (1-7)
b = Origin node address X (00-FF)

TABLE R
IN:XLBUF:APPLID a,ORIGAHP b!
a = Protocol handler application ID number (1-7)
b = Origin AHP identifier X (0-F)

CAUTION 1
If this is not first channel associated with this protocol handler ID, then approval must be obtained prior to performing any changes

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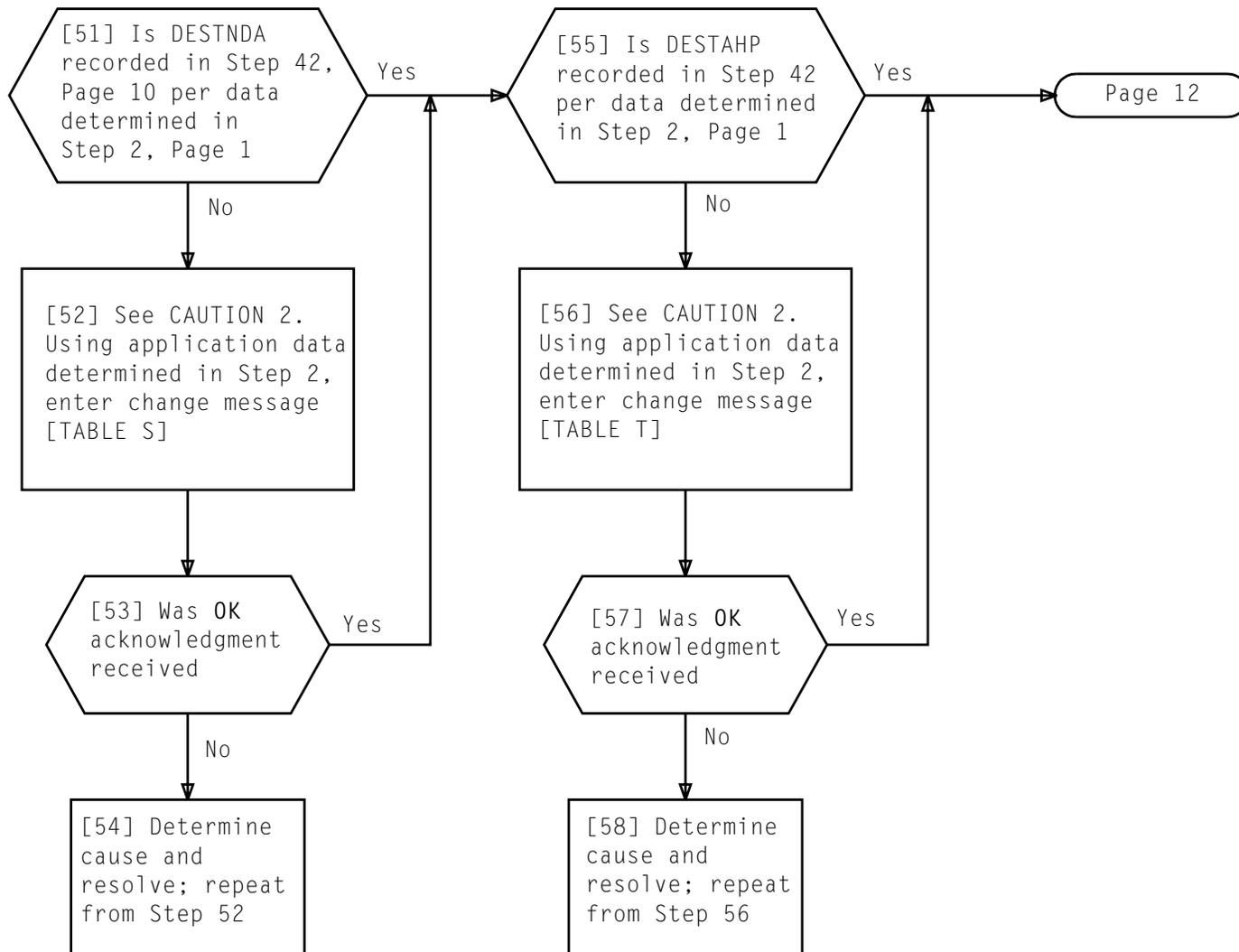


TABLE S
IN:XLBUF:APPLID a,DESTNDA b!
a = Protocol handler application ID (1-7)
b = Destination node address X (00-FF)

TABLE T
IN:XLBUF:APPLID a,DESTAHP b!
a = Protocol handler application ID (1-7)
b = Destination AHP identifier X (0-F)

CAUTION 2
If this is not first channel associated with this protocol handler ID, then approval must be obtained prior to performing any changes

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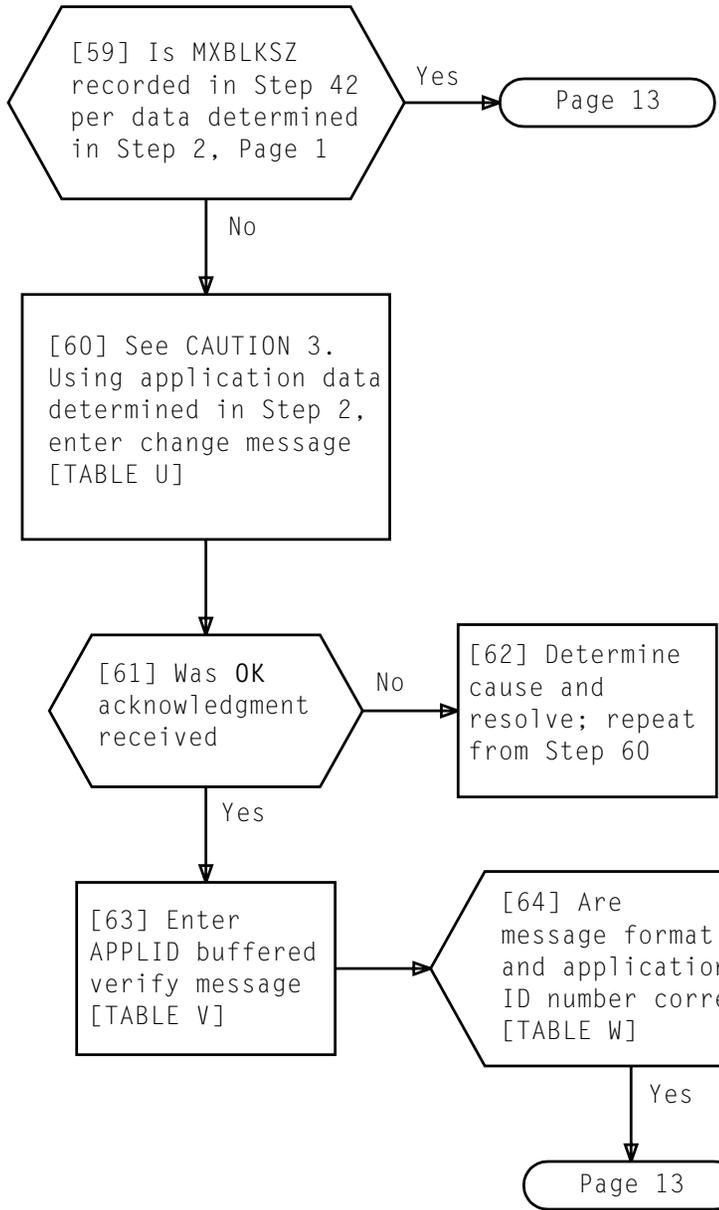


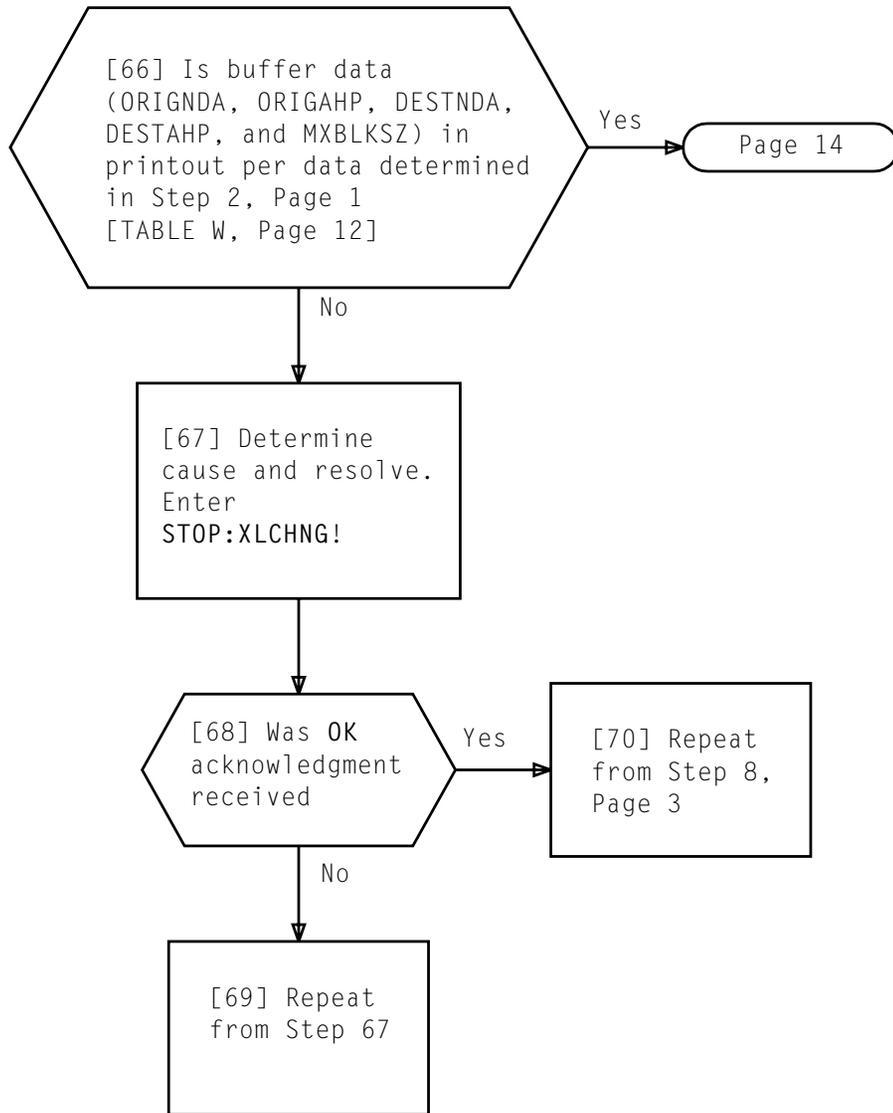
TABLE U
IN:XLBUF:APPLID a,MXBLKSZ b!
a = Protocol handler application ID (1-7)
b = Maximum data block transmission size in bytes (0-510) in multiples of 3

TABLE V
VER:UTMN;BUF:APPLID a!
a = Protocol handler application ID number associated with growth IOUC - 1 through 7

TABLE W
VER:APPLID a COMPLETED
TRANSLATOR ADR= TRANSLATOR SIZE=2
BUFFERED DATA: ORIGNDA=b ORIGAHP=c DESTNDA=d DESTAHP=e MXBLKSZ=f
a = Protocol handler application ID (1-7)
b = Origin node address X (00-FF)
c = Origin AHP identifier X (0-F)
d = Destination node address X (00-FF)
e = Destination AHP identifier X (0-F)
f = Maximum block size (0-510) in multiples of 3

CAUTION 3
If this is not first channel associated with this protocol handler ID, then approval must be obtained prior to performing any changes

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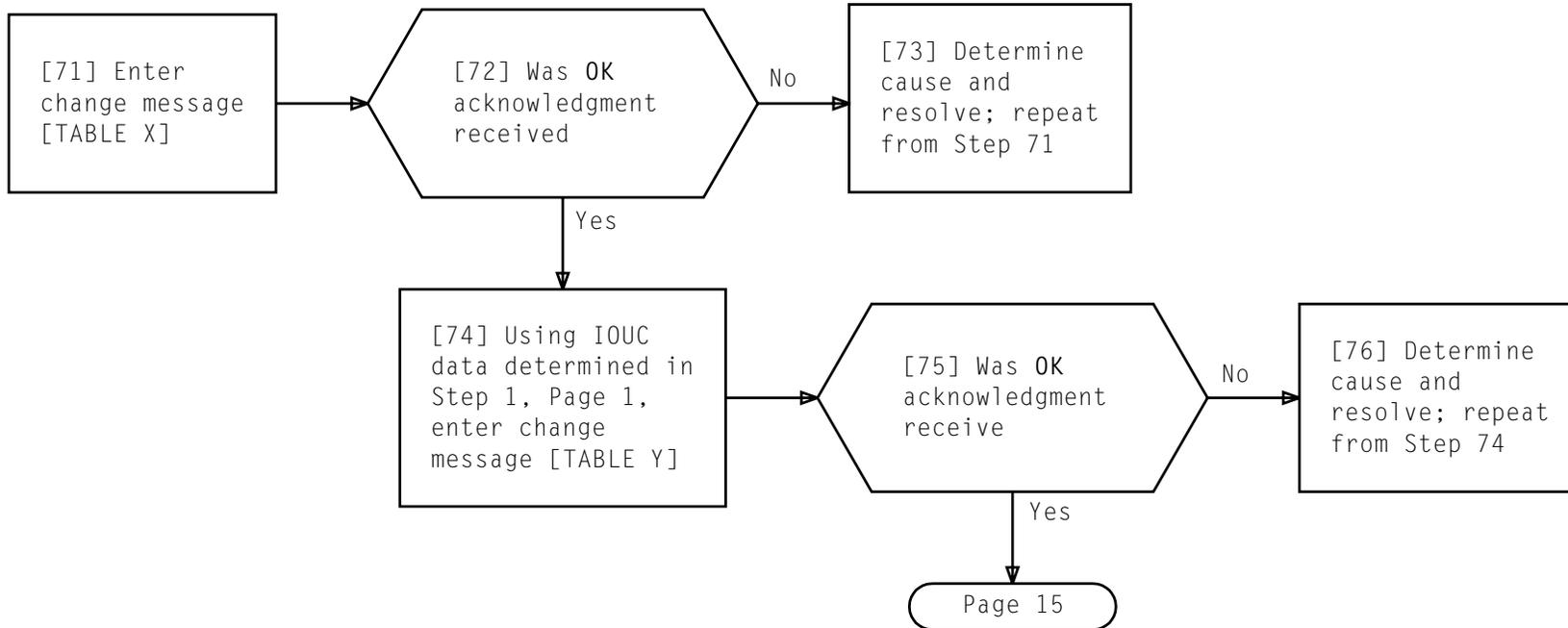


TABLE X
IN:XLBUF:IOUS a,IOUC b,STATYP DCE!
a = Member number of growth associated IOUS b = Submember number of growth IOUC

TABLE Y
IN:XLBUF:IOUS a,IOUC b,ACU c!
a = Member number of growth associated IOUS b = Submember number of growth IOUC c = Y (for DUP 1 through 6) N (for remaining channels)

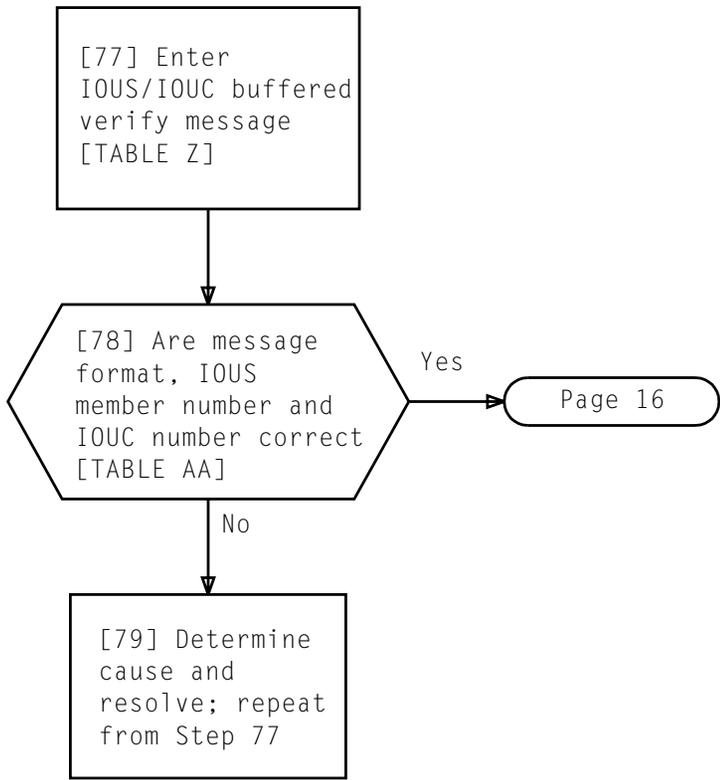
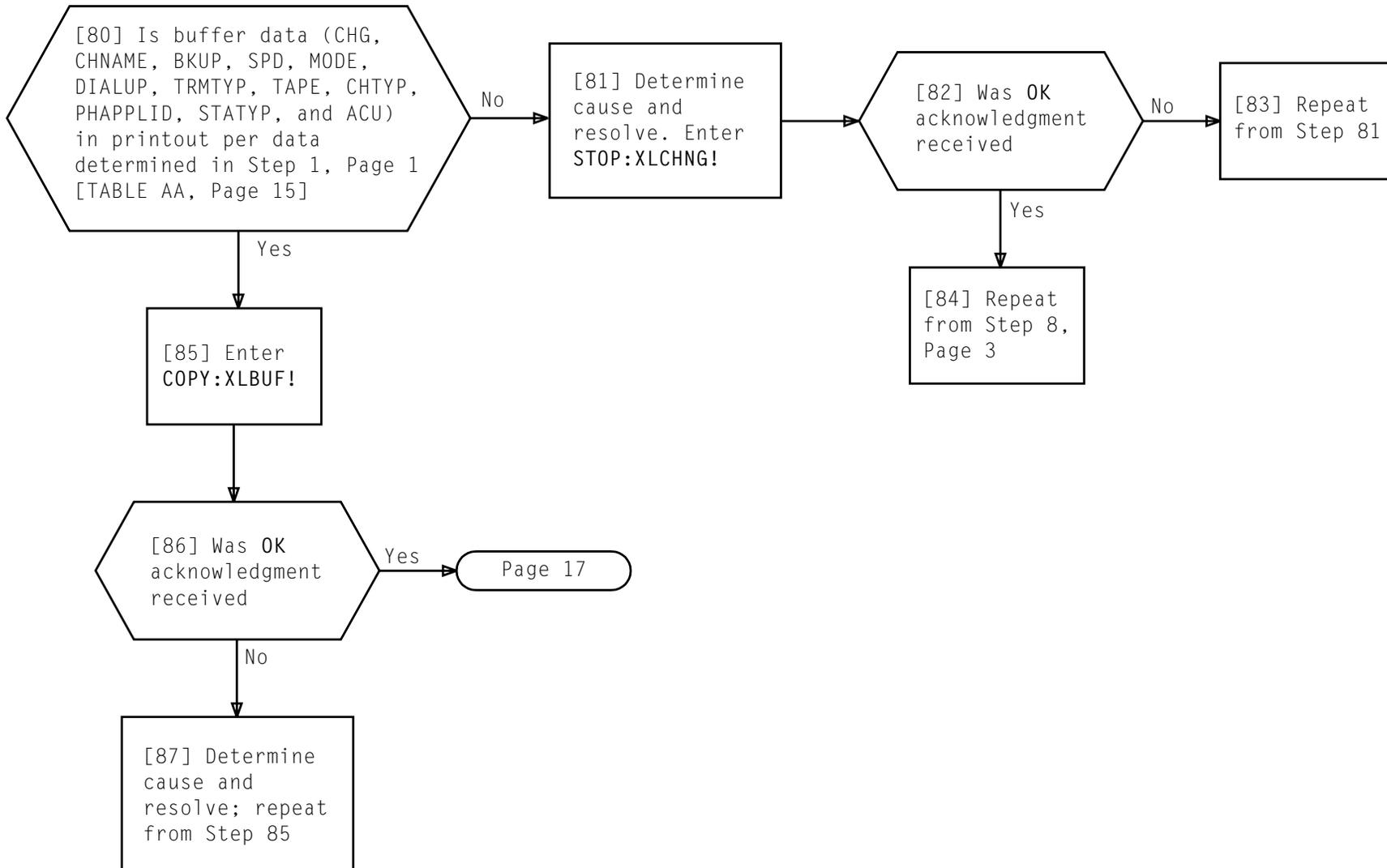


TABLE Z
VER:UTMN;BUF:IOUS a,IOUC b!
a = Member number of growth associated IOUS b = Submember number of growth IOUC

TABLE AA	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	c = Channel hardware generation
BUFFERED DATA:	d = Channel name
CE=UNEQ	e = Backup channel name
CHG=c	f = Channel speed
CHNAME=d	g = HLFDPX or FLLDPX
BKUP=e	h = Y or N
SPD=f	i = KD KDT
MODE=g	P PT
DIALUP=h	KP KPT
TRMTYP=i	KDP KDPT
TAPE=j	T NONE
CHTYP=k	j = Y or N
PHAPPLID=l	k = Channel type
STATYP=m	l = Protocol handler application ID
ACU=n	m = Station type
.	n = Automatic calling unit
.	
.	



CHANGE AND VERIFY CHANNEL DATA

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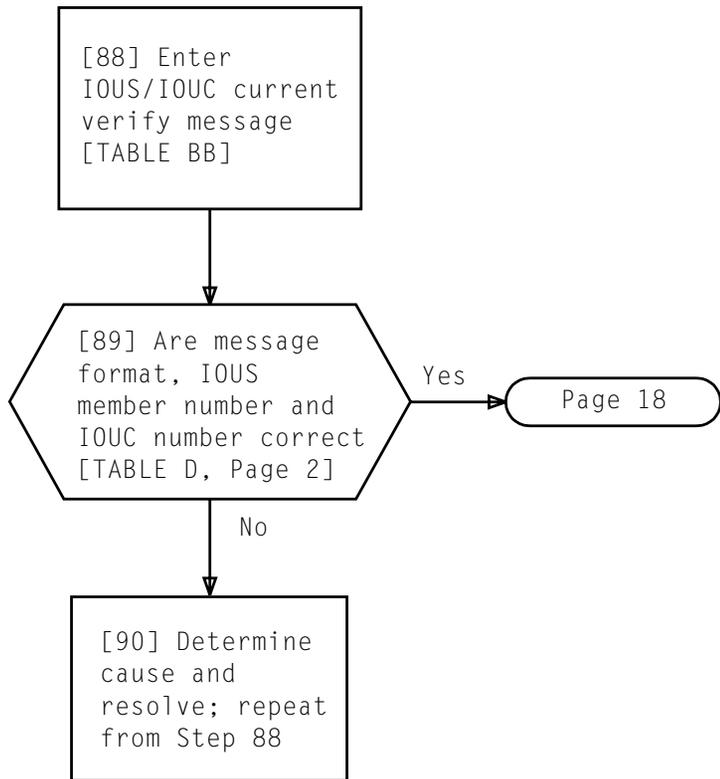


TABLE BB
VER:UTMN:IOUS a,IOUC b!
a = Member number of growth associated IOUS b = Submember number of growth IOUC

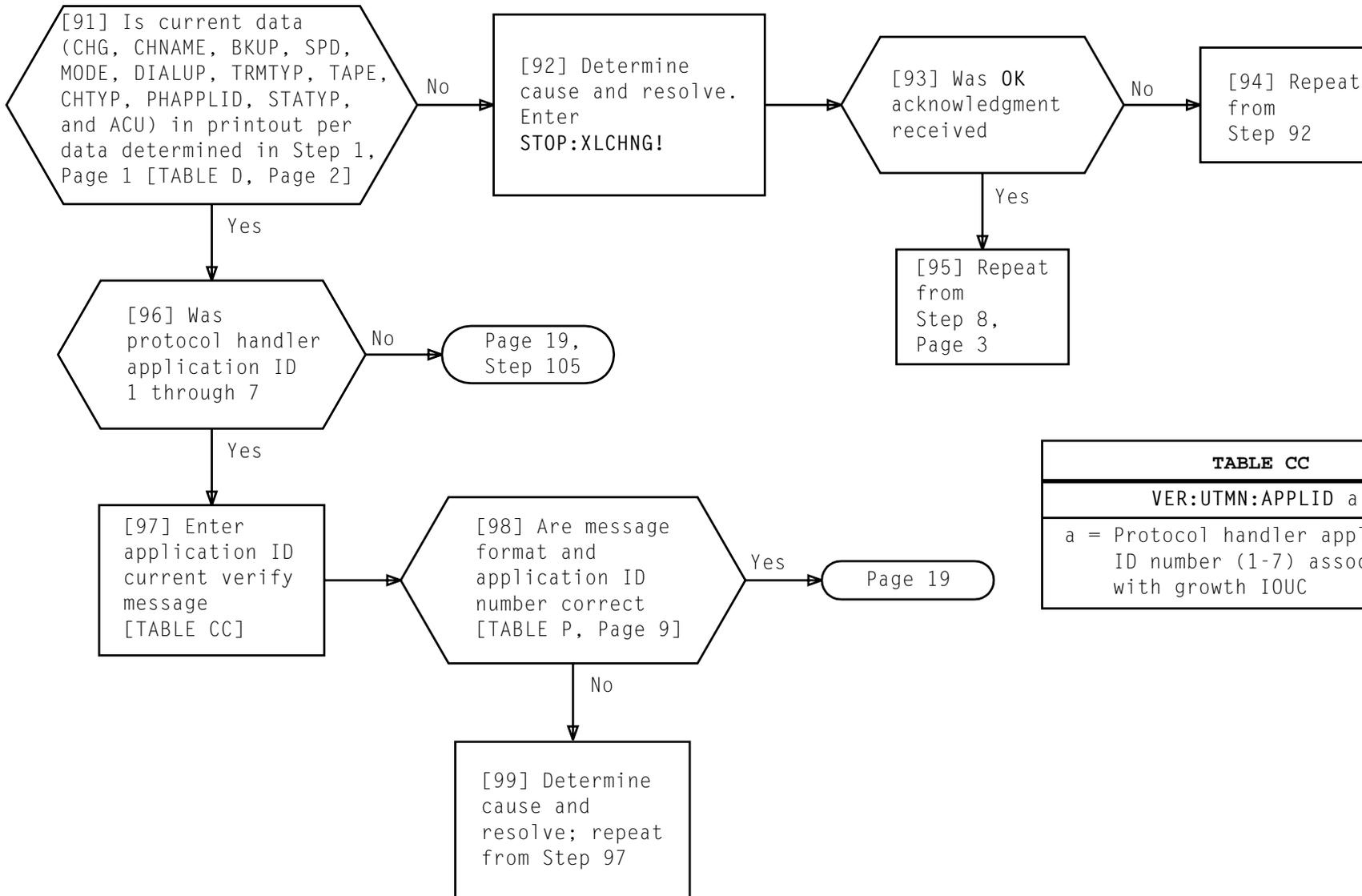
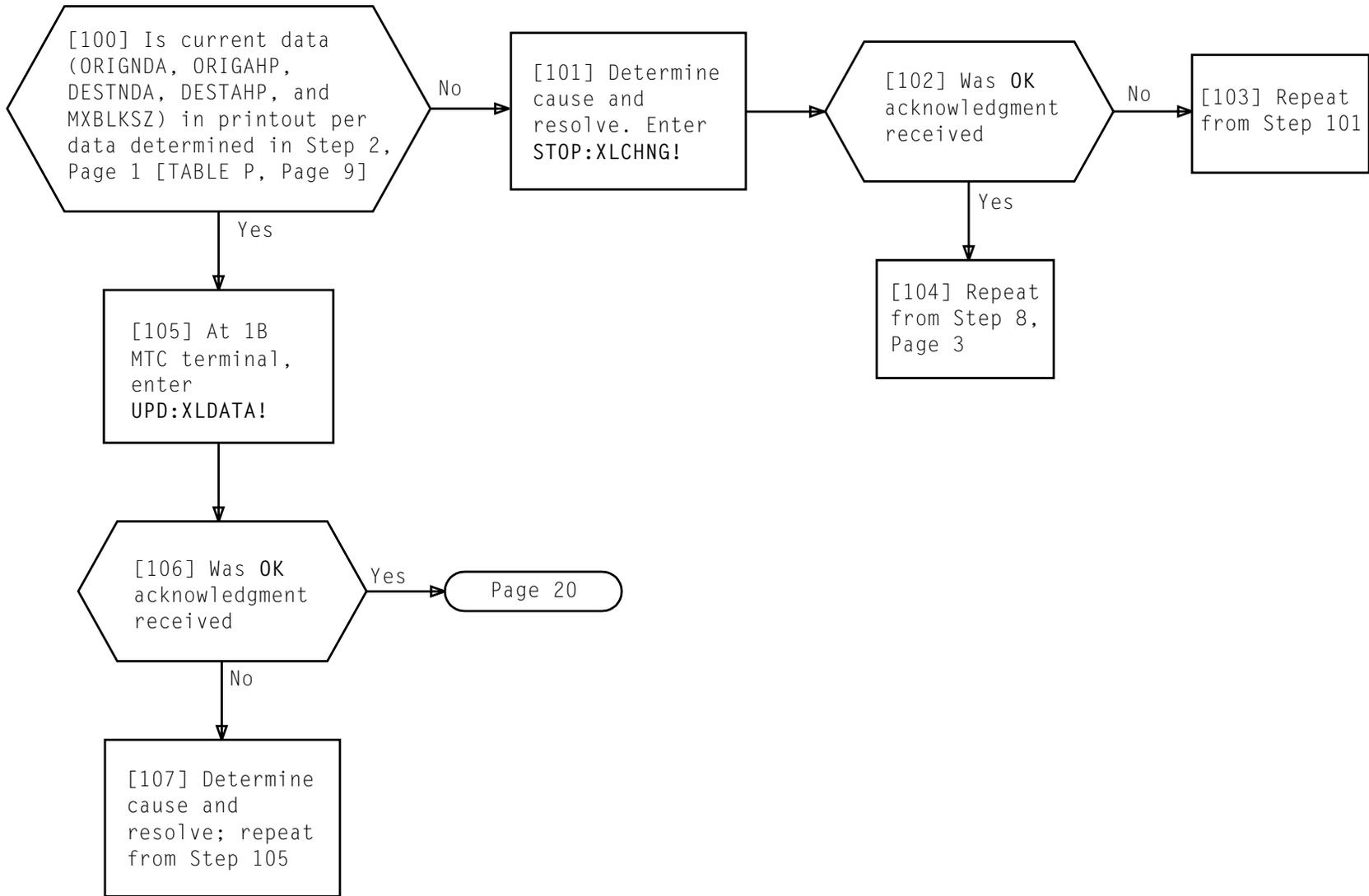


TABLE CC
VER:UTMN:APPLID a!
a = Protocol handler application ID number (1-7) associated with growth IOUC



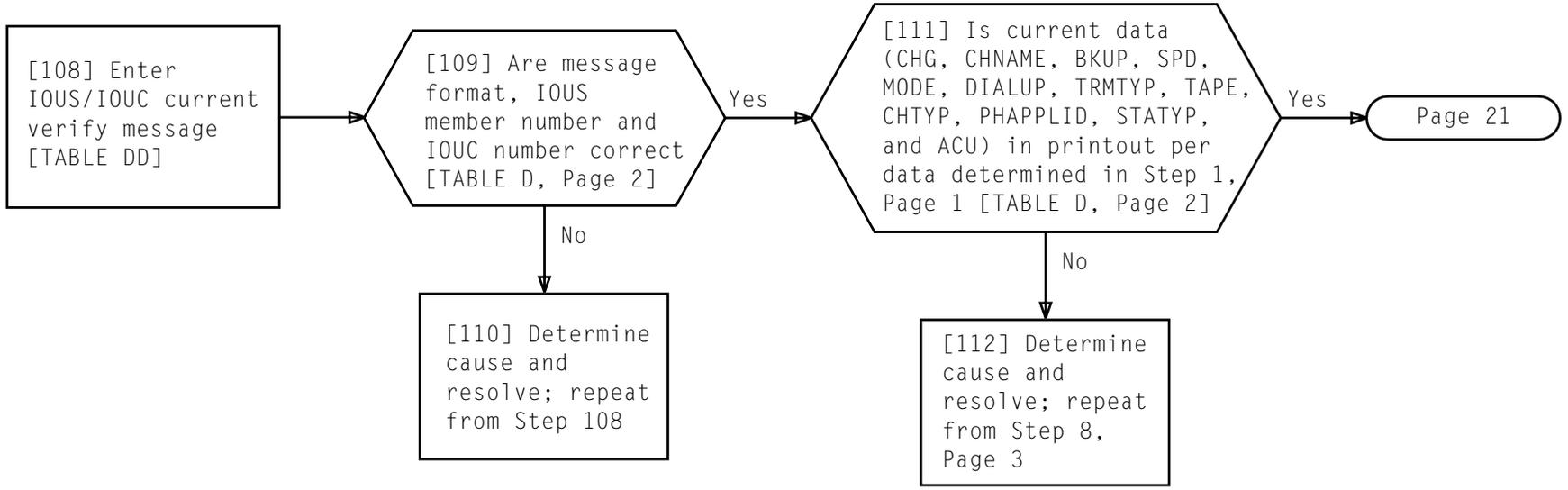


TABLE DD
VER:UTMN:IOUS a,IOUC b!
a = Member number of growth associated IOUS b = Submember number of growth IOUC

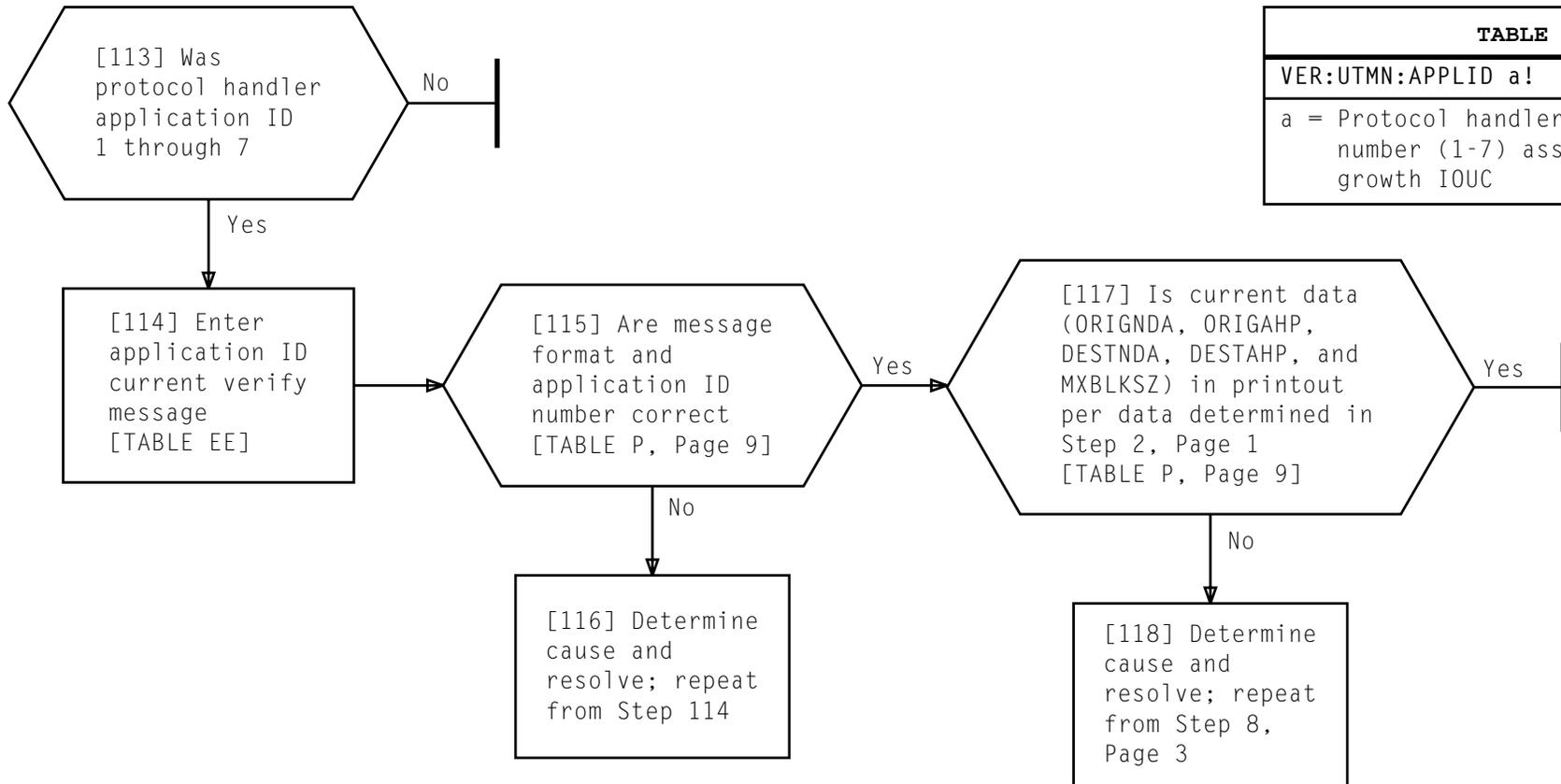


TABLE EE
VER:UTMN:APPLID a!
a = Protocol handler application ID number (1-7) associated with growth IOUC

<p>SUMMARY</p> <p>Enter change message to grow channel equipage (CE) from UNEQ to GROW. Verify buffered CE, enter copy message, then verify current CE. If after each verify CE is in</p>	<p>error, enter stop message and start change from beginning. If CE is correct after current verify, enter update message and verify that data is correct in translator</p>
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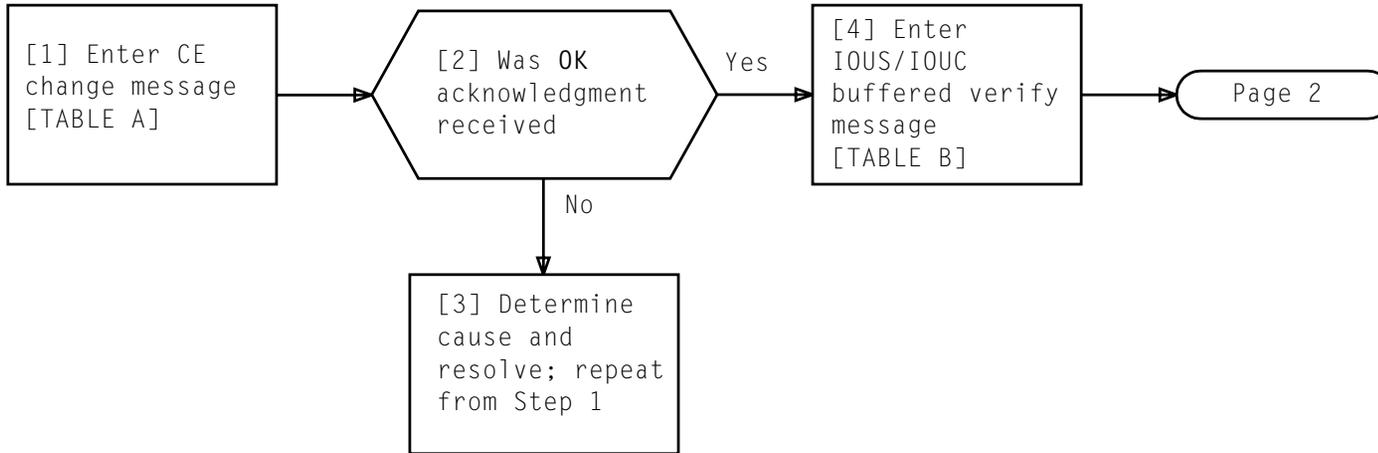


TABLE A
IN:XLBUF:IOUS a,IOUC b,CE (UNEQ,GROW)!
a = Member number of growth associated IOUS b = Submember number of growth IOUC

TABLE B
VER:UTMN;BUF:IOUS a,IOUC b!
a = Member number of growth associated IOUS b = Submember number of growth IOUC

**CHANGE AND VERIFY CHANNEL EQUIPAGE
UNEQUIPPED TO GROW**

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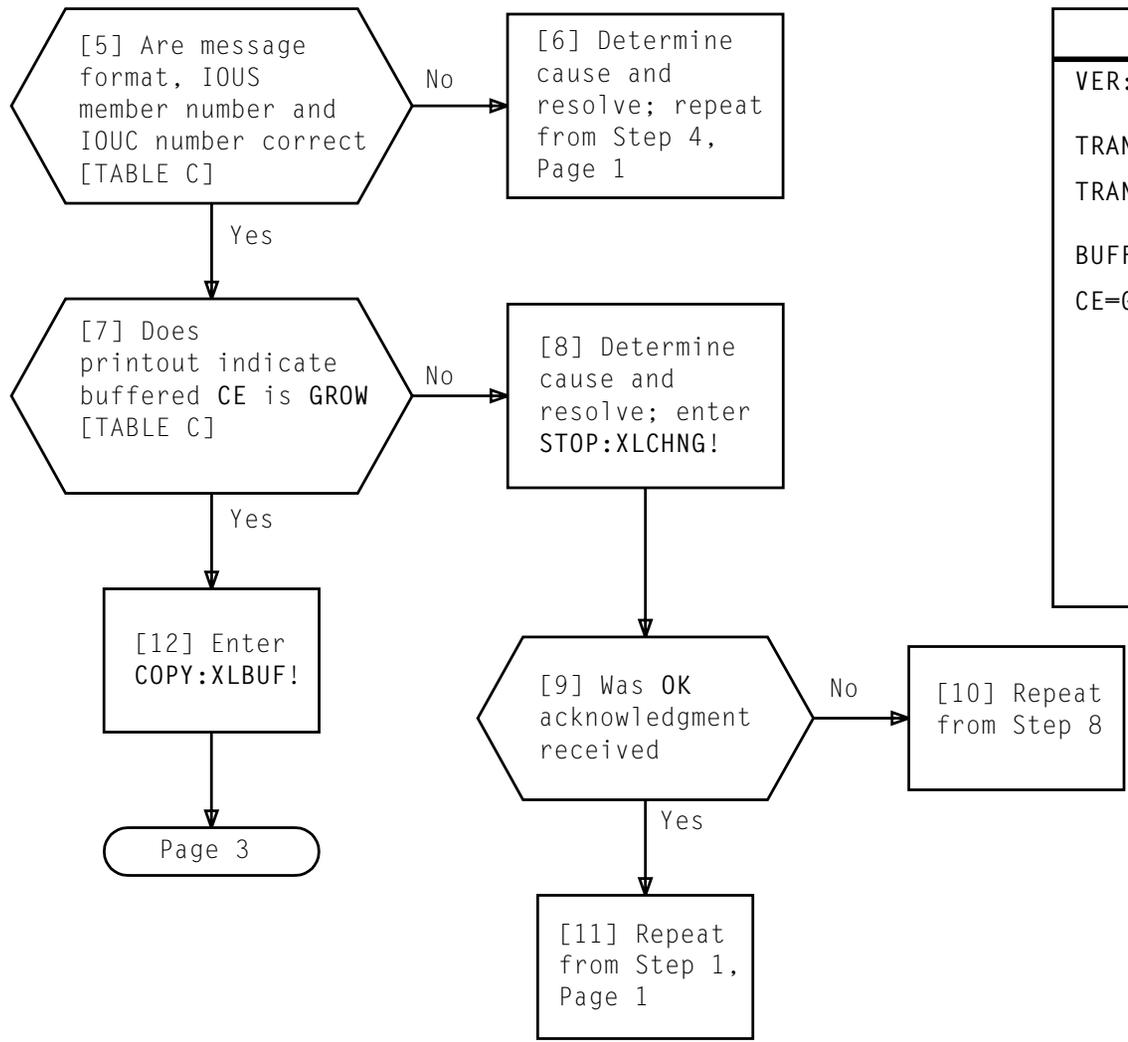


TABLE C	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	
BUFFERED DATA:	
CE=GROW	
.	
.	
.	
.	
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.	

**CHANGE AND VERIFY CHANNEL EQUIPAGE
UNEQUIPPED TO GROW**

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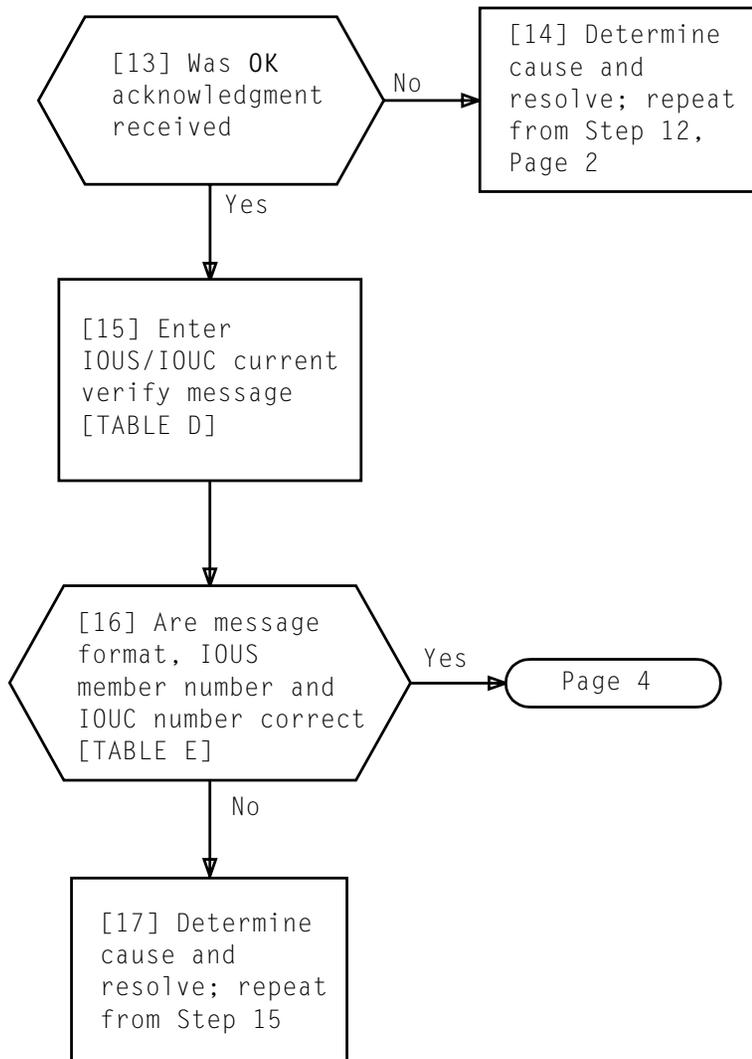


TABLE D
VER:UTMN:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

TABLE E	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	
CURRENT DATA:	
CE=GROW	
.	
.	
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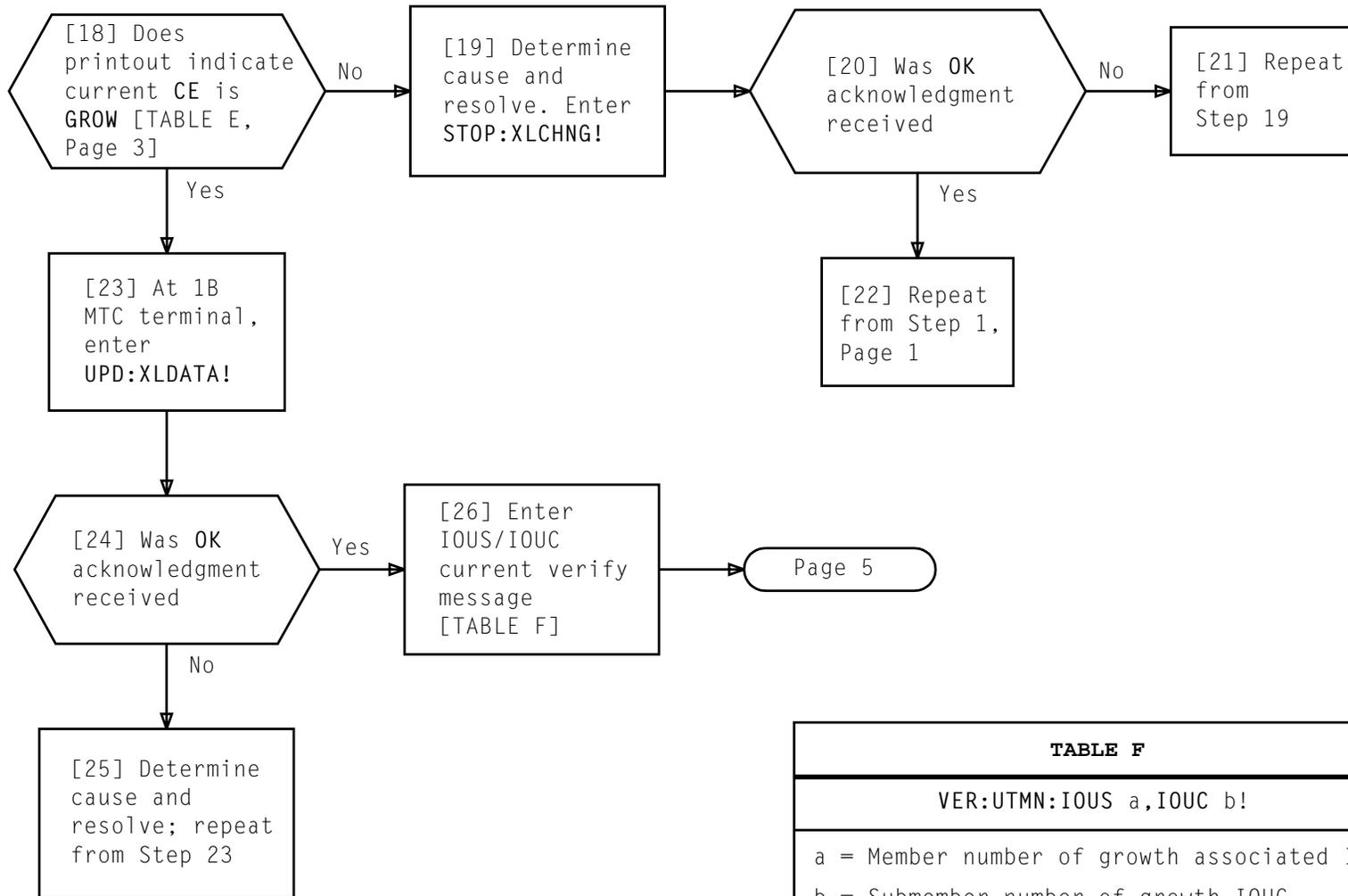
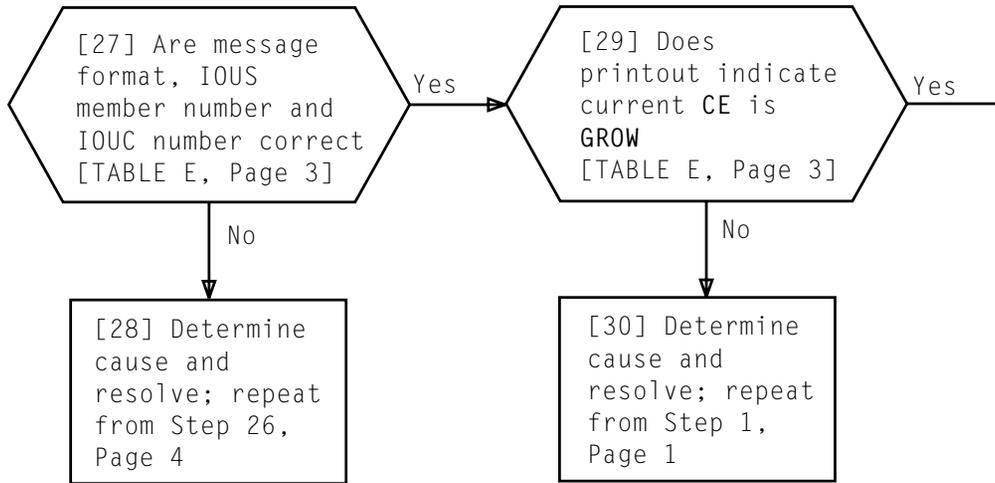


TABLE F	
VER:UTMN:IOUS a,IOUC b!	
a = Member number of growth associated IOUS	
b = Submember number of growth IOUC	



**CHANGE AND VERIFY CHANNEL EQUIPAGE
UNEQUIPPED TO GROW**

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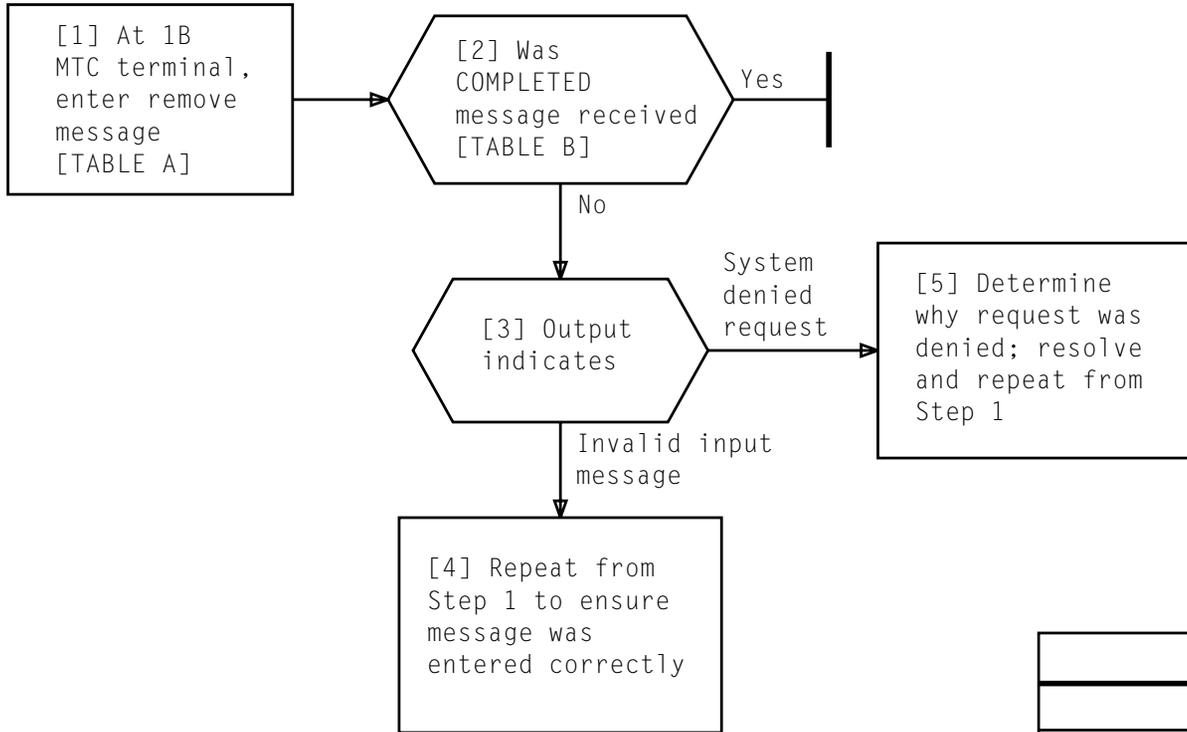


TABLE A
RMV:IOUS a,IOMP b!
a = Member number of growth associated unit type b = Submember number of growth IOMP - 0 or 1

TABLE B
RMV:IOUS a,IOMP b COMPLETED
a = Member number of growth associated unit type b = Submember number of growth IOMP - 0 or 1

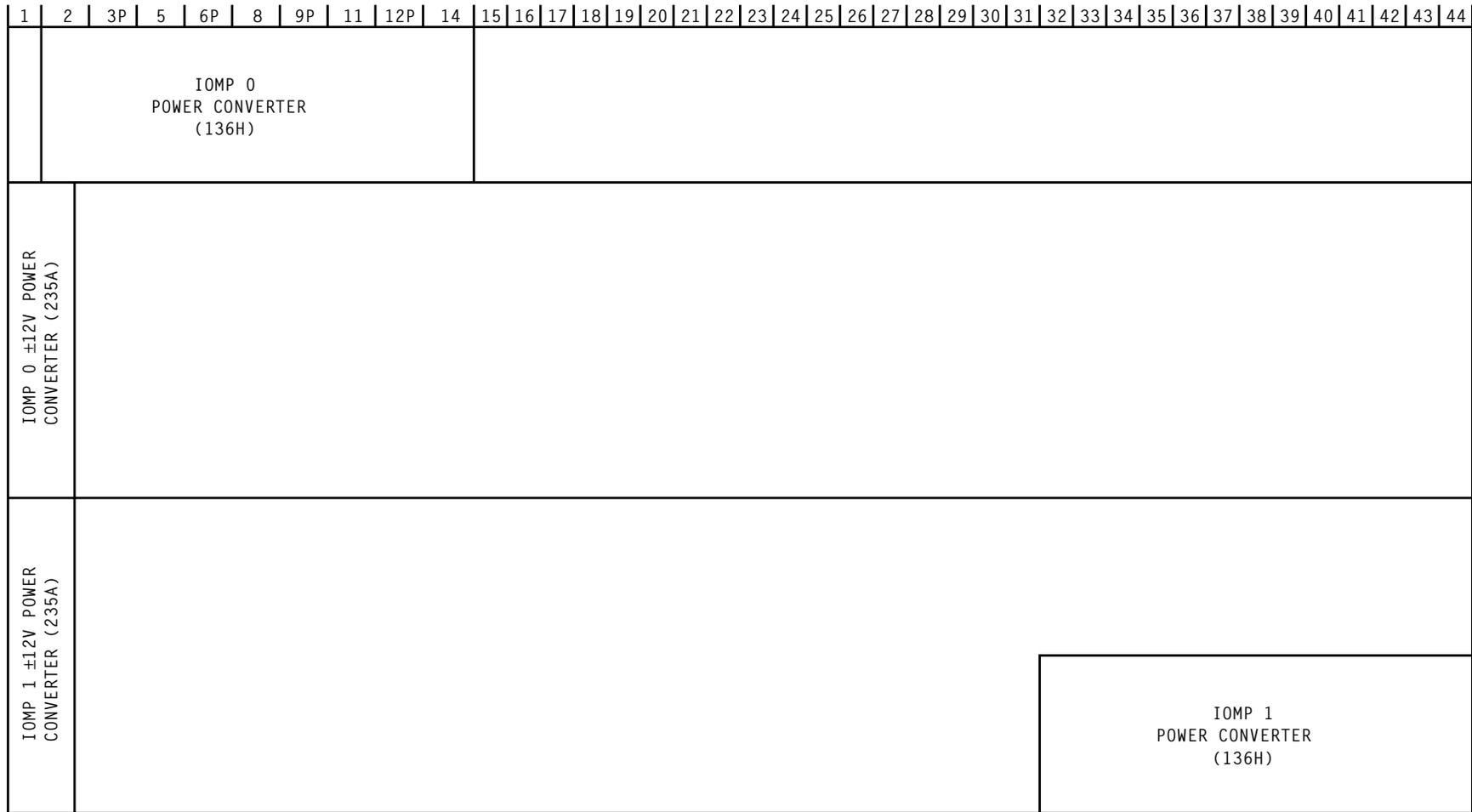
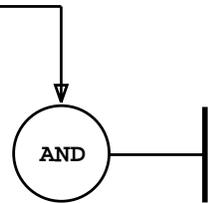


FIG. 1

[1] Turn 136H power supply switch to **OFF** for growth associated IOMP [FIG. 1]



[2] Turn 235A power supply switch to **OFF** for growth associated IOMP [FIG. 1]

[1] Turn power supply switch to **OFF** on 136H or 136N converter(s) in growth associated IOMP [FIG. 1]

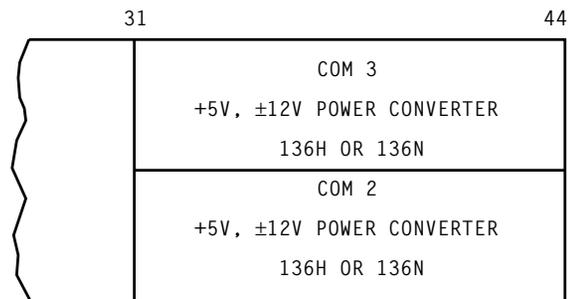
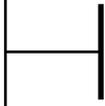


FIG. 1

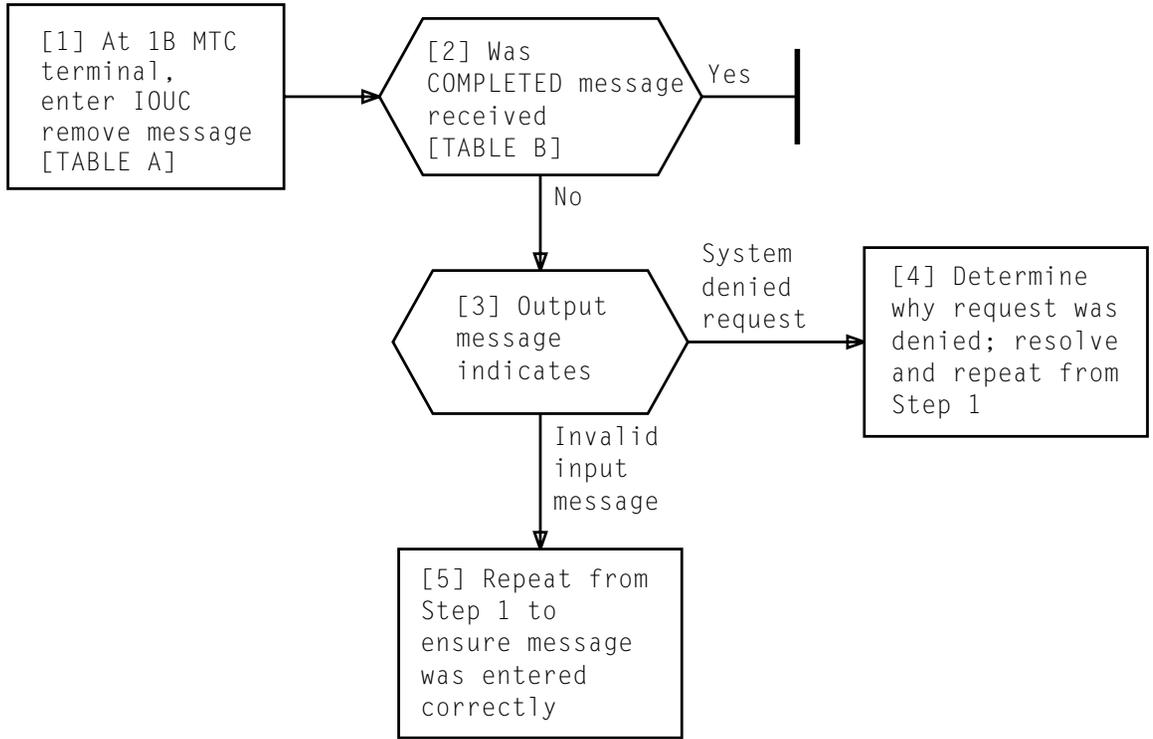


TABLE A
RMV:IOUS a,IOUC b!
a = Member number of growth associated IOUS b = Submember number of growth IOUC

