Lucent Technologies
Bell Labs Innovations

4ESS™ Switch With 1B Processor Expanded Time Slot Interchange (XTSI)

Growth/Degrowth

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Document Title: **4ESS**™ Switch With 1B Processor Expanded Time Slot Interchange (XTSI) Growth/Degrowth

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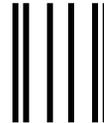
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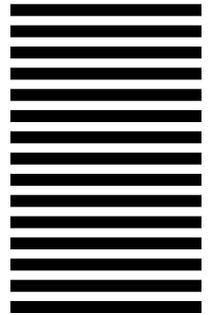
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TASK INDEX LIST

FIND YOUR JOB IN THE LIST BELOW	THEN GO TO
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Acceptance

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

Scope Peripheral Unit Buses (PUBs) 0 and 1 and Perform TMSP Controller Phase 8 Diagnostics

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
WARNING: No other growth or maintenance activity is allowed during this procedure.		
Notes: 1. Appropriate Input/Output Manuals must be used if clarification of input message or output message is necessary. 2. Use SREC or Beltline terminal with form enter capability to expedite procedure. 3. This procedure must be performed during light traffic periods. 4. ***4ESS***™ Switch operation must be closely monitored while performing this procedure. 5. Corrective action must be taken immediately on any activity that may cause any unit to go out of service (OOS). 6. Stability of office must be maintained throughout this procedure.		
1 At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED** **AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
2 At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
Caution: This procedure must be performed to ensure Peripheral Unit Buses (PUBs) are error free before growing XTSI Cabinet.		

DO THE ITEMS BELOW IN THE ORDER LISTED		**FOR DETAILS, GO TO**	
	PUB 0 SCOPING		
3	Locate bus branch terminating resistors at PUBB frame, or determine location of last frame on bus branch where XTSI cabinet will be connected per office record drawing T-nnnn-Hn-3840.	TELCO	—
4	If VIF frame was determined in Step 3, determine from office record drawing T-nnnn-Hn-3840 frame where PU write and enable buses are terminated.	TELCO	—
5	Store input messages on 1B Processor terminal for PUB 0 looping test.	TELCO	DLP-510
6	Remove PUB 0 from service (**RMV:PUB 0!**).	TELCO	DLP-513
7	Set up storage oscilloscope.	TELCO	DLP-511
8	Advance program to bus branch to be scoped and set up loop to observe bit 0 on PU write and reply Bus.	TELCO	DLP-514
9	If last frame determined in Step 3 is **not** a VIF frame, scope bit 0 on PU write bus at BTRs in last frame determined in Step 3.	TELCO	DLP-516
10	If last frame determined in Step 3 is a VIF frame, scope bit 0 on PU write bus at BTRs in last frame determined in Step 4.	TELCO	DLP-516
11	Scope bit 0 on PU reply bus at BTRs in last frame determined in Step 3.	TELCO	DLP-517
12	Enter stop looping message (**EX:PUB 0!**).	TELCO	—
13	Advance program and set up loop to observe bits 1 to 35 on PU write bus; bits 0 to 11 on PU enable address bus; and bits 1 to 23 on PU reply bus.	TELCO	DLP-514
14	If last frame determined in Step 3 is **not** a VIF frame, scope bits 1 to 35 on PU write bus at BTRs in last frame determined in Step 3.	TELCO	DLP-518
15	If last frame determined in Step 3 is a VIF frame, scope bits 1 to 35 on PU write bus at BTRs in last frame determined in Step 4.	TELCO	DLP-518
16	If last frame determined in Step 3 is **not** a VIF frame, scope bits 0 to 11 on PU enable address bus at BTRs in last frame determined in Step 3.	TELCO	DLP-519
17	If last frame determined in Step 3 is a VIF frame, scope bits 0 to 11 on PU enable address bus at BTRs in last frame determined in Step 4.	TELCO	DLP-519
18	Scope bits 1 to 23 on PU reply bus at BTRs in last frame determined in Step 3.	TELCO	DLP-520

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
19	Enter stop looping message (**EX:PUB 0!**).	TELCO	—
20	Set up loop to observe PU control bus and miscellaneous bus bits.	TELCO	DLP-521
21	Scope PU control bus and miscellaneous bus bits at BTRs in last frame determined in Step 3.	TELCO	DLP-522
22	If last frame determined in Step 3 Is a VIF frame, scope remaining PU miscellaneous bus bits at BTRs in last frame determined in Step 4.	TELCO	DLP-523
23	Enter stop looping message (**EX:PUB 0!**).	TELCO	—
24	Stop maintenance control program client.	TELCO	DLP-515
25	Determine if last frame in Step 3 is an SCS cabinet, DIFE (member numbers 24 through 31) frame, XTSI on expanded pollable bus, or XTSI is being grown on new bus branch with expanded pollable bits,	TELCO	—
26	If last frame in Step 3 is an SCS cabinet, DIFE (member numbers 24 through 31) frame, XTSI on expanded pollable bus, or XTSI is being grown on new bus branch with expanded pollable bits, perform Steps 27 and 28; otherwise, go to Step 29.	TELCO	—
27	Set up loop to observe and scope expanded pollable bits:		
	A. If last frame in Step 3 is an SCS cabinet, DIFE (member numbers 24 through 31) frame, or XTSI on expanded pollable bus, set up loop and scope expanded pollable bits.	TELCO	DLP-675
	B. If XTSI is being grown on new bus branch with expanded pollable bits, set up loop and scope expanded pollable bits.	TELCO	DLP-676
28	Stop maintenance control program client.	TELCO	DLP-515
29	Restore PUB 0 to service (**RST:PUB 0!**).	TELCO	DLP-524
30	Ensure storage oscilloscope is disconnected from scoped frame.	TELCO	—
	PUB 1 SCOPING		
31	Locate bus branch terminating resistors at PUBB frame, or determine location of last frame on bus branch where XTSI cabinet will be connected per office record drawing T-nnnn-Hn-3840.	TELCO	—
32	If VIF frame was determined in Step 31, determine from office record drawing T-nnnn-Hn-3840 frame where PU write and enable buses are terminated.	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
33	Store input messages on 1B Processor terminal for PUB 1 looping test.	TELCO	DLP-510
34	Remove PUB 1 from service (**RMV:PUB 1!**).	TELCO	DLP-513
35	Set up storage oscilloscope.	TELCO	DLP-511
36	Advance program to bus branch to be scoped and set up loop to observe bit 0 on PU write and reply bus.	TELCO	DLP-514
37	If last frame determined in Step 31 is **not** a VIF frame, scope bit 0 on PU write bus at BTRs in last frame determined in Step 31.	TELCO	DLP-516
38	If last frame determined in Step 31 is a VIF frame, scope bit 0 on PU write bus at BTRs in last frame determined in Step 32.	TELCO	DLP-516
39	Scope bit 0 on PU reply bus at BTRs in last frame determined in Step 31.	TELCO	DLP-517
40	Enter stop looping message (**EX:PUB 1!**).	TELCO	—
41	Advance program and set up loop to observe bits 1 to 35 on PU write bus; bits 0 to 11 on PU enable address bus; and bits 1 to 23 on PU reply bus.	TELCO	DLP-514
42	If last frame determined in Step 31 is **not** a VIF frame, scope bits 1 to 35 on PU write bus at BTRs in last frame determined in Step 31.	TELCO	DLP-518
43	If last frame determined in Step 31 is a VIF frame, scope bits 1 to 35 on PU write bus at BTRs in last frame determined in Step 32.	TELCO	DLP-518
44	If last frame determined in Step 31 is **not** a VIF frame, scope bits 0 to 11 on PU enable address bus at BTRs in last frame determined in Step 32.	TELCO	DLP-519
45	If last frame determined in Step 31 is a VIF frame, scope bits 0 to 11 on PU enable address bus at BTRs in last frame determined in Step 32.	TELCO	DLP-519
46	Scope bits 1 to 23 on PU reply bus at BTRs in last frame determined in Step 31.	TELCO	DLP-520
47	Enter stop looping message (**EX:PUB 1!**).	TELCO	—
48	Set up loop to observe PU control bus and miscellaneous bus bits.	TELCO	DLP-521
49	Scope PU control bus and miscellaneous bus bits at BTRs in last frame determined in Step 31.	TELCO	DLP-522
50	If last frame determined in Step 31 is a VIF frame, scope remaining PU miscellaneous bus bits at BTRs in last frame determined in Step 32.	TELCO	DLP-523
51	Enter stop looping message (**EX:PUB 1!**).	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
52	Stop maintenance control program client.	TELCO	DLP-515
53	Determine if last frame in Step 31 is an SCS cabinet, DIFE (member numbers 24 through 31) frame, XTSI on expanded pollable bus, or XTSI is being grown on new bus branch with expanded pollable bits,	TELCO	—
54	If last frame in Step 31 is an SCS cabinet, DIFE (member numbers 24 through 31) frame, XTSI on expanded pollable bus, or XTSI is being grown on new bus branch with expanded pollable bits, perform Steps 55 and 56; otherwise, go to Step 57.	TELCO	—
55	Set up loop to observe and scope expanded pollable bits:		
	A. If last frame in Step 31 is an SCS cabinet, DIFE (member numbers 24 through 31) frame, or XTSI on expanded pollable bus, set up loop and scope expanded pollable bits.	TELCO	DLP-675
	B. If XTSI is being grown on new bus branch with expanded pollable bits, set up loop and scope expanded pollable bits.	TELCO	DLP-676
56	Stop maintenance control program client.	TELCO	DLP-515
57	Restore PUB 1 to service (**RST:PUB 1!**).	TELCO	DLP-524
58	Ensure storage oscilloscope is disconnected from scoped frame.	TELCO	—

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

	Notes:
	1. Demand diagnostics on growth associated TMS controllers should be performed in following order:
	
	    • TMSP 0,CONTR 0
	
	    • TMSP 0,CONTR 1
	
	    • TMSP 1,CONTR 0
	
	    • TMSP 1,CONTR 1
	
	    • TMSP 2,CONTR 0
	
	    • TMSP 2,CONTR 1
	
	    • TMSP 3,CONTR 0
	
	    • TMSP 3,CONTR 1
	
	2. Each diagnostic may take up to 30 minutes to complete.		

59	At 1B Processor MTC terminal, diagnose one TMSP CONTR specifying phase 8 (**DGN:TMSP** a**,CONTR** b**:PH 8!**).	TELCO	DLP-582
60	Restore removed TMSP CONTR (Step 59) to service (**RST:TMSP** a**,CONTR** b**!**).	TELCO	DLP-526
61	Safe point to temporarily stop this procedure. If stopping, perform Steps 62 and 63; otherwise, go to Step 66.	TELCO/INST	—
62	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
63	Stop procedure for now. Continue at Step 64 when resuming.	TELCO/INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
64	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED** **AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
65	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
66	Repeat Steps 59 through 61 for each TMSP CONTR.	TELCO/INST	—
67	**STOP! YOU HAVE COMPLETED THIS PROCEDURE.**	TELCO/INST	—

Add Expanded Time Slot Interchange (XTSI) Cabinet - Support to Installer (INST)

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
GENERAL WARNINGS AND NOTES WHEN ADDING XTSI CABINET ***WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling or installing circuit packs or backplane cables.*** ***Notes:*** 1. Appropriate Input/Output Manuals must be used if clarification of input message or output message is necessary. 2. This procedure must be performed during light traffic periods. 3. ***4ESS***™ Switch and 3B20D/3B21D APS operation must be closely monitored while performing this procedure. 4. Corrective action must be taken immediately on any activity that may cause any unit to go out of service (OOS). 5. Stability of office must be maintained throughout this procedure. 6. This procedure contains soak intervals for verifying system operation and stability during growth. During the soaking interval, all abnormal conditions (such as interrupts, interjects, and diagnostic failures related to growth) must be investigated and resolved immediately. Growth equipment, being soaked, must be error free for at least the time specified. 7. It will be required for appropriate provisioning group to set up dummy trunks for NETX library program of growth XTSI cabinet.		

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
1	Ensure PUB scoping and TMSP Controller Phase 8 diagnostics [NTP-003] have been completed within 30 days before performing this procedure and no PUB problems have been encountered since PUB scoping.	TELCO	—
2	At TMS frames associated with growth XTSI cabinet, determine if A-Link ports are available to be connected to per telephone equipment order (TEO).	TELCO	—
	Note: If XTSI 16, 32, or 48 is being grown, memory blocks may need to be added to TMSP. J4A002BD-1, List 1 contains memory blocks for XTSIs 0 through 15. J4A002BD-1, List 2 contains memory blocks for XTSIs 16 through 31. J4A002BD-1, List 3 contains memory blocks for XTSIs 32 through 47. J4A002BD-1, List 4 contains memory blocks for XTSIs 48 through 63. If list associated with growth XTSI is not installed, memory block growth will be required.		
3	If AIMS terminal is going to be used to enter input messages,, load **GRXTSI.1** command file into terminal.	TELCO	DLP-577
4	Using the TEO, determine if TMS memory blocks are required to be grown.	TELCO	—
5	If TEO specifies TMS memory blocks growth is required for this XTSI cabinet addition, at 1B Processor MTC terminal, verify TMS memory blocks have been grown to GROW state (**VER:UTYPE:TMSP** a,**SME** b**!**).	TELCO	DLP-500
6	If equipage for TMS memory blocks associated with growth XTSI cabinet is UNEQ, add required TMS memory blocks per TOP 234-353-040. Continue this procedure at Step 7 upon completion.	TELCO	—
7	At network clock frame, verify that **FB211** circuit packs associated with growth XTSI cabinet are equipped.	TELCO/INST	DLP-574
8	At 1B Processor MTC terminal, enter message **VER:OFFICE!**; determine what generic that office is operating on.	TELCO	—
9	Inventory main material order per installation job specification.	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
10	Verify growth XTSI cabinet unit type (UT) translators (both even and odd members):		
	1. Verify growth XTSI cabinet UT translators (even member number XTSI) (**VER:UTYPE:XTSI** a**!**).	TELCO	DLP-501
	2. Verify growth XTSI cabinet UT translators (odd member number XTSI) (**VER:UTYPE:XTSI** a**!**).	TELCO	DLP-509
	3. If office is running on 4E24 or later generic, at 1B Processor MTC terminal, verify proper hardware designation for circuit packs are contained in growth even-numbered XTSI cabinet (**VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1** a**!**).	TELCO	DLP-615
11	Erect, align and bolt down growth XTSI cabinet in its proper location.	INST	—
12	Perform ground tests on growth XTSI cabinet.	INST	—
13	Connect cabinet ground strap to growth XTSI cabinet.	INST	—
14	At growth XTSI cabinet fuse panel (Level 69), remove all fuses.	INST	—
	Caution: Keep circuit pack removal to a minimum to reduce the possibility of bending pins.		
15	At growth XTSI cabinet, ensure all circuit packs are properly seated.	INST	—
16	Connect power to growth XTSI cabinet and perform power verification tests; ensure power is off to all units in growth XTSI cabinet before proceeding (only **OFF** LEDs on). **ROS/NORM** switches must be left in **NORM** position.	INST	—
17	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
18	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—

	DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
19	While installer is connecting leads/cables at the growth XTSI cabinet (Steps 20 and 21), the on-site workforce should perform Steps 22 through 31. Do not proceed past Step 31 until leads/cables are connected and diagnostics are complete.	TELCO/INST	—
20	At growth XTSI cabinet, connect and verify private signal leads.	INST	—
21	Connect scan, SD, pulse point, NCLK, and alarm leads to growth XTSI cabinet:		
	1. At growth XTSI cabinet, connect alarm cable(s).	INST	—
	2. At growth XTSI cabinet, connect NCLK cables.	INST	—
	3. At growth XTSI cabinet, connect pulse point, MSN, and MDN cables.	INST	—
	4. At signal processor (SP), connect pulse point, MSN, and MDN cables.	INST	—

	Notes:
	1. Demand diagnostics on growth associated TMS controllers should be performed in following order:
	
	    • TMSP 0,CONTR 0
	
	    • TMSP 1,CONTR 0
	
	    • TMSP 2,CONTR 0
	
	    • TMSP 3,CONTR 0
	
	    • TMSP 0,CONTR 1
	
	    • TMSP 1,CONTR 1
	
	    • TMSP 2,CONTR 1
	
	    • TMSP 3,CONTR 1
	
	2. Each diagnostic may take up to 30 minutes to complete.		

22	At 1B Processor MTC terminal, diagnose one TMSP CONTR specifying phase 8 (**DGN:TMSP** a**,CONTR** b**:PH 8!**).	TELCO	DLP-582
23	At 1B Processor MTC terminal, restore removed TMSP CONTR (Step 22) to service (**RST:TMSP** a**,CONTR** b**!**).	TELCO	DLP-526
24	Safe point to temporarily stop this procedure. If stopping, perform Steps 25 through 27; otherwise, go to Step 31.	TELCO/INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
25 At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
26 If AIMS terminal is being used to enter input messages,, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
27 Stop procedure for now. Continue at Step 28 when resuming.	TELCO/INST	—
28 If AIMS terminal is being used to enter input messages, load **GRXTSI.1** command file into terminal.	TELCO	DLP-577
29 At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
30 At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
31 Repeat Steps 22 through 24 for next TMSP CONTR; continue at Step 32 when all diagnostics are complete.	TELCO/INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	Note: Steps 32 through 59 are being performed to do the following: • Ensure office is ready to perform XTSI cabinet growth • Set up proper K-code identifier • Verify power and fuse alarms • Connect NCLK leads • Extend or Insert XTSI in PUB		
32	Notify next higher support group that XTSI cabinet growth is being performed. Request information to complete Steps 33 through 37.	TELCO	—
	Note: Broadcast Warning Messages (BWMs), if applied, will ensure use of latest software available which is compatible with hardware being installed.		
33	Request next higher support group to determine if BWM(s) are associated with this XTSI cabinet growth and apply if necessary.	TELCO	DLP-527
34	Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
35	Ensure **4ESS** switch is in stable condition.	TELCO	DLP-528
36	Ensure diagnostics on duplexed 3B CUs have been run to completion within last 24 hours.	TELCO	—
37	Ensure any 1B Processor and/or system problems have been cleared before performing this procedure.	TELCO	—
38	If AIMS terminal is being used to enter input messages, load **GRXTSI.2** command file into terminal.	TELCO	DLP-578

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
39	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
40	Using office records and TEO, at growth XTSI cabinet, verify each growth D3U circuit pack location (including protection switch) is installed.	INST	—
	Note: XTSI cabinet will come with K-code set for member number 0.		
41	Verify proper 963E-2 K-code jumper plugs (used to identify XTSI member number) for controllers 0 and 1 are installed for growth XTSI cabinet. remove extra K-code jumper plugs that are not required.	INST	—
42	Verify fuse alarms and perform lamp tests:		
	1. At backplane for growth XTSI cabinet, using digital voltmeter (DVM), verify no continuity (open continuity) for major alarm.	INST	—
	2. Connect XTSI alarm cable to office alarm grid.	INST	—
	3. At XTSI cabinet fuse panel (Level 69), remove fuse associated with one power mod: **Note:** Fuse A is at the top of the fuse panel and fuse E is on the bottom of the fuse panel. • MPC 0 (**CONTR0B**) - EQL A0-008-B • ALD 0 (**ALC0**) - EQL A2-040-A • IPC 0 (**IPUB0**) - EQL A3-056-B • MPC 1 (**CONTR1B**) - EQL B0-110-B • ALD 1 (**ALC1**) - EQL B2-142-A • IPC 1 (**IPUB1**) - EQL B3-158-B	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
4. At power switch associated with removed fuse, ensure low input power (**LIP**) LED is on.	INST	—
5. If **CONTR0B** or **CONTR1B** fuse is removed, at top of growth XTSI cabinet, ensure **POWER** LED is on.	INST	—
6. Install removed fuse.	INST	—
7. At power switch for power mod associated with removed fuse, observe **LIP** LED is off.	INST	—
8. At power switch for power mod associated with removed fuse, depress **OFF** pushbutton.	INST	—
9. If **CONTR0B** or **CONTR1B** fuse was removed, at top of growth XTSI cabinet, ensure **POWER** LED is off.	INST	—
10. Repeat Steps 42.3 through 42.9 for each power mod.	INST	—
11. At XTSI cabinet fuse panel, depress **LAMP TEST** pushbutton and observe **NIP** - **A** and **B** LEDs; then release. ensure **NIP** - **A** and **B** LEDs were on.	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
12. At power switch, depress **ON** pushbutton for all power mods in following order: • MPC 0 (52-066) • MPC 1 (61-066) • ALD 0 (52-014) • ALD 1 (61-014) • IPC 0 (52-188) • IPC 1 (61-188) • Each D3U being grown	INST	—
13. At power switch for one power mod, depress and hold lamp test (**LTEST**) pushbutton: • ALD 1 (61-014) • MPC 1 (61-066) • IPC 1 (61-188) • ALD 0 (52-014) • MPC 0 (52-066) • IPC 0 (52-188) • Each D3U being grown	INST	—
14. Observe that associated LEDs are on; then release **LTEST** pushbutton.	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	15. Repeat Steps 42.13 and 42.14 for each power mod.	INST	—
	16. At power switch for each D3U being equipped, depress **OFF** and **MOR** pushbuttons simultaneously to remove power from associated unit; ensure **OFF** LEDs are on (power is off).	INST	—
43	Connect network clock cables:		
	1. At NCLK frame, remove power from network clock cable driver in bay 0.	TELCO	DLP-530
	2. At NCLK frame bay 0, connect network clock cable from growth XTSI cabinet.	INST	—
	3. At NCLK frame bay 0, replace fuse removed in Step 43.1.	TELCO	—
	4. At NCLK frame, remove power from network clock cable driver in bay 1.	TELCO	DLP-530
	5. At NCLK frame bay 1, connect network clock cable from growth XTSI cabinet.	INST	—
	6. At NCLK frame bay 1, replace fuse removed in Step 43.4.	TELCO	—
	7. At XTSI cabinet, scope clock leads to ensure there is a clock signal present.	TELCO	—
	WARNING: When checking cable continuity, test-probe plugs must be used to decrease the possibility of damaging A-Link backplane cable connectors.		
44	Using test probe plugs connected to growth XTSI cabinet end of A-Link cables, check continuity of all 128 A-Link and A'-Link coaxial cables (**Do not connect cables at this time**).	INST	—
45	Recent change and verify member equipage from UNEQ to GROW (even growth XTSI member number).	TELCO	DLP-531
46	At IPC 0 power switch (52-188), depress **OFF** and **MOR** pushbuttons simultaneously to remove power from IPUB 0; ensure **OFF** LED is on (power is off).	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
47	At IPC 1 power switch (61-188), depress **OFF** and **MOR** pushbuttons simultaneously to remove power from IPUB 1; ensure **OFF** LED is on (power is off).	INST	—
48	At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
49	Safe point to temporarily stop this procedure. If stopping, perform Steps 50 through 52; otherwise, go to Step 58.	TELCO/INST	—
50	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
51	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
52	Stop procedure for now. Continue at Step 53 when resuming.	TELCO/INST	—
53	If AIMS terminal is being used to enter input messages, load **GRXTSI.2** command file into terminal.	TELCO	DLP-577
54	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
55	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
56	Request next higher support group to Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
57	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
58	If AIMS terminal is being used to enter input messages, load **EXTPUB.1** command file into terminal.	TELCO	DLP-578
	Note: The XTSI growth on PUB 0 (shelf EQL 52) is followed by a one shift soak before continuing growth on PUB 1 (shelf EQL 61).		
59	Extend or insert peripheral unit bus per TOP 234-353-045 (see office drawing T-nnnn-H0-3840 for placement of growth XTSI cabinet); then continue this procedure at Step 60 upon completion.	TELCO/INST	—
60	Safe point to temporarily stop this procedure. If stopping, perform Steps 61 through 63; otherwise, go to Step 68.	TELCO/INST	—
61	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	
62	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
63	Stop procedure for now. Continue at Step 64 when resuming.	TELCO/INST	—
64	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
65	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
66	Request next higher support group to Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
67	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
Note: Steps 68 through 72 are being performed to do the following: • Fully test PUB 0 through IPUB 0 to both XTSI CONTRs • Fully test PUB 1 through IPUB 1 to both XTSI CONTRs • Run all diagnostics on XTSI CONTRs		
68 If AIMS terminal is being used to enter input messages, load **GRXTSI.3** command file into terminal.	TELCO	DLP-578
69 Test PUB 0 connection through IPUB 0 to growth XTSI cabinet:		
1. At 1B Processor MTC terminal, remove PUB 0 from service (**RMV:PUB 0!**).	TELCO	DLP-513
2. At MPC 1 (61-066) and MPC 0 (52-066) power switches, ensure **OFF** LEDs are not on (power is on).	INST	—
3. At IPC 0 power switch (52-188), depress **ON** pushbutton to restore power to IPUB 0; ensure **OFF** LED is not on (power is on).	INST	—
4. At IPC 1 power switch (61-188), ensure **OFF** LED is on (power is off).	INST	—
5. At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
Note: Diagnostics will be performed using factory-loaded software located in associated CIA0 pack.		
6. At 1B Processor MTC terminal, diagnose PUB 0 connection to CONTR 0 through IPUB 0 for even-numbered XTSI specifying phases 1 and 2 and GROWTH (**DGN:XTSI** a**,CONTR 0:PUB 0,PH 1-2,GROWTH!**).	TELCO/INST	DLP-532
7. At 1B Processor MTC terminal, diagnose PUB 0 connection to CONTR 1 through IPUB 0 for even-numbered XTSI specifying phases 1 and 2 and GROWTH (**DGN:XTSI** a**,CONTR 1:PUB 0,PH 1-2,GROWTH!**).	TELCO/INST	DLP-532
8. At 1B Processor MTC terminal, diagnose PUB 0 connection to CONTR 0 through IPUB 0 for even-numbered XTSI specifying phases 1 through 9 and GROWTH (**DGN:XTSI** a**,CONTR 0:PUB 0,PH 1-9,GROWTH!**).	TELCO/INST	DLP-533
9. At 1B Processor MTC terminal, diagnose PUB 0 connection to CONTR 1 through IPUB 0 for even-numbered XTSI specifying phases 1 through 9 and GROWTH (**DGN:XTSI** a**,CONTR 1:PUB 0,PH 1-9,GROWTH!**).	TELCO/INST	DLP-533
10. At 1B Processor MTC terminal, restore PUB 0 to service (**RST:PUB 0!**).	TELCO	DLP-524

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
70 Test PUB 1 connection through IPUB 1 to growth XTSI cabinet:		
1. At 1B Processor MTC terminal, remove PUB 1 from service (**RMV:PUB 1!**).	TELCO	DLP-513
2. At IPC 0 power switch (52-188), depress **OFF** and **MOR** pushbuttons simultaneously to remove power from IPUB 0 (this will force IPUB 1 testing); ensure **OFF** LED is on (power is off).	INST	—
3. At IPC 1 power switch (61-188), depress **ON** pushbutton to restore power to IPUB 1; ensure **OFF** LED is not on (power is on).	INST	—
4. At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
Note: Diagnostics will be performed using factory-loaded software located in CIA1 Pack		
5. At 1B Processor MTC terminal, diagnose PUB 1 connection to CONTR 0 through IPUB 1 for even-numbered XTSI specifying phases 1 and 2 and GROWTH (**DGN:XTSI** a,**CONTR 0:PUB 1,PH 1-2,GROWTH!**).	TELCO/INST	DLP-532
6. At 1B Processor MTC terminal, diagnose PUB 1 connection to CONTR 1 through IPUB 1 for even-Numbered XTSI specifying phases 1 and 2 and GROWTH (**DGN:XTSI** a,**CONTR 1:PUB 1,PH 1-2,GROWTH!**).	TELCO/INST	DLP-532

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	7. At 1B Processor MTC terminal, diagnose PUB 1 Connection to CONTR 0 through IPUB 1 for even-numbered XTSI specifying phases 1 through 9 and GROWTH (**DGN:XTSI** a,**CONTR 0:PUB 1,PH 1-9,GROWTH!**).	TELCO/INST	DLP-533
	8. At 1B Processor MTC terminal, diagnose PUB 1 connection to CONTR 1 through IPUB 1 for even-numbered XTSI specifying phases 1 through 9 and GROWTH (**DGN:XTSI** a,**CONTR 1:PUB 1,PH 1-9,GROWTH!**).	TELCO/INST	DLP-533
	9. At 1B Processor MTC terminal, restore PUB 1 to service (**RST:PUB 1!**).	TELCO	DLP-524
	10. At IPC 0 power switch (52-188), depress **ON** pushbutton to restore power to IPUB 0; ensure **OFF** LED is not on (power is on).	INST	—
	11. At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
71	At 1B Processor MTC terminal, diagnose even-numbered growth XTSI CONTR 0 specifying phases 1 through 15 and GROWTH (**DGN:XTSI** a,**CONTR 0:PH 1-15,GROWTH!**).	TELCO/INST	DLP-534
72	At 1B Processor MTC terminal, diagnose even-numbered growth XTSI CONTR 1 specifying phases 1 through 15 and GROWTH (**DGN:XTSI** a,**CONTR 1:PH 1-15,GROWTH!**).	TELCO/INST	DLP-534
	Notes: 1. Steps 73 and 74 are being performed to update and test growth XTSI cabinet controllers 0 and 1, respectively. 2. Phase 90 diagnostic will take approximately 35 minutes to complete.		
73	At 1B Processor MTC terminal, diagnose even-numbered growth XTSI CONTR 0 specifying phase 90 and GROWTH (**DGN:XTSI** a,**CONTR 0:PH 90,GROWTH!**).	TELCO/INST	DLP-586
74	At 1B Processor MTC terminal, diagnose even-numbered growth XTSI CONTR 1 specifying phase 90 and GROWTH (**DGN:XTSI** a,**CONTR 1:PH 90,GROWTH!**).	TELCO/INST	DLP-586

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
75	Safe point to temporarily stop this procedure. If stopping, perform Steps 76 through 78; otherwise, go to Step 84.	TELCO/INST	—
76	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
77	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
78	Stop procedure for now. Continue at Step 79 when resuming.	TELCO/INST	—
79	If AIMS terminal is being used to enter input messages, load **GRXTSI.3** command file into terminal.	TELCO	DLP-577
80	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
81	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
82	Request next higher support group to Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
83	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
	Note: Steps 84 through 93 are being performed to load initial software into growth XTSI cabinet.		
84	At 3B MCRT, enter message **INH:DMQ;SRC REX!** to inhibit 3B REX. Response: **INH DMQ COMPLETED**	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
85	If AIMS terminal is being used to enter input messages, load **GRXTSI.4** command file into terminal.	TELCO	DLP-578
86	At 1B Processor MTC terminal, verify software version pointers for growth even-numbered XTSI CONTRs 0 and 1, D3U are set to 0:		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-536
	B. For offices in 4E24 or later generic	TELCO	DLP-616
87	At 1B Processor MTC terminal, copy current XTSI factory files in case back out is required.	TELCO	DLP-537
88	At 3B MCRT, verify XTSI files stored in 3B computer:		
	A. For offices in 4E24 R1 or earlier generic	TELCO	DLP-538
	B. For offices in 4E24 R2 or later generic	TELCO	DLP-617
89	Copy new files from 3B computer to growth XTSI:		
	1. At 1B Processor MTC terminal, copy new files from 3B Computer to growth XTSI CIA0 pack (version/location 0 within CIA0):		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-539
	B. For offices in 4E24 or later generic	TELCO	DLP-618
	2. At 1B Processor MTC terminal, verify XTSI files were copied properly to CIA0:		
	A. For offices in 4E23 or earlier generic	TELCO/INST	DLP-541
	B. For offices in 4E24 or later generic	TELCO/INST	DLP-619
	3. At 1B Processor MTC terminal, copy files to remaining file locations in CIA0 pack:		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-540
	B. For offices in 4E24 or later generic	TELCO	DLP-620
	4. At 1B Processor MTC terminal, copy CIA0 CONTR 0 to CIA1 CONTR 1.	TELCO	DLP-580

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
90	At 1B Processor MTC terminal, diagnose even-numbered growth XTSI CONTR 0:		
	A. For offices in 4E23 or earlier generic (**DGN:XTSI** a,**CONTR 0:PH 1-22,GROWTH!**)	TELCO	DLP-544
	B. For offices in 4E24 or later generic (**DGN:XTSI** a,**CONTR 0:PH 1-29,GROWTH!**)	TELCO	DLP-622
91	At 1B Processor MTC terminal, diagnose even-numbered growth XTSI CONTR 1:		
	A. For offices in 4E23 or earlier generic (**DGN:XTSI** a,**CONTR 1:PH 1-22,GROWTH!**)	TELCO	DLP-544
	B. For offices in 4E24 or later generic (**DGN:XTSI** a,**CONTR 1:PH 1-29,GROWTH!**)	TELCO	DLP-622
92	At 3B MCRT, enter message **ALW:DMQ;SRC REX!** to allow 3B REX. Response: **ALW DMQ ENABLED REX**	TELCO	—
93	Safe point to temporarily stop this procedure. If stopping, perform Steps 94 through 96; otherwise, go to Step 102.	TELCO/INST	—
94	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
95	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
96	Stop procedure for now. Continue at Step 97 when resuming.	TELCO/INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
97	If AIMS terminal is being used to enter input messages, load **GRXTSI.4** command file into terminal.	TELCO	DLP-577
98	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
99	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
100	Request next higher support group to Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
101	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
	Note: Steps 102 through 123 are being performed to connect growth XTSI cabinet to TMSP frame		
102	At 1B Processor MTC terminal, run audit 26; ensure 0 ERROR DETECTED message is received (**AUD:NUM 26!**).	TELCO	DLP-583
103	Connect A-/A'-Link Cable Groups at XTSI CONTR 0 (ALC0):		
	1. At ALD 0 power switch (52-014), depress **OFF** and **MOR** pushbuttons simultaneously to remove power from ALD 0; ensure **OFF** LED is on (power is off).	INST	—
	2. At ALD 1 power switch (61-014), depress **OFF** and **MOR** pushbuttons simultaneously to remove power from ALD 1; ensure **OFF** LED is on (power is off).	INST	—
	3. Connect two RCV (A-Link) cable groups for XTSI ALC 0 to proper locations.	INST	—
	4. Connect two XMT (A'-Link) cable groups for XTSI ALC 0 to proper locations.	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
104	Connect A-/A'-Link cable groups at XTSI CONTR 1 (ALC1):		
	1. Connect two RCV (A-Link) cable groups for XTSI ALC 1 to proper locations.	INST	—
	2. Connect two XMT (A'-Link) cable groups for XTSI ALC 1 to proper locations.	INST	—
105	If AIMS terminal is being used to enter input messages, load **GRXTSI.5** command file into terminal.	TELCO	DLP-578
	Note: Steps 106 through 119 must be performed for one TMSP CONTR 0 at a time in TMSP 0, 1, 2, and 3 member number order.		
106	At 1B Processor MTC terminal, remove TMSP CONTR 0 from service (**RMV:TMSP** a,**CONTR 0!**).	TELCO	DLP-525
107	Connect TMSP CONTR 0 XMT (A'-Link) cables:		
	1. At TMSP CONTR 0 End, locate one XMT (A'-Link) cable and connect to proper location.	INST	—
	2. Repeat Step 107.1 for each of remaining three XMT (A'-Link) connections in first cable group.	INST	—
	3. Repeat Steps 107.1 and 107.2 for each of four XMT (A'-Link) connections in last cable group.	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
108	Connect TMSP CONTR 0 RCV (A-Link) cables:		
	1. At TMSP CONTR 0 end, connect RCV (A-Link) cable to proper location.	INST	—
	2. Repeat Step 108.1 for each of three remaining RCV (A-Link) connections in first cable group.	INST	—
	3. Repeat Steps 108.1 and 108.2 for each of four RCV (A-Link) connections in last cable group.	INST	—
	Note: Phase 8 diagnostic is being performed to ensure that previously existing A-/A'-link cables were not disturbed when new cables were connected.		
	4. At 1B Processor MTC terminal, diagnose TMSP CONTR 0 (Step 106) specifying phase 8 (**DGN:TMSP** a,**CONTR 0:PH 8!**).	TELCO/INST	DLP-582
109	At 1B Processor MTC terminal, restore TMSP CONTR 0 (Step 106) to service (**RST:TMSP** a,**CONTR 0!**).	TELCO/INST	DLP-526
110	Safe point to temporarily stop this procedure. If stopping, perform Steps 111 through 113; otherwise, go to Step 119.	TELCO/INST	—
111	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
112	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
113	Stop procedure for now. Continue at Step 114 when resuming.	TELCO/INST	—
114	If AIMS terminal is being used to enter input messages, load **GRXTSI.5** command file into terminal.	TELCO	DLP-577

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
115	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
116	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
117	Request next higher support group to Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
118	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
119	Repeat Steps 106 through 110 for each TMSP CONTR 0 (TMSP 1,2,3).	TELCO/INST	—
	Note: Steps 120 through 133 must be performed for one TMSP CONTR 1 at a time in TMSP 0, 1, 2, and 3 member number order.		
120	At 1B Processor MTC terminal, remove TMSP CONTR 1 from service (**RMV:TMSP** a**,CONTR 1!**).	TELCO	DLP-525