TABLE B
RMV:IOUS a,IOUC b COMPLETED
a = Member number b = Submember number

REMOVE IOUC FROM SERVICE

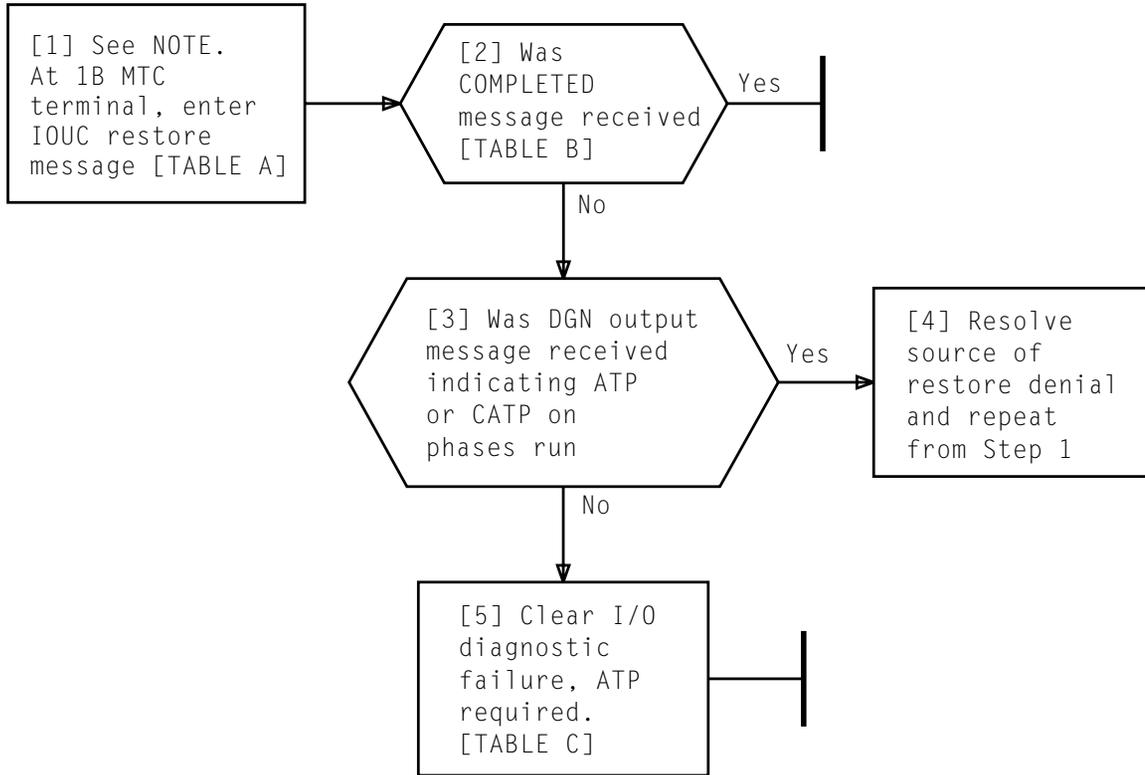


TABLE A
RST:IOUS a,IOUC b!
a = Member number of growth associated IOUS b = Submember number of growth IOUC

TABLE B
RST:IOUS a,IOUC b COMPLETED
a = Member number b = Submember number

TABLE C	
IO/IOP	TOP
J5A006A	234-351-020
J5A006C	234-351-021
J5A006D	234-351-022

NOTE Restore message will cause I/O diagnostic to be run	
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[1] At terminal device, ensure that cable from port being activated is connected and firmly seated

[2] Connect cable from terminal device to terminal strip (level 72) of I/O frame for IOUC and port being activated [FIG. 1]

[3] Apply power to terminal device according to installation instructions for that terminal

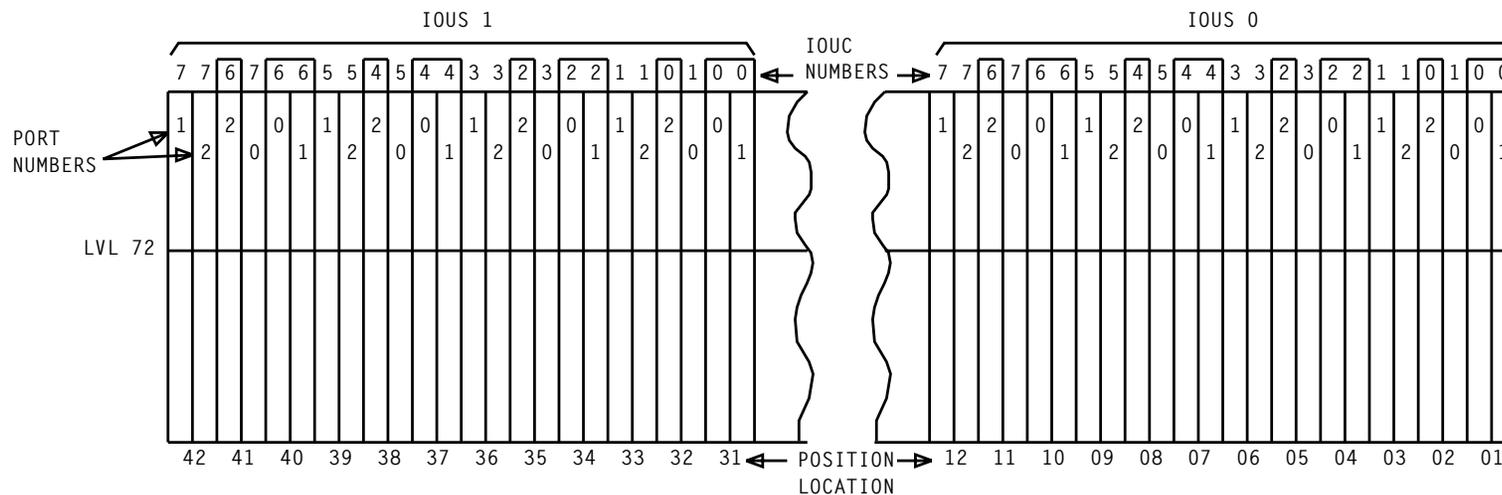
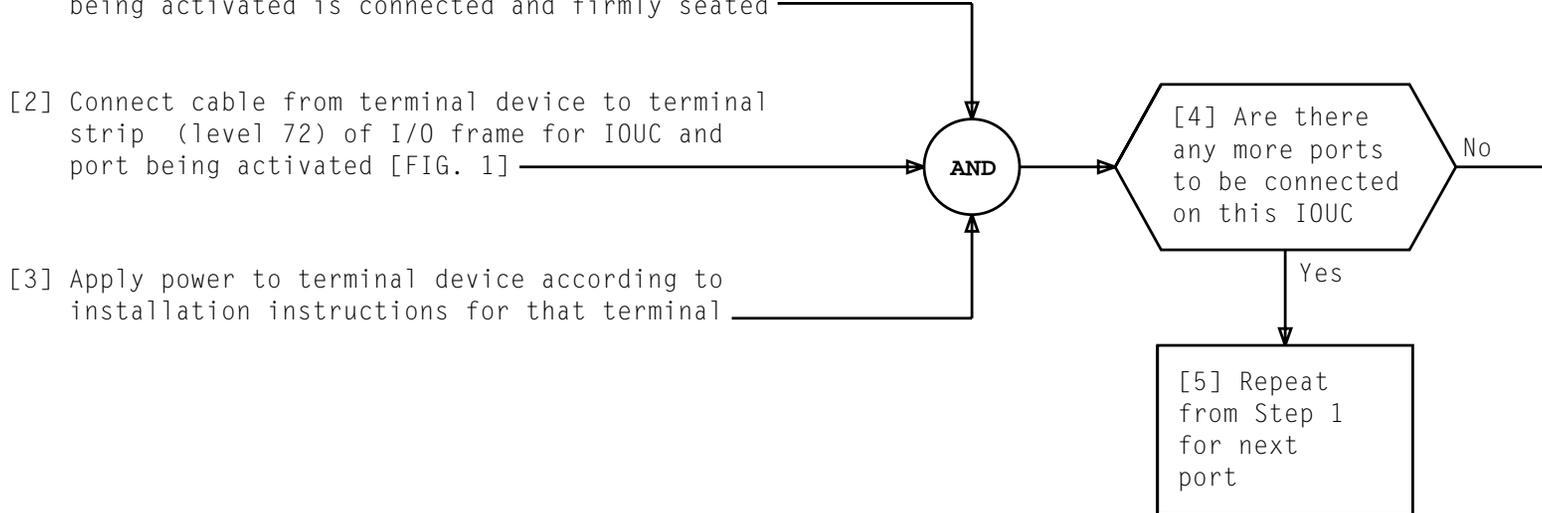


FIG. 1

CONNECT PORT CABLE(S) AT I/O FRAME

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- [1] At terminating end, ensure that cable from port being activated is connected and firmly seated
- [2] Using TABLE A, determine location of backplane area associated with IOUC being activated
- [3] Connect cable from terminating end, to backplane area located in Step 2 of I/O frame for port being activated [FIG. 1]
- [4] Apply power to terminating end according to installation instructions

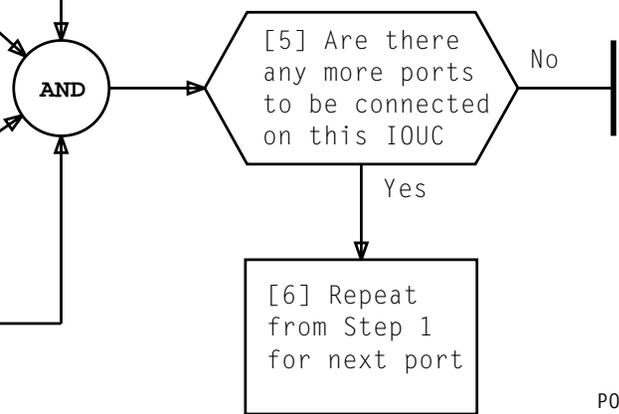


TABLE A			
CHANNEL	LOCATION	CHANNEL	LOCATION
A00	062-14	B00	038-14
A01	062-12P	B01	038-12P
A02	062-11	B02	038-11
A03	062-09P	B03	038-09P
A04	062-08	B04	038-08
A05	062-06P	B05	038-06P
A06	062-05	B06	038-05
A07	062-03P	B07	038-03P
A10	054-14	B10	030-14
A11	054-12P	B11	030-12P
A12	054-11	B12	030-11
A13	054-09P	B13	030-09P
A14	054-08	B14	030-08
A15	054-06P	B15	030-06P
A16	054-05	B16	030-05
A17	054-03P	B17	030-03P

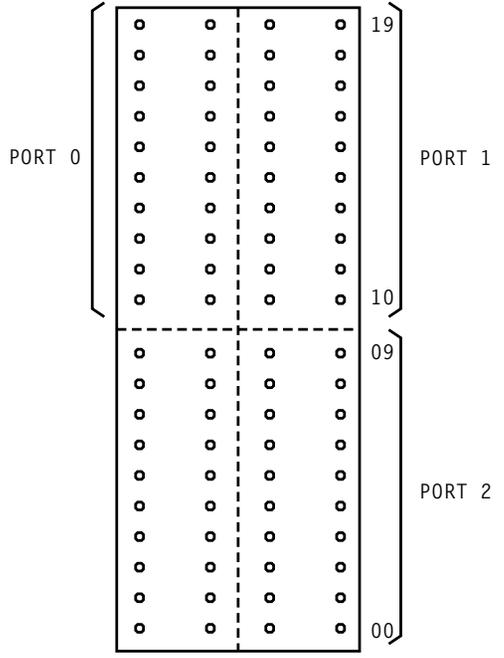


FIG. 1

CONNECT PORT CABLE(S) AT IOP FRAME

[1] At terminating end, ensure that cable from port being activated is connected and firmly seated

[2] Using TABLE A, determine location of backplane area associated with IOUC being activated

[3] Connect cable to backplane area located in Step 2 for port being activated [TABLE B and FIG. 1 or 2, Page 2]

[4] Apply power to terminating end according to installation instructions

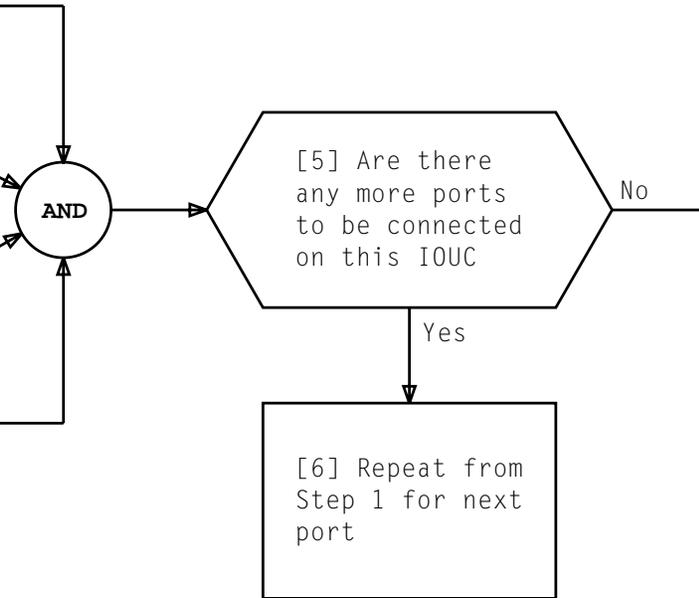


TABLE A					
SD-5A052-02		SD-5A049-01		SD-4C049-01	
CHANNEL	LOCATION	CHANNEL	LOCATION	CHANNEL	LOCATION
A00	62-14	A10	54-14	PC-20A	50-108
A01	62-12P	A11	54-12P	PC-21A	50-100
A02	62-11	A12	54-11	PC-22A	50-092
A03	62-09P	A13	54-09P	PC-23A	50-084
A04	62-08	A14	54-08	PC-30A	50-048
A05	62-06P	A15	54-06P	PC-31A	50-040
A06	62-05	A16	54-05	PC-32A	50-032
A07	62-03P	A17	54-03P	PC-33A	50-024
B00	32-14	B10	24-14	PC-20B	20-108
B01	32-12P	B11	24-12P	PC-21B	20-100
B02	32-11	B12	24-11	PC-22B	20-092
B03	32-09P	B13	24-09P	PC-23B	20-084
B04	32-08	B14	24-08	PC-30B	20-048
B05	32-06P	B15	24-06P	PC-31B	20-040
B06	32-05	B16	24-05	PC-32B	20-032
B07	32-03P	B17	24-03P	PC-33B	20-024

TABLE B				
PORT	FG19	FG26	FG27	TN75
0	310	310	310	145
1	110		110	
2	100			

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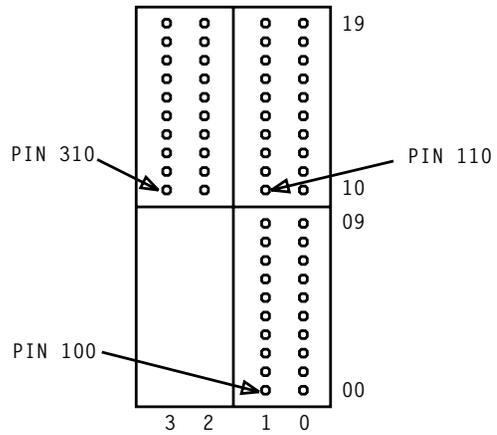


FIG. 1

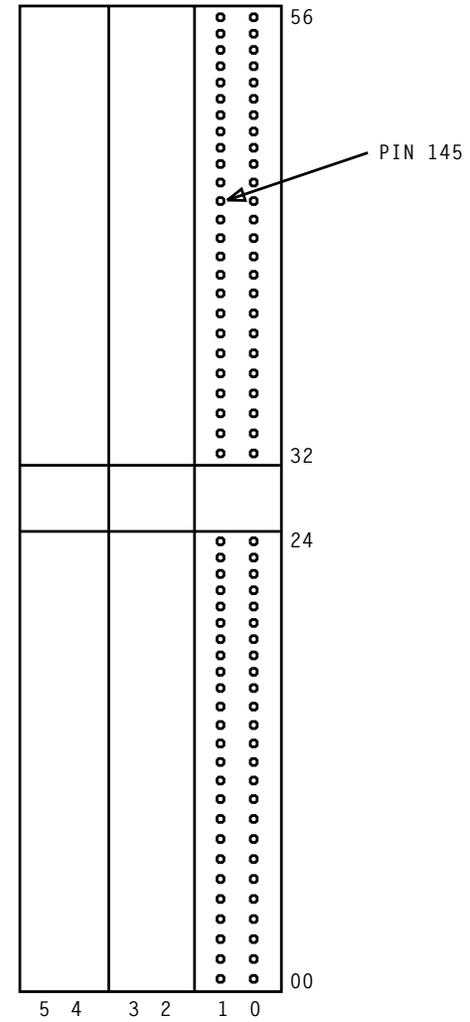


FIG. 2

CONNECT PORT CABLES AT IOP FRAME (J5A006D)

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[1] Determine from office records operating speed for IOUC to be added

[2] See TABLE A. Install 942P connector on IOUC to be added

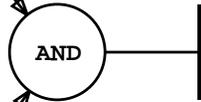


TABLE A				
IOUS	IOUC	EQUIPMENT LOCATION	BITS PER SECOND	
			110	1200
			QUADRANT	QUADRANT
Upper	0	056-09	J3	J4
	1	052-06	J3	J4
	2	048-09	J3	J4
	3	056-22	J3	J4
	4	048-22	J3	J4
	5	056-36	J3	J4
	6	052-39	J3	J4
	7	048-36	J3	J4
Lower	0	028-09	J3	J4
	1	024-06	J3	J4
	2	020-09	J3	J4
	3	028-22	J3	J4
	4	020-22	J3	J4
	5	028-36	J3	J4
	6	024-39	J3	J4
	7	020-36	J3	J4

SELECT IOUC OPERATING SPEED

[1] See NOTES 1 and 2. Place current mode signaling converters into I/O frame according to TABLE A

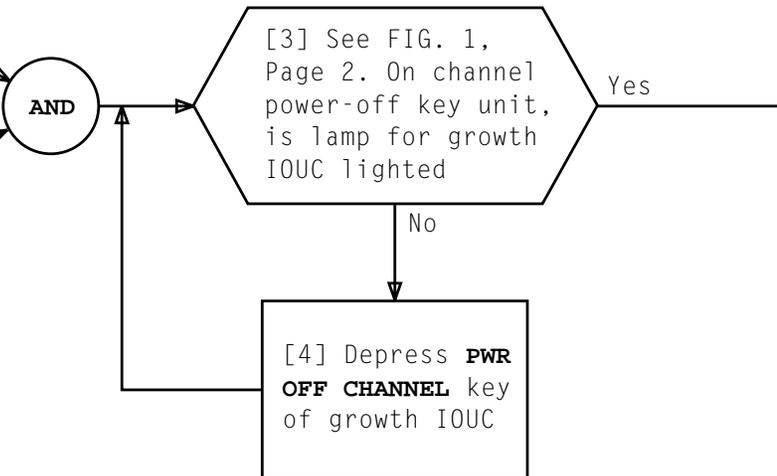


TABLE A								
IOUC	0	1	2	3	4	5	6	7
FRAME LEVEL	I/O FRAME LEVEL 72-CENTER HOUSING							
Upper IOUS FC126 pack position	X	16	17	18	19	20	21	22
Lower IOUS FC126 pack position	X	23	24	25	26	27	28	29

NOTES	
1. Signaling converters cannot be used on IOUC 0	
2. FC126 signaling converters supply current mode signaling for ports 0 and 1. Current mode signaling is not available for port 2 of any IOUC	
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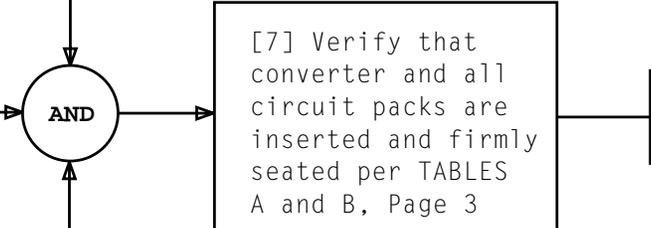
[1] Ensure all protector covers are removed from converter and circuit packs that are to be installed

[2] Inspect converter and circuit packs for damage



[5] See FIG. 2 and TABLE A, Page 3. Insert J87389F-1 DC-to-DC converter into unit equipment location related to growth IOUC

[6] See FIG. 2 and TABLE B, Page 3. Insert required circuit packs into IOUC positions



INSTALL DC-TO-DC CONVERTER AND CIRCUIT PACKS FOR GROWTH IOUC

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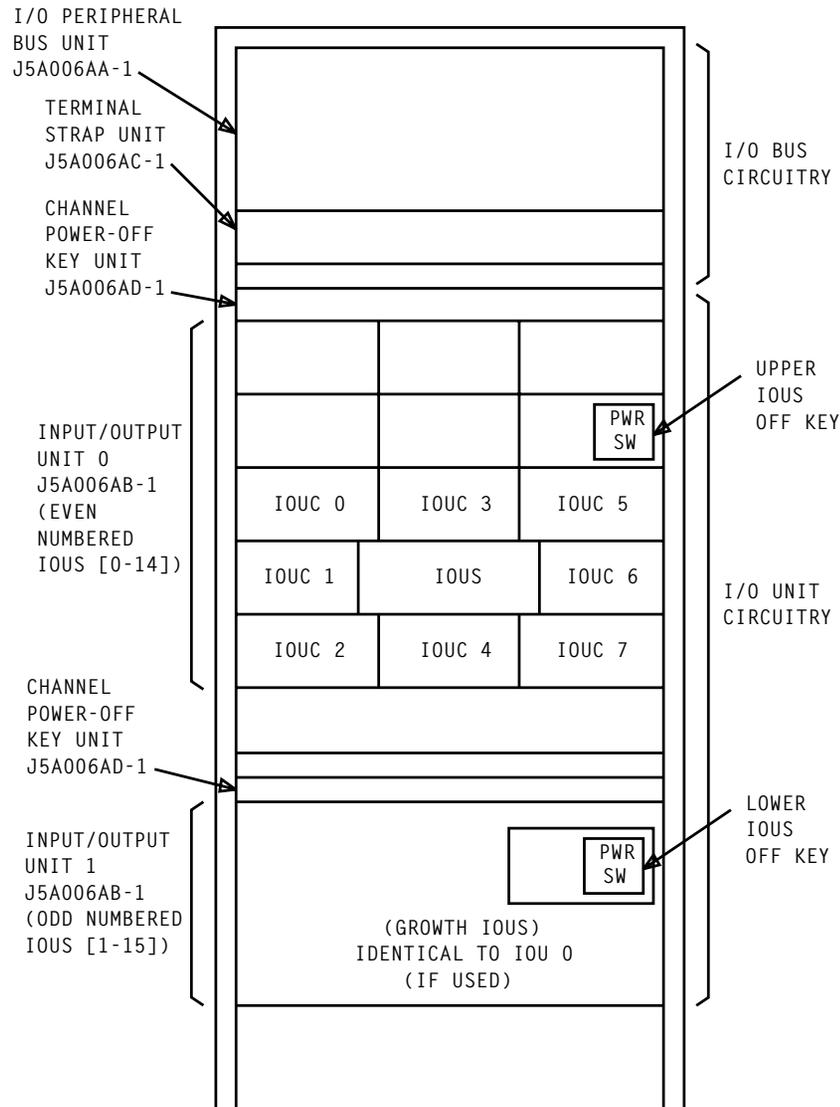


FIG. 1 - Input/Output Frame Front View (Equipment Side)

INSTALL DC-TO-DC CONVERTER AND CIRCUIT PACKS
FOR GROWTH IOUC

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TABLE A								
IOUC	0	1	2	3	4	5	6	7
CONVERTER TYPE	J87389F-1 +3 VOLT DC-DC CONVERTER							
UNIT EQUIPMENT LOCATION	18-5	18-9	18-13	18-20	18-24	18-28	18-35	18-39

TABLE B								
IOUC	0	1	2	3	4	5	6	7
UNIT LEVEL	10	06	02	10	02	10	06	02
CIRCUIT PACKS	POS	POS	POS	POS	POS	POS	POS	POS
FC125	1&2	1&2	1&2	25&26	25&26	43&44	43&44	43&44
FA455	8	5	8	23	23	37	40	37
FA452	9	6	9	22	22	36	39	36
FA453	10	7	10	21	21	35	38	35
FA454	11	8	11	20	20	34	37	34
FA450	12&14	9&11	12&14	17&19	17&19	31&33	34&36	31&33
FA451	13	10	13	18	18	32	35	32
FC22						38		38

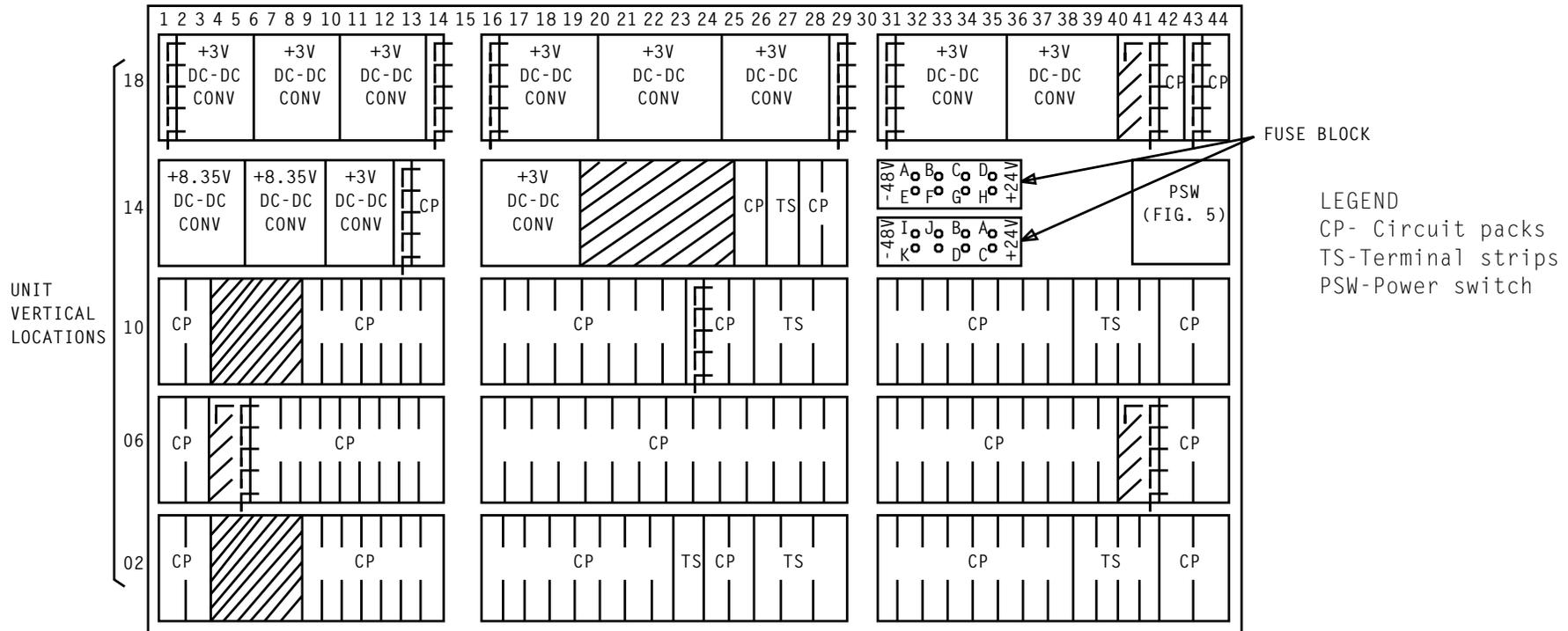


FIG. 2 - Input/Output Unit J5A006AB-1 - Front View

**INSTALL DC-TO-DC CONVERTER AND CIRCUIT PACKS
FOR GROWTH IOUC**

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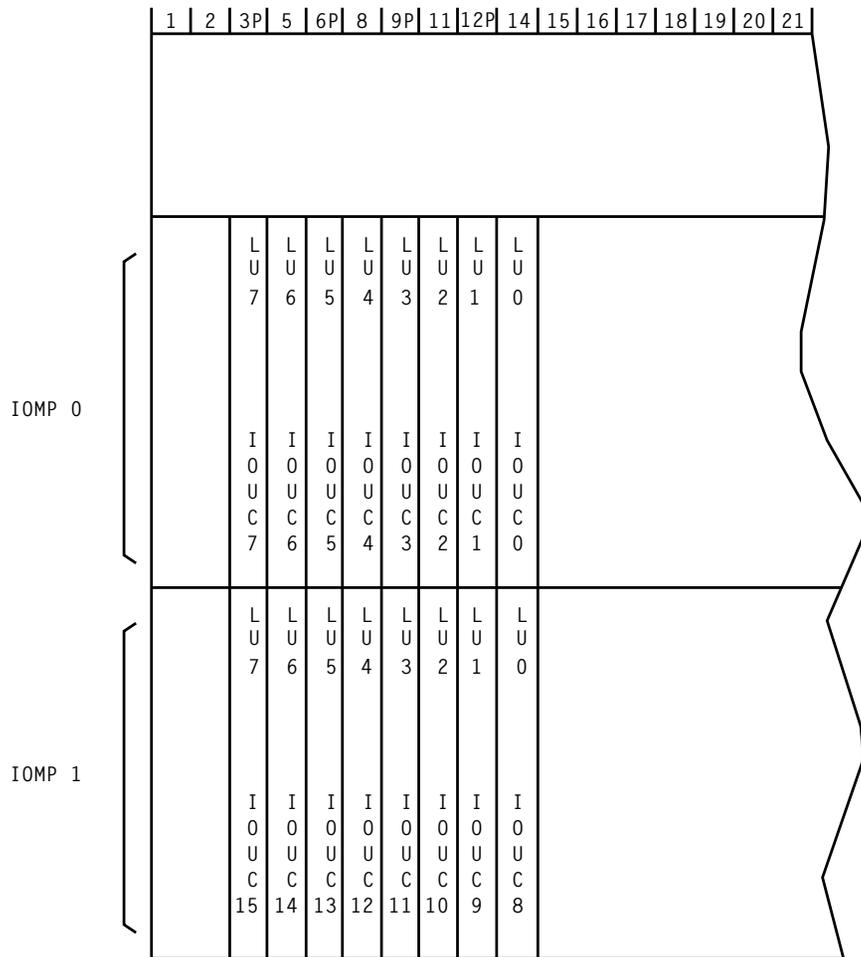
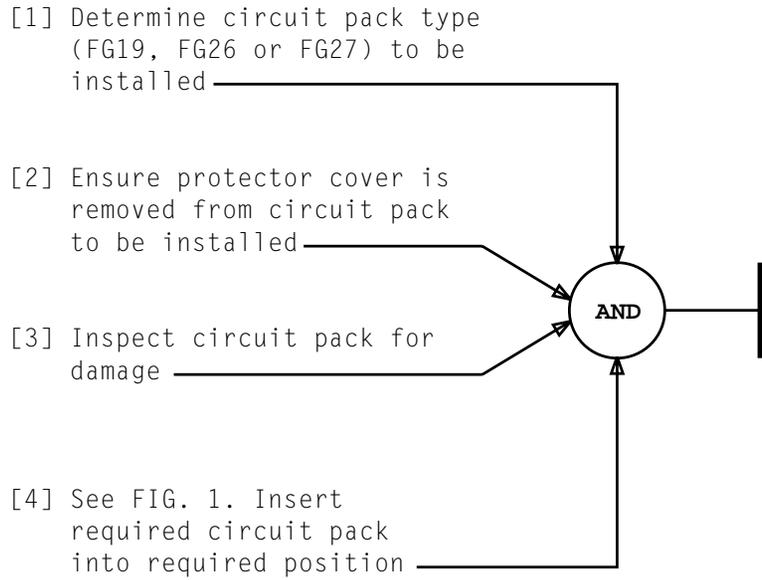


FIG. 1

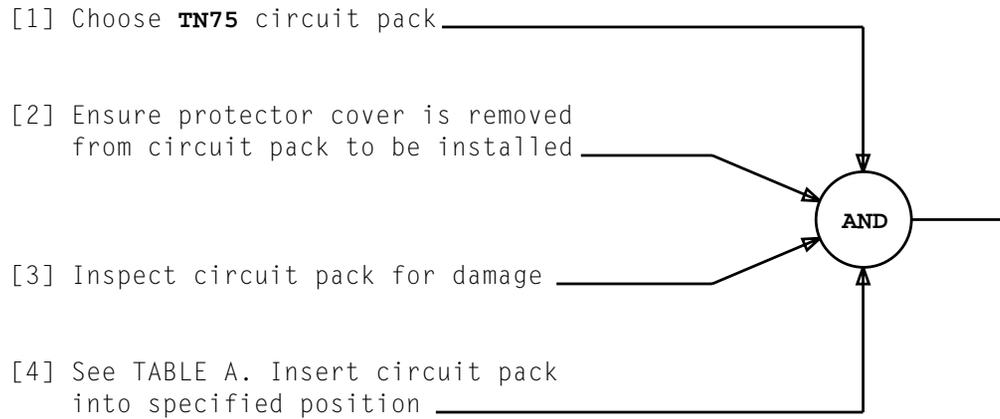


TABLE A	
CHANNEL	LOCATION
PC-20A	50-108
PC-21A	50-100
PC-22A	50-092
PC-23A	50-084
PC-30A	50-048
PC-31A	50-040
PC-32A	50-032
PC-33A	50-024
PC-20B	20-108
PC-21B	20-100
PC-22B	20-092
PC-23B	20-084
PC-30B	20-048
PC-31B	20-040
PC-32B	20-032
PC-33B	20-024

INSTALL CIRCUIT PACK FOR GROWTH IOUC (SD-4C049)

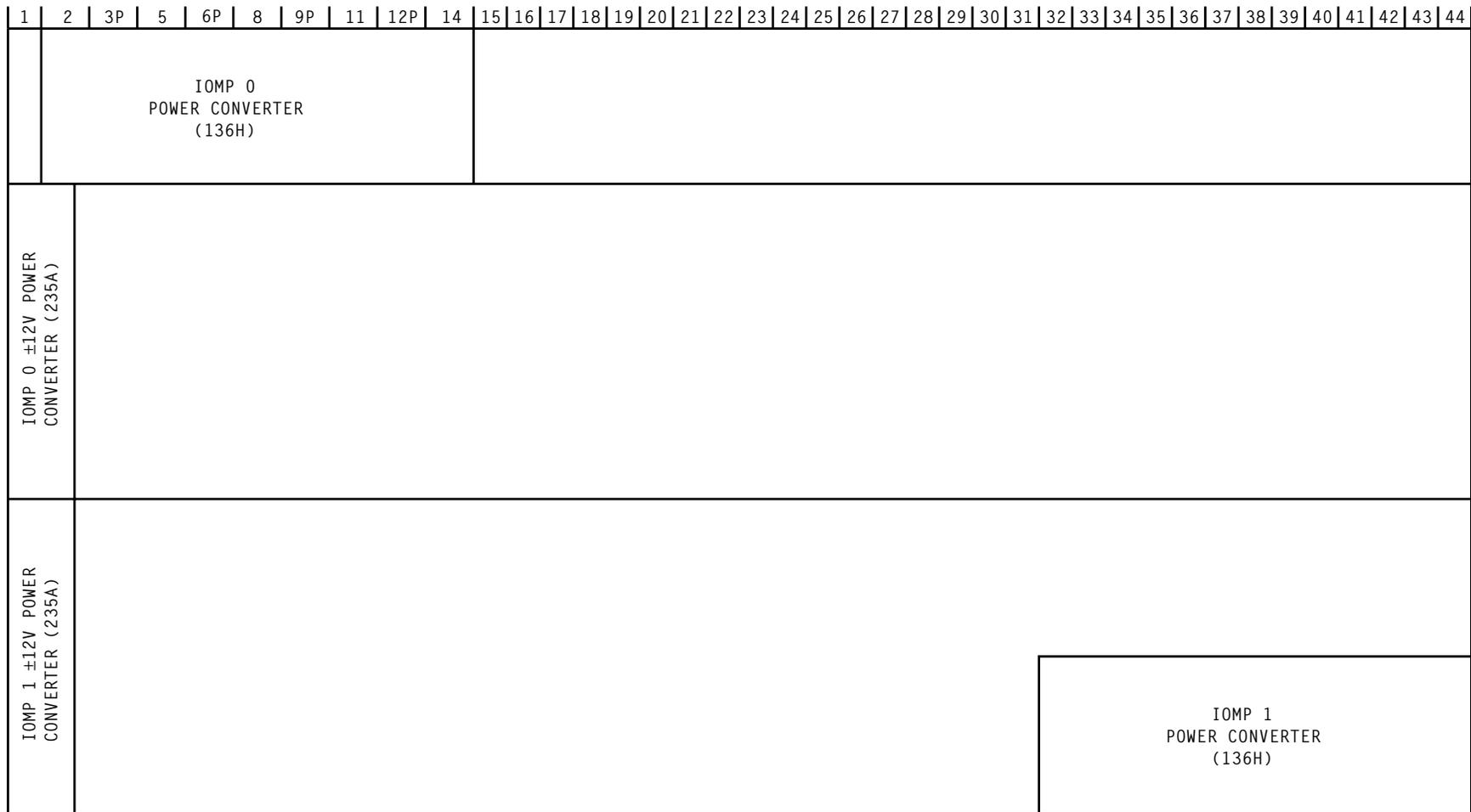
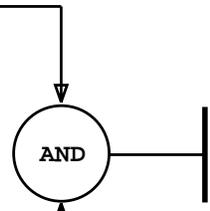


FIG. 1

RESTORE POWER TO INPUT/OUTPUT MICROPROCESSOR
COMMUNITY (SD-5A049 OR 5A052)

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[1] Turn 136H power supply switch to **ON** for growth associated IOMP [FIG. 1]



[2] Turn 235A power supply switch to **ON** for growth associated IOMP [FIG. 1]

**RESTORE POWER TO INPUT/OUTPUT MICROPROCESSOR
COMMUNITY (SD-5A049 OR 5A052)**

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[1] Turn power supply switch to **ON** on 136H or 136N converter(s) in growth associated IOMP [FIG. 1]

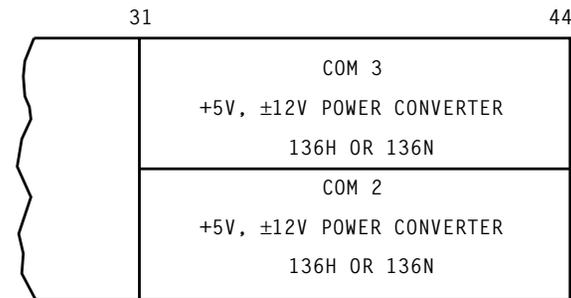


FIG. 1

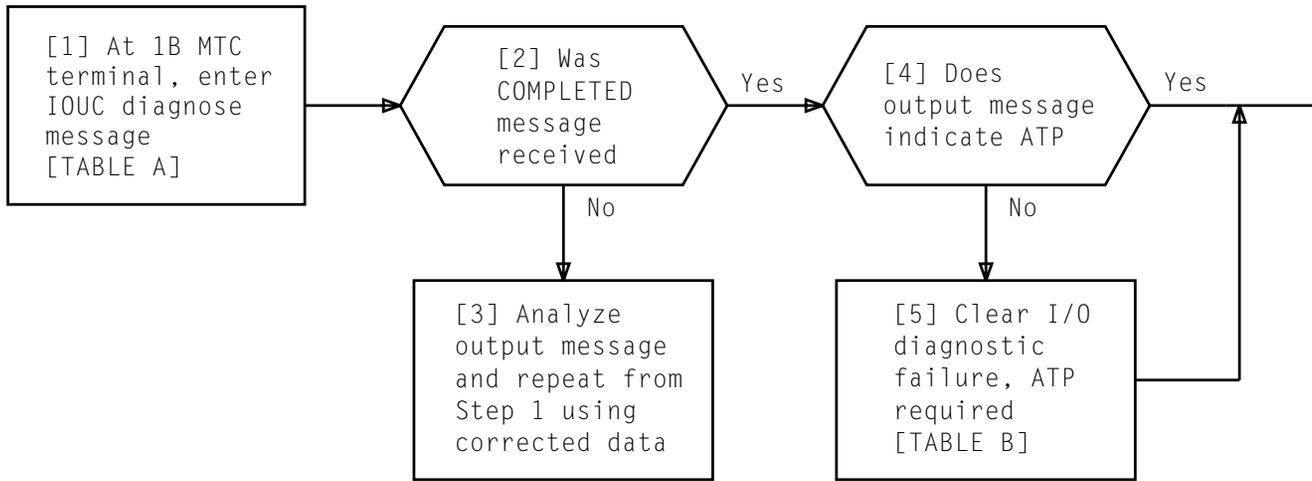


TABLE A
DGN:IOUS a,IOUC b!
a = Member number of growth associated IOUS b = Submember number of growth IOUC

TABLE B	
IO/IOP	TOP
J5A006A	234-351-020
J5A006C	234-351-021
J5A006D	234-351-022

SUMMARY

Enter change message to grow channel equipage (CE) from GROW to SGRO. Verify buffered CE, enter copy message, then verify current CE. If after each verify, CE is in

error, enter stop message and start change from beginning. If CE is correct after current verify, enter update message and verify that data is correct in translator

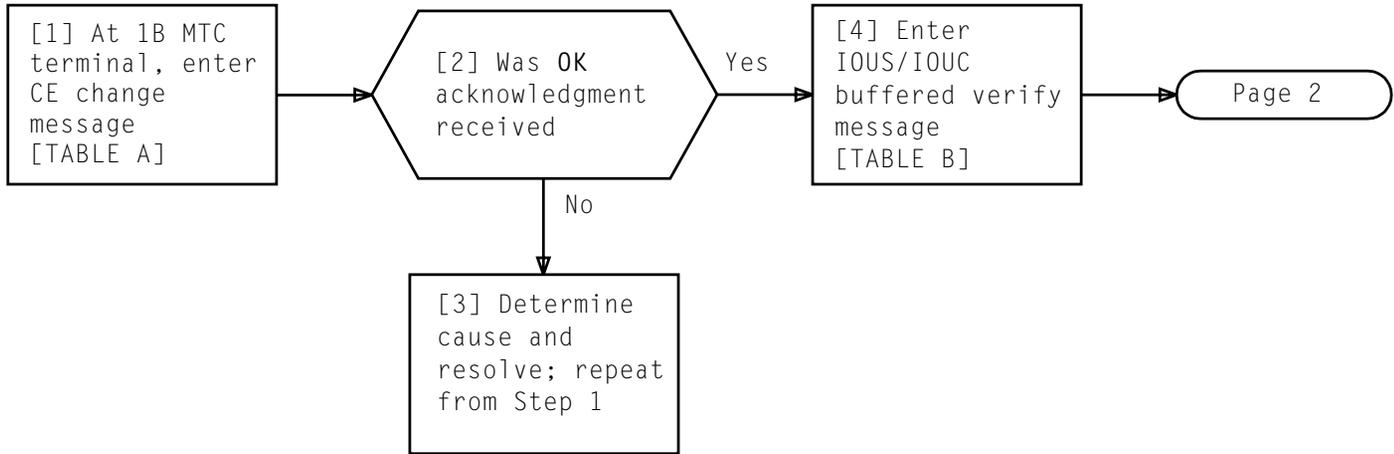


TABLE A
IN:XLBUF:IOUS a,IOUC b,CE (GROW,SGRO)!
a = Member number of growth associated IOUS b = Submember number of growth IOUC

TABLE B
VER:UTMN;BUF:IOUS a,IOUC b!
a = Member number of growth associated IOUS b = Submember number of growth IOUC

**CHANGE AND VERIFY CHANNEL EQUIPAGE
GROW TO SPECIAL GROWTH**

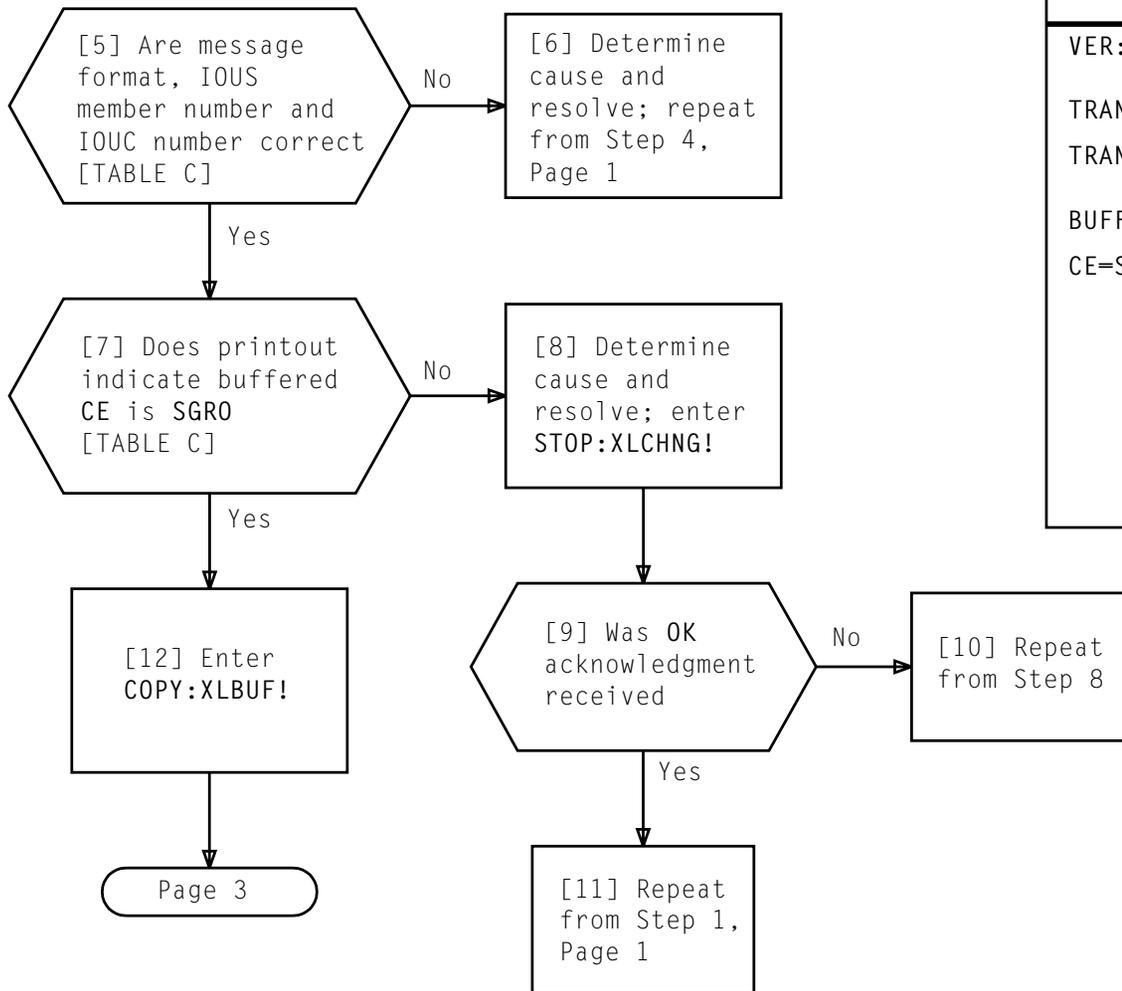


TABLE C	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number b = Submember number
TRANSLATOR ADR=	
TRANSLATOR SIZE=43	
BUFFERED DATA:	
CE=SGRO	
.	
.	
.	
.	
.	

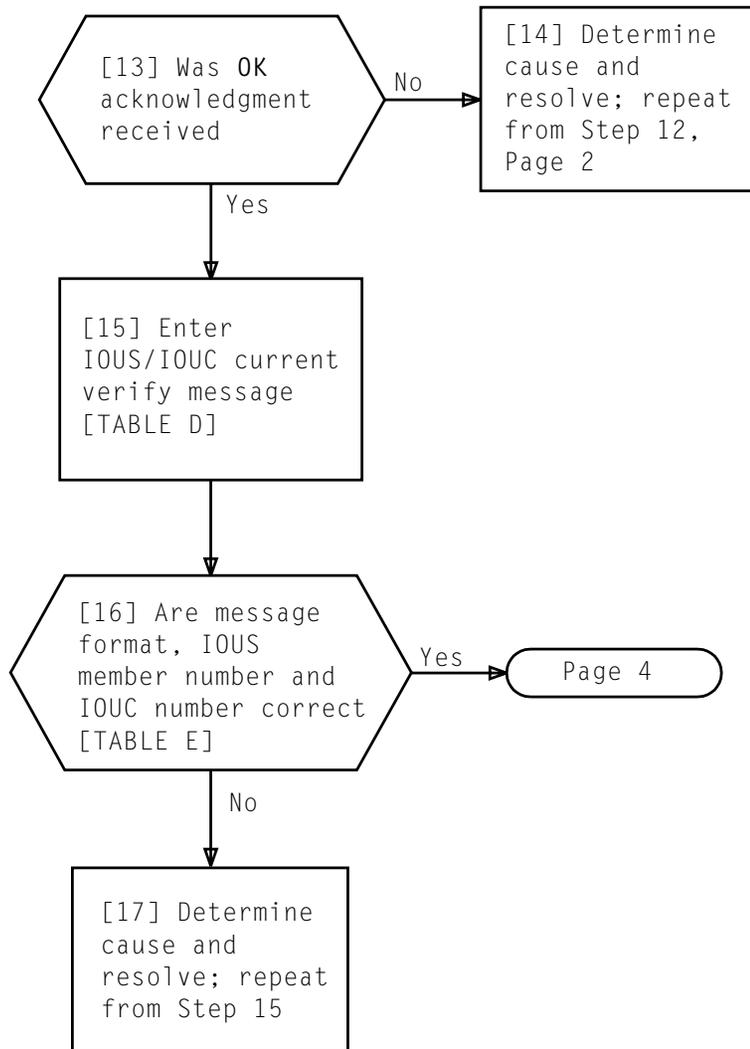


TABLE D	
VER:UTMN:IOUS a,IOUC b!	
a = Member number of growth associated IOUS	
b = Submember number of growth IOUC	

TABLE E	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	
CURRENT DATA:	
CE=SGRO	
.	
.	
.	
.	
.	
.	

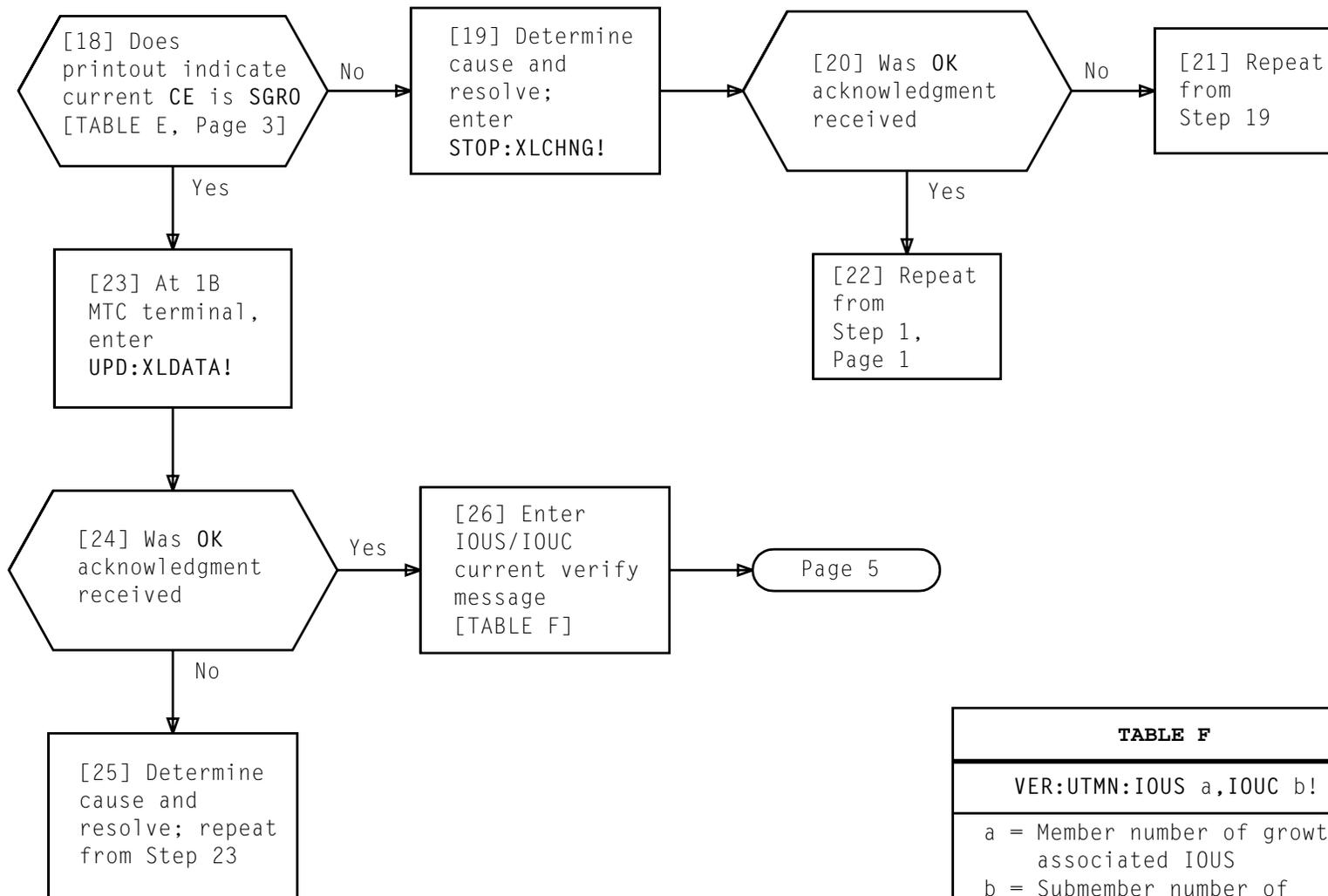
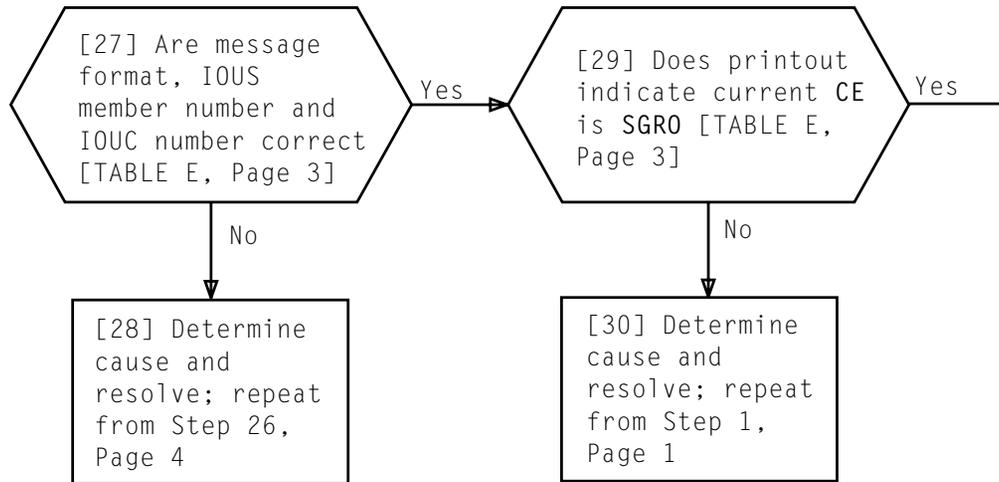


TABLE F	
VER:UTMN:IOUS a,IOUC b!	
a =	Member number of growth associated IOUS
b =	Submember number of growth IOUC



**CHANGE AND VERIFY CHANNEL EQUIPAGE
GROW TO SPECIAL GROWTH**

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<p>SUMMARY</p> <p>Enter change message to grow channel equipage (CE) from SGRO to OPER. Verify buffered CE, enter copy message, then verify current CE. If after each verify CE is in error,</p>	<p>enter stop message and start change from beginning. If CE is correct after current verify, enter update message and verify that data is correct in translator</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------

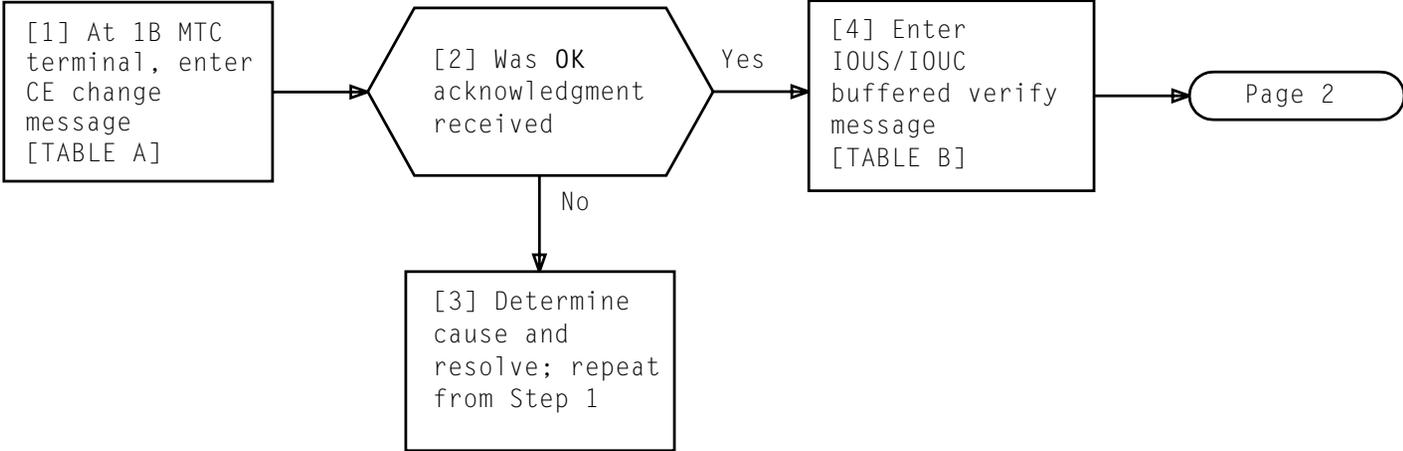


TABLE A
IN:XLBUF:IOUS a,IOUC b,CE (SGRO,OPER)!
a = Member number of growth associated IOUS b = Submember number of growth IOUC

TABLE B
VER:UTMN;BUF:IOUS a,IOUC b!
a = Member number of growth associated IOUS b = Submember number of growth IOUC

**CHANGE AND VERIFY CHANNEL EQUIPAGE
SPECIAL GROWTH TO OPERATIONAL**

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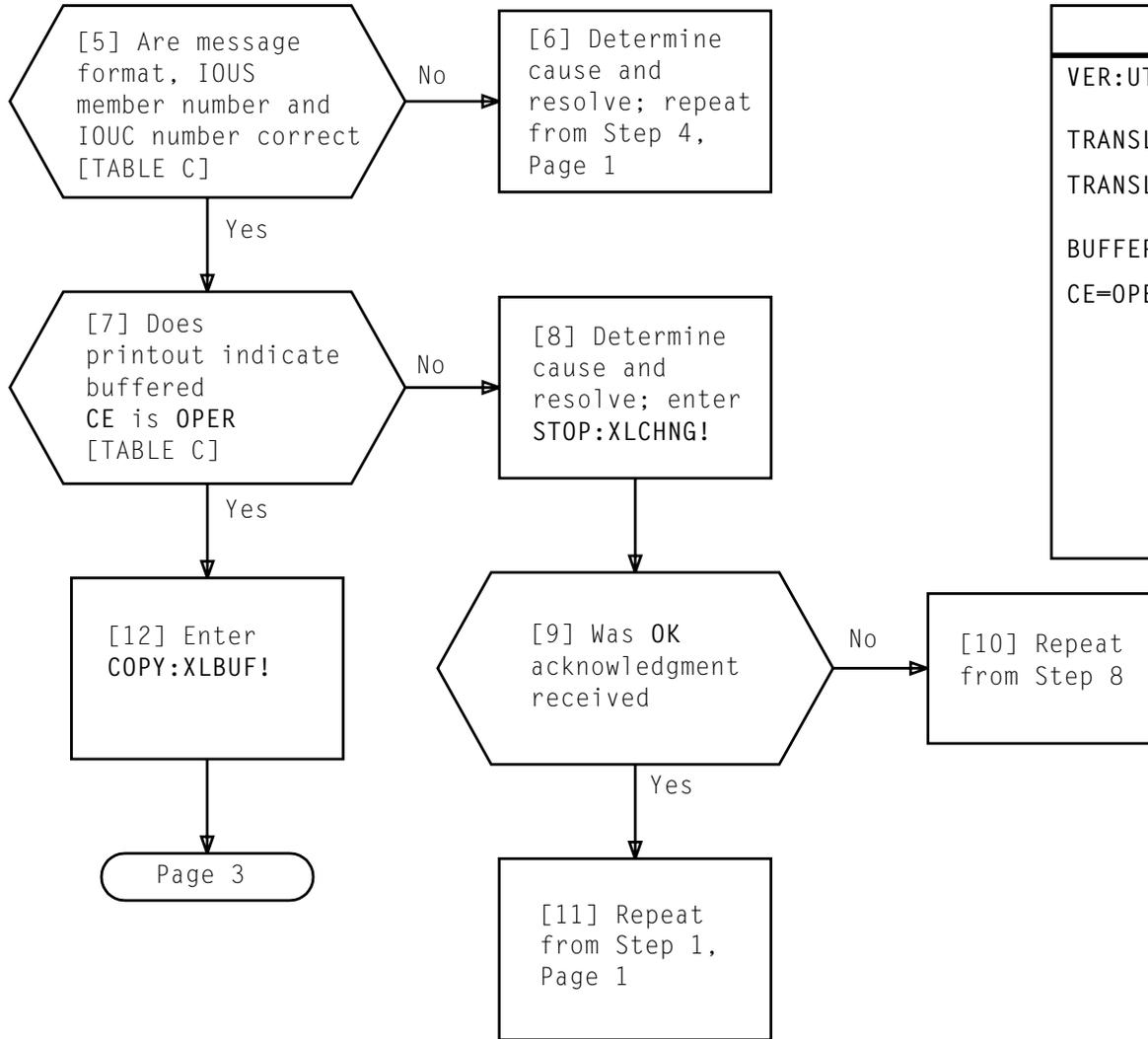


TABLE C	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number b = Submember number
TRANSLATOR ADR=	
TRANSLATOR SIZE=43	
BUFFERED DATA:	
CE=OPER	
.	
.	
.	
.	
.	

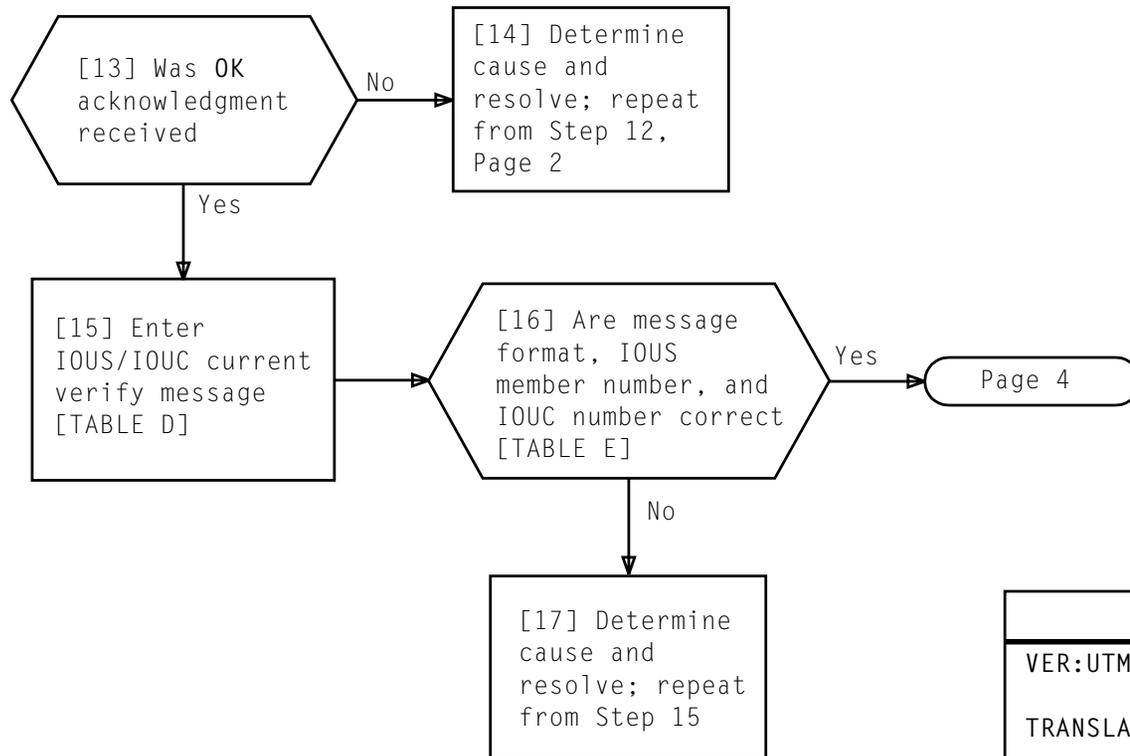


TABLE D
VER:UTMN:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

TABLE E	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	
CURRENT DATA:	
CE=OPER	
.	
.	
.	
.	
.	

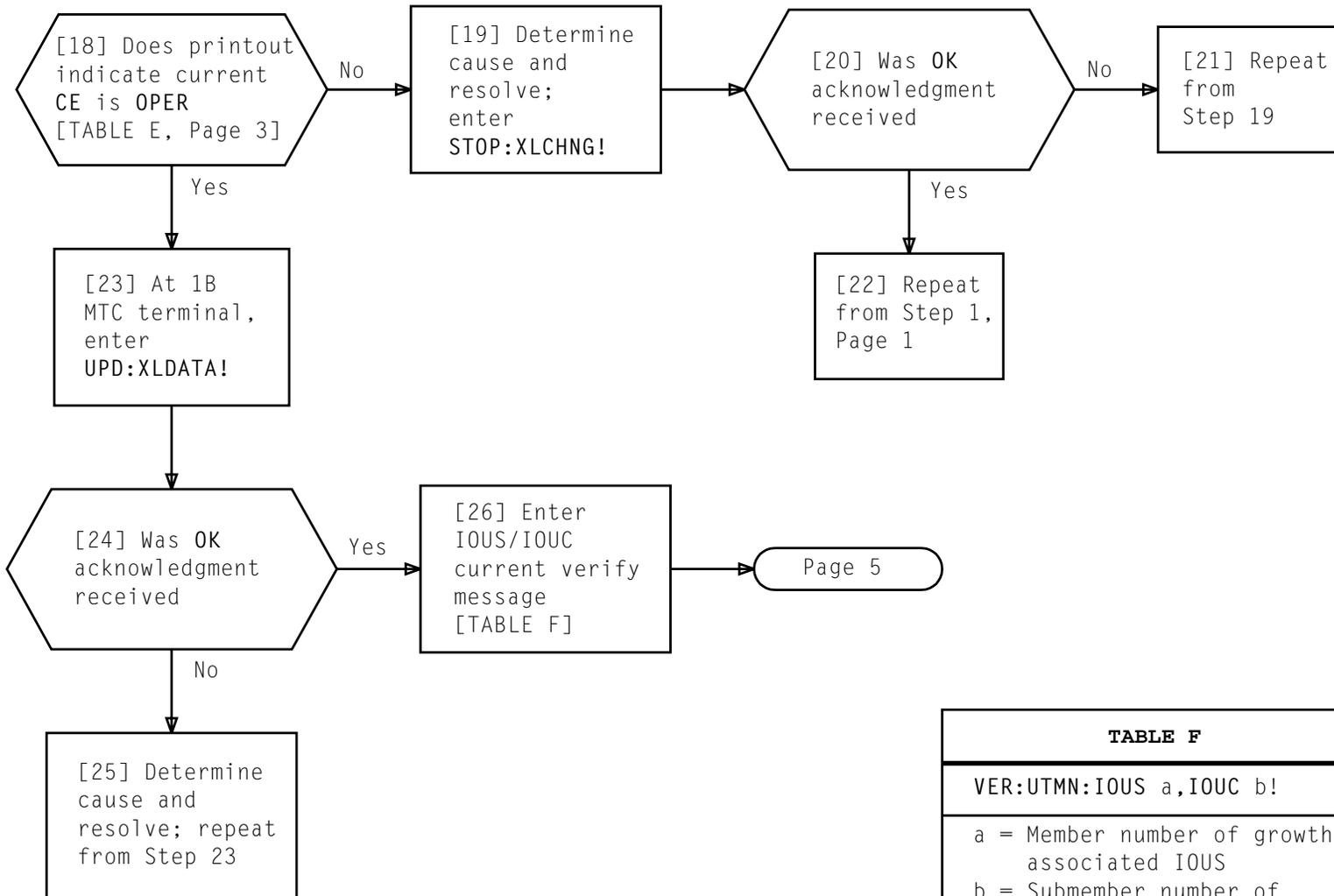
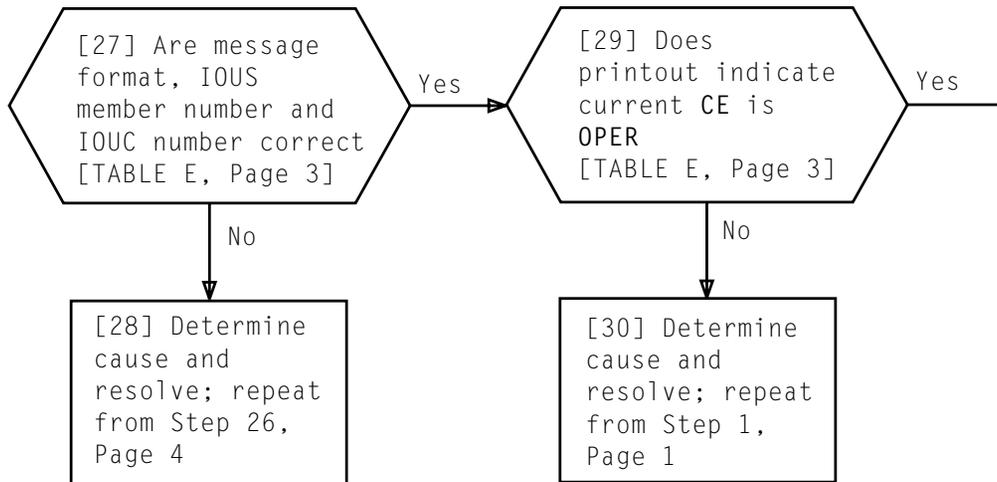


TABLE F	
VER:UTMN:IOUS a,IOUC b!	
a = Member number of growth associated IOUS	
b = Submember number of growth IOUC	



SUMMARY

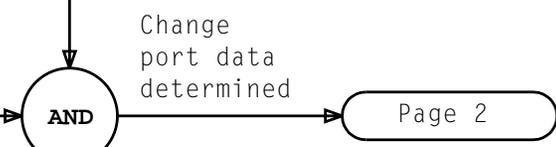
Using appropriate office record drawings, determine change port data for PTC, DSTYPE and SWC (if required), and AB. Enter change message to change port data. Verify buffered port data, enter copy message, then verify current port

data. If after each verify, port data is in error, enter stop message and start change from beginning. If port data is correct after current verify, enter update message and verify that data is correct in translator

[1] See NOTE 1. If port 0 is being grown and CHG greater than 3, determine from appropriate office record drawing, data set type and carrier type. Record for later use

[2] See NOTE 1. Determine from office record drawing T-nnnn-Hn-3800 or equivalent port type connection on growth port [NOTE 2]. Record for later use

[3] See NOTE 1. Determine from office record drawing T-nnnn-Hn-3100 or equivalent if I/O terminal connected to growth port is equipped with answer-back feature [NOTE 2]. Record for later use



NOTES

- 1. If data cannot be determined from office record drawings, consult with office engineer
- 2. n = Office unique drawing number

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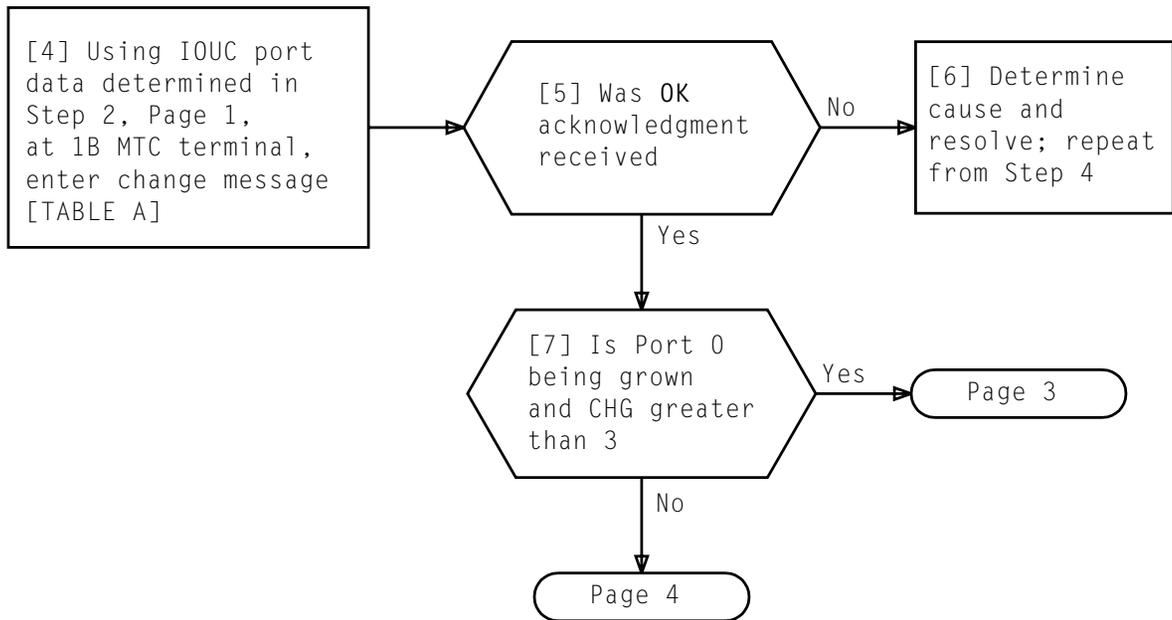


TABLE A	
IN:XLBUF:IOUS a,IOUC b,PORT c,PTC d!	
a = Member number of growth associated IOUS	
b = Submember number of growth IOUC	
c = Growth port number	
d = Port type connection –	
DC if direct connection	
PLDS if private line data set connected	
DUDS if dial up data set connected	

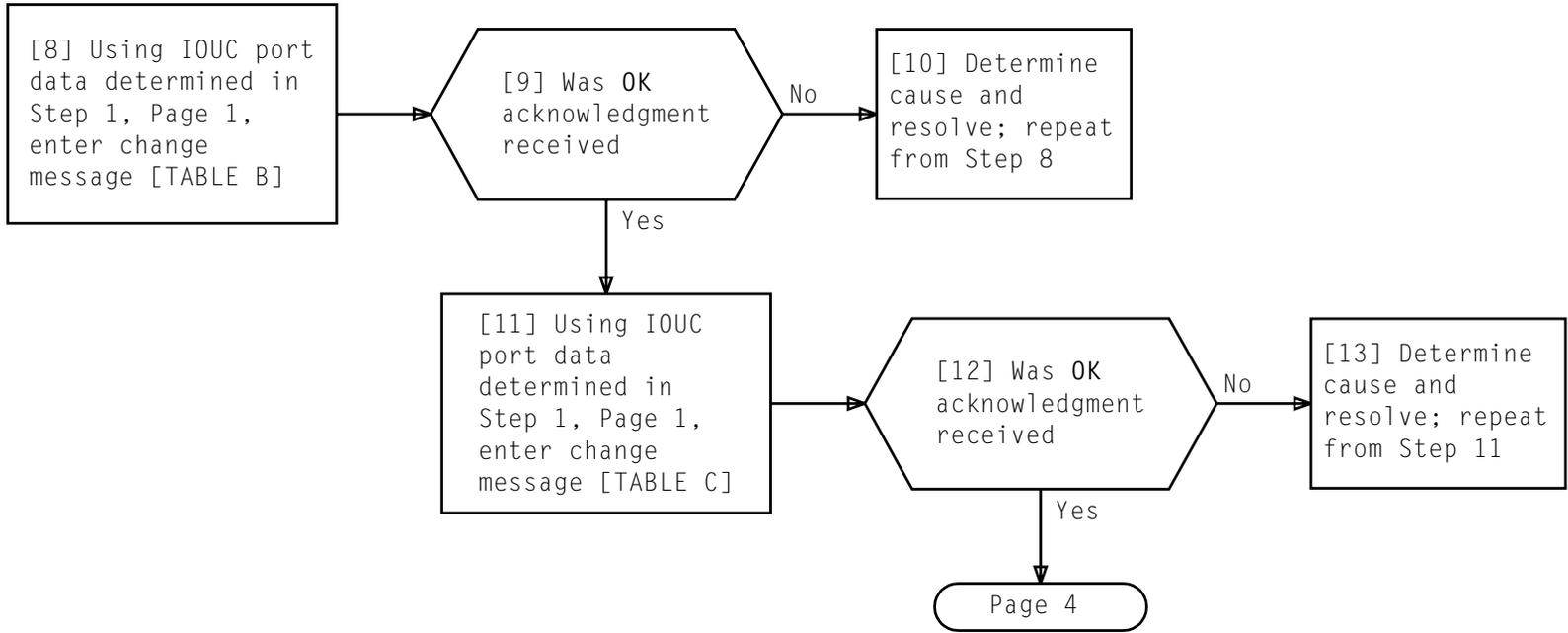


TABLE B
IN:XLBUF:IOUS a,IOUC b,PORT c,DSTYPE d!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC
c = Growth port number
d = Data set type -
NODS
212A
208A
202108 (for 202T)
2096A

TABLE C
IN:XLBUF:IOUS a,IOUC b,PORT c,SWC d!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC
c = Growth port number
d = Switched carrier -
Y if carrier is switched or
N if carrier is continuous

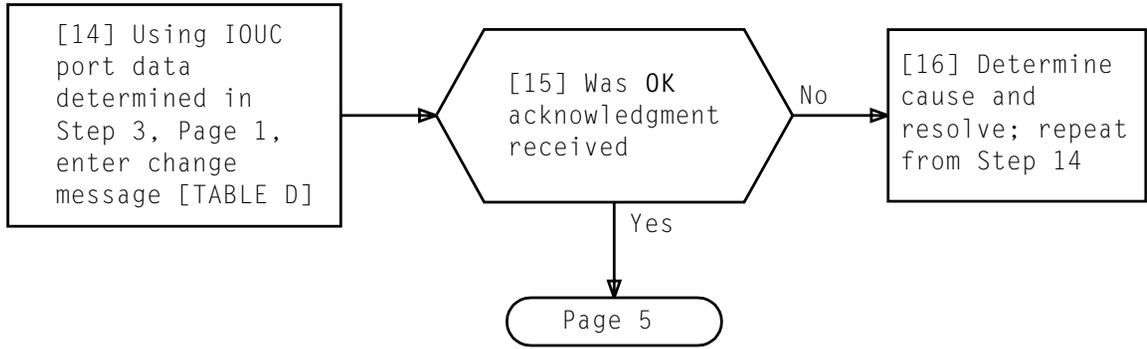


TABLE D	
IN:XLBUF:IOUS a,IOUC b,PORT c,AB d!	
a = Member number of growth associated IOUS	
b = Submember number of growth IOUC	
c = Growth port number	
d = Answer back feature –	
Y if I/O terminal connected to growth port is equipped with answer back feature or	
N if I/O terminal connected to growth port is not equipped with answer back feature	

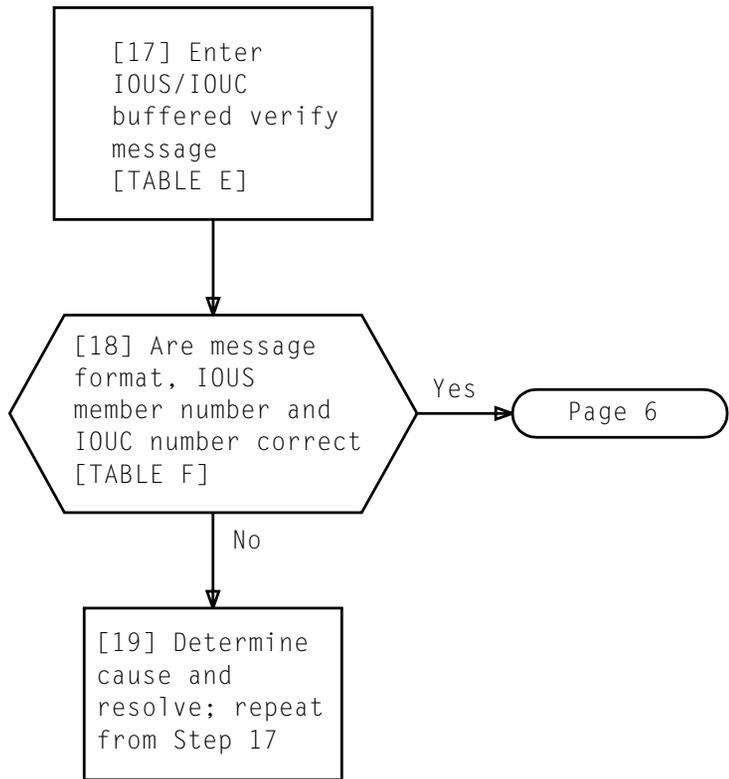
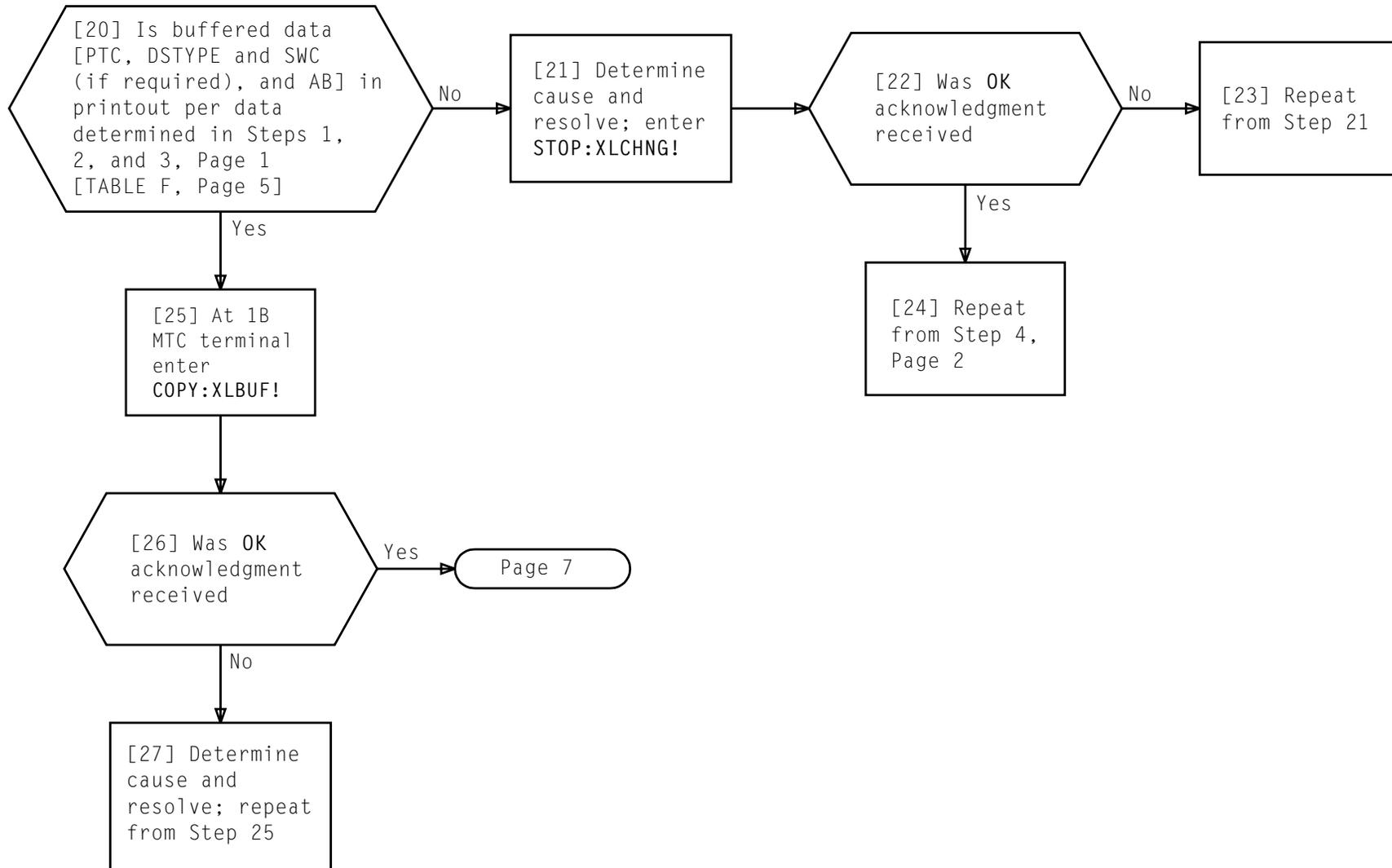


TABLE E
VER:UTMN;BUF:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

TABLE F	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	c = Port connection arrangement – DC or PLDS or DUDS
BUFFERED DATA:	d = Data set type
.	e = Switched carrier – Y or N
.	f = Answer back feature – Y or N
.	
.	
.	
.	
PORT 0,PRTE=	
PTC=c	
DSTYPE=d	
SWC=e	
AB=f	
PORT 1,PRTE=	
PTC=c	
AB=f	
PORT 2,PRTE=	
PTC=c	
AB=f	

CHANGE AND VERIFY PORT DATA



CHANGE AND VERIFY PORT DATA

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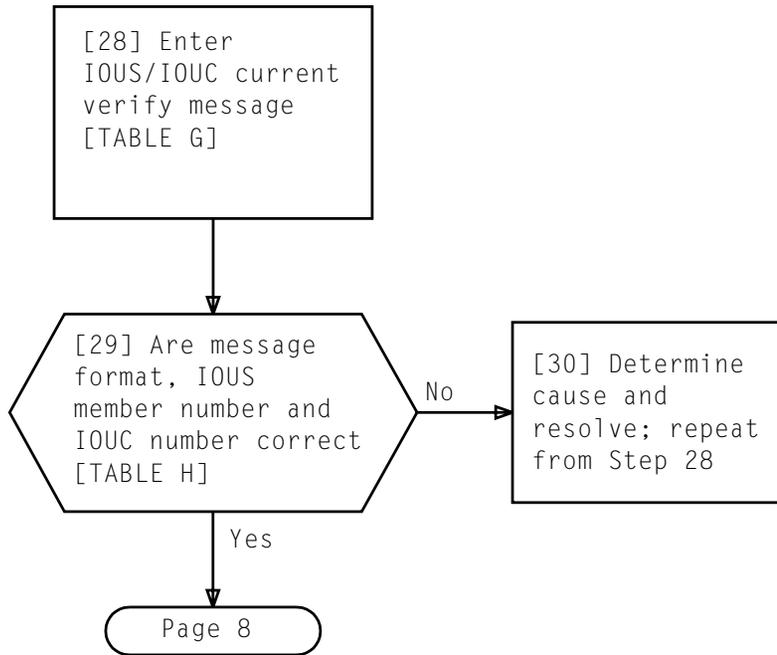
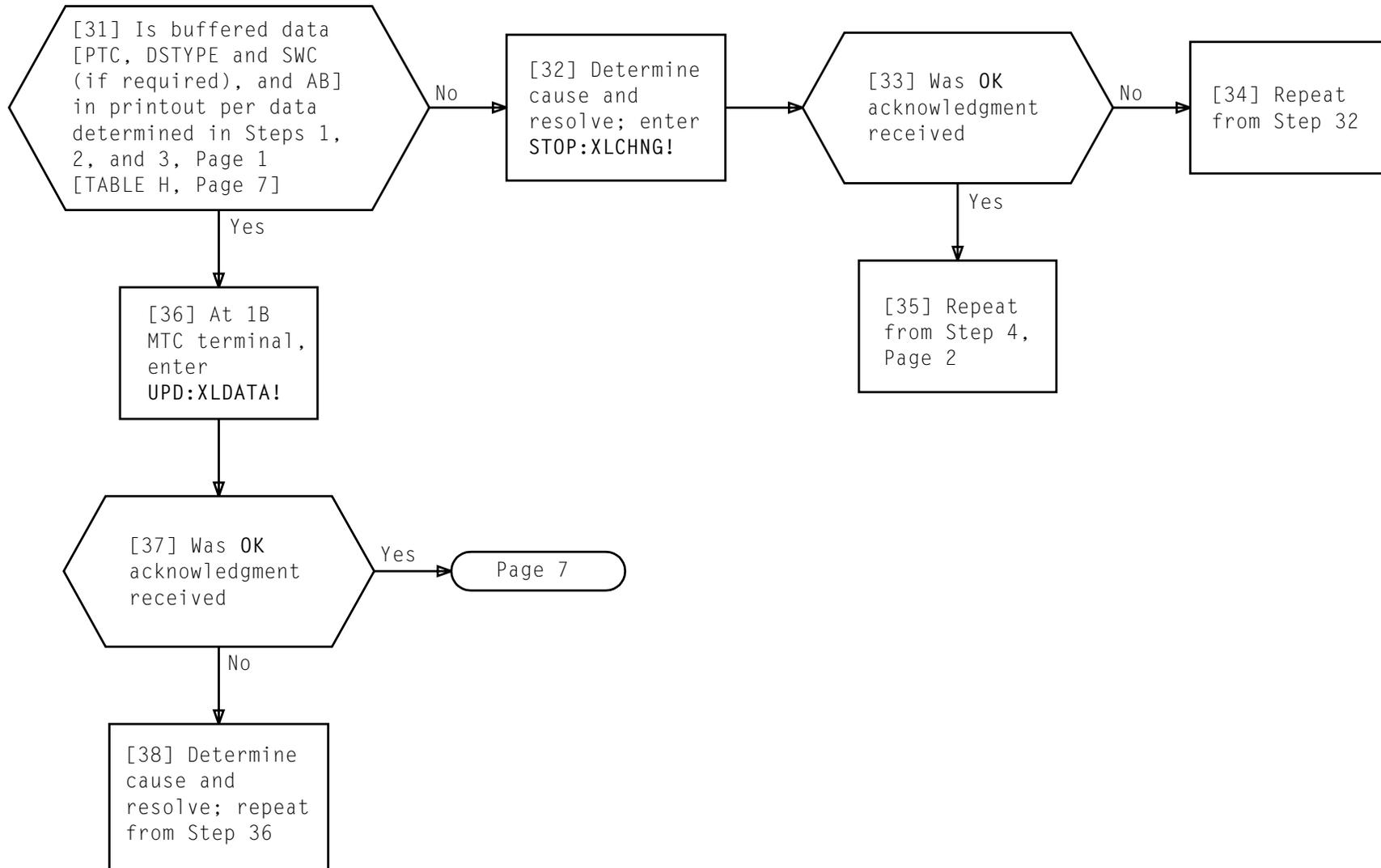


TABLE G
VER:UTMN:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

TABLE H	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	c = Port connection arrangement – DC or PLDS or DUDS
CURRENT DATA:	d = Data set type
.	e = Switched carrier – Y or N
.	f = Answer back feature – Y or N
.	
.	
.	
PORT 0,PRTE=	
PTC=c	
DSTYPE=d	
SWC=e	
AB=f	
PORT 1,PRTE=	
PTC=c	
AB=f	
PORT 2,PRTE=	
PTC=c	
AB=f	



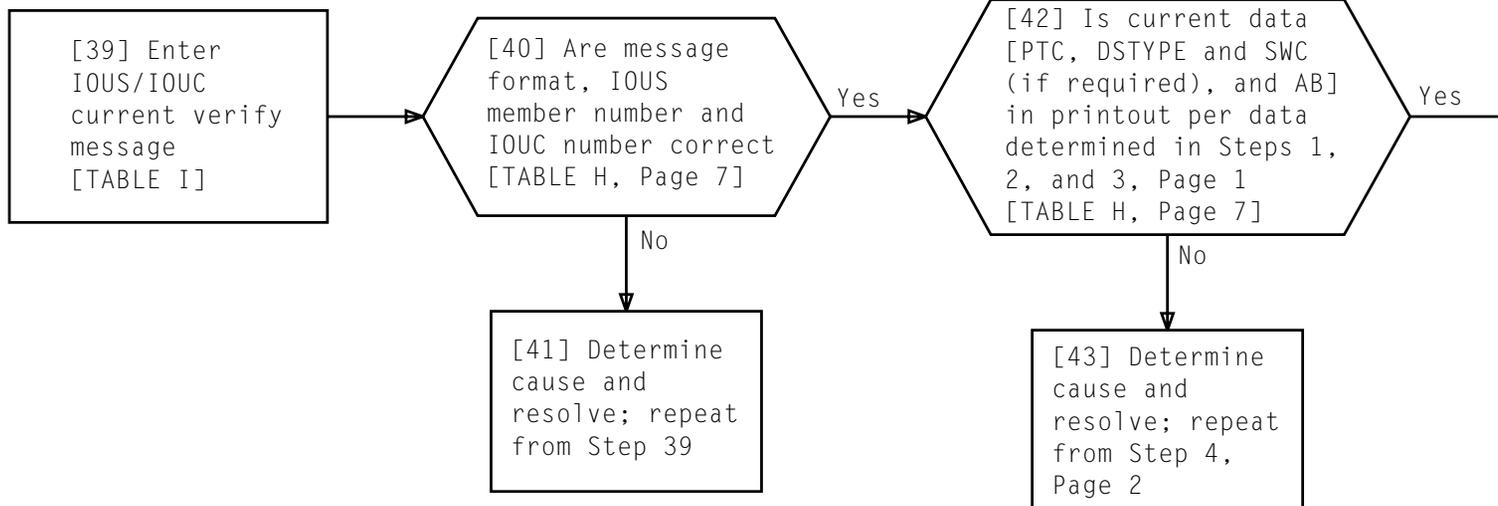


TABLE I
VER:UTMN:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

SUMMARY

Enter change message to grow port equipage (PRTE) from UNEQ to GROW. Verify buffered PRTE, enter copy message, then verify current PRTE. If after each verify the PRTE is in error, enter stop message and start change from beginning. If PRTE is correct after current verify, enter update message and verify that data is correct in translator

TABLE A

IN:XLBUF:IOUS a,IOUC b,PORT c,PRTE (UNEQ,GROW)!

a = Member number of growth associated IOUS

b = Submember number of growth IOUC

c = Growth port number

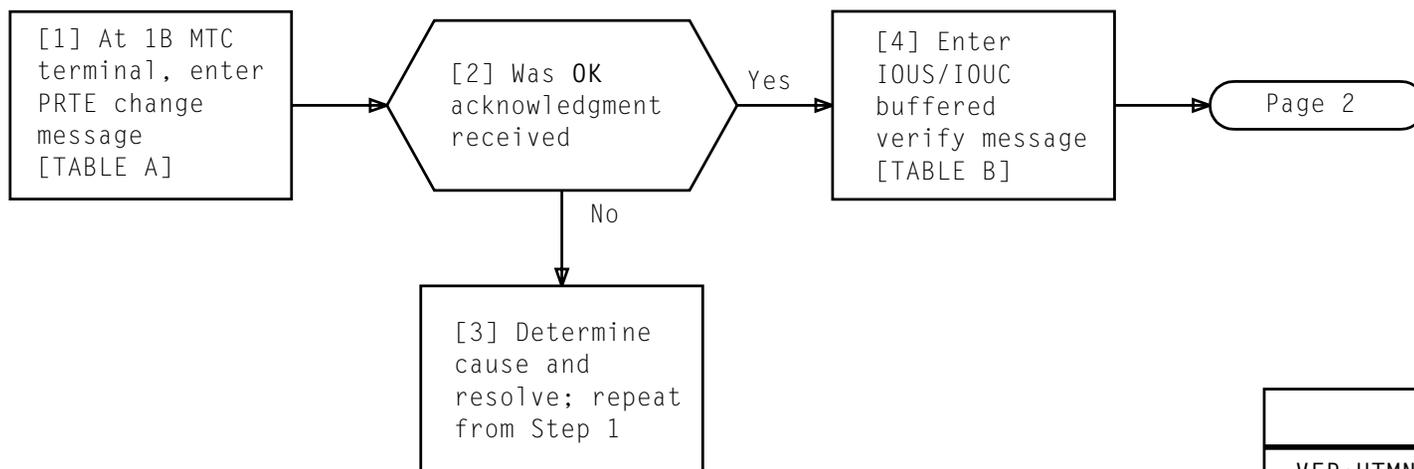


TABLE B

VER:UTMN;BUF:IOUS a,IOUC b!

a = Member number of growth associated IOUS

b = Submember number of growth IOUC

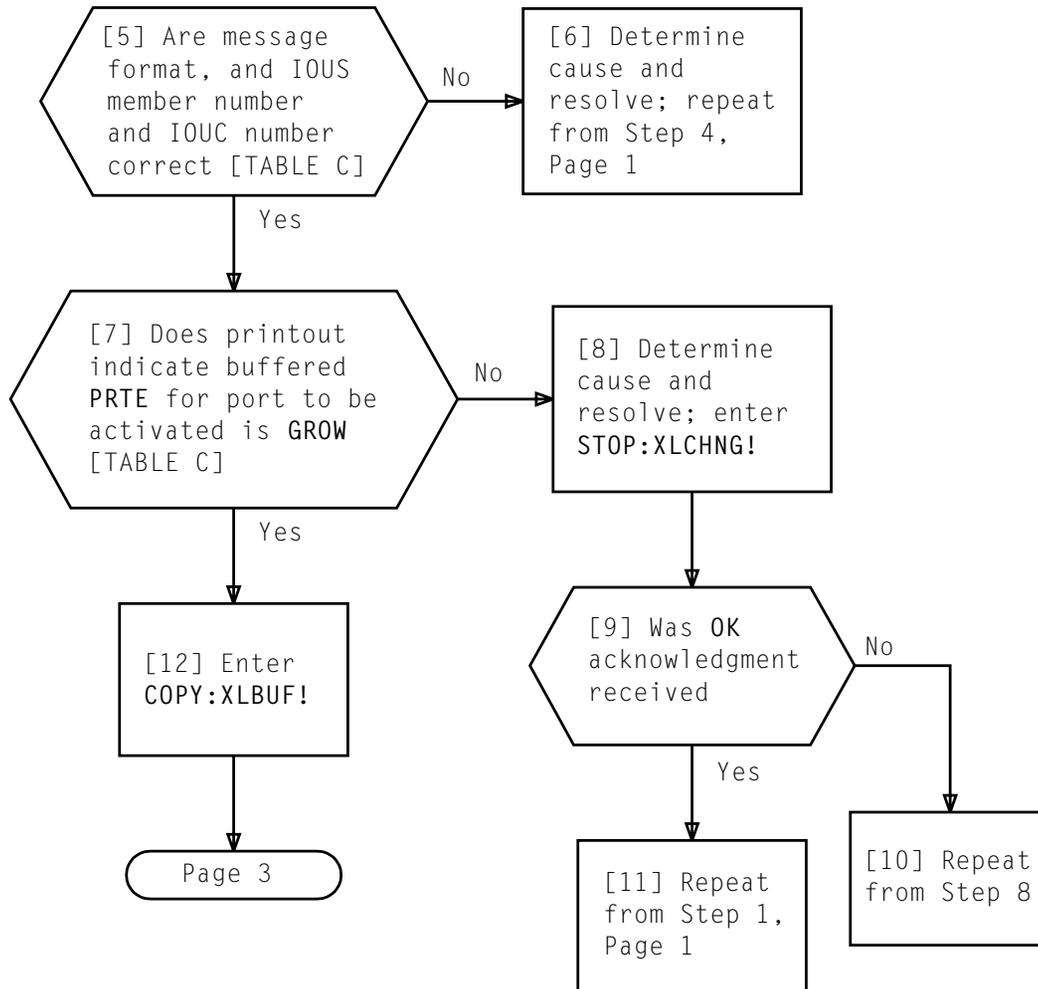


TABLE C	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	c = Port 0 equipage
BUFFERED DATA:	d = Port 1 equipage
.	e = Port 2 equipage
.	
.	
.	
.	
PORT 0,PRTE=c	
.	
.	
.	
PORT 1,PRTE=d	
.	
.	
PORT 2,PRTE=e	
.	
.	

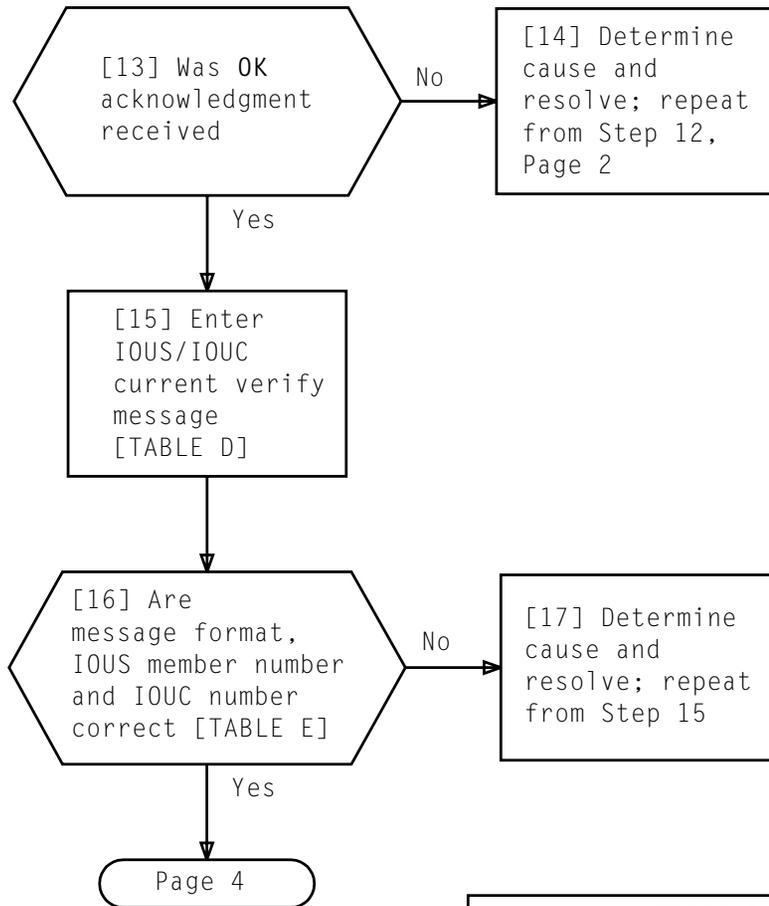


TABLE D
VER:UTMN:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

TABLE E	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	c = Port 0 equipage
CURRENT DATA:	d = Port 1 equipage
.	e = Port 2 equipage
.	
.	
.	
.	
.	
PORT 0,PRTE=c	
.	
.	
PORT 1,PRTE=d	
.	
.	
PORT 2,PRTE=e	
.	
.	

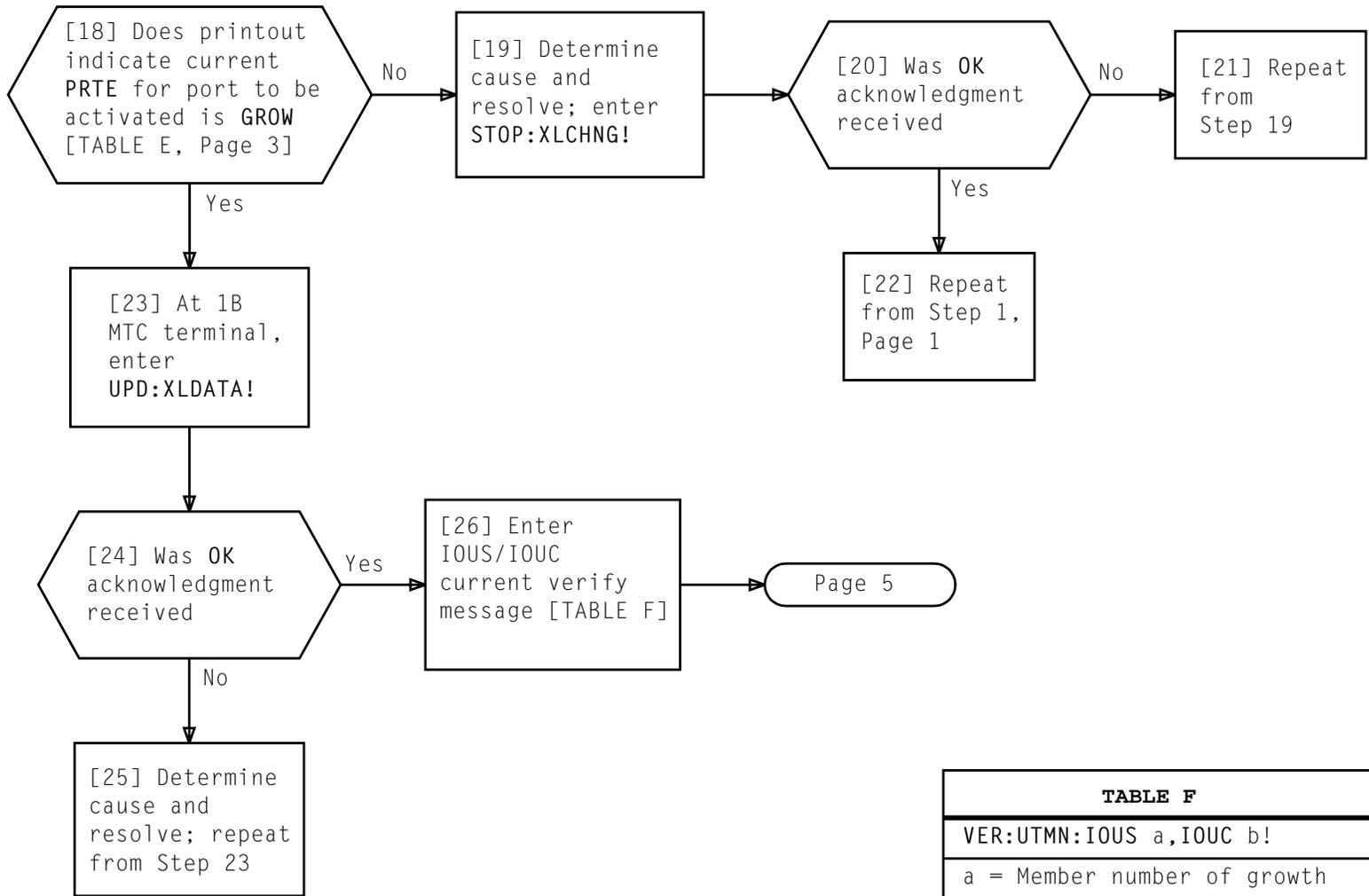
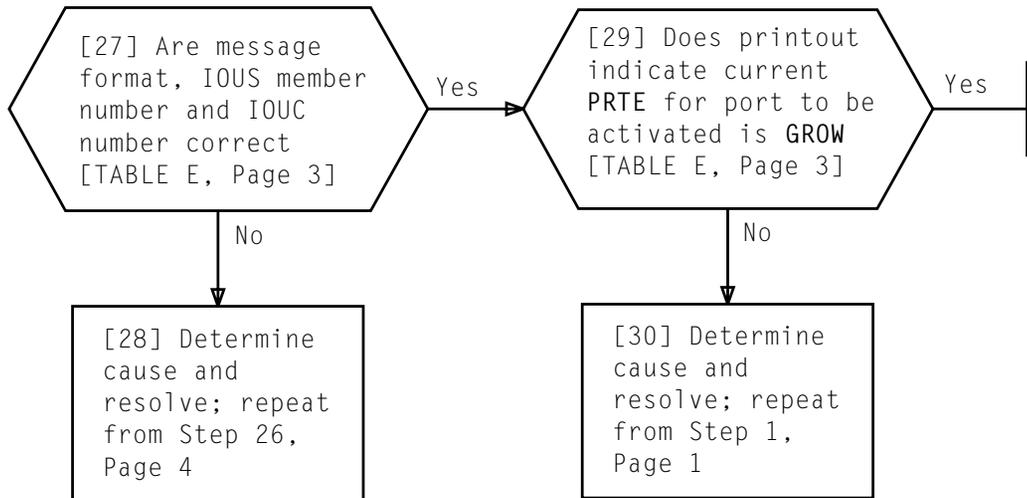


TABLE F	
VER:UTMN:IOUS a,IOUC b!	
a = Member number of growth associated IOUS	
b = Submember number of growth IOUC	

CHANGE AND VERIFY PORT EQUIPAGE UNEQUIPPED TO GROW

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CHANGE AND VERIFY PORT EQUIPAGE UNEQUIPPED TO GROW

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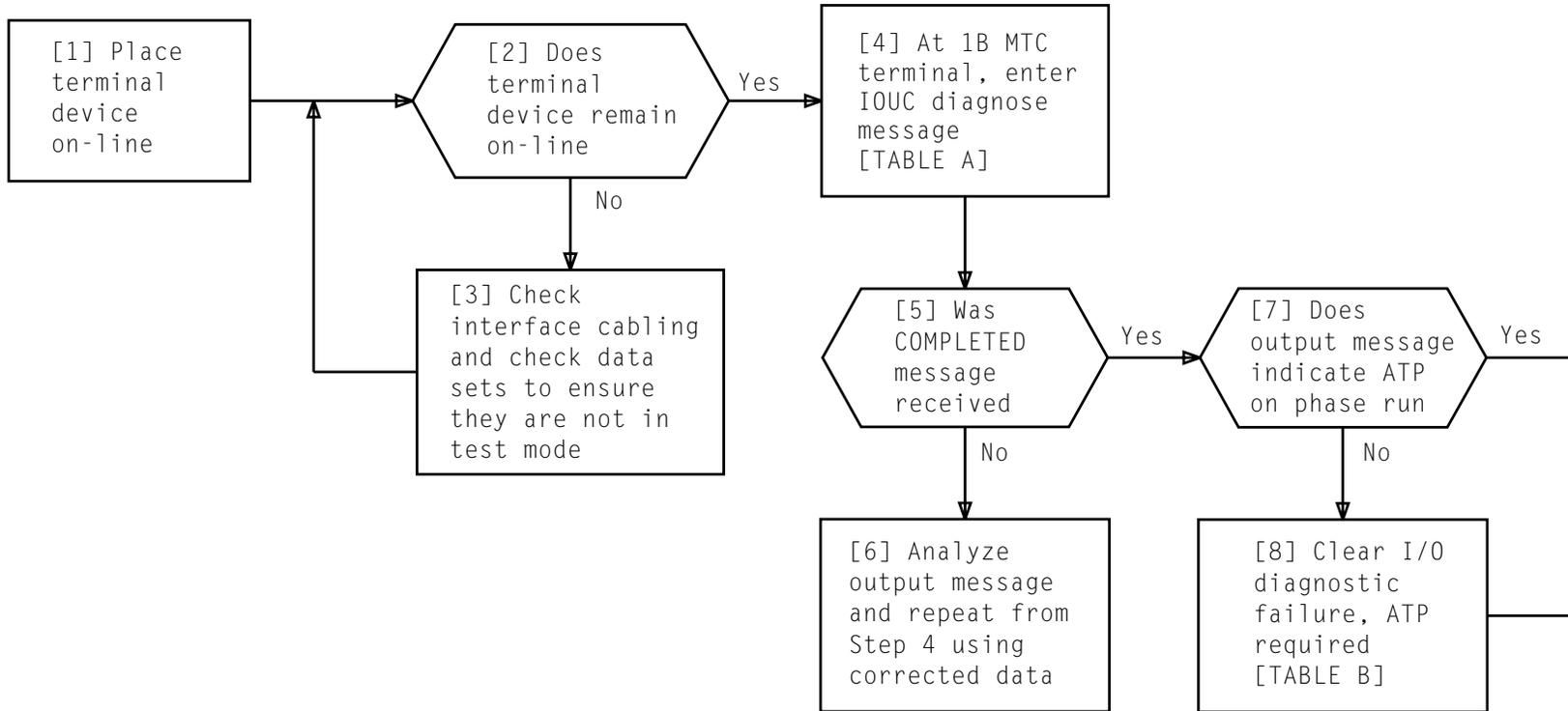


TABLE A
DGN:IOUS a,IOUC b:PORT c!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC
c = Port number 0 to 2

TABLE B	
IO/IOP	TOP
J5A006A	234-351-020
J5A006C	234-351-021
J5A006D	234-351-022

SUMMARY

Enter change message to grow port equipage (PRTE) from GROW to SGRO. Verify buffered PRTE, enter copy message, then verify current PRTE. If after each verify the PRTE is in error, enter stop message and start change from beginning. If PRTE is correct after current verify, enter update message and verify that data is correct in translator.

TABLE A

IN:XLBUF:IOUS a,IOUC b,PORT c,PRTE (GROW,SGRO)!

a = Member number of growth associated IOUS

b = Submember number of growth IOUC

c = Growth port number

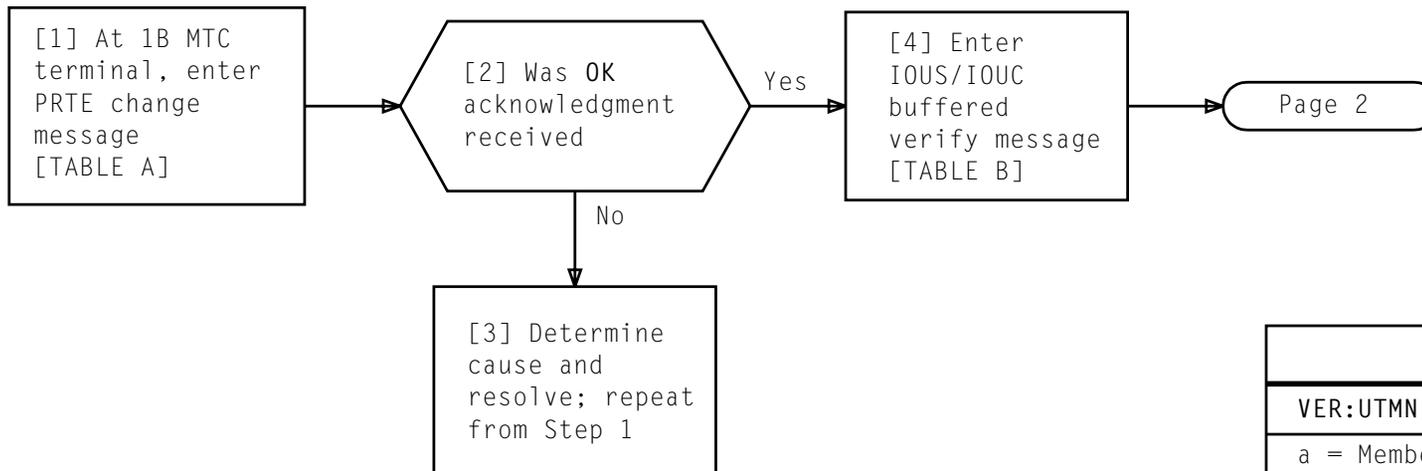


TABLE B

VER:UTMN;BUF:IOUS a,IOUC b!

a = Member number of growth associated IOUS

b = Submember number of growth IOUC

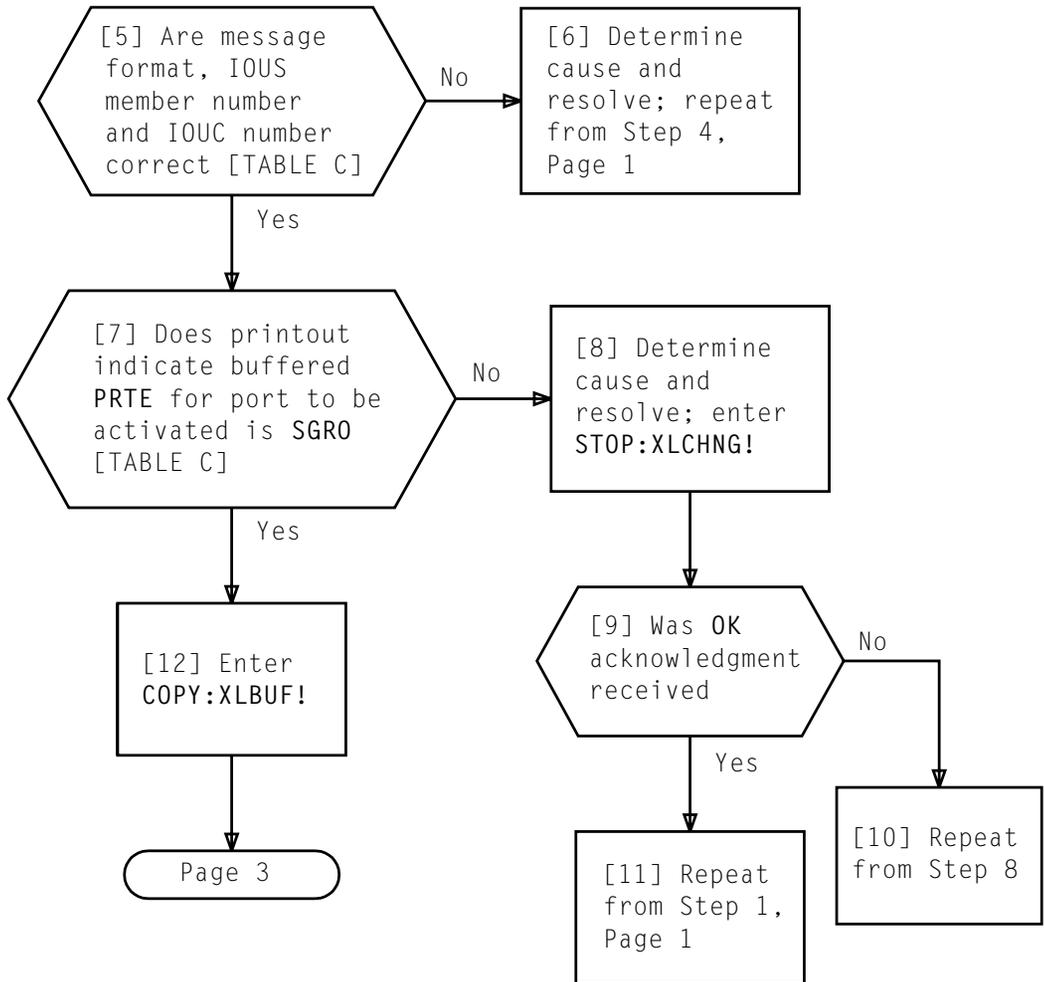


TABLE C	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	c = Port 0 equipage
BUFFERED DATA:	d = Port 1 equipage
.	e = Port 2 equipage
.	
.	
.	
.	
.	
PORT 0,PRTE=c	
.	
.	
.	
PORT 1,PRTE=d	
.	
.	
PORT 2,PRTE=e	
.	
.	

CHANGE AND VERIFY PORT EQUIPAGE GROW TO SPECIAL GROWTH

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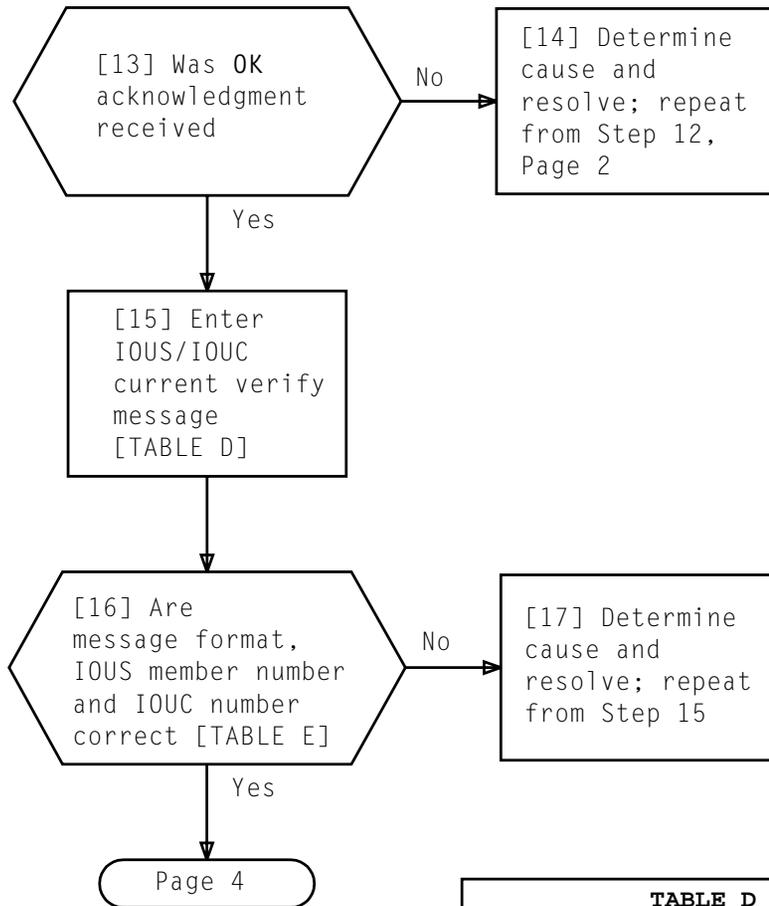


TABLE D
VER:UTMN:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

TABLE E	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	c = Port 0 equipage
CURRENT DATA:	d = Port 1 equipage
.	e = Port 2 equipage
.	
.	
.	
.	
.	
PORT 0,PETR=c	
.	
.	
PORT 1,PRTE=d	
.	
.	
PORT 2,PRTE=e	
.	
.	

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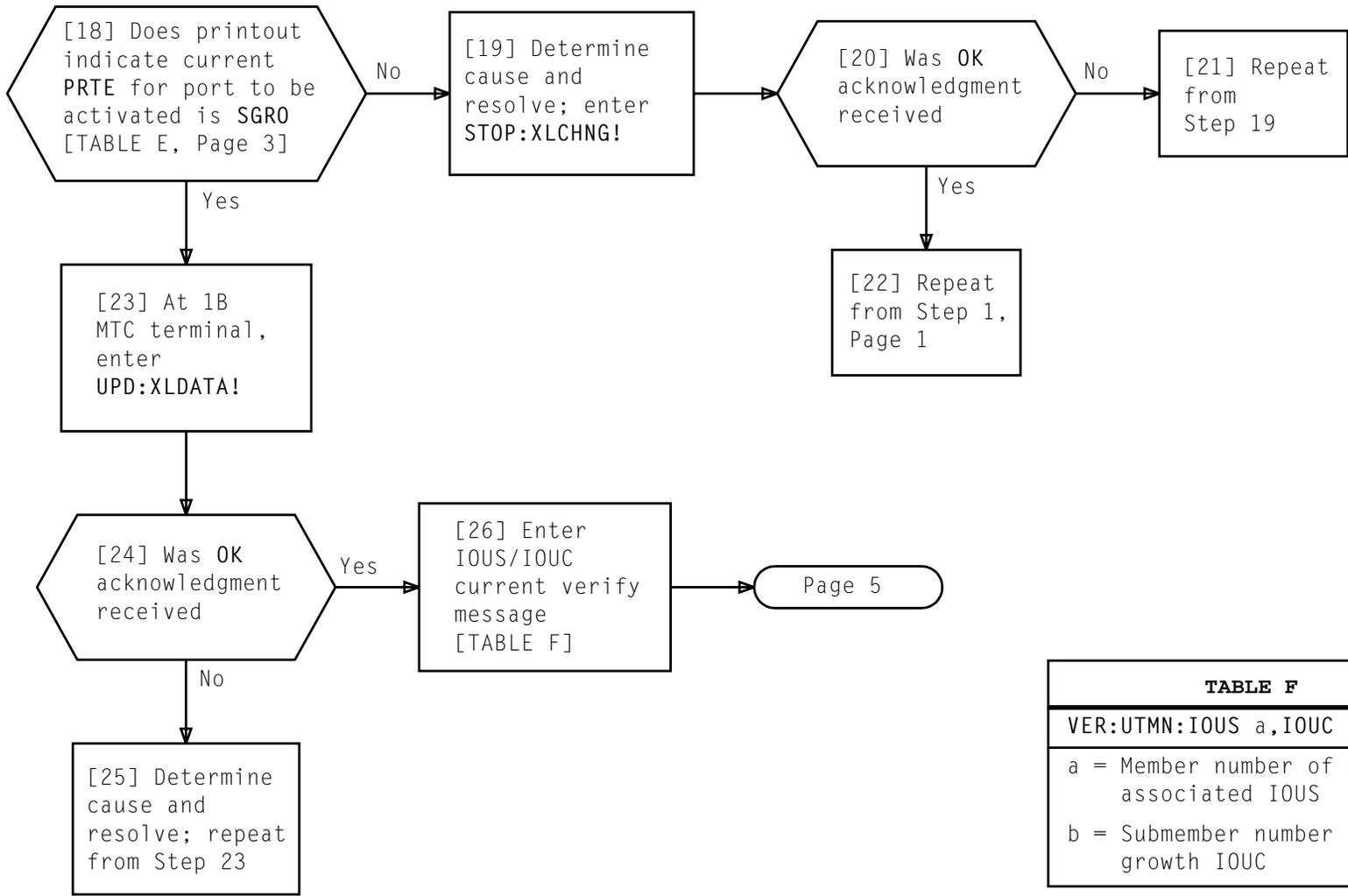
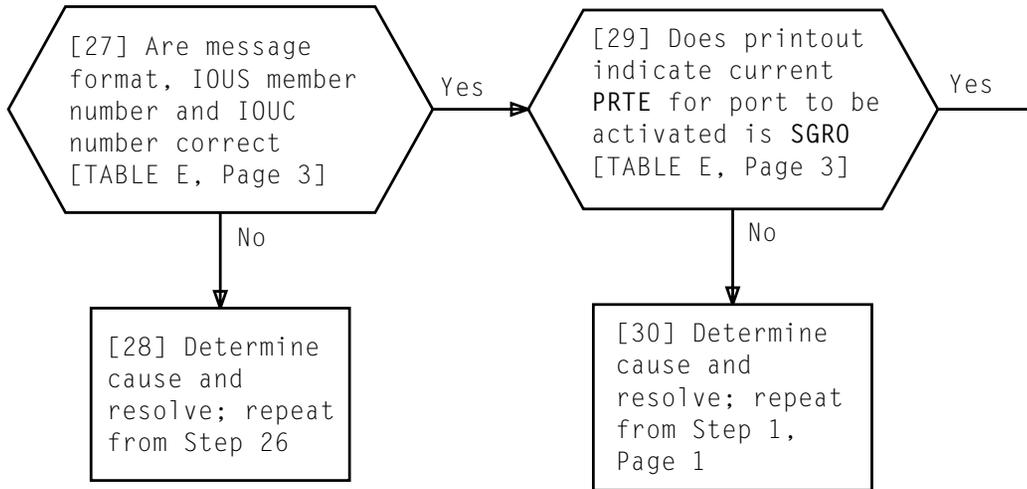


TABLE F	
VER:UTMN:IOUS a,IOUC b!	
a = Member number of growth associated IOUS	
b = Submember number of growth IOUC	



CHANGE AND VERIFY PORT EQUIPAGE GROW TO SPECIAL GROWTH

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SUMMARY

Enter change message to grow port equipage (PRTE) from SGRO to OPER. Verify buffered PRTE, enter copy message, then verify current PRTE. If after each verify PRTE is in error, enter stop message and start change from beginning. If PRTE is correct after current verify, enter update message and verify that data is correct in translator

TABLE A

IN:XLBUF:IOUS a,IOUC b,PORT c,PRTE (SGRO,OPER)!

a = Member number of growth associated IOUS

b = Submember number of growth IOUC

c = Growth port number

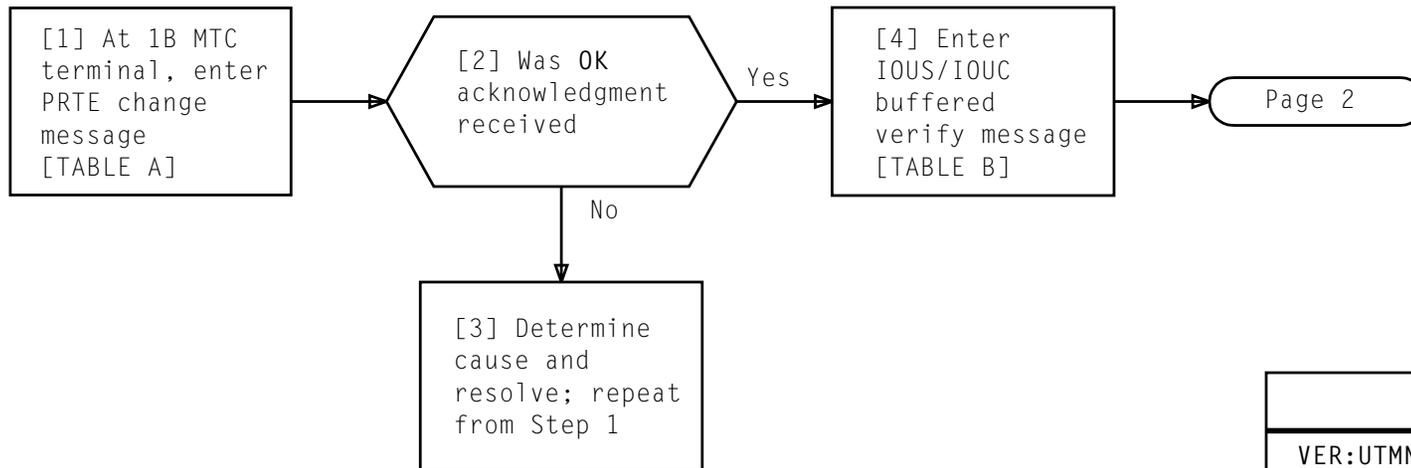


TABLE B

VER:UTMN;BUF:IOUS a,IOUC b!

a = Member number of growth associated IOUS

b = Submember number of growth IOUC

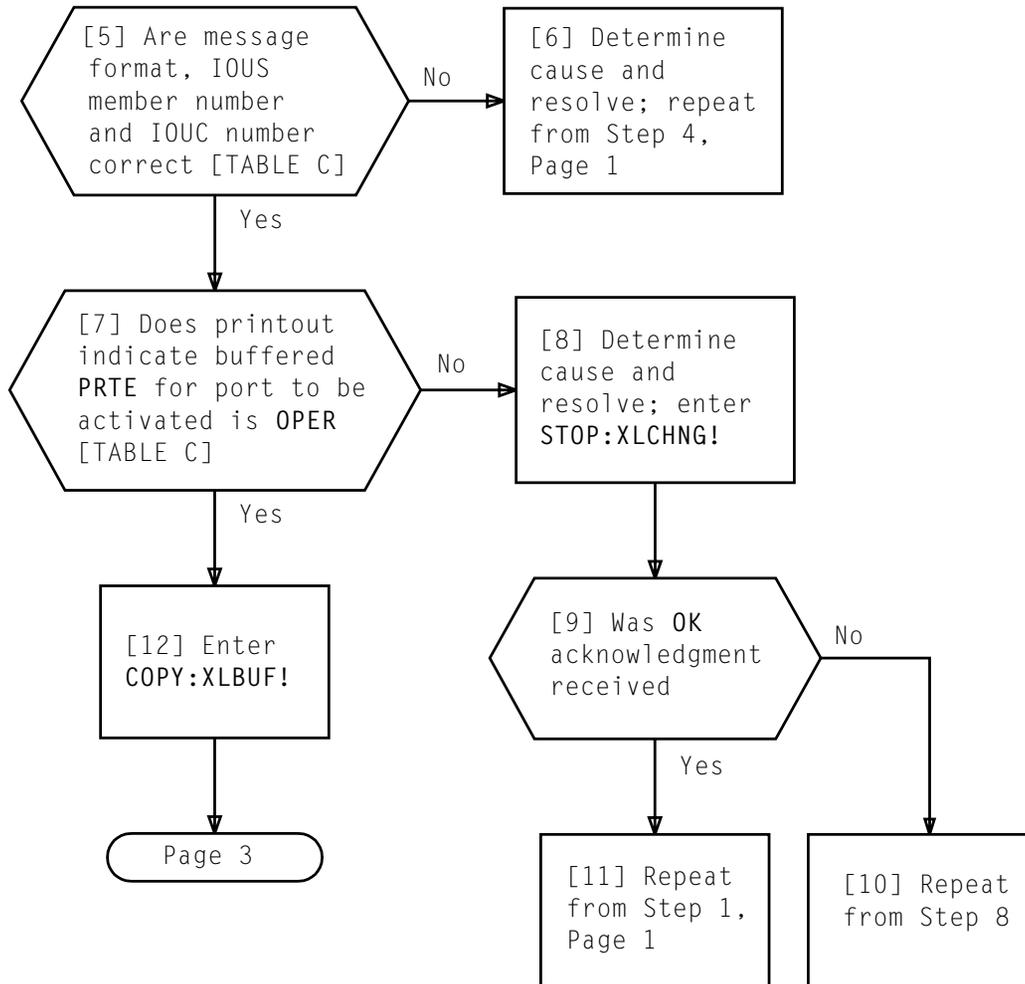


TABLE C	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	c = Port 0 equipage
BUFFERED DATA:	d = Port 1 equipage
.	e = Port 2 equipage
.	
.	
.	
.	
PORT 0,PRTE=c	
.	
.	
.	
PORT 1,PRTE=d	
.	
.	
PORT 2,PRTE=e	
.	
.	