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
121	Connect TMSP CONTR 1 XMT (A'-Link) cables:		
	1. At TMSP CONTR 1 end, locate one XMT (A'-Link) cable and connect to proper location.	INST	—
	2. Repeat Step 121.1 for each of remaining three XMT (A'-Link) connections in first cable group.	INST	—
	3. Repeat Steps 121.1 and 121.2 for each of four XMT (A'-Link) connections in last cable group.	INST	—
122	Connect TMSP CONTR 1 RCV (A-Link) cables:		
	1. At TMSP CONTR 1 end, connect RCV (A-Link) cable to proper location.	INST	—
	2. Repeat Step 122.1 for each of three remaining RCV (A-Link) connections in first cable group.	INST	—
	3. Repeat Steps 122.1 and 122.2 for each of four RCV (A-Link) connections in last cable group.	INST	—
	Note: Phase 8 diagnostic is being performed to ensure that previously existing A-/A'-link cables were not disturbed when new cables were connected.		
	4. At 1B Processor MTC terminal, diagnose TMSP CONTR 1 (Step 120) specifying phase 8 (**DGN:TMSP** a,**CONTR 1:PH 8!**).	TELCO/INST	DLP-582
123	At 1B Processor MTC terminal, restore TMSP CONTR 1 (Step 120) to service (**RST:TMSP** a,**CONTR 1!**).	TELCO/INST	DLP-526
124	Safe point to temporarily stop this procedure. If stopping, perform Steps 125 through 127; otherwise, go to Step 133.	TELCO/INST	—
125	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
126	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
127	Stop procedure for now. Continue at Step 128 when resuming.	TELCO/INST	—
128	If AIMS terminal is being used to enter input messages, load **GRXTSI.5** command file into terminal.	TELCO	DLP-577
129	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED** **AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
130	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
131	Request next higher support group to Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
132	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
133	Repeat Steps 120 through 124 for each TMSP CONTR 1 (TMSP 1,2,3).	TELCO/INST	—
134	At ALD 0 power switch (52-014), depress **ON** pushbutton to restore power to ALD 0; ensure **OFF** LED is not on (power is on).	INST	—
135	At ALD 1 power switch (61-014), depress **ON** pushbutton to restore power to ALD 1; ensure **OFF** LED is not on (power is on).	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
136	If TMSP memory blocks were added for this XTSI cabinet growth, perform Steps 137 through 142; otherwise, go to Step 152.	TELCO	—
137	If AIMS terminal is being used to enter input messages, load **GRXTSI.6** command file into terminal.	TELCO	DLP-578
	Note: If XTSI 16, 32, or 48 is being grown, memory blocks may need to be added to TMSP. J4A002BD-1, List 1 contains memory blocks for XTSIs 0 through 15. J4A002BD-1, List 2 contains memory blocks for XTSIs 16 through 31. J4A002BD-1, List 3 contains memory blocks for XTSIs 32 through 47. J4A002BD-1, List 4 contains memory blocks for XTSIs 48 through 63. If list associated with growth XTSI is not installed, memory block growth will be required.		
138	Verify TMSP memory block equipage is GROW for all controllers: • For TMSP 0 CONTR 0 memory block 1, 2, or 3 (**VER:UTYPE:TMSP 0:SME** a**!**) • For TMSP 0 CONTR 1 memory block 1, 2, or 3 (**VER:UTYPE:TMSP 0:SME** b**!**) • For TMSP 1 CONTR 0 memory block 1, 2, or 3 (**VER:UTYPE:TMSP 1:SME** a**!**) • For TMSP 1 CONTR 1 memory block 1, 2, or 3 (**VER:UTYPE:TMSP 1:SME** b**!**) • For TMSP 2 CONTR 0 memory block 1, 2, or 3 (**VER:UTYPE:TMSP 2:SME** a**!**) • For TMSP 2 CONTR 1 memory block 1, 2, or 3 (**VER:UTYPE:TMSP 2:SME** b**!**) • For TMSP 3 CONTR 0 memory block 1, 2, or 3 (**VER:UTYPE:TMSP 3:SME** a**!**) • For TMSP 3 CONTR 1 memory block 1, 2, or 3 (**VER:UTYPE:TMSP 3:SME** b**!**)	TELCO	DLP-500

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
139	Recent change and verify submember equipage from GROW to SGRO for one TMSP memory block:		
	1. Recent change and verify submember equipage from GROW to SGRO for one TMSP memory block and diagnose: • TMSP 0 CONTR 0 Memory Block 1, 2, or 3 • TMSP 0 CONTR 1 Memory Block 1, 2, or 3 • TMSP 1 CONTR 0 Memory Block 1, 2, or 3 • TMSP 1 CONTR 1 Memory Block 1, 2, or 3 • TMSP 2 CONTR 0 Memory Block 1, 2, or 3 • TMSP 2 CONTR 1 Memory Block 1, 2, or 3 • TMSP 3 CONTR 0 Memory Block 1, 2, or 3 • TMSP 3 CONTR 1 Memory Block 1, 2, or 3	TELCO	DLP-542
	2. At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
	3. At 1B Processor MTC terminal, diagnose TMSP controller memory, just recent changed, specifying GROWTH (**DGN:TMSP** a,**CONTR** b:**MEMORY,GROWTH!**).	TELCO/INST	DLP-613
140	Recent change and verify submember equipage from SGRO to OPER for one TMSP memory block and diagnose:		
	1. Recent change and verify submember equipage from SGRO to OPER for TMSP memory block (Step 139.1).	TELCO	DLP-542
	2. At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
	3. At 1B Processor MTC terminal, diagnose TMSP controller memory, just recent changed (Step 139.1), specifying GROWTH (**DGN:TMSP** a,**CONTR** b:**MEMORY,GROWTH!**).	TELCO/INST	DLP-614

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
141	At 1B Processor MTC terminal, restore TMSP controller (Step 139.1) to service (**RST:TMSP** a**,CONTR** b**!**).	TELCO/INST	DLP-526
142	Safe point to temporarily stop this procedure. If stopping, perform Steps 143 through 145; otherwise, go to Step 151.	TELCO/INST	—
143	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
144	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
145	Stop procedure for now. Continue at Step 146 when resuming.	TELCO/INST	—
146	If AIMS terminal is being used to enter input messages, load **GRXTSI.6** command file into terminal.	TELCO	DLP-577
147	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
148	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
149	Request next higher support group to Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
150	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
151	Repeat from Step 139 for each TMSP memory block.	TELCO/INST	—
	Note: Steps 152 through 159 are being performed to test growth XTSI cabinet interfaces in SGRO state.		
152	If AIMS terminal is being used to enter input messages, load **GRXTSI.7** command file into terminal.	TELCO	DLP-578
153	Recent change and verify member equipage from GROW to SGRO (even growth XTSI member number).	TELCO	DLP-531
154	At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
155	At 1B Processor MTC terminal, diagnose even-numbered growth XTSI CONTR 0:		
	A. For offices in 4E23 or earlier generic (**DGN:XTSI** a,**CONTR 0:PH 1-22,GROWTH!**)	TELCO	DLP-544
	B. For offices in 4E24 or later generic (**DGN:XTSI** a,**CONTR 0:PH 1-29,GROWTH!**)	TELCO	DLP-622
156	At 1B Processor MTC terminal, diagnose even-numbered growth XTSI CONTR 1:		
	A. For offices in 4E23 or earlier generic (**DGN:XTSI** a,**CONTR 1:PH 1-22,GROWTH!**)	TELCO	DLP-544
	B. For offices in 4E24 or later generic (**DGN:XTSI** a,**CONTR 1:PH 1-29,GROWTH!**)	TELCO	DLP-622

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

	Notes:
	1. TMS diagnostic tests are used to test growth XTSI-TMS interfaces. It should be noted that when TMS DGN is used and one TMS controller is out-of service for diagnostic testing, if failure occurs in any active TMS controller on other side of network, it can result in TMS duplex failure condition. Demand TMS diagnostic phases 8 and 9 retain simplex TMS controller configuration longer than regular TMS diagnostic phases. Each office should be assured that any known TMS frame or network problems are cleared before proceeding with growth XTSI-TMS testing.
	2. Phase 9 of TMS diagnostics may be used for troubleshooting specific network path problems.
	3. Demand diagnostics on growth associated TMS controllers should be performed in following order:
	
	    • TMSP 0 CONTR 0
	
	    • TMSP 1 CONTR 0
	
	    • TMSP 2 CONTR 0
	
	    • TMSP 3 CONTR 0
	
	    • TMSP 0 CONTR 1
	
	    • TMSP 1 CONTR 1
	
	    • TMSP 2 CONTR 1
	
	    • TMSP 3 CONTR 1		

157	At 1B Processor MTC terminal, diagnose one TMSP CONTR specifying phase 8, level, CONTR 0, and GROWTH (**DGN:TMSP** a**,CONTR** b**:PH 8,LEVEL** c**,CONTR 0,GROWTH!**).	TELCO/INST	DLP-546
158	At 1B Processor MTC terminal, diagnose TMSP CONTR (Step 157) specifying phase 8, level, CONTR 1, and GROWTH (**DGN:TMSP** a**,CONTR** b**:PH 8,LEVEL** c**,CONTR 1,GROWTH!**).	TELCO/INST	DLP-546

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
159	At 1B Processor MTC terminal, restore TMSP CONTR (Step 157) to service (**RST:TMSP** a**,CONTR** b**!**).	TELCO/INST	DLP-527
160	Safe point to temporarily stop this procedure. If stopping, perform Steps 161 through 163; otherwise, go to Step 169.	TELCO/INST	—
161	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
162	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
163	Stop procedure for now. Continue at Step 164 when resuming.	TELCO/INST	—
164	If AIMS terminal is being used to enter input messages, load **GRXTSI.7** command file into terminal.	TELCO	DLP-577
165	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
166	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
167	Request next higher support group to Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
168	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
169	Repeat Steps 157 through 160 for Each TMSP CONTR.	TELCO/INST	—
170	At 1B Processor MTC terminal, diagnose even-numbered growth XTSI CONTR 0 specifying phases 40 and 41 and GROWTH (**DGN:XTSI** a**,CONTR 0:PH 40-41,GROWTH!**).	TELCO/INST	DLP-579
171	At 1B Processor MTC terminal, diagnose even-numbered growth XTSI CONTR 1 specifying phases 40 and 41 and GROWTH (**DGN:XTSI** a**,CONTR 1:PH 40-41,GROWTH!**).	TELCO/INST	DLP-579

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
172	Notify office personnel that alarms will be received during XTSI alarm testing.	INST	—
173	If fan controller board is located at the back of growth XTSI cabinet (EQL 44-188), perform Steps 174 through 184; otherwise, if fan controller board is not located at the back of growth XTSI cabinet, go to Step 185.	INST	—
	Note: **FAN A** and **FAN D** fuses will not be tested in Steps 174 through 179.		
174	At XTSI cabinet fuse panel (Level 69), remove fuse for one fan: ***Note:*** Fuse A is at the top of the fuse panel and fuse E is on the bottom of the fuse panel. • **FAN B** (A3-064-A) • **FAN C** (B4-174-B) • **FAN E** (A2-048-A) • **FAN F** (B3-166-A) • **FAN G** (A4-072-B)	INST	—
175	Ensure the following: • Audible major alarm is received. • At front top of growth XTSI cabinet, **FAN** and **POWER** LEDs are on. • End guard major lamp is on. • GRID **MJ** LED is on. • At back of growth XTSI cabinet, on fan controller board (EQL 41-004), LED associated with pulled fuse is on. • On 1B Processor SREC1 terminal, **REPT: MJ ALM MOC GRID 1** message is received.	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
176	Install removed fuse.	INST	—
177	On fan controller board of growth XTSI cabinet, operate **RESET** switch down and release.	INST	—
178	Ensure the following: • Audible major alarm is retired. • On fan controller board of growth XTSI cabinet, LED associated with pulled fuse is off. • At front top of growth XTSI cabinet, **FAN** and **POWER** LEDs are off. • End guard major lamp is off. • GRID **MJ** LED is off. • On 1B Processor SREC1 terminal, **RTR:MJ ALM MOC GRID 1 COMPL** message is received.	INST	—
179	Repeat Steps 174 through 178 for each fan fuse.	INST	—
180	At front of growth XTSI cabinet at fan unit (level 45), disconnect plug (plug with 4 wires) associated with fan G (rightmost fan).	INST	—
181	Ensure the following: • Audible major alarm is received. • At front top of growth XTSI cabinet, **FAN** and **POWER** LEDs are on. • On fan controller board of growth XTSI cabinet, **G** LED is on. • End guard major lamp is on. • Grid **MJ** LED is on. • On 1B Processor SREC1 terminal, **REPT: MJ ALM MOC GRID 1** message is received.	INST	—
182	At front of growth XTSI cabinet at Fan Unit (level 45), connect plug associated with fan G disconnected in Step 180.	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
183	On fan controller board of growth XTSI cabinet, operate **RESET** switch down and release.	INST	—
184	Ensure the following: • Audible major alarm is retired. • On fan controller board of growth XTSI cabinet, **G** LED is off. • At front top of growth XTSI cabinet, **FAN** and **POWER** LEDs are off. • End guard major lamp is off. • Grid **MJ** LED is off. • On 1B Processor SREC1 terminal, **RTR:MJ ALM MOC GRID 1 COMPL** message is received.	INST	—
185	If fan controller board is located at the front of growth XTSI cabinet (EQL 41-004), perform Steps 186 through 200; otherwise, if fan controller board is not located at the front of growth XTSI cabinet, go to Step 201.	INST	—
	Note: **FAN A** and **FAN D** fuses will not be tested in Steps 186 through 193.		
186	At XTSI cabinet fuse panel (Level 69), remove fuse for one fan: *Note:* Fuse A is at the top of the fuse panel and fuse E is on the bottom of the fuse panel. • **FAN B** (A3-064-A) • **FAN C** (B4-174-B) • **FAN E** (A2-048-A) • **FAN F** (B3-166-A) • **FAN G** (A4-072-B)	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
187	Ensure the following: • Audible major alarm is received. • At front top of growth XTSI cabinet, **FAN** LED is on. • End guard major lamp is on. • GRID **MJ** LED is on. • At front of growth XTSI cabinet, on fan controller board (EQL 44-188), LED associated with pulled fuse and **ALARM** and **RETIRE** LEDs are on. • On 1B Processor SREC1 terminal, **REPT: MJ ALM MOC GRID 1** message is received.	INST	—
188	Install removed fuse.	INST	—
189	On fan controller board of growth XTSI cabinet, depress **RETIRE** pushbutton.	INST	—
190	Ensure the following: • Audible major alarm is retired. • At front top of growth XTSI cabinet, **FAN** LED remains on. • On fan controller board, LED associated with pulled fuse and **ALARM** and **RETIRE** LEDs remains on. • End guard major lamp is off. • GRID **MJ** LED is off. • On 1B Processor SREC1 terminal, **RTR:MJ ALM MOC GRID 1 COMPL** message is received.	INST	—
191	On fan controller board of growth XTSI cabinet, depress **START** pushbutton.	INST	—
192	Ensure the following: • On fan controller board, LED associated with pulled fuse and **ALARM** and **RETIRE** LEDs are off. • At front top of growth XTSI cabinet, **FAN** LED is off.	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
193	Repeat Steps 186 through 192 for each fan fuse.	INST	—
194	At front of growth XTSI cabinet at fan unit (level 45), disconnect plug (plug with 4 wires) associated with fan G (rightmost fan).	INST	—
195	Ensure the following: • Audible major alarm is received. • At front top of growth XTSI cabinet, **FAN** LED is on. • On fan controller board, **G** and **ALARM** LEDs are on. • End guard major lamp is on. • Grid **MJ** LED is on. • On 1B Processor SREC1 terminal, **REPT: MJ ALM MOC GRID 1** message is received.	INST	—
196	At front of growth XTSI cabinet at Fan Unit (level 45), connect plug associated with fan G disconnected in Step 194.	INST	—
197	On fan controller board of growth XTSI cabinet, depress **RETIRE** pushbutton.	INST	—
198	Ensure the following: • Audible major alarm is retired. • **RETIRE** LED is on. • On fan controller board, **G** and **ALARM** LEDs remain on. • At front top of growth XTSI cabinet, **FAN** LED remains on. • End guard major lamp is off. • Grid **MJ** LED is off. • On 1B Processor SREC1 terminal, **RTR:MJ ALM MOC GRID 1 COMPL** message is received.	INST	—
199	On fan controller board of growth XTSI cabinet, depress **START** pushbutton.	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
200	Ensure the following: • On fan controller board, **G** LED and **ALARM** and **RETIRE** LEDs are off. • At front top of growth XTSI cabinet, **FAN** LED is off.	INST	—
201	At growth XTSI cabinet fuse panel, install blown fuse into unmarked and unused fuse slot.	INST	—
202	Ensure the following: • Audible major alarm is received. • At front top of growth XTSI cabinet, **FUSE** and **POWER** LEDs are on. • End guard major lamp is on. • GRID **MJ** LED is on. • On 1B Processor SREC1 terminal, **REPT: MJ ALM MOC GRID 1** message is received.	INST	—
203	Remove blown fuse.	INST	—
204	Ensure the following: • Audible major alarm is retired. • At front top of growth XTSI cabinet, **FUSE** and **POWER** LEDs are off. • End guard major lamp is off. • GRID **MJ** LED is off. • On 1B Processor SREC1 terminal, **RTR:MJ ALM MOC GRID 1 COMPL** message is received.	INST	—
205	Recent change and verify member equipage from SGRO to OPER (even growth XTSI member number).	TELCO	DLP-531
	Note: After AUD:PUSTAT message is entered, **REPT:SDU XTSI** a,**DUPLEX FAILED** message will be received.		
206	At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
Notes: 1. If Phase 22 (for 4E23 or earlier generic) or Phase 29 (for 4E24 generic) fails during controller 0 and/or 1 restoral, D3Us are probably powered up. D3Us must not be powered up at this time. 2. When Controller 0 and/or 1 is restored to service, **REPT:SDU XTSI** a **RESTORED** message will be received when restore completes.		
207	At 1B Processor MTC terminal, restore even-numbered growth XTSI CONTR 0 to service (**RST:XTSI** a,**CONTR 0!**).	TELCO/INST	DLP-547
208	At 1B Processor MTC terminal, restore even-numbered growth XTSI CONTR 1 to service (**RST:XTSI** a,**CONTR 1!**).	TELCO/INST	DLP-547
	Note: After IPUB 0 restores to service, peripheral unit AUD:PUSTAT messages will be received.		
209	At 1B Processor MTC terminal, restore IPUB 0 of even-numbered XTSI to service (**RST:XTSI** a,**IPUB 0!**).	TELCO/INST	DLP-545
210	At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
211	At 1B Processor MTC terminal, restore IPUB 1 of even-numbered XTSI to service (**RST:XTSI** a,**IPUB 1!**).	TELCO/INST	DLP-545
212	At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
	Note: Power switch testing should be performed in following order: • IPC 0 (52-188) • IPC 1 (61-188) • MPC 0 (52-066) • MPC 1 (61-066)		
213	Operate **ROS/NORM** switch to **ROS** position for one power switch (**Do not depress ON switch**) and ensure the following: • **ACK** LED goes on then off and **OS** LED stays on. • At 1B Processor MTC terminal, **RMV: XTSI** a, xxxx b **COMPL** message is received.	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
214	At power switch (Step 213), operate **ROS/NORM** switch to **NORM** position and ensure the following: • **ACK** and **OS** LEDs go off after unit is restored. • At 1B Processor MTC terminal, either **DGN: XTSI** a**,** xxxx b **COMPLETED ATP MSG COMPL** or **DGN: XTSI** a**,** xxxx b **COMPLETED CATP (00000000 00000400) MSG COMPL** message is received. • At 1B Processor SREC1 terminal, **RST: XTSI** a**,** xxxx b **COMPL** message is received.	INST	—
215	Repeat Steps 213 and 214 for each power mod. ***Note:*** Power switch testing should be performed in following order: • ALD 0 (52-014) • ALD 1 (61-014)	INST	—
216	Operate **ROS/NORM** switch to **ROS** position for one power switch (**Do not depress ON switch**) and ensure the following: • **ACK** LED goes on then off and **OS** LED stays on. • At 1B Processor MTC terminal, **RMV: XTSI** a**, ALC** b **COMPL** and **RMV: TMSP** a**, CONTR** b **COMPL** messages are received.	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
217	At power switch (Step 216), operate **ROS/NORM** switch to **NORM** position and ensure the following: • **ACK** and **OS** LEDs go off after unit is restored. • At 1B Processor MTC terminal, **DGN: TMSP** a**, CONTR** b **PH 9 IN PROGRESS (**nnnnnnnn nnnnnnnn**) ATP MSG STARTED** message is received. • **DGN: TMSP** a**, CONTR** b **:XTSI** c **COMPLETED CATP (00000000 00000040) MSG COMPL** message is received. • At 1B Processor SREC1 terminal, **RST: TMSP** a**, CONTR** b **COMPL** message is received. • **RST: XTSI** a**, ALC** b **COMPL** message is received.	INST	—
218	Repeat Steps 216 and 217 for each power switch.	INST	—
219	At 1B Processor MTC terminal, enter message **OP:PERIFINH!** to determine if any inhibits are listed. If inhibits are listed, investigate cause and clear as appropriate.	TELCO	—
220	Safe point to temporarily stop this procedure. If stopping, perform Steps 221 through 223; otherwise, go to Step 229.	TELCO/INST	—
221	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
222	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
223	Stop procedure for now. Continue at Step 224 when resuming.	TELCO/INST	—
224	If AIMS terminal is being used to enter input messages, load **GRXTSI.7** command file into terminal.	TELCO	DLP-577

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
225	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED** **AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
226	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
227	Request next higher support group to Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
228	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
	Note: Steps 229 through 232 are being performed to grow DS3 interface units (D3Us) (up to eight total) to GROW.		
229	If AIMS terminal is being used to enter input messages, load **GRXTSI.8** command file into terminal.	TELCO	DLP-578
230	At 1B Processor MTC terminal, verify no nailups are provisioned for growth XTSI (**VER:NAILUP:TAN** aa**00001-**bb**17127!**). If nailups are provisioned, contact next higher support group; procedure must not be continued.	TELCO	DLP-548
	Note: Minimum configuration is D3U 0 and D3U 6. Fields on RC Form 705 that are left blank will leave corresponding translations data unchanged. All D3Us being grown can be recent changed at one time.		
231	Recent change submember equipage from UNEQ to GROW for **all** D3Us being grown (even growth XTSI member number):		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-588
	B. For offices in 4E24 or later generic	TELCO	DLP-623

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
232	At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
	Note: Power must be restored to D3Us being grown in following D3U order: 6, 0, 1, 2, 7, 3, 4, and 5		
233	At power switch for **all** D3Us being grown, depress **ON** pushbutton and operate **ROS** switch to **NORM** position.	INST	—
234	If AIMS terminal is being used to enter input messages, load **GRXTSI.9** command file into terminal.	TELCO	DLP-578
	Note: In Step 235, diagnostics for D3Us being grown must be performed in following D3U order: 6, 0, 1, 2, 7, 3, 4, and 5.		
235	At 1B Processor MTC terminal, diagnose **one** D3U being grown in even-numbered growth XTSI specifying phases 1 through 19 and GROWTH (**DGN:XTSI** a,**D3U** b:**PH 1-19,GROWTH!**).	TELCO/INST	DLP-549
236	Repeat Step 235 for each D3U being grown in proper sequence (0, 1, 2, 7, 3, 4, 5).	TELCO/INST	—
237	Safe point to temporarily stop this procedure. If stopping, perform Steps 238 through 240; otherwise, go to Step 246.	TELCO/INST	—
238	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
239	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
240	Stop procedure for now. Continue at Step 241 when resuming.	TELCO/INST	—
241	If AIMS terminal is being used to enter input messages, load **GRXTSI.9** command file into terminal.	TELCO	DLP-577
242	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
243 At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
244 Request next higher support group to Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
245 Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
Note: Steps 246 through 277 are being performed to do the following: • Configure and connect DS3 lines for D3Us being grown. • Recent change D3U 6 to SGRO, run diagnostics, then recent change to OPER. • If D3U(s) associated with D3U 7 (D3Us 3, 4, 5) are being grown, recent change D3U 7 to SGRO, run diagnostics, then recent change to OPER. • D3Us being grown (0, 1, 2, 3, 4, 5) are recent changed to SGRO and tested. • D3Us being grown (0, 1, 2, 3, 4, 5) are each tested for loopback with network element on other cable end. • With all loopbacks removed, each D3U is recent changed to OPER.		
246 If AIMS terminal is being used to enter input messages, load **GRXTSI.A** command file into terminal.	TELCO	DLP-578
247 At 1B Processor MTC terminal, set DS3 link parameters for D3Us being grown (0, 1, 2, 3, 4, 5) and verify:		
A. For offices in 4E23 or earlier generic	TELCO	DLP-551
B. For offices in 4E24 or later generic	TELCO	DLP-624

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
248	Connect DS3 cables between growth XTSI cabinet and far-end network element (**DACS** IV-2000 Equipment, **DDM**-1000 Equipment, DSX-3 Equipment, **Tellabs** Titan Crossconnect, and so on):		
	1. Request trunk services center to verify that no other DS3 cables are connected or planned to be connected to assigned points for growth XTSI at far-end network element.	TELCO	—
	Note: Steps 248.2 through 248.5 must be performed for **one** D3U being grown at a time in following D3U order: 0, 1, 2, 3, 4, and 5.		
	2. At growth XTSI cabinet, inside front door, record D3U/DS3 Facility Termination Point for D3U being grown on provided sticker.	INST	—
	3. At growth XTSI cabinet, connect XTSI-RCV cable labeled R-IN to **IN** port of proper **470A** circuit module.	INST	—
	4. At growth XTSI cabinet, connect XTSI-XMT cable labeled T-OUT to **OUT** port of proper **470A** circuit module.	INST	—
	5. Repeat Steps 248.2 through 248.4 for each D3U being grown in proper sequence (1, 2, 3, 4, 5).	INST	—
249	If AIMS terminal is being used to enter input messages, load **GRXTSI.B** command file into terminal.	TELCO	DLP-578
	Note: Minimum configuration is D3U 0 and D3U 6. Fields on RC Form 705 that are left blank will leave corresponding translations data unchanged. All D3Us being grown can be recent changed at one time.		
250	Recent change submember equipage from GROW to SGRO for **all** D3Us being grown (even growth XTSI member number):		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-589
	B. For offices in 4E24 or later generic	TELCO	DLP-625

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	Note: Steps 251 through 256 must be performed for D3U 6 and then D3U 7 (if being grown) protection D3Us.		
251	At 1B Processor MTC terminal, diagnose **one** protection D3U in even-numbered growth XTSI specifying phases 1 through 19 and GROWTH (**DGN:XTSI** a,**D3U** b:**PH 1-19,GROWTH!**).	TELCO/INST	DLP-585
252	Recent change submember equipage from SGRO to OPER for **one** protection D3U (Step 251) (even growth XTSI member number):		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-590
	B. For offices in 4E24 or later generic	TELCO	DLP-626
253	At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
254	At 1B Processor MTC terminal, restore D3U (Step 251) to service (**RST:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-556
255	At power switch for protection D3U (Step 251), operate **ROS**/**NORM** switch to **ROS** position and ensure the following: • **ACK** LED goes on then off and **OS** LED stays on. • At 1B Processor MTC terminal, **RMV: XTSI** a, **D3U** b **COMPL** message is received.	INST	—
256	At power switch (Step 251), operate **ROS**/**NORM** switch to **NORM** position and ensure the following: • **ACK** and **OS** LEDs go off after unit is restored. • At 1B Processor MTC terminal, **DGN: XTSI** a, **D3U** b **COMPLETED ATP MSG COMPL** message is received. • At 1B Processor SREC1 terminal, **RST: XTSI** a**, D3U** b **COMPL** message is received.	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
257	If D3U 7 is being grown, repeat Steps 251 through 256 for second protection D3U (D3U 7).	TELCO/INST	—
	Note: Steps 258 through 263 must be performed for one client D3U being grown at a time in following D3U order to test loopback: 0, 1, 2, 3, 4, and 5.		
258	Set up Loop for D3U loopback testing:		
	A. If DS3 is connected directly to DSX-3:		
	1. At DSX-3, if cross-connect cable is connected for D3U being tested, disconnect this cable.	TELCO	—
	2. Connect jumper between **IN** and **OUT** ports associated with this D3U; go to Step 259 when connected.	TELCO	—
	B. If DS3 is connected directly to **DDM**-1000 or **DACS** 256 far-end network element or DS3 Is Connected Directly to equipment that is not capable of of setting up loopback at a T3 level:		
	1. At growth XTSI cabinet, disconnect DS3 cables at **IN** and **OUT** ports associated with this D3U.	INST	—
	2. Connect coax jumper between **IN** and **OUT** ports associated with this D3U; go to Step 259 when connected.	INST	—
	Note: For Step 258.C, far-end network element can not be connected to **DDM**-1000 equipment.		
	C. If DS3 is connected directly to far-end network element with operational interface, request trunk services center to set up loopback for this DS3 line.	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
259	At 1B Processor MTC terminal, diagnose D3U associated with DS3 in even-numbered growth XTSI specifying phase 90 and GROWTH (**DGN:XTSI** a,**D3U** b:**PH 90,GROWTH!**).	TELCO/INST	DLP-552
260	Remove loop used for D3U loopback testing:		
	A. If DS3 is connected directly to DSX-3:		
	1. At DSX-3, disconnect jumper between **IN** and **OUT** ports associated with this D3U.	TELCO	—
	2. If cross-connect cable was disconnected in Step 258.A.1, connect this cable to proper location.	TELCO	—
	3. Go to Step 261.	TELCO	—
	B. If coax jumper was installed in Step 258.B.2 for this DS3 line at XTSI cabinet:		
	1. At growth XTSI cabinet, disconnect coax jumper between **IN** and **OUT** ports associated with this D3U.	INST	—
	2. Connect DS3 cables at **IN** and **OUT** ports associated with this D3U; go to Step 261 when connected.	INST	—
	C. If DS3 is connected directly to far-end network element with operational interface, request trunk services center to remove far-end loopback for this DS3 line.	TELCO	—
261	At 1B Processor MTC terminal, diagnose D3U associated with DS3 in even-numbered growth XTSI specifying phases 90 and GROWTH (**DGN:XTSI** a,**D3U** b:**PH 90,GROWTH!**); ensure **DGN: XTSI** a, **D3U** b **PH 90 COMPLETED STF . . . .** (STF must be received. This indicates loopback is removed).	TELCO	DLP-575
262	Repeat Steps 258 through 261 for each D3U being grown in proper sequence (1, 2, 3, 4, 5).	TELCO/INST	—
263	If DS3s, associated with growth XTSI, are connected directly to DSX-3, ensure no loopback plugs are connected for these DS3s.	TELCO	—
264	Safe point to temporarily stop this procedure. If stopping, perform Steps 265 through 267; otherwise, go to Step 273.	TELCO/INST	—
265	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
266	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
267	Stop procedure for now. Continue at Step 268 when resuming.	TELCO/INST	—

	DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
268	If AIMS terminal is being used to enter input messages, load **GRXTSI.B** command file into terminal.	TELCO	DLP-577
269	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
270	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
271	Request next higher support group to Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
272	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
273	If AIMS terminal is being used to enter input messages, load **GRXTSI.C** command file into terminal.	TELCO	DLP-578
	Note: Minimum configuration is D3U 0 and D3U 6. Fields on RC Form 705 that are left blank will leave corresponding translations data unchanged. D3Us being grown must be recent changed one at time (0, 1, 2, 3, 4, and/or 5).		
274	Recent change submember equipage from SGRO to OPER for **one** D3U being grown (even growth XTSI member number):		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-590
	B. For offices in 4E24 or later generic	TELCO	DLP-626
275	At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
276	At 1B Processor MTC terminal, restore D3U (Step 274) in even-numbered growth XTSI to service (**RST:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-556
277	Repeat Steps 274 through 276 for each D3U being grown in proper sequence (1, 2, 3, 4, 5).	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
Note: Steps 278 through 280 must be performed for **one** D3U being grown at a time in following D3U order: 0, 1, 2, 3, 4, and 5.		
278	At power switch for **one** D3U being grown, operate **ROS**/**NORM** switch to **ROS** position and ensure the following: • **ACK** LED goes on then off and **OS** LED stays on. • At 1B Processor MTC terminal, **RMV: XTSI** a**, D3U** b **COMPL** message is received.	INST	—
279	At power switch (Step 278), operate **ROS**/**NORM** switch to **NORM** position and ensure the following: • **ACK** and **OS** LEDs go off after unit is restored. • At 1B Processor MTC terminal, **DGN: XTSI** a**, D3U** b **COMPLETED ATP MSG COMPL** message is received. At 1B Processor SREC1 terminal, **RST: XTSI** a**, D3U** b **COMPL** message is received.	INST	—
280	Repeat Steps 278 and 279 for each D3U being grown in proper sequence (1, 2, 3, 4, 5).	TELCO/INST	—
281	If AIMS terminal is being used to enter input messages, load **GRXTSI.D** command file into terminal.	TELCO	DLP-578
282	If D3Us 0, 1, and/or 2 are connected to far-end network element with operational interface, perform Steps 283 through 292; otherwise, go to Step 293.	TELCO/INST	—
	Notes: 1. Steps 283 through 292 can only be performed on D3Us that are connected to a far-end network element with an operational interface. 2. Steps 283 through 292 are being performed to do protection-switch testing using D3U 6. 3. Using protection D3U 6, Steps 283 through 291 are to be performed on **one** D3U being grown at a time in following D3U order: 0, 1, and 2.		
283	At 1B Processor MTC terminal, set up near-end loopback for **one** D3U being grown in even-numbered XTSI (**ORD:DS3LOOP;OPR:XTSI** a**,D3U** b**!**).	TELCO/INST	DLP-554

	DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
284	At 1B Processor MTC terminal, verify loopback is operating for D3U 6 (**ORD:DS3LOOP;READ:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-555
285	At 1B Processor MTC terminal, force protection D3U 6 to become active by removing D3U being tested (Step 283) in even-numbered growth XTSI (**RMV:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-553
286	At 1B Processor MTC terminal, verify loopback is operating for D3U 6 (**ORD:DS3LOOP;READ:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-555
287	Request trunk services center to perform loopback test to D3U (Step 283) (loopback is set up at D3U). This will test protection-switching (D3U 6) for D3U being tested from far-end network element.	TELCO	—
288	Wait for testing to successfully complete (Step 287) before continuing.	TELCO/INST	—
289	At 1B Processor MTC terminal, restore D3U being tested (Step 283) in even-numbered growth XTSI to service (**RST:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-556
290	At 1B Processor MTC terminal, remove near-end loopback for D3U being tested (Step 283) in even-numbered XTSI (**ORD:DS3LOOP;RLS:XTSI** a,**D3U** b**!**).	TELCO	DLP-576
291	At 1B Processor MTC terminal, verify loopback is released for D3U 6 and D3U being tested (**ORD:DS3LOOP;READ:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-581
292	Repeat Steps 283 through 291 for each D3U being grown in proper sequence (1 and 2).	TELCO/INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
293	If D3Us 3, 4, and/or 5 are connected to far-end network element with operational interface, perform Steps 294 through 303; otherwise, go to Step 304.	TELCO/INST	—
	Notes: 1. Steps 294 through 303 can only be performed on D3Us that are connected to a far-end network element with an operational interface. 2. Steps 294 through 303 are being performed to do protection-switch testing using D3U 7. 3. Using protection D3U 7, Steps 294 through 302 are to be performed on **one** D3U being grown at a time in following D3U order: 3, 4, and 5.		
294	At 1B Processor MTC terminal, set up near-end loopback for **one** D3U being grown in even-numbered XTSI (**ORD:DS3LOOP;OPR:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-554
295	At 1B Processor MTC terminal, verify loopback is operating for D3U 7 (**ORD:DS3LOOP;READ:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-555
296	At 1B Processor MTC terminal, remove D3U being tested (Step 294) in even-numbered growth XTSI from service to force protection D3U 7 to become active (**RMV:XTSI** a,**D3U** b**!**).	TELCO	DLP-553
297	At 1B Processor MTC terminal, verify loopback is operating for D3U 7 (**ORD:DS3LOOP;READ:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-555
298	Request trunk services center to perform loopback test to D3U (Step 294) (loopback is set up at D3U). This will test protection-switching (D3U 7) for D3U being tested from far-end network element.	TELCO	—
299	Wait for testing to successfully complete (Step 298) before continuing.	TELCO/INST	—
300	At 1B Processor MTC terminal, restore D3U being tested (Step 294) in even-numbered growth XTSI to service (**RST:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-556
301	At 1B Processor MTC terminal, remove near-end loopback for D3U being tested (Step 294) in even-numbered XTSI (**ORD:DS3LOOP;RLS:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-576
302	At 1B Processor MTC terminal, verify loopback is released for D3U 7 and D3U being tested (**ORD:DS3LOOP;READ:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-581
303	Repeat Steps 294 through 302 for each D3U being grown in proper sequence (4 and 5).	TELCO/INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
304 At 1B Processor MTC terminal, enter message **OP:PERIFINH!** to determine if any inhibits are listed. If inhibits are listed, investigate cause and clear as appropriate.	TELCO	—
305 At 1B Processor MTC terminal, verify proper software issue is being run on all D3Us being grown in even-numbered growth XTSI [**DUMP:TSIMEM;XTSI** a,**D3U** b,**HADR (0,20,0000),L 10!**].	TELCO	DLP-550
306 Safe point to temporarily stop this procedure. If stopping, perform Steps 307 through 309; otherwise, go to Step 315.	TELCO/INST	—
307 At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
308 If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
309 Stop procedure for now. Continue at Step 310 when resuming.	TELCO/INST	—
310 If AIMS terminal is being used to enter input messages, load **GRXTSI.D** command file into terminal.	TELCO	DLP-577
311 At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
312 At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
313 Request next higher support group to Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
314 Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	Note: Steps 315 through 351 are being performed to do the following: • Verify sufficient equipment active for NETX run. • Set up dummy trunks and verify. • Copy NETX into 1B memory. • Run NETX on 200 connect level for 1 hour. • Run NETX on 960 connect level for 8 hours in 2-hour intervals. • Remove dummy trunks and verify.		
315	Read entire test procedure to become familiar with its contents before beginning NETX testing.	TELCO/INST	—
	Caution: To avoid any service interruptions, measures should be taken to avoid running NETX continuously for more than 2 hours at a time. NETX should be periodically terminated, audits which are inhibited during testing should be released and run [DLP-572], and NETX testing restarted. Testing should resume at same place it was when terminated.		
316	Establish required hardware status.	TELCO	DLP-557

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
317	Provision dummy trunks for NETX testing:		
	A. If appropriate provisioning group is to provide dummy trunks for NETX testing, Request appropriate provisioning group to set up dummy trunks and echo cancellation connections for running NETX. DLP-596 gives guidelines for setting up dummy trunks. **Do Not** continue until provisioning group has confirmed which trunks have been set up for NETX testing.	TELCO	DLP-596
	B. If on-site personnel are to provision dummy trunks for NETX testing.	TELCO	DLP-621
	Notes: 1. If ODA structures and TAN assignments for all trunks associated with growth XTSI have not been built, maximum occupancy levels for test cannot be met. 2. Measures should be taken to ensure that NETX testing does not take place during busy hour. NETX should be terminated and audits which were inhibited during testing should be run if this condition exists. NETX testing should be resumed during next low traffic period. 3. If NETX testing is temporarily stopped due to trouble condition which simplexes XTSI under test or any system TMS, observe output message which may indicate NETX is in hold state. When frames are restored to duplex operation, NETX exercise will automatically restart. 4. All trunks assigned to XTSI(s) to be tested must be in CAD.DSA state before XTSI(s) can be used by NETX.		
318	If AIMS terminal is being used to enter input messages, load **NETX.1** command file into terminal.	TELCO	DLP-578
319	At 1B Processor MTC terminal, verify sufficient number of dummy trunks, for NETX testing, are set to CAD.DSA.	TELCO	DLP-558

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
320	Review requirements to maintain log sheet.	TELCO	DLP-559
321	At 1B Processor MTC terminal, determine if library package containing program NETX resides in file system (**OP:LIBSTAT,FS!**).	TELCO	DLP-560
322	If Library Package Containing Program NETX Does Not Reside in File System:		
	1. Mount library tape on available 3B tape/DAT unit.	TELCO	DLP-561
	2. Load library tape in file system:		
	A. For office loading an original library tape	TELCO	DLP-597
	B. For office loading a back up library tape	TELCO	DLP-598
323	At 1B Processor MTC terminal, enter message **OP:PERIFINH!** and save printout for use after NETX has been stopped.	TELCO	—
324	At 1B Processor MTC terminal, set network routing to NORM state (**SET:NETROUT;NORM:MEMN** a!).	TELCO	DLP-562
325	At 1B Processor MTC terminal, execute NETX library program and set office translations to in-service, if required.	TELCO	DLP-563
326	At 1B Processor MTC terminal, enter NETX execution data.	TELCO	DLP-564
327	At 1B Processor MTC terminal, run growth XTSI(s) at 200 connect level.	TELCO/INST	DLP-565
328	Safe point to temporarily stop this procedure. If stopping, perform Steps 329 through 331; otherwise, go to Step 337.	TELCO/INST	—
329	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
330	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
331	Stop procedure for now. Continue at Step 332 when resuming.	TELCO/INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
332	If AIMS terminal is being used to enter input messages, load **NETX.1** command file into terminal.	TELCO	DLP-577
333	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
334	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
335	Request next higher support group to Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
336	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
	Note: Final criteria for NETX testing is that all network routing configurations on growth XTSI(s) complete 2-hour test interval without triggering any TRPFs.		
337	Investigate any trouble patterns.	TELCO/INST	DLP-567
338	Safe point to temporarily stop this procedure. If stopping, perform Steps 339 through 341; otherwise, go to Step 347.	TELCO/INST	—
339	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
340	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
341	Stop procedure for now. Continue at Step 342 when resuming.	TELCO/INST	—
342	If AIMS terminal is being used to enter input messages, load **NETX.1** command file into terminal.	TELCO	DLP-577

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
343	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED** **AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
344	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
345	Request next higher support group to Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
346	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
347	At 1B Processor MTC terminal, run growth XTSI(s) at 960 connect level for 8 hours in 2-hour intervals.	TELCO/INST	DLP-568
348	At 1B Processor MTC terminal, terminate execution of NETX library program (**STOP:LIBSYS;RELEASE!**).	TELCO	DLP-569
349	Delete dummy trunks used for NETX testing:		
	A. If appropriate provisioning group is to delete dummy trunks used for NETX testing, request appropriate provisioning group to delete dummy trunks that were used for NETX testing.	TELCO	—
	B. If on-site personnel is to delete dummy trunks, delete dummy trunks used for NETX testing.	TELCO	DLP-627
350	At 1B Processor MTC terminal, run all growth XTSI-related audits (**AUD:NUM(1,2,26,50)!**).	TELCO/INST	DLP-584
351	NETX run provided 24-hour minimum soak interval for growth XTSI(s). with NETX run and DS3 loopback tests successfully completed, all acceptance tests have been performed	TELCO/INST	—
352	If AIMS terminal is being used to enter input messages, load **GRXTSI.F** command file into terminal.	TELCO	DLP-578
353	At 1B Processor MTC terminal, copy CIA0 files to CIA1.	TELCO	DLP-612
354	Notify provisioning group that the XTSI is ready for provisioning. DS1s, to be provisioned, must be set to **P** on RC Form 704 as part of the provisioning for XTSI.	TELCO	—
355	Notify next higher support group that XTSI cabinet growth is complete.	TELCO	—
356	**STOP! YOU HAVE COMPLETED THIS PROCEDURE.**	TELCO/INST	—

Add D3U to Expanded Time Slot Interchange (XTSI) Cabinet - Support to Installer (INST)

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	GENERAL WARNINGS AND NOTES WHEN ADDING D3U TO XTSI CABINET ***WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling or installing circuit packs or backplane cables.*** ***Notes:*** 1. Appropriate Input/Output Manuals must be used if clarification of input message or output message is necessary. 2. This procedure must be performed during light traffic periods. 3. ***4ESS***™ Switch and 3B20D/3B21D APS operation must be closely monitored while performing this procedure. 4. Corrective action must be taken immediately on any activity that may cause any unit to go out of service (OOS). 5. Stability of office must be maintained throughout this procedure. 6. One D3U must be grown at a time in 6, 0, 1, 2, 7, 3, 4, and 5 submember number order. 7. It will be required for appropriate provisioning group to set up dummy trunks for NETX library program on growth associated XTSI cabinet.		
1	Notify next higher support group that D3U growth is being performed. Request information to complete Steps 2 through 4.	TELCO	—
2	Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
3	Ensure ***4ESS*** switch is in stable condition.	TELCO	DLP-528
4	Ensure any 1B Processor and/or system problems have been cleared before performing this procedure.	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
5	If AIMS terminal is going to be used to enter input messages, load **D3UGROW.1** command file into terminal.	TELCO	DLP-577
6	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED** **AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
7	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
8	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
9	Using office records and telephone equipment order (TEO), determine growth D3U(s) location and DS3 connections.	INST	—
10	At 1B Processor MTC terminal, verify growth XTSI D3U software version for all D3Us is 0 (**VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1** a**!**):		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-536
	B. For offices in 4E24 or later generic	TELCO	DLP-671
	Note: There are two groups of consecutive TANs for each D3U.		
11	At 1B Processor MTC terminal, verify no nailups are provisioned for growth D3U (**VER:NAILUP:TAN** a-b**!**). If nailups are provisioned, contact next higher support group; procedure must not be continued.	TELCO	DLP-570
12	At growth associated XTSI cabinet fuse panel, verify fuses are installed for growth D3U per labeling on fuse panel cover.	INST	—
13	At growth associated XTSI cabinet, remove blank faceplate at growth D3U location.	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
14	At growth associated XTSI cabinet, install growth D3U circuit pack. Verify power is on, and associated A and B power sources are active; **ROS** switch must be left in normal position.	INST	—
15	At growth D3U circuit pack, depress **LTEST** pushbutton and observe **OFF**, **PA**, **OS**, **ACK**, and **FA** LEDs are on; then release. **ACK**, **PA**, and **FA** LEDs go off. **OFF** and **OS** LEDs remain on.	INST	—
16	Recent change submember equipage from UNEQ to GROW for growth D3U (even growth associated XTSI member number):		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-588
	B. For offices in 4E24 or later generic	TELCO	DLP-623
17	At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
18	At 1B Processor MTC terminal, diagnose growth D3U in even-numbered growth XTSI specifying phases 1 through 19 and GROWTH (**DGN:XTSI** a,**D3U** b:**PH 1-19,GROWTH!**).	TELCO/INST	DLP-549
19	Safe point to temporarily stop this procedure. If stopping, perform Steps 20 through 22; otherwise, go to Step 28.	TELCO/INST	—
20	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**.	TELCO	—
21	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
22	Stop procedure for now. Continue at Step 23 when resuming.	TELCO/INST	—
23	If AIMS terminal is going to be used to enter input messages, load **D3UGROW.1** command file into terminal.	TELCO	DLP-577
24	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
25	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
26	Request next higher support group to ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
27	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
28	If D3U 0, 1, 2, 3, 4, or 5 is being grown, perform Steps 29 and 30; otherwise, if D3U 6 or 7 is being grown, go to Step 31.	TELCO/INST	—
	Note: Steps 29 through 42 are being performed to do the following: • Configure and connect DS3 lines for D3Us being grown • D3U being grown (0, 1, 2, 3, 4, 5) are recent changed to SGRO and tested • D3U being grown (0, 1, 2, 3, 4, 5) are each tested for loopback with network element on other cable end • Loopback test is run from other network element (if available) • With all loopbacks removed, growth D3U is recent changed to OPER.		
29	Set DS3 link parameters for growth D3U (0, 1, 2, 3, 4, 5); and verify.		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-551
	B. For offices in 4E24 or later generic	TELCO	DLP-624

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
30	Connect DS3 cables between growth D3U and far-end network element (**DACS** IV-2000 equipment, **DDM**-1000 equipment, DSX-3, **Tellabs** Titan crossconnect, and so on):		
	1. Request trunk services center to verify that no other DS3 cables are connected or planned to be connected to assigned points for growth D3U at far-end network element.	TELCO	—
	2. At transmit side of far-end network element, connect cable labeled **T-OUT** for growth D3U to assigned **OUT** connector.	INST	—
	3. At receive side of far-end network element, connect cable labeled **R-IN** for growth D3U to assigned **IN** connector.	INST	—
	4. At growth associated XTSI cabinet, connect XTSI-RCV cable labeled **R-IN** for growth D3U to **IN** port of proper **470A** circuit module.	INST	—
	5. At growth associated XTSI cabinet, connect XTSI-XMT cable labeled **T-OUT** for growth D3U to **OUT** port of proper **470A** circuit module.	INST	—
31	Recent change submember equipage from GROW to SGRO for growth D3U (even growth associated XTSI member number):		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-589
	B. For offices in 4E24 or later generic	TELCO	DLP-625
32	At 1B Processor MTC terminal, diagnose growth D3U in even-numbered growth XTSI specifying phases 1 through 19 and GROWTH (**DGN:XTSI** a,**D3U** b:**PH 1-19,GROWTH!**).	TELCO/INST	DLP-585
33	Recent change submember equipage from SGRO to OPER for growth D3U (even growth associated XTSI member number):		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-590
	B. For offices in 4E24 or later generic	TELCO	DLP-626
34	At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
35	At 1B Processor MTC terminal, restore growth D3U in even-numbered growth associated XTSI to service (**RST:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-556

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
36	At power switch for D3U being grown, operate **ROS** switch to **ROS** position and ensure the following: • **ACK** LED goes on then off and **OS** LED stays on • At 1B Processor MTC terminal, **RMV: XTSI** a, **D3U** b **COMPL** message is received.	INST	—
37	At power switch (Step 36), operate **ROS** switch to normal position and ensure the following: • **ACK** and **OS** LEDs go off after unit is restored • At 1B Processor MTC terminal, **DGN: XTSI** a, **D3U** b **ATP COMPLETED MSG COMPL** and **RST: XTSI** a, **D3U** b **COMPL** messages are received.	INST	—
38	If D3U 0, 1, 2, 3, 4, or 5 is being grown, perform Steps 39 through 42; otherwise, if D3U 6 or 7 is being grown, go to Step 43.	TELCO/INST	—
39	Set up loop for D3U loopback testing:		
	A. If DS3 is connected directly to DSX-3:		
	1. At DSX-3, if cross-connect cable is connected for D3U being tested, disconnect this cable.	TELCO	—
	2. Connect jumper between **IN** and **OUT** ports associated with this D3U; go to Step 40 when connected.	TELCO	—
	B. If DS3 is connected directly to **DDM**-1000 or **DACS** 256 far-end network element or DS3 is Connected Directly to **DACS** equipment that is not capable of setting up loopback at a T3 level:		
	1. At growth XTSI cabinet, disconnect DS3 cables at **IN** and **OUT** ports associated with this D3U.	INST	—
	2. Connect coax jumper between **IN** and **OUT** ports associated with this D3U; go to Step 40 when connected.	INST	—
	Note: For Step 39.C, far-end network element can not be connected to **DDM**-1000 equipment.		
	C. If DS3 is connected directly to far-end network element with operational interface, request trunk services center to set up loopback for this DS3 line.	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
40	At 1B Processor MTC terminal, diagnose D3U associated with DS3 in even-numbered growth XTSI specifying phase 90 and GROWTH (**DGN:XTSI** a,**D3U** b:**PH 90,GROWTH!**).	TELCO/INST	DLP-552
41	Remove loop used for D3U loopback testing:		
	A. If DS3 is connected directly to DSX-3:		
	1. At DSX-3, disconnect jumper between **IN** and **OUT** ports associated with this D3U.	TELCO	—
	2. If cross-connect cable was disconnected in Step 39.A.1, connect this cable to proper location.	TELCO	—
	3. Go to Step 42.	TELCO	—
	B. If coax jumper was installed in Step 39.B.2 for this DS3 line at XTSI cabinet:		
	1. At growth XTSI cabinet, disconnect coax jumper between **IN** and **OUT** ports associated with this D3U.	INST	—
	2. Connect DS3 cables at **IN** and **OUT** ports associated with this D3U; Go to Step 42 when connected.	INST	—
	C. If DS3 is connected directly to far-end network element with operational interface, request trunk services center to remove far-end loopback for this DS3 line.	TELCO	—
42	At 1B Processor MTC terminal, diagnose D3U associated with DS3 in even-numbered growth XTSI specifying phases 90 and GROWTH (**DGN:XTSI** a,**D3U** b:**PH 90,GROWTH!**); Ensure **DGN: XTSI** a, **D3U** b **PH 90 COMPLETED STF . . . .** (STF must be received. This indicates loopback is removed).	TELCO/INST	DLP-575

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
43	Safe point to temporarily stop this procedure. If stopping, perform Steps 44 through 46; otherwise, go to Step 52.	TELCO/INST	—
44	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**.	TELCO	—
45	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
46	Stop procedure for now. Continue at Step 47 when resuming.	TELCO/INST	—
47	If AIMS terminal is going to be used to enter input messages, load **D3UGROW.1** command file into terminal.	TELCO	DLP-577
48	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
49	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
50	Request next higher technical support group to ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
51	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
52	If D3U 0, 1, 2, 3, 4, or 5 is being grown and this D3U is connected to far-end network element with operational interface, perform Steps 53 through 60; otherwise, go to Step 61.	TELCO/INST	—
	Notes: 1. Steps 53 through 60 are being performed to do protection-switch testing on associated protection D3U (6 or 7). 2. D3U 6 is protection D3U for D3Us 0, 1, and 2 and D3U 7 is protection D3U for D3Us 3, 4, and 5. 3. If loopback can not be verified at T3 level, verification of a T1 within a T3 is acceptable, Ex: **DDM**-1000 or **DACS** 256 far-end network element.		
53	At 1B Processor MTC terminal, set up near-end loopback for D3U being grown in even-numbered XTSI (**ORD:DS3LOOP;OPR:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-554
54	At 1B Processor MTC terminal, remove D3U being tested (Step 53) in even-numbered growth XTSI from service to force associated protection D3U (6 or 7) to become active (**RMV:XTSI** a,**D3U** b**!**).	TELCO	DLP-553
55	At 1B Processor MTC terminal, verify loopback is operating for associated D3U (6 or 7) (**ORD:DS3LOOP;READ:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-555
56	Request trunk services center to set up loopback test for D3U being tested (Step 53) and test protection-switching of associated D3U from far-end network element.	TELCO	—
57	Wait for testing to successfully complete (Step 56) before continuing.	TELCO/INST	—
58	At 1B Processor MTC terminal, restore D3U being tested (Step 53) in even-numbered growth XTSI to service (**RST:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-556
59	At 1B Processor MTC terminal, remove near-end loopback for D3U being tested (Step 53) in even-numbered XTSI (**ORD:DS3LOOP;RLS:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-576
60	At 1B Processor MTC terminal, verify loopback is released for associated D3U (6 or 7) and D3U being tested (**ORD:DS3LOOP;READ:XTSI** a,**D3U** b**!**).	TELCO/INST	DLP-581

	DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
61	At 1B Processor MTC terminal, enter message **OP:PERIFINH!** to determine if any inhibits are listed. If inhibits are listed, investigate cause and clear as appropriate.	TELCO	—
62	At 1B Processor MTC terminal, verify proper software issue is being run on D3U being grown and one existing D3U (existing D3U is to be used for comparison) in even-numbered growth XTSI [**DUMP:TSIMEM;XTSI** a,**D3U** b,**HADR (0,20,0000),L 10!**].	TELCO	DLP-550
63	Safe point to temporarily stop this procedure. If stopping, perform Steps 64 through 66; otherwise, go to Step 72.	TELCO/INST	—
64	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**.	TELCO	—
65	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
66	Stop procedure for now. Continue at Step 67 when resuming.	TELCO/INST	—
67	If AIMS terminal is going to be used to enter input messages, load **D3UGROW.1** command file into terminal.	TELCO	DLP-577
68	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
69	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
70	Request next higher support group to ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
71	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	Note: Steps 72 through 96 are being performed to do the following: • Verify sufficient equipment active for NETX run • Set up dummy trunks/DS1s and verify • Copy NETX into 1B memory • Run NETX on 200 trunks for 2 hours • Remove dummy trunks/DS1s and verify		
72	Read entire test procedure to become familiar with its contents before beginning NETX testing.	TELCO/INST	—
	Caution: To avoid any service interruptions, measures should be taken to avoid running NETX continuously for more than 2 hours at a time. NETX should be periodically terminated, audits which are inhibited during testing should be released and run [DLP-566], and NETX testing restarted. Testing should resume at same place it was when terminated.		
73	Establish required hardware status.	TELCO	DLP-557
74	Provision dummy trunks for NETX testing:		
	A. If appropriate provisioning group is to provide dummy trunks for NETX testing, Request appropriate provisioning group to set up dummy trunks and echo cancellation connections for running NETX. DLP-596 gives guidelines for setting up dummy trunks. **Do Not** continue until provisioning group has confirmed which trunks have been set up for NETX testing.	TELCO	DLP-596
	B. If on-site personnel are to provision dummy trunks for NETX testing.	TELCO	DLP-621

	DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
	Notes: 1. If ODA structures and TAN assignments for all trunks associated with growth XTSI have not been built, maximum occupancy levels for test cannot be met. 2. Measures should be taken to ensure that NETX testing does not take place during busy hour. NETX should be terminated and audits which were inhibited during testing should be run if this condition exists. NETX testing should be resumed during next low traffic period. 3. If NETX testing is temporarily stopped due to trouble condition which simplexes XTSI under test or any system TMS, observe output message which may indicate NETX is in hold state. When frames are restored to duplex operation, NETX exercise will automatically restart. 4. All trunks assigned to XTSI(s) to be tested must be in CAD.DSA state before XTSI(s) can be used by NETX.		
75	If AIMS terminal is being used to enter input messages, load **NETX.1** command file into terminal.	TELCO	DLP-578
76	At 1B Processor MTC terminal, verify all dummy trunks being used for NETX testing are set to CAD.DSA.	TELCO	DLP-558
77	Review requirements to maintain log sheet.	TELCO	DLP-559
78	At 1B Processor MTC terminal, determine if library package containing program NETX resides in file system (**OP:LIBSTAT,FS!**).	TELCO	DLP-560
79	If library package containing program NETX does not reside in file system:		
	1. Mount library tape containing program NETX on tape/DAT unit as appropriate.	TELCO	DLP-561
	2. Load library tape in file system:		
	A. For office loading an original library tape	TELCO	DLP-597
	B. For office loading a backup library tape	TELCO	DLP-598

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
80	At 1B Processor MTC terminal, enter message **OP:PERIFINH!** and save printout for use after NETX has been stopped.	TELCO	—
81	At 1B Processor MTC terminal, set network routing to NORM state (**SET:NETROUT;NORM:MEMN** a**!**).	TELCO	DLP-562
82	At 1B Processor MTC terminal, execute NETX library program and set office translations to in-service, if required.	TELCO	DLP-563
83	At 1B Processor MTC terminal, enter NETX execution data.	TELCO	DLP-564
84	At 1B Processor MTC terminal, run growth XTSI(s) at 200 connect level.	TELCO/INST	DLP-565
85	Safe point to temporarily stop this procedure. If stopping, perform Steps 86 through 88; otherwise, go to Step 94.	TELCO/INST	—
86	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**.	TELCO	—
87	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
88	Stop procedure for now. Continue at Step 89 when resuming.	TELCO/INST	—
89	If AIMS terminal is being used to enter input messages, load **NETX.1** command file into terminal.	TELCO	DLP-577
90	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
91	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
92	Request next higher support group to ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
93	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
Note: Final criteria for NETX testing is that all network routing configurations on growth XTSI(s) complete 2-hour test interval without triggering any TRPFs.		
94 Investigate any trouble patterns.	TELCO/INST	DLP-567
95 At 1B Processor MTC terminal, terminate execution of NETX library program (**STOP:LIBSYS;RELEASE!**).	TELCO	DLP-569
96 Delete dummy trunks used for NETX testing:		
A. If appropriate provisioning group is to delete dummy trunks used for NETX testing, request appropriate provisioning group to delete dummy trunks that were used for NETX testing.	TELCO	—
B. If on-site personnel is to delete dummy trunks, delete dummy trunks used for NETX testing.	TELCO	DLP-627
97 At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**.	TELCO	—
98 Notify provisioning group that growth D3U is ready for traffic provisioning. DS1s, to be provisioned, must be set to **P** on RC Form 704 as part or the provisioning for this D3U.	TELCO	—
99 Notify next higher support group that D3U growth is complete.	TELCO	—
100 **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**	TELCO/INST	—

Degrow Expanded Time Slot Interchange (XTSI) Cabinet - Support to Installer (INST)

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	GENERAL WARNING AND NOTES WHEN DEGROWING XTSI CABINET ***WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling or installing circuit packs or backplane cables.*** ***Notes:*** 1. Appropriate Input/Output Manuals must be used if clarification of input message or output message is necessary. 2. This procedure must be performed during light traffic periods. 3. **4ESS**™ Switch and 3B20D/3B21D APS operation must be closely monitored while performing this procedure. 4. Corrective action must be taken immediately on any activity that may cause any unit to go out of service (OOS). 5. Stability of office must be maintained throughout this procedure.		
1	If AIMS terminal is going to be used to enter input messages, load **XTSIDGRO.1** command file into terminal.	TELCO	DLP-577
2	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
3	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	Note: Steps 4 through 7 must be performed for one TMSP CONTR 0 at a time in TMSP 0, 1, 2, and 3 member number order		
4	At 1B Processor MTC terminal, remove TMSP CONTR 0 from service (**RMV:TMSP** a**,CONTR 0!**).	TELCO	DLP-525
	Note: Step 5 can take up to 30 minutes.		
5	At 1B Processor MTC terminal, diagnose TMSP CONTR (Step 4) specifying phase 8. (**DGN:TMSP** a**,CONTR 0:PH 8!**)	TELCO	DLP-582
6	At 1B Processor MTC terminal, restore TMSP CONTR 0 (Step 4) to service (**RST:TMSP** a**,CONTR 0!**).	TELCO	DLP-526
7	Safe point to temporarily stop this procedure. If stopping, perform Steps 8 through 10; otherwise, go to Step 15.	TELCO	—
8	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
9	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
10	Stop procedure for now. Continue at Step 11 when resuming.	TELCO	—
11	If AIMS terminal is being used to enter input messages, load **XTSIDGRO.1** command file into terminal.	TELCO	DLP-577
12	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
13	Request next higher support group to ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
14	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
15	Repeat Steps 4 through 7 for each TMSP CONTR 0 (TMSP 1, TMSP 2, TMSP 3).	TELCO	—
	Note: Steps 16 through 19 must be performed for one TMSP CONTR 1 at a time in TMSP 0, 1, 2, and 3 member number order.		
16	At 1B Processor MTC terminal, remove TMSP CONTR 1 from service (**RMV:TMSP** a,**CONTR 1!**).	TELCO	DLP-525
	Note: Step 17 can take up to 30 minutes.		
17	At 1B Processor MTC terminal, diagnose TMSP CONTR (Step 16) specifying phase 8 (**DGN:TMSP** a,**CONTR 1:PH 8!**).	TELCO	DLP-582
18	At 1B Processor MTC terminal, restore TMSP CONTR 1 (Step 16) to service (**RST:TMSP** a,**CONTR 1!**).	TELCO	DLP-526
19	Safe point to temporarily stop this procedure. If stopping, perform Steps 20 through 22; otherwise, go to Step 27.	TELCO	—
20	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
21	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
22	Stop procedure for now. Continue at Step 23 when resuming.	TELCO	—
23	If AIMS terminal is being used to enter input messages, load **XTSIDGRO.1** command file into terminal.	TELCO	DLP-577
24	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
25	Request next higher support group to ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
26	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
27	Repeat Steps 16 through 19 for each TMSP CONTR 1 (TMSP 1, TMSP 2, TMSP 3).	TELCO	—
	Note: Steps 28 through 58 are being performed to do the following: • Verify XTSI cabinet can be degrown • Degrow equipped D3Us to GROW • Remove power from equipped D3Us • Disconnect DS3 lines at both ends • Degrow equipped D3Us to UNEQ		
28	Ensure no major activity, growth, or degrowth is being performed while this procedure is being performed.	TELCO	—
29	Notify next higher support group that XTSI cabinet degrowth is being performed. Request information to complete Steps 30 through 32.	TELCO	—
30	Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
31	Ensure **4ESS** switch is in stable condition.	TELCO	DLP-528
32	Ensure any 1B Processor and/or system problems have been cleared before performing this procedure.	TELCO	—
33	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
34	At 1B Processor MTC terminal, determine XTSI unit equipage (**VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1** a**!**).	TELCO	DLP-691
35	Request Trunk Services Center to verify that DS3 facilities for XTSI being degrown are not operational and link can be disconnected.	TELCO	—
36	If AIMS terminal is going to be used to enter input messages, load **D3UDGRO.2** command file into terminal.	TELCO	DLP-578

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	Note: Steps 37 and 38 must be performed for one D3U being degrown at a time in following D3U order: 0, 1, 2, 3, 4, and 5		
37	At 1B Processor MTC terminal, verify no trunks are active for one degrowth D3U.	TELCO	DLP-573
38	At 1B Processor MTC terminal, verify all 28 DS1s of DS3 for D3U (Step 37) are set to future (F) state (**VER:VFUNC XTSID3U:FD1 XTSIMEMN,DT1 a,FD2 D3UN,DT2 b!**):		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-572
	B. For offices in 4E24 or later generic	TELCO	DLP-670
39	Repeat Steps 37 and 38 for each D3U being degrown in proper sequence (1, 2, 3, 4, 5).	TELCO	—
	Note: Steps 40 through 44 must be performed for one D3U being degrown at a time in following D3U order: 0, 1, 2, 3, 4, and 5.		
40	At 1B Processor MTC terminal, remove one degrowth D3U in even-numbered XTSI from service (**RMV:XTSI a,D3U b!**).	TELCO	DLP-553
41	At one D3U power switch, depress **OFF** and **MOR** pushbuttons simultaneously to remove power from D3U being degrown; ensure **OFF** LED is on.	TELCO	—
42	Recent change submember equipage from OPER to SGRO for degrowth D3Us (even degrowth associated XTSI member number):		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-606
	B. For offices in 4E24 or later generic	TELCO	DLP-672
43	At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
44	Repeat Steps 40 through 43 for each D3U being degrown in proper sequence (1, 2, 3, 4, 5).	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
Note: Steps 45 through 47 must be performed for one protection D3U at a time in following D3U order: 6 and 7 (if equipped).		
45 At 1B Processor MTC terminal, remove one degrowth protection D3U in even-numbered XTSI from service (**RMV:XTSI** a,**D3U** b**!**).	TELCO	DLP-553
46 At degrowth protection D3U power switch, depress **OFF** and **MOR** pushbuttons simultaneously to remove power from D3U being degrown; ensure **OFF** LED is on.	TELCO	—
47 Recent change submember equipage from OPER to SGRO for degrowth D3U (Step 45) (even degrowth associated XTSI member number):		
A. For offices in 4E23 or earlier generic	TELCO	DLP-606
B. For offices in 4E24 or later generic	TELCO	DLP-672
48 If D3U 7 is equipped, repeat Steps 45 through 47 for D3U 7.	TELCO	—
49 At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
50 Recent change submember equipage from SGRO to GROW for all D3Us (even degrowth associated XTSI member number):		
A. For offices in 4E23 or earlier generic	TELCO	DLP-607
B. For offices in 4E24 or later generic	TELCO	DLP-673
51 At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
Note: Steps 52 through 55 must be performed for one D3U being degrown at a time in following D3U order: 0, 1, 2, 3, 4, and 5.		
52 Inform facilities group that XTSI-RCV cable, associated with degrowth XTSI, can be disconnected from assigned point at transmit side of far-end network element.	TELCO	—
53 Inform facilities group that XTSI-XMT cable, associated with degrowth XTSI, can be disconnected from assigned point at transmit side of far-end network element.	TELCO	—
54 At degrowth XTSI cabinet, disconnect XTSI-RCV cable (R-IN) from **IN** port of proper **470A** circuit module.	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
55	At degrowth XTSI cabinet, disconnect XTSI-XMT cable (R-OUT) from **OUT** port of proper **470A** circuit module.	INST	—
56	Repeat Steps 52 through 55 for each D3U being degrown in proper sequence (1, 2, 3, 4, 5).	INST	—
57	Recent change submember equipage from GROW to UNEQ for all D3Us (even degrowth associated XTSI member number):		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-608
	B. For offices in 4E24 or later generic	TELCO	DLP-674
58	At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
59	Safe point to temporarily stop this procedure. If stopping, perform Steps 60 through 62; otherwise, go to Step 68.	TELCO/INST	—
60	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
61	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
62	Stop procedure for now. Continue at Step 63 when resuming.	TELCO/INST	—
63	If AIMS terminal is being used to enter input messages, load **D3UDGRO.2** command file into terminal.	TELCO	DLP-577
64	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
65	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
66	Request next higher support group to ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
67	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
68	If AIMS terminal is going to be used to enter input messages, load **XTSIDGRO.2** command file into terminal.	TELCO	DLP-578
69	At 1B Processor MTC terminal, remove XTSI CONTR 0 in even-numbered XTSI from service (**RMV:XTSI** a**,CONTR 0!**).	TELCO	DLP-587

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
70	Recent change and verify member equipage for degrowth XTSI from OPER to SGRO (even degrowth XTSI member number).	TELCO	DLP-504
71	At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
72	Recent change and verify member equipage for degrowth XTSI from SGRO to GROW (even degrowth XTSI member number).	TELCO	DLP-504
73	At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
74	At ALD 0 (52-014) power switch, depress **OFF** and **MOR** pushbuttons simultaneously. Response:　**OFF** LED Is On	TELCO	—
	Note: Steps 75 through 82 must be performed for one TMSP CONTR 0 at a time in TMSP 0, 1, 2, and 3 member number order.		
75	At 1B Processor MTC terminal, remove TMSP CONTR 0 from service (**RMV:TMSP** a,**CONTR 0!**).	TELCO	DLP-525
76	At TMSP CONTR 0 end, locate one XMT (A'-Link) cable associated with XTSI being degrown and disconnect from proper location.	INST	—
77	Repeat Step 76 for each remaining seven XMT (A'-Link) cables.	INST	—
78	At TMSP CONTR 0 end, locate one RCV (A-Link) cable associated with XTSI being degrown and disconnect from proper location.	INST	—
79	Repeat Step 78 for each remaining seven RCV (A-Link) cables.	INST	—
80	At 1B Processor MTC terminal, diagnose TMSP CONTR 0 (Step 75) specifying phase 8 (**DGN:TMSP** a,**CONTR 0:PH 8!**)	TELCO/INST	DLP-582
81	At 1B Processor MTC terminal, restore TMSP CONTR 0 (Step 75) to service (**RST:TMSP** a,**CONTR 0!**).	TELCO/INST	DLP-526
82	Safe point to temporarily stop this procedure. If stopping, perform Steps 83 through 85; otherwise, go to Step 91.	TELCO/INST	—
83	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response:　**REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
84	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
85	Stop procedure for now. Continue at Step 86 when resuming.	TELCO/INST	—
86	If AIMS terminal is being used to enter input messages, load **XTSIDGRO.2** command file into terminal.	TELCO	DLP-577
87	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
88	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
89	Request next higher support group to ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
90	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
91	Repeat Steps 75 through 82 for each TMSP CONTR 0 (TMSP 1, TMSP 2, TMSP 3).	TELCO/INST	—
92	At degrowth XTSI ALC0, disconnect all A'-/A-Link cables (8 Connectors).	INST	—
93	At ALD 1 (61-014) power switch, depress **OFF** and **MOR** pushbuttons simultaneously. Response: **OFF** LED Is On	TELCO	—
	Note: Steps 94 through 101 must be performed for one TMSP CONTR 1 at a time in TMSP 0, 1, 2, and 3 member number order.		
94	At 1B Processor MTC terminal, remove TMSP CONTR 1 from service (**RMV:TMSP** a**,CONTR 1!**).	TELCO	DLP-525

	DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
95	At TMSP CONTR 1 end, locate one XMT (A'-Link) cable associated with XTSI being degrown and disconnect from proper location.	INST	—
96	Repeat Step 95 for each remaining seven XMT (A'-Link) cables.	INST	—
97	At TMSP CONTR 1 end, locate one RCV (A-Link) cable associated with XTSI being degrown and disconnect from proper location.	INST	—
98	Repeat Step 97 for each remaining seven RCV (A-Link) cables.	INST	—
99	At 1B Processor MTC terminal, diagnose TMSP CONTR (Step 94) specifying phase 8 (**DGN:TMSP** a,**CONTR 1:PH 8!**).	TELCO/INST	DLP-582
100	At 1B Processor MTC terminal, restore TMSP CONTR 1 (Step 94) to service (**RST:TMSP** a,**CONTR 1!**).	TELCO/INST	DLP-526
101	Safe point to temporarily stop this procedure. If stopping, perform Steps 102 through 104; otherwise, go to Step 110.	TELCO/INST	—
102	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response:　**REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
103	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
104	Stop procedure for now. Continue at Step 105 when resuming.	TELCO/INST	—
105	If AIMS terminal is being used to enter input messages, load **XTSIDGRO.2** command file into terminal.	TELCO	DLP-577
106	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response:　**REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
107	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response:　**OK**	TELCO	—
108	Request next higher support group to ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
109	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
110	Repeat Steps 94 through 101 for each TMSP CONTR 1 (TMSP 1, TMSP 2, TMSP 3).	TELCO/INST	—
111	At degrowth XTSI ALC1, disconnect all A'-/A-Link cables (8 Connectors).	INST	—
112	Safe point to temporarily stop this procedure. If stopping, perform Steps 113 through 115; otherwise, go to Step 121.	TELCO/INST	—
113	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
114	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
115	Stop procedure for now. Continue at Step 116 when resuming.	TELCO/INST	—
116	If AIMS terminal is being used to enter input messages, load **XTSIDGRO.2** command file into terminal.	TELCO	DLP-577
117	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
118	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
119	Request next higher support group to ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
120	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
121	At ALD 0 (52-014) and ALD 1 (61-014) power switches, ensure **OFF** LED is on.	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
122	At following power switches, depress **OFF** and **MOR** pushbuttons simultaneously to remove power from each power control pack in degrowth XTSI: • MPC 0 (52-066) • MPC 1 (61-066) • IPC 0 (52-188) • IPC 1 (61-188) Response: **OFF** LED is on for each power control pack	TELCO	—
123	If AIMS terminal is going to be used to enter input messages, load **EXTPUB.1** command file into terminal.	TELCO	DLP-578
124	Remove degrowth XTSI from peripheral unit bus using selected Option A or B in TOP 234-353-045; then continue this procedure at Step 125 upon completion:		
	A. When degrowth frame is last frame on PUB branch (BTRs located in this cabinet)	TELCO/INST	—
	B. When degrowth frame is between two operational frames on PUB branch (BTRs not located in this cabinet)	TELCO/INST	—
125	Disconnect Network Clock Cables:		
	1. At NCLK frame, remove power from network clock cable driver in bay 0.	TELCO	DLP-530
	2. At NCLK frame bay 0, disconnect network clock cable from degrowth XTSI cabinet	INST	—
	3. At NCLK frame bay 0, replace fuses removed in Step 125.1.	TELCO	—
	4. At NCLK frame, remove power from network clock cable driver in bay 1.	TELCO	DLP-530
	5. At NCLK frame bay 1, disconnect network clock cable from degrowth XTSI cabinet.	INST	—
	6. At NCLK frame bay 1, replace fuses removed in Step 125.4.	TELCO	—
	7. At XTSI cabinet, disconnect NCLK cables.	TELCO	—
126	Safe point to temporarily stop this procedure. If stopping, perform Steps 127 through 129; otherwise, go to Step 135.	TELCO/INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
127	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
128	If AIMS terminal is being used to enter input messages, remove floppy disk from AIMS terminal and store per local practice.	TELCO	—
129	Stop procedure for now. continue at Step 130 when resuming.	TELCO/INST	—
130	If AIMS terminal is being used to enter input messages, load **EXTPUB.1** command file into terminal.	TELCO	DLP-577
131	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
132	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
133	Request next higher support group to ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
134	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
135	If AIMS terminal is going to be used to enter input messages, load **XTSIDGRO.3** command file into terminal.	TELCO	DLP-578
136	Recent change and verify member equipage for degrowth XTSI from GROW to UNEQ (even degrowth XTSI member number).	TELCO	DLP-504
137	At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
138	Disconnect XTSI alarm cable from office alarm grid and XTSI cabinet.	INST	—
139	Disconnect Scan, SD, Pulse Point, and common circuit cables from degrowth XTSI and far-end.	INST	—