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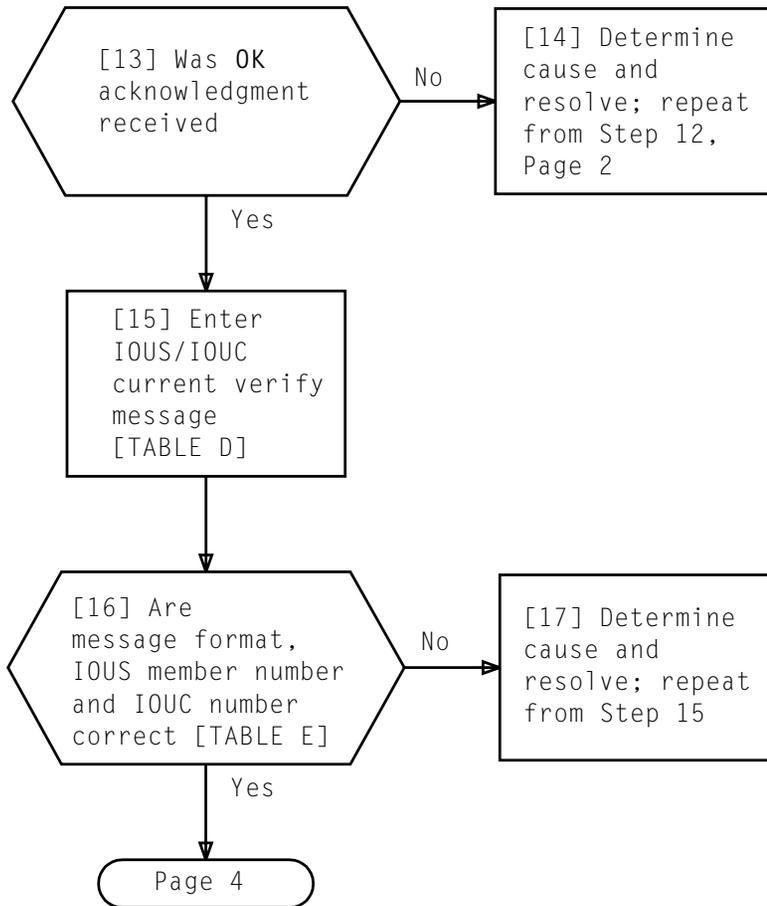


TABLE D
VER:UTMN:IOUS a,IOUC b!
a = Member number of growth associated IOUS
b = Submember number of growth IOUC

TABLE E	
VER:UTMN,IOUS a,IOUC b COMPLETED	a = Member number
TRANSLATOR ADR=	b = Submember number
TRANSLATOR SIZE=43	c = Port 0 equipage
CURRENT DATA:	d = Port 1 equipage
.	e = Port 2 equipage
.	
.	
.	
.	
PORT 0,PRTE=c	
.	
.	
PORT 1,PRTE=d	
.	
.	
PORT 2,PRTE=e	
.	
.	

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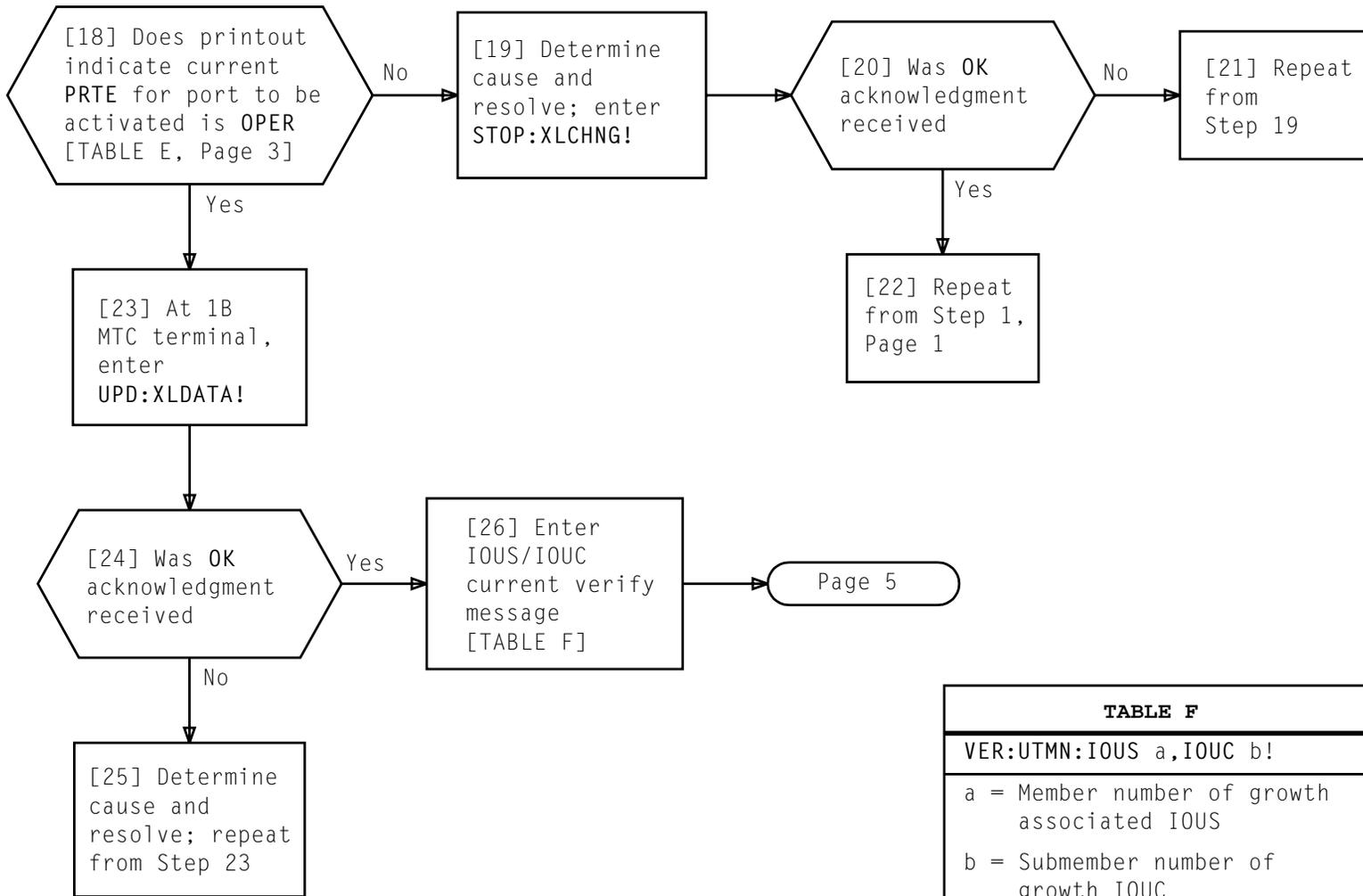
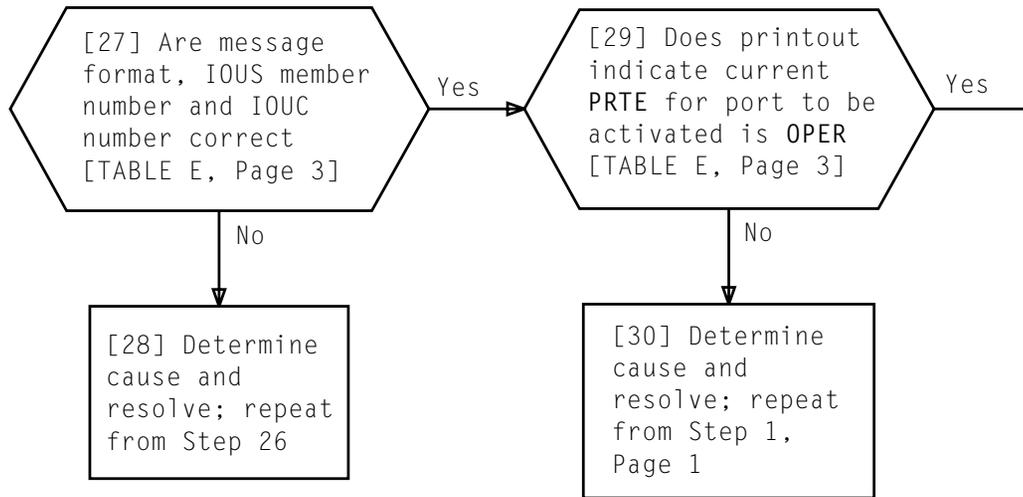


TABLE F	
VER:UTMN:IOUS a,IOUC b!	
a = Member number of growth associated IOUS	
b = Submember number of growth IOUC	

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CHANGE AND VERIFY PORT EQUIPAGE SPECIAL GROWTH TO OPERATIONAL

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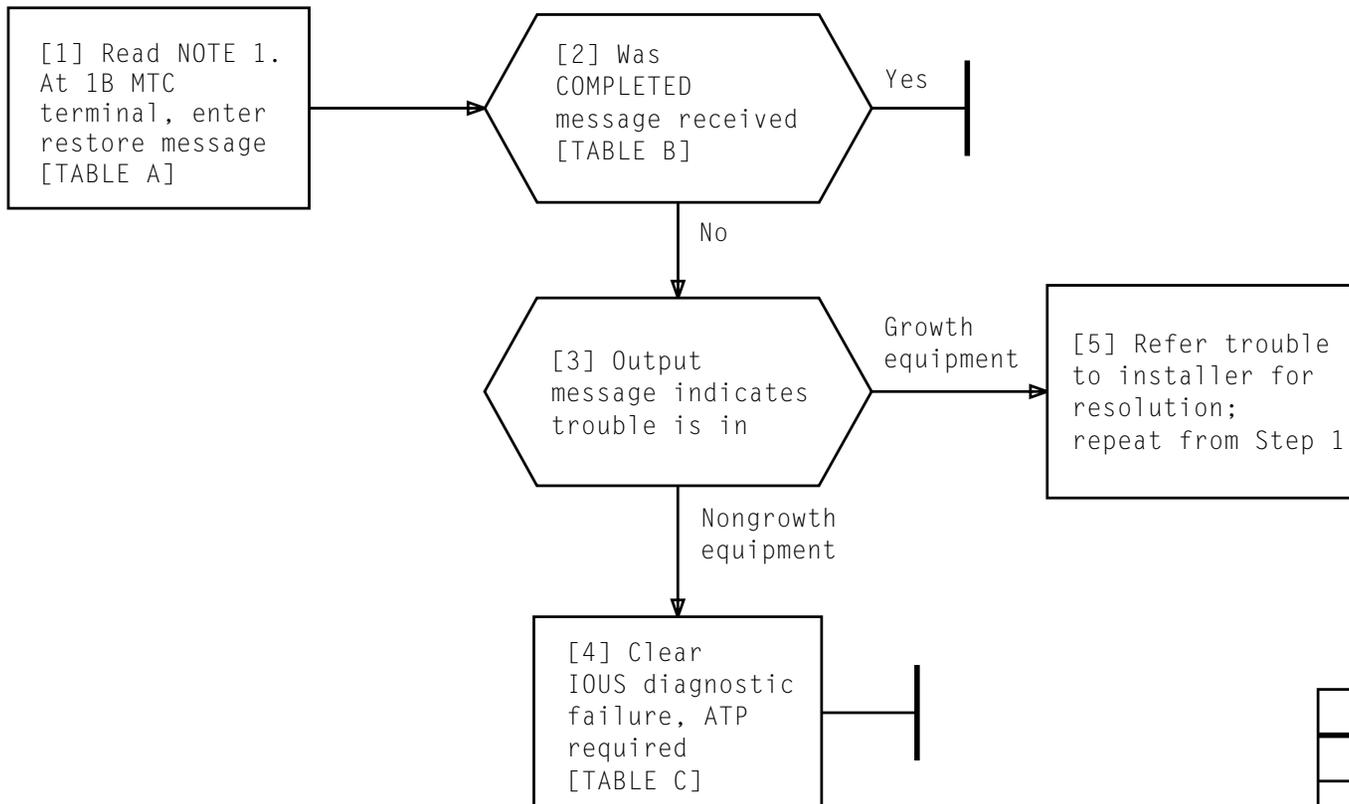
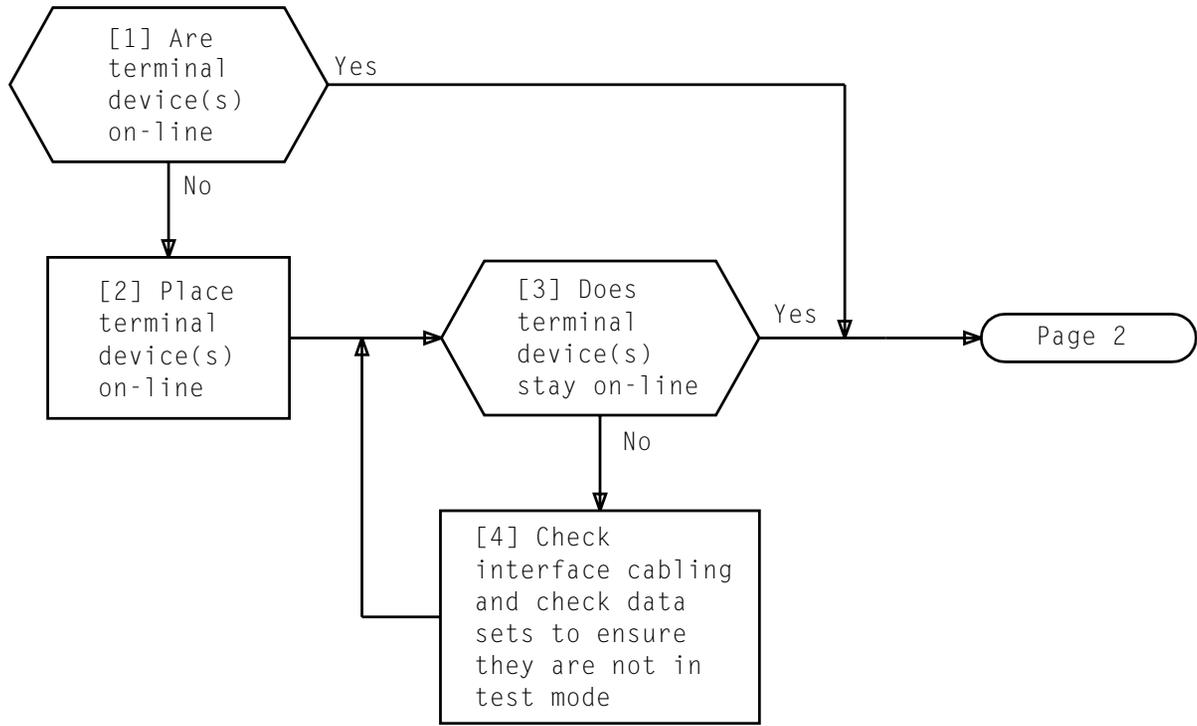


TABLE C	
IO/IOP	TOP
J5A006A	234-351-020
J5A006C	234-351-021
J5A006D	234-351-022

TABLE A
RST:IOUS a,IOMP b!
a = Member number of growth associated unit type
b = Submember number of growth IOMP - 0 or 1

TABLE B
RST:IOUS a,IOMP b COMPLETED
a = Member number of growth associated unit type
b = Submember number of growth IOMP - 0 or 1

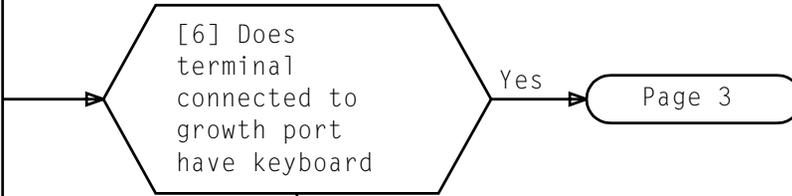
NOTE 1	
Restore message will cause IOUS diagnostic to be run. IOMP will be restored, if ATP	
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TEST TERMINAL DEVICE

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[5] Using TABLE A, determine source I/O channel to be monitored and destination channel to receive monitored message



[7] At any operational terminal of same speed, enter message, using channels determined in Step 5, to monitor any operational channel and to send printout to growth terminal [TABLE B]

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Step 9

TABLE A			
CHANNEL NAME			
BELT1	RCDT1	SREC2	TCA9
BELT2	RCDT2	TCA1	TCA10
ISCC	RCDT3	TCA2	TEC1
MTC	RCMOC	TCA3	TEC2
NMDT1	RCREC	TCA4	TEC3
NMDT2	RCRRT1	TCA5	TEC4
NMDT3	RCRRT2	TCA6	TEC5
NMPR1	SCC1	TCA7	TRF1
NMPR2	SREC1	TCA8	TRF2

TABLE B
MON:CHAN a;CHAN b!
a = Source I/O channel to be monitored
b = Destination I/O channel to receive monitored message

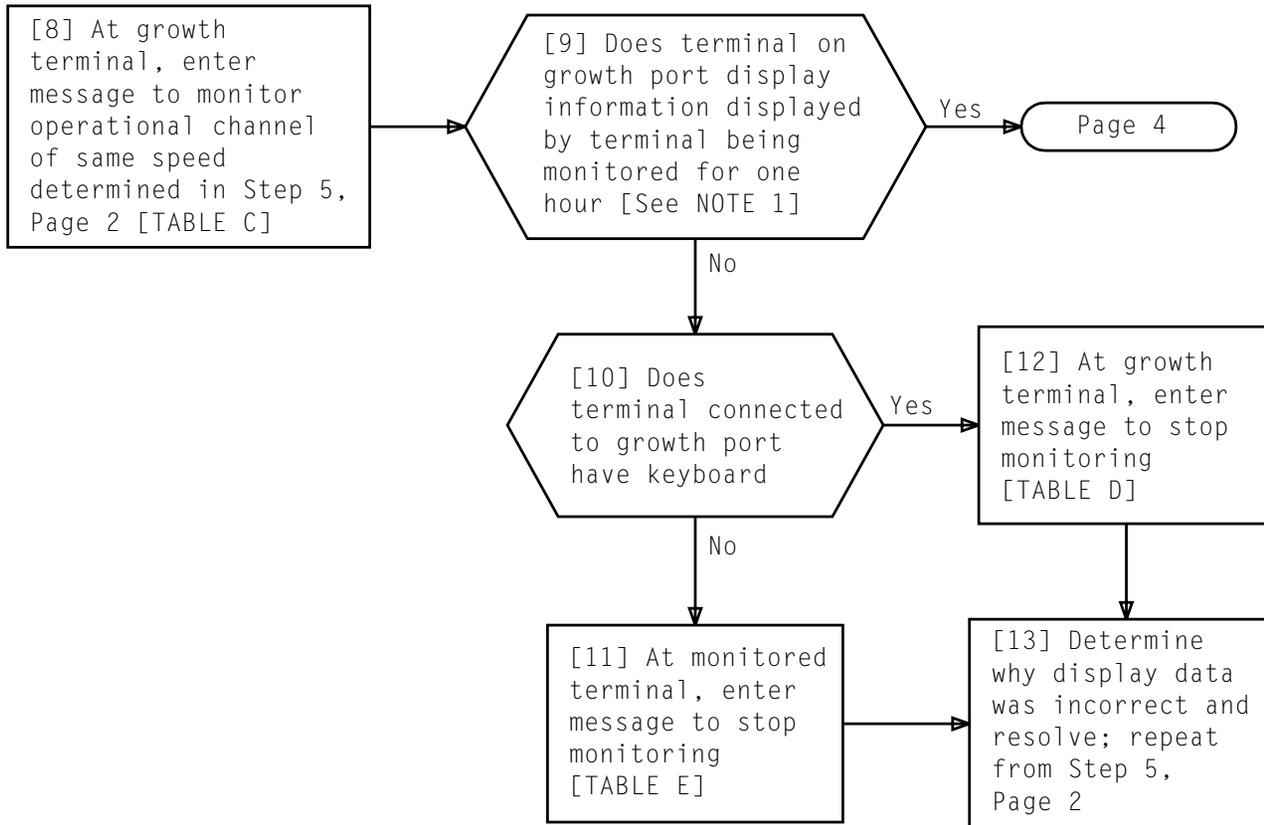


TABLE C
MON:CHAN a!
a = Source I/O channel to be monitored

TABLE D
STOP:MON;CHAN a!
a = Source I/O channel being monitored

TABLE E
STOP:MON;CHAN a;CHAN b!
a = Source I/O channel being monitored
b = Destination I/O channel receiving monitored message

NOTE 1	
If terminal on growth port is different class from terminal being monitored, additional information may be displayed	
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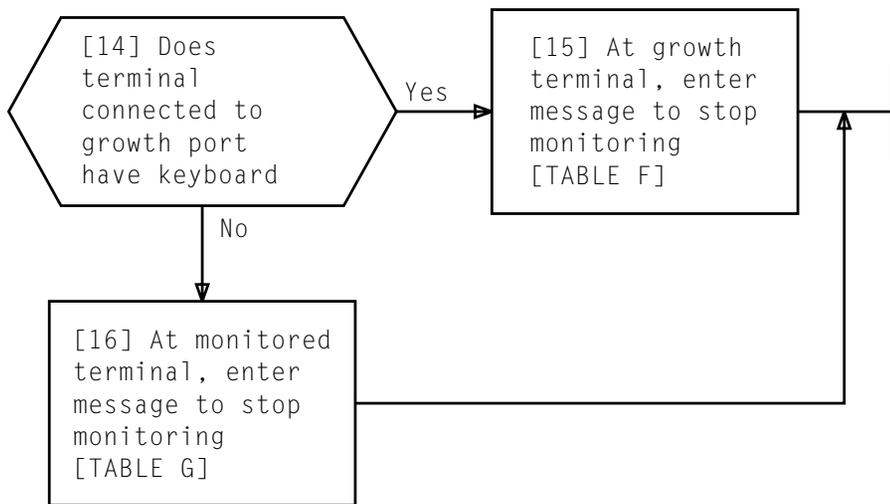


TABLE F
STOP:MON;CHAN a!
a = Source I/O channel being monitored

TABLE G
STOP:MON;CHAN a;CHAN b!
a = Source I/O channel being monitored
b = Destination I/O channel receiving monitored message

SUMMARY

Using verify unit type entry message, call up growth IOUS translator. Compare octal output data for words 1 through 3, 6, and 8 with octal data of TABLE C, Page 3. Using

octal output data and appropriate office record drawing, verify octal data of word 7. If installer determines that translator data is in error, word change(s) may be required

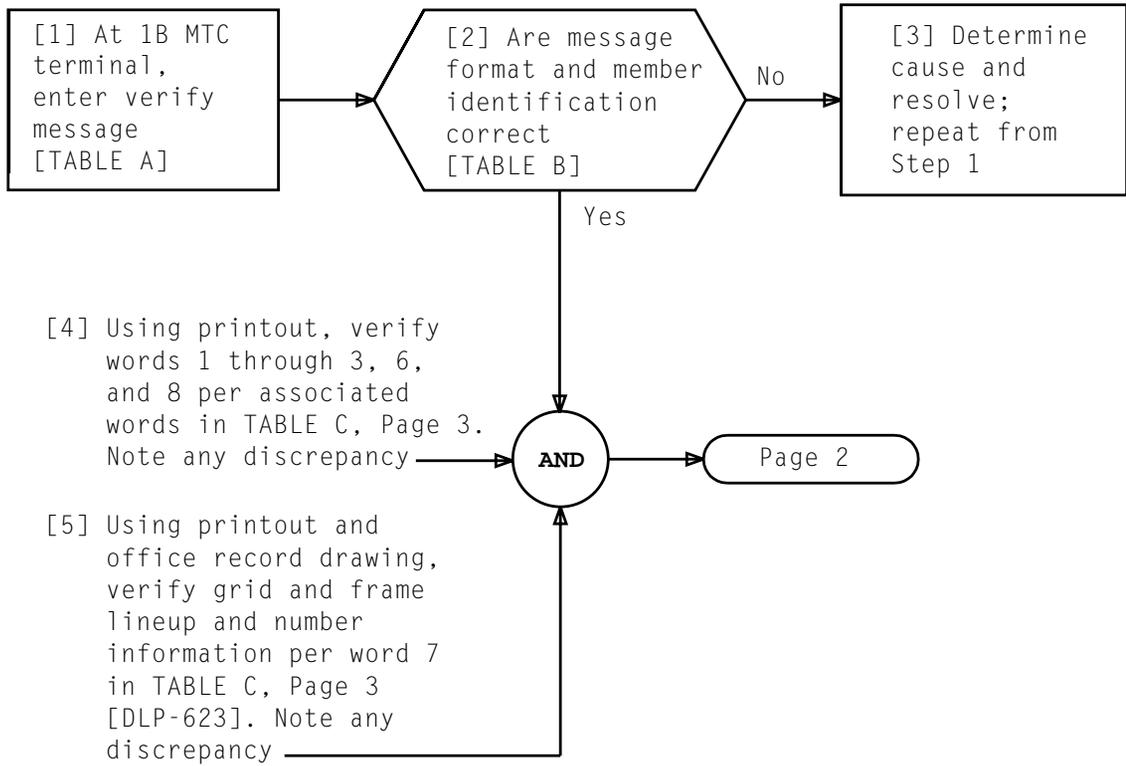
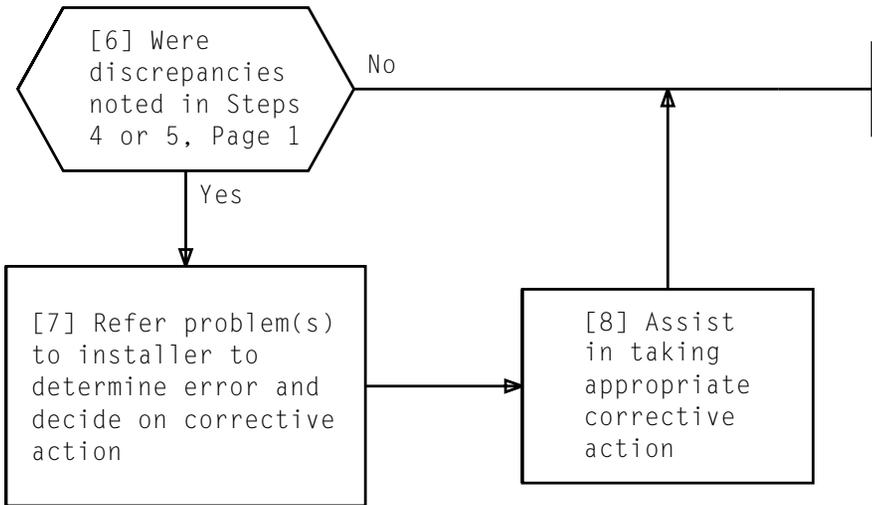


TABLE A
VER:UTMN:IOUS a,ENTRY!
a = Member number of growth IOUS

TABLE B			
VER:UTMN,IOUS a COMPLETED			
TRANSLATOR ADR =			
TRANSLATOR SIZE =			
CURRENT DATA			
(WORD 0)	_____	_____	_____
			(WORD 7)
(WORD 8)	_____	_____	_____
		•	
		•	
		•	
			(WORD 42)
a = Member number of growth IOUS			

VERIFY WORDS 1 THROUGH 3 AND 6 THROUGH 8 IN UNIT TYPE TRANSLATOR FOR IOUS 1, 2, OR 3



VERIFY WORDS 1 THROUGH 3 AND 6 THROUGH 8 IN UNIT
TYPE TRANSLATOR FOR IOUS 1, 2, OR 3

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TABLE C

ENTRY WORD	UT ENTRY DATA AND WORD CONFIGURATION																																																																		
1	<p>translator data octal output →</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 4%;">4</td> <td style="width: 4%;">0</td> <td style="width: 4%;">4</td> <td style="width: 4%;">0</td> <td style="width: 4%;">0</td> <td style="width: 4%;">Y</td> <td style="width: 4%;">Y</td> <td style="width: 4%;">Y</td> <td colspan="9"></td> </tr> <tr> <td style="width: 4%;">23</td> <td style="width: 4%;">22</td> <td style="width: 4%;">21</td> <td style="width: 4%;">20</td> <td style="width: 4%;">19</td> <td style="width: 4%;">18</td> <td style="width: 4%;">17</td> <td style="width: 4%;">16</td> <td style="width: 4%;">15</td> <td style="width: 4%;">14</td> <td style="width: 4%;">13</td> <td style="width: 4%;">12</td> <td style="width: 4%;">11</td> <td style="width: 4%;">10</td> <td style="width: 4%;">9</td> <td style="width: 4%;">8</td> <td style="width: 4%;">7</td> <td style="width: 4%;">6</td> <td style="width: 4%;">5</td> <td style="width: 4%;">4</td> <td style="width: 4%;">3</td> <td style="width: 4%;">2</td> <td style="width: 4%;">1</td> <td style="width: 4%;">0</td> </tr> <tr> <td style="width: 4%;">1</td> <td style="width: 4%;">0</td> <td style="width: 4%;">1</td> <td style="width: 4%;">0</td> <td style="width: 4%;">X</td> <td style="width: 4%;">X</td> <td style="width: 4%;">0</td> <td style="width: 4%;">X</td> <td style="width: 4%;">0</td> <td style="width: 4%;">X</td> <td style="width: 4%;">0</td> <td style="width: 4%;">X</td> </tr> </table> <p style="text-align: center;">CC PULSE POINT</p> <p style="text-align: center;">YYY = 120 for IOUS 1 or 201 for IOUS 2 or 204 for IOUS 3</p>	4	0	4	0	0	Y	Y	Y										23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	X	X	0	X	0	X	0	X	
4	0	4	0	0	Y	Y	Y																																																												
23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																																												
1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	X	X	0	X	0	X	0	X																																												
2	<p>translator data octal output →</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 4%;">4</td> <td style="width: 4%;">0</td> <td style="width: 4%;">0</td> <td style="width: 4%;">0</td> <td style="width: 4%;">0</td> <td style="width: 4%;">Y</td> <td style="width: 4%;">Y</td> <td style="width: 4%;">Y</td> <td style="width: 4%;">Y</td> <td colspan="9"></td> </tr> <tr> <td style="width: 4%;">23</td> <td style="width: 4%;">22</td> <td style="width: 4%;">21</td> <td style="width: 4%;">20</td> <td style="width: 4%;">19</td> <td style="width: 4%;">18</td> <td style="width: 4%;">17</td> <td style="width: 4%;">16</td> <td style="width: 4%;">15</td> <td style="width: 4%;">14</td> <td style="width: 4%;">13</td> <td style="width: 4%;">12</td> <td style="width: 4%;">11</td> <td style="width: 4%;">10</td> <td style="width: 4%;">9</td> <td style="width: 4%;">8</td> <td style="width: 4%;">7</td> <td style="width: 4%;">6</td> <td style="width: 4%;">5</td> <td style="width: 4%;">4</td> <td style="width: 4%;">3</td> <td style="width: 4%;">2</td> <td style="width: 4%;">1</td> <td style="width: 4%;">0</td> </tr> <tr> <td style="width: 4%;">1</td> <td style="width: 4%;">0</td> <td style="width: 4%;">1</td> <td style="width: 4%;">X</td> <td style="width: 4%;">X</td> <td style="width: 4%;">0</td> <td style="width: 4%;">1</td> <td style="width: 4%;">X</td> <td style="width: 4%;">1</td> <td style="width: 4%;">0</td> </tr> </table> <p style="text-align: center;">MEMBER BASE MASTER CONTROL CONSOLE SCAN POINT</p> <p>Master control console indicator →</p> <p style="text-align: center;">YYY = 7616 for IOUS 1 or 7752 for IOUS 2 or 7756 for IOUS 3</p>	4	0	0	0	0	Y	Y	Y	Y										23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	X	X	0	1	X	1	0
4	0	0	0	0	Y	Y	Y	Y																																																											
23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																																												
1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	X	X	0	1	X	1	0																																												

VERIFY WORDS 1 THROUGH 3 AND 6 THROUGH 8 IN UNIT
TYPE TRANSLATOR FOR IOUS 1, 2, OR 3

TABLE C (Contd)

ENTRY WORD	UT ENTRY DATA AND WORD CONFIGURATION																																																								
3	translator data octal output → bit position → binary values →	<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 3.33%;">4</td><td style="width: 3.33%;">0</td><td style="width: 3.33%;">0</td><td style="width: 3.33%;">0</td><td style="width: 3.33%;">Y</td><td style="width: 3.33%;">Y</td><td style="width: 3.33%;">Y</td><td style="width: 3.33%;">Y</td> </tr> </table>												4	0	0	0	Y	Y	Y	Y	<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 2.5%;">23</td><td style="width: 2.5%;">22</td><td style="width: 2.5%;">21</td><td style="width: 2.5%;">20</td><td style="width: 2.5%;">19</td><td style="width: 2.5%;">18</td><td style="width: 2.5%;">17</td><td style="width: 2.5%;">16</td><td style="width: 2.5%;">15</td><td style="width: 2.5%;">14</td><td style="width: 2.5%;">13</td><td style="width: 2.5%;">12</td><td style="width: 2.5%;">11</td><td style="width: 2.5%;">10</td><td style="width: 2.5%;">9</td><td style="width: 2.5%;">8</td><td style="width: 2.5%;">7</td><td style="width: 2.5%;">6</td><td style="width: 2.5%;">5</td><td style="width: 2.5%;">4</td><td style="width: 2.5%;">3</td><td style="width: 2.5%;">2</td><td style="width: 2.5%;">1</td><td style="width: 2.5%;">0</td> </tr> </table>												23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
4	0	0	0	Y	Y	Y	Y																																																		
23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																																		
<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 1.25%;">1</td><td style="width: 1.25%;">0</td><td style="width: 1.25%;">1</td><td style="width: 1.25%;">1</td><td style="width: 1.25%;">1</td><td style="width: 1.25%;">1</td><td style="width: 1.25%;">1</td><td style="width: 1.25%;">X</td><td style="width: 1.25%;">X</td><td style="width: 1.25%;">0</td><td style="width: 1.25%;">1</td><td style="width: 1.25%;">0</td><td style="width: 1.25%;">0</td><td style="width: 1.25%;">0</td> </tr> </table>		1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	X	X	0	1	0	0	0	BUS BASE MASTER CONTROL CONSOLE SCAN POINT																														
1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	X	X	0	1	0	0	0																																	
YY = 7610 for IOUS 1 or 7750 for IOUS 2 or 3																																																									
6	translator data octal output → bit position → binary values →	<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 3.33%;">0</td><td style="width: 3.33%;">0</td><td style="width: 3.33%;">0</td><td style="width: 3.33%;">0</td><td style="width: 3.33%;">0</td><td style="width: 3.33%;">Y</td><td style="width: 3.33%;">Y</td><td style="width: 3.33%;">Y</td> </tr> </table>												0	0	0	0	0	Y	Y	Y	<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 2.5%;">23</td><td style="width: 2.5%;">22</td><td style="width: 2.5%;">21</td><td style="width: 2.5%;">20</td><td style="width: 2.5%;">19</td><td style="width: 2.5%;">18</td><td style="width: 2.5%;">17</td><td style="width: 2.5%;">16</td><td style="width: 2.5%;">15</td><td style="width: 2.5%;">14</td><td style="width: 2.5%;">13</td><td style="width: 2.5%;">12</td><td style="width: 2.5%;">11</td><td style="width: 2.5%;">10</td><td style="width: 2.5%;">9</td><td style="width: 2.5%;">8</td><td style="width: 2.5%;">7</td><td style="width: 2.5%;">6</td><td style="width: 2.5%;">5</td><td style="width: 2.5%;">4</td><td style="width: 2.5%;">3</td><td style="width: 2.5%;">2</td><td style="width: 2.5%;">1</td><td style="width: 2.5%;">0</td> </tr> </table>												23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
0	0	0	0	0	Y	Y	Y																																																		
23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																																		
<table border="1" style="width: 100%; text-align: center;"> <tr> <td style="width: 1.25%;">0</td><td style="width: 1.25%;">X</td><td style="width: 1.25%;">0</td><td style="width: 1.25%;">0</td><td style="width: 1.25%;">0</td><td style="width: 1.25%;">0</td><td style="width: 1.25%;">0</td><td style="width: 1.25%;">0</td><td style="width: 1.25%;">X</td><td style="width: 1.25%;">X</td> </tr> </table>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	X	0	0	0	0	0	0	X	X	FRAME NUMBER						NEXT MEMBER NUMBER																								
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	X	0	0	0	0	0	0	X	X																																	
YYY = 000 for IOUS 1 or 203 for IOUS 2 or 202 for IOUS 3																																																									

VERIFY WORDS 1 THROUGH 3 AND 6 THROUGH 8 IN UNIT
 TYPE TRANSLATOR FOR IOUS 1, 2, OR 3

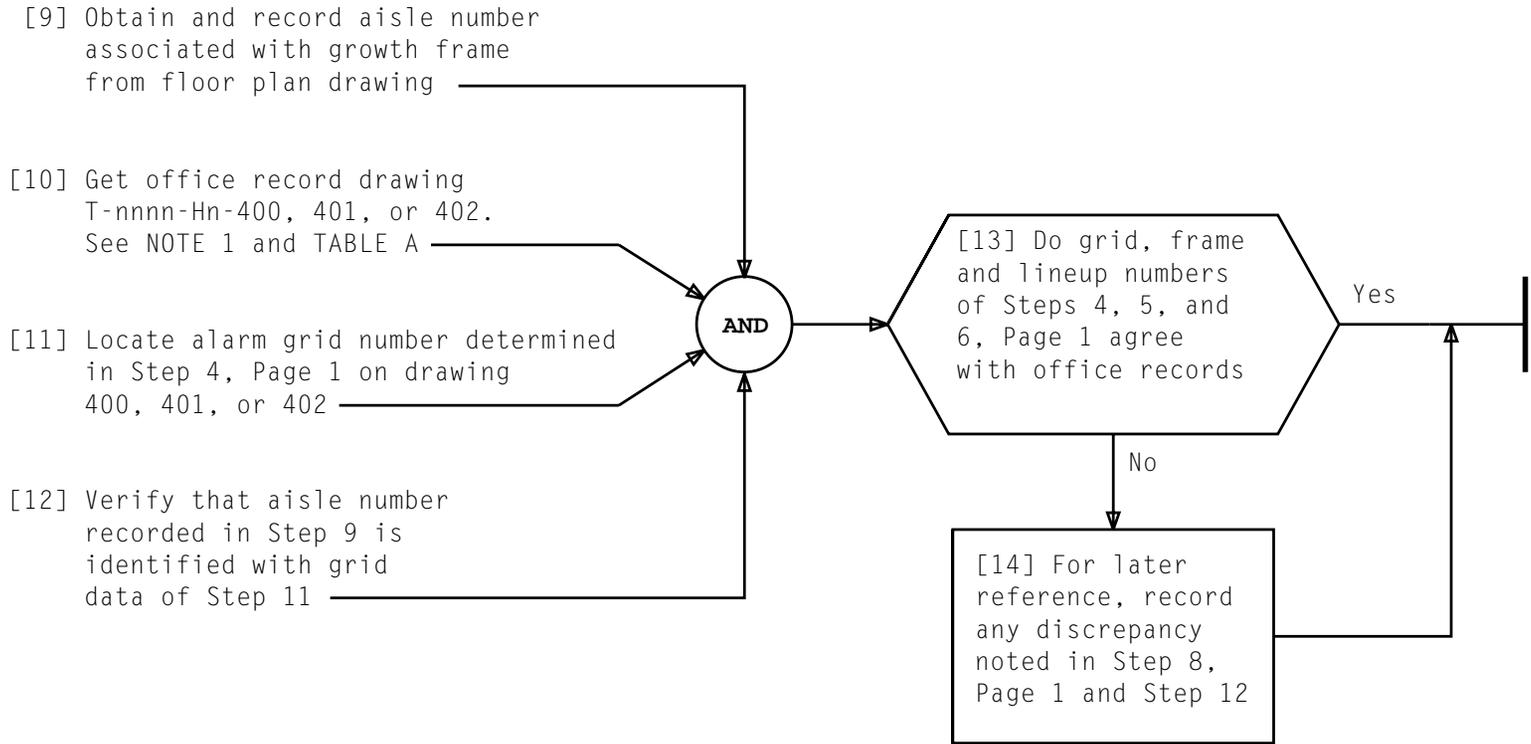


TABLE A	
ALARM GRIDS	DRAWING NUMBER
1 through 5	T-nnnn-Hn-400
6 through 10	T-nnnn-Hn-401
11 through 15	T-nnnn-Hn-402

NOTE 1 n = Office unique drawing identification number	
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VERIFY ALARM GRID, LINEUP AND FRAME ASSIGNMENT

SUMMARY

Using verify unit type entry message, call up growth IOUS translator. Compare octal output data for words 1, 6, and 8 with octal data of TABLE C, Page 3. Using octal output

data and appropriate office record drawing, verify octal data of words 2 through 5 and 7. If installer determines that translator data is in error, word change(s) may be required

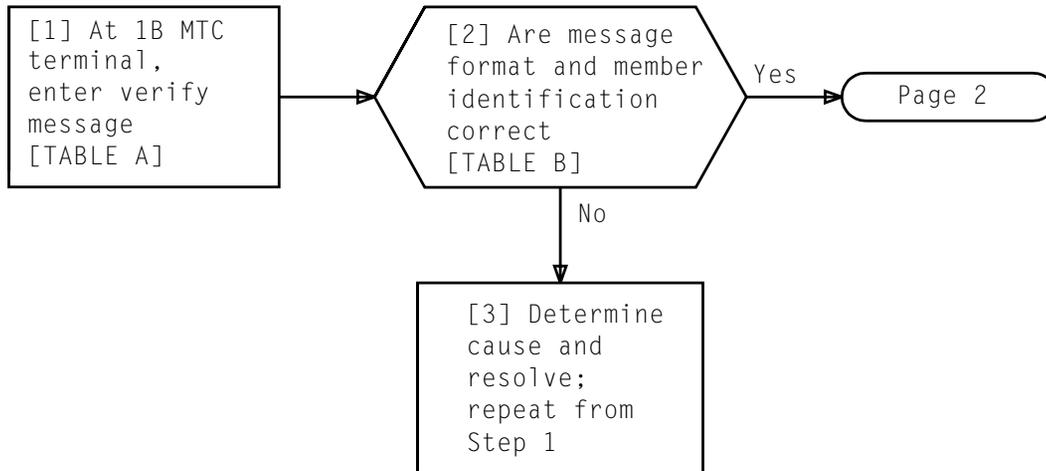


TABLE A
VER:UTMN:IOUS a,ENTRY!
a = Member number of growth IOUS

TABLE B
VER:UTMN,IOUS a COMPLETED
TRANSLATOR ADR =
TRANSLATOR SIZE =
CURRENT DATA
(WORD 0) _____
_____ (WORD 7)
(WORD 8) _____

•
•
•
_____ (WORD 42)
a = Member number of growth IOUS

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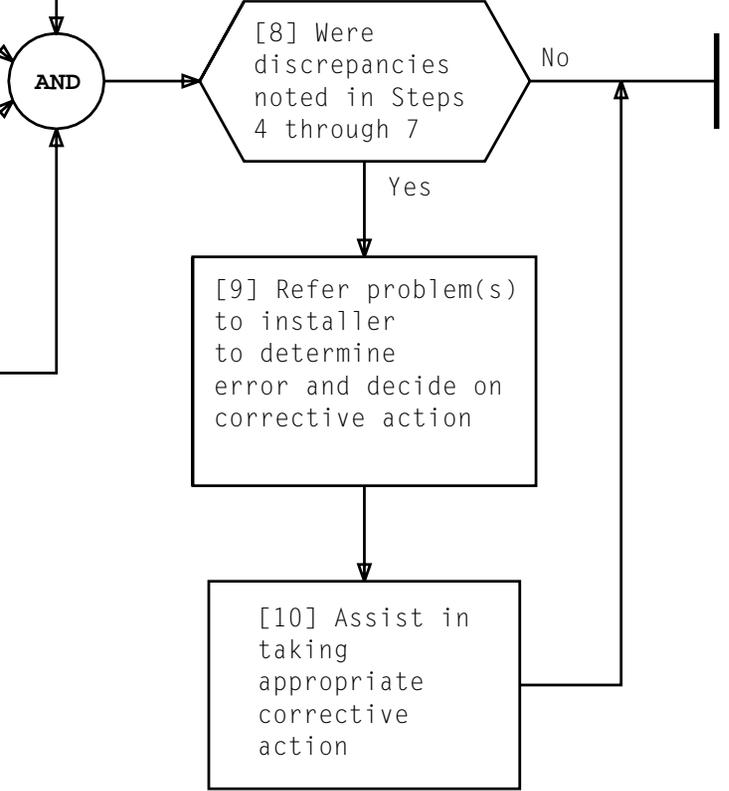
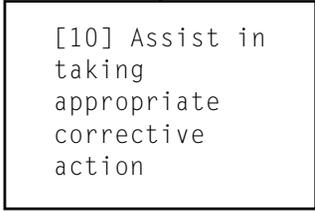
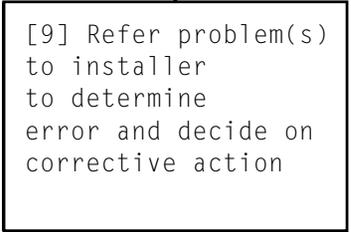
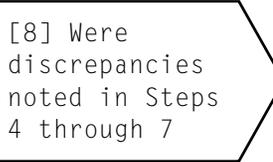
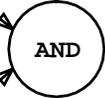
[4] Using printout, verify words 1, 6, and 8 per associated word in TABLE C, Page 3. Note any discrepancy

Using printout and office record drawings:

[5] Verify scan point assignments for growth IOUS per words 2 and 3 in TABLE C, Page 3 [DLP-625]. Note any discrepancy

[6] Verify SD point assignments for growth IOUS per words 4 and 5 in TABLE C, Page 3 [DLP-626]. Note any discrepancy

[7] Verify grid and frame lineup and number information per word 7 in TABLE C, Page 3 [DLP-623]. Note any discrepancy



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VERIFY WORDS 1 THROUGH 8 IN UNIT TYPE TRANSLATOR FOR IOUS 4 TO 7

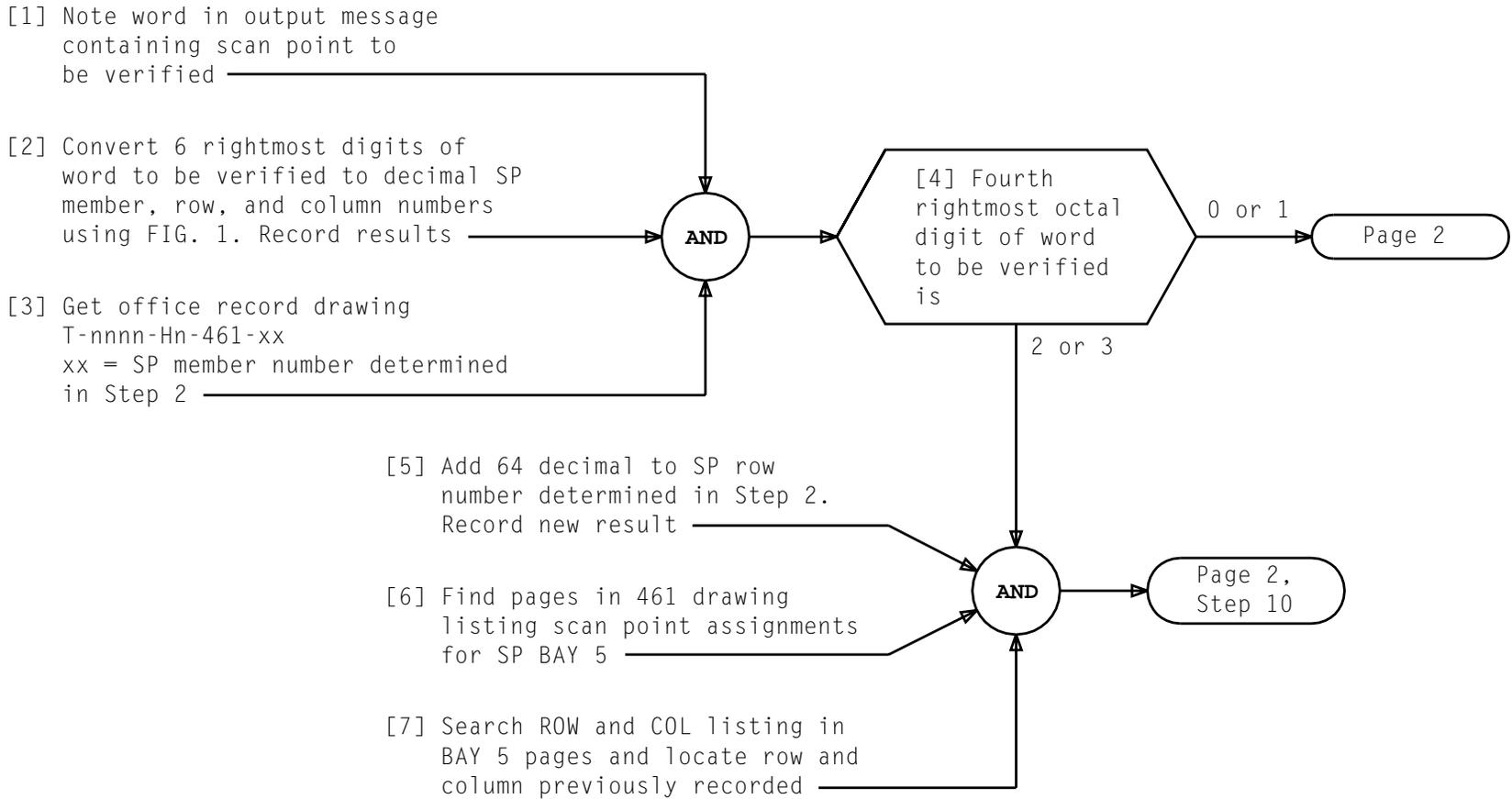
TABLE C

ENTRY WORD	UT ENTRY DATA AND WORD CONFIGURATION																						
1	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">translator data</td> <td></td> </tr> <tr> <td>octal output →</td> <td style="text-align: center;">4 0 4 0 0 Y Y Y</td> </tr> <tr> <td>bit position →</td> <td style="text-align: center;">23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0</td> </tr> <tr> <td>binary values →</td> <td style="text-align: center;">1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 X X 0 0 X 0 X 0 X</td> </tr> <tr> <td></td> <td style="text-align: center; border: 1px solid black;">CC PULSE POINT</td> </tr> <tr> <td></td> <td style="text-align: center;"> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;"><u>IOUS NO.</u></td> <td style="text-align: center;"><u>YYY</u></td> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">220</td> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">401</td> </tr> <tr> <td style="text-align: center;">6</td> <td style="text-align: center;">404</td> </tr> <tr> <td style="text-align: center;">7</td> <td style="text-align: center;">420</td> </tr> </table> </td> </tr> </table>	translator data		octal output →	4 0 4 0 0 Y Y Y	bit position →	23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0	binary values →	1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 X X 0 0 X 0 X 0 X		CC PULSE POINT		<table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;"><u>IOUS NO.</u></td> <td style="text-align: center;"><u>YYY</u></td> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">220</td> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">401</td> </tr> <tr> <td style="text-align: center;">6</td> <td style="text-align: center;">404</td> </tr> <tr> <td style="text-align: center;">7</td> <td style="text-align: center;">420</td> </tr> </table>	<u>IOUS NO.</u>	<u>YYY</u>	4	220	5	401	6	404	7	420
translator data																							
octal output →	4 0 4 0 0 Y Y Y																						
bit position →	23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0																						
binary values →	1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 X X 0 0 X 0 X 0 X																						
	CC PULSE POINT																						
	<table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;"><u>IOUS NO.</u></td> <td style="text-align: center;"><u>YYY</u></td> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">220</td> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">401</td> </tr> <tr> <td style="text-align: center;">6</td> <td style="text-align: center;">404</td> </tr> <tr> <td style="text-align: center;">7</td> <td style="text-align: center;">420</td> </tr> </table>	<u>IOUS NO.</u>	<u>YYY</u>	4	220	5	401	6	404	7	420												
<u>IOUS NO.</u>	<u>YYY</u>																						
4	220																						
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VERIFY WORDS 1 THROUGH 8 IN UNIT TYPE TRANSLATOR FOR IOUS 4 TO 7

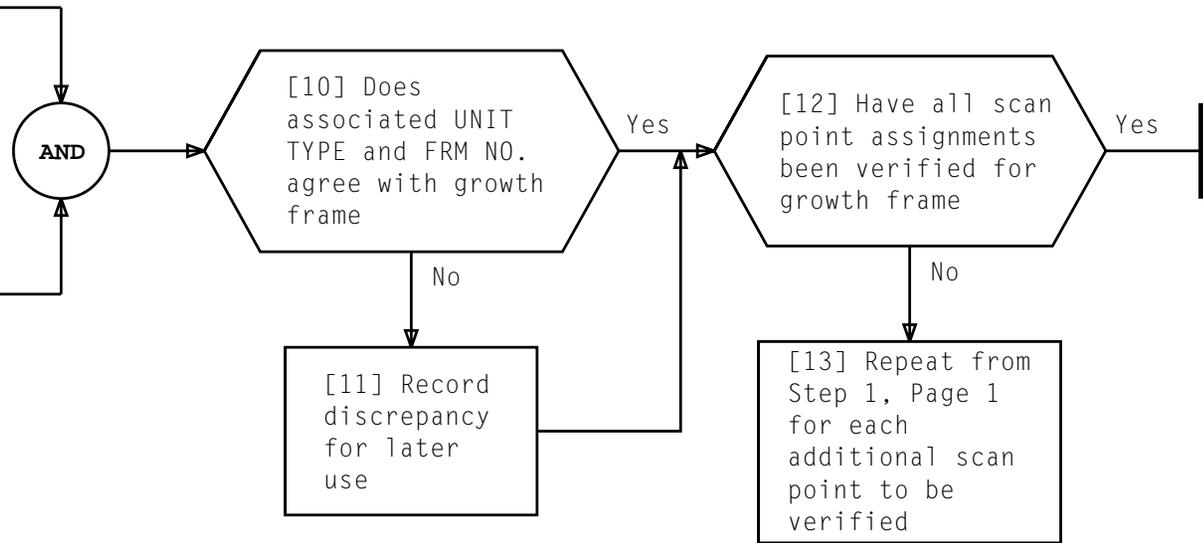


entry data																			
octal output			Y		Y			Y			Y			Y			Y		
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binary values	0	0	x	x	x	x	x	0	x	x	x	x	x	x	x	x	x	x	x
	SP MEMBER NUMBER				L OR R MATRIX		SP ROW NUMBER				SP COLUMN NUMBER								

FIG. 1 - Entry Data Word Layout

[8] Find pages in 461 drawing listing scan point assignments for SP BAY 0

[9] Search ROW and COL listing in BAY 0 pages and locate row and column previously recorded



[1] Note word in output message containing SD or pulse point to be verified

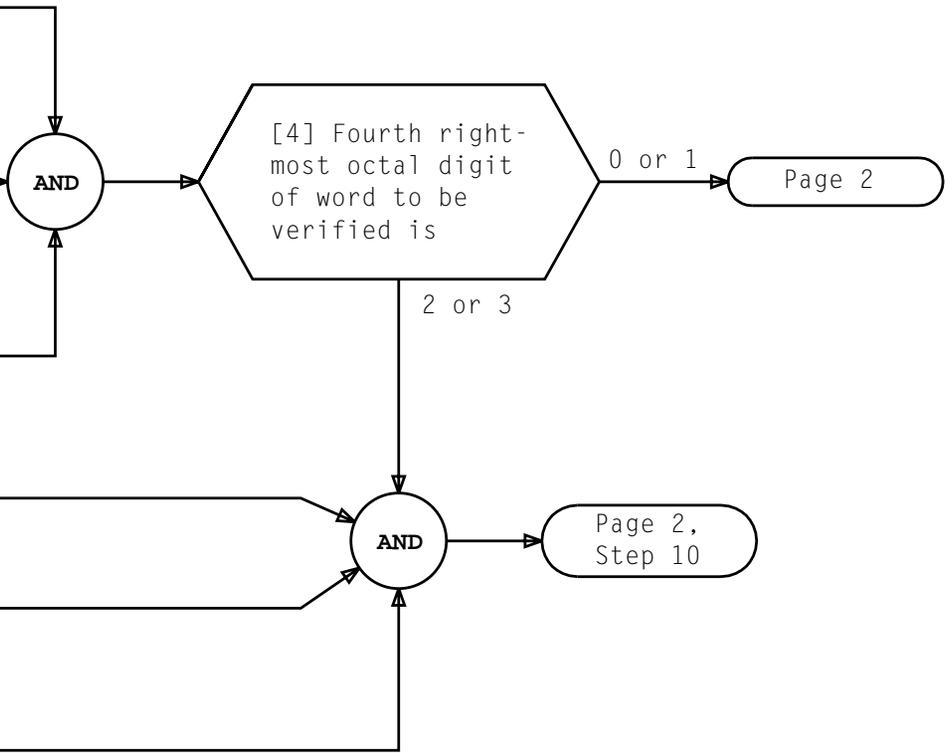
[2] Convert 6 rightmost digits of word to be verified to decimal SP member, row, and column numbers using FIG. 1. Record results

[3] Get office record drawing T-nnnn-Hn-462-xx.
xx = SP member number determined in Step 2

[5] Add 64 decimal to SP row number determined in Step 2. Record new result

[6] Find pages in 462 drawing listing SD or PP assignments for SP BAY 5

[7] Search ROW and COL listing in BAY 5 pages and locate row and column previously recorded



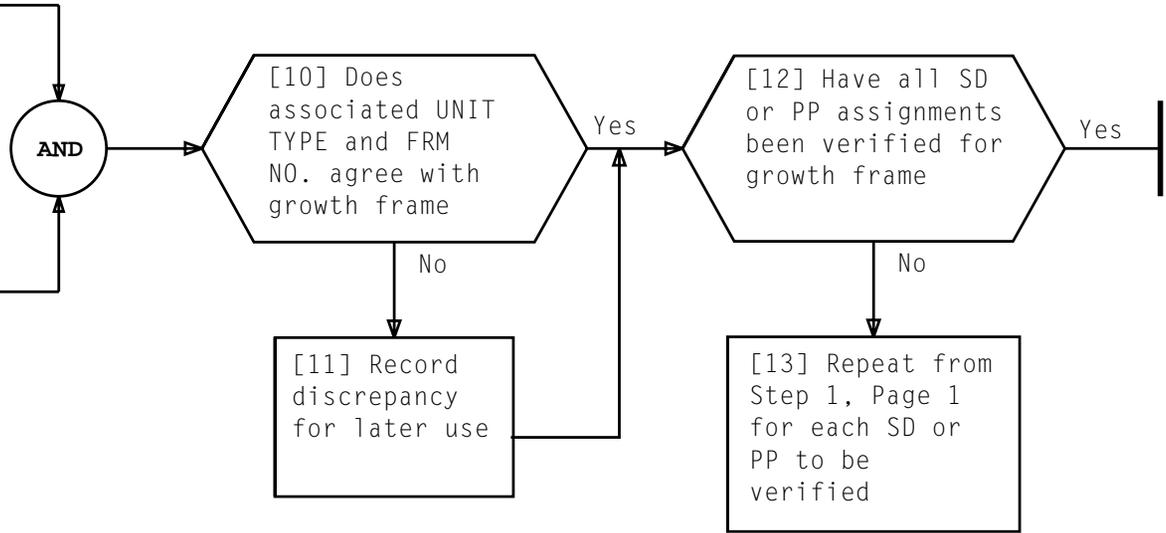
entry data																				
octal output			Y			Y			Y			Y			Y			Y		
bit position	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
binary values	x	x	x	x	x	x	x	0	x	x	x	x	x	x	x	x	x	x	x	
	SP MEMBER NUMBER						L OR R MATRIX	SP ROW NUMBER						SP COLUMN NUMBER						

FIG. 1 - Entry Data Word Layout

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[8] Find pages in 462 drawing listing
SD or PP assignments for SP BAY 0

[9] Search ROW and COL listing in BAY 0
pages and locate row & column
previously recorded



SUMMARY

Enter member type (MT) current verify and verify for proper value. If MT is in error, enter MT change message for growth unit type. Verify buffered data, enter copy message,

verify current data, and then enter update message. If after each verify, MT value is not per appropriate drawing, enter stop message and start change from beginning

[1] See NOTE 1. Obtain LDI level from installer and convert to MT value from functional ODA listing or TG-4 and record

[2] At 1B MTC terminal, enter MT current verify message [TABLE A]