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
140	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
	Caution: Service interruption may occur if wrong circuit breaker is set to off.		
141	At power distribution frame (PDF)/battery distribution fuse board (BDFB), set circuit breaker to off or remove fuse associated with degrowth XTSI.	TELCO	—
142	Verify no voltage exists on power cables at degrowth XTSI and PDF/BDFB.	INST	—
143	At degrowth XTSI, disconnect power cables.	INST	—
144	At degrowth XTSI, disconnect cabinet ground strap.	INST	—
145	Notify next higher support group that XTSI is degrown and ready to be removed from frame line-up.	TELCO	—
146	Perform cable mining as directed in TEO.	INST	—
147	Unbolt and remove XTSI cabinet from line-up.	INST	—
148	**STOP! YOU HAVE COMPLETED THIS PROCEDURE.**	TELCO/INST	—

Degrow D3U From Expanded Time Slot Interchange (XTSI) Cabinet - Support to Installer (INST)

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
GENERAL WARNINGS AND NOTES WHEN DEGROWING D3U FROM XTSI CABINET ***WARNINGS:*** 1. ***Protection-switch D3U 6 or 7 must not be degrown until all D3Us (0, 1, and 2 for D3U 6 or 3, 4, and 5 for D3U 7) have been degrown.*** 2. ***An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling or installing circuit packs or backplane cables.*** ***Notes:*** 1. Appropriate Input/Output Manuals must be used if clarification of input message or output message is necessary. 2. This procedure must be performed during light traffic periods. 3. ***4ESS***™ Switch and 3B20D/3B21D APS operation must be closely monitored while performing this procedure. 4. Corrective action must be taken immediately on any activity that may cause any unit to go out of service (OOS). 5. Stability of office must be maintained throughout this procedure.		
1 Ensure no major activity, growth, or degrowth is being performed while this procedure is being performed.	TELCO	—
2 Notify next higher support group that D3U degrowth is being performed. Request information to complete Steps 3 through 5.	TELCO	—
3 Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
4 Ensure ***4ESS*** switch is in stable condition.	TELCO	DLP-528
5 Ensure any 1B Processor and/or system problems have been cleared before performing this procedure.	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
6	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
7	If AIMS terminal is going to be used to enter input messages, load **D3UDGRO.2** command file into terminal.	TELCO	DLP-577
8	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—
9	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
10	If protection-switch D3U 6 or 7 is being degrown, go to Step 14; otherwise, continue at Step 11.	TELCO	—
11	Request trunk services center to verify that DS3 facility for D3U being degrown is not operational and link can be disconnected.	TELCO	—
12	At 1B Processor MTC terminal, verify all 28 DS1s of DS3 for degrowth D3U are set to future (F) state (**VER:VFUNC XTSID3U:FD1 XTSIMEMN,DT1** a,**FD2 D3UN,DT2** b**!**):		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-572
	B. For offices in 4E24 or later generic	TELCO	DLP-670
	Note: There are two groups of consecutive TANs for degrowth D3U.		
13	Verify no trunks for degrowth D3U are active.	TELCO	DLP-573

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	Note: If D3U 0, 1, 2, 3, 4, or 5 is being degrown, associated protection-switch D3U (6 or 7) will activate when degrowth D3U is removed from service. Protection-switch will be released later in this procedure. Protection-switch D3U will be released after degrowth D3U is removed from service in SGRO state.		
14	At 1B Processor MTC terminal, remove degrowth D3U in even-numbered XTSI from service (**RMV:XTSI** a**,D3U** b**!**).	TELCO	DLP-553
15	At degrowth D3U power switch, depress **OFF** pushbutton to remove power from D3U being degrown; ensure **OFF** and **OS** LEDs are on.	TELCO	—
16	Recent change submember equipage from OPER to SGRO for degrowth D3U (even growth XTSI member number):		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-606
	B. For offices in 4E24 or later generic	TELCO	DLP-672
17	At 1B Processor MTC Terminal, Run Peripheral Unit Status Audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
18	Recent change submember equipage from SGRO to GROW for degrowth D3U (even growth XTSI member number):		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-607
	B. For offices in 4E24 or later generic	TELCO	DLP-673
19	At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
20	At transmit side of far-end network element, disconnect XTSI-RCV cable (FE-OUT) from assigned point.	INST	—
21	At receive side of far-end network element, disconnect XTSI-XMT cable (FE-IN) from assigned point.	INST	—
22	At XTSI cabinet containing degrowth D3U, disconnect XTSI-RCV cable (R-IN) from **IN** port of proper **470A** circuit module.	INST	—
23	At XTSI cabinet containing degrowth D3U, disconnect XTSI-XMT cable (R-OUT) from **OUT** port of proper **470A** circuit module.	INST	—
24	Recent change submember equipage from GROW to UNEQ for one D3U (even growth XTSI member number):		
	A. For offices in 4E23 or earlier generic	TELCO	DLP-608
	B. For offices in 4E24 or later generic	TELCO	DLP-674
25	At 1B Processor MTC terminal, run peripheral unit status audit (**AUD:PUSTAT!**).	TELCO/INST	DLP-543
26	At 1B Processor MTC terminal, enter message **ALW:MACLI,CLASS MTCE!** to allow REX. Response: **REPT: MACP AUTOMATIC JOB SCHEDULING RESUMED**	TELCO	—
27	If directed in TEO, remove degrowth D3U circuit pack from XTSI cabinet.	INST	—
28	If D3U circuit pack was removed in Step 27, install blank faceplate in degrowth slot to maintain proper air flow within XTSI cabinet.	INST	—
29	Relabel designation strip associated with degrowth D3U.	INST	—
30	Notify next higher support group that D3U is degrown.	TELCO	—
31	Perform cable mining as directed in TEO for degrowth D3Us.	INST	—
32	**STOP! YOU HAVE COMPLETED THIS PROCEDURE.**	TELCO/INST	—

Replace D3U Circuit Pack With Different Verison
(4E24 Release 1 or Later Generic)

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	REPLACEMENT RULES FOR THIS PROCEDURE ***Note:*** D3Us can be mixed within a protection group as **4WB3** D3Us or **4WB11** D3Us. If there is to be a client D3U that is type **4WB11**, the protection spare D3U for that group must be a **4WB11** and replaced first.		

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

GENERAL WARNING AND NOTES WHEN CONVERTING D3U CIRCUIT PACKS
 	
   WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling or installing circuit packs or backplane cables.
 	
Notes:
   1. Appropriate Input/Output Manuals must be used if clarification of input message or output message is necessary.
   2. This procedure must be performed during light traffic periods.
   3. ***4ESS***™ Switch and 3B20D/3B21D APS operation must be closely monitored while performing this procedure.
   4. Corrective action must be taken immediately on any activity that may cause any unit to go out of service (OOS).
   5. Stability of office must be maintained throughout this procedure.
   6. ***4ESS***™ Switch must be running on 4E24 release 2 or later generic.		

1	Inspect replacement D3U circuit pack for damage.	TELCO	—
2	Notify next higher support group that D3U circuit pack replacement is being performed. Request information to complete Steps 3 through 6.	TELCO	—
3	Ensure 1B Processor has not experienced any terminal suspends, bootstraps, diagnostic failures, or overloads within last 24 hours.	TELCO	—
4	Ensure ***4ESS*** switch is in stable condition.	TELCO	DLP-528
5	Ensure diagnostics on duplexed 3B CUs have been run to completion within last 24 hours.	TELCO	—
6	Ensure any 1B Processor and/or system problems have been cleared before performing this procedure.	TELCO	—
7	At 1B Processor MTC terminal, enter message **INH:MACLI,CLASS MTCE;REX!** to inhibit REX. Response: **REPT:MACLI,CLASS MTCE INHIBITED AUTOMATIC JOB SCHEDULING DISALLOWED**	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
8	At 1B Processor MTC terminal, enter message **STOP:TEST;PUSYS!** to stop peripheral system tests. Response: **OK**	TELCO	—
9	Ensure 3B, 1B Processor, and peripheral units are operating in normal duplex mode.	TELCO	DLP-529
10	At 1B Processor MTC terminal, enter message **VER:OFFICE!**; ensure office is operating on 4E24 release 2 generic or later.	TELCO	—
11	At 1B Processor MTC terminal, verify proper hardware designation for circuit packs are contained in growth even-numbered XTSI cabinet (**VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1** a**!**).	TELCO	DLP-660
12	At 1B Processor MTC terminal, verify that there are no out of service (OOS) units, except for the possibility of the replaced D3U, in associated XTSI (**OP:OOSUNITS:XTSI!**).	TELCO	DLP-652
13	At 1B Processor MTC terminal, remove D3U being replaced in associated even-numbered XTSI from service (**RMV:XTSI** a,**D3U** b**!**).	TELCO	DLP-587
14	At D3U power switch, depress **OFF** pushbutton to remove power from D3U being replaced. Response: **OFF** LED is on	TELCO	—
15	At associated XTSI cabinet, remove the D3U circuit pack.	TELCO	—
16	Insert D3U circuit pack into a antistatic bag; then place in a circuit pack carton.	TELCO	—
17	Obtain a replacement D3U circuit pack and install at location just vacated.	TELCO	—
18	Recent change and verify the **D3UHV** field in the even-numbered associated XTSI for D3U being replaced to proper value.	TELCO	DLP-662
19	At D3U power switch, depress **ON** pushbutton to restore power to D3U being replaced. Response: **OFF** LED is off	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
20	At 1B Processor MTC terminal, restore D3U in associated even-numbered XTSI to service (**RST:XTSI** a**,D3U** b**!**).	TELCO	DLP-556
21	Notify next higher support group that D3U circuit pack replacement is completed.	TELCO	—
22	**STOP! YOU HAVE COMPLETED THIS PROCEDURE.**	TELCO	—

Verify Status of TMS Memory Blocks
Interfaced with Growth XTSI Frame

1. At 1B Processor MTC terminal, enter message **VER:UTYPE:TMSP** a**,SME** b**!** specifying SME index number for Memory Block of Controller 0 being verified.

   where   a = Member number of associated TMS frame
                 b = SME index number =
                   = **49** (for Memory Block 1, Controller 0 -
                     XTSI member number 16 through 31)
                   = **50** (for Memory Block 2, Controller 0 -
                     XTSI member number 32 through 47)
                   = **51** (for Memory Block 3, Controller 0 -
                     XTSI member number 48 through 63)

   Response: **VER:UTMN;OPT(SME),CUR:**   **FLN** a**,**   **UTYN TMSP,**

                      MEMN b**,**   **ME OPER,**

                      SUBMEM c**,**   **SME** d**,**

                      where   a = Floor location number
                                b = Member number of associated TMS frame
                                c = SME index number
                                d = **GROW** or **OPER**

2. Using printout and the response message in Step 1, is **SME** set to **GROW** or **OPER**?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Refer problem to installer to decide on corrective action.

4. At 1B Processor MTC terminal, enter message **VER:UTYPE:TMSP** a**,SME** b**!** specifying SME index number for Memory Block of Controller 1 being verified.

where   a = Member number of associated TMS frame
            b = SME index number =
              = **53** (for Memory Block 1, Controller 1 -
                XTSI member number 16 through 31)
              = **54** (for Memory Block 2, Controller 1 -
                XTSI member number 32 through 47)
              = **55** (for Memory Block 3, Controller 1 -
                XTSI member number 48 through 63)

Response: **VER:UTMN;OPT(SME),CUR:**   **FLN** a**,**   **UTYN TMSP,**

                      MEMN b**,**   **ME OPER,**

                      SUBMEM c**,**   **SME** d**,**

                where   a = Floor location number
                              b = Member number of associated TMS frame
                              c = SME index number
                              d = **GROW** or **OPER**

5. Using printout and the response message in Step 4, is **SME** set to **GROW** or **OPER**?

If **Yes**, go to Step 7.
If **No**, go to Step 6.

6. Refer problem to installer to decide on corrective action.

7. Has status of all necessary Memory Blocks been verified?

If **Yes**, go to Step 9.
If **No**, go to Step 8.

8. Repeat from Step 1 for each TMS member number Memory Block combination.

9. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify XTSI UT Translator for even Member Number

1. At 1B Processor MTC terminal, enter message
   VER:UTYPE:XTSI a**!**

   where   a = Even member number of growth XTSI.

   Response: **VER:UTMN;OPT(),CUR:**   **FLN** a,   **UTYN XTSI,**

           MEMN b,   **ME UNEQ,**
           ENTRY ADDRESS c,   **ENTRY SIZE 127,**

           CUR
           WORD 0   _____ _____ _____ _____
                     _____ _____ _____ _____
           WORD 10 _____ _____ _____ _____
                     _____ _____ _____ _____
           WORD 20 _____ _____ _____ _____
                     _____ _____ _____ _____
           WORD 30 _____ _____ _____ _____
                     _____ _____ _____ _____
           WORD 40 _____ _____ _____ _____
                     _____ _____ _____ _____
                                    •
                                    •
                                  •
           WORD 170 _____ _____ _____ _____
                     _____ _____ _____

        where   a = Floor location number
                     b = Member number of growth XTSI
                     c = Starting octal address for unit-type entry

2. Are message format and member identification correct per the response message in Step 1?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Determine cause and resolve; repeat from Step 1.

4. Using printout, TABLE A, and DLP-502, check that member equipage bits are set to 0 per word 0.

5. Were any equipage bits found in a state other than zero?

   If **Yes**, go to Step 6.
   If **No**, go to Step 7.

   > *Caution: Depending on local procedures, supervisory or TELCO engineering approval must be obtained prior to performing any data change.*

6. Using RC Form 701, degrow member equipage using DLP-504.

7. Using printout, TABLE A, and office records, verify Member Type and Member Type Hardware Generation data per bits 18 through 23 of word 0.

8. Using printout, TABLE A, office records, and DLP-505, verify alarm grid, lineup, and frame assignment for growth frame per word 1.

9. Using printout, TABLE A, office records, and DLP-506, verify SD and pulse point assignments for growth XTSI per words 2, 5, 6, and 7.

10. Using printout, TABLE A, office records, and DLP-507, verify PUB branch assignment for growth frame per word 3.

11. Using printout, TABLE A, office records, and DLP-508, verify scan point assignments for growth XTSI per words 3 and 4.

12. Using printout, TABLE A, and office records, verify frame even and odd member numbers per octal word 12.

13. Using printout, TABLE A, and office records, verify XTSI clock assignments are 0 per octal words 16 and 17.

14. Were any discrepancies noted in Steps 7 through 13?

    If **Yes**, go to Step 15.
    If **No**, go to Step 19.

15. Refer problem(s) to installer to determine error and decide on corrective action.

16. Error was found to be in?

    If **Office records**, go to Step 18.
    If **UT entry data**, go to Step 17.

17. Assist installer in taking appropriate corrective action as determined by regional engineering and as approved by office supervisor.

18. Have all UT data errors now been corrected?

    If **Yes**, go to Step 19.
    If **No**, go to Step 16.

19. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

TABLE A

UT ENTRY DATA AND WORD CONFIGURATION

ENTRY WORD 0 (OCTAL)

entry data octal output	4	3	0	0	0	0	0	0
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 1 1	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
field	MEMBER TYPE	MEMBER TYPE HARDWARE GENERATION	MEMBER EQUIPAGE (bit 17)					

ENTRY WORD 1 (OCTAL)

entry data octal output	Y	Y	Y	Y	Y	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	Z Z Z	X X X	X X X	X X X	X X X	X X X	X X X	X X X
field	ASSIGNED ALARM GRID NUMBER	FRAME LINEUP NUMBER			FRAME NUMBER			

X...X = Converts to decimal frame info as reflected in office floor plan drawing

Y = Variable octal numbers

ZZZZ = Converts to decimal alarm grid number as reflected in office record drawings T-nnnn-Hn-400, 401, or 402 or equivalent

TABLE A (Contd)

UT ENTRY DATA AND WORD CONFIGURATION

ENTRY WORD (OCTAL): **2**

entry data octal output	0	0	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	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	0	0	0	0	0	0	0	X	X	X	X	X	X	0	X	X	X	X	X	X	X	X	X	X

Fields: SP MEMBER NUMBER · SP ROW NUMBER · SP COLUMN NUMBER · BASE SP PULSE POINT

X...X = Converts to decimal SP info as reflected in office record drawing T-nnnn-Hn-462 or equivalent

Y = Variable octal numbers

ENTRY WORD (OCTAL): **3**

entry data octal output	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	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	0	1	Z	Z	Z	Z	0	X	X	X	X	X	X	0	X	X	X	X	X	X	X	X	X	X

Fields: PUB BRANCH NUMBER ASSIGNMENT · SP MEMBER NUMBER · SP ROW NUMBER · SP COLUMN NUMBER · MEMBER BASE MISCELLANEOUS SCAN NUMBER

X...X = Converts to decimal SP info as reflected in office record drawing T-nnnn-Hn-461 or equivalent

Y = Variable octal numbers

ZZZ = 3-digit code corresponding to lettered PUB branch as reflected in office record drawing T-nnnn-Hn-3840 or equivalent

= 000 - branch A&B   100 - branch K&L
001 - branch C&D   101 - branch M&R
010 - branch E&F   110 - branch T&V
011 - branch G&H   111 - branch W&X

TABLE A (Contd)

UT ENTRY DATA AND WORD CONFIGURATION

ENTRY WORD (OCTAL): 4

	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
entry data octal output	Y				Y			Y					Y			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	0	0	0	0	0	0	0	X	X	X	X	X	0	X	X	X	X	X	X	X	X	X	X	X

- SP MEMBER NUMBER
- SP ROW NUMBER
- SP COLUMN NUMBER
- BUS BASE MISCELLANEOUS SCAN NUMBER

X...X = Converts to decimal SP info as reflected in office record drawing T-nnnn-Hn-461 or equivalent

Y = Variable octal numbers

ENTRY WORD (OCTAL): 5

	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
entry data octal output	0				0			Y					Y			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	0	0	0	0	0	0	0	X	X	X	X	X	0	X	X	X	X	X	X	X	X	X	X	X

- EST MEMBER NUMBER
- SP MEMBER NUMBER
- SP ROW NUMBER
- SP COLUMN NUMBER
- DUPLICATE BASE SP PULSE POINT

X...X = Converts to decimal SP info as reflected in office record drawing T-nnnn-Hn-462 or equivalent

Y = Variable octal numbers

Z...Z = Converts to decimal EST member number info as reflected in appropriate office record drawing

TABLE A (Contd)

UT ENTRY DATA AND WORD CONFIGURATION

ENTRY WORD (OCTAL)	Configuration
12	entry data octal output: 0 0 0 Y Y Y Y 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: 0 0 0 0 0 V V V V V X X X X X X X X Z Z Z Z Z Z Fields: SP MEMN (bits 18–14) · EVEN MEMBER NUMBER (X bits) · EVEN MEMBER NUMBER PLUS ONE (Z bits)
16	entry data octal output: 0 0 0 0 0 0 0 0 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: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Fields: FRAME TYPE · MEMBER NUMBER · CLOCK B · FRAME TYPE · MEMBER NUMBER · CLOCK A

Legend:

V...V = SP member number (4E24 or later generic)
X...X = XTSI even member number
Y = Variable octal numbers
Z...Z = Member number of odd member within frame

TABLE A (Contd)

UT ENTRY DATA AND WORD CONFIGURATION

ENTRY WORD (OCTAL)																											
entry data octal output		0		0		0		0		0		0		0		0										
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			
17	binary values	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0		

Field configuration:

- FRAME TYPE
- CLOCK D
- MEMBER NUMBER
- FRAME TYPE
- CLOCK C
- MEMBER NUMBER

Verify Unequipped Status of Growth XTSI Member

1. See entry output message.

2. Examine third leftmost octal digit of word 0.

3. Is this digit set to zero?

    If **Yes**, go to Step 6.
    If **No**, go to Step 4.

4. Identify associated binary bit(s) not set to zero and note for later reference.
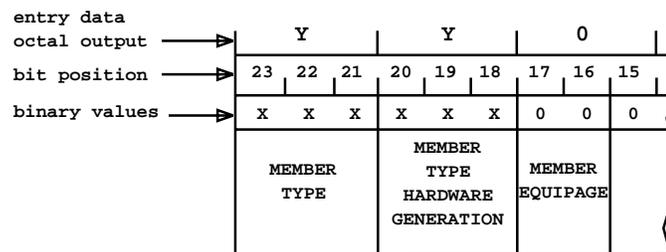
FIG. 1 — Partial Entry Word 0 Layout

5. Identify equipage state other than 00 to installer.

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Recent Change Submember Equipage
Using RC Form 701 (Degrow)

1. What is present state of equipage to be changed?

   If **GROW**, go to Step 20.
   If **SGRO**, go to Step 11.
   If **OPER**, go to Step 2.

   Caution: Calling up RC form will cause all CRT data to be cleared.

2. At 1B Processor MTC terminal, enter message **OP:RCFORM 701!**

   Response: CRT displays RC Form 701

3. Fill in blanks on RC Form 701 per the following to degrow submember to SGRO state and enter message:

   RC:UTYPE;CHG;OPT(EQP,DEGROW),a**:   UTYN** b**,**

   ORNU c**,**
                    OLD NEW
   MEMN d**,   ME (--- , ---),**
                    OLD NEW
   SUBMEM e**,   SME (f , f),**

   REMARKS----------------------!

   where   a = **FTA**
              b = **XTSI** or **TMSP**
              c = RC order number
              d = Member number of degrowth frame
              e = Submember name:
                 = **TOPRTEQ**(**0** to **6**) (for SPC 0, Ports 0-6)
                 = **T1PRTEQ**(**0** to **6**) (for SPC 1, Ports 0-6)
                 = **XTSID3U**(**0** to **7**) (for D3U 0-7)
                 = **COGRWTH** (for TMS Controller 0)
                 = **C1GRWTH** (for TMS Controller 1)
                 = **C0MBLK**(**0** to **3**) (for Controller 0, Mem Blk 0-3)
                 = **C1MBLK**(**0** to **3**) (for Controller 1, Mem Blk 0-3)
              f = **OPER,SGRO**

4. Was **RC ORNU** c **ACTIVATED** message received?

   If **Yes**, go to Step 6.
   If **No**, go to Step 5.

5. Determine cause for rejections; repeat from Step 1 with correct input data.

6. At 1B Processor MTC terminal, enter message
   VER:UTYPE:a b**,SME** c**!**

   where   a = **TMSP** or **XTSI**
                b = Member number of growth associated frame
                c = SME index number =

TMSP	INDEX NO.	XTSI D3U	INDEX NO.	TSI PORT	INDEX NO.	TSI PORT	INDEX NO.
CONTR 0 Mem Blk 1	49	0	217	SPC 0-0	56	SPC 1-0	63
CONTR 0 Mem Blk 2	50	1	218	SPC 0-1	57	SPC 1-1	64
CONTR 0 Mem Blk 3	51	2	219	SPC 0-2	58	SPC 1-2	65
CONTR 1 Mem Blk 1	53	3	220	SPC 0-3	59	SPC 1-3	66
CONTR 1 Mem Blk 2	54	4	221	SPC 0-4	60	SPC 1-4	67
CONTR 1 Mem Blk 3	55	5	222	SPC 0-5	61	SPC 1-5	68
		6	223	SPC 0-6	62	SPC 1-6	69
		7	224				

   Response: **VER:UTMN;OPT(SME),CUR:**   **FLN** a**,**   **UTYN** b**,**

                       MEMN c**,**   **ME** d**,**

                       SUBMEM e**,**   SME f**,**

                   where   a = Floor location number
                                 b = **TMSP** or **XTSI**
                                 c = Member number of growth associated frame
                                 d = Member equipage
                                 e = SME index number
                                 f = **SGRO**

7. Using printout and the response message in Step 6, is **SME** set to **SGRO**?

   If **Yes**, go to Step 10.
   If **No**, go to Step 8.

8. If input entries are in error and require correcting, remove recent change from system using RC Form 701.

9. Repeat from Step 2 using corrected message format.

10. Is it necessary to change equipage state any further to GROW or to UNEQ?

    If **Yes**, go to Step 11.
    If **No**, go to Step 28.

    Caution: Calling up RC form will cause all CRT data to be cleared.

11. At 1B Processor MTC terminal, enter message **OP:RCFORM 701!**

    Response: CRT displays RC Form 701

12. Fill in blanks on RC Form 701 per the following to degrow submember to GROW state and enter message:

    RC:UTYPE;CHG;OPT(EQP,DEGROW),a**:**   **UTYN** b**,**

    ORNU c**,**
                          OLD NEW
    MEMN d**,**   **ME (--- , ---),**
                          OLD NEW
    SUBMEM e**,**   **SME (** f **,** f **),**

    REMARKS----------------------!

    where   a = **FTA**
              b = **XTSI** or **TMSP**
              c = RC order number
              d = Member number of degrowth frame
              e = Submember name:
                  = **TOPRTEQ**(**0** to **6**) (for SPC 0, Ports 0-6)
                  = **T1PRTEQ**(**0** to **6**) (for SPC 1, Ports 0-6)
                  = **XTSID3U**(**0** to **7**) (for D3U 0-7)
                  = **COGRWTH** (for TMS Controller 0)
                  = **C1GRWTH** (for TMS Controller 1)
                  = **C0MBLK**(**0** to **3**) (for Controller 0, Mem Blk 0-3)
                  = **C1MBLK**(**0** to **3**) (for Controller 1, Mem Blk 0-3)
              f = **SGRO,GROW**

13. Was **RC ORNU** c **ACTIVATED** message received?

    If **Yes**, go to Step 15.
    If **No**, go to Step 14.

14. Determine cause for rejections; repeat from Step 11 with correct input data.

15. At 1B Processor MTC terminal, enter message
    VER:UTYPE:a b**,SME** c**!**

    where   a = **TMSP** or **XTSI**
             b = Member number of growth associated frame
             c = SME index number =

TMSP	INDEX NO.	XTSI D3U	INDEX NO.	TSI PORT	INDEX NO.	TSI PORT	INDEX NO.
CONTR 0 Mem Blk 1	49	0	217	SPC 0-0	56	SPC 1-0	63
CONTR 0 Mem Blk 2	50	1	218	SPC 0-1	57	SPC 1-1	64
CONTR 0 Mem Blk 3	51	2	219	SPC 0-2	58	SPC 1-2	65
CONTR 1 Mem Blk 1	53	3	220	SPC 0-3	59	SPC 1-3	66
CONTR 1 Mem Blk 2	54	4	221	SPC 0-4	60	SPC 1-4	67
CONTR 1 Mem Blk 3	55	5	222	SPC 0-5	61	SPC 1-5	68
		6	223	SPC 0-6	62	SPC 1-6	69
		7	224				

Response: **VER:UTMN;OPT(SME),CUR:**   **FLN** a,   **UTYN** b,

MEMN c,   **ME** d,

SUBMEM e,   SME f,

where   a = Floor location number
         b = **TMSP** or **XTSI**
         c = Member number of growth associated frame
         d = Member equipage
         e = SME index number
         f = **GROW**

16. Using printout and the response message in Step 6, is **SME** set to **GROW**?

    If **Yes**, go to Step 19.
    If **No**, go to Step 17.

17. If input entries are in error and require correcting, remove recent change from system using
    RC Form 701.

18. Repeat from Step 11 using corrected message format.

19. Is it necessary to change equipage state any further to UNEQ?

    If **Yes**, go to Step 20.
    If **No**, go to Step 28.

    Caution: Calling up RC form will cause all CRT data to be cleared.

20. At 1B Processor MTC terminal, enter message **OP:RCFORM 701!**

    Response: CRT displays RC Form 701

21. Fill in blanks on RC Form 701 per the following to degrow submember to UNEQ state and enter message:

    RC:UTYPE;CHG;OPT(EQP,DEGROW),a**:**   **UTYN** b**,**

    ORNU c**,**
                                    OLD NEW
    MEMN d**,**   **ME (--- , ---),**
                                    OLD NEW
    SUBMEM e**,**   **SME (** f **,** f **),**

    REMARKS----------------------!

    where   a = **FTA**
               b = **XTSI** or **TMSP**
               c = RC order number
               d = Member number of degrowth frame
               e = Submember name:
                   = **TOPRTEQ**(**0** to **6**) (for SPC 0, Ports 0-6)
                   = **T1PRTEQ**(**0** to **6**) (for SPC 1, Ports 0-6)
                   = **XTSID3U**(**0** to **7**) (for D3U 0-7)
                   = **COGRWTH** (for TMS Controller 0)
                   = **C1GRWTH** (for TMS Controller 1)
                   = **C0MBLK**(**0** to **3**) (for Controller 0, Mem Blk 0-3)
                   = **C1MBLK**(**0** to **3**) (for Controller 1, Mem Blk 0-3)
               f = **GROW,UNEQ**

22. Was **RC ORNU** c **ACTIVATED** message received?

    If **Yes**, go to Step 24.
    If **No**, go to Step 23.

23. Determine cause for rejections; repeat from Step 20 with correct input data.

24. At 1B Processor MTC terminal, enter message
    VER:UTYPE:a b**,SME** c**!**

    where   a = **TMSP** or **XTSI**
              b = Member number of growth associated frame
              c = SME index number =

TMSP	INDEX NO.	XTSI D3U	INDEX NO.	TSI PORT	INDEX NO.	TSI PORT	INDEX NO.
CONTR 0 Mem Blk 1	49	0	217	SPC 0-0	56	SPC 1-0	63
CONTR 0 Mem Blk 2	50	1	218	SPC 0-1	57	SPC 1-1	64
CONTR 0 Mem Blk 3	51	2	219	SPC 0-2	58	SPC 1-2	65
CONTR 1 Mem Blk 1	53	3	220	SPC 0-3	59	SPC 1-3	66
CONTR 1 Mem Blk 2	54	4	221	SPC 0-4	60	SPC 1-4	67
CONTR 1 Mem Blk 3	55	5	222	SPC 0-5	61	SPC 1-5	68
		6	223	SPC 0-6	62	SPC 1-6	69
		7	224				

    Response: **VER:UTMN;OPT(SME),CUR:**   **FLN** a,   **UTYN** b,

                MEMN c,   **ME** d,

                SUBMEM e,   SME f,

                where   a = Floor location number
                          b = **TMSP** or **XTSI**
                          c = Member number of growth associated frame
                          d = Member equipage
                          e = SME index number
                          f = **UNEQ**

25. Using printout and the response message in Step 6, is **SME** set to **UNEQ**?

    If **Yes**, go to Step 28.
    If **No**, go to Step 26.

26. If input entries are in error and require correcting, remove recent change from system using
    RC Form 701.

27. Repeat from Step 20 using corrected message format.

28. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Recent Change Member Equipage Using RC Form 701 (Degrow)

1. What is present state of equipage to be changed?

    If **GROW**, go to Step 20.
    If **SGRO**, go to Step 11.
    If **OPER**, go to Step 2.

    Caution: Calling up RC form will cause all CRT data to be cleared.

2. At 1B Processor MTC terminal, enter message **OP:RCFORM 701!**

    Response: CRT displays RC Form 701

3. Fill in blanks on RC Form 701 per the following and enter message:

    RC:UTYPE;CHG;OPT(EQP,DEGROW),a**:   UTYN** b**,**

    ORNU c**,**
                         OLD NEW
    MEMN d**,   ME (** e **,** e **),**
                         OLD NEW
    SUBMEM ----,   SME (--- , ---),

    REMARKS----------------------!

    where   a = **FTA**
                  b = **XTSI**, **TMSP**, or **SP** (for In-Band capable)
                  c = RC order number
                  d = Member number of growth frame/SP
                  e = **OPER,SGRO**

4. Was **RC ORNU** c **ACTIVATED** message received?

    If **Yes**, go to Step 6.
    If **No**, go to Step 5.

5. Determine cause for rejection; repeat from Step 1 with correct input message.

6. At 1B Processor MTC terminal, enter message
   VER:UTYPE:a b**,ME!**

   where   a = **XTSI**, **TMSP**, or **SP**
               b = Member number of growth frame/SP

   Response: **VER:UTMN;OPT(ME),CUR: FLN** d**,   UTYN** a**,**

   MEMN b**,   ME** c**,**

   where   a = **XTSI**, **TMSP**, or **SP**
               b = Member number of growth frame/SP
               c = **SGRO**
               d = Floor location number.

7. Using printout and the response message in Step 6, is **ME** set to **SGRO**?

   If **Yes**, go to Step 10.
   If **No**, go to Step 8.

8. If input entries are in error and require correcting, remove recent change from system using RC Form 701.

9. Repeat from Step 2 using corrected message format.

10. Is it necessary to change equipage any further to GROW or to UNEQ?

   If **Yes**, go to Step 11.
   If **No**, go to Step 28.

   Caution: Calling up RC form will cause all CRT data to be cleared.

11. At 1B Processor MTC terminal, enter message **OP:RCFORM 701!**

   Response: CRT displays RC Form 701.

12. Fill in blanks on RC Form 701 per the following and enter message:

RC:UTYPE;CHG;OPT(EQP,DEGROW),a**:   UTYN** b**,**

ORNU c**,**
                                              OLD NEW
MEMN d**,   ME (** e **,** e **),**
                                              OLD NEW
SUBMEM ----,   SME (--- , ---),

REMARKS----------------------!

where   a = **FTA**
                 b = **XTSI**, **TMSP**, or **SP** (for In-Band capable)
                 c = RC order number
                 d = Member number of growth frame/SP
                 e = **SGRO,GROW**

13. Was **RC ORNU** c **ACTIVATED** message received?

If **Yes**, go to Step 15.
If **No**, go to Step 14.

14. Determine cause for rejection; repeat from Step 11 with correct input message.

15. At 1B Processor MTC terminal, enter message
   VER:UTYPE:a b**,ME!**

where   a = **XTSI**, **TMSP**, or **SP**
                 b = Member number of growth frame/SP

Response: **VER:UTMN;OPT(ME),CUR: FLN** d**,   UTYN** a**,**

                    MEMN b**,   ME** c**,**

                    where   a = **XTSI**, **TMSP**, or **SP**
                                     b = Member number of growth frame/SP
                                     c = **GROW**
                                     d = Floor location number

16. Using printout and the response message in Step 15, is **ME** set to **GROW**?

If **Yes**, go to Step 19.
If **No**, go to Step 17.

17. If input entries are in error and require correcting, remove recent change from system using RC Form 701.

18. Repeat from Step 11 using corrected message format.

19. Is it necessary to change equipage any further to UNEQ?

    If **Yes**, go to Step 20.
    If **No**, go to Step 28.

    > ***Caution: Calling up RC form will cause all CRT data to be cleared.***

20. At 1B Processor MTC terminal, enter message **OP:RCFORM 701!**

    Response: CRT displays RC Form 701.

21. Fill in blanks on RC Form 701 per the following and enter message:

    RC:UTYPE;CHG;OPT(EQP,DEGROW),a**:   UTYN** b**,**

    ORNU c**,**
                                        OLD NEW
    MEMN d**,   ME (** e **,** e **),**
                                        OLD NEW
    SUBMEM ----,   SME (--- , ---),

    REMARKS----------------------!

    where   a = **FTA**
              b = **XTSI**, **TMSP**, or **SP** (for In-Band capable)
              c = RC order number
              d = Member number of growth frame/SP
              e = **GROW,UNEQ**

22. Was **RC ORNU** c **ACTIVATED** message received?

    If **Yes**, go to Step 24.
    If **No**, go to Step 23.

23. Determine cause for rejection; repeat from Step 20 with correct input message.

24. At 1B Processor MTC terminal, enter message
    VER:UTYPE:a b**,ME!**

　　where　　a = **XTSI**, **TMSP**, or **SP**
　　　　　　　b = Member number of growth frame/SP

　　Response:　**VER:UTMN;OPT(ME),CUR:**　　**FLN** d**,**　　　**UTYN** a**,**

　　　　　　　　MEMN b**,**　　　　　　**ME** c**,**

　　　　　　where　　a = **XTSI**, **TMSP**, or **SP**
　　　　　　　　　　b = Member number of growth frame/SP
　　　　　　　　　　c = **UNEQ**
　　　　　　　　　　d = Floor location number.

25. Using printout and the response message in Step 24, is **ME** set to **UNEQ**?

    If **Yes**, go to Step 28.
    If **No**, go to Step 26.

26. If input entries are in error and require correcting, remove recent change from system using
    RC Form 701.

27. Repeat from Step 20 using corrected message format.

28. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify Alarm Grid, Lineup and Frame Assignment
For Growth Frame

1. See Octal word 1 in entry output message.

2. See FIG. 1 for word 1 layout.

3. Convert all octal digits of word 1 in entry output to binary digits and record.

4. Convert bits 20 through 23 to decimal alarm grid number. See FIG. 1.

5. Convert bits 10 through 19 to decimal frame lineup number. See FIG. 1.

6. Convert bits 0 through 9 to decimal frame number. See FIG. 1.

7. Get office floor plan drawing for floor containing growth frame.

8. Compare growth frame and lineup information on floor plan drawing with decimal data determined in Steps 5 and 6.

9. Obtain and record aisle number associated with growth frame from floor plan drawing.

10. Get appropriate office record drawing T-nnn-Hn-400, 401, 402 or equivalent.

> ***Note:*** n = Office unique drawing identification number.

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

11. Locate alarm grid number determined in Step 4 on office record.

12. Verify that aisle number recorded in Step 9 is identified with grid data of Step 11.

13. Do grid, frame and lineup numbers of Steps 4, 5, and 6, Page 1 agree with office records?

    If **Yes**, go to Step 15.
    If **No**, go to Step 14.