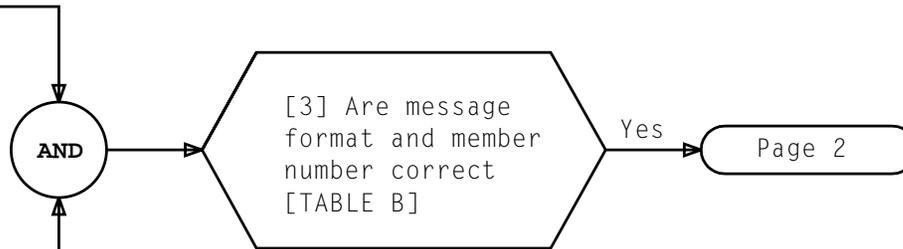


TABLE A
VER:UTMN:a b,MT!
a = Unit type – CS, IOUS, or PS
b = Member number of growth unit

TABLE B
VER:UTMN,a b COMPLETED
TRANSLATOR ADR =
TRANSLATOR SIZE =
CURRENT DATA
MT c
a = Growth unit type
b = Member number of growth unit
c = MT value to be used as old data in change message

[4] Determine cause and resolve; repeat from Step 2

NOTE 1
If data cannot be determined from office record drawing, consult with office engineer

CHANGE AND VERIFY MEMBER TYPE FOR GROWTH UNIT TYPE

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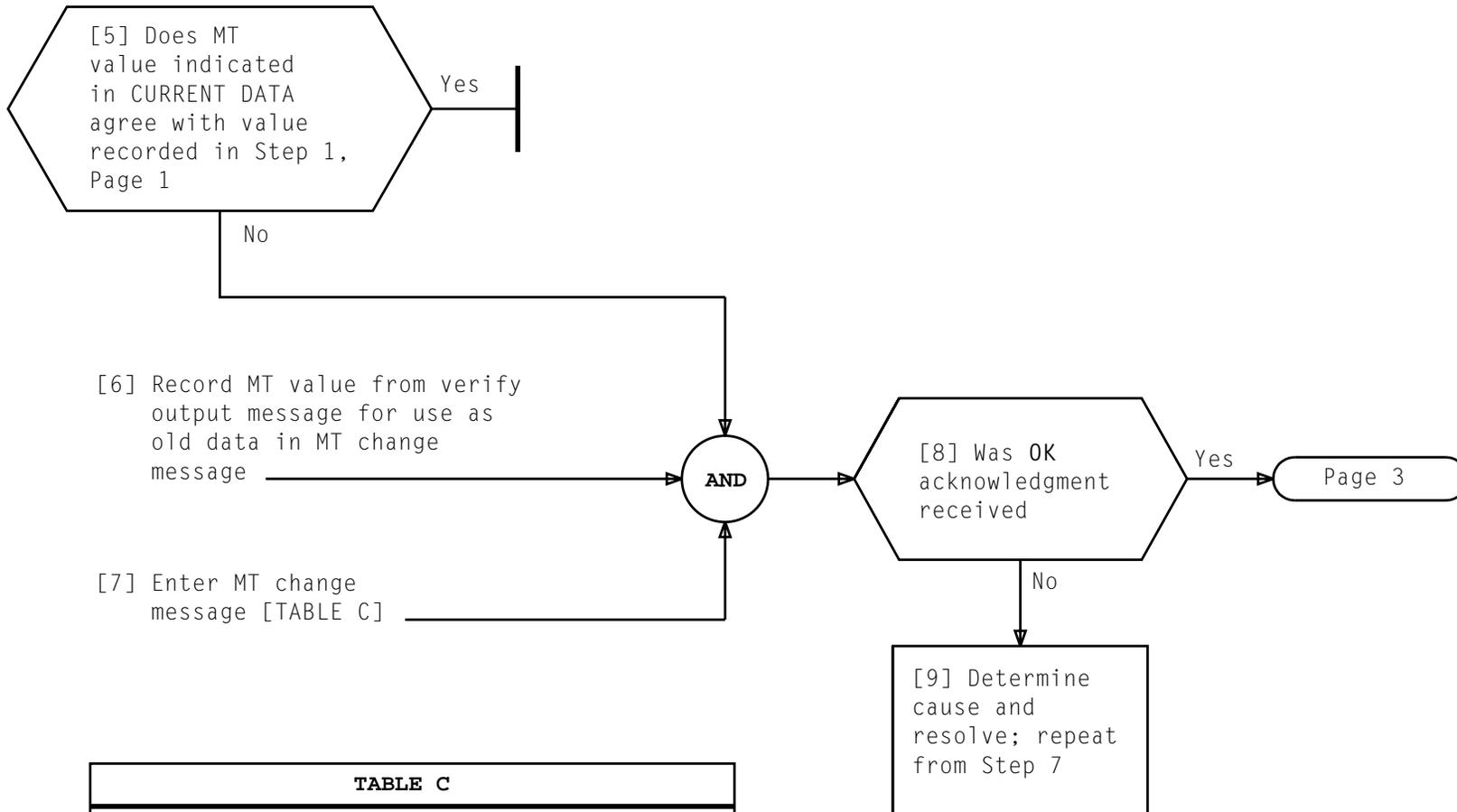


TABLE C
IN:XLBUF:a b,MT (c,d)!
a = Unit type – CS, IOUS, or PS
b = Member number of growth unit
c = Old data recorded from MT current verify
d = New data recorded from office record drawing

CHANGE AND VERIFY MEMBER TYPE FOR GROWTH UNIT TYPE

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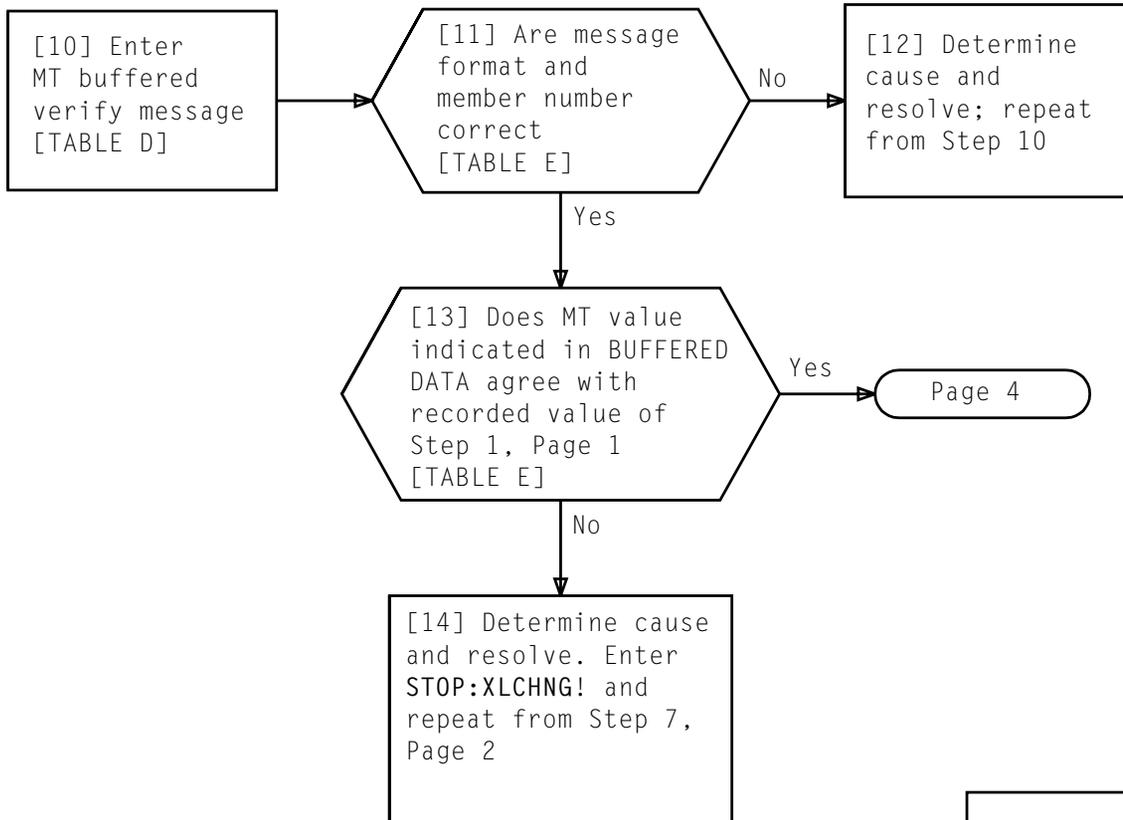


TABLE D
VER:UTMN;BUF:a b,MT!
a = Unit type – CS, IOUS, or PS b = Member number of growth unit

TABLE E
VER:UTMN,a b COMPLETED TRANSLATOR ADR = TRANSLATOR SIZE = BUFFERED DATA MT c
a = Growth unit type b = Member number of growth unit c = MT value of growth unit

**CHANGE AND VERIFY MEMBER TYPE
FOR GROWTH UNIT TYPE**

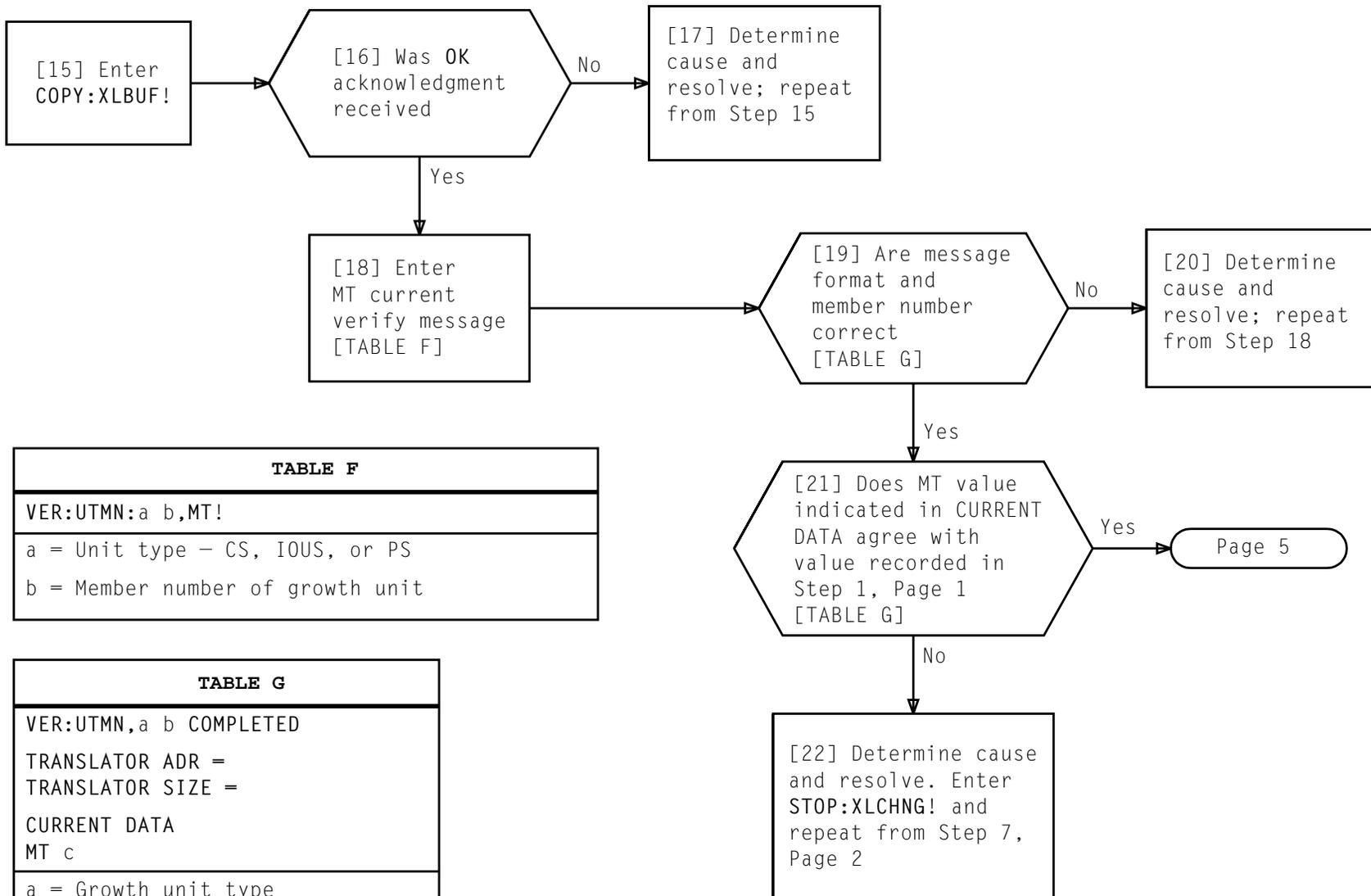


TABLE F
VER:UTMN:a b,MT!
a = Unit type – CS, IOUS, or PS
b = Member number of growth unit

TABLE G
VER:UTMN,a b COMPLETED
TRANSLATOR ADR =
TRANSLATOR SIZE =
CURRENT DATA
MT c
a = Growth unit type
b = Member number of growth unit
c = MT value of growth unit

**CHANGE AND VERIFY MEMBER TYPE
FOR GROWTH UNIT TYPE**

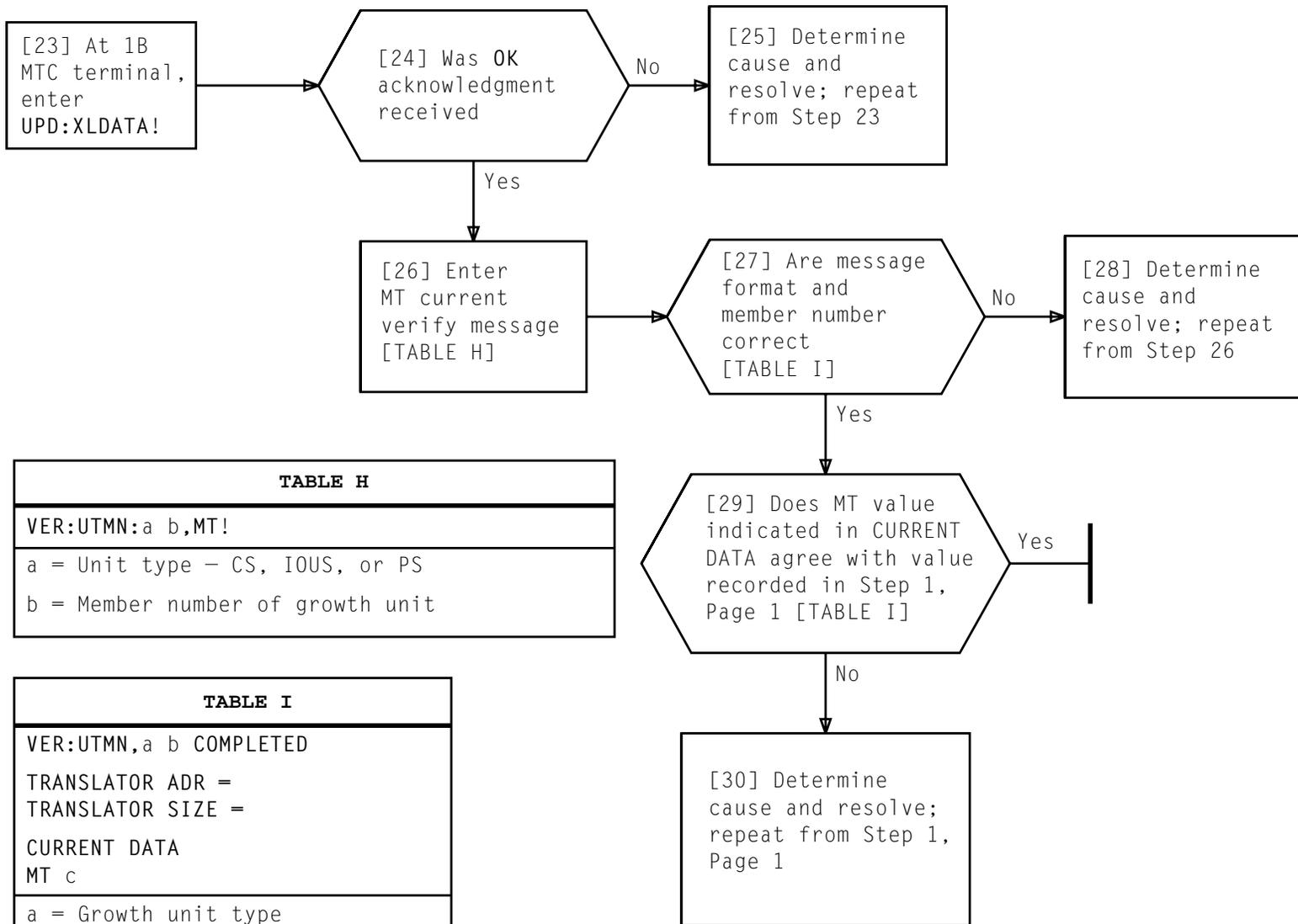
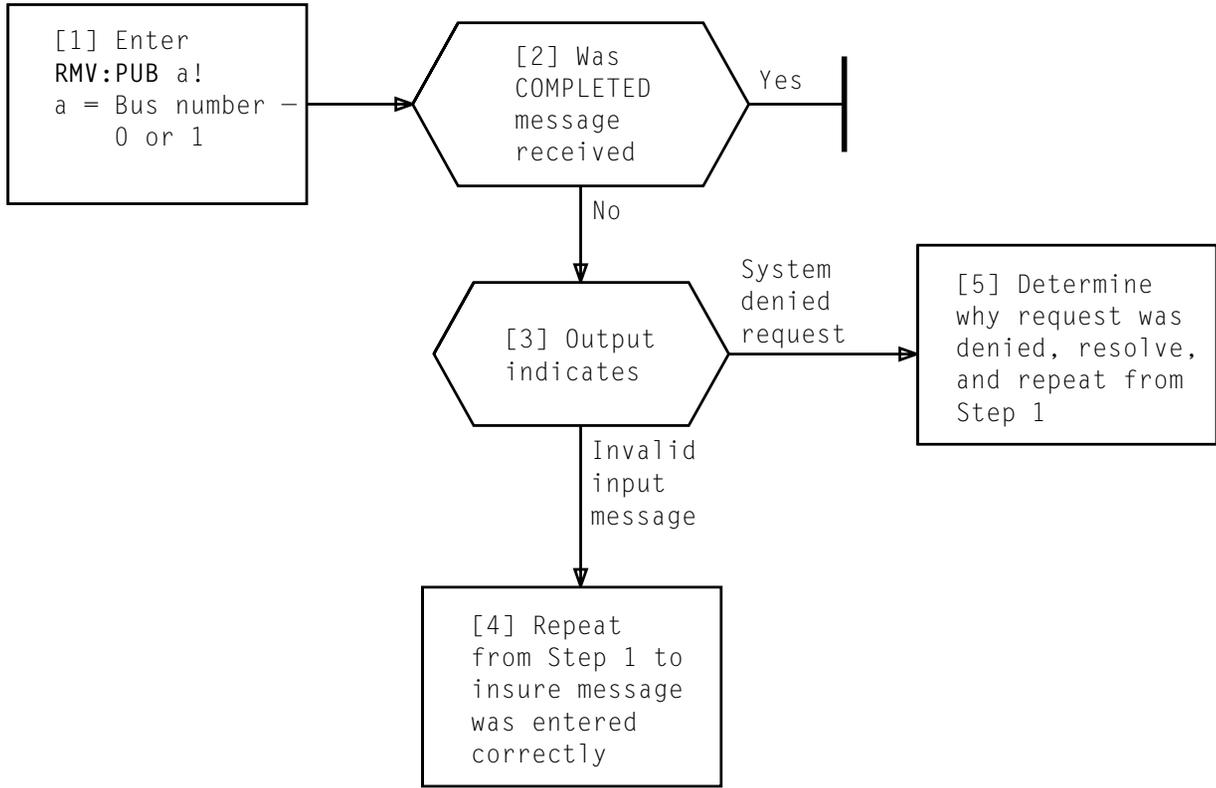


TABLE H
VER:UTMN:a b,MT!
a = Unit type – CS, IOUS, or PS
b = Member number of growth unit

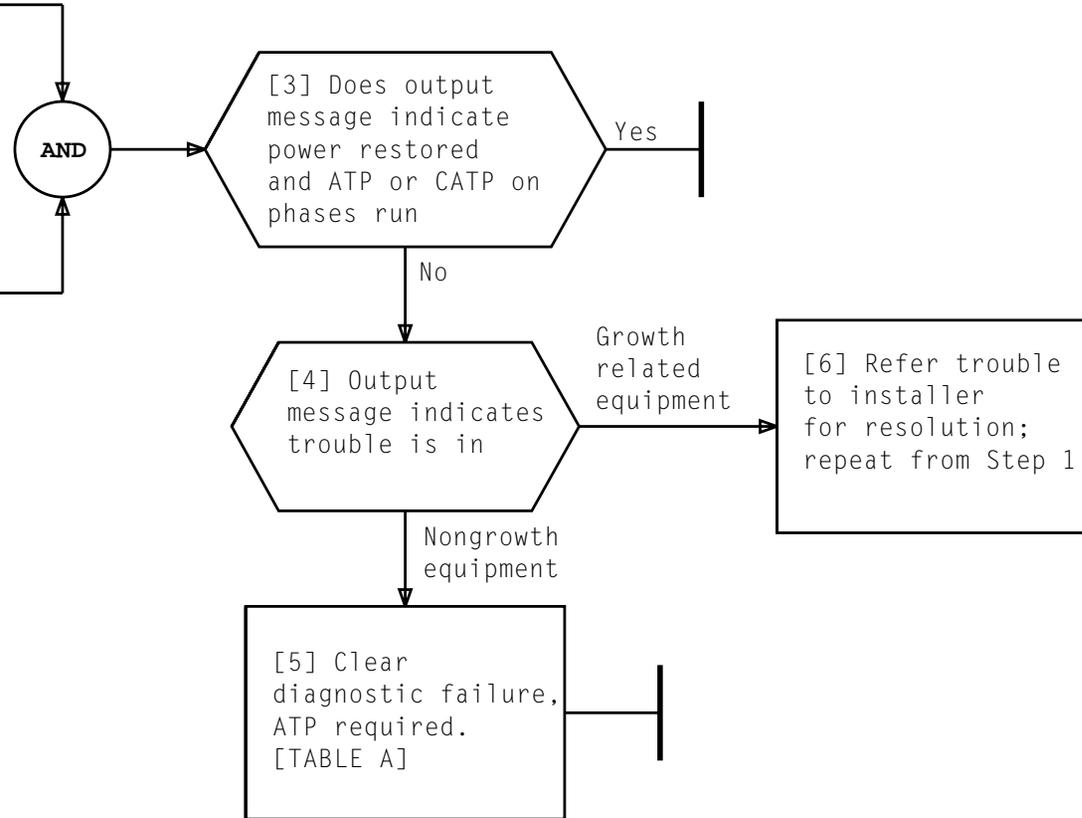
TABLE I
VER:UTMN,a b COMPLETED
TRANSLATOR ADR =
TRANSLATOR SIZE =
CURRENT DATA
MT c
a = Growth unit type
b = Member number of growth unit
c = MT value of growth unit

CHANGE AND VERIFY MEMBER TYPE FOR GROWTH UNIT TYPE



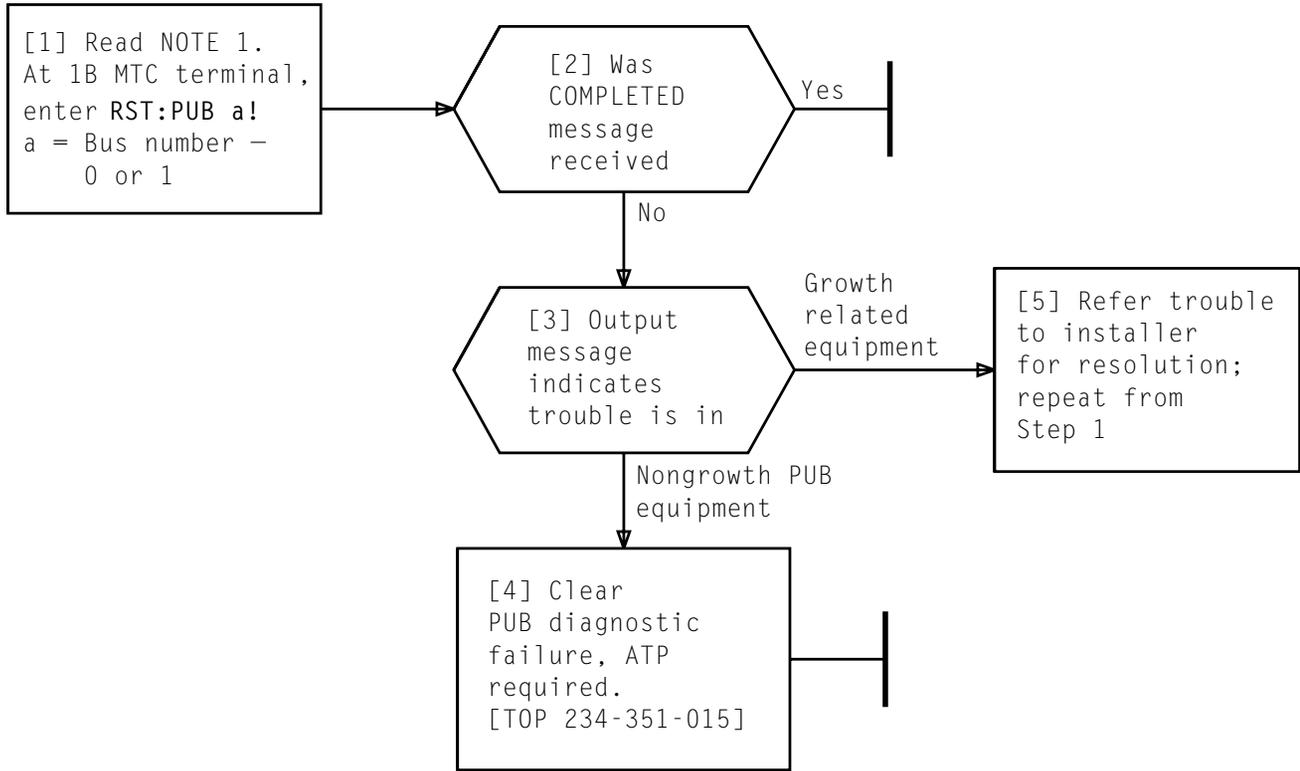
[1] At power switch, depress
ON switch

[2] See NOTE 1. At power
switch, operate **ROS** switch
to normal position



UNIT TYPE		TROUBLE CLEARING VOLUME
ADS		234-351-010
I/O/ IOP	J5A006A	234-351-020
	J5A006C	234-351-021
	J5A006D	234-351-022
PUB		234-351-015
CS, PS		234-351-004
CC		234-351-004

NOTE 1	
Operation of ROS switch will cause diagnostic to be run	
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NOTE 1	
Restore message will cause a PUB diagnostic to be run. PUB will be restored if ATP	
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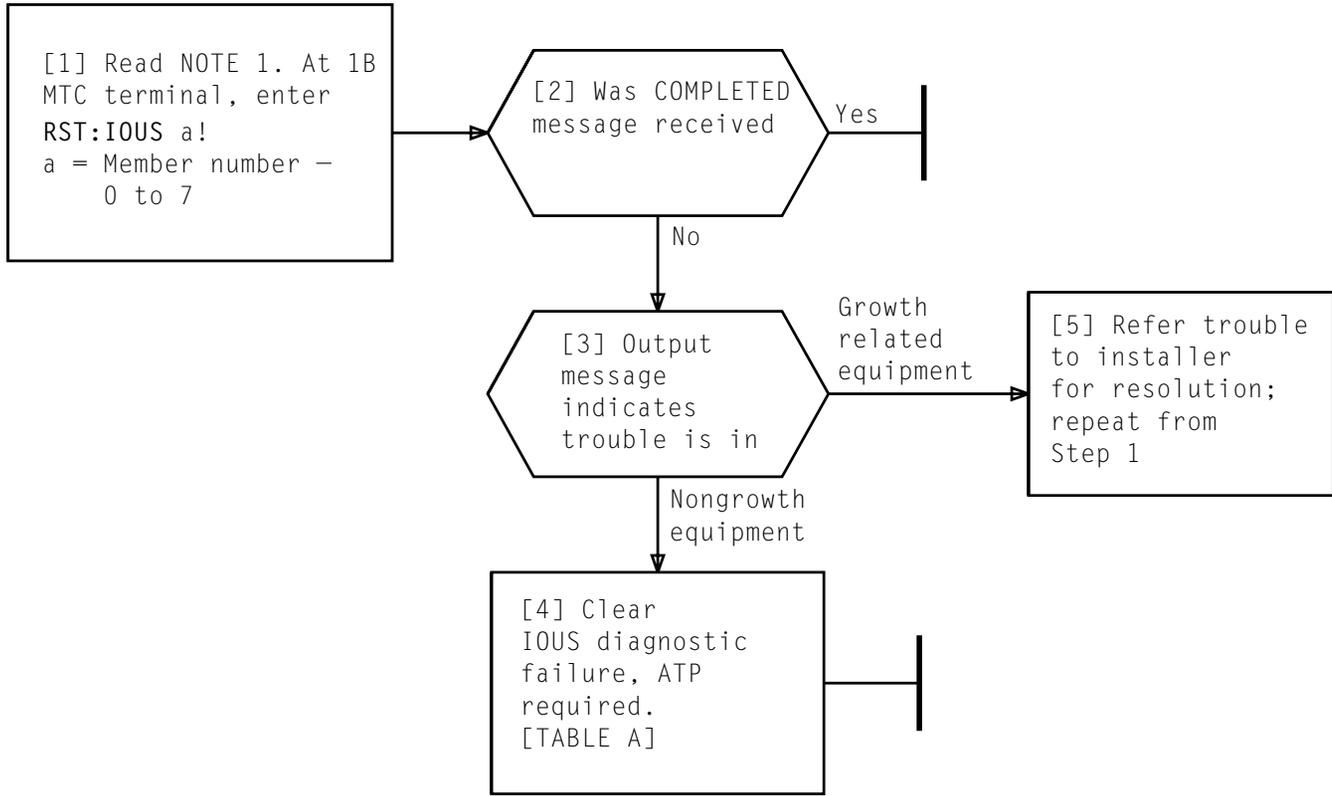


TABLE A	
IO/IOP	TOP
J5A006A	234-351-020
J5A006C	234-351-021
J5A006D	234-351-022

NOTE 1
Restore message will cause IOUS diagnostic to be run. IOUS will be restored, if ATP or CATP

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<p>SUMMARY</p> <p>Enter SMHG current verify and verify for proper value. If SMHG is in error, enter SMHG change message for growth unit type. Verify buffered data, enter copy message,</p>	<p>verify current data, and then enter update message. If after each verify, SMHG value is not per appropriate drawing, enter stop message and start change from beginning</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

[1] Obtain SMHG for growth unit type from functional ODA listing or TG-4 and record

[2] At 1B MTC terminal, enter SMHG current verify message [TABLE A]

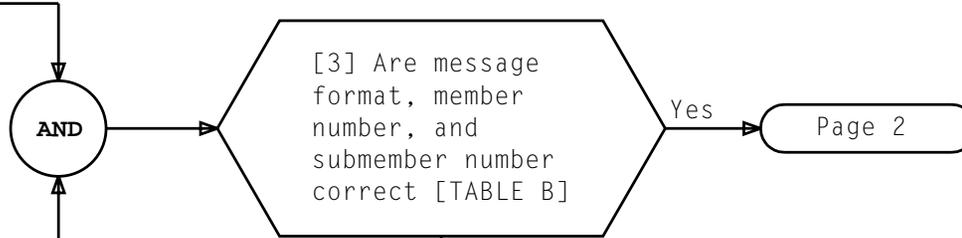


TABLE A
VER:UTMN:IOUS a,SUBMEM b,SMHG!
a = Member number of growth associated IOUS b = Submember number of growth IOMP

TABLE B
VER:UTMN,IOUS a,SUBMEM b COMPLETED
TRANSLATOR ADR= TRANSLATOR SIZE=
CURRENT DATA SMHG c
a = Member number of growth associated IOUS b = Submember number of growth IOMP - 0 or 1 c = SMHG value to be used as old data in change message

CHANGE AND VERIFY SUBMEMBER HARDWARE GENERATION FOR GROWTH IOMP

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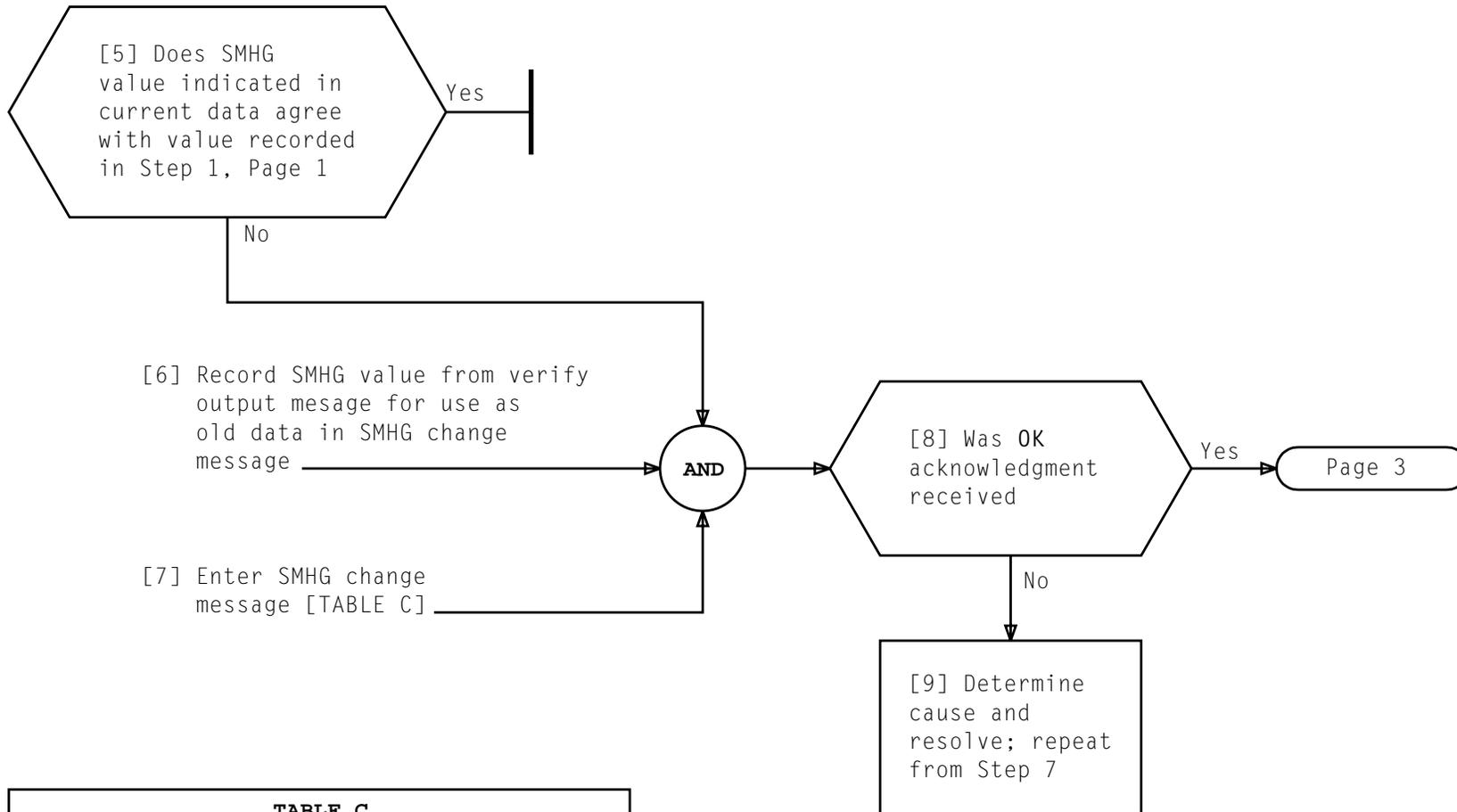


TABLE C
IN:XLBUF:IOUS a,SUBMEM b,SMHG (c,d)!
a = Member number of growth associated IOUS
b = Submember number of growth IOMP - 0 or 1
c = Old data recorded from SMHG current verify
d = New data recorded from office record drawing

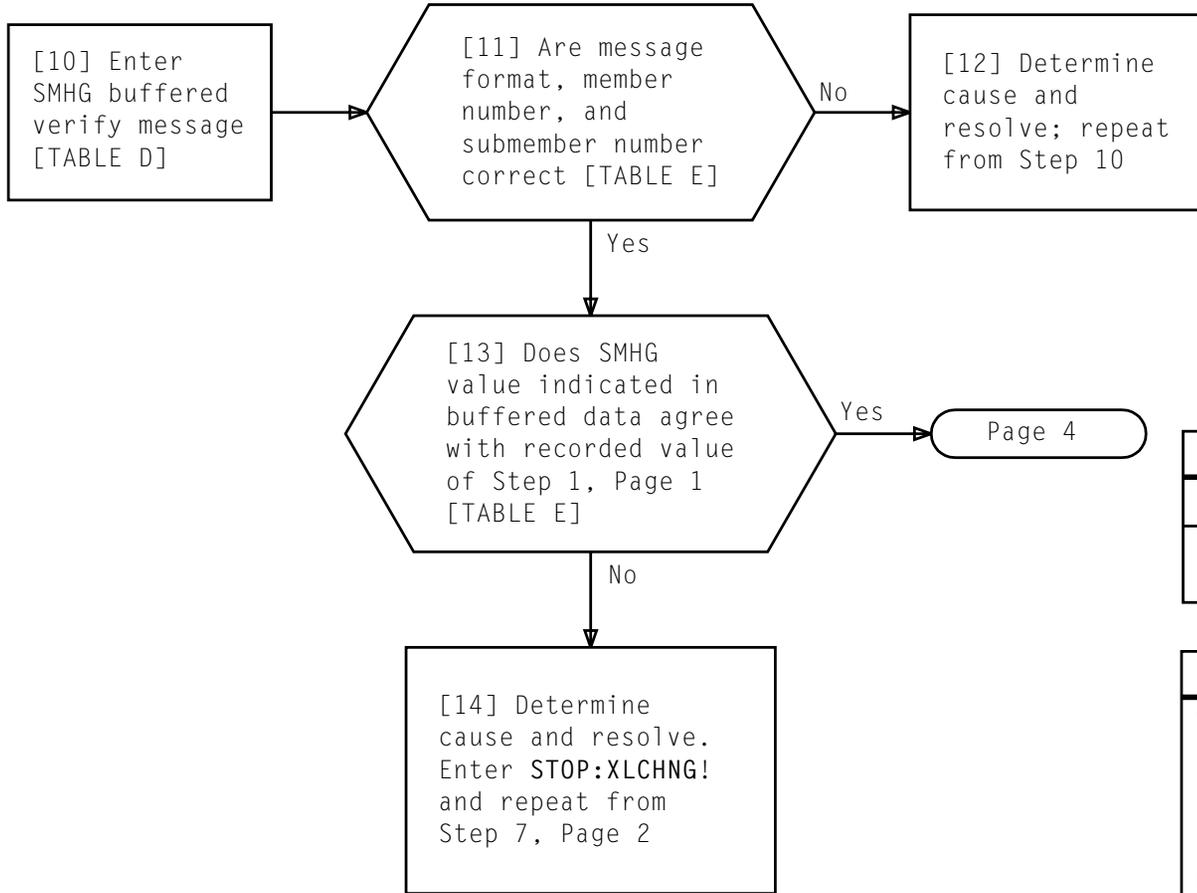


TABLE D
VER:UTMN;BUF:IOUS a,SUBMEM b,SMHG!
a = Member number of growth associated IOUS b = Submember number of growth IOMP - 0 or 1

TABLE E
VER:UTMN,IOUS a,SUBMEM b COMPLETED
TRANSLATOR ADR= TRANSLATOR SIZE=
BUFFERED DATA SMHG c
a = Member number of growth associated IOUS b = Submember number of growth IOMP - 0 or 1 c = SMHG value of growth IOMP

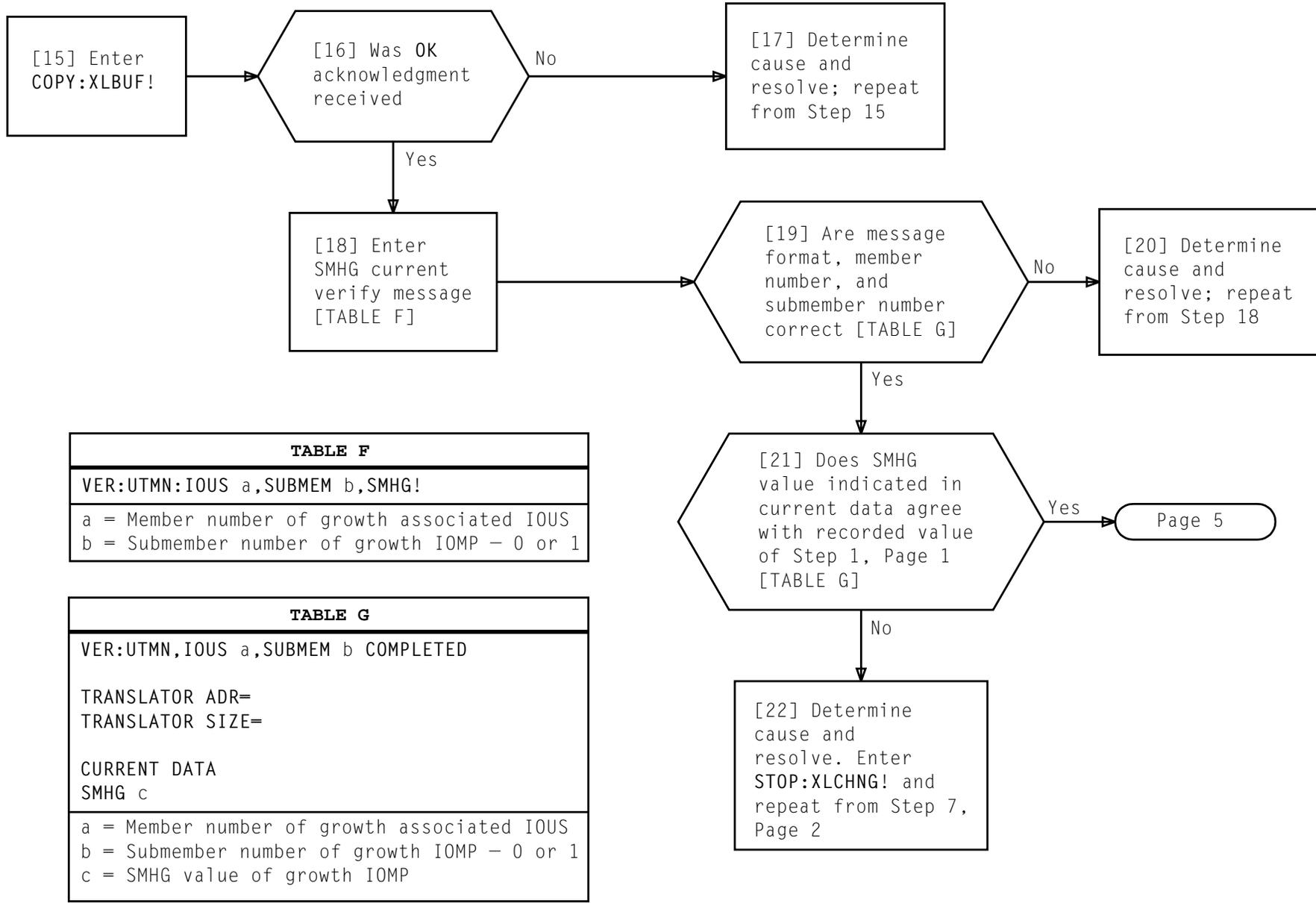


TABLE F
VER:UTMN:IOUS a,SUBMEM b,SMHG!
a = Member number of growth associated IOUS b = Submember number of growth IOMP - 0 or 1

TABLE G
VER:UTMN,IOUS a,SUBMEM b COMPLETED
TRANSLATOR ADR= TRANSLATOR SIZE=
CURRENT DATA SMHG c
a = Member number of growth associated IOUS b = Submember number of growth IOMP - 0 or 1 c = SMHG value of growth IOMP

CHANGE AND VERIFY SUBMEMBER HARDWARE GENERATION FOR GROWTH IOMP

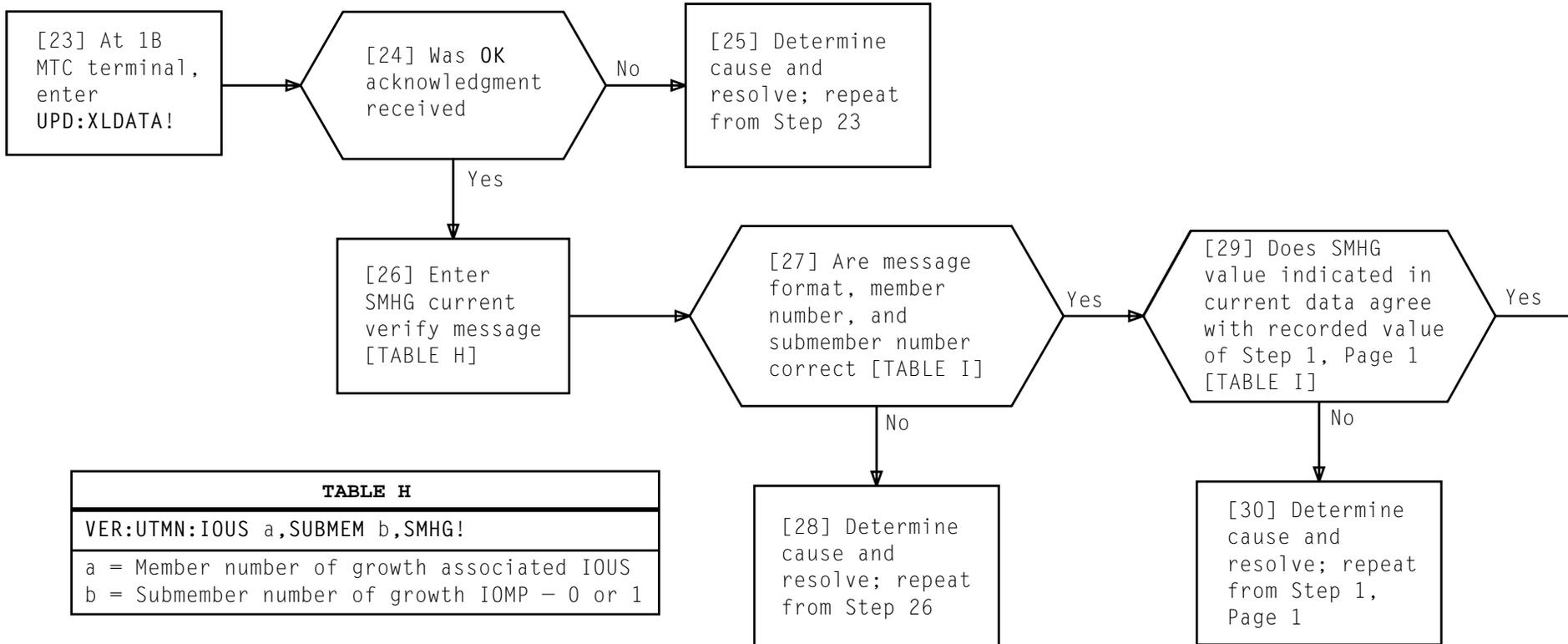


TABLE H
VER:UTMN:IOUS a,SUBMEM b,SMHG!
a = Member number of growth associated IOUS b = Submember number of growth IOMP - 0 or 1

TABLE I
VER:UTMN,IOUS a,SUBMEM b COMPLETED
TRANSLATOR ADR= TRANSLATOR SIZE=
CURRENT DATA SMHG c
a = Member number of growth associated IOUS b = Submember number of growth IOMP - 0 or 1 c = SMHG value of growth IOMP

**CHANGE AND VERIFY SUBMEMBER HARDWARE
GENERATION FOR GROWTH IOMP**

SUMMARY

Enter change message to grow submember equipage (SME) from UNEQ to GROW. Verify buffered SME, enter copy message, verify current SME, then enter update message. If after each verify, SME is not in right state, enter stop message and start change from beginning

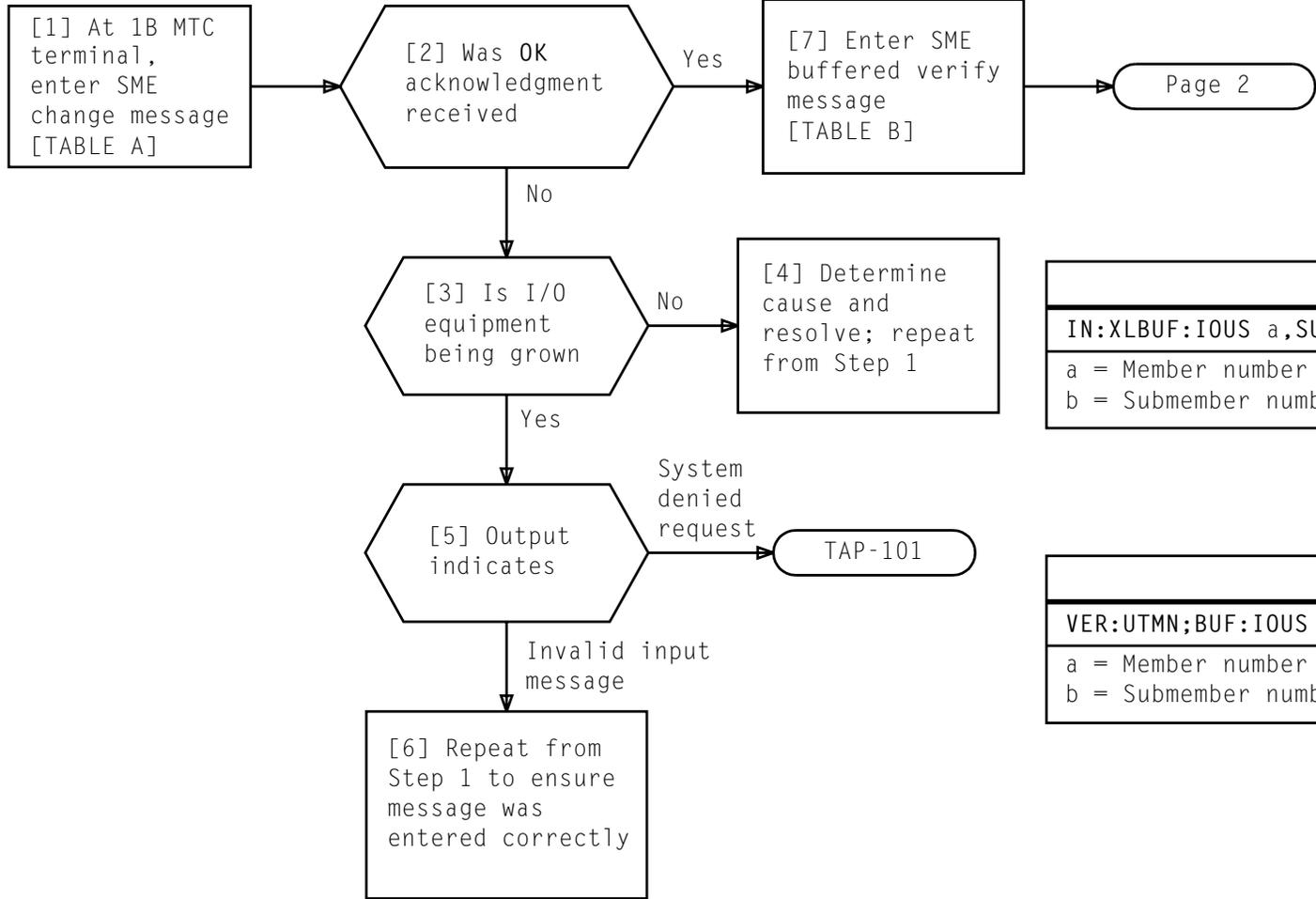


TABLE A
IN:XLBUF:IOUS a,SUBMEM b,SME (UNEQ,GROW)!
a = Member number of growth associated unit type b = Submember number of growth IOMP - 0 or 1

TABLE B
VER:UTMN;BUF:IOUS a,SUBMEM b,SME!
a = Member number of growth associated unit type b = Submember number of growth IOMP - 0 or 1

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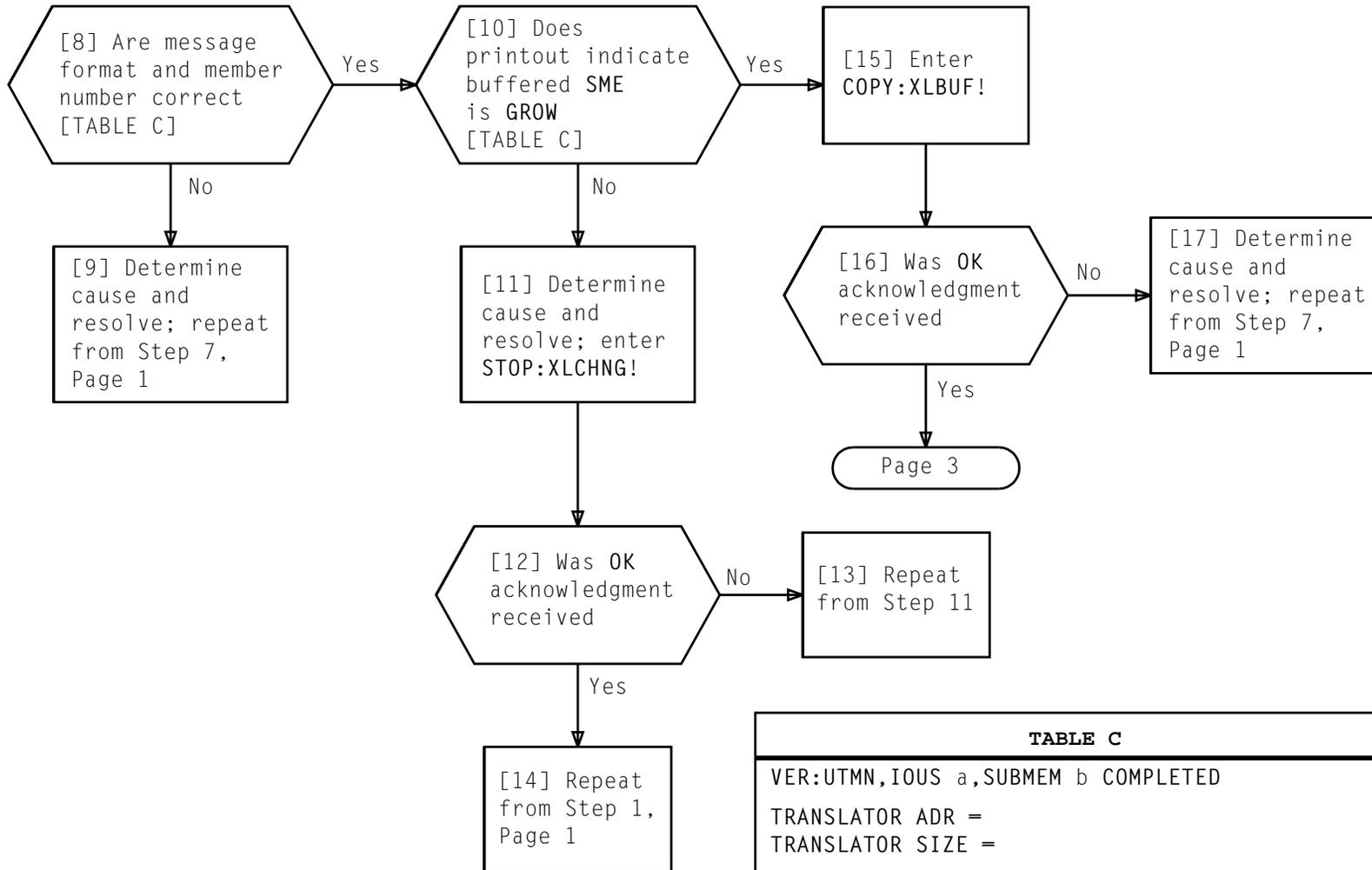


TABLE C	
VER:UTMN,IOUS a,SUBMEM b COMPLETED	
TRANSLATOR ADR =	
TRANSLATOR SIZE =	
BUFFERED DATA	
SME GROW	
a = Member number of growth associated unit type	
b = Submember number of growth IOMP - 0 or 1	

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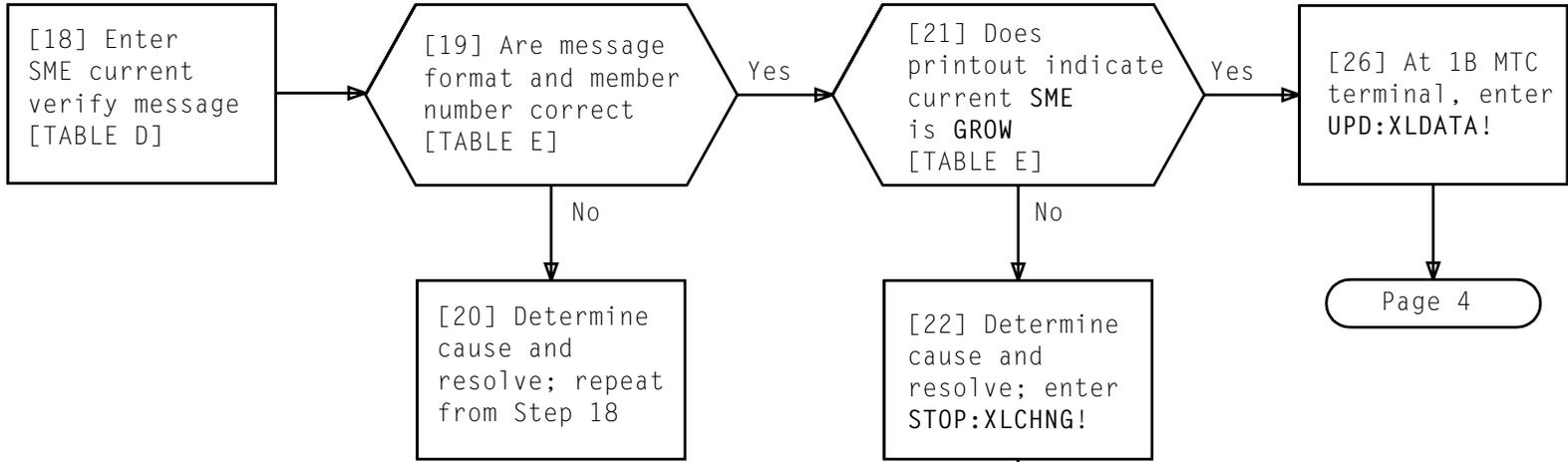


TABLE D
VER:UTMN:IOUS a,SUBMEM b,SME!
a = Member number of growth associated unit type
b = Submember number of growth IOMP - 0 or 1

TABLE E
VER:UTMN,IOUS a,SUBMEM b COMPLETED
TRANSLATOR ADR =
TRANSLATOR SIZE =
CURRENT DATA
SME GROW
a = Member number of growth associated unit type
b = Submember number of growth IOMP - 0 or 1

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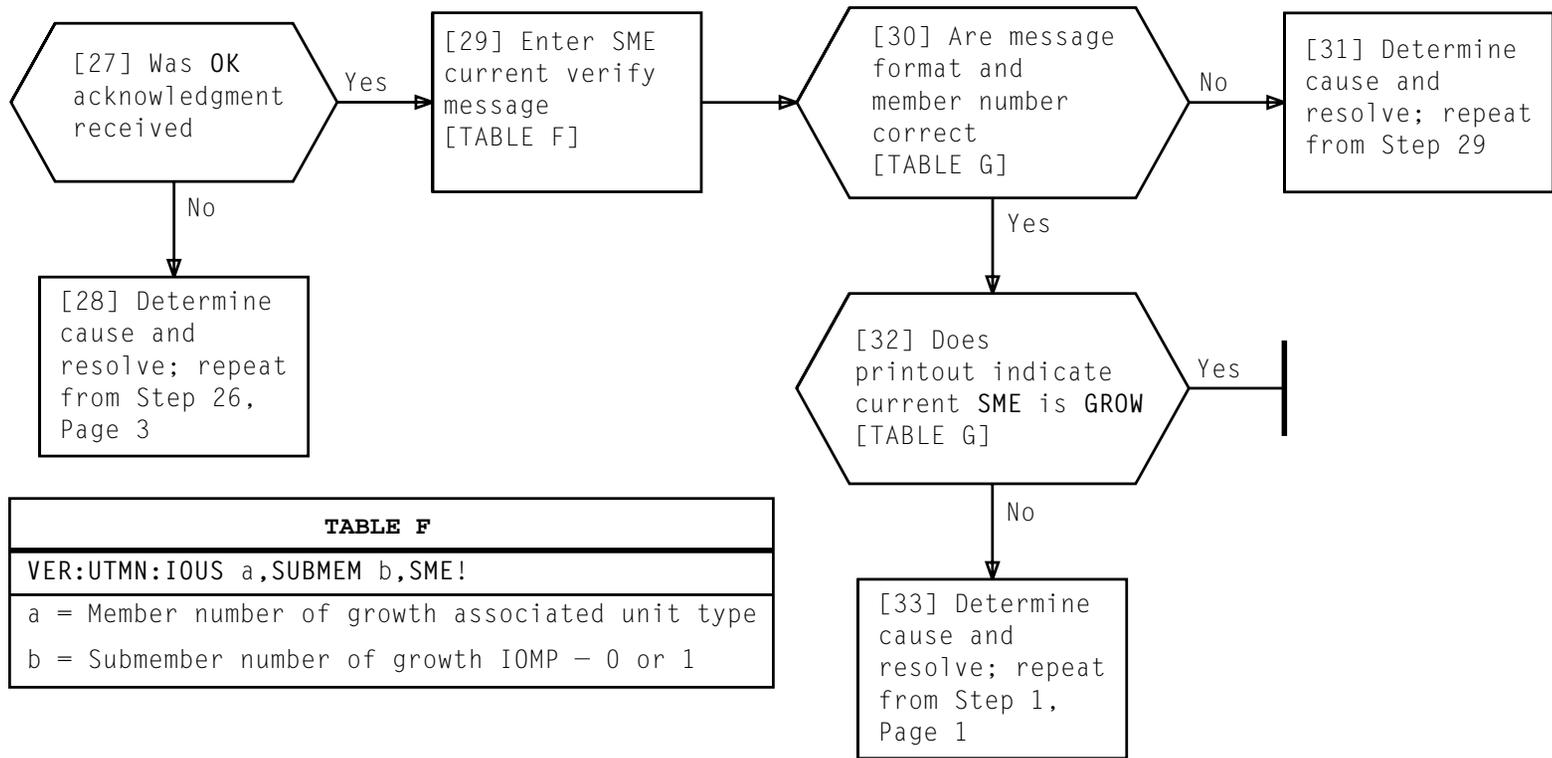


TABLE F
VER:UTMN:IOUS a,SUBMEM b,SME!
a = Member number of growth associated unit type b = Submember number of growth IOMP - 0 or 1

TABLE G
VER:UTMN,IOUS a,SUBMEM b COMPLETED
TRANSLATOR ADR = TRANSLATOR SIZE =
CURRENT DATA SME GROW
a = Member number of growth associated unit type b = Submember number of growth IOMP - 0 or 1

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SUMMARY

Enter change message to grow submember equipage (SME) from GROW to SGRO. Verify buffered SME, enter copy message, verify current SME, then enter update message. If after each verify, SME is not in right state, enter stop message and start from beginning

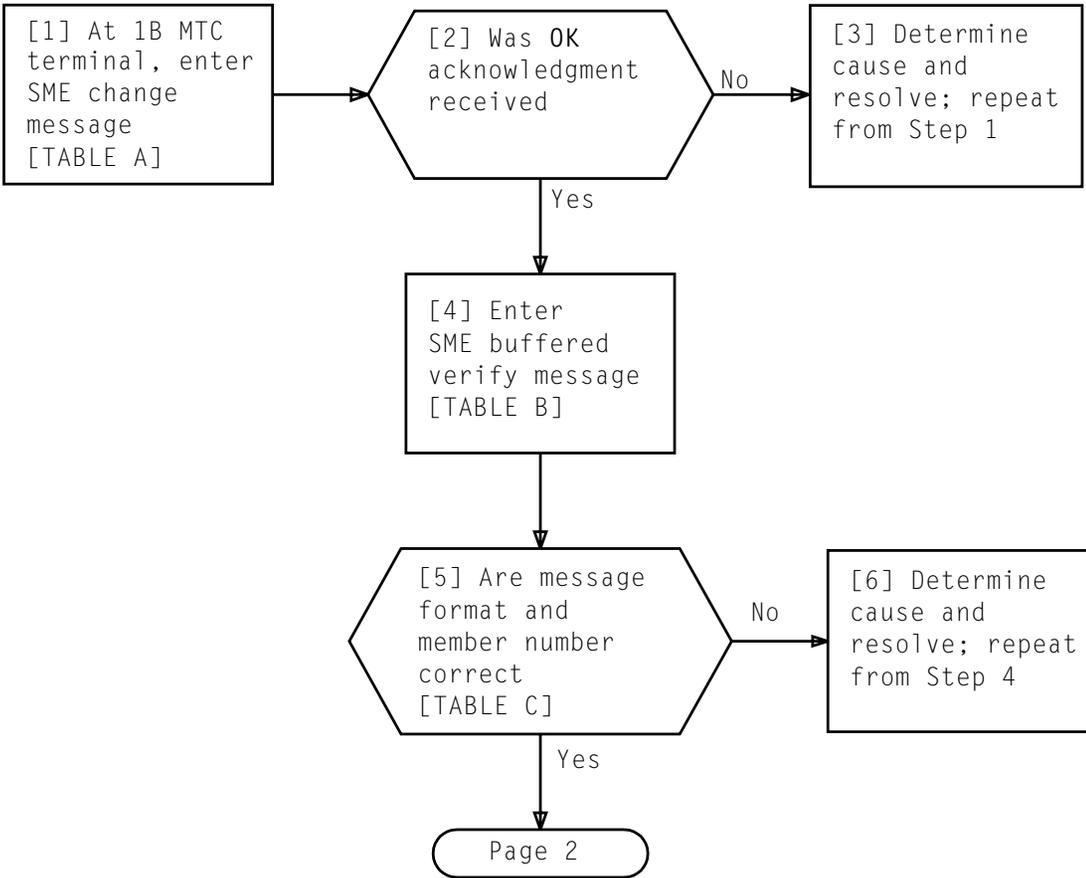


TABLE A
IN:XLBUF:IOUS a,SUBMEM b,SME (GROW,SGRO)!
a = Member number of growth associated unit type
b = Submember number of growth IOMP - 0 or 1

TABLE B
VER:UTMN;BUF:IOUS a,SUBMEM b,SME!
a = Member number of growth associated unit type
b = Submember number of growth IOMP - 0 or 1

TABLE C
VER:UTMN,IOUS a,SUBMEM b COMPLETED
TRANSLATOR ADR =
TRANSLATOR SIZE =
BUFFERED DATA
SME SGRO
a = Member number of growth associated unit type
b = Submember number of growth IOMP - 0 or 1

**CHANGE AND VERIFY SUBMEMBER EQUIPAGE
GROW TO SPECIAL GROWTH**

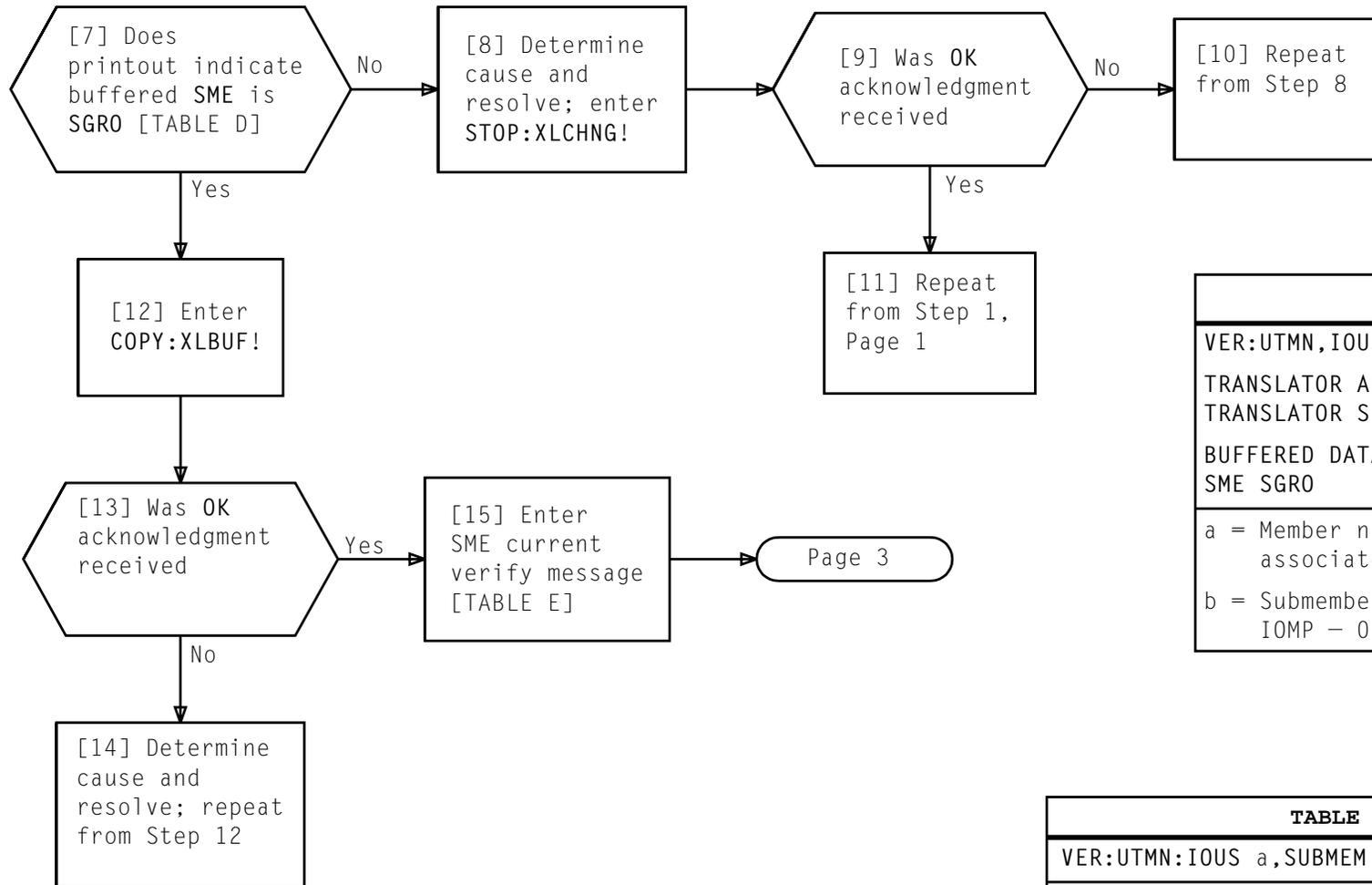


TABLE D
VER:UTMN,IOUS a,SUBMEM b COMPLETED
TRANSLATOR ADR =
TRANSLATOR SIZE =
BUFFERED DATA
SME SGRO
a = Member number of growth associated unit type
b = Submember number of growth IOMP - 0 or 1

TABLE E
VER:UTMN:IOUS a,SUBMEM b,SME!
a = Member number of growth associated unit type
b = Submember number of growth IOMP - 0 or 1

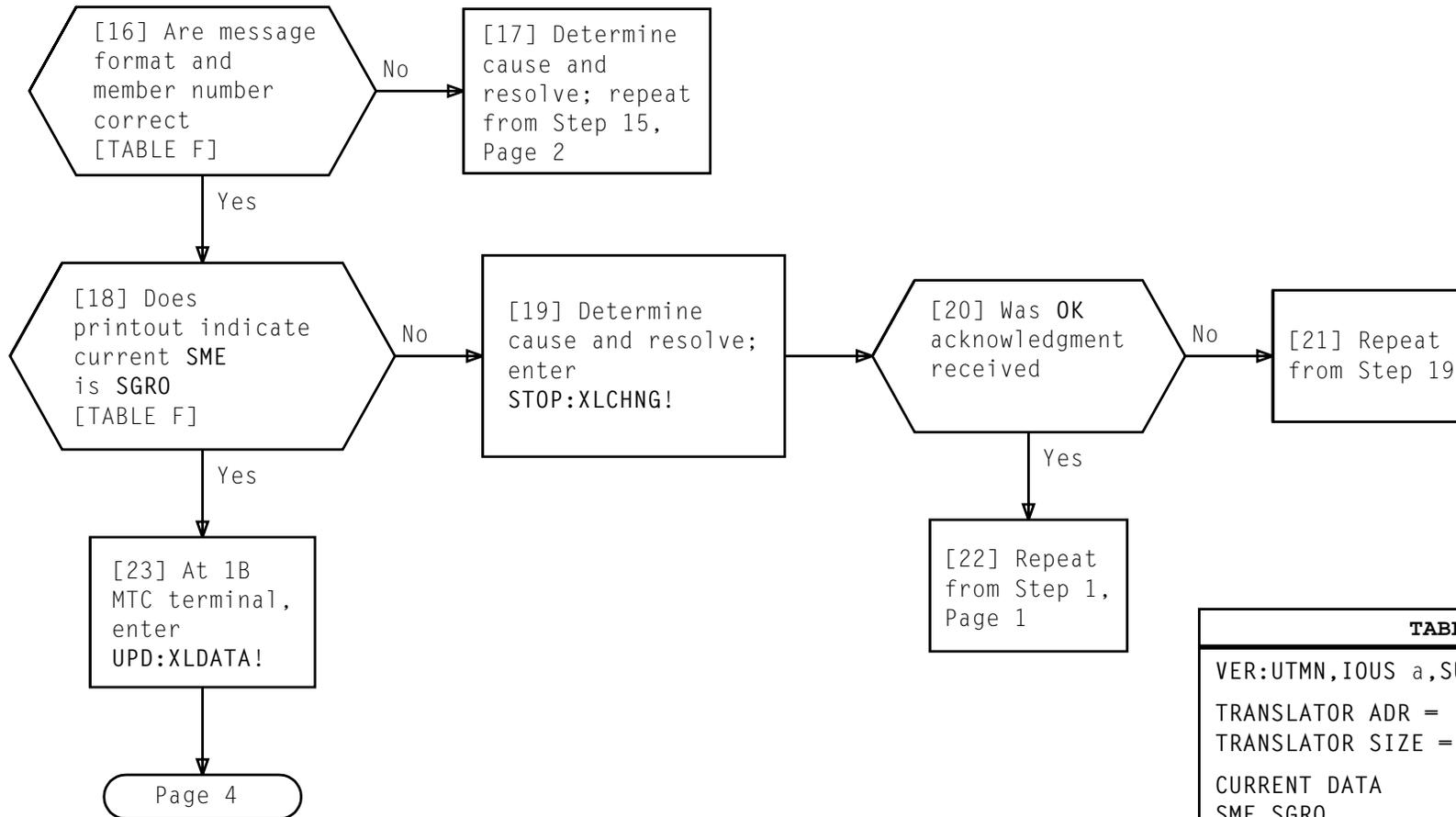


TABLE F	
VER:UTMN, IOUS a, SUBMEM b COMPLETED	
TRANSLATOR ADR =	
TRANSLATOR SIZE =	
CURRENT DATA	
SME SGRO	
a = Member number of associated growth unit type	
b = Submember number of growth IOMP - 0 or 1	

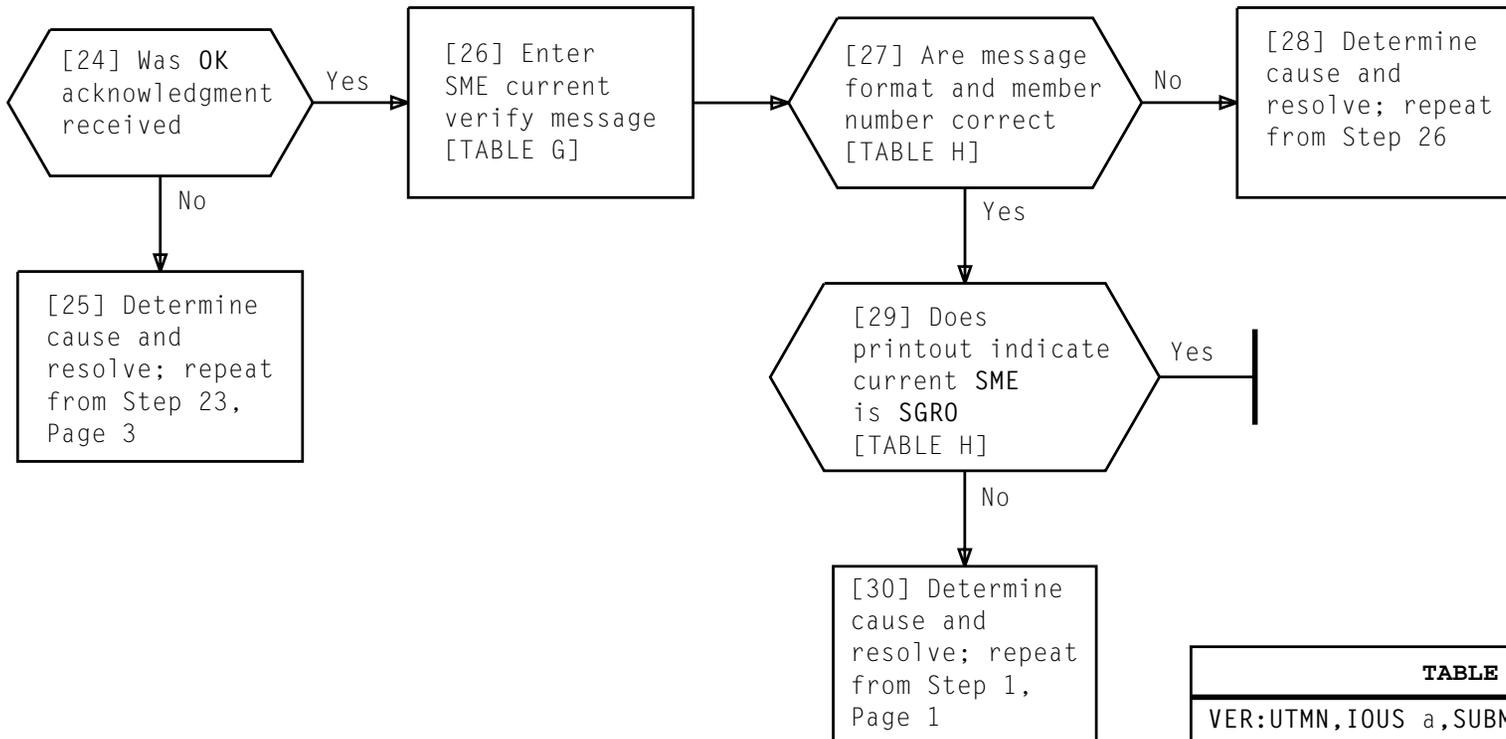


TABLE G
VER:UTMN:IOUS a,SUBMEM b,SME!
a = Member number of growth associated unit type b = Submember number of growth IOMP - 0 or 1

TABLE H
VER:UTMN,IOUS a,SUBMEM b COMPLETED
TRANSLATOR ADR = TRANSLATOR SIZE =
CURRENT DATA ME SGRO
a = Member number of growth associated unit type b = Submember number of growth IOMP - 0 or 1

SUMMARY

Enter change message to grow submember equipage (SME) from SGRO to OPER. Verify buffered SME, enter copy message, verify current SME, then enter update message. If after each verify, the SME is not in the right state, enter stop message and start change from beginning

TABLE B

VER:UTMN;BUF:IOUS a,SUBMEM b,SME!

a = Member number of growth associated unit type

b = Submember number of growth IOMP - 0 or 1

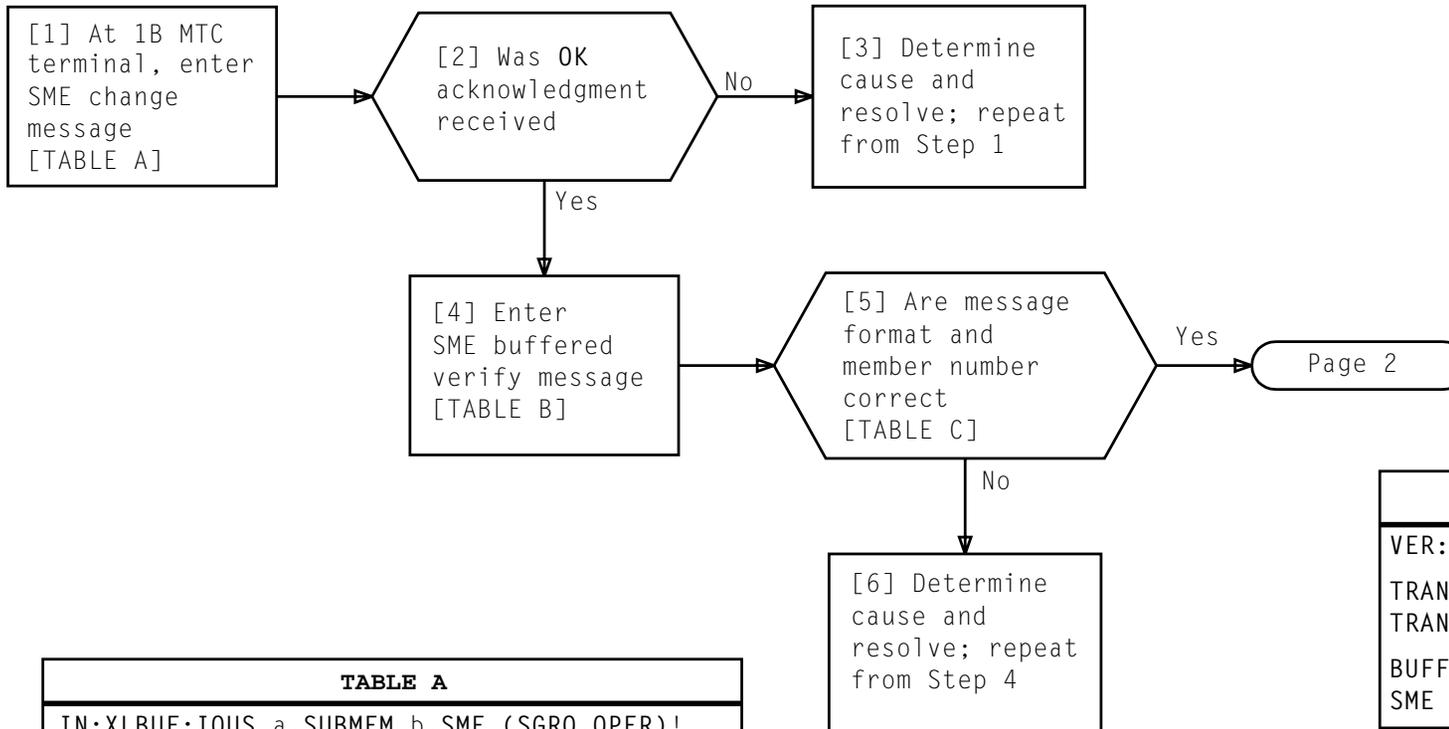


TABLE A

IN:XLBUF:IOUS a,SUBMEM b,SME (SGRO,OPER)!

a = Member number of growth associated unit type

b = Submember number of growth IOMP - 0 or 1

TABLE C

VER:UTMN,IOUS a,SUBMEM b COMPLETED

TRANSLATOR ADR =
TRANSLATOR SIZE =

BUFFERED DATA
SME OPER

a = Member number of growth associated unit type

b = Submember number of growth IOMP - 0 or 1

**CHANGE AND VERIFY SUBMEMBER EQUIPAGE
SPECIAL GROWTH TO OPERATIONAL**

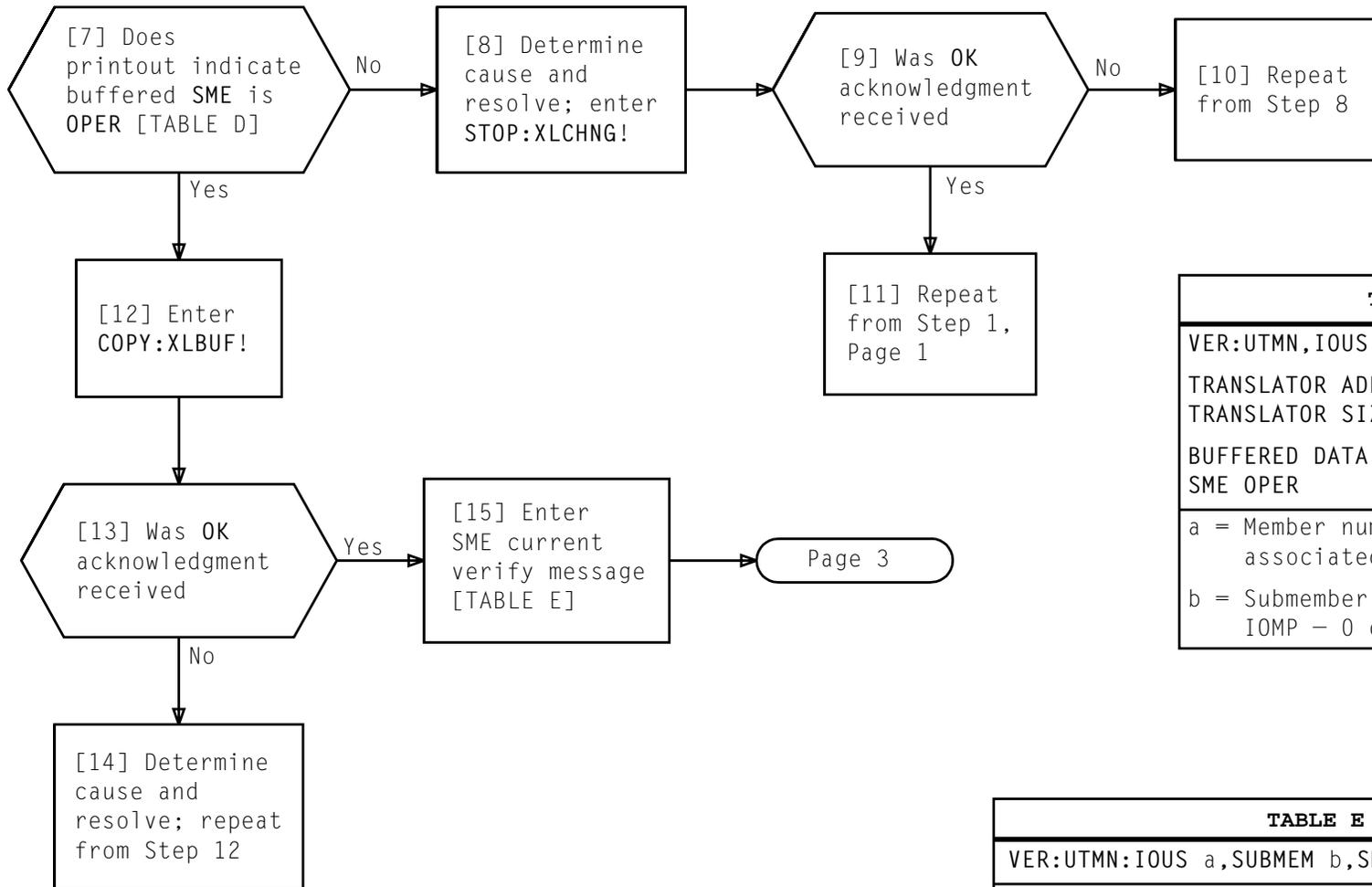


TABLE D
VER:UTMN,IOUS a,SUBMEM b COMPLETED
TRANSLATOR ADR =
TRANSLATOR SIZE =
BUFFERED DATA
SME OPER
a = Member number of growth associated unit type
b = Submember number of growth IOMP - 0 or 1

TABLE E
VER:UTMN:IOUS a,SUBMEM b,SME!
a = Member number of growth associated unit type
b = Submember number of growth IOMP - 0 or 1

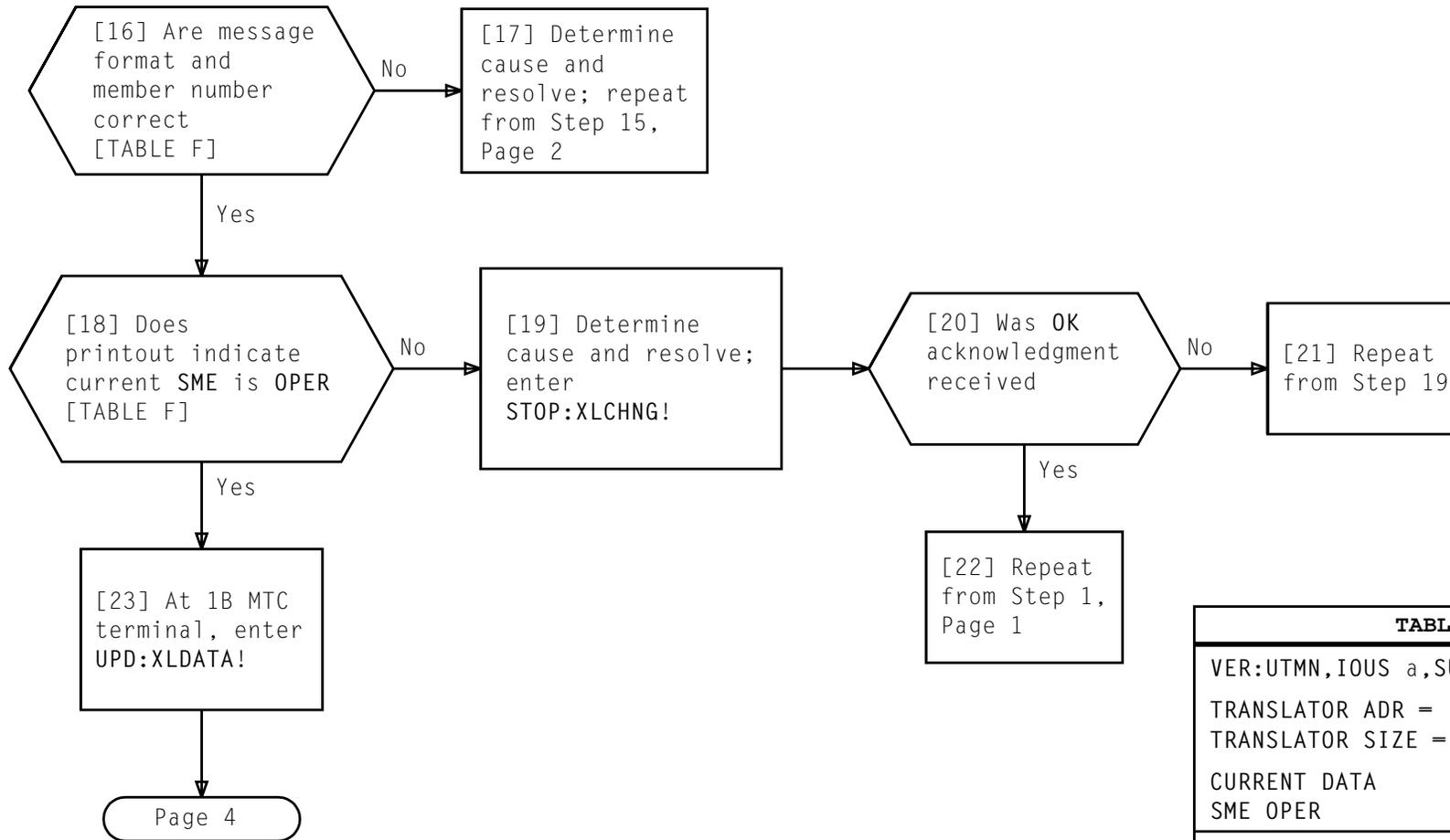


TABLE F	
VER:UTMN,IOUS a,SUBMEM b	COMPLETED
TRANSLATOR ADR =	
TRANSLATOR SIZE =	
CURRENT DATA	SME OPER
a = Member number of growth associated unit type	
b = Submember number of growth IOMP - 0 or 1	

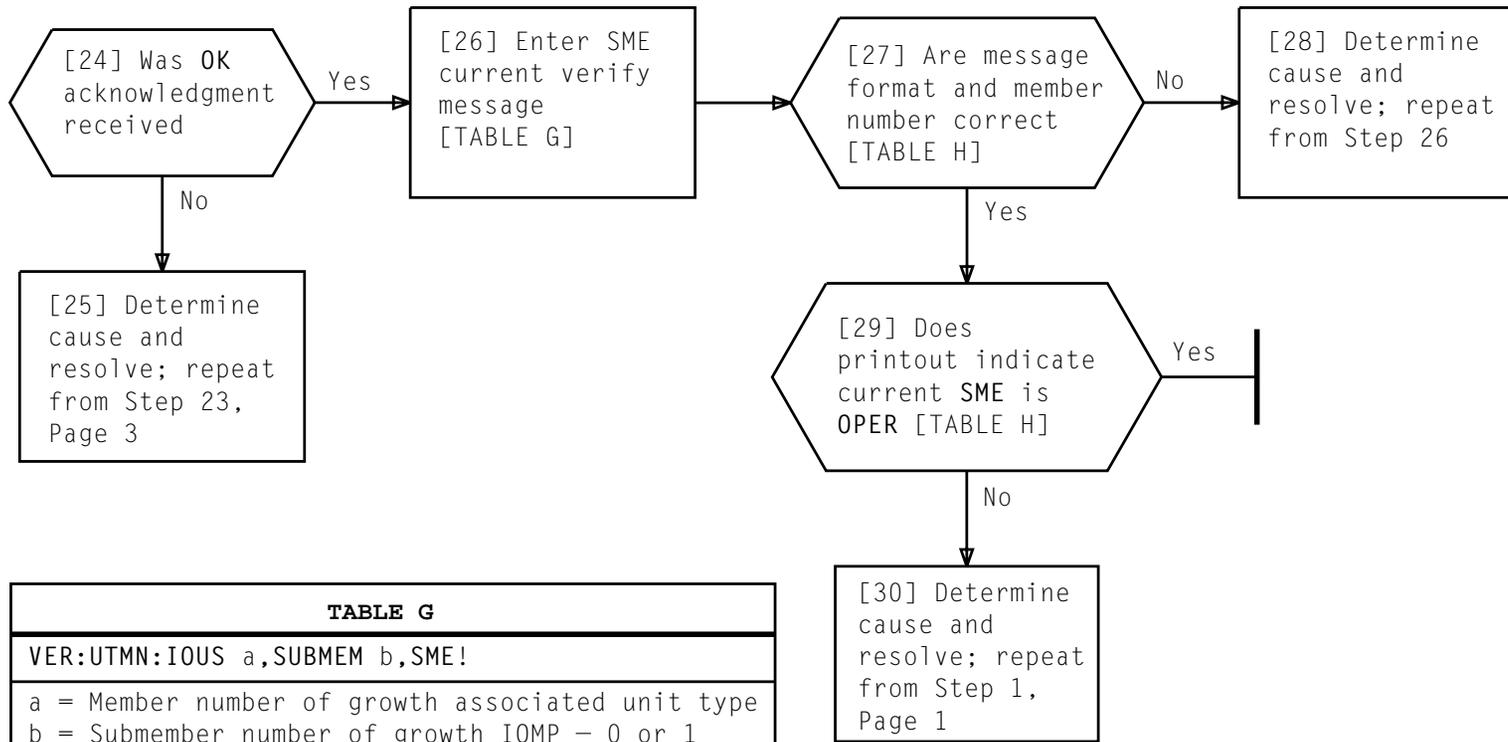


TABLE G
VER:UTMN:IOUS a,SUBMEM b,SME!
a = Member number of growth associated unit type b = Submember number of growth IOMP - 0 or 1

TABLE H
VER:UTMN,IOUS a,SUBMEM b COMPLETED
TRANSLATOR ADR = TRANSLATOR SIZE =
CURRENT DATA SME OPER
a = Member number of growth associated unit type b = Submember number of growth IOMP - 0 or 1

**CHANGE AND VERIFY SUBMEMBER EQUIPAGE
SPECIAL GROWTH TO OPERATIONAL**

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SUMMARY

Using verify input message, verify that submember equipage (SME) for growth unit type is UNEQ. If equipage is in error, change SME to UNEQ

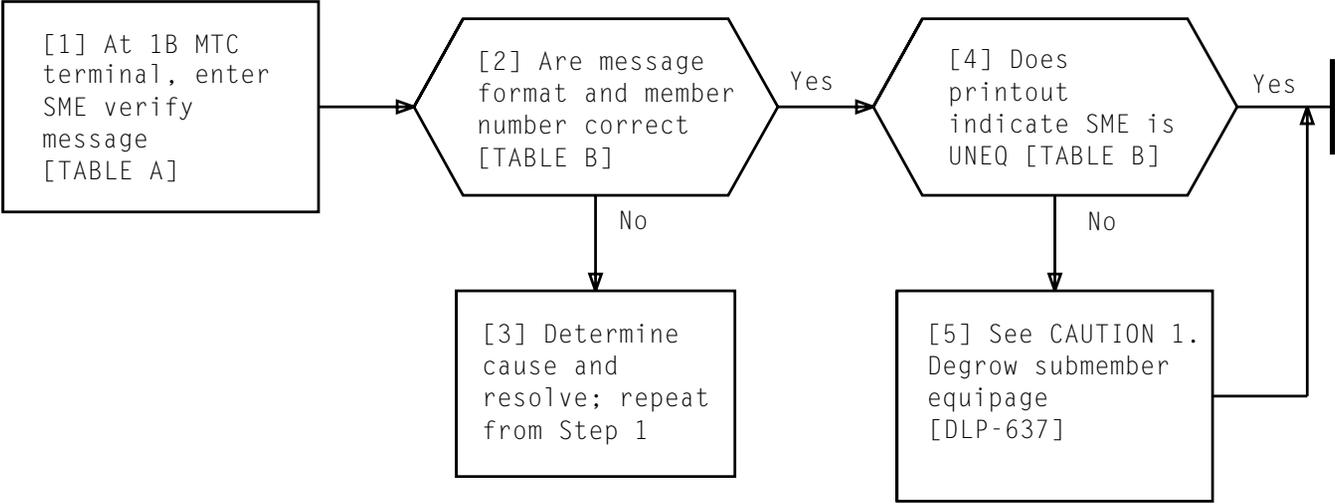


TABLE A
VER:UTMN:IOUS a,SUBMEM b,SME!
a = Member number of growth associated unit type
b = Submember number of growth unit

TABLE B
VER:UTMN,IOUS a,SUBMEM b COMPLETED
TRANSLATOR ADR =
TRANSLATOR SIZE =
CURRENT DATA
SME UNEQ
a = Member number of growth associated unit type
b = Submember number of growth unit

CAUTION 1
 Depending on local procedures, supervisory or TELCO engineering approval must be obtained prior to performing any data changes

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SUMMARY

Enter change message to degrow SME from OPER to SGRO and/or from SGRO to GROW and/or from GROW to UNEQ. Verify buffered SME, enter copy message, and verify current SME for each

change in state. If after each verify, SME is not in right state, enter stop message and start change from beginning. After all required changes in equipage are in copy state, enter update message and verify current SME

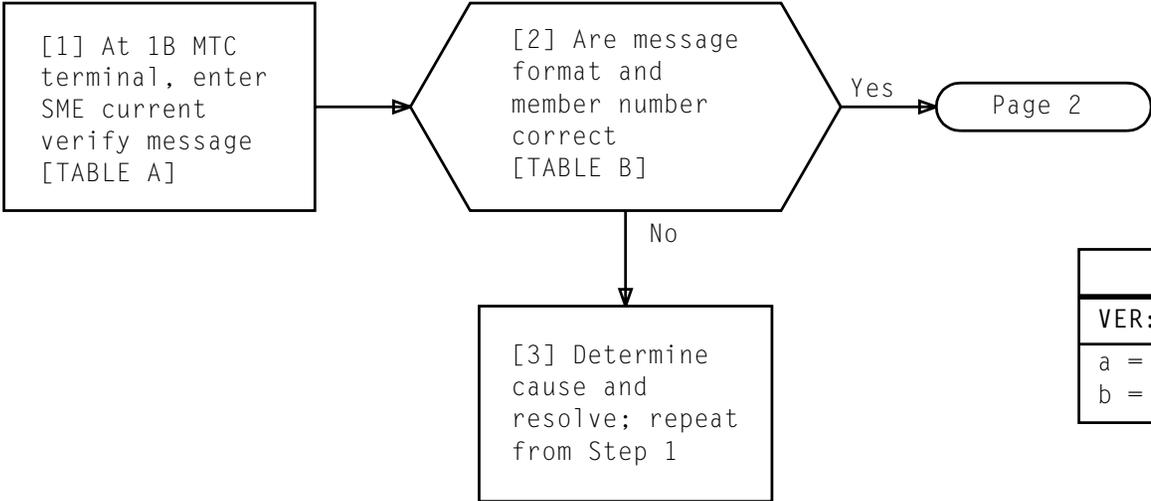


TABLE A
VER:UTMN:IOUS a,SUBMEM b,SME!
a = Member number of growth associated unit type b = Submember number of growth IOMP - 0 or 1

TABLE B
VER:UTMN,IOUS a,SUBMEM b COMPLETED
TRANSLATOR ADR = TRANSLATOR SIZE =
CURRENT DATA SME c
a = Member number of growth associated unit type b = Submember number of growth IOMP - 0 or 1 c = Submember equipage

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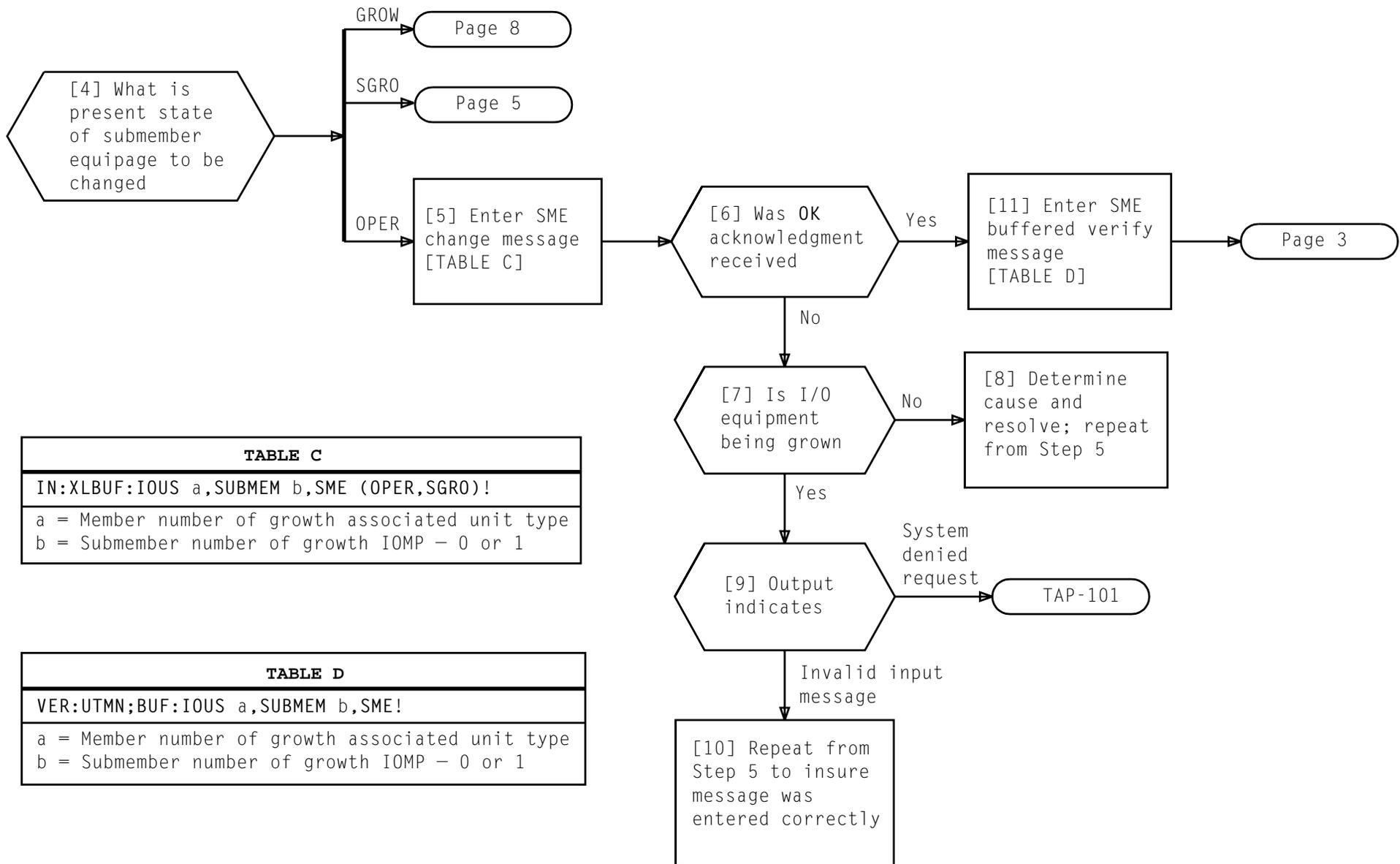


TABLE C
IN:XLBUF:IOUS a,SUBMEM b,SME (OPER,SGRO)!
a = Member number of growth associated unit type b = Submember number of growth IOMP - 0 or 1

TABLE D
VER:UTMN;BUF:IOUS a,SUBMEM b,SME!
a = Member number of growth associated unit type b = Submember number of growth IOMP - 0 or 1

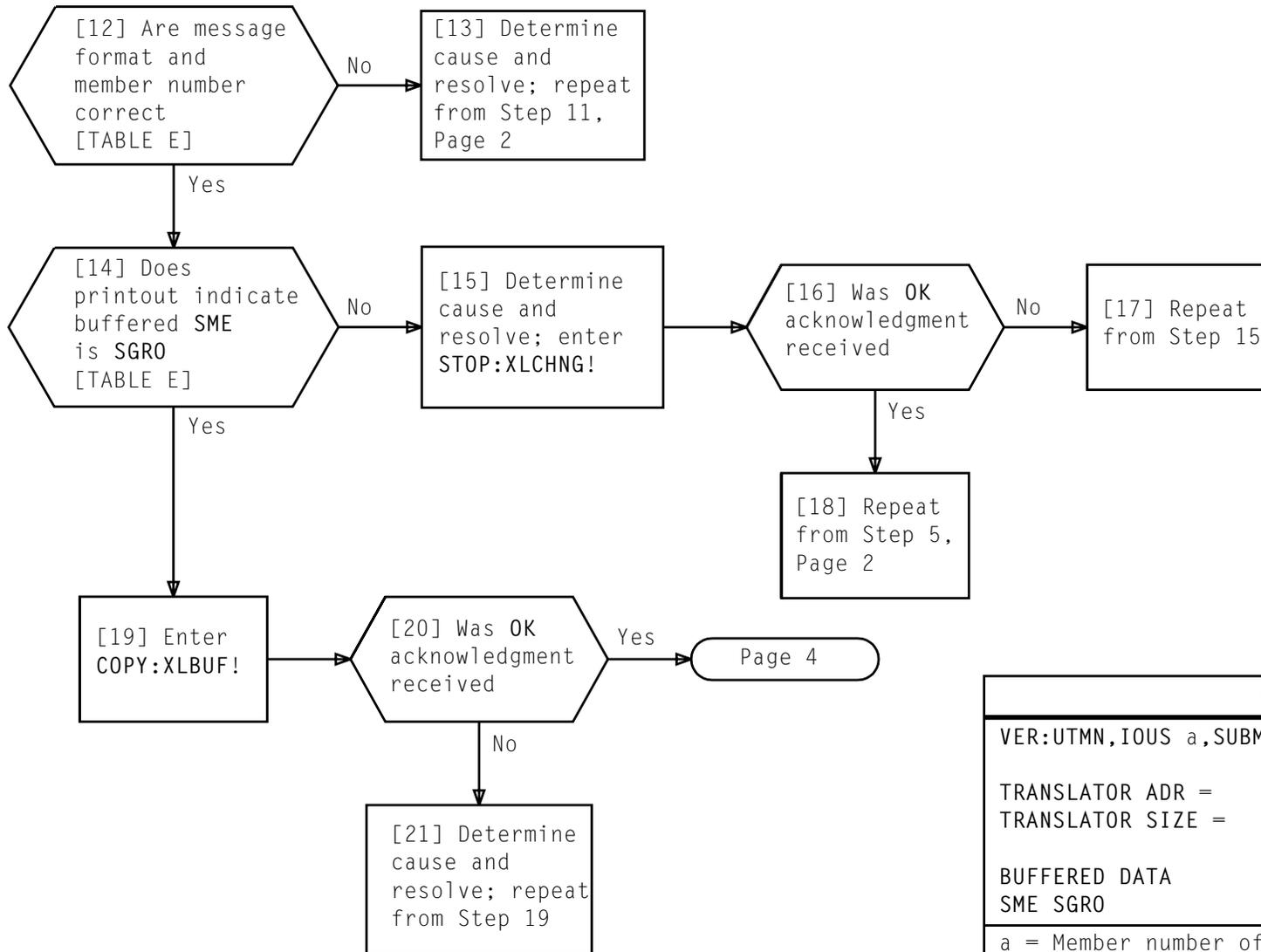


TABLE E	
VER:UTMN,IOUS a,SUBMEM b COMPLETED	
TRANSLATOR ADR =	
TRANSLATOR SIZE =	
BUFFERED DATA	
SME SGRO	
a = Member number of growth associated unit type	
b = Submember number of growth IOMP - 0 or 1	

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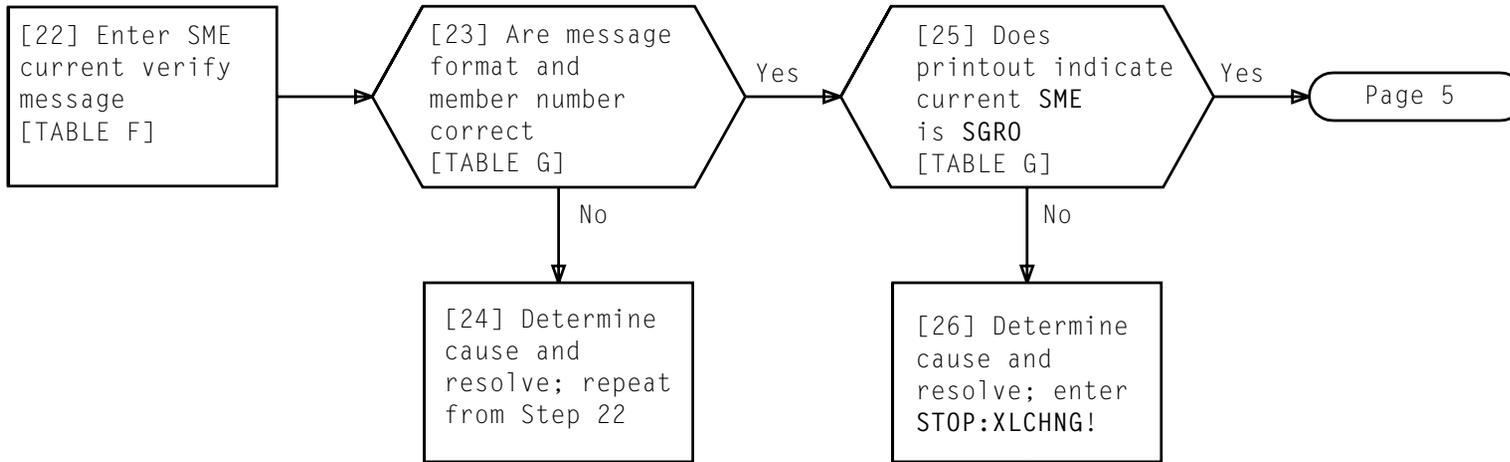
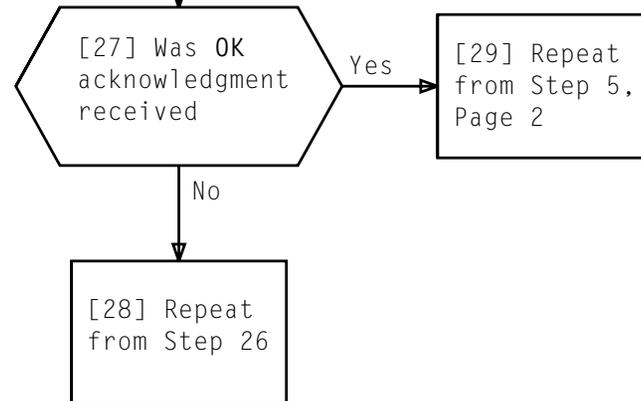


TABLE F
VER:UTMN:IOUS a,SUBMEM b,SME!
a = Member number of growth associated unit type
b = Submember number of growth IOMP - 0 or 1

TABLE G
VER:UTMN,IOUS a,SUBMEM b COMPLETED
TRANSLATOR ADR =
TRANSLATOR SIZE =
CURRENT DATA
SME SGRO
a = Member number of growth associated unit type
b = Submember number of growth IOMP - 0 or 1



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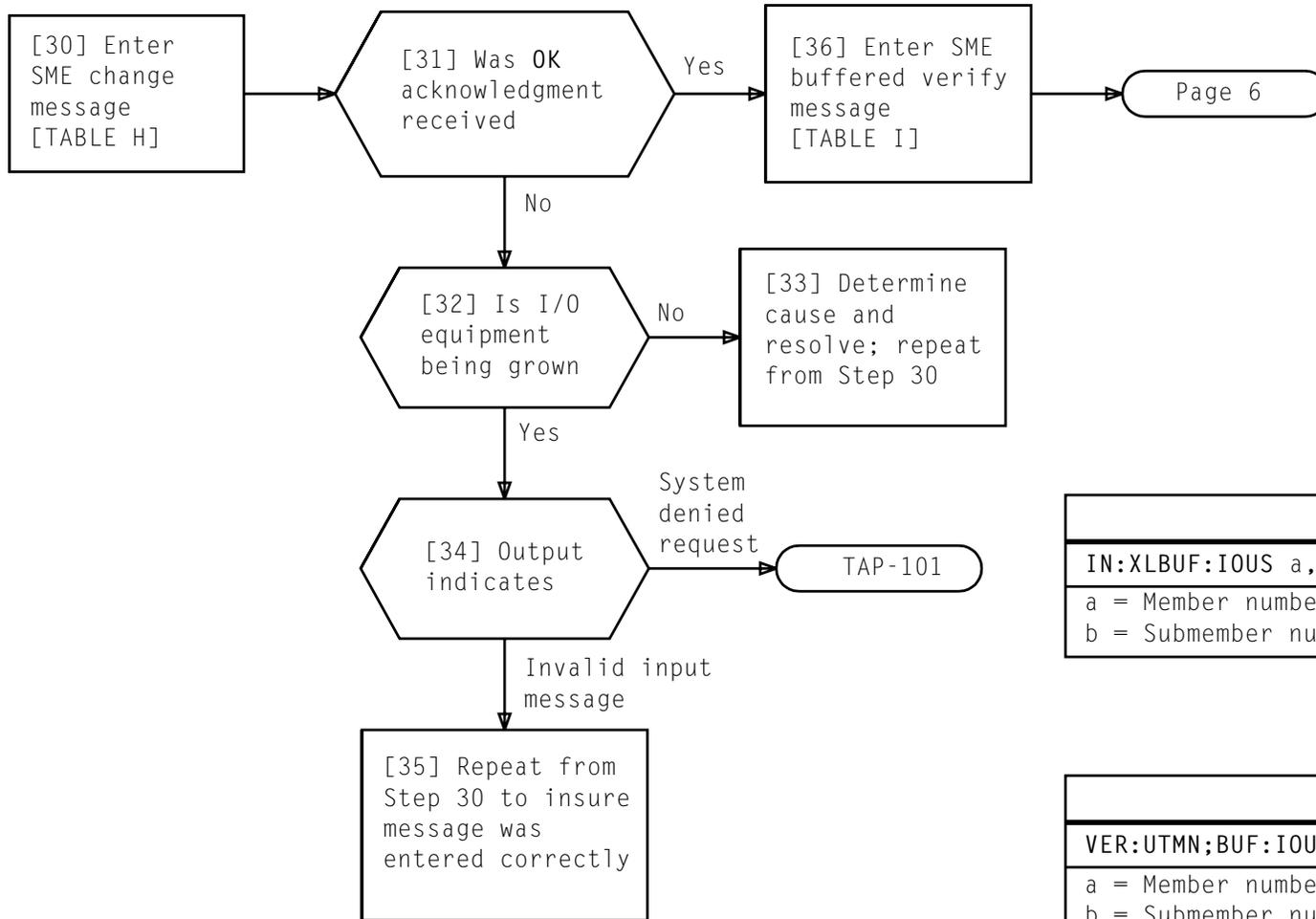


TABLE H
IN:XLBUF:IOUS a,SUBMEM b,SME (SGRO,GROW)!
a = Member number of growth associated unit type b = Submember number of growth IOMP - 0 or 1

TABLE I
VER:UTMN;BUF:IOUS a,SUBMEM b,SME!
a = Member number of growth associated unit type b = Submember number of growth IOMP - 0 or 1

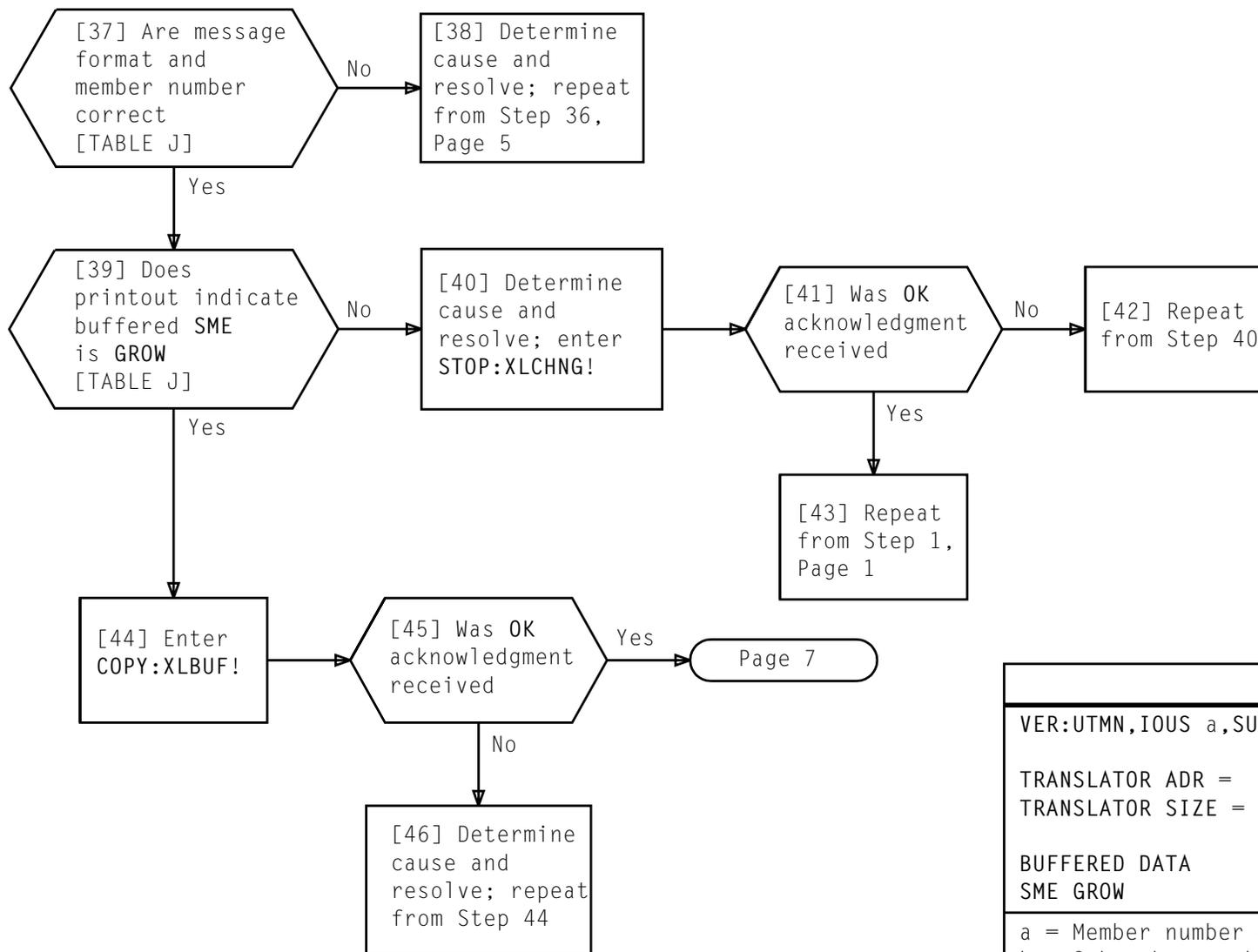


TABLE J	
VER:UTMN,IOUS a,SUBMEM b COMPLETED	
TRANSLATOR ADR =	
TRANSLATOR SIZE =	
BUFFERED DATA SME GROW	
a = Member number of growth associated unit type	
b = Submember number of growth IOMP - 0 or 1	

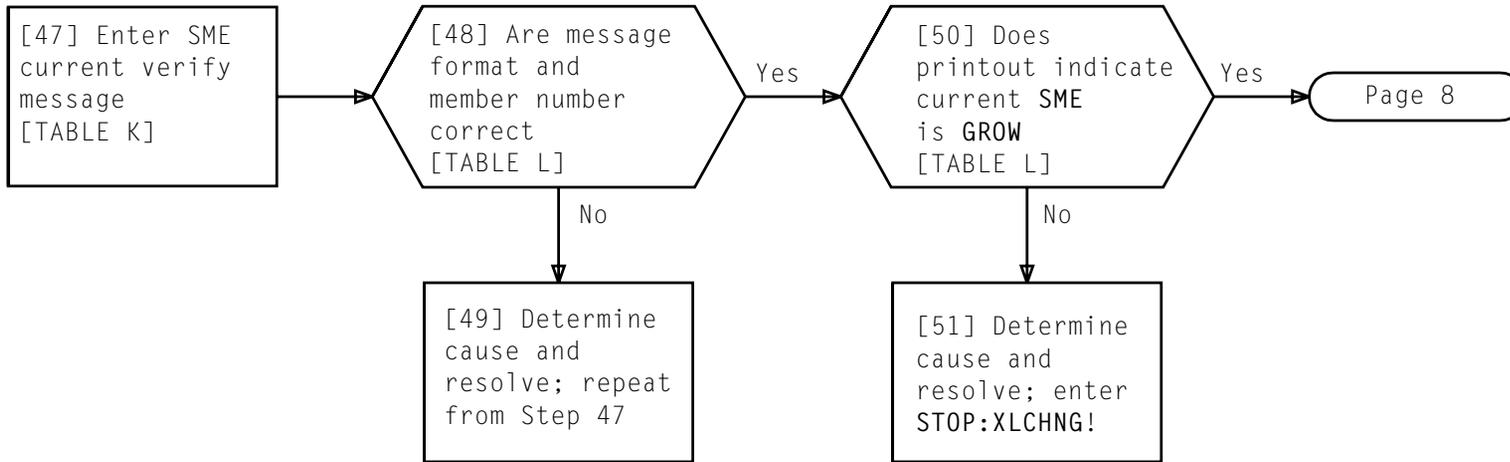
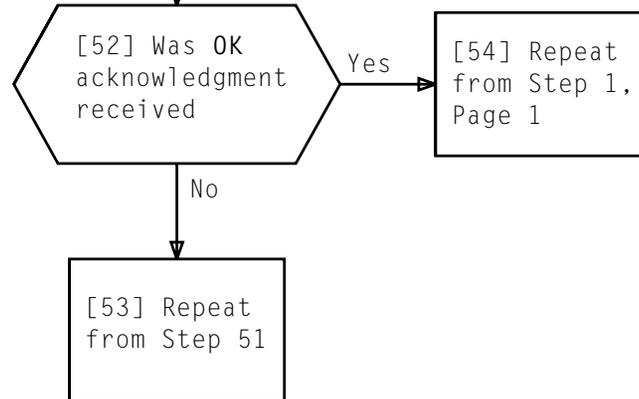


TABLE K
VER:UTMN:IOUS a,SUBMEM b,SME!
a = Member number of growth associated unit type
b = Submember number of growth IOMP - 0 or 1

TABLE L
VER:UTMN,IOUS a,SUBMEM b COMPLETED
TRANSLATOR ADR =
TRANSLATOR SIZE =
CURRENT DATA
SME GROW
a = Member number of growth associated unit type
b = Submember number of growth IOMP - 0 or 1



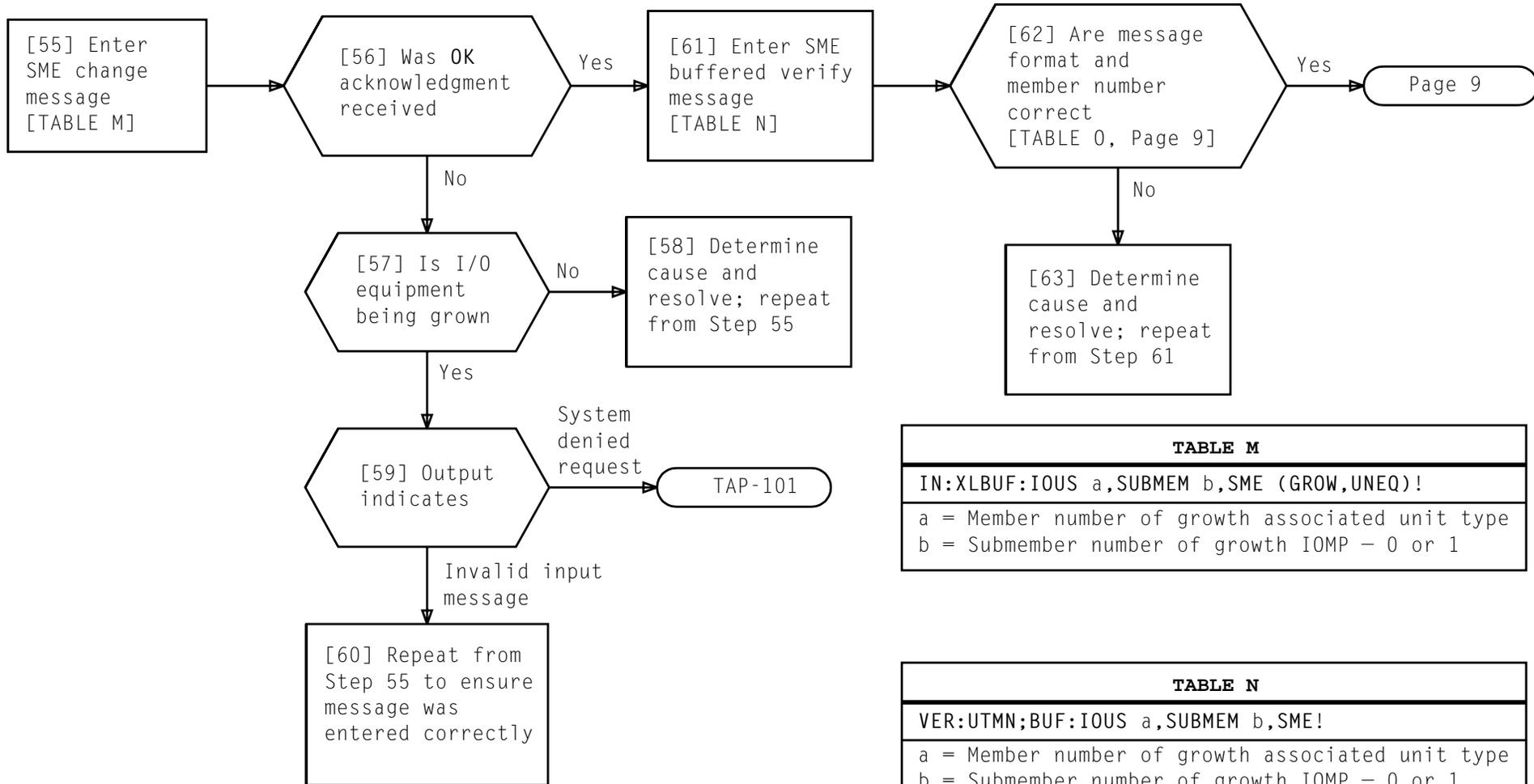


TABLE M	
IN:XLBUF:IOUS a,SUBMEM b,SME (GROW,UNEQ)!	
a	= Member number of growth associated unit type
b	= Submember number of growth IOMP - 0 or 1