14. For later reference, record any discrepancy noted in Steps 8 and 12.

15. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

entry data
octal output →

	Y				Y		Y			Y			Y			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 →

Z	Z	Z	Z	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

ASSIGNED ALARM GRID NUMBER | LINEUP NUMBER | FRAME NUMBER

FRAME LINEUP NUMBER AND FRAME NUMBER INFORMATION
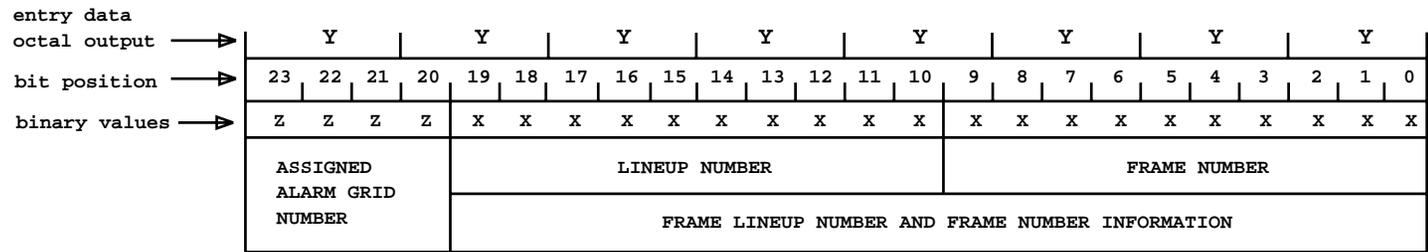
FIG. 1 — Entry Data Word Layout

Verify SD or Pulse Point Assignments for Growth Frame

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.


```
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 ——▷   0   0   X   X   X   X   X   0   X   X   X   X   X   X   X   X   X   X   X
                             SP MEMBER                SP ROW NUMBER          SP COLUMN
                              NUMBER                                          NUMBER
```
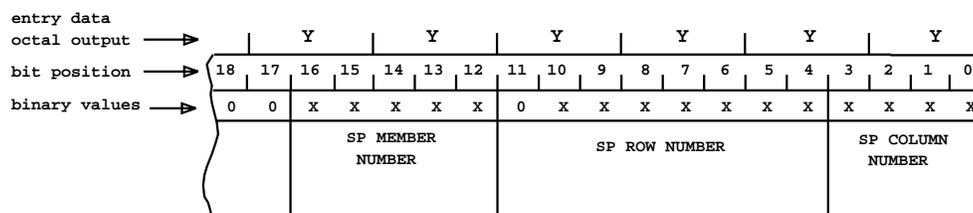
FIG. 1 — Entry Data Word Layout

3. Get office record T-nnnn-Hn-462-xx or equivalent.
    xx = SP member number determined in Step 2.

4. Search ROW and COL listing in office record and locate row and column previously recorded.

5. Does associated UNIT TYPE and FRM NO. agree with growth frame?

    If **Yes**, go to Step 7.
    If **No**, go to Step 6.

6. Record discrepancy for later use.

7. Have all SD or PP assignments been verified for growth frame?

    If **Yes**, go to Step 9.
    If **No**, go to Step 8.

8. Repeat from Step 1 for each SD or PP to be verified.

9. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify PUB Branch Assignment for Growth Frame

1. See word 3 in entry output message.

2. See FIG. 1 for word 3 layout.

3. Convert 2 leftmost octal digits of word 3 in entry output to binary digits.

4. Record bits 19 through 21. Octal to binary conversion completed.

5. Get office record drawing T-nnnn-Hn-3840 or equivalent.

    Note: n = Office unique drawing identification numbers

6. On drawing, locate Table C. See FIG. 2.

7. On drawing, locate line on Table C containing growth frame. See FIG. 2.

8. Read left to **BUS 0 & 1** column and note PUB branch letter.

9. Note 3-digit code associated with PUB branch letter in Step 8.

PUB BRANCH LETTER	3-DIGIT CODE
A and B	000
C and D	001
E and F	010
G and H	011
K and L	100
M and R	101
T and V	110
W and X	111

10. Does binary code in Step 4 agree with binary code noted in Step 9.

    If **Yes**, go to Step 12.
    If **No**, go to Step 11.

11. Record discrepancy for later reference.

12. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

entry data octal output	Y			Y			Y			Y			Y			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	0	1	Z	Z	Z	0	0	X	X	X	X	X	0	X	X	X	X	X	X	X	X	X	X	X

PUB BRANCH NUMBER ASSIGNMENT

SP MEMBER NUMBER

SP ROW NUMBER

SP COLUMN NUMBER

MEMBER BASE MISCELLANEOUS SCAN NUMBER

FIG. 1 — Entry Data Word 3 Layout

TABLE C								
LINE NO.	BUS 0&1	FROM	THROUGH	TO	TOTAL LENGTH	TOTAL LOAD	NOTE OR TABLE	
1	A	PUBB		1/0 1		1		
2	B	PUBB	TS1 00,01,02,03,04,05,06,13,12,11,10,09,08,07,	TS1 28		44	1	
3	C	PUBB	VIF 020,019;SP 03;VIF 018,017,016,014,015;SP	VIF 013		12	2	
4	D	PUBB	VIF 010,009; VIF 008,007,006,004,005;	VIF 003		13	2	
5	E	PUBB		TG1935.1		1		
6	F	PUBB	SP II 7,8,9,10	SPII 11		6		
7	G	PUBB	SP 01	SP 00		2		
8	H	PUBB	SP 2,12,13	SP 2 14		4		
9	K	PUBB	VIF 023,022,021,SP 04,VIF 025	VIF 024		6	2	
10	L	PUBB						
11	M	PUBB						
12	R	PUBB						
13	T	PUBB						
14	V	PUBB	TYPICAL					
15	W	PUBB						
16	X	PUBB						
LNN	BS	FROM		TO	TO LG	TO LD	NTTB	

FIG. 2 — Typical Table C of 3840 Drawing

Verify Scan Point Assignment(s) for Growth Frame

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.
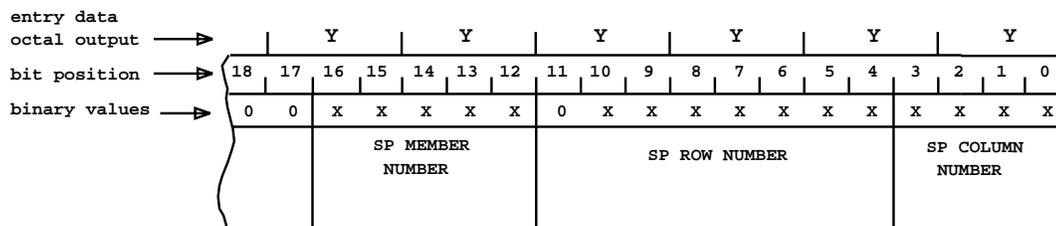
FIG. 1 — Entry Data Word Layout

3. Get office record T-nnnn-Hn-462-xx or equivalent.

   xx = SP member number determined in Step 2.

4. Fourth rightmost octal digit of word to be verified is:

   If **0 or 1**, go to Step 6.
   If **2 or 3**, go to Step 5.

5. Add 64 decimal to SP row number determined in Step 2. Record new result.

6. Search ROW and COL listing in office record and locate row and column previously recorded.

7. Does associated UNIT TYPE and FRM NO. agree with growth frame?

   If **Yes**, go to Step 9.
   If **No**, go to Step 8.

8. Record discrepancy for later use.

9. Have all scan point assignments been verified for growth frame?

    If **Yes**, go to Step 11.
    If **No**, go to Step 10.

10. Repeat from Step 1 for each SD or PP to be verified.

11. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify XTSI UT Translator for Odd Member Number

1. At 1B Processor MTC terminal, enter message
   VER:UTYPE:XTSI a**!**

   where a = Member number of growth XTSI.

   Response: **VER:UTMN;OPT(),CUR: FLN** a,   **UTYN XTSI,**

   MEMN b,   **ME UNEQ,**
   ENTRY ADDRESS c,   **ENTRY SIZE 127,**

   CUR
   WORD 0   _____ _____ _____ _____
                 _____ _____ _____ _____
   WORD 10   _____ _____ _____ _____
                 _____ _____ _____ _____
   WORD 20   _____ _____ _____ _____
                 _____ _____ _____ _____
   WORD 30   _____ _____ _____ _____
                 _____ _____ _____ _____
   WORD 40   _____ _____ _____ _____
                 _____ _____ _____ _____
                              •
                              •
                              •
   WORD 170 _____ _____ _____ _____
                 _____ _____ _____

   where   a = Floor location number
            b = Member number of growth XTSI
            c = Starting octal address for unit-type entry

2. Are message format and member identification correct per the response message in Step
   1.

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Determine cause and resolve; repeat from Step 1.

4. Using printout, TABLE A, and DLP-502, check that member equipage bits are set to 0 per
   word 0.

5. Were equipage bits found in a state other than zero?

    If **Yes**, go to Step 6.
    If **No**, go to Step 7.

    > *Caution: Depending on local procedures, supervisory or TELCO engineering approval must be obtained prior to performing any data change.*

6. Using RC Form 701, degrow member equipage using DLP-504.

7. Using printout, TABLE A, and office records, verify Member Type and Member Type Hardware Generation data per bits 18 through 23 of word 0.

8. Using printout, TABLE A, and office records, verify frame even member numbers per octal word 12.

9. Were any discrepancies noted in Steps 7 and 8?

    If **Yes**, go to Step 10.
    If **No**, go to Step 14.

10. Refer problem(s) to installer to determine error and decide on corrective action.

11. Error was found to be in?

    If **Office records**, go to Step 13.
    If **UT entry data**, go to Step 12.

12. Assist installer in taking appropriate corrective action as determined by regional engineering and as approved by office supervisor.

13. Have all UT data errors now been corrected?

    If **Yes**, go to Step 14.
    If **No**, go to Step 11.

14. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

TABLE A

UT ENTRY DATA AND WORD CONFIGURATION

ENTRY WORD (OCTAL): 0

	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
entry data octal output	5			3			0			0			0			0			0			0		
binary values	1	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

- MEMBER TYPE (bits 23–22)
- MEMBER TYPE HARDWARE GENERATION (bits 21–18)
- MEMBER EQUIPAGE (bit 17)

ENTRY WORD (OCTAL): 12

	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
entry data octal output	0			0			Y			Y			Y			Y			Y			0		
binary values	0	0	0	0	0	0	V	V	V	V	Y	X	X	X	X	X	X	X	X	X	X	0	0	0

- SP MEMN
- EVEN MEMBER NUMBER

Y = Variable octal numbers

V...V = SP member number (4E24 or later generic)
X...X = XTSI even member number

Store Input Messages on *4ESS*™ **Switch**
Input/Output Terminal for PUB-Looping Test

1. Get program listings PR-4A510 (PUDGPBGR) and PR-4A512 (PUDGPB02) (See FIG. 1).

2. Using PR-4A512, verify address of Item 1.

ITEM	STATEMENT LABEL	ADDRESS
1	STM10600	543
2	PBTS2600	200
3	PBTS2900	207
4	PBTS3600	246
5	PBTS4400	616
6	PBTS13800	1675

3. Using PR-4A510, verify addresses of Items 2 through 6.

4. At SREC or Beltline terminal, depress **FORM ENTER** key to On.

Caution: The messages must not be entered into system at this time.

5. At SREC or Beltline terminal, type the following input messages:

- **EX:PUB** a**;START!**
  where a = Bus 0 or 1.

- **EX:PUB** a**:PH 2,ADR 543!**
  where a = Bus 0 or 1

- **EX:PUB** a**;STEP!**
  where a = Bus 0 or 1

- **EX:PUB** a**:ADR 543!**
  where a = Bus 0 or 1

- **EX:PUB** a**:ADR 200-207!**
  where a = Bus 0 or 1

- **EX:PUB a!**
  where a = Bus 0 or 1

- **EX:PUB** a**:ADR 207-246!**
  where a = Bus 0 or 1

- **EX:PUB** a**:ADR 616-1675!**
  where a = Bus 0 or 1

- **OP:MACLI,CLASS MTCE!**

- **STOP:MACLI,CLASS MTCE,SUBCLASS a!**
  where a = CLASS MTCE SUBCLASS number from output message assigned to
  PUB diagnostic. To obtain CLASS MTCE SUBCLASS number, type and send
  OP:MACLI,CLASS MTCE!. From system response, determine which maintenance
  subclass number is associated with PUB and use that number for "a" for NUMBER 9
  message.

6. At SREC or Beltline terminal, depress **FORM ENTER** key to Off.

7. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

```
                          STM10600

                  4370.   38 STM10500 SEGMENT FORCE(AUTO)
                  -002-   39          DATA 9 = 1DG_UNUSED,9 = 0(101),6 = INDEX(4DGSEGMENT)
                  4376.   41 #
                  4378.   42 #
                  4380.   43 #
                  4382.   44 #
                  4384.   45 # SET UP MASK TO CHECK BTC EQUIPAGE
                  4386.   46 STM10600 MOVEDATA_ITEM(PB4BTCEQMSK),CONST(=0(3)),
                  4388.   47 #
                  4390.   48 # CALCULATE AMOUNT OF SHIFT. SHIFT=(BTCOUNT*2)

                  4420.   17 # SHIFT EQUIPAGE BITS BACK TO DO COMPARE.
                  4422.   18    ME   ITEM(PB4TEST),LOC(PB4TEST),SHIFT(DG4PULTAB+22)
                  -003-   19          DATA 9 = 1DG_UNUSED,9 = 0(701),6 = INDEX(4DGMOVEDATA)

                  -003-   21          * ITEM(PB4BTCEQMSK)
                  -003-   22          DATA 24 = 0(00000003)            #LITERAL CONSTANT
                  -003-   23          DATA 2 = 2,5 = 0(0),12 = 0(20),12 = 0(0323) #TO ITEM
                  -003-   24          DATA 2 = 1DG_UNUSED,5 = 0(0),5 = 0(0),12 = 0(0000) #INDEX
                  -003-   25          DATA 2 = 0,5 = 0(0),5 = 0(30),9 = 1DG_UNUSED,3 = 0 #MASK,FLAGS
                  -003-   26          DATA 24 = 0(00000000)            #NO OPERATION

USE FIRST ADDRESS
(DOWN FROM STM10600)

000542AB 4643 00 00010135

000543AB 4643 00 00070136

000544AB 4643 00 00000003
000545AB 4643 00 40200323
000546AB 4643 00 00000000
000547AB 4643 00 00300000
000550AB 4643 00 00000000
```

FIG. 1 – Location of STM10600 and Address to Use

Figure 1.

Set Up Storage Oscilloscope for Pub-Looping Test

1. Is storage oscilloscope set up?

   If **Yes**, go to Step 17.
   If **No**, go to Step 2.

2. Get TEKTRONIX* storage oscilloscope model 2232 or equivalent and two TEKTRONIX oscilloscope X10 probes model P6109 or equivalent.

3. Connect one X10 probe to channel 1 (POS) and other X10 probe to channel 2 (NEG).

4. Power up storage oscilloscope.

5. At storage oscilloscope, depress **STORE** to in position.

6. Depress **SETUP - ACQ**.

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

8. Depress **SETUP - DISPLAY**.

9. Observe storage oscilloscope screen and set DISPLAY controls by depressing switch associated with control not set correctly.

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.		

---

0.   * Registered trademark of TEKTRONIX, Inc.

10. Depress **SETUP - REF**.

11. Observe storage oscilloscope screen and set REF controls by depressing switch associated with control not set correctly.

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.		

12. Depress **SETUP - REF** to return to screen.

13. Determine one location in FIG. 1 where bus-scoping adapter can be connected.

14. Connect storage scope with bus-scoping adapter to connector location determined in Step 13 [see DLP-512 on how to use bus-scoping adapter].

15. Set bus-scoping adapter to position 2.

16. Adjust storage scope per the Table below for the waveform in FIG. 2.

OSCILLOSCOPE CONTROL SETTINGS FOR MODEL 2232	
CONTROLS	**POSITION**
CURSORS	Don't Care
SAVE/CONT	Depress until SAVE is not displayed
STORE	Depress (out)
VAR HOLDOFF	Don't Care
VERTICAL-POSITION (left)	Rotate to 2 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/FIV-AC GND DC	DC
HORIZONTAL-POSITION	Rotate to 1 o'clock position
HORIZONTAL-MODE	A
HORIZONTAL-A and B SEC/DIV	.2 us
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 2 o'clock position
A TRIGGER-A & B SOURCE	CH 1
A TRIGGER-A COUPLE	NORM
A TRIGGER-A EXT COUPL	Don't Care

17. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

```
                    P*    N*
                ┌────────────────┐
                │        o     o │ 19
                │        o     o │
                │        o     o │
                │        o     o │
CLKI -          │        o     o │
POSITION 2 †────┼──────▶ o     o │
                │        o     o │
                │        o     o │
                │        o     o │
                │        o     o │ 10
                ├────────────────┤ 09
                │                │
                │                │
                │                │
                │                │ 00
                └────────────────┘
                  3    2    1    0
```
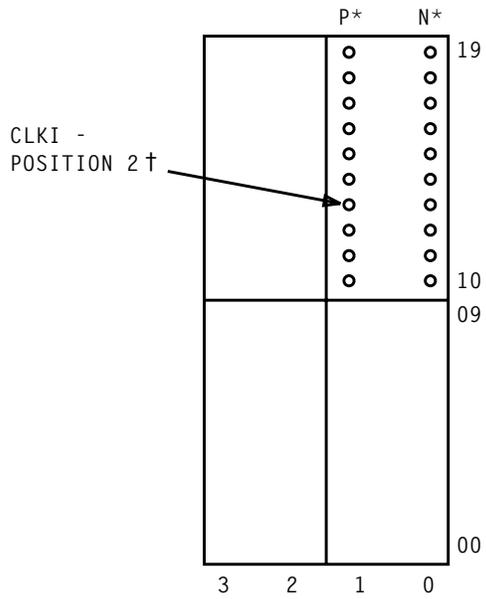
```
FRAME

IO
BUS 0        080-10
BUS 1        080-35

IOP
BUS 0        080-29
BUS 1        076-29
```

* P FOR POSITIVE LEAD AND
  N FOR NEGATIVE LEAD

† POSITION 2 IS ON BUS SCOPING ADAPTER
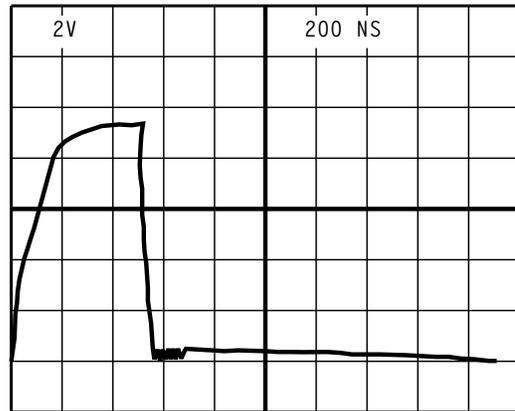
FIG. 1
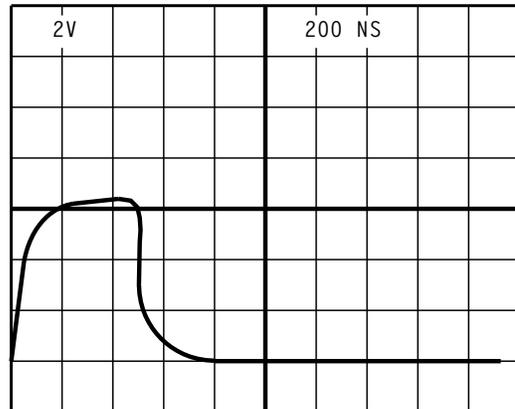
NORMAL PULSE AT DRIVER

NORMAL PULSE 500 FEET FROM DRIVER

FIG. 2

How to Use Bus-Scoping Adapter

1. Ensure the following:

   • Scope probes from storage scope are wrapped around each other.

   • Positive scope probe lead is connected to channel 1.

   • Negative scope probe lead is connected to channel 2.

   • Ground leads of scope probes are attached together.

2. See FIG. 1. At bus scoping adapter, connect scope 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].

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 3 and 4 for each connector to be scoped. See the following for scope adapter position to associated bit.

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		

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**
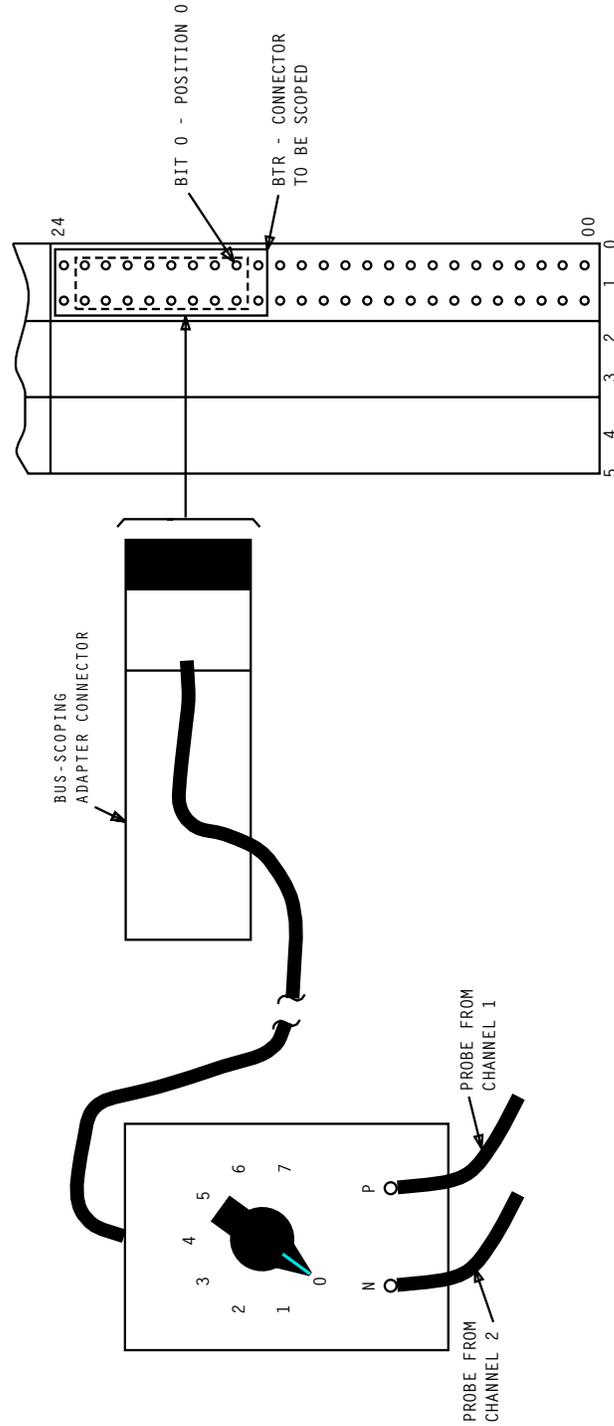
FIG. 1 — Bus-Scoping Adapter Connections

Remove Peripheral Unit Bus from Service

1. At 1B Processor MTC terminal, enter message **RMV:PUB** a!

   where a = Bus number (0 or 1).

   Response: **RMV: PUB** a **COMPL**

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 6.
   If **No**, go to Step 3.

3. Output indicates?

   If **invalid input message**, go to Step 4.
   If **system denied request**, go to Step 5.

4. Repeat from Step 1 to ensure message was entered correctly.

5. Determine cause and resolve; repeat from Step 1.

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Advance Program and Set Up Loop to Observe Bit on PU Enable Address and/or Write and Reply Buses

1. At SREC or beltline terminal, enter message
   OP:MACLI,CLASS MTCE!

2. Was **CLASS MTCE SUBCLASS** a **7 69 0** xxxxxxxx **PUB** b message received?

   If **Yes**, go to Step 6.
   If **No**, go to Step 3.

3. At SREC or beltline terminal, enter start looping message
   EX:PUB a**;START!**

   where a = bus 0 or 1

   Response: **RMV: PUB** a **COMPL**
   EX: PUB a **SUSPENDED MSG COMPL**

4. Was printout received per the response message in Step 3?

   If **Yes**, go to Step 6.
   If **No**, go to Step 5.

5. Determine cause and resolve; repeat from Step 1.

6. At SREC or beltline terminal, enter starting address message
   EX:PUB a**:PH 2,ADR 543!**

   where a = bus 0 or 1

   Response: **EX: PUB** a **SUSPENDED AT PH 2 ADR 543 AFTER TEST** xxxxx
   (ADVANCE) MSG COMPL

7. Was printout received per the response message in Step 6?

   If **Yes**, go to Step 9.
   If **No**, go to Step 8.

8. Determine cause and resolve; repeat from Step 1.

9. Are branches A or B to be scoped?

    If **Yes**, go to Step 26.
    If **No**, go to Step 10.

10. At SREC or beltline terminal, enter step message
    EX:PUB a**;STEP!**

    where a = bus 0 or 1

    Response: **EX: PUB** a**:SUSPENDED AT PH 2 ADR 32 AFTER TEST** xxxxx **(STEP)**
    MSG COMPL

11. Was printout received per the response message in Step 10?

    If **Yes**, go to Step 13.
    If **No**, go to Step 12.

12. Determine cause and resolve; repeat from Step 1.

13. At SREC or beltline terminal, enter advance message
    EX:PUB a**:ADR 543!**

    where a = bus 0 or 1

    Response: **EX: PUB** a**:SUSPENDED AT PH 2 ADR 543 AFTER TEST** xxxxx
    (ADVANCE) MSG COMPL

14. Was printout received per the response message in Step 13?

    If **Yes**, go to Step 16.
    If **No**, go to Step 15.

15. Determine cause and resolve; repeat from Step 1.

16. Are branches C or D to be scoped?

    If **Yes**, go to Step 26.
    If **No**, go to Step 17.

17. Determine the number of times the step and advance messages (Steps 18 through 23) must be performed for the associated bus branch to be scoped.

BRANCHES	REPEAT NUMBER
E,F	1
G,H	2
K,L	3
M,R	4
T,V	5
W,X	6

18. At SREC or beltline terminal, enter step message
    EX:PUB a**;STEP!**

    where a = bus 0 or 1

    Response: **EX: PUB** a**:SUSPENDED AT PH 2 ADR 32 AFTER TEST** xxxxx **(STEP) MSG COMPL**

19. Was printout received per the response message in Step 18?

    If **Yes**, go to Step 21.
    If **No**, go to Step 20.

20. Determine cause and resolve; repeat from Step 1.

21. At SREC or beltline terminal, enter advance message
    EX:PUB a**:ADR 543!**

    where a = bus 0 or 1

    Response: **EX: PUB** a**:SUSPENDED AT PH 2 ADR 543 AFTER TEST** xxxxx **(ADVANCE) MSG COMPL**

22. Was printout received per the response message in Step 21?

    If **Yes**, go to Step 24.
    If **No**, go to Step 23.

23. Determine cause and resolve; repeat from Step 1.

24. Have Steps 18 through 23 been performed the number of times determined in the Step 17?

    If **Yes**, go to Step 26.
    If **No**, go to Step 25.

25. Repeat from Step 18.

26. At SREC or beltline terminal, enter step message
    EX:PUB a**;STEP!**

    where a = bus 0 or 1

    Response: **EX: PUB** a**:SUSPENDED AT PH 2 ADR 32 AFTER TEST** xxxxx **(STEP) MSG COMPL**

27. Was printout received per the response message in Step 26?

    If **Yes**, go to Step 29.
    If **No**, go to Step 28.

28. Determine cause and resolve; repeat from Step 1.

29. At SREC or beltline terminal, enter looping message
    EX:PUB a**:ADR** b**-**c**!**

    where   a = bus 0 or 1
                  b = **200** for bit 0 PU write and reply bus or
                    = **207** for all other bits
                  c = **207** for bit 0 PU write and reply bus or
                    = **246** for all other bits

    Response: **EX: PUB** a **LOOPING STARTED MSG STARTED**

30. Was printout received per the response message in Step 29?

    If **Yes**, go to Step 32.
    If **No**, go to Step 31.

31. Stop maintenance control program client using DLP-515; repeat from Step 1.

32. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Stop Maintenance Control Program Client

1. At 1B Processor terminal, enter message
   OP:MACLI,CLASS MTCE!

   Response: **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

   where   a - d = NONE or variable data
               e = Unit type
                f = Member number

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Determine cause and resolve; repeat from Step 1.

4. At 1B Processor terminal, enter stop maintenance control program client message
   STOP:MACLI,CLASS MTCE,SUBCLASS a!

   where a = **CLASS MTCE SUBCLASS** number from output message assigned
           to PUB diagnostics.

5. Was maintenance control program client stopped?

   If **Yes**, go to Step 7.
   If **No**, go to Step 6.

6. Determine cause and resolve; repeat from Step 4.

7. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Scope PU Write Bus Bit 0

1. Obtain TEKTRONIX* storage oscilloscope mode 2232 or equivalent with two identical X10 (times 10) probes that were set up earlier.

2. Locate connector location in FIG. 1, 2, 3, or 5 that contain last frame where PU write bus is terminated on bus branch to be scoped.

3. Connect storage scope with scoping adapter to connector location determined in Step 2 [See DLP-512 on how to use scope adapter].

4. Scope P- and N -pins in dash line box, per FIG. 1, 2, 3, or 5, at connector location on line in Step 1. Observe oscilloscope for FIG. 4 waveform.

     Note: Pulse waveform will vary, depending on distance away from driver. Waveform measurements should be similar to examples shown in FIG. 4.

5. Was bit 0 observations per waveform in FIG. 4?

    If **Yes**, go to Step 7.
    If **No**, go to Step 6.

6. Clear equipment trouble [TOP 234-351-015].

7. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

---

0.   * Registered trademark of TEKTRONIX, Inc.

	P†	N†	
	○	○	19
	○	○	
	○	○	
	○	○	
	○	○	
	○	○	
	○	○	
BIT 0 →	○	○	
	○	○	10
	○	○	09
			00

3　2　1　0
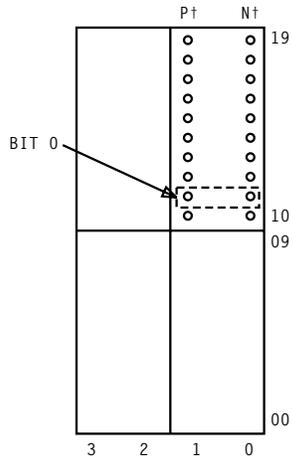
CCIS	*80-25
EST	
BUS 0	080-17
BUS 1	080-38
IO	
BUS 0	080-03
BUS 1	080-27
IOP	
BUS 0	080-31
BUS 1	076-31
NCLK	*60-40
SP 1 (WITH D&SM FRAME)	
BUS 0	380-14
BUS 1	480-14
SP 1 (WITH COMBINED MATRIX FRAME)	
BUS 0	280-32
BUS 1	380-32
SP 2	
BUS 0	180-28
BUS 1	280-28
TMSA	*80-14
TMSB	
BUS 0	‡76-32
BUS 1	‡80-32
TSIA-1	*80-46
TSIA-2	*80-51
TSIB	*80-55

* 0 FOR BUS 0 OR 1 FOR BUS 1

† P FOR POSITIVE LEAD AND
  N FOR NEGATIVE LEAD

‡ 0 FOR PUB TERMINATING AT TMS
  BAY 0 OR 1 FOR PUB
  TERMINATING AT TMS BAY 1

FIG. 1

```
            P†    N†
                          19
                          
                          
                          
                          
                          
                          
                          
BIT 0 ──────►
                          10
                          09
                          
                          
                          
                          
                          00
     3    2    1    0
```
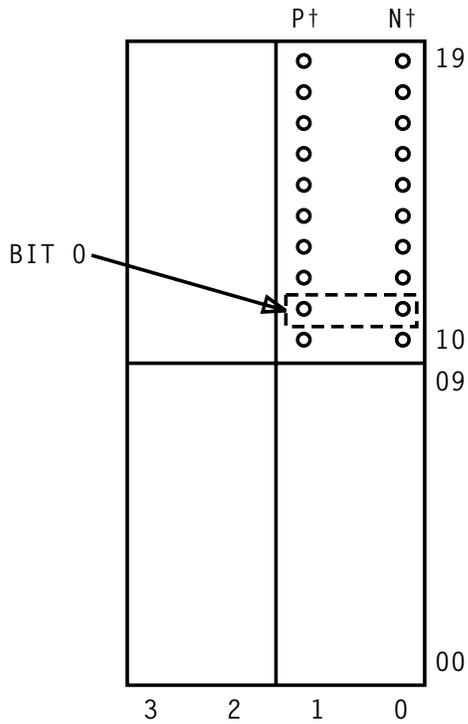
PUBB FRAME

BRANCH A	*76-03
BRANCH B	*72-06
BRANCH C	*76-05
BRANCH D	*72-07
BRANCH E	*64-03
BRANCH F	*60-06
BRANCH G	*64-05
BRANCH H	*60-07
BRANCH K	*48-03
BRANCH L	*44-06
BRANCH M	*48-05
BRANCH R	*44-07
BRANCH T	*36-03
BRANCH V	*32-06
BRANCH W	*36-05
BRANCH X	*32-07

```
* 0 FOR BUS 0 OR 1 FOR BUS 1
† P FOR POSITIVE LEAD AND
  N FOR NEGATIVE LEAD
```

FIG. 2

```
                          P*  N*
                         ┌──────┐ 24
                         │ o  o │
                         │ o  o │
                         │ o  o │
                         │ o  o │
                         │ o  o │
                         │ o  o │
                         │ o  o │
                         │ o  o │
                         │ o  o │
                         │ o  o │
  BIT                    ├──────┤
   0 ──────────────────► │ o  o │ 14
                         │ o  o │
                         │ o  o │
                         │ o  o │
                         │ o  o │
                         ├──────┤
                         │ o  o │ 09
                         │ o  o │
                         │ o  o │
                         │ o  o │
                         │ o  o │
                         │ o  o │
                         │ o  o │
                         │ o  o │
                         │ o  o │
                         │ o  o │ 00
                         └──────┘
                          3  2  1  0
```

```
        DIF or DIFE (24-31)
        BUS 0    180-109
        BUS 1    180-257
        ──────────────────
```

```
    * P FOR POSITIVE LEAD AND
      N FOR NEGATIVE LEAD
```

FIG. 3
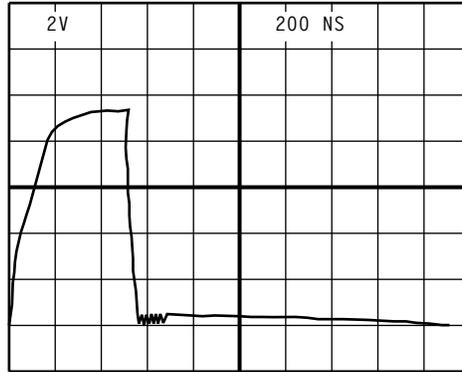
NORMAL PULSE AT DRIVER
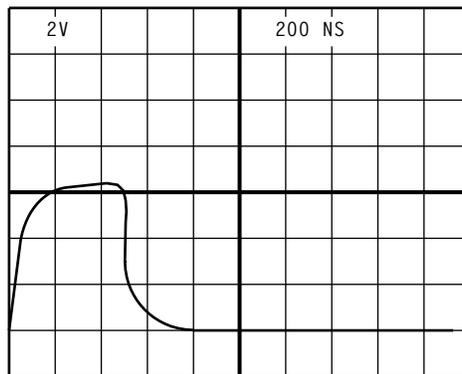
NORMAL PULSE 500 FEET FROM DRIVER

FIG. 4
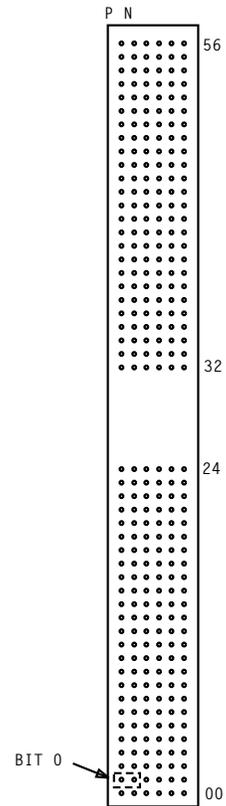
```
        P  N
      ┌─────────┐
      │• • • • • •│ 56
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│ 32
      │         │
      │• • • • • •│ 24
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
      │• • • • • •│
BIT 0 ╲│• • • • • •│
      │• • • • • •│
      │┌ ┐• • • •│
      │└ ┘• • • •│ 00
      └─────────┘

SCS              XTSI
BUS 0  045-168   BUS 0  052-180
BUS 1  053-168   BUS 1  061-180


           tpa 840174/05
```

Scope PU Reply BUS Bit 0

1. Locate connector location in FIG. 1, 2, 3, or 5 that contains last frame where PU reply bus is terminated on bus branch to be scoped.

2. Connect storage scope with scoping adapter to connector location determined in Step 1 [See DLP-512 on how to use scope adapter].

3. Scope P- and N-pins in dash line box, per FIG. 1, 2, 3, or 5, at connector location on line in Step 1. Observe oscilloscope for FIG. 4 waveform.

    Note: Pulse waveform will vary, depending on distance away from driver. Waveform measurements should be similar to examples shown in FIG. 4.

4. Was bit 0 observations per waveform in FIG. 4?

    If **Yes**, go to Step 6.
    If **No**, go to Step 5.