TABLE N	
VER:UTMN;BUF:IOUS a,SUBMEM b,SME!	
a	= Member number of growth associated unit type
b	= Submember number of growth IOMP - 0 or 1

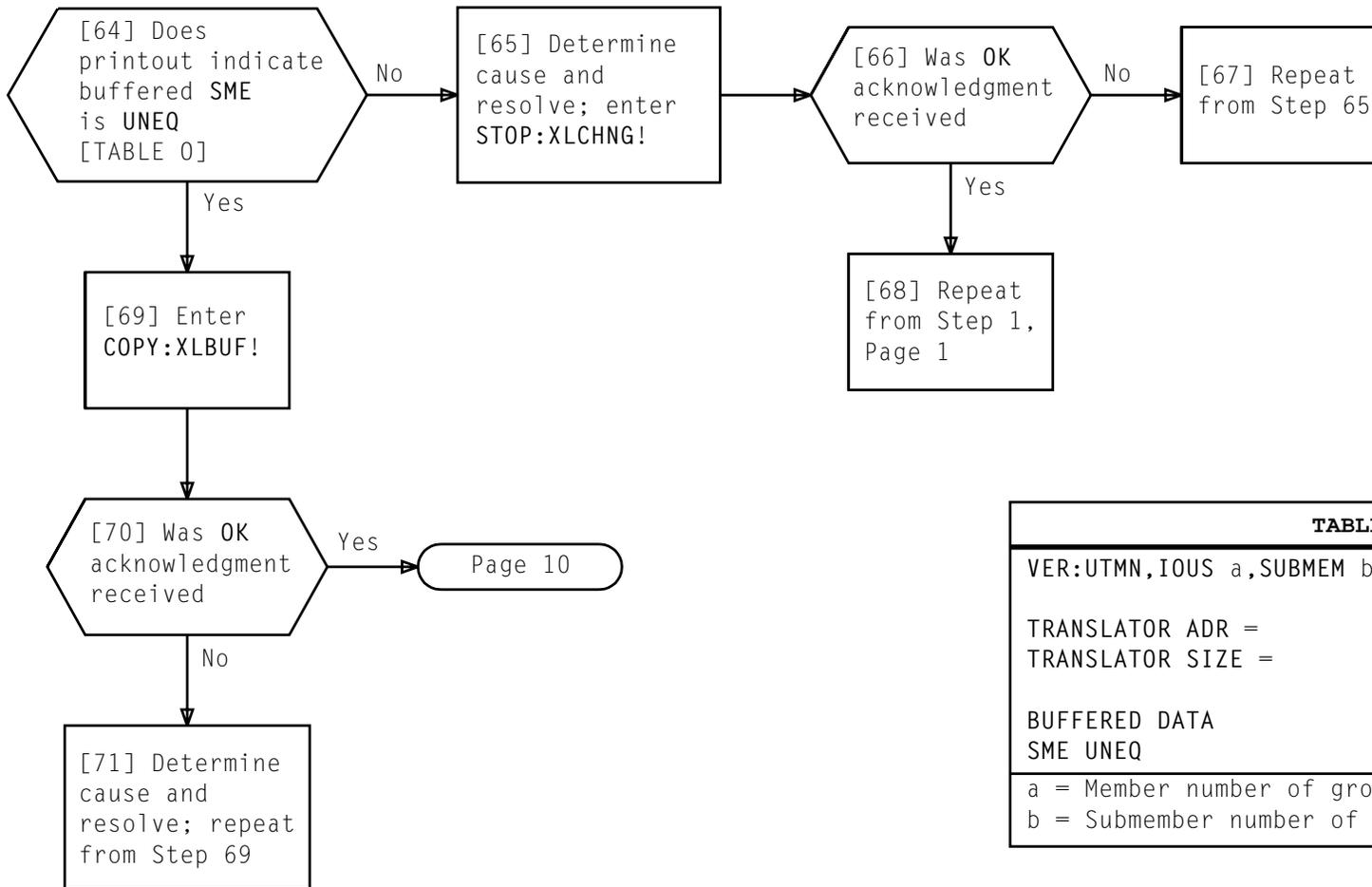


TABLE 0	
VER:UTMN,IOUS a,SUBMEM b COMPLETED	
TRANSLATOR ADR =	
TRANSLATOR SIZE =	
BUFFERED DATA SME UNEQ	
a = Member number of growth associated unit type	
b = Submember number of growth IOMP - 0 or 1	

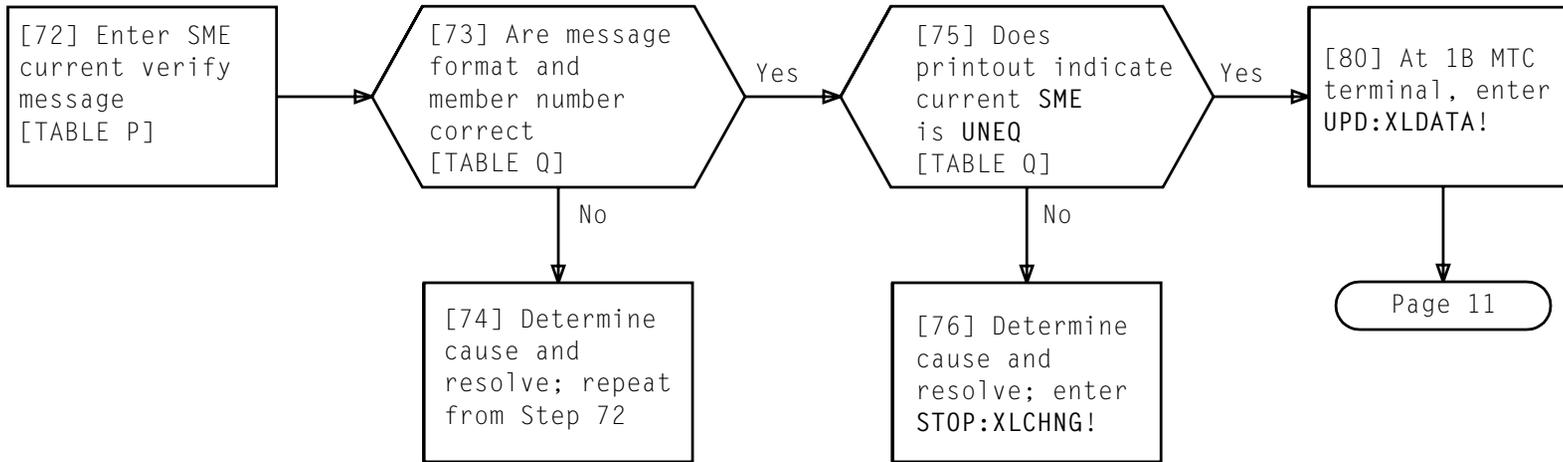
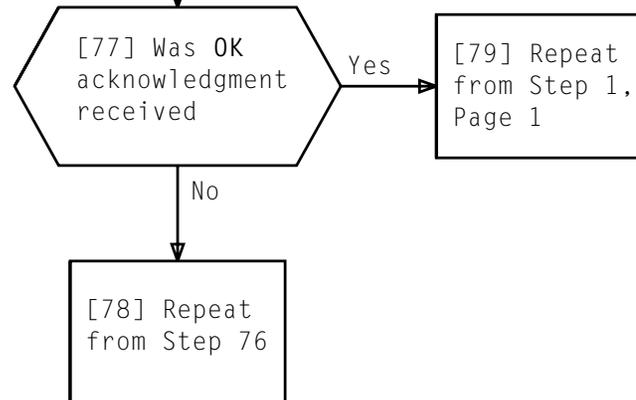


TABLE P
VER:UTMN:IOUS a,SUBMEM b,SME!
a = Member number of growth associated unit type
b = Submember number of growth IOMP - 0 or 1

TABLE Q
VER:UTMN,IOUS a,SUBMEM b COMPLETED
TRANSLATOR ADR =
TRANSLATOR SIZE =
CURRENT DATA
SME UNEQ
a = Member number of growth associated unit type
b = Submember number of growth IOMP - 0 or 1



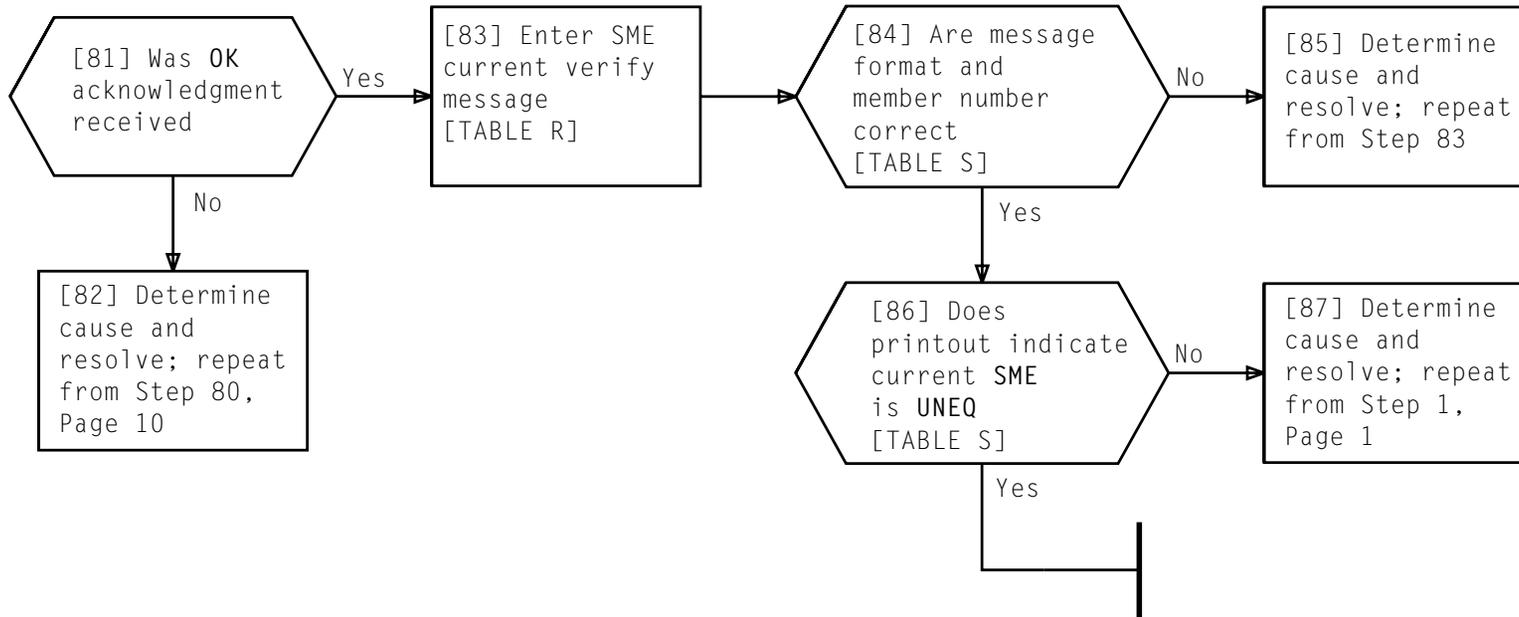


TABLE R
VER:UTMN:IOUS a,SUBMEM b,SME!
a = Member number of growth associated unit type b = Submember number of growth IOMP - 0 or 1

TABLE S
VER:UTMN,IOUS a,SUBMEM b COMPLETED
TRANSLATOR ADR = TRANSLATOR SIZE =
CURRENT DATA SME UNEQ
a = Member number of growth associated unit type b = Submember number of growth IOMP - 0 or 1

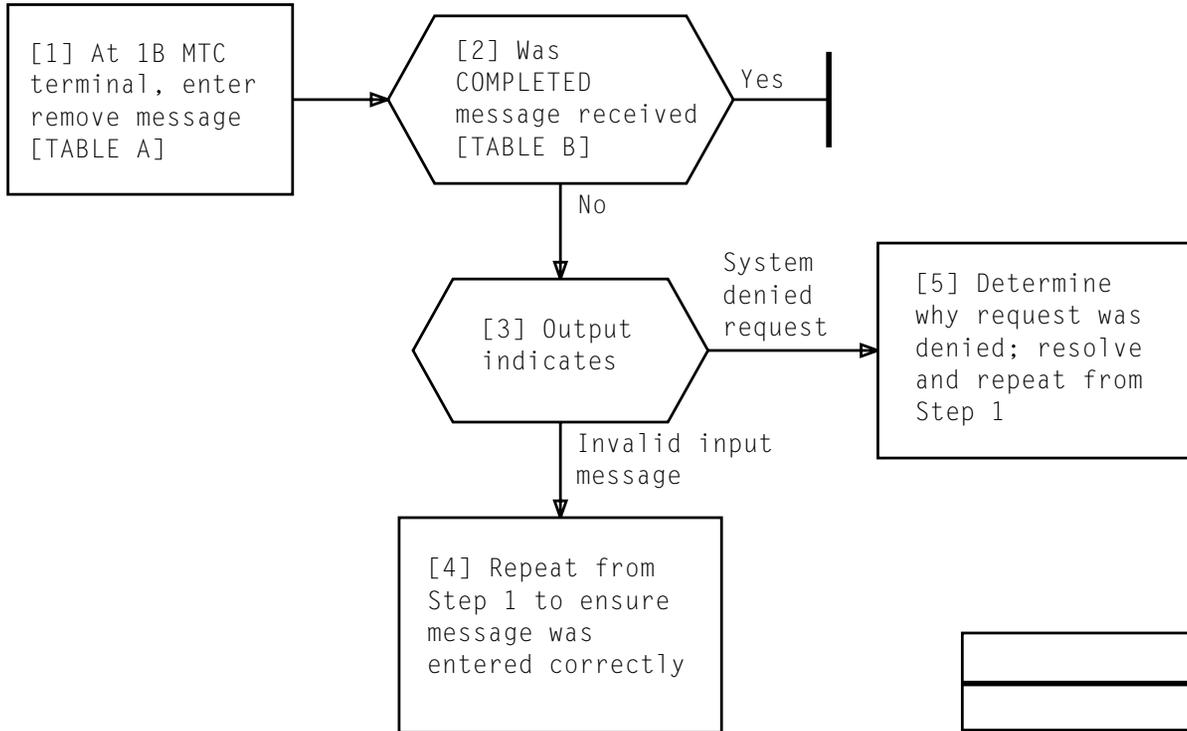


TABLE A	
RMV:IOUS a!	
a = Member number of growth associated unit type (0-7)	

TABLE B	
RMV:IOUS a COMPLETED	
a = Member number of growth associated unit type (0-7)	

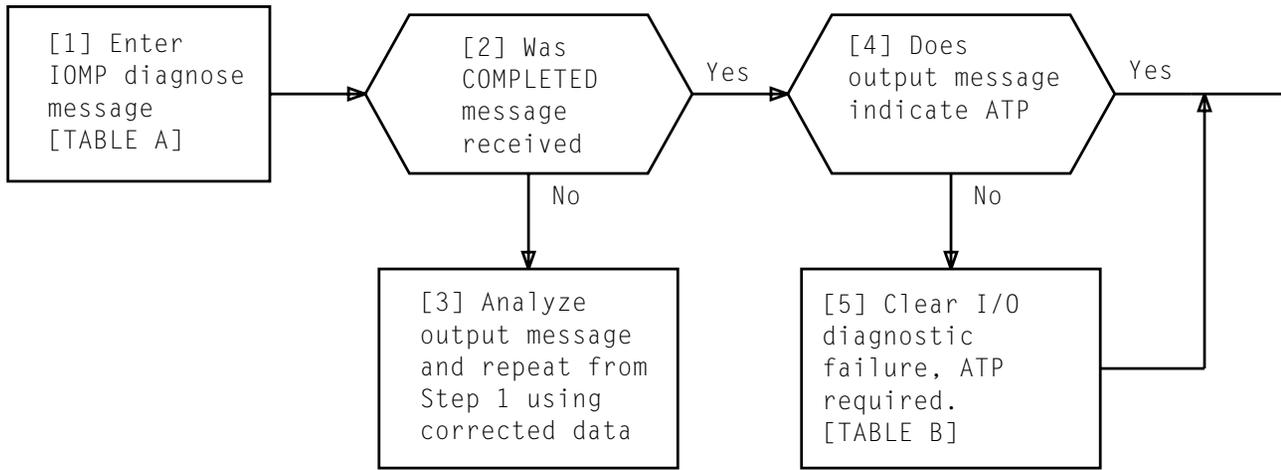


TABLE A
DGN:IOUS a,IOMP b!
a = Member number of growth associated IOUS (0-7)
b = Submember number of growth IOMP (0 or 1)

TABLE B	
IOP	TOP
J5A006C	234-351-021
J5A006D	234-351-022

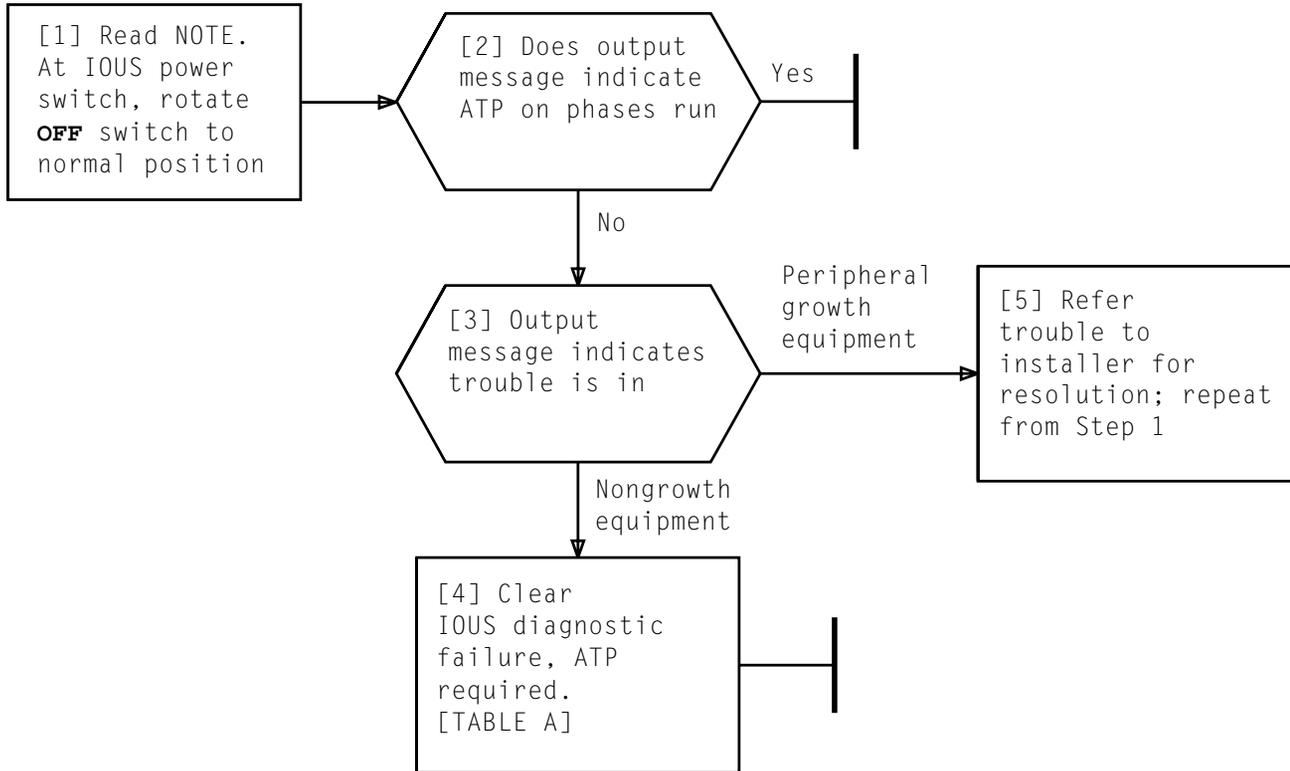


TABLE A	
IOP	TOP
J5A006C	234-351-021
J5A006D	234-351-022

NOTE Operation of the OFF switch will cause a diagnostic to be run	
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[1] See FIG. 1, 2, and TABLE A, Page 2.
 Remove J87389F-1 DC-to-DC converter from
 equipment location related to IOUC

[2] See FIG. 1, 2, and TABLE B, Page 2.
 Remove circuit packs from associated
 IOUC positions

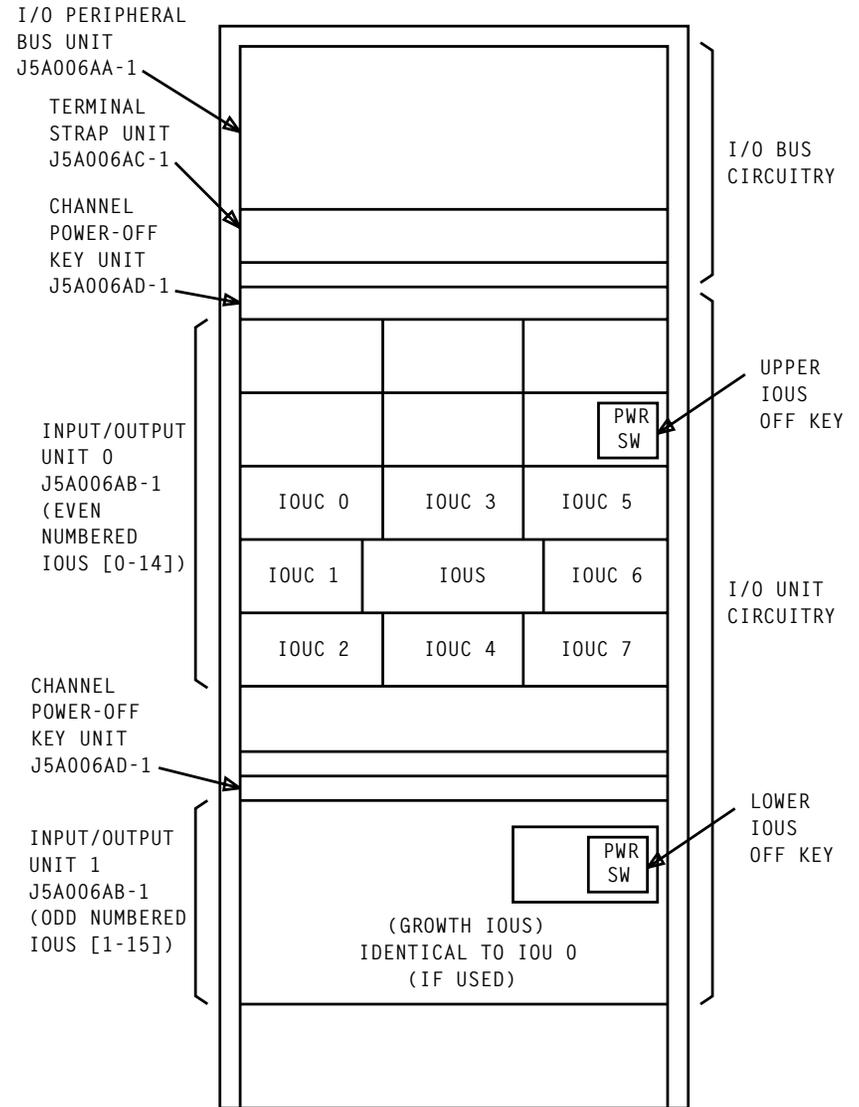
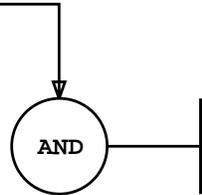


FIG. 1 - Input/Output Frame Front View (Equipment Side)

**REMOVE DC-TO-DC CONVERTER AND CIRCUIT PACKS
 FOR REMOVED IOUC**

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TABLE A								
IOUC	0	1	2	3	4	5	6	7
CONVERTER TYPE	J87389F-1 +3 VOLT DC-DC CONVERTER							
UNIT EQUIPMENT LOCATION	18-5	18-9	18-13	18-20	18-24	18-28	18-35	18-39

TABLE B								
IOUC	0	1	2	3	4	5	6	7
UNIT LEVEL	10	06	02	10	02	10	06	02
Circuit Packs	POS	POS	POS	POS	POS	POS	POS	POS
FC125	1&2	1&2	1&2	25&26	25&26	43&44	43&44	43&44
FA455	8	5	8	23	23	37	40	37
FA452	9	6	9	22	22	36	39	36
FA453	10	7	10	21	21	35	38	35
FA454	11	8	11	20	20	34	37	34
FA450	12&14	9&11	12&14	17&19	17&19	31&33	34&36	31&33
FA451	13	10	13	18	18	32	35	32
FC22						38		38

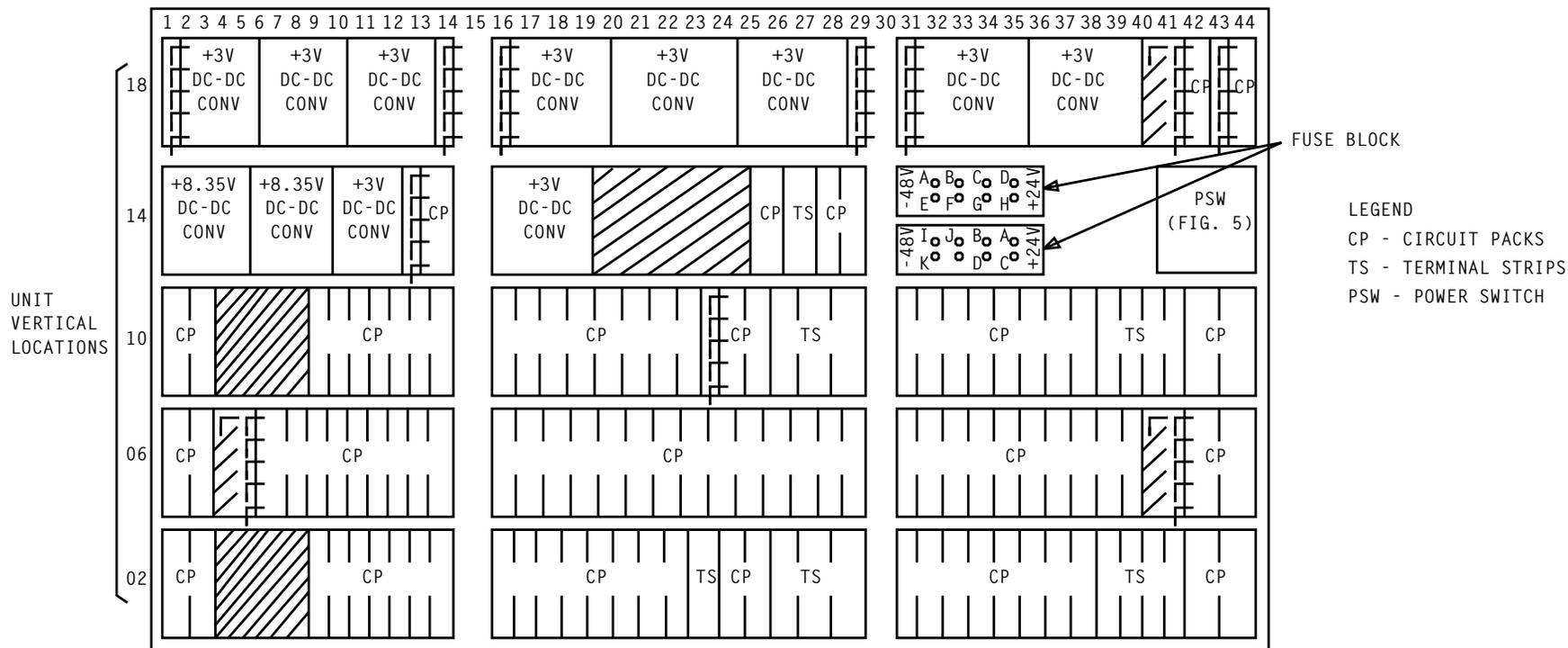


FIG. 2 - Input/Output Unit J5A006AB-1 - Front View

**REMOVE DC-TO-DC CONVERTER AND CIRCUIT PACKS
FOR REMOVED IOUC**

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[1] See FIG. 1.
Remove circuit
pack for removed
IOUC

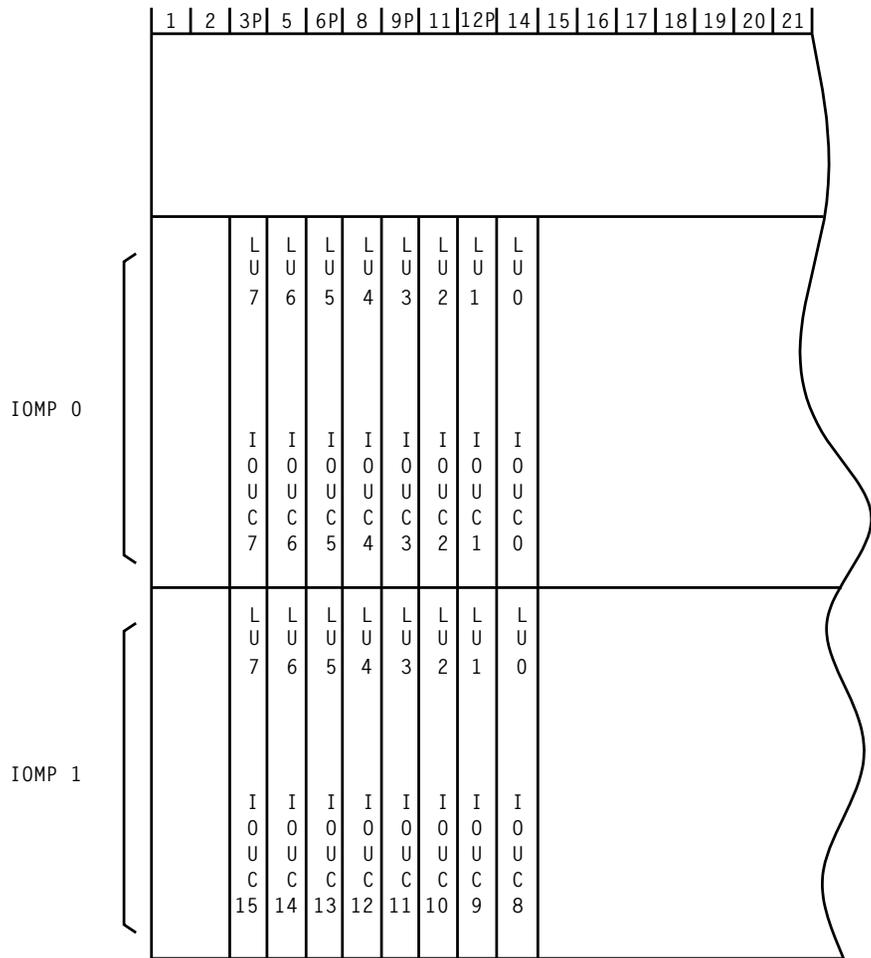


FIG. 1

REMOVE CIRCUIT PACKS FOR REMOVED IOUC (SD-5A049 OR 5A052)

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[1] See TABLE A.
Remove circuit pack
for removed IOUC



TABLE A	
CHANNEL	LOCATION
PC-20A	50-108
PC-21A	50-100
PC-22A	50-092
PC-23A	50-084
PC-30A	50-048
PC-31A	50-040
PC-32A	50-032
PC-33A	50-024
PC-20B	20-108
PC-21B	20-100
PC-22B	20-092
PC-23B	20-084
PC-30B	20-048
PC-31B	20-040
PC-32B	20-032
PC-33B	20-024

REMOVE CIRCUIT PACK FOR REMOVED IOUC (SD-4C049)

[1] Remove power from terminating end of cable

[2] Remove port cable at level 72 of I/O frame for IOUC port being deactivated

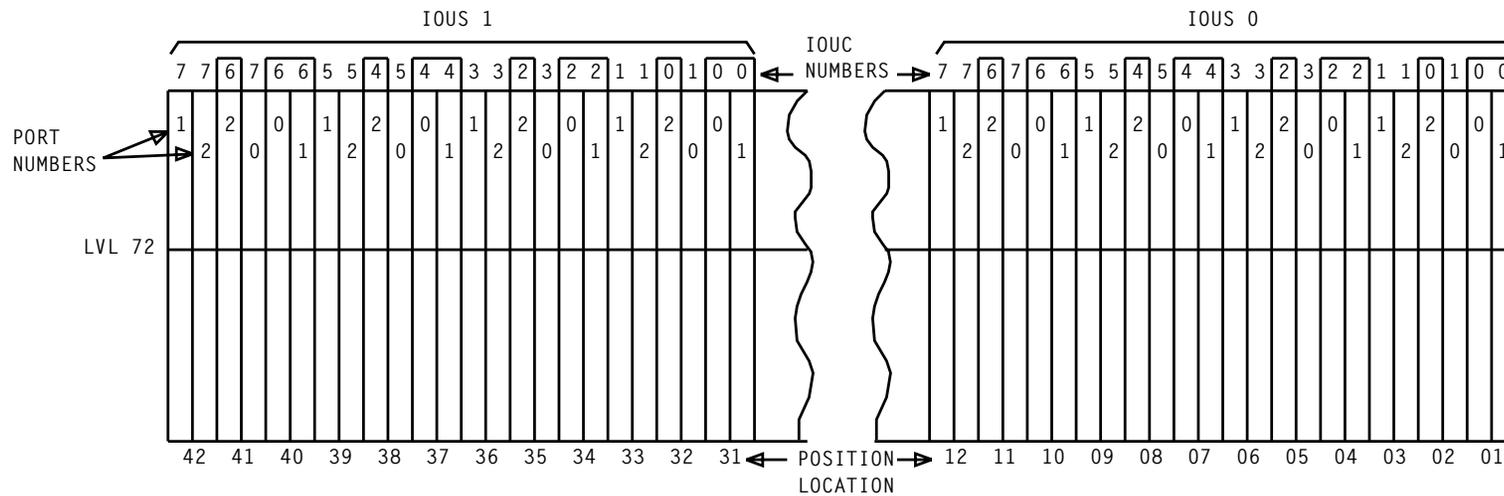
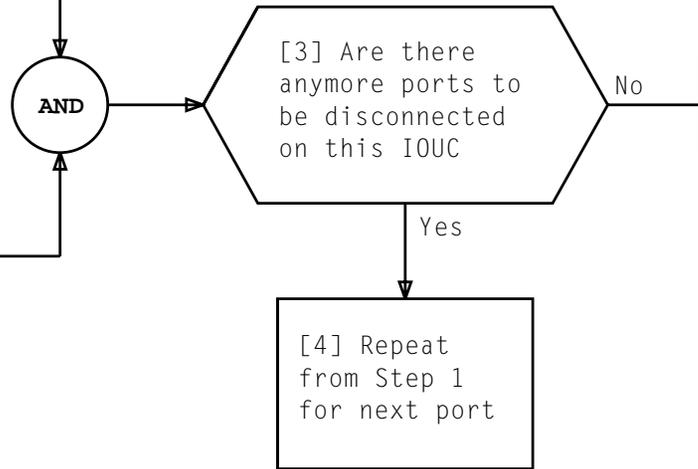


FIG. 1

REMOVE PORT CABLES AT I/O FRMAE (J5A006A)

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[1] Remove power from terminating end of cable

[2] Using TABLE A, determine location of backplane area associated with IOUC being deactivated

[3] Disconnect cable from backplane area located in Step 2 for port being deactivated [FIG. 1]

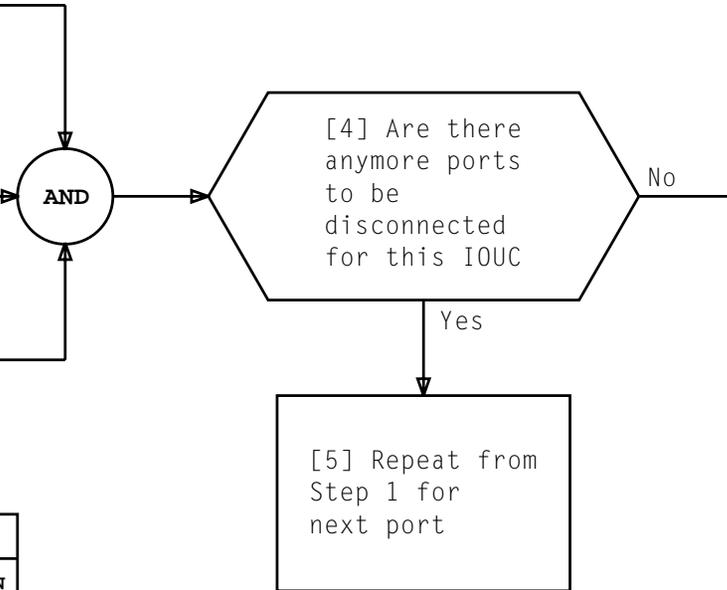


TABLE A			
CHANNEL	LOCATION	CHANNEL	LOCATION
A00	062-14	B00	038-14
A01	062-12P	B01	038-12P
A02	062-11	B02	038-11
A03	062-09P	B03	038-09P
A04	062-08	B04	038-08
A05	062-06P	B05	038-06P
A06	062-05	B06	038-05
A07	062-03P	B07	038-03P
A10	054-14	B10	030-14
A11	054-12P	B11	030-12P
A12	054-11	B12	030-11
A13	054-09P	B13	030-09P
A14	054-08	B14	030-08
A15	054-06P	B15	030-06P
A16	054-05	B16	030-05
A17	054-03P	B17	030-03P

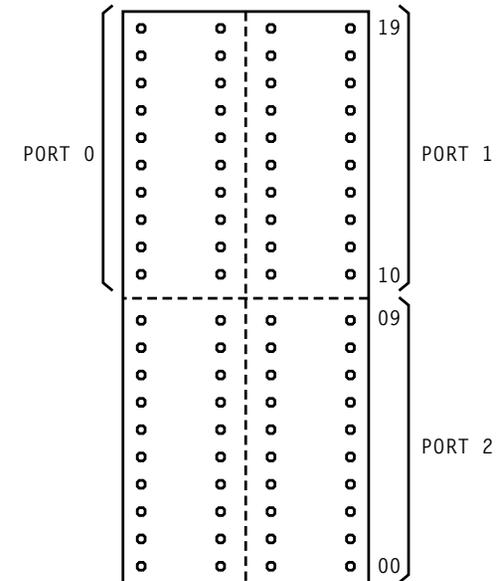


FIG. 1

REMOVE PORT CABLES AT I/O FRAME (J5A006C)

[1] Remove power from terminating end of cable

[2] Using TABLE A, determine location of backplane area associated with IOUC being deactivated

[3] Disconnect cable from backplane area located in Step 2 for port being deactivated [TABLE B and FIG. 1 or 2, Page 2]

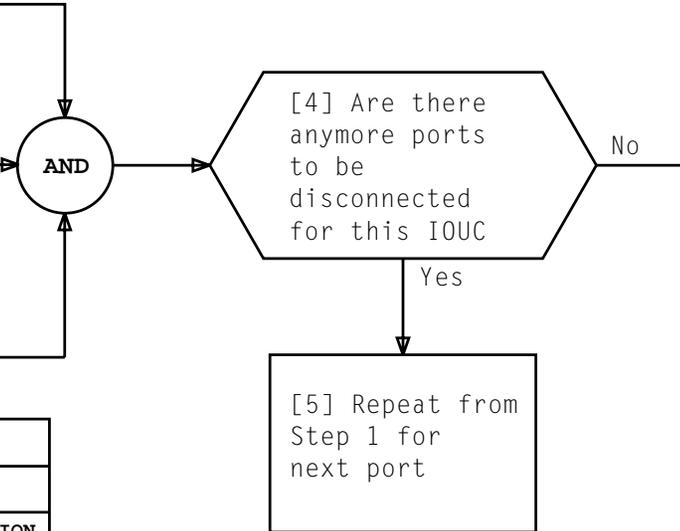


TABLE A					
SD-5A052-02		SD-5A052-01		SD-4C049-01	
CHANNEL	LOCATION	CHANNEL	LOCATION	CHANNEL	LOCATION
A00	62-14	A10	54-14	PC-20A	50-108
A01	62-12P	A11	54-12P	PC-21A	50-100
A02	62-11	A12	54-11	PC-22A	50-092
A03	62-09P	A13	54-09P	PC-23A	50-084
A04	62-08	A14	54-08	PC-30A	50-048
A05	62-06P	A15	54-06P	PC-31A	50-040
A06	62-05	A16	54-05	PC-32A	50-032
A07	62-03P	A17	54-03P	PC-33A	20-024
B00	32-14	B10	24-14	PC-20B	20-108
B01	32-12P	B11	24-12P	PC-21B	20-100
B02	32-11	B12	24-11	PC-22B	20-092
B03	32-09P	B13	24-09P	PC-23B	20-084
B04	32-08	B14	24-08	PC-30B	20-048
B05	32-06P	B15	24-06P	PC-31B	20-040
B06	32-05	B16	24-05	PC-32B	22-032
B07	32-03P	B17	24-03P	PC-33B	20-024

TABLE B				
PORT	FG19	FG26	FG27	TN75
0	310	310	310	145
1	110		110	
2	100			

REMOVE PORT CABLES AT I/O FRAME (J5A006D)

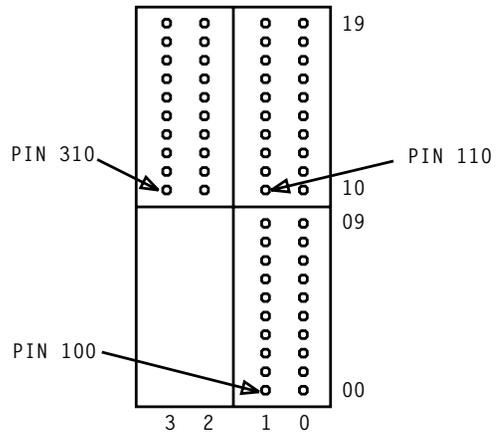


FIG. 1

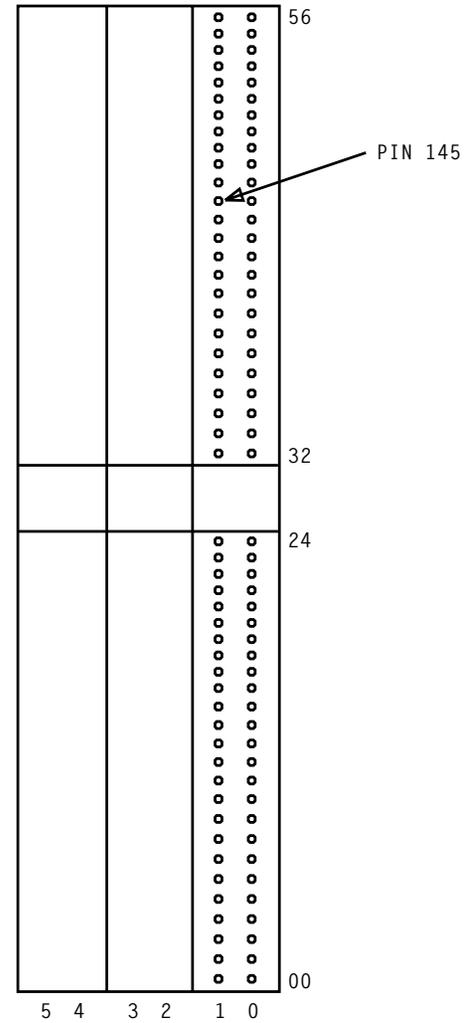


FIG. 2

REMOVE PORT CABLES AT IOP FRAME (J5A006D)

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[1] Using TABLE A, determine CHAN value for logical channel being grown

[2] Using TABLE A, determine CHTYP value for logical channel being grown

[3] At 1B MTC terminal, enter message to assign logical channel for logical operation
IN:XLBUF1:LCHAN,CHAN 0'a,CHTYP 0'b!

a = Channel number (CHAN) determined in Step 1

b = Channel type value determined in Step 2

OK
acknowledgment
received

AND

Page 2

TABLE A

CHANNEL NAME	CHAN	CHTYP
EDASH2	103	11
MAC1	106	0
MAC2	107	0
MAC3	110	0
PSIRAS	111	0
PSSPR	112	0
PSSPR2	113	0
NSA1	114	0
NSA2	115	0

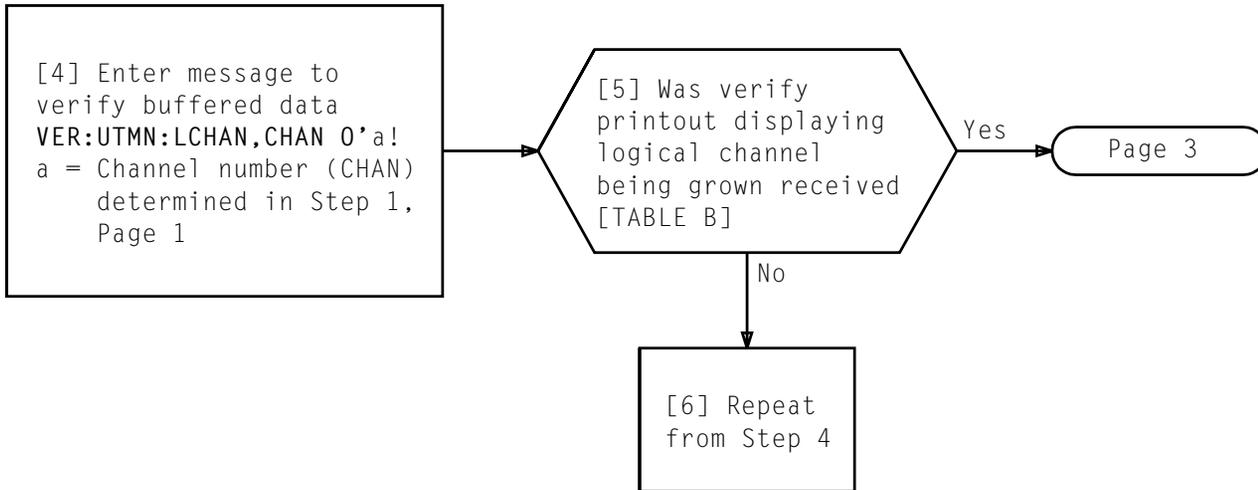
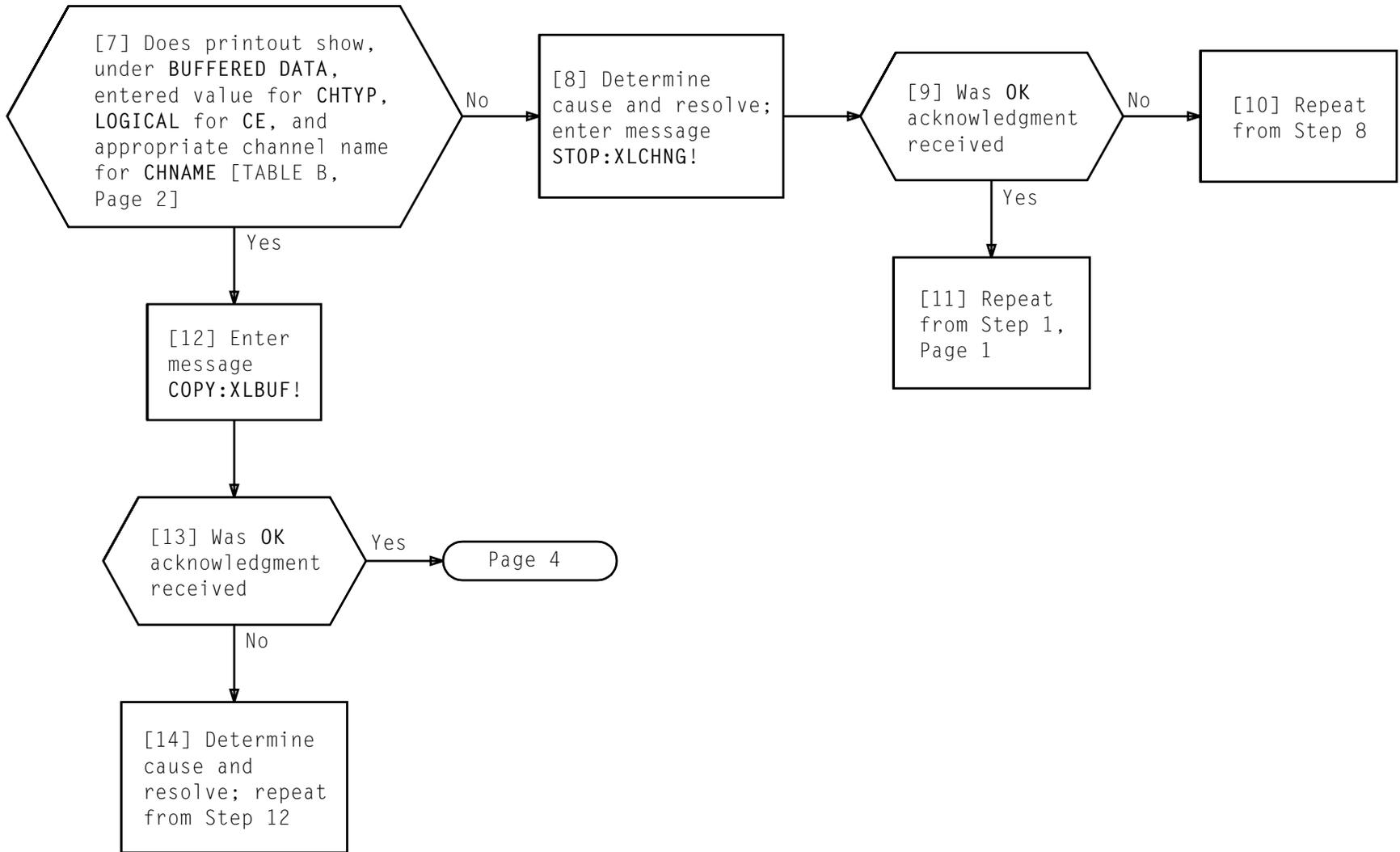


TABLE B	
OUTPUT MESSAGE	VARIABLES
VER:UTMN:LCHAN COMPLETED BUFFERED DATA: CHTYP=a CE=LOGICAL PHAPPLID=0 CURRENT DATA: CHNUMBER=b CHNAME=c CE=UNEQ CHTYP=x PHAPPLID=x	a = Channel type determined in Step 2, Page 1 b = Octal channel number of logical channel c = Channel name x = Don't care



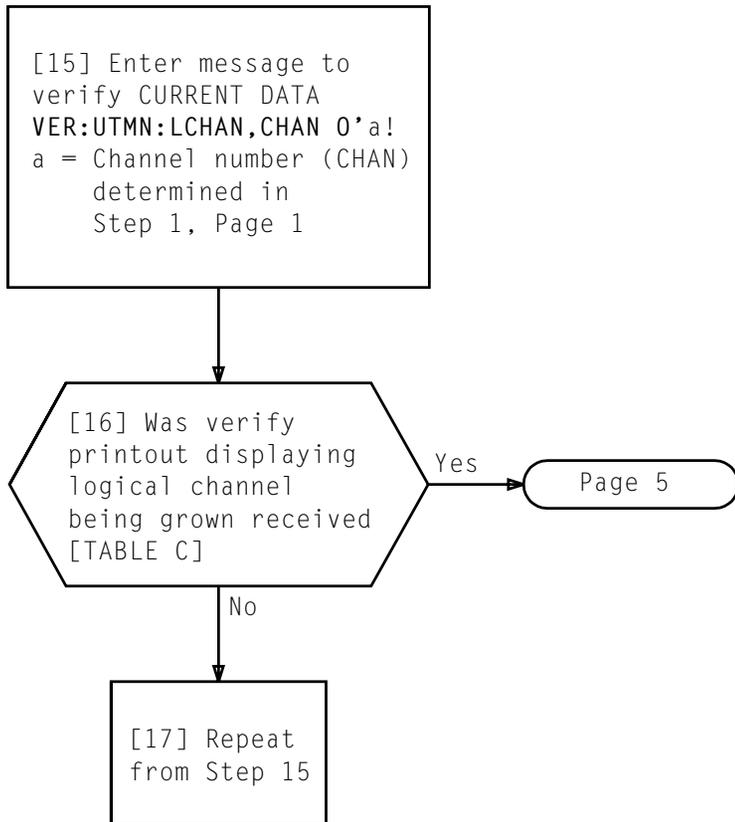
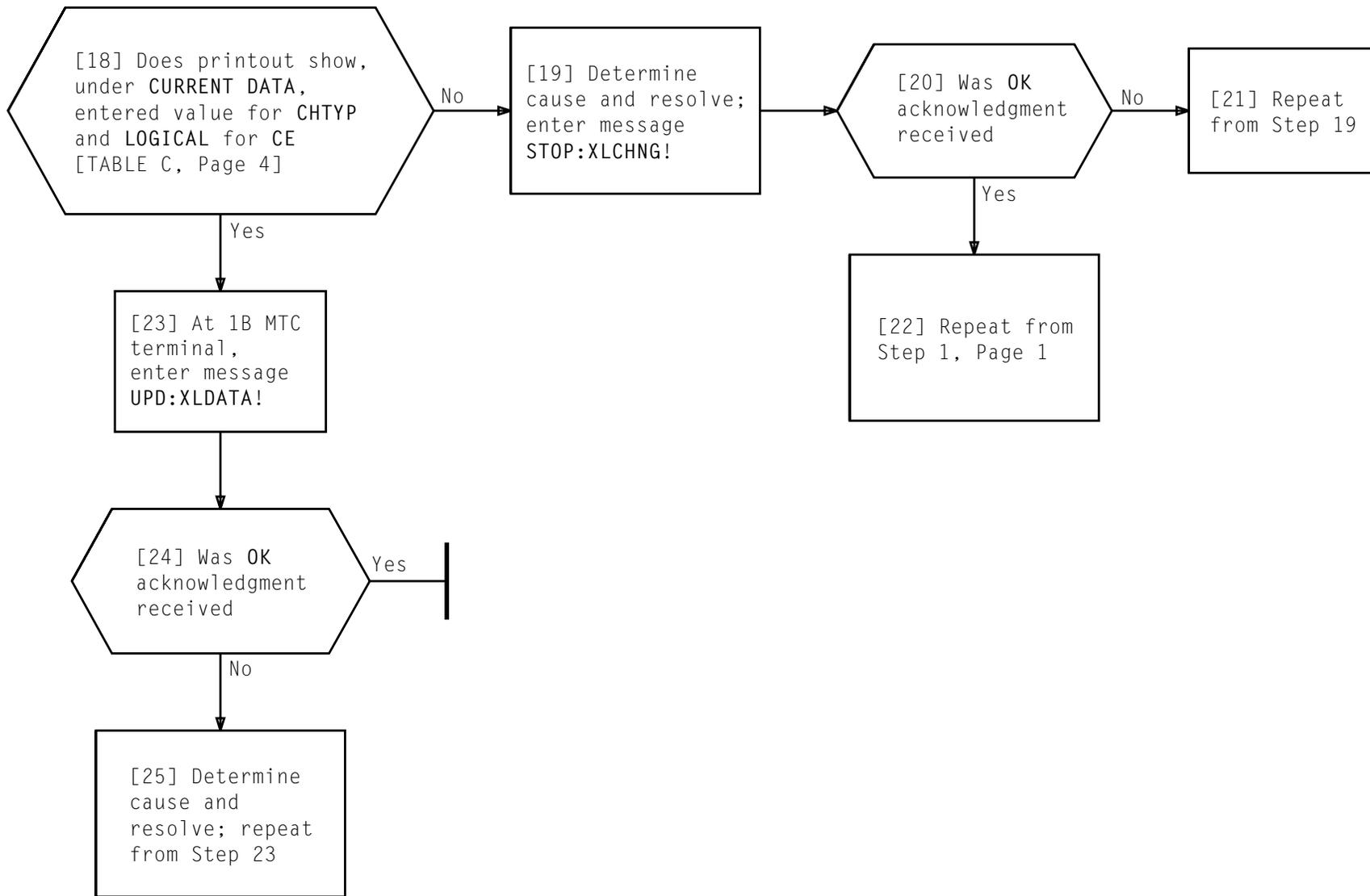


TABLE C	
OUTPUT MESSAGE	VARIABLES
VER:UTMN:LCHAN COMPLETED	a = Octal channel number of logical channel
BUFFERED DATA:	b = Channel name
CHTYP=x	c = Channel type determined in Step 2, Page 1
CE=x	x = Don't care
PHAPPLID=x	
CURRENT DATA:	
CHNUMBER=a	
CHNAME=b	
CE=LOGICAL	
CHTYP=c	
PHAPPLID=x	

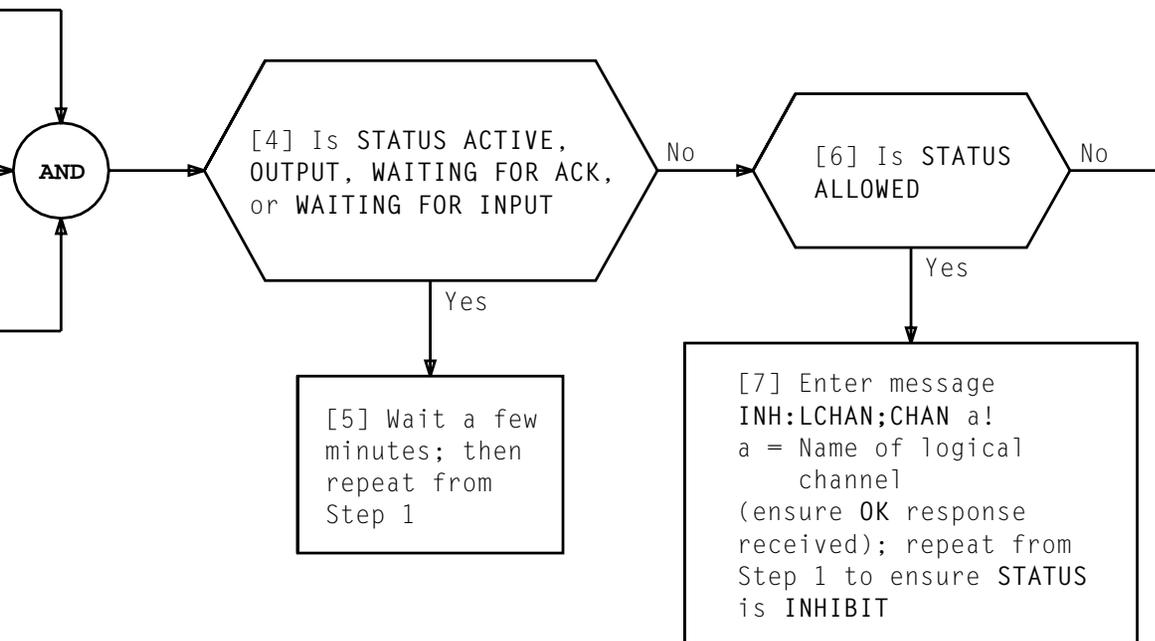


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[1] At 1B MTC terminal,
enter message
OP:LCHAN!

[2] Using printout, locate
line containing logical
channel being degrown

[3] On line located in Step 2,
determine STATUS of
logical channel



ENSURE LOGICAL CHANNEL IS INACTIVE AND INHIBIT

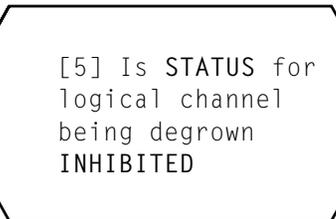
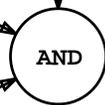
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[1] Using TABLE A, determine CHAN value for logical channel being degrown

[2] At 1B MTC terminal, enter message
INH:LCHAN;CHAN 0'a!
a = Channel number (CHAN)
determined in Step 1

[3] Enter message
OP:LCHAN!

[4] Using printout, determine if STATUS for logical channel being degrown is INHIBITED



Page 2

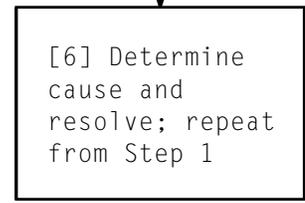


TABLE A	
CHANNEL NAME	CHAN
EDASH2	103
MAC1	106
MAC2	107
MAC3	110
PSIRAS	111
PSSPR	112
NSA1	114
NSA2	115

[7] Enter message to change logical channel to UNEQ
 IN:XLBUF1:LCHAN,CHAN 0'a,CLEAR!

a = Channel number (CHAN)
 determined in Step 1,
 Page 1

OK
 acknowledgment
 received

[8] Enter message to verify buffered data
 VER:UTMN:LCHAN,CHAN 0'a!

a = Channel number (CHAN)
 determined in Step 1,
 Page 1

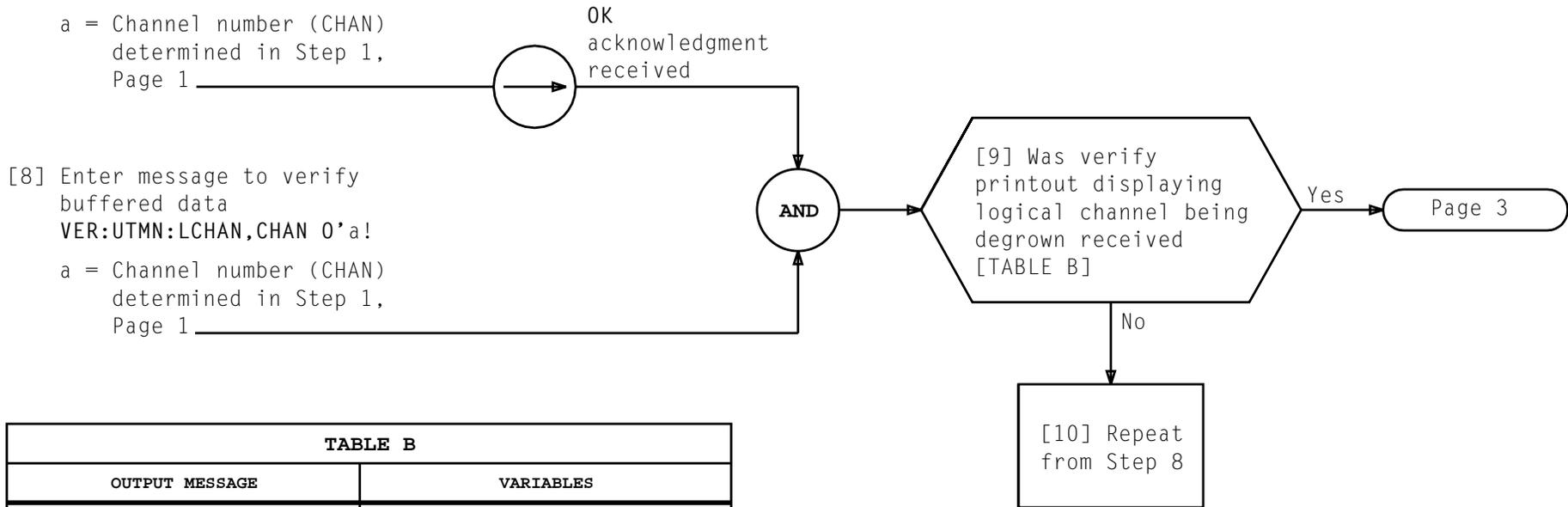
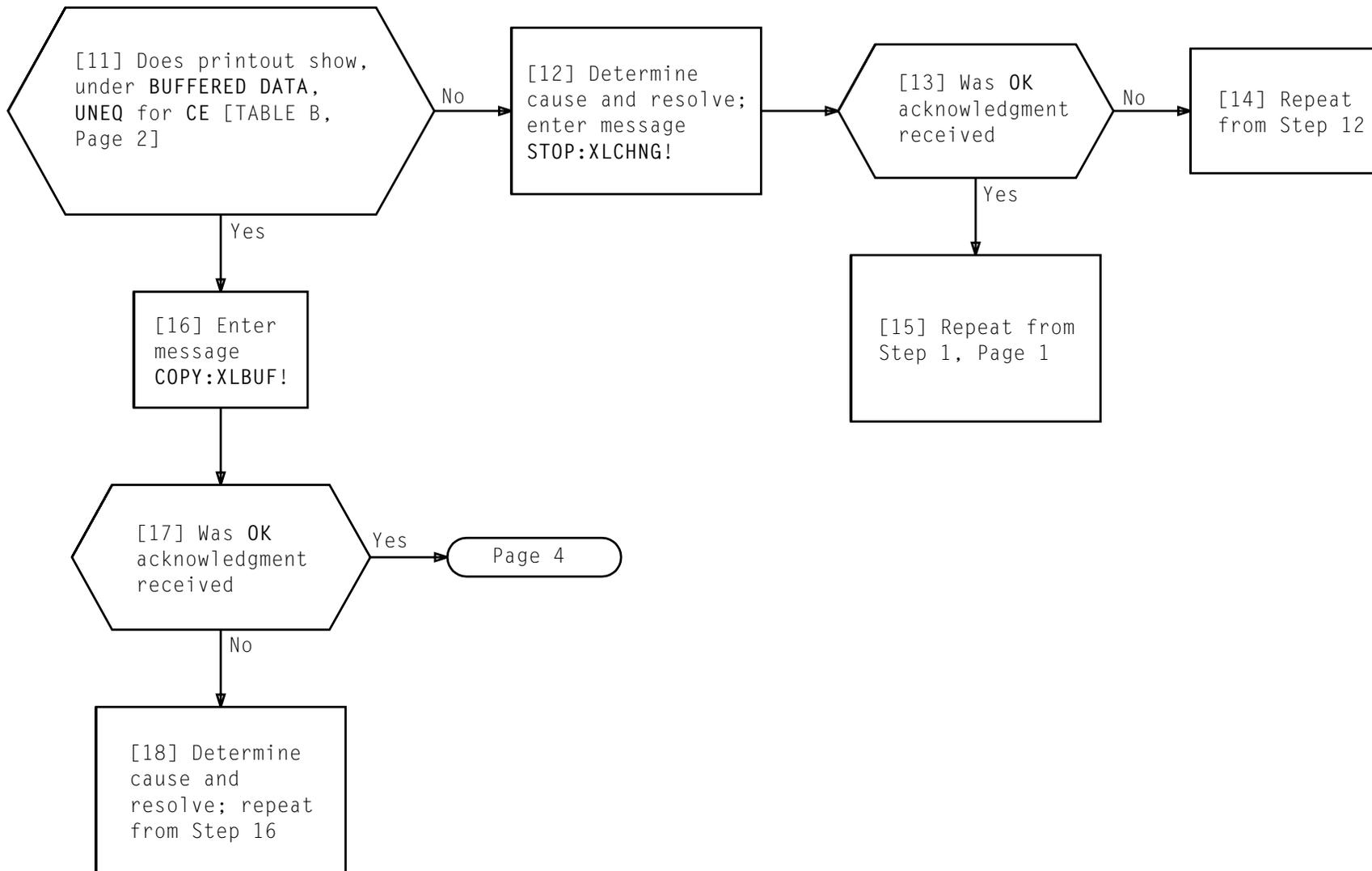


TABLE B	
OUTPUT MESSAGE	VARIABLES
VER:UTMN:LCHAN COMPLETED	a = Octal channel number of logical channel
BUFFERED DATA:	b = Channel name
CHTYP=x	x = Don't care
CE=UNEQ	
PHAPPLID=x	
CURRENT DATA:	
CHNUMBER=a	
CHNAME=b	
CE=LOGICAL	
CHTYP=x	
PHAPPLID=x	



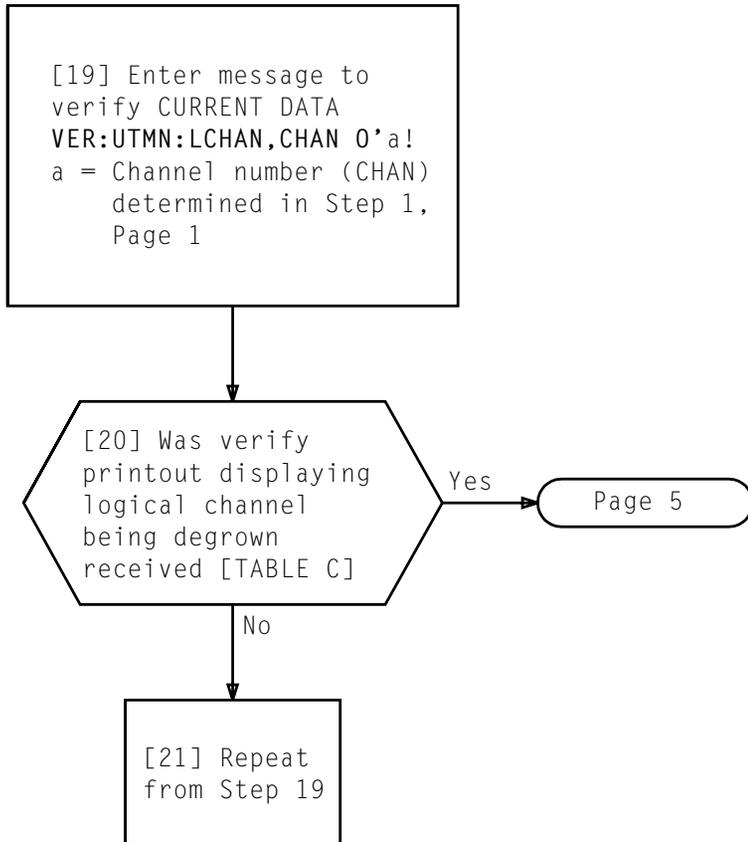
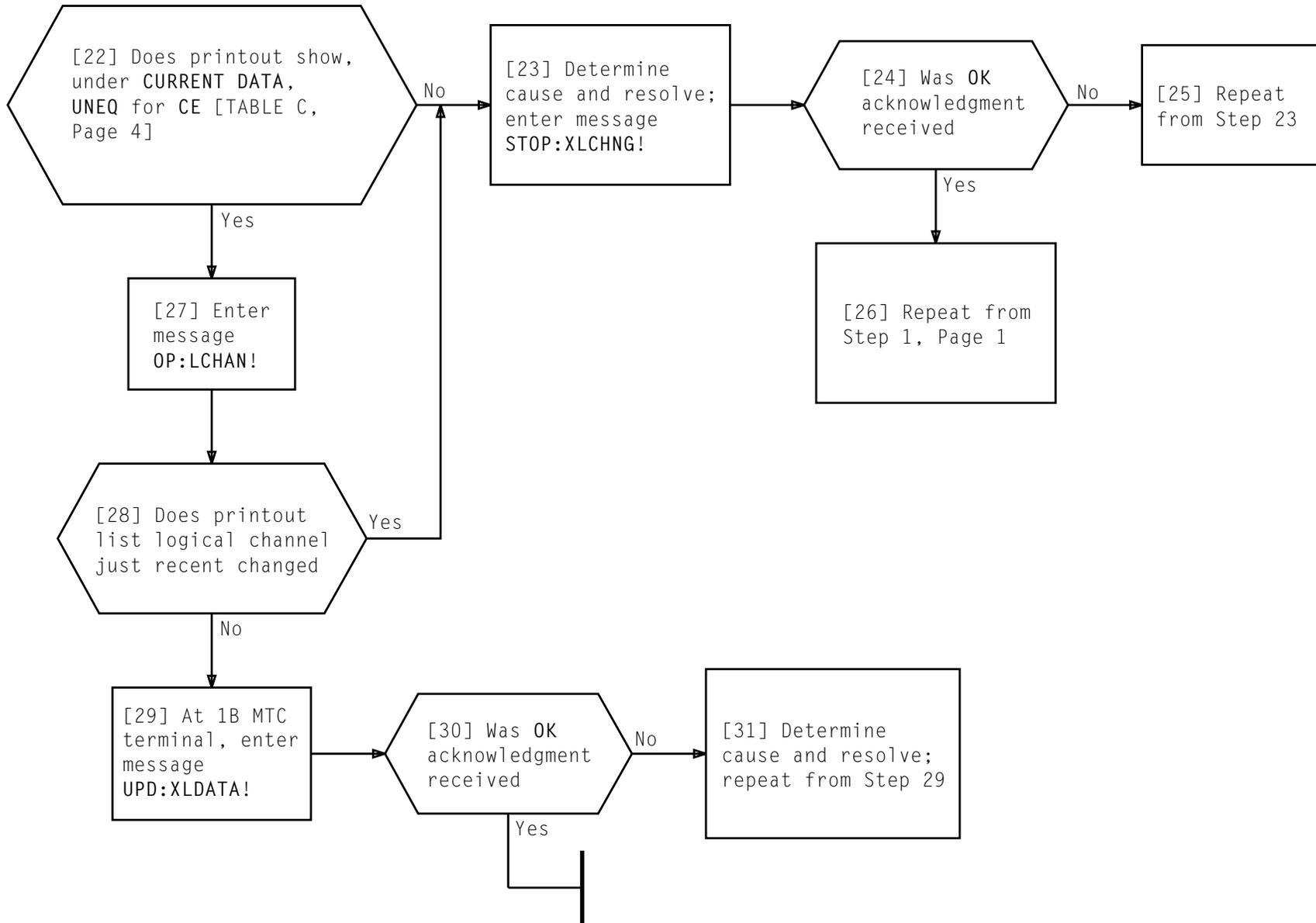


TABLE C	
OUTPUT MESSAGE	VARIABLES
VER:UTMN:LCHAN COMPLETED	a = Octal channel number of logical channel
BUFFERED DATA:	b = Channel name
CHTYP=x	x = Don't care
CE=x	
PHAPPLID=x	
CURRENT DATA:	
CHNUMBER=a	
CHNAME=b	
CE=UNEQ	
CHTYP=x	
PHAPPLID=x	



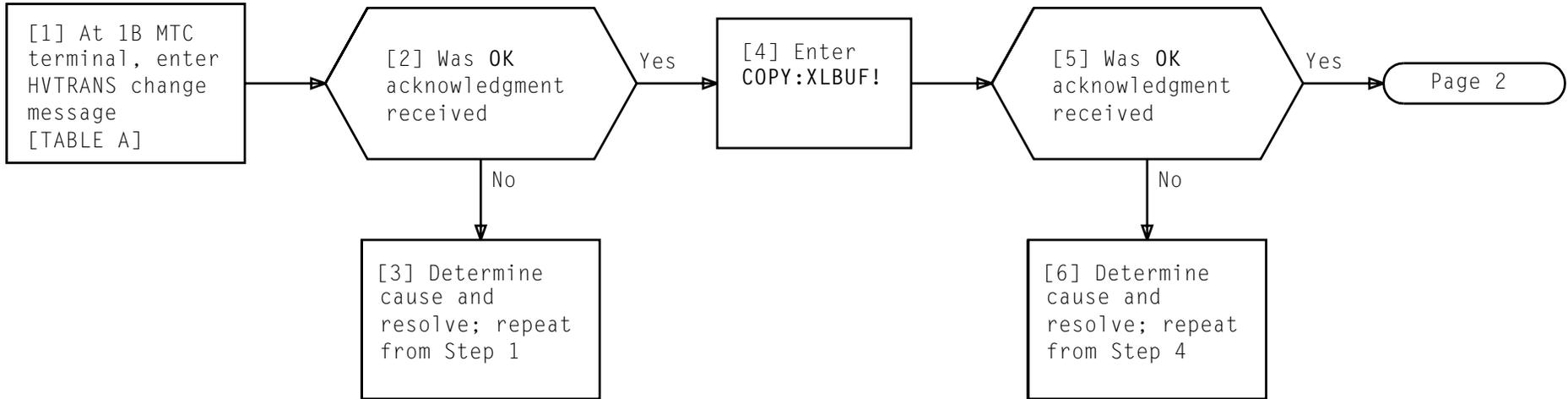


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	IN:XLBUF:CC a,HVTRANS (SGM,Y)!
a = CC Member number	

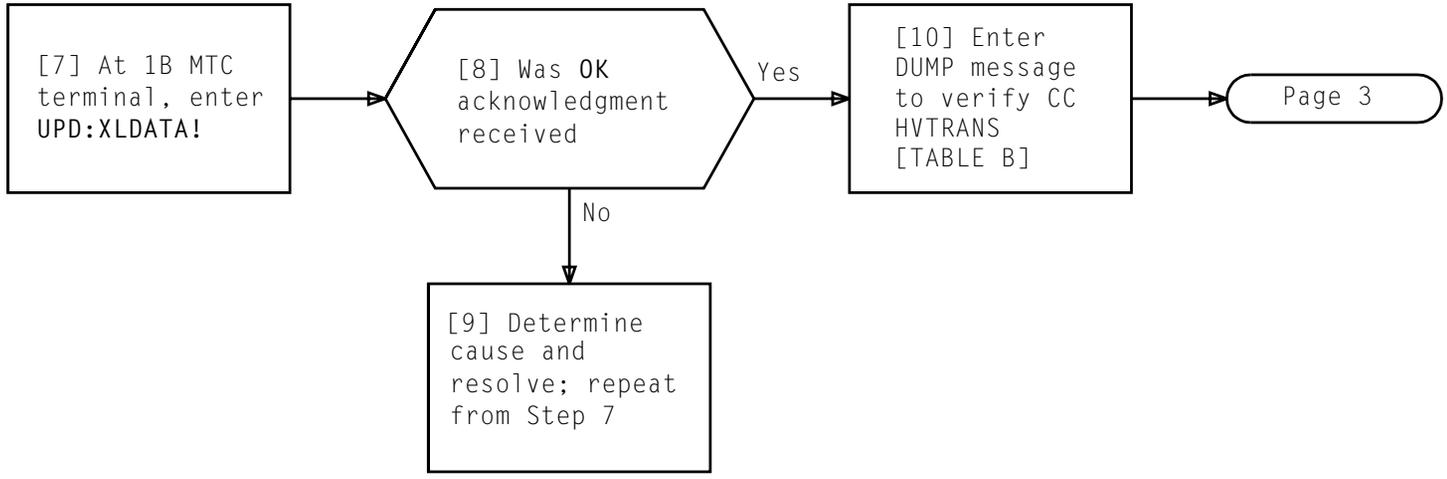


TABLE B	
MESSAGE NUMBER	INPUT MESSAGE
1	DUMP:CSS,ADR 777500a!
a = 0 (for CC 0) or 1 (for CC 1)	

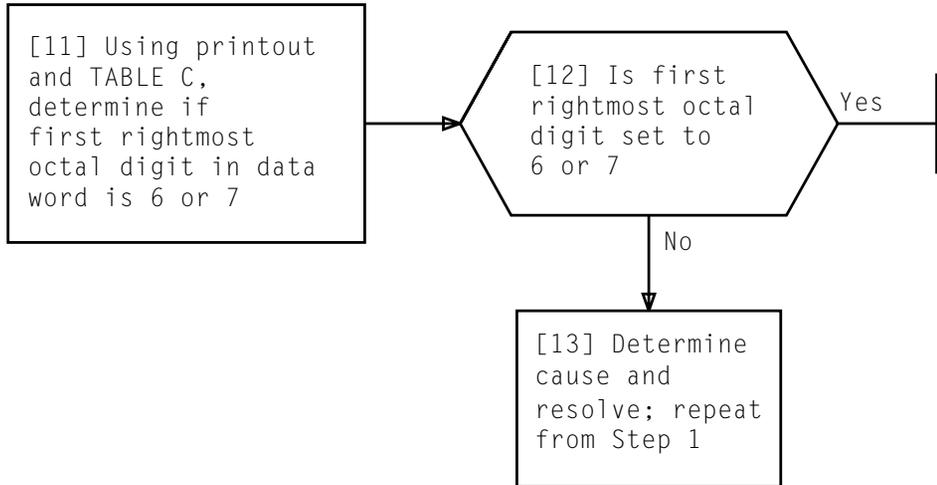


TABLE C	
MESSAGE NUMBER	OUTPUT MESSAGE
1	DUMP:CSS,INDIR 0,ADR 774777500a,INC +0 COMPLETED 774777500a 000000bc
a = 0 (for CC 0) or 1 (for CC 1) b = Don't Care c = 6 or 7 [Segmented Memory (Bit 2) is set]	

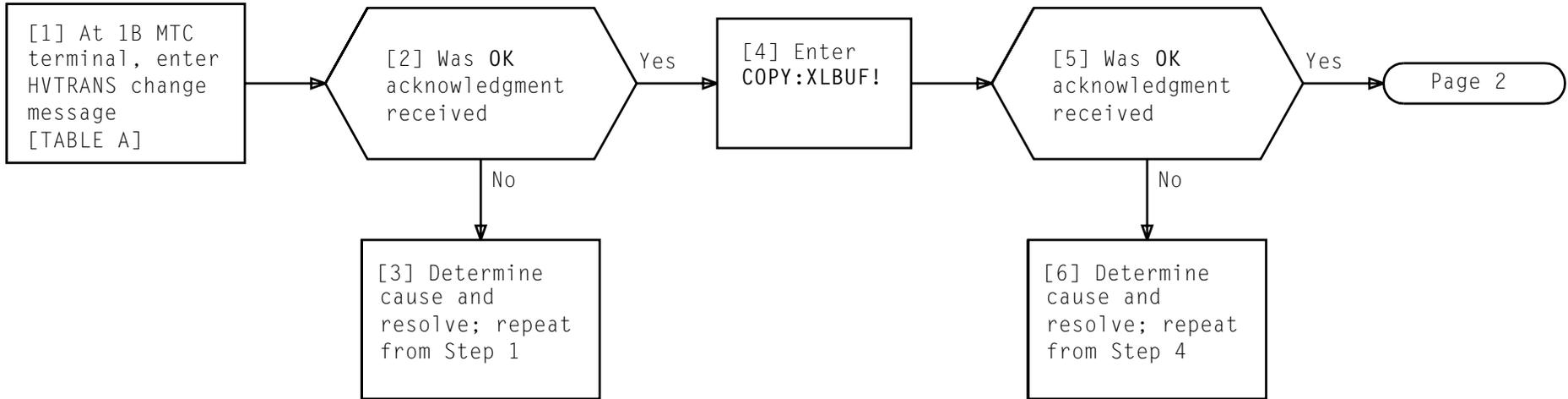


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	IN:XLBUF:CC a,HVTRANS (SGM,N)!
a = CC Member number	

CHANGE AND VERIFY CC HARDWARE VERSION TRANSLATOR TO BACK OUT SEGMENTED MEMORY

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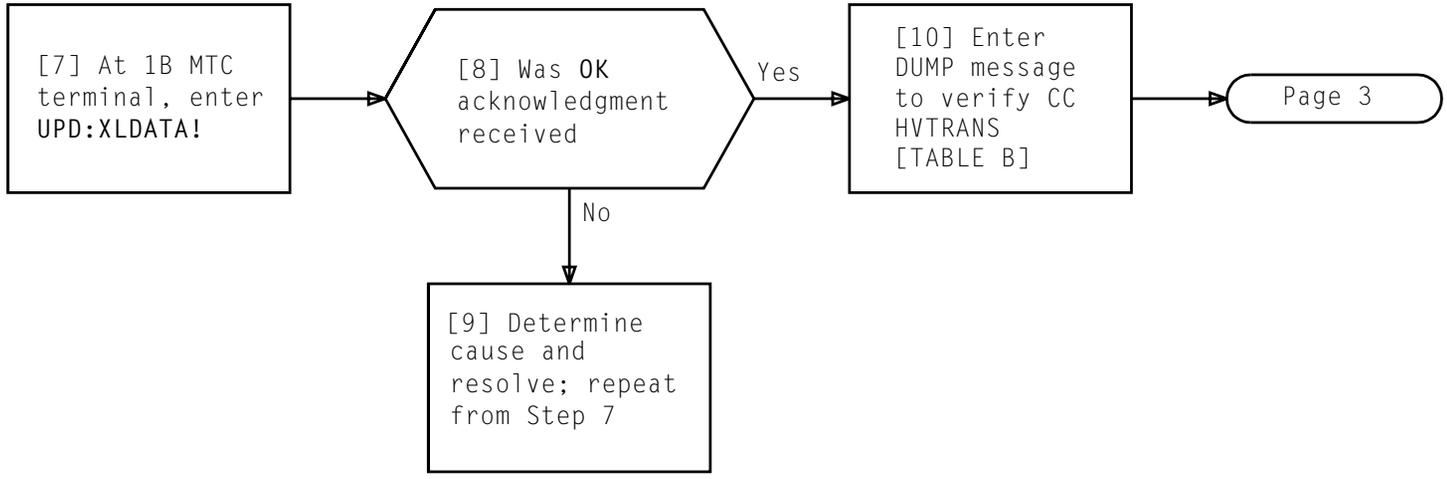


TABLE B	
MESSAGE NUMBER	INPUT MESSAGE
1	DUMP:CSS,ADR 777500a!
a = 0 (for CC 0) or 1 (for CC 1)	

CHANGE AND VERIFY CC HARDWARE VERSION TRANSLATOR TO BACK OUT SEGMENTED MEMORY

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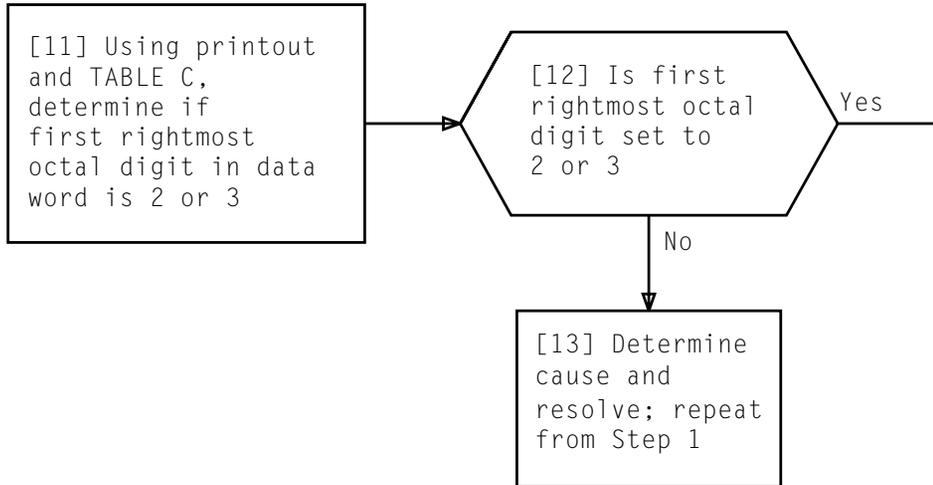


TABLE C	
MESSAGE NUMBER	OUTPUT MESSAGE
1	DUMP:CSS,INDIR 0,ADR 774777500a,INC +0 COMPLETED 774777500a 000000bc
a = 0 (for CC 0) or 1 (for CC 1) b = Don't Care c = 2 or 3 [Segmented Memory (Bit 2) is not set]	

CHANGE AND VERIFY CC HARDWARE VERSION TRANSLATOR TO BACK OUT SEGMENTED MEMORY

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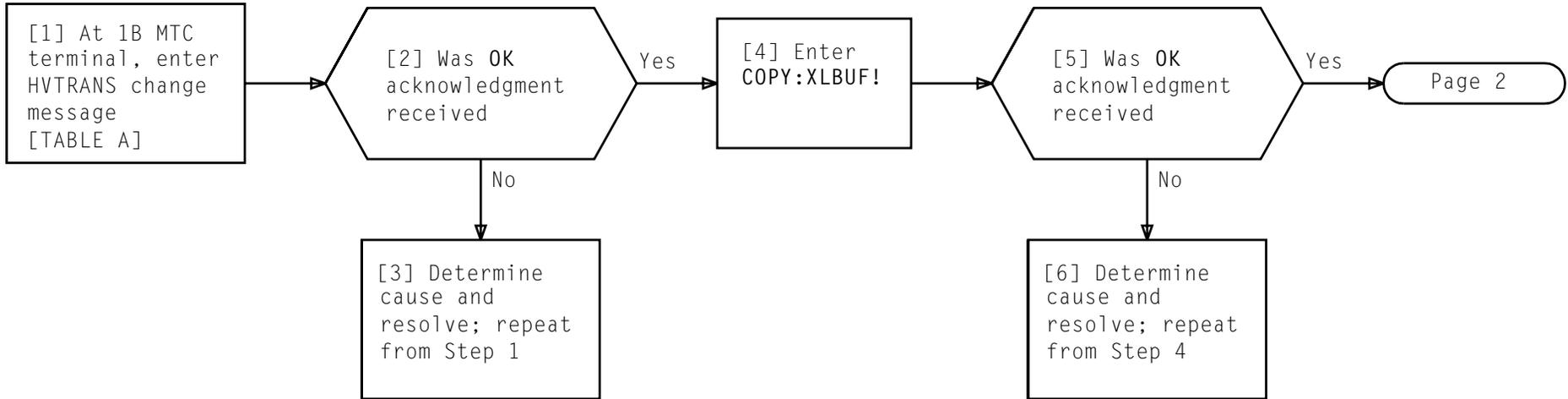


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	IN:XLBUF:CC a,HVTRANS (PRF,Y)!
a = CC Member number	

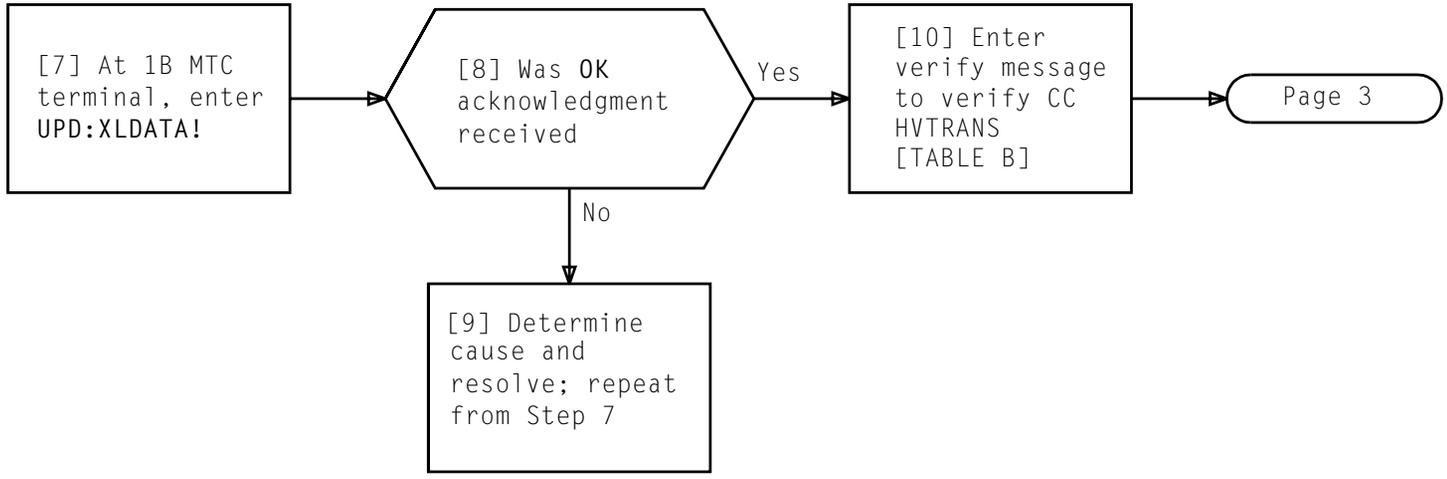


TABLE B	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:CC a,HVTRANS!
a = 0 (for CC 0) or 1 (for CC 1)	

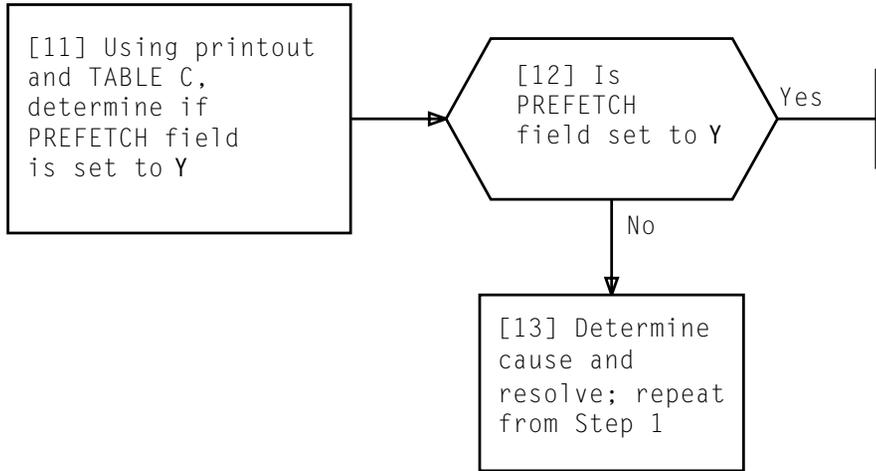


TABLE C	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,CC a COMPLETED TRANSLATOR ADR=0777500a TRANSLATOR SIZE=1 CURRENT DATA: EXTENDED MEMORY=Y PROGRAM STORE EXPANSION=b SEGMENTED MEMORY=b PREFETCH=Y
a = 0 (for CC 0) or 1 (for CC 1) b = Don't Care	

CHANGE AND VERIFY CC HARDWARE VERSION TRANSLATOR FOR ADDRESS PRE-FETCH

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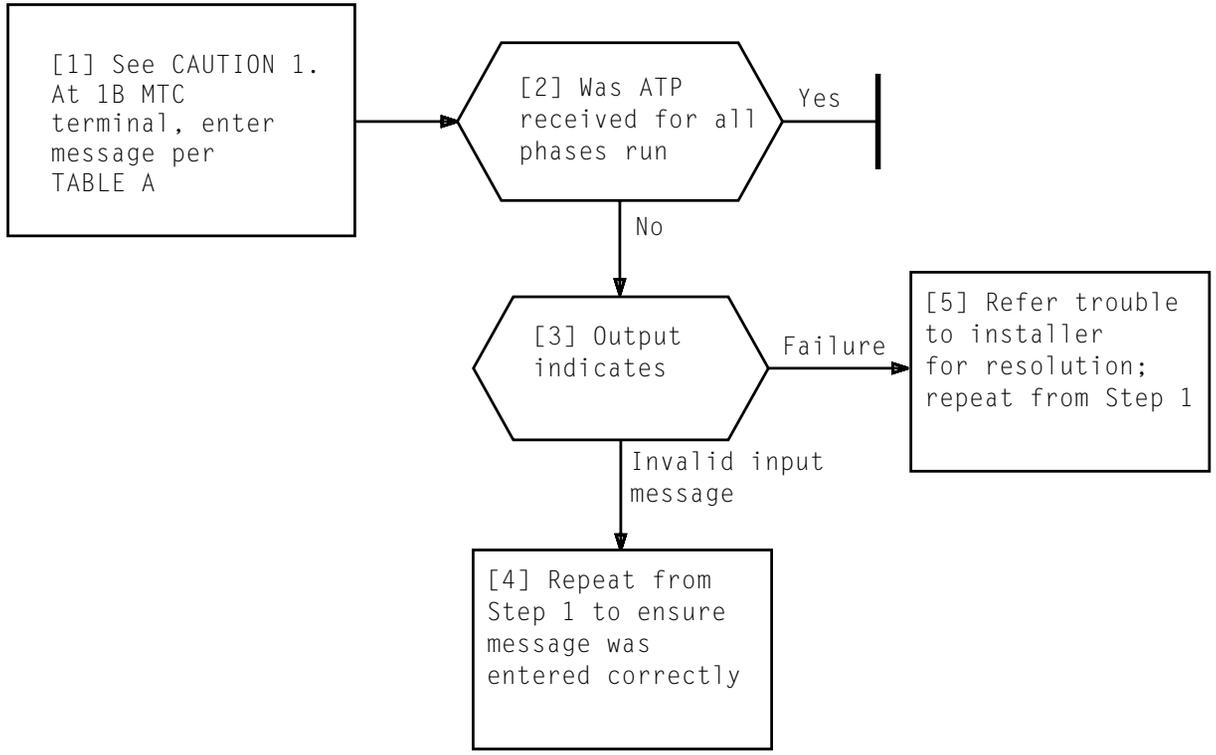
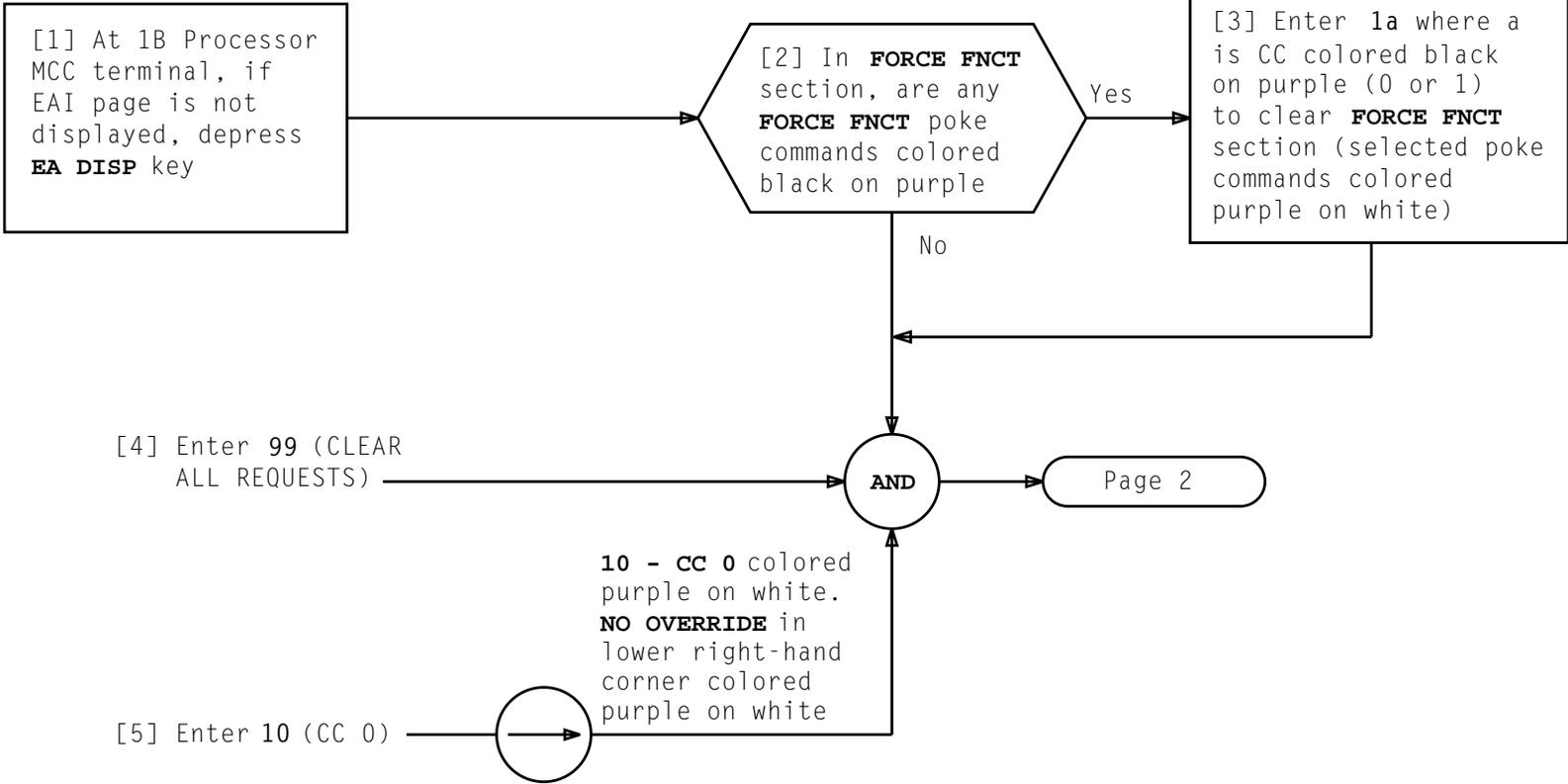


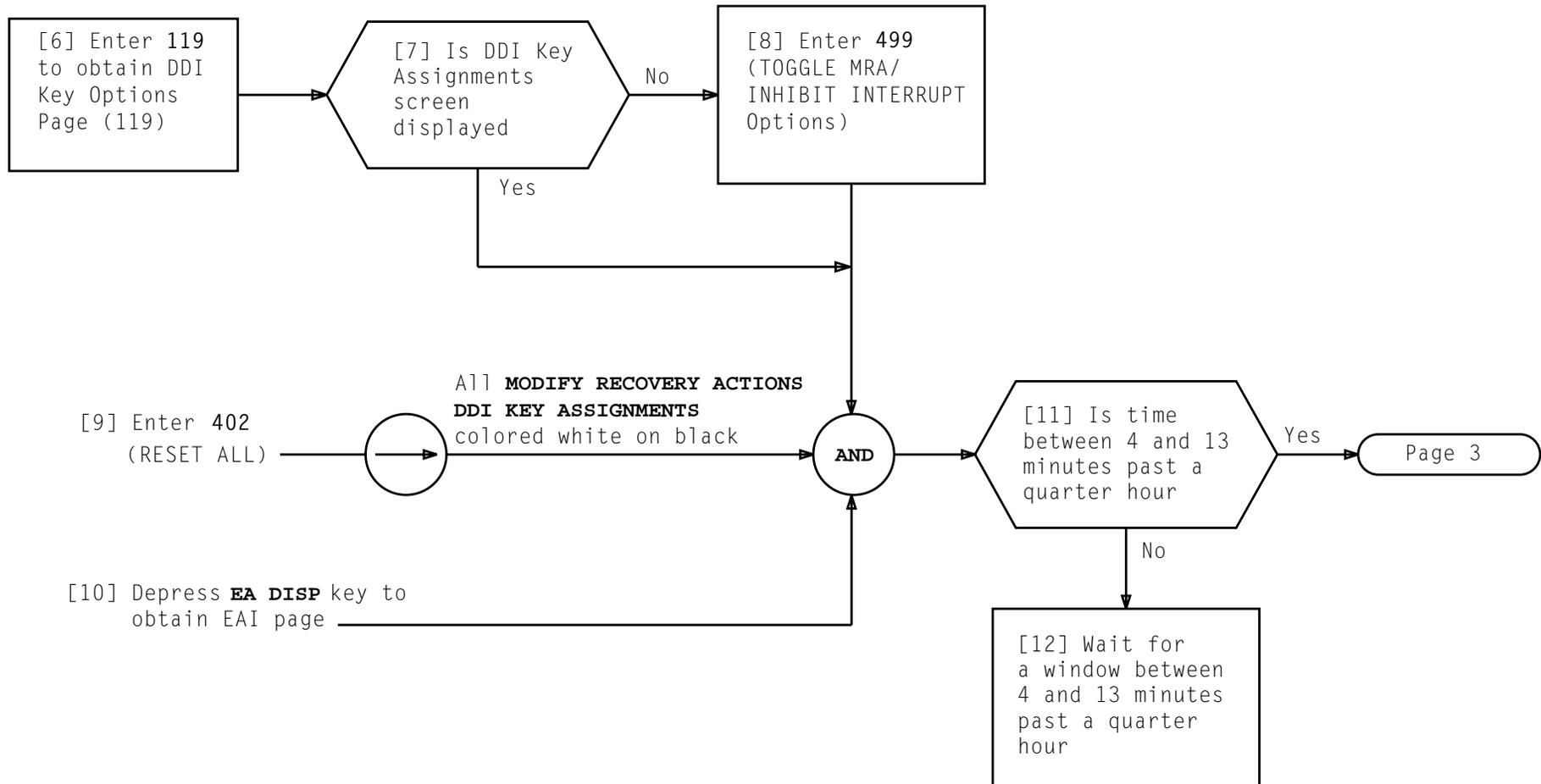
TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	DGN:CC a:PH (1-58,61-70,80,81,83,85,87,89)!
a = Standby CC member number (0 or 1)	

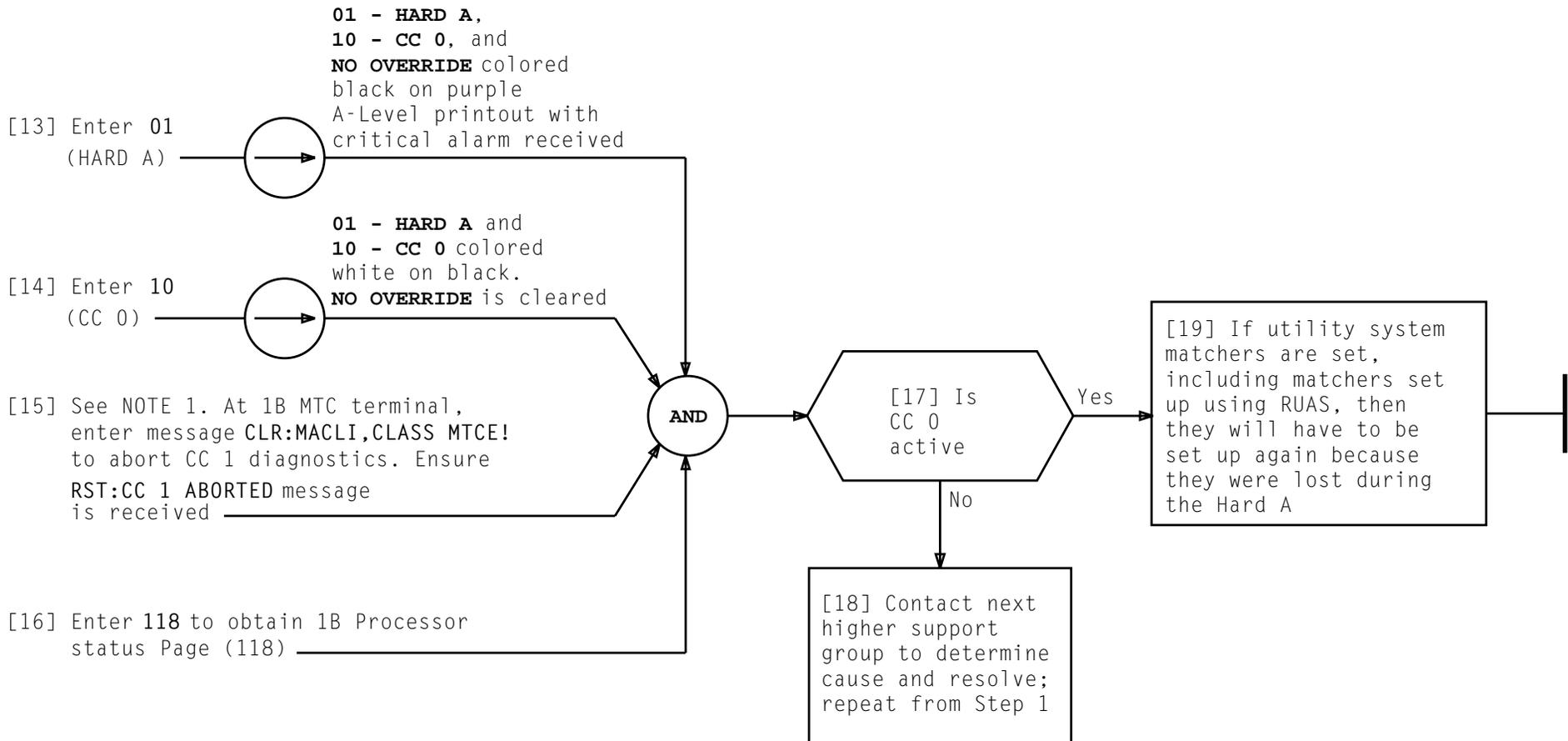
CAUTION 1
CC diagnostic must be entered as given. Do not add any phases not listed. A system phase 3 is possible if not followed exactly



FORCE CC 0 TO ACTIVE STATE

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NOTE 1 Diagnostic failure may be received if CLR message is not entered immediately	
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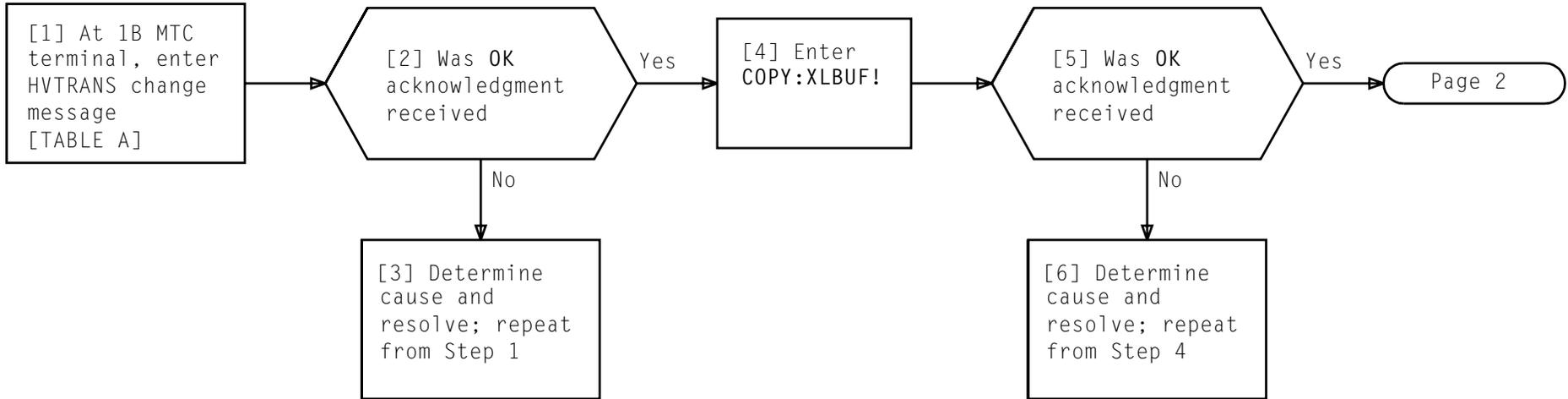


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	IN:XLBUF:CC a,HVTRANS (PRF,N)!
a = CC Member number	

CHANGE AND VERIFY CC HARDWARE VERSION TRANSLATOR TO BACK OUT ADDRESS PRE-FETCH

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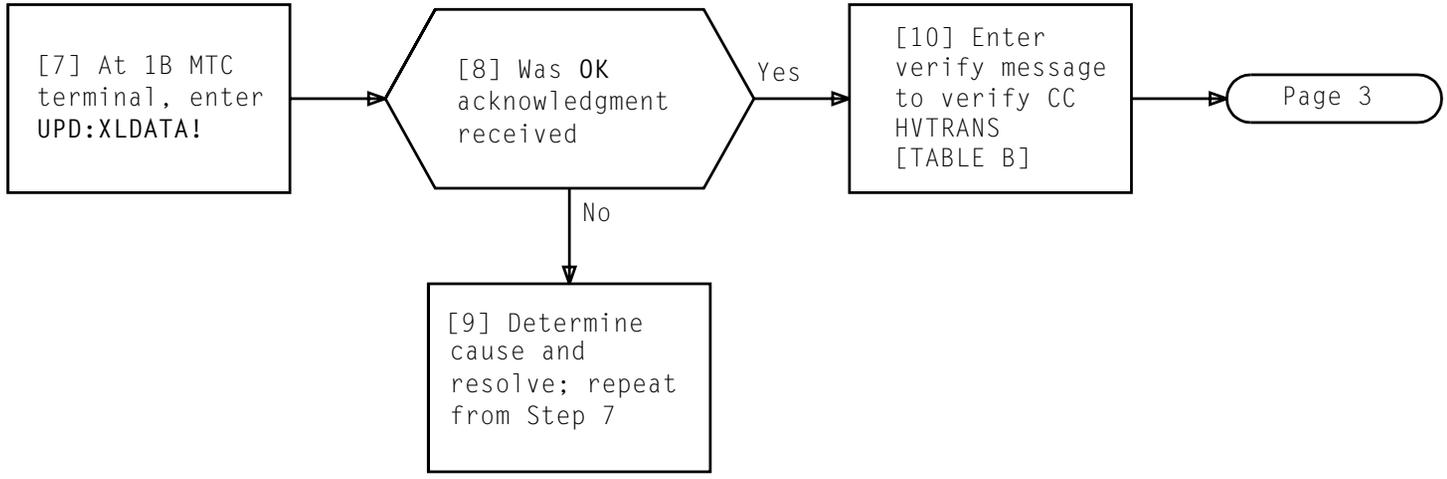


TABLE B	
MESSAGE NUMBER	INPUT MESSAGE
1	VER:UTMN:CC a,HVTRANS!
a = 0 (for CC 0) or 1 (for CC 1)	

CHANGE AND VERIFY CC HARDWARE VERSION TRANSLATOR TO BACK OUT ADDRESS PRE-FETCH

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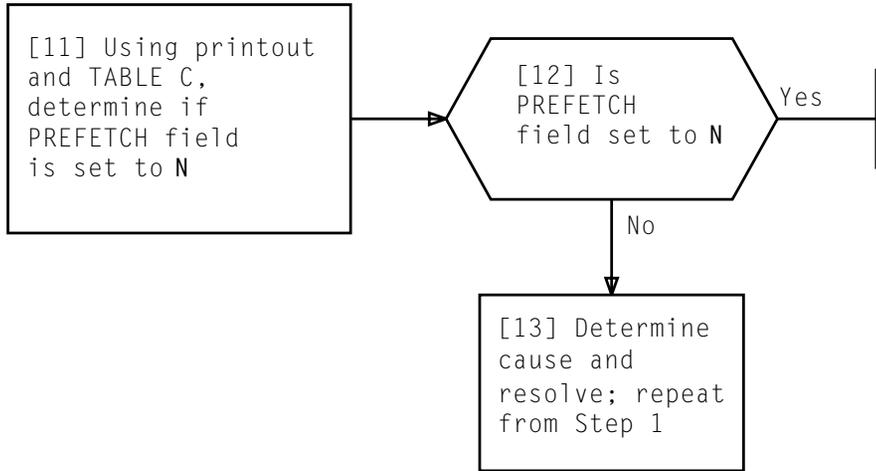
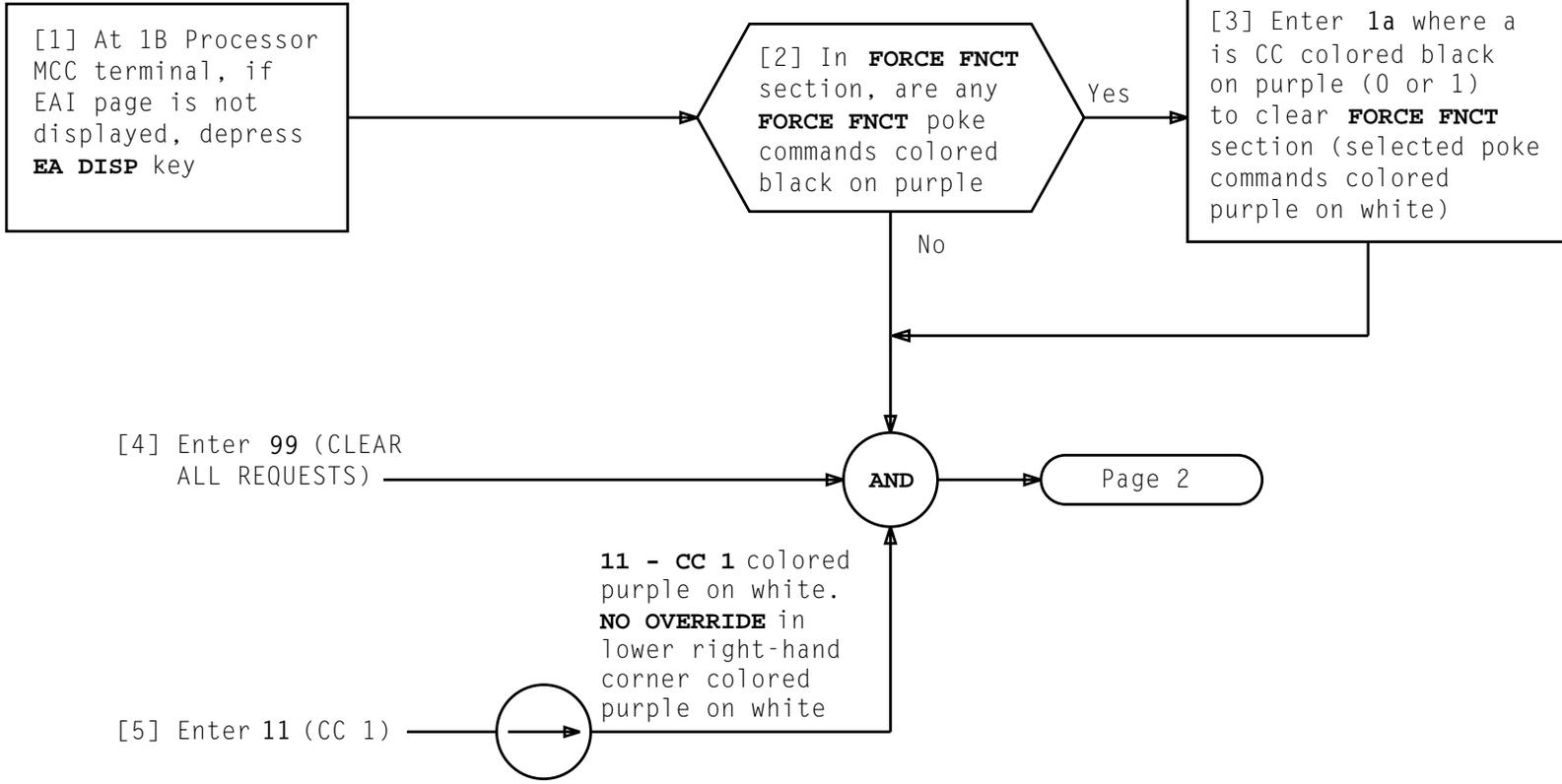


TABLE C	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:UTMN,CC a COMPLETED TRANSLATOR ADR=0777500a TRANSLATOR SIZE=1 CURRENT DATA: EXTENDED MEMORY=Y PROGRAM STORE EXPANSION=b SEGMENTED MEMORY=b PREFETCH=N
a = 0 (for CC 0) or 1 (for CC 1) b = Don't Care	

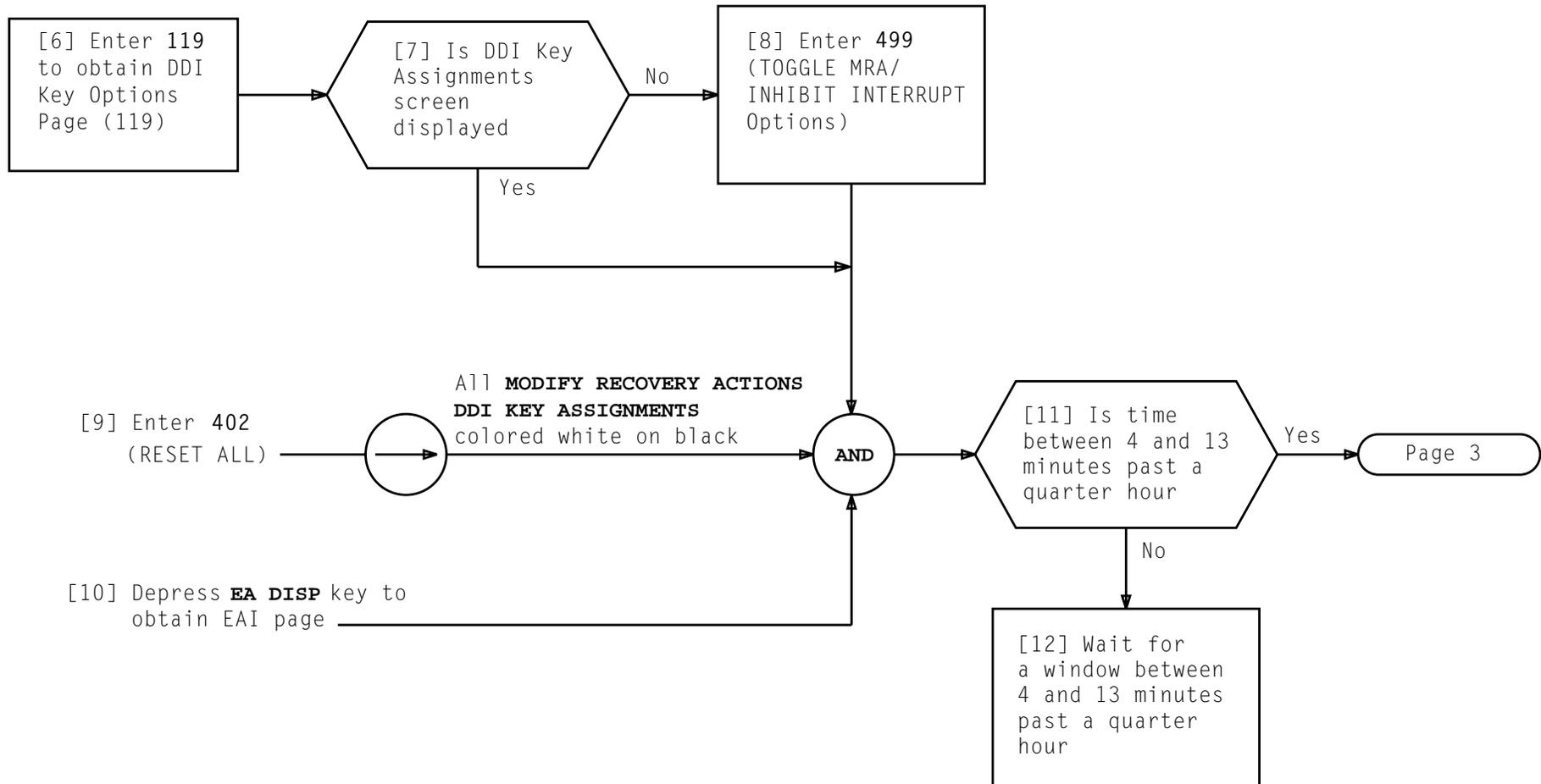
CHANGE AND VERIFY CC HARDWARE VERSION TRANSLATOR TO BACK OUT ADDRESS PRE-FETCH

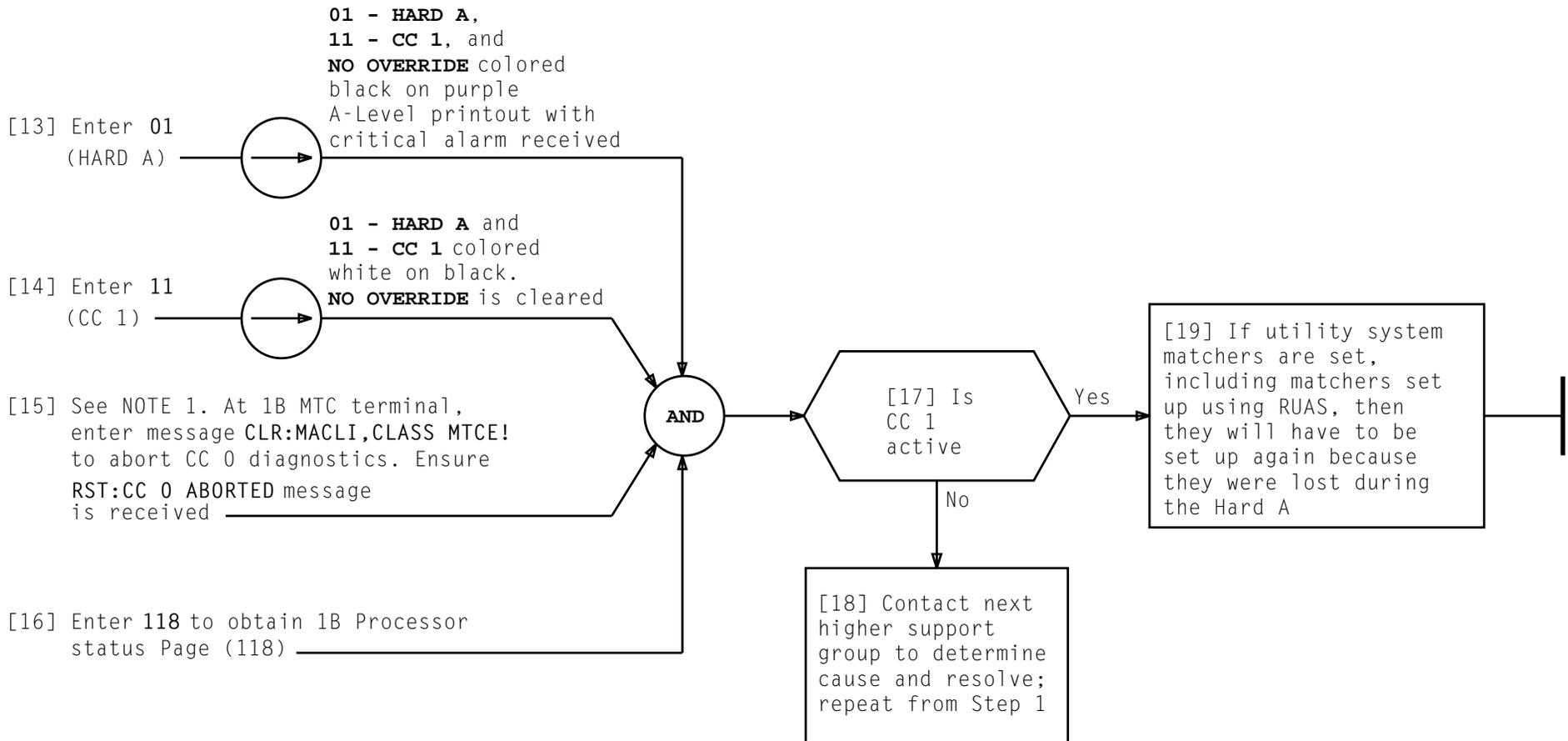
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FORCE CC 1 TO ACTIVE STATE

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NOTE 1 Diagnostic failure may be received if CLR message is not entered immediately	
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ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE
IXL-001		DLP-513		DLP-548		DLP-583		• DLP-618		• DLP-653	
NTP-002		DLP-514		DLP-549		DLP-584		• DLP-619		• DLP-654	
NTP-003		DLP-515		DLP-550		DLP-585		• DLP-620		• DLP-655	
NTP-004		DLP-516		DLP-551		DLP-586		• DLP-621		• CKL-891	
NTP-005		DLP-517		DLP-552		DLP-587		• DLP-622		TNG-893	
NTP-006		DLP-518		DLP-553		DLP-588		• DLP-623			
NTP-007		DLP-519		DLP-554		DLP-589		• DLP-624			
NTP-008		DLP-520		DLP-555		DLP-590		• DLP-625			
NTP-009		DLP-521		DLP-556		DLP-591		• DLP-626			
NTP-010		DLP-522		DLP-557		• DLP-592		• DLP-627			
NTP-011		DLP-523		DLP-558		• DLP-593		• DLP-628			
NTP-012		DLP-524		DLP-559		• DLP-594		• DLP-629			
• NTP-013		DLP-525		DLP-560		• DLP-595		• DLP-630			
• NTP-014		DLP-526		DLP-561		• DLP-596		• DLP-631			
• NTP-015		DLP-527		DLP-562		• DLP-597		• DLP-632			
• NTP-016		DLP-528		DLP-563		• DLP-598		• DLP-633			
• NTP-017		DLP-529		DLP-564		• DLP-599		• DLP-634			
• NTP-018		DLP-530		DLP-565		• DLP-600		• DLP-635			
• NTP-019		DLP-531		DLP-566		• DLP-601		• DLP-636			
• NTP-020		DLP-532		DLP-567		• DLP-602		• DLP-637			
• NTP-021		DLP-533		DLP-568		• DLP-603		• DLP-638			
• NTP-022		DLP-534		DLP-569		• DLP-604		• DLP-639			
DLP-500		DLP-535		DLP-570		• DLP-605		• DLP-640			
DLP-501		DLP-536		DLP-571		• DLP-606		• DLP-641			
DLP-502		DLP-537		DLP-572		• DLP-607		• DLP-642			
DLP-503		DLP-538		DLP-573		• DLP-608		• DLP-643			
DLP-504		DLP-539		DLP-574		• DLP-609		• DLP-644			
DLP-505		DLP-540		DLP-575		• DLP-610		• DLP-645			
DLP-506		DLP-541		DLP-576		• DLP-611		• DLP-646			
DLP-507		DLP-542		DLP-577		• DLP-612		• DLP-647			
DLP-508		DLP-543		DLP-578		• DLP-613		• DLP-648			
DLP-509		DLP-544		DLP-579		• DLP-614		• DLP-649			
DLP-510		DLP-545		DLP-580		• DLP-615		• DLP-650			
DLP-511		DLP-546		DLP-581		• DLP-616		• DLP-651			
DLP-512		DLP-547		DLP-582		• DLP-617		• DLP-652			

• REVISED OR ADDED ITEM

CANCELED ITEM

Revised

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