5. Clear equipment trouble [TOP 234-351-015].

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

	P†	N†	P†	N†	
EST OR NCLK ONLY					19
					BIT 0
					10
					09
					00
	3	2	1	0	
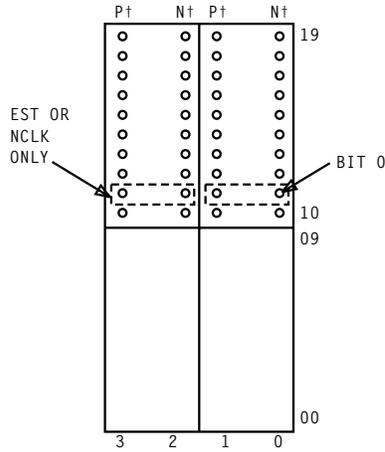
CCIS	*80-33	
EST		
BUS 0	080-02	
BUS 1	080-23	
IO		
BUS 0	080-11	
BUS 1	080-36	
IOP		
BUS 0	080-40	
BUS 1	076-40	
NCLK	*60-48	
SP 1 (WITH D&SM FRAME)		
BUS 0	380-04	
BUS 1	480-04	
SP 1 (WITH COMBINED MATRIX FRAME)		
BUS 0	280-20	
BUS 1	380-20	
SP 2		
BUS 0	180-18	
BUS 1	280-18	
TMS A	*80-04	
TMS B		
BUS 0	‡76-20	
BUS 1	‡80-20	
TSIA-1	*80-36	
TSIA-2	*80-39	
TSIB	*80-43	
VIF		
BUS 0	152-15	
BUS 1	152-25	

* 0 FOR BUS 0 OR 1 FOR BUS 1

† P FOR POSITIVE LEAD AND
  N FOR NEGATIVE LEAD

‡ 0 FOR PUB TERMINATING AT TMS
  BAY 0 OR 1 FOR PUB TERMINATING
  AT TMS BAY 1

FIG. 1

```
          P†      N†
       ┌──────┬──────┐
       │      │  o  o│ 19
       │      │  o  o│
       │      │  o  o│
       │      │  o  o│
       │      │  o  o│
       │      │  o  o│
       │      │  o  o│
       │      │  o  o│
       │     ┌┼─┐  o┌┼┐
       │     │o│  o││ 10
       ├──────┼┴────┼┴┤ 09
       │      │  o  o│
       │      │
       │      │       BIT 0
       │      │
       │      │
       │      │
       │      │
       │      │       00
       └──────┴──────┘
    3      2      1      0
```

PUBB FRAME

BRANCH A	*76-19
BRANCH B	*72-17
BRANCH C	*76-20
BRANCH D	*72-18
BRANCH E	*64-19
BRANCH F	*60-17
BRANCH G	*64-20
BRANCH H	*60-18
BRANCH K	*48-19
BRANCH L	*44-17
BRANCH M	*48-20
BRANCH R	*44-18
BRANCH T	*36-19
BRANCH V	*32-17
BRANCH W	*36-20
BRANCH X	*32-18

* 0 FOR BUS 0 OR 1 FOR BUS 1
† P FOR POSITIVE LEAD AND
  N FOR NEGATIVE LEAD

FIG. 2

```
                    P*  N*
                   ┌──┬──┐ 24
                   │ o│ o│
                   │ o│ o│
                   │ o│ o│
                   │ o│ o│
                   │ o│ o│
                   │ o│ o│
                   │ o│ o│
                   │ o│ o│
                   │ o│ o│
 BIT               │ o│ o│
  0 ──────────────►│ o│ o│ 14
                   │ o│ o│
                   │ o│ o│
                   │ o│ o│
                   │ o│ o│ 09
                   │ o│ o│
                   │ o│ o│
                   │ o│ o│
                   │ o│ o│
                   │ o│ o│
                   │ o│ o│
                   │ o│ o│
                   │ o│ o│
                   │ o│ o│ 00
                   └──┴──┘
          3  2  1  0
```

FIG. 3

DIF or DIFE (24-31)
BUS 0 180-053
BUS 1 180-201

*P FOR POSITIVE LEAD AND
 N FOR NEGATIVE LEAD
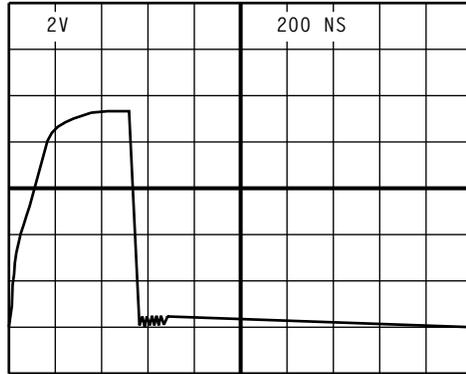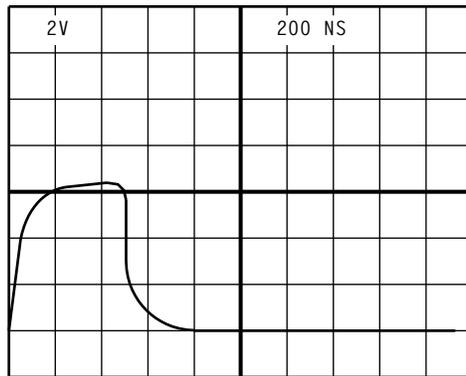
FIG. 3

2V		200 NS	

NORMAL PULSE AT DRIVER

2V		200 NS	

NORMAL PULSE 500 FEET FROM DRIVER

FIG. 4

P N

56

BIT 0

32

24

00

SCS
BUS 0   045-168
BUS 1   053-168
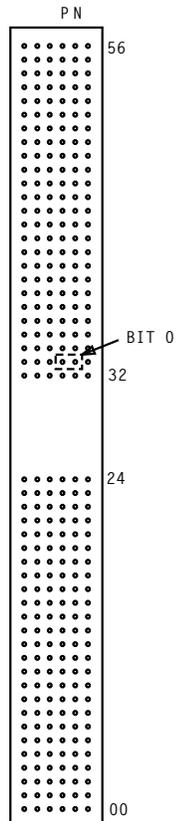
XTSI
BUS 0   052-180
BUS 1   052-180

FIG. 5

Scope PU Write BUS Bits 1 to 35

1. Locate connector location in FIG. 1, 2, 3, 4, or 6 that contains last frame where PU write bus is terminated on bus branch to be scoped.

2. Connect storage scope with bus scoping adapter to connector location determined in Step 1 [See DLP-512 on how to use scope adapter].

3. Scope P- and N-pins in dashed line box, per FIG. 1, 2, 3, 4, or 6, at connector location on line in Step 1. Observe oscilloscope for FIG. 5 waveform.

    Note: Pulse waveform will vary, depending on distance away from driver. Waveform measurements should be similar to examples shown in FIG. 5.

4. Were all observations per waveform in FIG. 5?

    If **Yes**, go to Step 6.
    If **No**, go to Step 5.

5. Clear equipment trouble [TOP 234-351-015].

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

FRAME	BITS 1 TO 7	BITS 8 TO 15
CCIS	*80-25	*80-23
EST		
BUS 0	080-17	080-16
BUS 1	080-38	080-37
IO		
BUS 0	080-03	080-04
BUS 1	080-27	080-28
IOP		
BUS 0	080-31	080-33
BUS 1	076-31	076-33
NCLK	*60-40	*60-39
SP 1 (WITH D&SM FRAME)		
BUS 0	380-14	380-13
BUS 1	480-14	480-13
SP 1 (WITH COMBINED MATRIX FRAME)		
BUS 0	280-32	280-30
BUS 1	380-32	380-30
SP 2		
BUS 0	180-28	180-27
BUS 1	280-28	280-27
TMS A	*80-14	*80-13
TMS B		
BUS 0	‡76-32	‡76-30
BUS 1	‡80-32	‡80-30
TSI	*80-46	*80-45
TSIA-1	*80-51	*80-49
TSIB	*80-55	*80-53

* 0 FOR BUS 0 OR 1 FOR BUS 1
† P FOR POSITIVE LEAD AND N FOR NEGATIVE LEAD
‡ 0 FOR PUB TERMINATING AT TMS BAY 0 OR 1 FOR PUB TERMINATING AT TMS BAY 1

FIG. 1

FRAME	BITS 16 TO 23	BITS 24 TO 31	BITS 32 TO 35
CCIS	*80-21	*80-19	*80-18
EST			
BUS 0	080-15	080-14	080-13
BUS 1	080-36	080-35	080-34
IO			
BUS 0	080-05	080-06	080-07
BUS 1	080-29	080-31	080-32
IOP			
BUS 0	080-34	080-36	080-37
BUS 1	076-34	076-36	076-37
NCLK	*60-38	*60-37	*60-36
SP 1 (WITH D&SM FRAME)			
BUS 0	380-12	380-11	380-10
BUS 1	480-12	480-11	480-10
SP 1 (WITH COMBINED MATRIX FRAME)			
BUS 0	280-29	280-27	280-26
BUS 1	380-29	380-27	380-26
SP 2			
BUS 0	180-26	180-25	180-24
BUS 1	280-26	280-25	280-24
TMS A	*80-12	*80-11	*80-10
TMS B			
BUS 0	‡76-29	‡76-27	‡76-26
BUS 1	‡80-29	‡80-27	‡80-26
TSIA-1	*80-44	*80-43	*80-42
TSIA-2	*80-48	*80-46	*80-45
TSIB	*80-52	*80-50	*80-49

* 0 FOR BUS 0 OR 1 FOR BUS 1
† P FOR POSITIVE LEAD AND N FOR NEGATIVE LEAD
‡ 0 FOR PUB TERMINATING AT TMS BAY 0 OR 1 FOR PUB TERMINATING AT TMS BAY 1
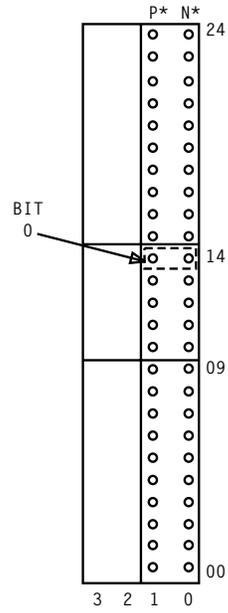

FIG. 2

PUBB FRAME

	BITS 1 TO 7	BITS 8 TO 15	BITS 16 TO 23	BITS 24 TO 31	BITS 32 TO 35
BRANCH A	*76-03	*76-12	*76-34	*76-06	*76-09
BRANCH B	*72-06	*72-12	*72-34	*72-08	*72-10
BRANCH C	*76-05	*76-14	*76-36	*76-08	*76-11
BRANCH D	*72-07	*72-13	*72-35	*72-09	*72-11
BRANCH E	*64-03	*64-12	*64-34	*64-06	*64-09
BRANCH F	*60-06	*60-12	*60-34	*60-08	*60-10
BRANCH G	*64-05	*64-14	*64-36	*64-08	*64-11
BRANCH H	*60-07	*60-13	*60-35	*60-09	*60-11
BRANCH K	*48-03	*48-12	*48-34	*48-06	*48-09
BRANCH L	*44-06	*44-12	*44-34	*44-08	*44-10
BRANCH M	*48-05	*48-14	*48-36	*48-08	*48-11
BRANCH R	*44-07	*44-13	*44-35	*44-09	*44-11
BRANCH T	*36-03	*36-12	*36-34	*36-06	*36-09
BRANCH V	*32-06	*32-12	*32-34	*32-08	*32-10
BRANCH W	*36-05	*36-14	*36-36	*36-08	*36-11
BRANCH X	*32-07	*32-13	*32-35	*32-09	*32-11

* 0 FOR BUS 0 OR 1 FOR BUS 1
† P FOR POSITIVE LEAD AND N FOR NEGATIVE LEAD

FIG. 3

BITS 1 TO 7   BITS 8 TO 15   BITS 16 TO 23   BITS 24 TO 31   BITS 32 TO 35

P* N* 24   P* N* 24   P* N* 24   P* N* 24   P* N* 24

BIT 1   BIT 8   BIT 16   BIT 24   BIT 32

14   14   14   14   14

09   09   09   09   09

00   00   00   00   00

3 2 1 0   3 2 1 0   3 2 1 0   3 2 1 0   3 2 1 0

DIF or DIFE (24-31)
BUS 0   180-109   180-103   180-097   180-091   180-085
BUS 1   180-257   180-251   180-245   180-239   180-233

* P FOR POSITIVE LEAD AND
  N FOR NEGATIVE LEAD

FIG. 4

2V			200 NS		

NORMAL PULSE AT DRIVER

2V			200 NS		

NORMAL PULSE 500 FEET FROM DRIVER

FIG. 5

FIG. 6

Scope PU Enable Address BUS Bits 0 to 11

1. Locate connector location in FIG. 1, 2, 3, or 5 that contains last frame where PU enable address bus is terminated on bus branch to be scoped.

2. Connect storage scope with bus scoping adapter to connector location determined in Step 1 [See DLP-512 on how to use scope adapter].

3. Scope P- and N-pins in each dashed line box, per FIG. 1, 2, 4, or 5, at connector locations on line in Step 1. Observe oscilloscope for FIG. 4 waveform.

   Note: Pulse waveform will vary, depending on distance away from driver. Waveform measurements should be similar to examples shown in FIG. 4.

4. Were all observations per waveform in FIG. 4?

   If **Yes**, go to Step 6.
   If **No**, go to Step 5.

5. Clear equipment trouble [TOP 234-351-015].

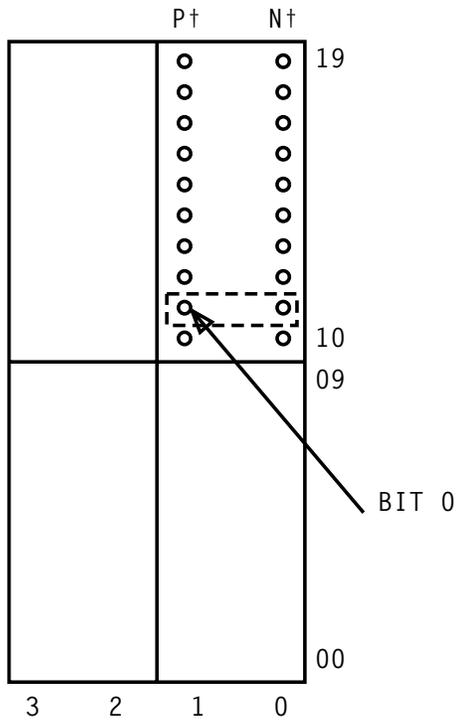6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

FRAME	BITS 0 TO 7	BITS 8 TO 11
CCIS	*80-16	*80-15
EST		
BUS 0	080-12	080-11
BUS 1	080-33	080-32
IO		
BUS 0	080-08	080-09
BUS 1	080-33	080-34
IOP		
BUS 0	080-24	080-27
BUS 1	076-24	076-27
NCLK	*60-35	*60-34
SP 1 (WITH D&SM FRAME)		
BUS 0	380-09	380-08
BUS 1	480-09	480-08
SP 1 (WITH COMBINED MATRIX FRAME)		
BUS 0	280-24	280-23
BUS 1	380-24	380-23
SP 2		
BUS 0	180-23	180-22
BUS 1	280-23	280-22
TMS A	*80-09	*80-08
TMS B		
BUS 0	‡76-24	‡76-23
BUS 1	‡80-24	‡80-23
TSIA-1	*80-41	*80-40
TSIA-2	*80-43	*80-42
TSIB	*80-47	*80-46

* 0 FOR BUS 0 OR 1 FOR BUS 1
† P FOR POSITIVE LEAD AND N FOR NEGATIVE LEAD
‡ 0 FOR PUB TERMINATING AT TMS BAY 0 OR 1 FOR
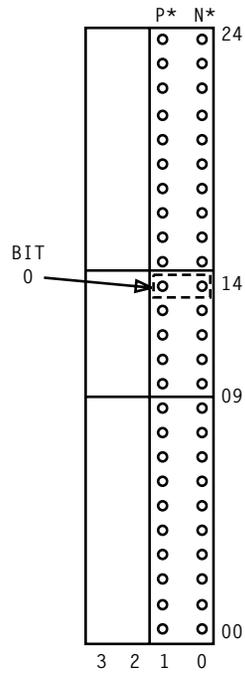 PUB TERMINATING AT TMS BAY 1

FIG. 1

PUBB FRAME	BITS 0 TO 7	BITS 8 TO 11
BRANCH A	*76-37	*76-40
BRANCH B	*72-36	*72-38
BRANCH C	*76-39	*76-42
BRANCH D	*72-37	*72-39
BRANCH E	*64-37	*64-40
BRANCH F	*60-36	*60-38
BRANCH G	*64-39	*64-42
BRANCH H	*60-37	*60-39
BRANCH K	*48-37	*48-40
BRANCH L	*44-36	*44-38
BRANCH M	*48-39	*48-42
BRANCH R	*44-37	*44-39
BRANCH T	*36-37	*36-40
BRANCH V	*32-36	*32-38
BRANCH W	*36-39	*36-42
BRANCH X	*32-37	*32-39

* 0 FOR BUS 0 OR 1 FOR BUS 1
† P FOR POSITIVE LEAD AND N FOR NEGATIVE LEAD

FIG. 2

BITS 0 TO 7   BITS 8 TO 11

P* N*   P* N*
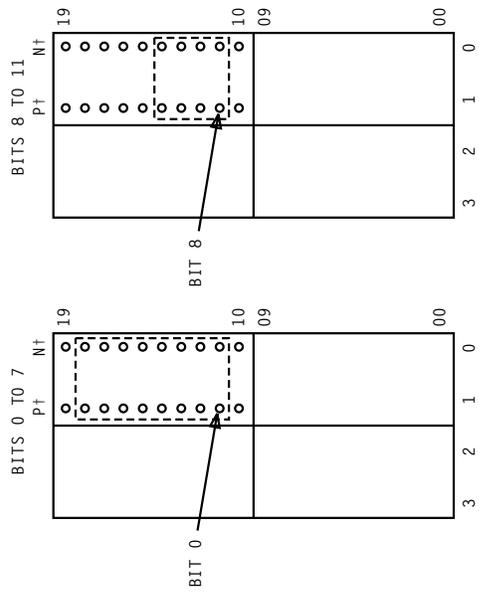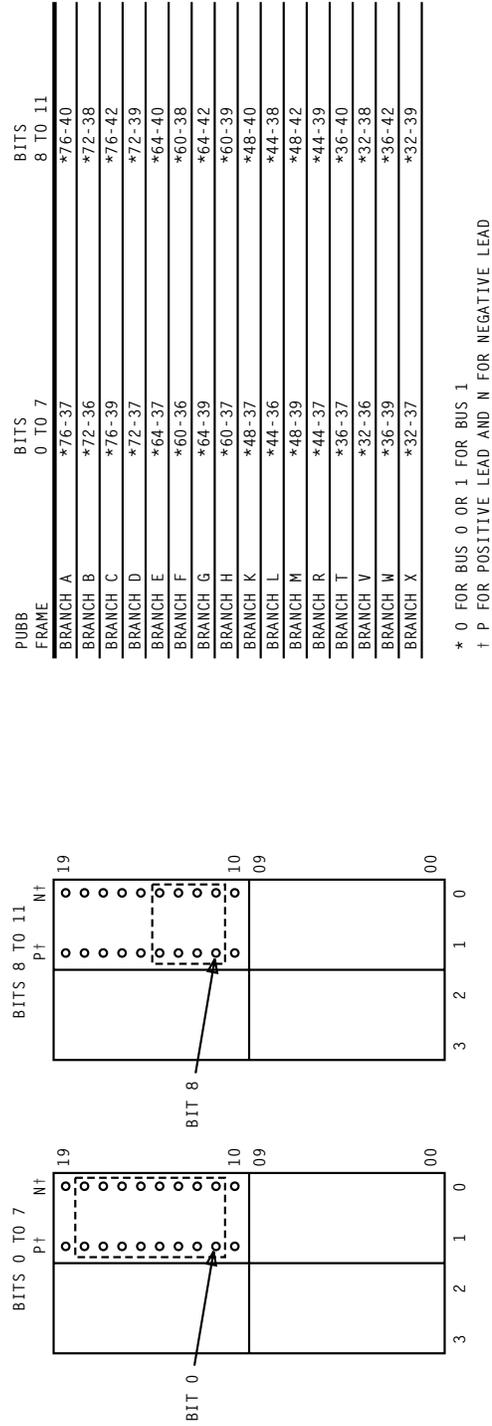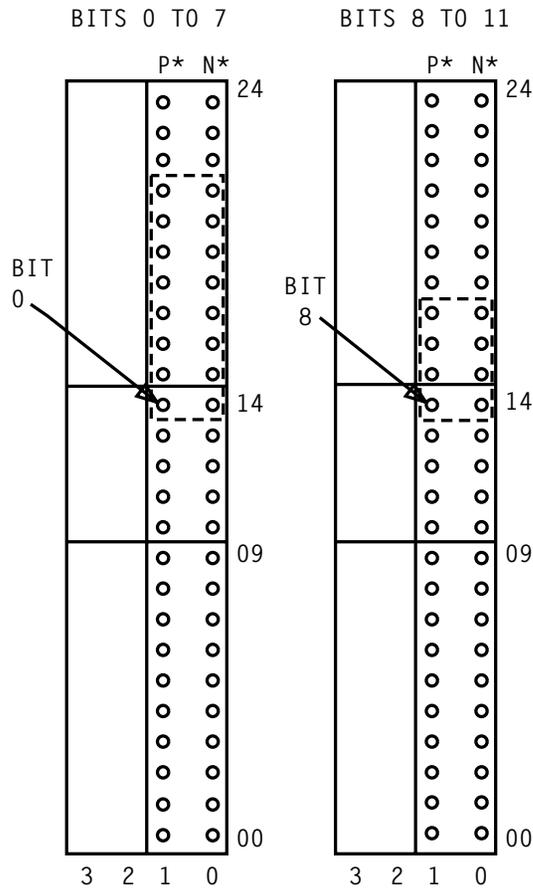
DIF or DIFE (24-31)
BUS 0   180-079   180-073
BUS 1   180-227   180-221

* P FOR POSITIVE LEAD AND
  N FOR NEGATIVE LEAD

FIG. 3

2V				200 NS			

NORMAL PULSE AT DRIVER

2V				200 NS			
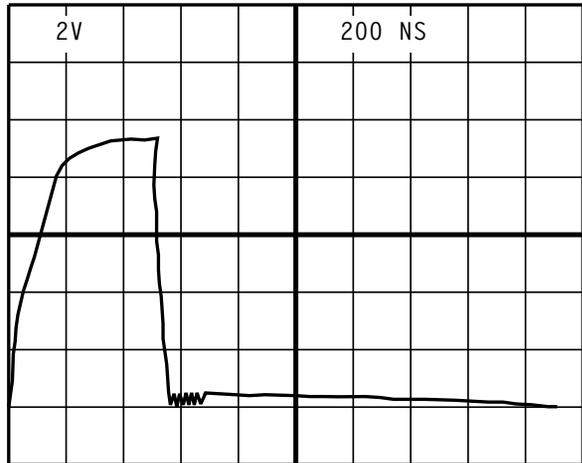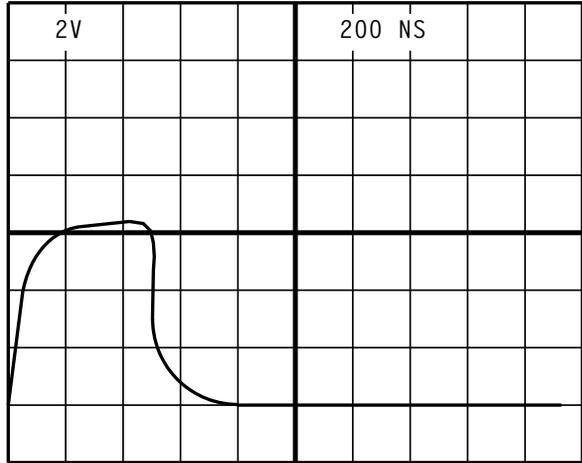
NORMAL PULSE 500 FEET FROM DRIVER

FIG. 4
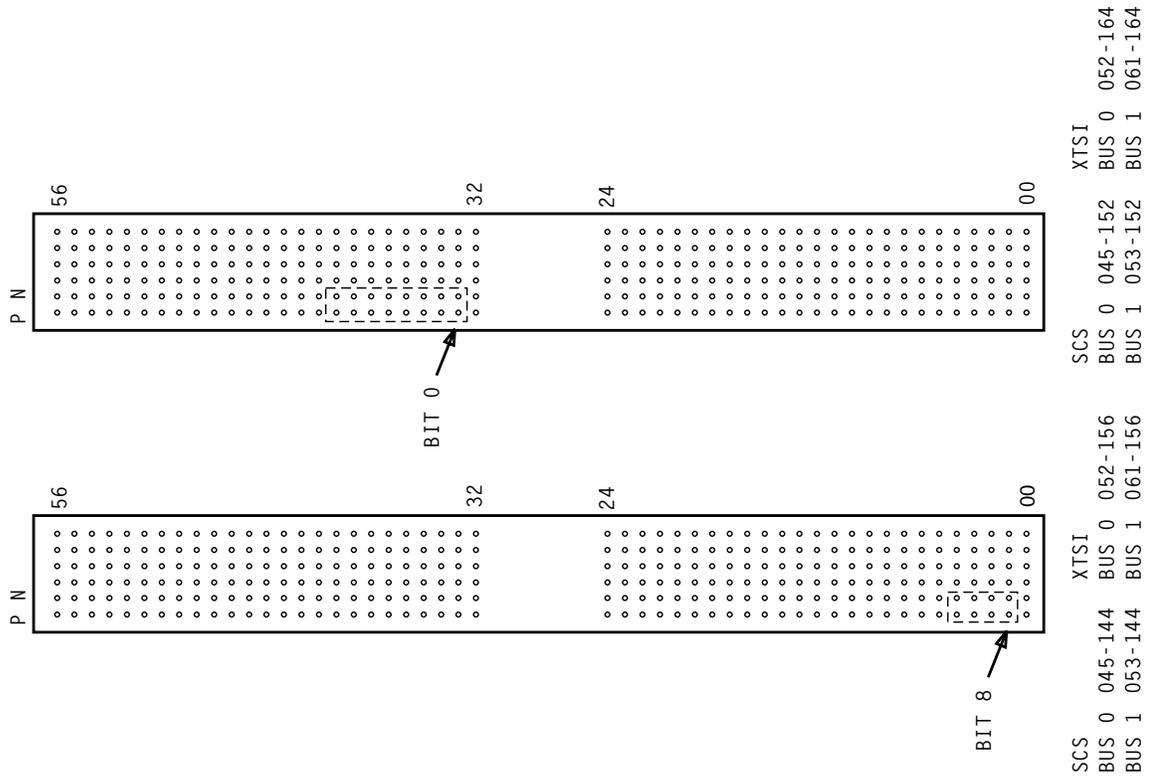
FIG. 5

Scope PU Reply BUS Bits 1 to 23

1. Locate connector location in FIG. 1, 2, 3, or 5 that contains last frame where PU reply bus is terminated on bus branch to be scoped.

2. Connect storage scope with bus scoping adapter to connector location determined in Step 1 [See DLP-512 on how to use scope adapter].

3. Scope P- and N-pins in dashed line box, per FIG. 1, 2, 3, or 5, at connector location on line in Step 1. Observe oscilloscope for FIG. 4 waveform.

   Note: Pulse waveform will vary, depending on distance away from driver. Waveform measurements should be similar to examples shown in FIG. 4.

4. Were all observations per waveform in FIG. 4?

   If **Yes**, go to Step 6.
   If **No**, go to Step 5.

5. Clear equipment trouble [TOP 234-351-015].

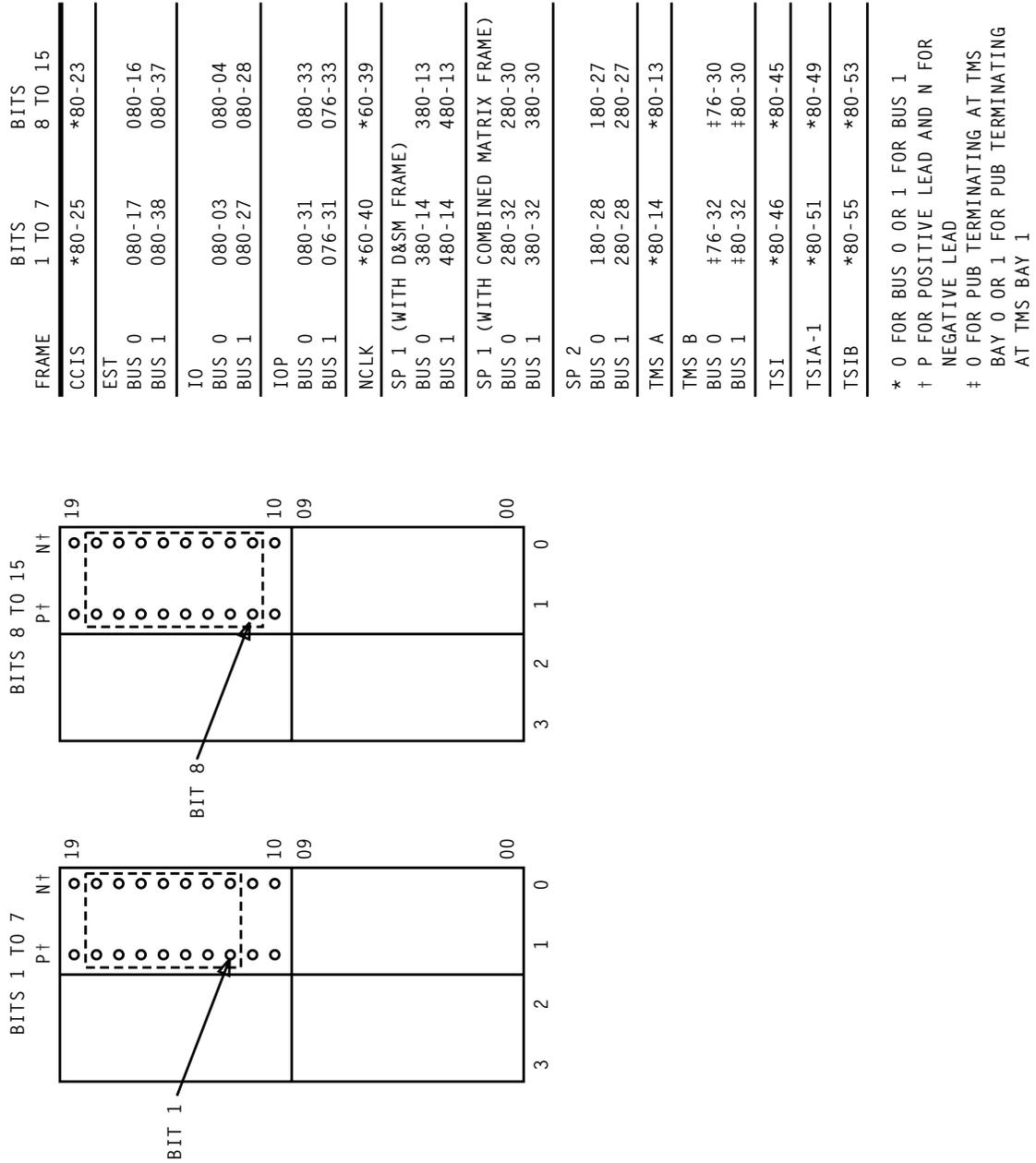6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

FRAME	BITS 1 TO 7	BITS 8 TO 15	BITS 16 TO 23
CCIS	*80-33	*80-32	*80-31
EST			
BUS 0	080-02	080-02	080-02
BUS 1	080-23	080-23	080-23
IO			
BUS 0	080-11	080-12	080-13
BUS 1	080-36	080-37	080-38
IOP			
BUS 0	080-40	080-41	080-42
BUS 1	076-40	076-41	076-42
NCLK	*60-48	*60-48	*60-48
SP 1 (WITH D&SM FRAME)			
BUS 0	380-04	380-03	380-02
BUS 1	480-04	480-03	480-02
SP 1 (WITH COMBINED MATRIX FRAME)			
BUS 0	280-20	280-18	280-16
BUS 1	380-20	380-18	380-16
SP 2			
BUS 0	180-18	180-17	180-16
BUS 1	280-18	280-17	280-16
TMS A	*80-04	*80-03	*80-02
TMS B			
BUS 0	‡76-20	‡76-18	‡76-16
BUS 1	‡80-20	‡80-18	‡80-16
TSIA-1	*80-36	*80-35	*80-34
TSIA-2	*80-39	*80-37	*80-35
TSIB	*80-43	*80-41	*80-39
VIF			
BUS 0	152-15	152-14	152-13
BUS 1	152-25	152-24	152-23

* 0 FOR BUS 0 OR 1 FOR BUS 1
† P FOR POSITIVE LEAD AND N FOR NEGATIVE LEAD
‡ 0 FOR PUB TERMINATING AT TMS BAY 0 OR 1 FOR PUB TERMINATING AT TMS BAY 1

FIG. 1

BITS 1 TO 7 — BIT 1

BITS 8 TO 15 — BIT 8

BITS 16 TO 23 — BIT 16

PUBB FRAME	BITS 1 TO 7	BITS 8 TO 15	BITS 16 TO 23
BRANCH A	*76-19	*76-21	*76-23
BRANCH B	*72-17	*72-19	*72-25
BRANCH C	*76-20	*76-22	*76-24
BRANCH D	*72-18	*72-20	*72-26
BRANCH E	*64-19	*64-21	*64-23
BRANCH F	*60-17	*60-19	*60-25
BRANCH G	*64-20	*64-22	*64-24
BRANCH H	*60-18	*60-20	*60-26
BRANCH K	*48-19	*48-21	*48-23
BRANCH L	*44-17	*44-19	*44-25
BRANCH M	*48-20	*48-22	*48-24
BRANCH R	*44-18	*44-20	*44-26
BRANCH T	*36-19	*36-21	*36-23
BRANCH V	*32-17	*32-19	*32-25
BRANCH W	*36-20	*36-22	*36-24
BRANCH X	*32-18	*32-20	*32-26

* 0 FOR BUS 0 OR 1 FOR BUS 1
† P FOR POSITIVE LEAD AND N FOR NEGATIVE LEAD

FIG. 2

BITS 16 TO 23 — BIT 16

BITS 8 TO 15 — BIT 8

BITS 1 TO 7 — BIT 1

```
DIF or DIFE (24-31)
BUS 0    180-053          180-041          180-035
BUS 1    180-201          180-189          180-183

PUC
BUS 0    080-053          080-041          080-035
BUS 1    080-201          080-189          080-183

* P FOR POSITIVE LEAD AND
  N FOR NEGATIVE LEAD
```

FIG. 3

2V   200 NS

NORMAL PULSE AT DRIVER

2V   200 NS
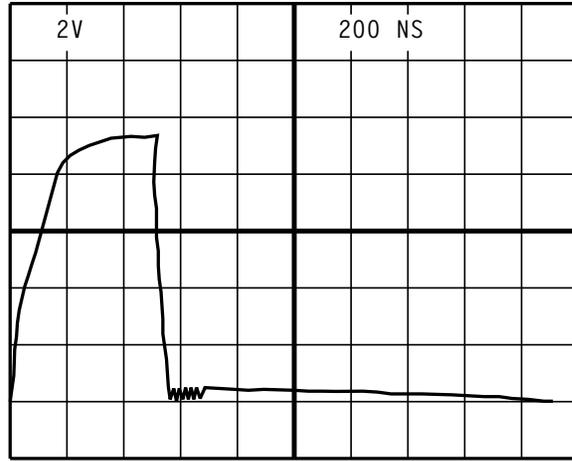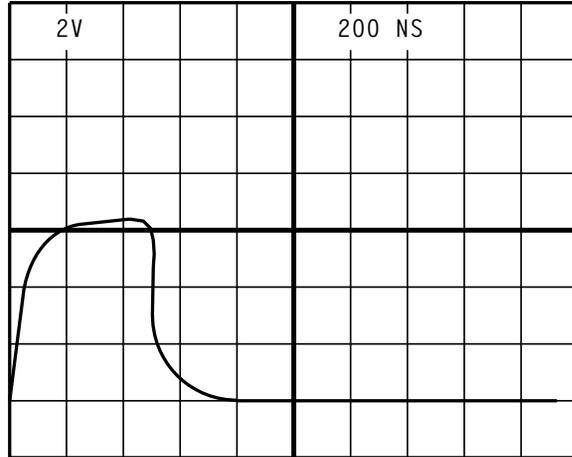
NORMAL PULSE 500 FEET FROM DRIVER

FIG. 4
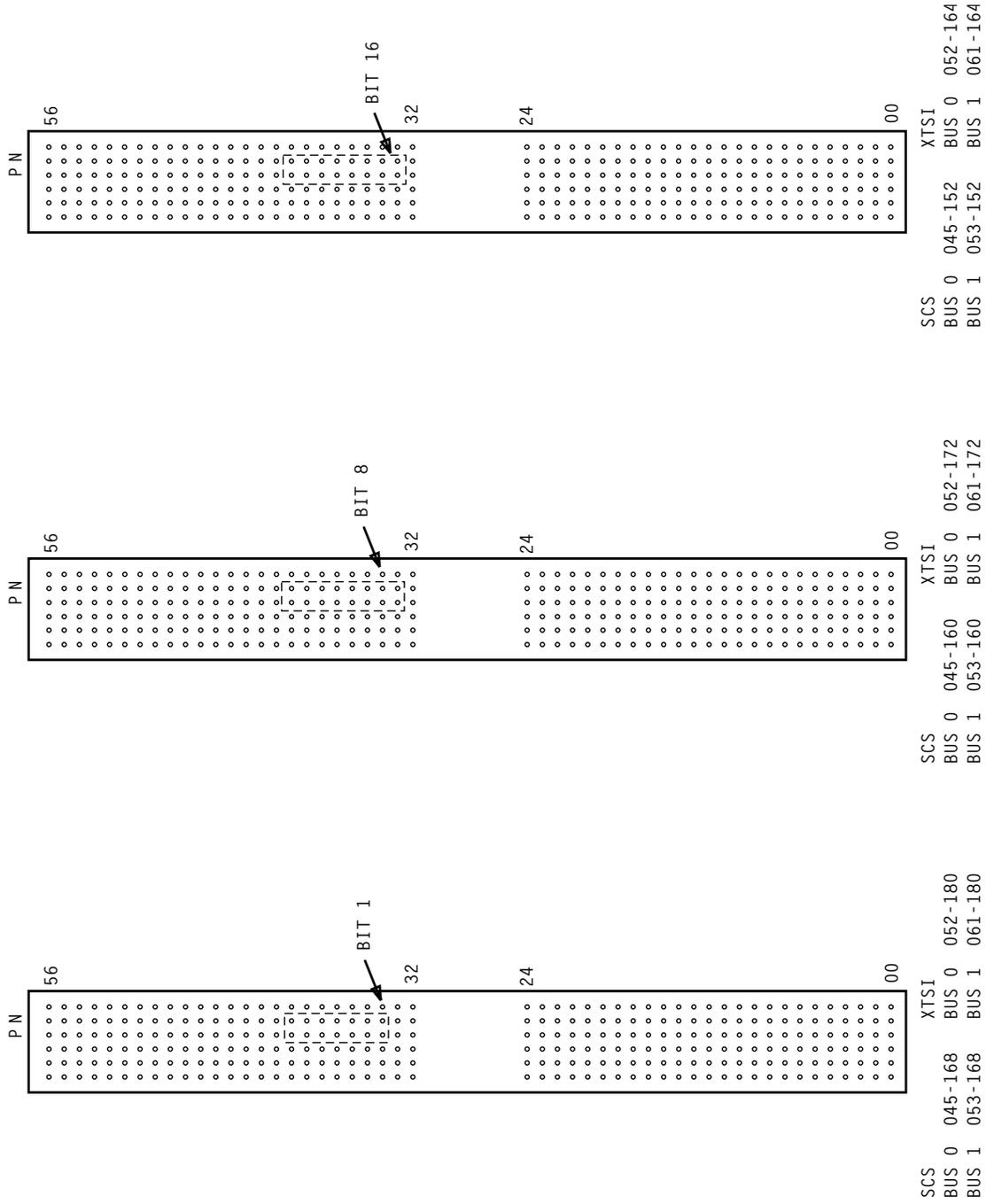
FIG. 5

Advance Program and Set Up Loop to Observe PU Control Bus and Miscellaneous Bus Bits

1. At SREC or beltline terminal, enter message
    OP:MACLI,CLASS MTCE!

2. Was **CLASS MTCE SUBCLASS** a **7 69 0** xxxxxxxx **PUB** b message received?

    If **Yes**, go to Step 6.
    If **No**, go to Step 3.

3. At SREC or beltline terminal, enter start looping message
    EX:PUB a**;START!**

    where a = bus 0 or 1

    Response: **RMV: PUB** a **COMPL**
                EX: PUB a **SUSPENDED MSG COMPL**

4. Was printout received per the response message in Step 3?

    If **Yes**, go to Step 6.
    If **No**, go to Step 5.

5. Determine cause and resolve; repeat from Step 1.

6. At SREC or beltline terminal, enter starting address message
    EX:PUB a**:PH 2,ADR 543!**

    where a = bus 0 or 1

    Response: **EX: PUB** a **SUSPENDED AT PH 2 ADR 543 AFTER TEST** xxxxx
                (ADVANCE) MSG COMPL

7. Was printout received per the response message in Step 6?

    If **Yes**, go to Step 9.
    If **No**, go to Step 8.

8. Determine cause and resolve; repeat from Step 1.

9. Are branches A or B to be scoped?

    If **Yes**, go to Step 26.
    If **No**, go to Step 10.

10. At SREC or beltline terminal, enter step message
    EX:PUB a**;STEP!**

    where a = bus 0 or 1

    Response: **EX: PUB** a**:SUSPENDED AT PH 2 ADR 32 AFTER TEST** xxxxx **(STEP)
                 MSG COMPL**

11. Was printout received per the response message in Step 10?

    If **Yes**, go to Step 13.
    If **No**, go to Step 12.

12. Determine cause and resolve; repeat from Step 1.

13. At SREC or beltline terminal, enter advance message
    EX:PUB a**:ADR 543!**

    where a = bus 0 or 1

    Response: **EX: PUB** a**:SUSPENDED AT PH 2 ADR 543 AFTER TEST** xxxxx
                 (ADVANCE) MSG COMPL

14. Was printout received per the response message in Step 13?

    If **Yes**, go to Step 16.
    If **No**, go to Step 15.

15. Determine cause and resolve; repeat from Step 1.

16. Are branches C or D to be scoped?

    If **Yes**, go to Step 26.
    If **No**, go to Step 17.

17. Determine the number of times the step and advance messages (Steps 18 through 23) must be performed for the associated bus branch to be scoped.

BRANCHES	REPEAT NUMBER
E,F	1
G,H	2
K,L	3
M,R	4
T,V	5
W,X	6

18. At SREC or beltline terminal, enter step message
    EX:PUB a**;STEP!**

    where a = bus 0 or 1

    Response: **EX: PUB** a**:SUSPENDED AT PH 2 ADR 32 AFTER TEST** xxxxx **(STEP) MSG COMPL**

19. Was printout received per the response message in Step 18?

    If **Yes**, go to Step 21.
    If **No**, go to Step 20.

20. Determine cause and resolve; repeat from Step 1.

21. At SREC or beltline terminal, enter advance message
    EX:PUB a**:ADR 543!**

    where a = bus 0 or 1

    Response: **EX: PUB** a**:SUSPENDED AT PH 2 ADR 543 AFTER TEST** xxxxx **(ADVANCE) MSG COMPL**

22. Was printout received per the response message in Step 21?

    If **Yes**, go to Step 24.
    If **No**, go to Step 23.

23. Determine cause and resolve; repeat from Step 1.

24. Have Steps 18 through 23 been performed the number of times determined in the Step 17?

    If **Yes**, go to Step 26.
    If **No**, go to Step 25.

25. Repeat from Step 18.

26. At SREC or beltline terminal, enter step message
    EX:PUB a**;STEP!**

    where a = bus 0 or 1

    Response: **EX: PUB** a**:SUSPENDED AT PH 2 ADR 32 AFTER TEST** xxxxx **(STEP) MSG COMPL**

27. Was printout received per the response message in Step 26?

    If **Yes**, go to Step 29.
    If **No**, go to Step 28.

28. Determine cause and resolve; repeat from Step 1.

29. At SREC or beltline terminal, enter looping message
    EX:PUB a**:ADR 616-1675!**

    where   a = bus 0 or 1

    Response: **EX: PUB** a **LOOPING STARTED MSG STARTED**

30. Was printout received per the response message in Step 29?

    If **Yes**, go to Step 32.
    If **No**, go to Step 31.

31. Stop maintenance control program client using DLP-515; repeat from Step 1.

32. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Scope PU Control BUS and Miscellaneous Bus Bits

1. Locate connector location in FIG. 1, 2, 3, 4, or 6 that contains last frame where PU control bus and miscellaneous bus bits are terminated on bus branch to be scoped.

2. Connect storage scope with bus scoping adapter to connector location determined in Step 1 [See DLP-512 on how to use scope adapter].

    Note: Pulse waveform will vary, depending on distance away from driver. Waveform measurements should be similar to examples shown in FIG. 5.

3. Scope P- and N-pins in dashed line box of connector 1, per FIG. 1, 2, 3, 4, or 6, at connector location on line in Step 1. Observe oscilloscope waveform [FIG. 5]. If problem occurs in seeing bit, use external trigger on scope and connect to trigger bit associated with faulty bit. See TABLE A and FIG. 1, 3, 4, or 6.

TABLE A	
FAULTY BIT	TRIGGER BIT
APUB	PSZ
APUF	CLKI
APUT	PLP
PUASW	MI
PURB	GI

4. Scope P- and N- pins in each dashed line box of connectors 2 through 4, per FIG. 1, 2, 3, 4, or 6 at connector locations on line in Step 1. Observe oscilloscope waveform [FIG. 5].

5. Were all observations per waveform in FIG. 5?

    If **Yes**, go to Step 7.
    If **No**, go to Step 6.

6. Clear equipment trouble [TOP 234-351-015].

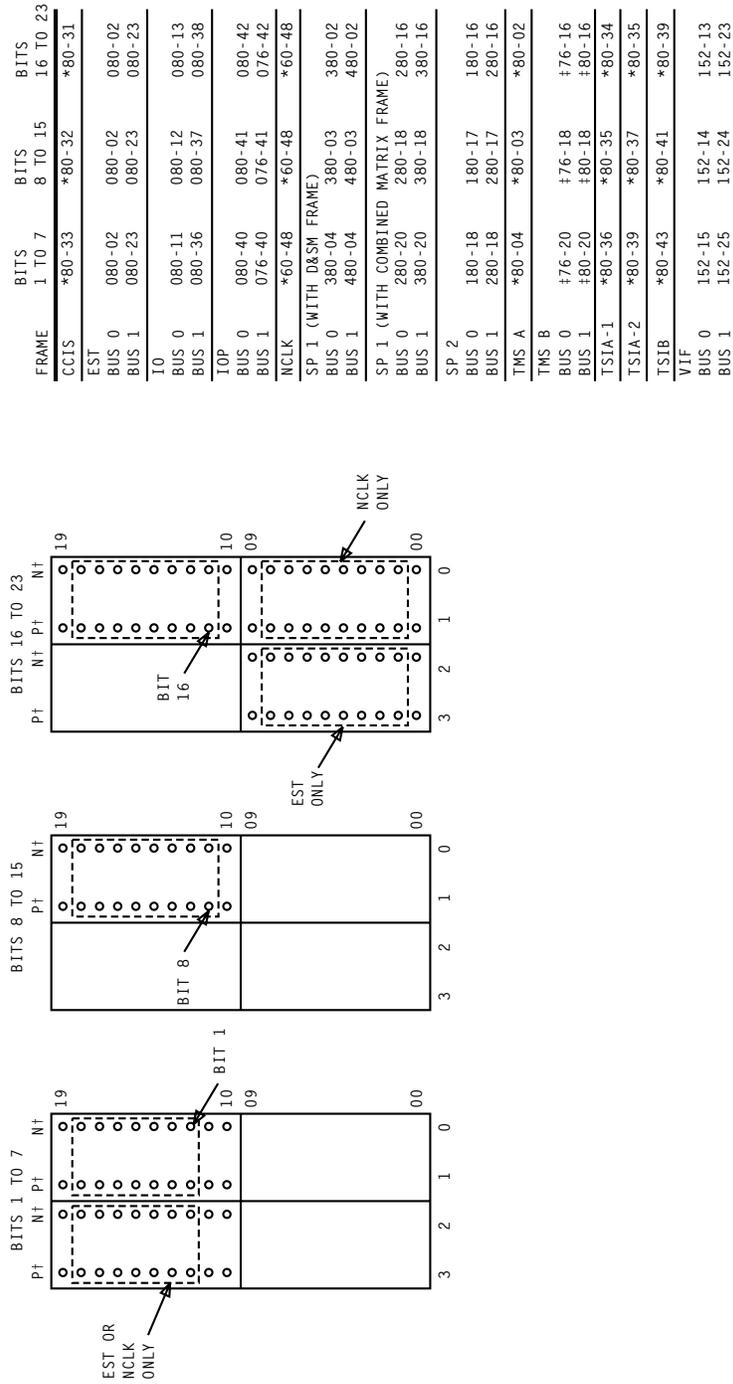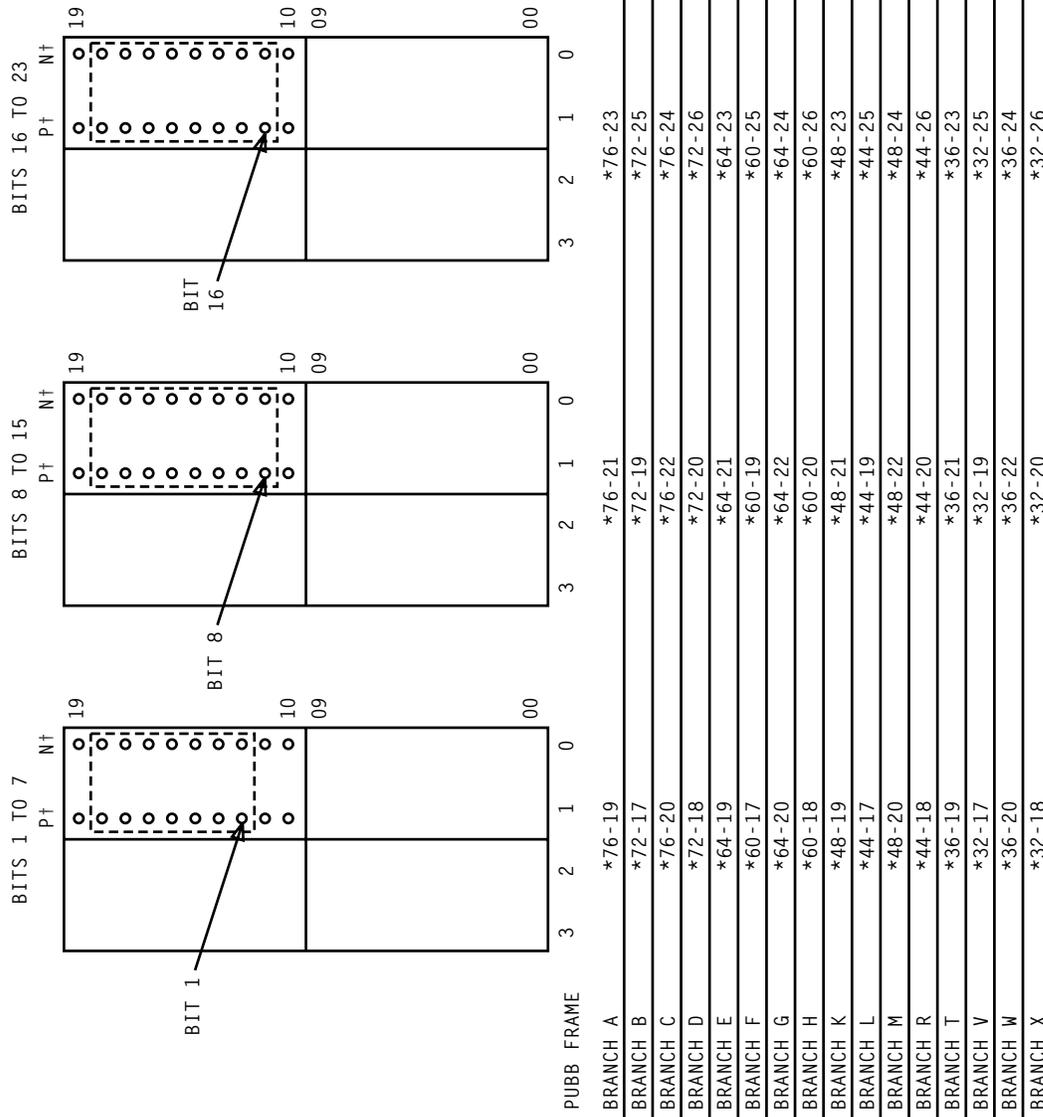7. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

CONNECTOR 1
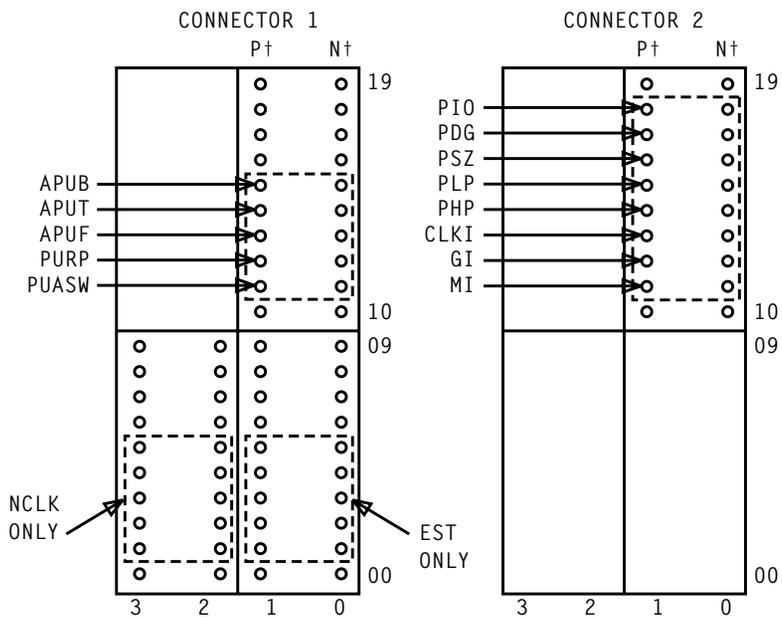
CONNECTOR 2

FRAME	CONNECTOR 1	CONNECTOR 2
CCIS	*80-30	*80-13
EST		
BUS 0	080-02	080-10
BUS 1	080-23	080-31
IO		
BUS 0	080-14	080-10
BUS 1	080-39	080-35
IOP		
BUS 0	080-39	080-29
BUS 1	076-39	076-29
NCLK	*60-48	*60-47
SP 1 (WITH D&SM FRAME)		
BUS 0	380-01	380-07
BUS 1	480-01	480-07
SP 1 (WITH COMBINED MATRIX FRAME)		
BUS 0	280-14	280-21
BUS 1	380-14	380-21
SP 2		
BUS 0	180-15	180-21
BUS 1	280-15	280-21
TMS A	*80-01	*80-07
TMS B		
BUS 0	‡76-14	‡76-21
BUS 1	‡80-14	‡80-21
TSIA-1	*80-33	*80-39
TSIA-2	*80-33	*80-40
TSIB	*80-37	*80-44
VIF		
BUS 0	152-12	152-09
BUS 1	152-22	152-27

* 0 FOR BUS 0 OR 1 FOR BUS 1

† P FOR POSITIVE LEAD AND N FOR NEGATIVE LEAD

‡ 0 FOR PUB TERMINATING AT TMS BAY 0 OR 1 FOR
  PUB TERMINATING AT TMS BAY 1

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FRAME	CONNECTOR 3	CONNECTOR 4
CCIS	*80-15	*80-18
EST		
BUS 0	080-11	080-13
BUS 1	080-32	080-34
IO		
BUS 0	080-09	080-07
BUS 1	080-34	080-32
IOP		
BUS 0	080-27	080-37
BUS 1	076-27	076-37
NCLK	*60-34	*60-36
SP 1 (WITH D&SM FRAME)		
BUS 0	380-08	380-10
BUS 1	480-08	480-10
SP 1 (WITH COMBINED MATRIX FRAME)		
BUS 0	280-23	280-26
BUS 1	380-23	380-26
SP 2		
BUS 0	180-22	180-24
BUS 1	280-22	280-24
TMS A	*80-08	*80-10
TMS B		
BUS 0	‡76-23	‡76-26
BUS 1	‡80-23	‡76-26
TSIA-1	*80-40	*80-42
TSIA-2	*80-42	*80-45
TS1B	*80-46	*80-49
VIF		
BUS 0	NONE	NONE
BUS 1	NONE	NONE

* 0 FOR BUS 0 OR 1 FOR BUS 1
† P FOR POSITIVE LEAD AND N FOR NEGATIVE LEAD
‡ 0 FOR PUB TERMINATING AT TMS BAY 0 OR 1 FOR PUB TERMINATING AT TMS BAY 1

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CONNECTOR 4

PUPE
PUP0

CONNECTOR 3

IOCL
IOCH
PUSYC
EA12

CONNECTOR 1 CONNECTOR 2 CONNECTOR 3 CONNECTOR 4

Connector 1 leads: APUB, APUT, APUF, PURP, PUASW

Connector 2 leads: PIO, PDG, PSZ, PLP, PHP, CLKI, GI, MI

Connector 3 leads: IOCL, IOCH, PUSYC, EA12

Connector 4 leads: PUPE, PUPO

PUBB FRAME	CONNECTOR 1	CONNECTOR 2	CONNECTOR 3	CONNECTOR 4
BRANCH A	*76-25	*76-31	*76-40	*76-09
BRANCH B	*72-27	*72-32	*72-38	*72-10
BRANCH C	*76-26	*76-33	*76-42	*76-11
BRANCH D	*72-28	*72-33	*72-39	*72-11
BRANCH E	*64-25	*64-31	*64-40	*64-09
BRANCH F	*60-27	*60-32	*60-38	*60-10
BRANCH G	*64-26	*64-33	*64-42	*64-11
BRANCH H	*60-28	*60-33	*60-39	*60-11
BRANCH K	*48-25	*48-31	*48-40	*48-09
BRANCH L	*44-27	*44-32	*44-38	*44-10
BRANCH M	*48-26	*48-33	*48-42	*48-11
BRANCH R	*44-28	*44-33	*44-39	*44-11
BRANCH T	*36-25	*36-31	*36-40	*36-09
BRANCH V	*32-27	*32-32	*32-38	*32-10
BRANCH W	*36-26	*36-33	*36-42	*36-11
BRANCH X	*32-28	*32-33	*32-39	*32-11

* 0 FOR BUS 0 OR 1 FOR BUS 1
† P FOR POSITIVE LEAD AND N FOR NEGATIVE LEAD

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CONNECTOR 1

P* N*

APUB
APUT
APUF
PURP
PUASW

3 2 1 0

CONNECTOR 2

P* N*

PIO
PDG
PSZ
PLP
PHP
CLKI
GI
MI

3 2 1 0

CONNECTOR 3

P* N*

IOCL
IOCH
PUSYC
EA12

3 2 1 0

CONNECTOR 4

P* N*

PUPE
PUPO

3 2 1 0

DIF or DIFE (24-31)			
BUS 0	180-023	180-067	180-073	180-085
BUS 1	180-171	180-215	180-221	180-233

* P FOR POSITIVE LEAD AND
  N FOR NEGATIVE LEAD

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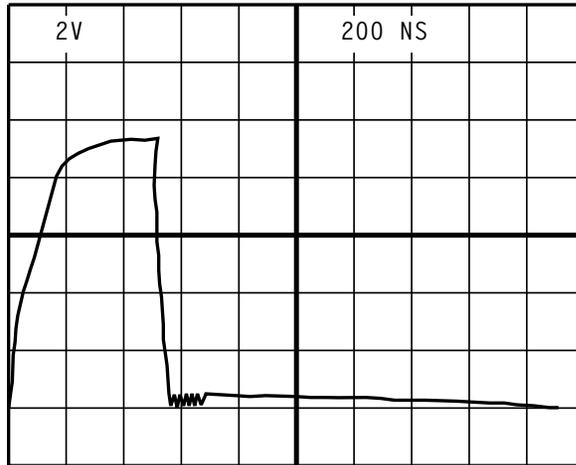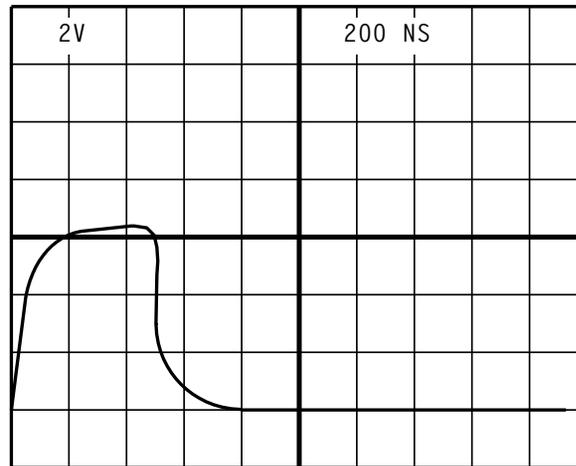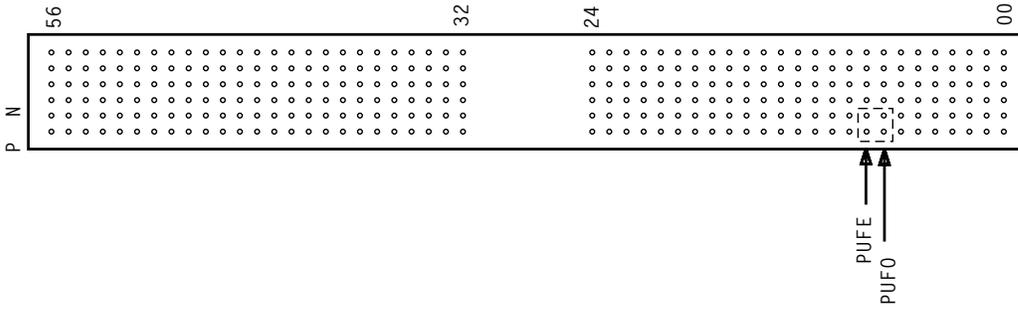
2V				200 NS			

NORMAL PULSE AT DRIVER

2V				200 NS			

NORMAL PULSE 500 FEET FROM DRIVER

tpa 840178/05
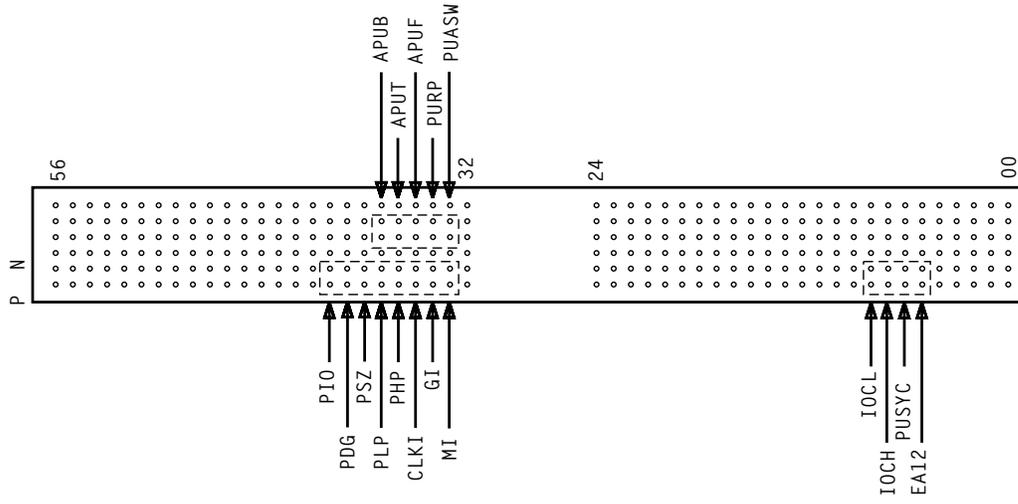
tpa 840178/06

Scope Remaining PU Miscellaneous Bus Bits
Not Terminated at VIF

1. Locate connector location in FIG. 1, 2, or 3 that contains last frame where PU
    miscellaneous bus bits are terminated on bus branch to be scoped.

2. Connect storage scope with bus scoping adapter to connector location determined in Step
    1 [See DLP-512 on how to use scope adapter].

    Note: Pulse waveform will vary, depending on distance away from driver. Waveform
    measurements should be similar to examples shown in FIG. 4.

3. Scope P- and N-pins in each dashed line box per FIG. 1, 2, or 3, at connector location on
    line in Step 1. Observe oscilloscope waveform [FIG. 4].

4. Were all observations per waveform in FIG. 4?

    If **Yes**, go to Step 6.
    If **No**, go to Step 5.

5. Clear equipment trouble [TOP 234-351-015].

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

FRAME	CONNECTOR 1	CONNECTOR 2
CCIS	*80-15	*80-18
EST		
BUS 0	080-11	080-13
BUS 1	080-32	080-34
IO		
BUS 0	080-09	080-07
BUS 1	080-34	080-32
IOP		
BUS 0	080-27	080-37
BUS 1	076-27	076-37
NCLK	*60-34	*60-36
SP 1 (WITH D&SM FRAME)		
BUS 0	380-08	380-10
BUS 1	480-08	480-10
SP 1 (WITH COMBINED MATRIX FRAME)		
BUS 0	280-23	280-26
BUS 1	380-23	380-26
SP 2		
BUS 0	180-22	180-24
BUS 1	280-22	280-24
TMS A	*80-08	*80-10
TMS B		
BUS 0	‡76-23	‡76-26
BUS 1	‡80-23	‡80-26
TSIA-1	*80-40	*80-42
TSIA-2	*80-42	*80-45
TSIB	*80-46	*80-49
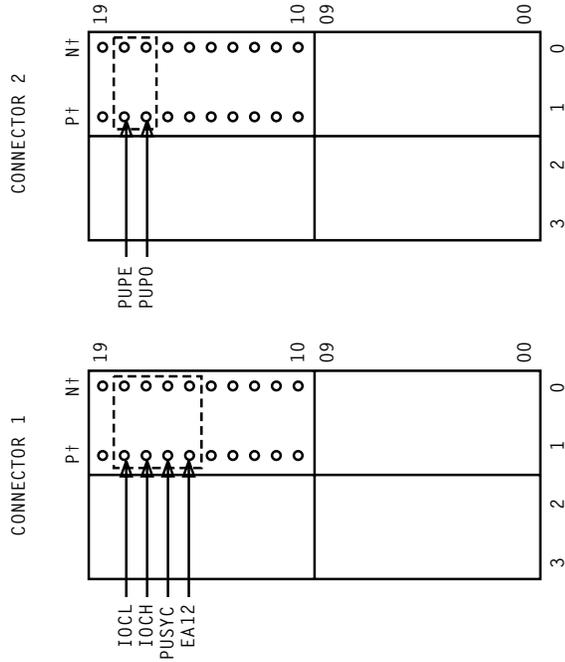
* 0 FOR BUS 0 OR 1 FOR BUS 1

† P FOR POSITIVE LEAD AND N FOR NEGATIVE LEAD

‡ 0 FOR PUB TERMINATING AT TMS BAY 0 OR 1 FOR
PUB TERMINATING AT TMS BAY 1

tpa 840179/01

CONNECTOR 2

PUPE
PUP0

CONNECTOR 1

IOCL
IOCH
PUSYC
EA12

PUBB FRAME	CONNECTOR 1	CONNECTOR 2
BRANCH A	*76-40	*76-09
BRANCH B	*72-38	*72-10
BRANCH C	*76-42	*76-11
BRANCH D	*72-39	*72-11
BRANCH E	*64-40	*64-09
BRANCH F	*60-38	*60-10
BRANCH G	*64-42	*64-11
BRANCH H	*60-39	*60-11
BRANCH K	*48-40	*48-09
BRANCH L	*44-38	*44-10
BRANCH M	*48-42	*48-11
BRANCH R	*44-39	*44-11
BRANCH T	*36-40	*36-09
BRANCH V	*32-38	*32-10
BRANCH W	*36-42	*36-11
BRANCH X	*32-39	*32-11

* 0 FOR BUS 0 OR 1 FOR BUS 1
† P FOR POSITIVE LEAD AND N FOR NEGATIVE LEAD

tpa 84017/02

CONNECTOR 1   CONNECTOR 2

P* N*   P* N*

IOCL ——▷
IOCH ——▷
PUSYC ——▷
EA12 ——▷

PUPE ——▷
PUPO ——▷

3 2 1 0   3 2 1 0
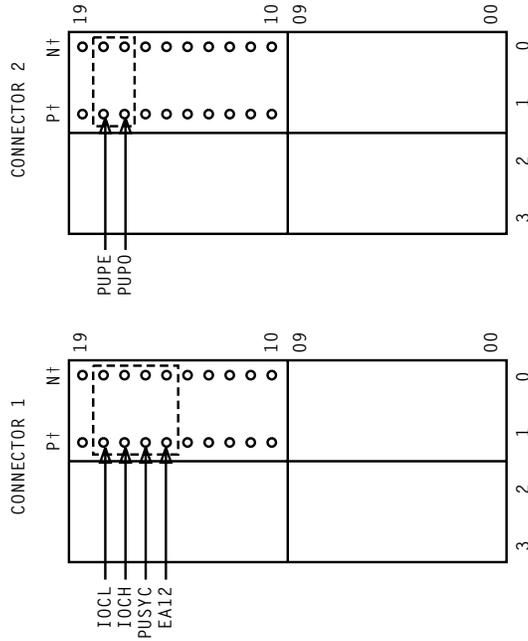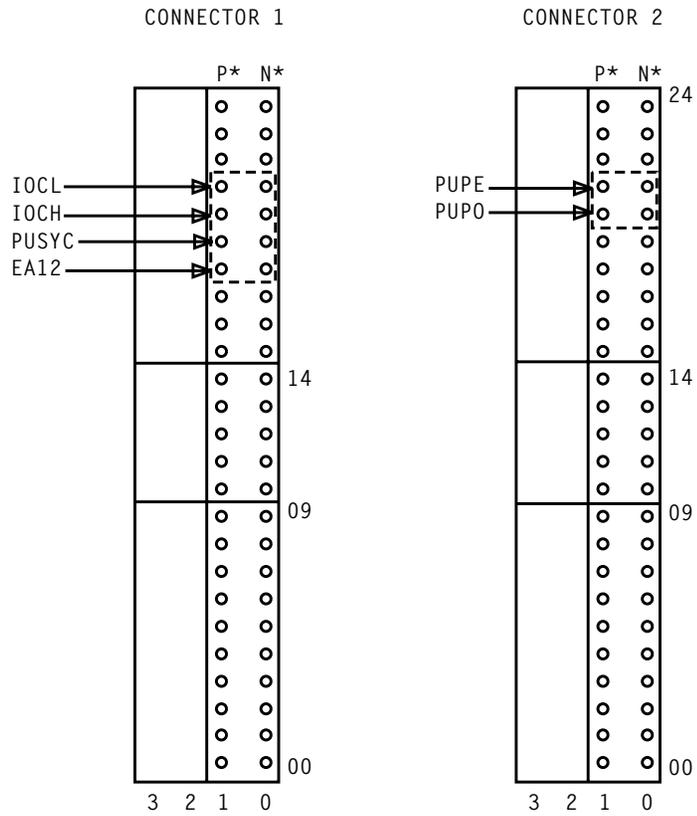
DIF or DIFE (24-31)
BUS 0   180-073   180-085
BUS 1   180-221   180-233

PUC
BUS 0   080-073   080-085
BUS 1   080-221   080-233

* P FOR POSITIVE LEAD AND
  N FOR NEGATIVE LEAD

tpa 840179/03

2V   200 NS

NORMAL PULSE AT DRIVER

2V   200 NS

NORMAL PULSE 500 FEET FROM DRIVER

tpa 840179/04
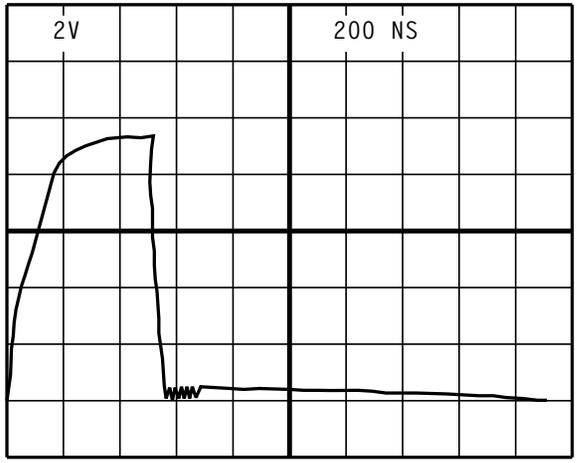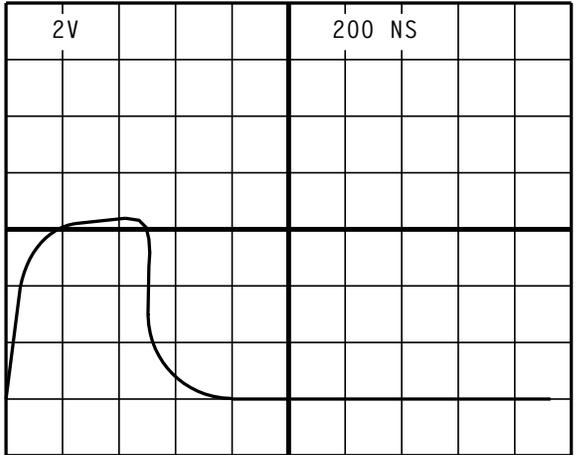
Restore Peripheral Unit BUS to Service

Note: Restore message will cause PUB diagnostic to be run.

1. At 1B Processor MTC terminal, enter message
   RST:PUB a!

   where a = Bus member number (0 or 1)

   Response: **RST: PUB** a **COMPL**

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 6.
   If **No**, go to Step 3.

3. Output message indicates trouble is in?

   If **nongrowth PUB equipment**, go to Step 4.
   If **peripheral growth equipment**, go to Step 5.

4. Clear PUB diagnostic failure; ATP required. [TOP 234-351-015].

5. Refer trouble to installer for resolution; ATP required.

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Remove TMSP Controller from Service

1. At 1B Processor MTC terminal, enter message
   RMV:TMSP a,**CONTR** b**!**

   where   a = TMSP Member number
            b = CONTR number (0 or 1)

   Response: **RMV: TMSP** a**, CONTR** b **COMPL**

   where   a = TMSP Member number
            b= CONTR number (0 or 1).

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 6.
   If **No**, go to Step 3.

3. Output indicates?

   If **invalid input message**, go to Step 5.
   If **system denied request**, go to Step 4.

4. Determine why request was denied, resolve, and repeat from Step 1.

5. Repeat from Step 1 to ensure message was entered correctly.

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Restore TMSP Controller to Service

Note: Restore message will cause TMSP CONTR diagnostic to be run.

1. At 1B Processor MTC terminal, enter message
    RST:TMSP a,**CONTR** b!

    where   a = TMSP Member number
              b = CONTR number (0 or 1)

    Response: **DGN: TMSP** a**, CONTR** b **COMPLETED ATP MSG COMPL**
                RST: TMSP a**, CONTR** b **COMPL**

2. Was printout received per the response message in Step 1?

    If **Yes**, go to Step 6.
    If **No**, go to Step 3.

3. Is failure a result of TELCO/INST instruction?

    If **Yes**, go to Step 5.
    If **No**, go to Step 4.

4. Clear diagnostic failure; ATP required [TOP 234-151-011].

5. Refer trouble to installer for resolution; ATP required.

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Install BWM

1. At 3B MCRT, enter message **OP:STATUS:LISTDIR,FN"**/etc/bwm"!

2. Is BWM to be installed, listed in AAxx-xxxx format?

   If **Yes**, go to Step 5.
   If **No**, go to Step 3.

3. At 3B MCRT, enter message **COPY:BWM** xxxxxx**!**

   where xxxxxx = BWM, CFT, or DMT number to be installed

4. Wait for the following printout:

   MOVING /etc/bwm/xxxxxx **TO /etc/bwm/**AAAxx-xxxx
   COPY BWM COMPLETED

5. At 3B MCRT, press **NORM DISP (PF2)** key and enter **1960** in command mode to obtain display page 1960.

6. At 3B MCRT, enter **9000,**AAAxx-xxxx in command mode to select BWM.

   where AAAxx-xxxx = BWM number to be installed

7. At 3B MCRT, enter **9260,SCANS** in command mode to obtain printout of SCANS file.

8. Using printout, determine if special instructions are required for this BWM. Save printout for later use if special procedures required after BWM is applied.

9. If back out is necessary during this procedure, contact next higher support group IMMEDIATELY.

10. At 3B MCRT, enter **9010** in command mode to verify BWM.

11. Wait for **COMPLETED** message to be received in **RESPONSE** field.

12. Was **UPD VFY COMPLETED** message displayed in **RESPONSE** field?

    If **Yes**, go to Step 14.
    If **No**, go to Step 13.

13. Determine cause and resolve; repeat from Step 9.

14. At 3B MCRT, enter **9310** in command mode to execute APPLY section.

15. Wait for **COMPLETED** message to be received in **RESPONSE** field.

16. Was **COMPLETED: APPLY SECTION** message displayed in **RESPONSE** field?

    If **Yes**, go to Step 18.
    If **No**, go to Step 17.

17. Determine cause and resolve; repeat from Step 14.

18. At 3B MCRT, enter **9320** in command mode to execute SOAK section.

    Response: -----------UPD PRINT SOAK TIMER IN PROGRESS-------------
                 BWM NAME = AAAxx-xxxx   REMAINING SOAK PERIOD = (HH:MM)

                    CURRENT SOAK TIMER
                 START   (DD MM dd h:mm:ss yy)
                 END   (DD MM dd hh:mm:ss YY)
                 DURATION (HH:MM)

                    PREVIOUS SOAK TIMER
                 START   (DD MM dd h:mm:ss YY)
                 END   (DD MM dd hh:mm:ss YY)
                 DURATION (HH:MM)
                 ------------END OF BWM SOAK TIMER INFORMATION-------------
                 UPD PRINT SOAK TIMER COMPLETED

> ***Note:*** The **END** field under **CURRENT SOAK TIMER** section indicates the time
> **SOAK PERIOD COMPLETED: SOAK SECTION** response should be received.

19. Was the following response displayed in **RESPONSE** field at the end of the soak period?

   Response: **SOAK PERIOD COMPLETED: SOAK SECTION**

   If **Yes**, go to Step 21.
   If **No**, go to Step 20.

20. Determine cause and resolve; repeat from Step 18.

21. Obtain printout saved in Step 7 and determine if special instructions are required to be performed before executing OFC section.

22. Are special instructions required to be performed before executing OFC section?

   If **Yes**, go to Step 23.
   If **No**, go to Step 24.

23. Perform the special instructions as required. After completion, continue at with the next step.

24. At 3B MCRT, enter **9330** in command mode to execute OFC section.

25. Wait for **COMPLETED** message to be received in **RESPONSE** field.

   Note: Time to finish OFC section is dependent on BWM size.

26. Was **COMPLETED: OFFICIAL SECTION** message displayed in **RESPONSE** field?

   If **Yes**, go to Step 27.
   If **No**, go to Step 26.

27. Determine cause and resolve; repeat from Step 24.

28. Obtain printout saved in Step 7 and determine if special instructions are required to be performed at this time.

29. Are special instructions required to be performed at this time?

    If **Yes**, go to Step 30.
    If **No**, go to Step 31.

30. Perform the special instructions as required. After completion, continue at with the next step.

31. Are more BWMs to be entered at this time?

    If **Yes**, go to Step 32.
    If **No**, go to Step 33.

32. Repeat from Step 1.

33. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Determine if Office is Stable

> ***Note:*** Figure 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.

1. Using Figure 1 for guidelines and office printouts, determine if office meets stable condition.

2. Does office meet stable condition?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Contact next higher support group for resolution. After resolving, procedure may continue.

4. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

- INTERRUPTS

  1B PROCESSOR
  $\leq$ 1 PER MEMBER NUMBER PER DAY
  $\leq$ 3 PER DAY TOTAL

  TMS, NC, PUB, IO, CCIS
  $\leq$ 2 PER MEMBER NUMBER PER DAY
  $\leq$ 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)
  $\leq$ 3 PER DAY

  PBFRs
  $\leq$ 1 PER DAY

- INTERJECTS
  $\leq$ 2 PER MEMBER NUMBER PER DAY
  $\leq$ 5 PER DAY TOTAL

- BASE LEVEL
  ANALYZED, CORRECTED AND/OR UNDERSTOOD

- PHASES/DUPLEX FAILURES

  DIRECTED PHASE 1
  $\leq$ 1 IN 2 WEEKS

  SYSTEM PHASE 1
  $\leq$ 1 IN 1 WEEK

  PHASE 2 OR 3
  $\leq$ 1 IN 4 WEEKS

  DT, VIF, OR EST
  $\leq$ 1 IN 4 WEEKS

  TGR/TER LINK PAIR
  $\leq$ 1 IN 2 WEEKS

- OUT-OF-SERVICE UNITS

  NUMBER OUT-OF-SERVICE
  $\leq$ 5 AT ANYTIME

  CRITICAL UNITS:
  CC   DIF   PS   TMSP
  CS   LN   PUB   TSI/XTSI
  CU   NCLK   SP

- 3B COMPUTER

  INTERRUPTS
  $\leq$ 3 PER DAY

  PHASE 1
  $\leq$ 1 IN 4 WEEKS

  PHASE 2 OR 3
  $\leq$ 1 IN 4 WEEKS

  CNI RING INIT
  $\leq$ 1 IN 2 WEEKS

  CNI RING TRANSPORT ERRORS
  $\leq$ 2 PER DAY

  DLNE ERRORS
  $\leq$ 1 PER DAY

Figure 1.   Office Stability Guidelines

Ensure all Units are In-Service

1. At 1B Processor MTC terminal, enter message **OP:OOSUNITS!**

2. Does printout list any units?

   If **Yes**, go to Step 3.
   If **No**, go to Step 11.

3. Contact next higher support group to determine if any units in printout must be restored before continuing with procedure.

4. Do any units need to be restored?

   If **Yes**, go to Step 5.
   If **No**, go to Step 11.

     Note: Variables c and d are only to be used if submember is listed.

5. At 1B Processor MTC terminal, enter message for one listed unit **RST:**a b[**,**c d]!

   where   a = Listed unit type
             b = Listed member number
             c = Submember type (if listed)
             d = Submember number (if listed)

   Response: **RST**: a b [c d] **COMPLETED**

6. Was printout received per the response message in Step 5.

   If **Yes**, go to Step 8.
   If **No**, go to Step 7.

7. Clear failure per TABLE A; ATP required. Repeat from Step 5.

TABLE A			
UNIT TYPE	**TROUBLE-CLEARING VOLUME**	**UNIT TYPE**	**TROUBLE-CLEARING VOLUME**
1B Processor	234-351-004	MFS	234-151-041
3B20D Model 1	254-301-812	MISC A, B, C	234-151-043
	254-301-813	NCLK	234-151-013
3B20D Model 2/3	254-302-812	PCDF J5A007B	234-351-025
3B21D	254-303-107	PCDF J5A007C	234-351-026
ADS (TUC and DUS)	234-351-010	PUBB	234-351-015
API	234-351-016	SCS	234-151-077
AUB	234-351-010	SP1	234-151-031
CNI	234-151-120	SP2	234-151-032
DIF	234-151-055	TGR	234-151-033
DT	234-151-045	TMS	234-151-011
EST	234-151-050	TSI	234-151-012
IO J5A006A	234-351-020	VIF	234-151-025
IO J5A006C	234-351-021	XTSI	234-351-011
IO J5A006D	234-351-022		

8. Are more units listed (Step 4)?

    If **Yes**, go to Step 9.
    If **No**, go to Step 10.

9. Repeat Step 5 for next listed unit.

10. Repeat from Step 1.

11. At 3B MCRT, enter message **OP:OOS!**

12. Does printout list any units?

    If **Yes**, go to Step 13.
    If **No**, go to Step 21.

13. Contact next higher support group to determine if any units in printout must be restored before continuing with procedure.

14. Do any units need to be restored?

   If **Yes**, go to Step 15.
   If **No**, go to Step 21.

15. At 3B MCRT, enter message for one listed unit **RST:**a b**!**

   where   a = Listed unit type
              b = Listed member number.

   Response: **RST: a b COMPLETED**

16. Was printout received per the response message in Step 15?

   If **Yes**, go to Step 18.
   If **No**, go to Step 17.

17. Clear failure per TABLE A; ATP required. Repeat from Step 15

18. Are more units listed (Step 14)?

   If **Yes**, go to Step 19.
   If **No**, go to Step 20.

19. Repeat Step 15 for next listed unit.

20. Repeat from Step 11.

21. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Remove Power from Network Clock Cable Drivers Associated with Growth XTSI

Note: On the Network Clock frame, clock cable drivers (Circuit Pack **FB211**) are powered from two separate 9-volt sources with the fuses arranged in a grid pattern. The only means for removing power from circuit pack is through removal of the two assigned 9-volt fuses.

1. Identify **A** and **B** fuses associated with XTSI [TABLE A or TABLE B].

    Caution: Ensure that correct fuses for intended circuit pack are being removed. Removal of incorrect fuses could cause loss of service.

2. At network clock fuse panel in appropriate bay, remove fuses identified in Step 1.

3. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**
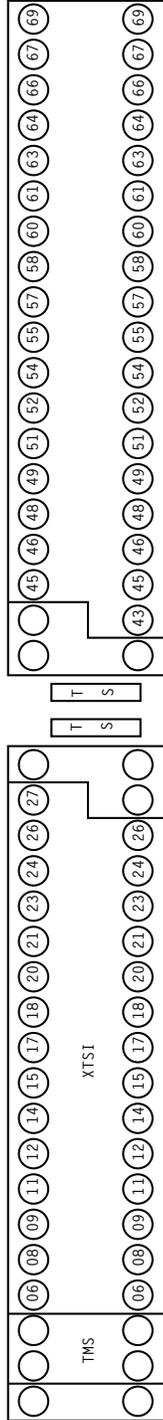
Figure 1.   Coax Jack Panels at Top of NCLK Bay (Top Row - Level 81, Bottom Row - Level 80

Table A						
FB211 Pack/Fuse/User Assignment For Offices **Equipped With (XTSI, CRTSIs and Other Types)**						
FB211 Pack LOC	**Fuse Desig**		**EQL***	**FB211 Pack LOC**	**Fuse Desig**		**EQL***
74-04	**A1**	**B6**	81,12	74-50	**A8**	**B4**	80,46
74-05	**A3**	**B5**	80,12	74-51	**A8**	**B3**	81,48
74-06	**A3**	**B6**	81,14	74-52	**A9**	**B4**	80,48
74-07	**A6**	**B5**	80,14	74-54	**A9**	**B3**	81,49
74-08	**A6**	**B6**	81,15	74-55	**A2**	**B4**	80,49
74-09	**A4**	**B5**	80,15	74-56	**A2**	**B3**	81,51
74-10	**A4**	**B6**	81,17	74-57	**A5**	**B4**	80,51
74-11	**A7**	**B5**	80,17	74-58	**A5**	**B3**	81,52
74-12	**A7**	**B6**	81,18	74-59	**A7**	**B4**	80,52
74-13	**A5**	**B5**	80,18	74-60	**A7**	**B3**	81,54
74-14	**A5**	**B6**	81,20	74-61	**A4**	**B4**	80,54
74-15	**A2**	**B5**	80,20	74-62	**A4**	**B3**	81,55
74-16	**A2**	**B6**	81,21	74-63	**A6**	**B4**	80,55
74-17	**A9**	**B5**	80,21	74-64	**A6**	**B3**	81,57
74-19	**A9**	**B6**	81,23	74-65	**A3**	**B4**	80,57
74-20	**A8**	**B5**	80,23	74-66	**A3**	**B3**	81,58
74-21	**A8**	**B6**	81,24	74-67	**A1**	**B4**	80,58
74-22	**A8**	**B7**	80,24	78-27	**A4**	**B7**	81,06
74-23	**A8**	**B8**	81,26	78-28	**A4**	**B8**	80,06
74-24	**A9**	**B7**	80,26	78-29	**A2**	**B7**	81,08
74-25	**A9**	**B8**	81,27	78-30	**A2**	**B8**	80,08
74-46	**A9**	**B2**	80,43	78-31	**A5**	**B7**	81,09
74-47	**A9**	**B1**	81,45	78-32	**A5**	**B8**	80,09
74-48	**A8**	**B2**	74,59	78-33	**A7**	**B7**	81,11
74-49	**A8**	**B1**	81,46	78-34	**A7**	**B8**	80,11
* EQL numbers (not stamped on coax jack panels) are equipment locations of coax jacks which feed clock signals to XTSI frames. See Figure 1. Assignments for these positions are office engineered and XTSI member number is stamped adjacent to assigned output (coax jack). EQL = Equipment Location						

Table B						
FB211 Pack/Fuse/User Assignment For Offices **Equipped With XTSIs and CRTSIs Only**						
FB211 Pack LOC	**Fuse Desig**		**User***	**FB211 Pack LOC**	**Fuse Desig**		**User***
74-04	**A1**	**B6**	TSI 16,17	74-21	**A8**	**B6**	TSI 48,49
74-05	**A3**	**B5**	TSI 18,19	74-22	**A8**	**B7**	TSI 50,51
74-06	**A3**	**B6**	TSI 20,21	74-23	**A8**	**B8**	TSI 52,53
74-07	**A6**	**B5**	TSI 22,23	74-24	**A9**	**B7**	TSI 54,55
74-08	**A6**	**B6**	TSI 24,25	74-25	**A9**	**B8**	TSI 56,57
74-09	**A4**	**B5**	TSI 26,27	74-46	**A9**	**B2**	TSI 58,59
74-10	**A4**	**B6**	TSI 28,29	74-47	**A9**	**B1**	TSI 60,61
74-11	**A7**	**B5**	TSI 30,31	74-48	**A8**	**B2**	TSI 62,63
74-12	**A7**	**B6**	TSI 32,33	74-28	**A4**	**B8**	TSI 02,03
74-13	**A5**	**B5**	TSI 34,35	74-29	**A2**	**B7**	TSI 04,05
74-14	**A5**	**B6**	TSI 36,37	74-30	**A2**	**B8**	TSI 06,07
74-15	**A2**	**B5**	TSI 38,39	74-31	**A5**	**B7**	TSI 08,09
74-16	**A2**	**B6**	TSI 40,41	74-32	**A5**	**B8**	TSI 10,11
74-17	**A9**	**B5**	TSI 42,43	74-33	**A7**	**B7**	TSI 12,13
74-19	**A9**	**B6**	TSI 44,45	74-34	**A7**	**B8**	TSI 14,15
74-20	**A8**	**B5**	TSI 46,47				
* In USER column, TSI can be either XTSI or CRTSI.						

Recent Change and Verify Member Equipage

Caution: Calling up RC form will cause all CRT data to be cleared.

1. At 1B Processor MTC terminal, enter message **OP:RCFORM 700!**

   Response: CRT displays RC Form 700.

2. Fill in blanks on RC Form 700 per the following and enter message:

   RC:UTYPE;CHG;OPT(EQP,GROW),a**:**   **UTYN** b**,**

   ORNU c**,**

                          OLD NEW
   MEMN d**,**   **ME (** e **,** e **),**
                          OLD NEW
   SUBMEM ----,   **SME (--- , ---),**

   REMARKS----------------------!

   where   a = **FTA**
             b = **XTSI** (for XTSI equipage) or **SP** (for In-Band capable)
             c = RC order number
             d = Member number of growth frame/SP
             e = **UNEQ,GROW** or
                GROW,SGRO or
                SGRO,OPER

3. Was **RC ORNU** c **ACTIVATED** message received?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Determine cause for rejection; repeat from Step 1 with correct input message.

5. At 1B Processor MTC terminal, enter message
   VER:UTYPE:a b**,ME!**

   where   a = **XTSI** or **SP**
               b = Member number of growth frame/SP

   Response: **VER:UTMN;OPT(ME),CUR:**   **FLN** d**,**   **UTYN** a**,**

                  MEMN b**,**   **ME** c**,**

           where   a = **XTSI** or **SP**
                      b = Member number of growth frame/SP
                      c = Entered member equipage
                      d = Floor location number

6. Is **ME** set to entered member equipage?

   If **Yes**, go to Step 9.
   If **No**, go to Step 7.

7. If input entries are in error and require correcting, remove recent change from system using RC Form 701.

8. Repeat from Step 1, using corrected message format.

9. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Diagnose XTSI Controller Specifying Phases 1 and 2 Growth

1. At 1B Processor MTC terminal, enter message
    DGN:XTSI a**,CONTR** b**:PUB** c**,PH 1-2,GROWTH!**

    where   a = XTSI member number
                b = XTSI controller (0 or 1)
                c = PUB number (0 or 1).

    Response: **DGN: XTSI** a**, CONTR** b **:PUB** c **PH 1 CATP (00000000 0000400**d**) MSG STARTED**
                    DGN: XTSI a**, CONTR** b **:PUB** c **PH 2 CATP (00000000 0000400**d**) MSG IP**
                    DGN: XTSI a**, CONTR** b **COMPLETED CATP (00000000 0000400**d**) MSG COMPL**

            where   a = XTSI member number
                       b = XTSI controller (0 or 1)
                       c = PUB number (0 or 1)
                       d = CATP bit
                            2 (for PUB 0) or
                            1 (for PUB 1).

2. Was printout received per the response message in Step 1?

    If **Yes**, go to Step 6.
    If **No**, go to Step 3.

3. Is failure a result of TELCO/INST instruction?

    If **Yes**, go to Step 5.
    If **No**, go to Step 4.

4. Clear diagnostic failure [TOP 234-351-011]; repeat from Step 1.

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

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Diagnose XTSI Controller Specifying Phases 1 Through 9 and Growth

1. At 1B Processor MTC terminal, enter message
    DGN:XTSI a,**CONTR** b**:PUB** c,**PH 1-9,GROWTH!**

    where   a = XTSI member number
             b = XTSI controller (0 or 1)
             c = PUB number (0 or 1).

    Response: **DGN: XTSI** a**, CONTR** b **:PUB** c **PH 1 CATP (00000000 0000400**d**) MSG STARTED**
                 DGN: XTSI a**, CONTR** b **:PUB** c **PH 2 CATP (00000000 0000400**d**) MSG IP**
                 DGN: XTSI a**, CONTR** b **:PUB** c **PH 4 CATP (00000000 0000000**d**) MSG IP**
                 DGN: XTSI a**, CONTR** b**: PUB** c **PH 5 CATP (00000000 00004000) MSG IP**
                 DGN: XTSI a**, CONTR** b **:PUB** c **PH 6 CATP (00000000 0000000**d**) MSG IP**
                 DGN: XTSI a**, CONTR** b **:PUB** c **PH 7 ATP MSG IP**
                 DGN: XTSI a**, CONTR** b **:PUB** c **PH 9 ATP MSG IP**
                 DGN: XTSI a**, CONTR** b **COMPLETED CATP (00000000 0000400**d**) MSG COMPL**

    where   a = XTSI member number
              b = XTSI controller (0 or 1)
              c = PUB number (0 or 1)
              d = CATP bit
                  2 (for PUB 0) or
                  1 (for PUB 1).

2. Was printout received per the response message in Step 1?

    If **Yes**, go to Step 6.
    If **No**, go to Step 3.

3. Is failure a result of TELCO/INST instruction?

    If **Yes**, go to Step 5.
    If **No**, go to Step 4.

4. Clear diagnostic failure [TOP 234-351-011]; repeat from Step 1.

    Note: If phases 4, 5 and/or 6 fail, intraframe clock cables should be checked for
    proper seating.

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

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Diagnose XTSI Controller Specifying Phases 1 Through 15 and Growth

1. At 1B Processor MTC terminal, enter message
    DGN:XTSI a**,CONTR** b**:PH 1-15,GROWTH!**

    where   a = XTSI member number
             b = XTSI controller (0 or 1)

    Response: **DGN: XTSI** a**, CONTR** b **PH 1 ATP MSG STARTED**
                DGN: XTSI a**, CONTR** b **PH 2 ATP MSG IP**
                DGN: XTSI a**, CONTR** b **PH 4 ATP MSG IP**
                DGN: XTSI a**, CONTR** b **PH 5 ATP MSG IP**
                DGN: XTSI a**, CONTR** b **PH 6 ATP MSG IP**
                DGN: XTSI a**, CONTR** b **PH 7 ATP MSG IP**
                DGN: XTSI a**, CONTR** b **PH 9 ATP MSG IP**
                DGN: XTSI a**, CONTR** b **PH 12 ATP MSG IP**
                DGN: XTSI a**, CONTR** b **PH 13 ATP MSG IP**
                DGN: XTSI a**, CONTR** b **PH 14 ATP MSG IP**
                DGN: XTSI a**, CONTR** b **PH 15 ATP MSG IP**
                DGN: XTSI a**, CONTR** b **COMPLETED ATP MSG COMPL**

2. Was printout received per the response message in Step 1?

    If **Yes**, go to Step 6.
    If **No**, go to Step 3.

3. Is failure a result of TELCO/INST instruction?

    If **Yes**, go to Step 5.
    If **No**, go to Step 4.

4. Clear diagnostic failure [TOP 234-351-011]; repeat from Step 1.

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

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify Software Version Pointers and Equipage
For Even-Numbered XTSI

1. At 1B Processor MTC terminal, enter message
   VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1 a**!** for even-numbered growth XTSI.

   where a = XTSI member number

   Response: **VER:MISC;OPT(SUXTSI):**   **XTSI MEMN** a,

XTCN	0	1									
XTCHV	-,	-,									
XTCSV	0,	0,									
D3UN	0	1	2	3	4	5	6	7			
D3UEQ	O,	b,	b,	b,	b,	b,	b,	b,			
D3UHV	-,	-,	-,	-,	-,	-,	-,	-,			
D3USV	0,	0,	0,	0,	0,	0,	0,	0,			
SPUN	0	1	2	3	4	5	6	7	8	9	10	11
SPUEQ	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUHV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUSV	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,

   where   a = XTSI member number.
            b = **U** for UNEQ, **G** for GROW, **S** for SGRO, or **O** for OPER.

2. Are message format and member identification correct per the response message in Step 1?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Determine cause and resolve; repeat from Step 1.

4. Using printout and the response message in Step 1, verify all fields for **XTCSV**, **D3USV** and **SPUSV** are set to **0**.

5. Are all fields set to **0**?

   If **Yes**, go to Step 7.
   If **No**, go to Step 6.

6. Refer problem to installer to determine error and decide on corrective action. After resolving, repeat from Step 1.

7. Using printout and the response message in Step 1, verify equipage in **D3UEQ** field for growth D3U is **U**.

8. Is equipage for growth D3U set to **U**?

   If **Yes**, go to Step 10.
   If **No**, go to Step 9.

9. Refer problem to installer to determine error and decide on corrective action. After resolving, repeat from Step 1.

10. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Back up Current XTSI Files

Note: Input messages must be entered one at a time in sequence from 1 through 5.

Caution: Ensure correct SFN and DFN numbers are entered to prevent wrong file being copied.

1. At 1B Processor MTC terminal, enter one of the following messages:

   1. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 1!**
   2. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 4,DFN 5!**
   3. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 8,DFN 9!**
   4. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 12,DFN 13!**
   5. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 16,DFN 17!**

   where a = Even growth XTSI member number.

2. Was **COMPLETE** message received?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Refer trouble to installer for resolution; after resolving, repeat from Step 1 by entering same message in error.

4. Have all input messages in Step 1 been entered?

   If **Yes**, go to Step 6.
   If **No**, go to Step 5.

5. Repeat from Step 1 for next input message.

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify XTSI Files Stored in 3B Computer

Note: This command will take from 5 to 15 minutes to complete, depending on system call load.

1. At 3B MCRT, enter message **EXC:ENVIR:UPROC,FN "/tools/prxtsihdrs"**

   Response:

   EXC ENVIR UPROC /tools/prxtsihdrs STARTED

File(s)	Hash	Sums	Size		Header Date	Issue
xtsi/fdt/xfdtver0	0000	**xxxx**	0000	nnnn	**C**Ann/nn/nn	nn:nn:nn**C**<nn>**d.efg**
xtsi/fdt/xfdtver1	0000	**xxxx**	0000	nnnn	**C**Ann/nn/nn	nn:nn:nn**C**<nn>**d.efg**
xtsi/xtc/xoprver0	0000	**xxxx**	0000	nnnn	**O**Ann/nn/nn	nn:nn:nn**C**<nn>**d.efg**
xtsi/xtc/xoprver1	0000	**xxxx**	0000	nnnn	**O**Ann/nn/nn	nn:nn:nn**C**<nn>**d.efg**
xtsi/xtc/xdgnver0	0000	**xxxx**	0000	nnnn	**D**Ann/nn/nn	nn:nn:nn**C**<nn>**d.efg**
xtsi/xtc/xdgnver1	0000	**xxxx**	0000	nnnn	**D**Ann/nn/nn	nn:nn:nn**C**<nn>**d.efg**
xtsi/d3u/doprver0	0000	**xxxx**	0000	nnnn	**O**Ann/nn/nn	nn:nn:nn**U**<nn>**d.efg**
xtsi/d3u/doprver1	0000	**xxxx**	0000	nnnn	**O**Ann/nn/nn	nn:nn:nn**U**<nn>**d.efg**
xtsi/d3u/ddgnver0	0000	**xxxx**	0000	nnnn	**D**Ann/nn/nn	nn:nn:nn**U**<nn>**d.efg**
xtsi/d3u/ddgnver1	0000	**xxxx**	0000	nnnn	**D**Ann/nn/nn	nn:nn:nn**U**<nn>**d.efg**
xtsi/spu/soprver0	0000	**xxxx**	0000	nnnn	**O**Ann/nn/nn	nn:nn:nn**S**<nn>**d.efg**
xtsi/spu/soprver1	0000	**xxxx**	0000	nnnn	**O**Ann/nn/nn	nn:nn:nn**S**<nn>**d.efg**
xtsi/spu/sdgnver0	0000	**xxxx**	0000	nnnn	**D**Ann/nn/nn	nn:nn:nn**S**<nn>**d.efg**
xtsi/spu/sdgnver1	0000	**xxxx**	0000	nnnn	**D**Ann/nn/nn	nn:nn:nn**S**<nn>**d.efg**

   EXC ENVIR UPROC /tools/prxtsihdrs COMPLETED SEGMENT 2

   xxxx = Checksum/Hashsum value for file in hex

   In Header Date Column:
   C means FDT file
   D means DGN file
   O means OPR file

   In Issue Column:
   C means XTC subunit
   U means D3U subunit
   S (Don't Care)
   d.efg is file issue number

2. Using printout and the response above (Step 1), request next higher support group to verify that latest XTSI operating and diagnostic files are 3B computer memory.

3. Save printout for later use to verify that XTSI subunits are running on latest software.

4. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Copy New Files from 3B Computer to Growth XTSI

> ***Note:*** Input messages must be entered one at a time in sequence from 1 through 7.
> Each copy command may take approximately 3 minutes.

1. At 1B Processor MTC terminal, enter one of the following messages:

   1. **COPY:XTSI** a**,CONTR 0,XTC,FDT,SVN 0,DVN 0;UCL!**
   2. **COPY:XTSI** a**,CONTR 0,XTC,OPR,SVN 0,DVN 0;UCL!**
   3. **COPY:XTSI** a**,CONTR 0,XTC,DGN,SVN 0,DVN 0;UCL!**
   4. **COPY:XTSI** a**,CONTR 0,D3U,OPR,SVN 0,DVN 0;UCL!**
   5. **COPY:XTSI** a**,CONTR 0,D3U,DGN,SVN 0,DVN 0;UCL!**
   6. **COPY:XTSI** a**,CONTR 0,SPU,OPR,SVN 0,SVN 0;UCL!**
   7. **COPY:XTSI** a**,CONTR 0,SPU,DGN,SVN 0,SVN 0;UCL!**

   where a = Even growth XTSI member number.

2. Was **TASK COMPLETED** message received?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Refer trouble to installer for resolution; after resolving, repeat from Step 1 by entering same message in error.

4. Have all input messages in Step 1 been entered?

   If **Yes**, go to Step 6.
   If **No**, go to Step 5.

5. Repeat from Step 1 for next input message.

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Copy Files to Remaining File Locations in CIA0 Pack

Note: Input messages must be entered one at a time in sequence from 1 through 16.

Caution: Ensure correct SFN and DFN numbers are entered to prevent wrong file being copied.

1. At 1B Processor MTC terminal, enter one of the following messages:

    1. **COPY:TSIFILE;XTSI** a,**CONTR 0,SFN 0,DFN 2!**
    2. **COPY:TSIFILE;XTSI** a,**CONTR 0,SFN 0,DFN 3!**
    3. **COPY:TSIFILE;XTSI** a,**CONTR 0,SFN 4,DFN 6!**
    4. **COPY:TSIFILE;XTSI** a,**CONTR 0,SFN 4,DFN 7!**
    5. **COPY:TSIFILE;XTSI** a,**CONTR 0,SFN 8,DFN 10!**
    6. **COPY:TSIFILE;XTSI** a,**CONTR 0,SFN 8,DFN 11!**
    7. **COPY:TSIFILE;XTSI** a,**CONTR 0,SFN 12,DFN 14!**
    8. **COPY:TSIFILE;XTSI** a,**CONTR 0,SFN 12,DFN 15!**
    9. **COPY:TSIFILE;XTSI** a,**CONTR 0,SFN 16,DFN 18!**
    10. **COPY:TSIFILE;XTSI** a,**CONTR 0,SFN 16,DFN 19!**
    11. **COPY:TSIFILE;XTSI** a,**CONTR 0,SFN 20,DFN 21!**
    12. **COPY:TSIFILE;XTSI** a,**CONTR 0,SFN 20,DFN 22!**
    13. **COPY:TSIFILE;XTSI** a,**CONTR 0,SFN 20,DFN 23!**
    14. **COPY:TSIFILE;XTSI** a,**CONTR 0,SFN 24,DFN 25!**
    15. **COPY:TSIFILE;XTSI** a,**CONTR 0,SFN 24,DFN 26!**
    16. **COPY:TSIFILE;XTSI** a,**CONTR 0,SFN 24,DFN 27!**

    where a = Even growth XTSI member number.

2. Was **COMPLETE** message received?

    If **Yes**, go to Step 4.
    If **No**, go to Step 3.

3. Refer trouble to installer for resolution; after resolving, repeat from Step 1 by entering same message in error.

4. Have all input messages in Step 1 been entered?

    If **Yes**, go to Step 6.
    If **No**, go to Step 5.

5. Repeat from Step 1 for next input message.

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify Proper Controller 0 Software is Being Run

Note: Input messages must be entered one at a time in sequence from 1 through 7.

1. At 1B Processor MTC terminal, enter one of the following messages:

    1. **DUMP:TSIFILE;XTSI** a,**CONTR 0,FILE 0,HADR 0,L 20!** /xtc/fdtver0
    2. **DUMP:TSIFILE;XTSI** a,**CONTR 0,FILE 4,HADR 0,L 20!** /xtc/oprver0
    3. **DUMP:TSIFILE;XTSI** a,**CONTR 0,FILE 8,HADR 0,L 20!** /xtc/dgnver0
    4. **DUMP:TSIFILE;XTSI** a,**CONTR 0,FILE 12,HADR 0,L 20!** /d3u/oprver0
    5. **DUMP:TSIFILE;XTSI** a,**CONTR 0,FILE 16,HADR 0,L 20!** /d3u/dgnver0
    6. **DUMP:TSIFILE;XTSI** a,**CONTR 0,FILE 20,HADR 0,L 20!** /spu/oprver0
    7. **DUMP:TSIFILE;XTSI** a,**CONTR 0,FILE 24,HADR 0,L 20!** /spu/dgnver0

    where a = Even growth XTSI member number

    Response:

    DUMP:TSIFILE XTSI a **CONTR 0 FILE** b **HADR 0 L 20:**
            COMPLETE
    000000   xxxx   0000   ----   0000   ----   yyyy   ----   ----
    000008   ----   ----   ----   ----   --zz   ----   ----   ----
    000010   3e3f   **3d--   0000   3**g**00**

a	=	XTSI member number
b	=	File number (0, 4, 8, 12, 16, 20, or 24)
xxxx	=	Checksum/Hashsum value for this file in hex
yyyy	=	Type of file:
		4341 (for fdtver0) or
		4441 (for dgnver0) or
		4F41 (for oprver0)
zz	=	Type of subunit:
		43 (for XTC) or
		53 (for SPU) or
		55 (for D3U)
e f d g	=	File issue number (in the format d.efg)

2. Was printout received per the response message in Step 1?

    If **Yes**, go to Step 4.
    If **No**, go to Step 3.

3. Determine cause and resolve; repeat from Step 1.

4. Using printout and above response (Step 1), compare checksum value in word 0 with associated checksum value from 3B printout saved earlier [DP-538]. Record discrepancy for later use.

5. Using printout and above response (Step 1), compare software release issue in words 10, 11 and 13 with associated software release issue from 3B printout saved earlier [DLP-538]. Record discrepancy for later use.

6. Using printout and above response (Step 1), verify type of file data in word 5 for associated message inputted. Record discrepancy for later use.

7. Using printout and above response (Step 1), verify subunit type in word C (hex) for associated message inputted. Record discrepancy for later use.

8. Have all messages in Step 1 been entered?

   If **Yes**, go to Step 10.
   If **No**, go to Step 9.

9. Repeat from Step 1, for next input message.

10. Were data words correct?

   If **Yes**, go to Step 12.
   If **No**, go to Step 11.

11. Refer error(s) to installer for resolution; after resolving, repeat from Step 1.

12. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Recent Change and Verify Submember Equipage

Caution: Calling up RC form will cause all CRT data to be cleared.

1. At 1B Processor MTC terminal, enter message **OP:RCFORM 700!**

    Response: CRT displays RC Form 700.

2. Fill in blanks on RC Form 700 per the following and enter message:

    RC:UTYPE;CHG;OPT(EQP,GROW),a**:**   **UTYN** b**,**

    ORNU c**,**
    　　　　　　　　　　　OLD NEW
    MEMN d**,**   **ME (--- , ---),**
    　　　　　　　　　　　OLD NEW
    SUBMEM e**,**   **SME (** f **,** f **),**

    REMARKS----------------------!

    where   a = **FTA**
    　　　　　b = **TMSP**
    　　　　　c = RC order number
    　　　　　d = Member number of growth associated frame.
    　　　　　e = Submember name:
    　　　　　　= **COMBLK**(**0** to **3**) (for CONT 0, Mem Blk 0-3)
    　　　　　　= **C1MBLK**(**0** to **3**) (for CONT 1, Mem Blk 0-3)
    　　　　　f = Submember equipage:
    　　　　　　= **UNEQ,GROW** or
    　　　　　　= **GROW,SGRO** or
    　　　　　　= **SGRO,OPER**

3. Was **RC ORNU** c **ACTIVATED** message received?

    If **Yes**, go to Step 5.
    If **No**, go to Step 4.

4. Determine cause for rejection and repeat from Step 1, with correct input message.

5. At 1B Processor MTC terminal, enter message
VER:UTYPE:TMSP b**,SME** f**!**

where   a = Member number of growth associated frame
b = SME index number:
  = CONTR 0 Mem Blk 1 = **49**
  = CONTR 0 Mem Blk 2 = **50**
  = CONTR 0 Mem Blk 3 = **51**
  = CONTR 1 Mem Blk 1 = **53**
  = CONTR 1 Mem Blk 2 = **54**
  = CONTR 1 Mem Blk 3 = **55**

Response:

VER:UTMN;OPT(ME),CUR: **FLN** a**,**   **UTYN TMSP,**

MEMN b**,**   **ME** c**,**

SUBMEM d**,**   **SME** e**,**

where   a = Floor location number
b = Member number of growth associated frame
c = **GROW**, **SGRO**, or **OPER**
d = SME index number:
  = CONTR 0 Mem Blk 1 = **49**
  = CONTR 0 Mem Blk 2 = **50**
  = CONTR 0 Mem Blk 3 = **51**
  = CONTR 1 Mem Blk 1 = **53**
  = CONTR 1 Mem Blk 2 = **54**
  = CONTR 1 Mem Blk 3 = **55**
e = Entered submember equipage

6. Are output message format and recent changed data correct?

If **Yes**, go to Step 8.
If **No**, go to Step 7.

7. Analyze output message; repeat from Step 5 using correct data.

8. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Run PUSTAT Audit

1. At 1B Processor MTC terminal, enter message **AUD:PUSTAT!**

   Response: **AUD:PUSTAT MSG STARTED**

   Discrepancy messages

   AUD:PUSTAT MSG COMPL

2. Using printout and response message in Step 1, determine if discrepancy messages are printed for recent changed unit(s).

3. Are discrepancy messages for recent changed unit(s) listed?

   If **Yes**, go to Step 4.
   If **No**, go to Step 8.

4. At 1B Processor MTC terminal, enter message **AUD:PUSTAT!** again.

   Response: **AUD:PUSTAT MSG STARTED**
   Discrepancy messages
   AUD:PUSTAT MSG COMPL

5. Using printout and response message in Step 4, determine if discrepancy messages are printed for recent changed unit(s).

6. Is recent changed unit(s) listed?

   If **Yes**, go to Step 7.
   If **No**, go to Step 8.

7. Refer trouble to installer for resolution; after resolving, repeat from Step 1.

8. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Diagnose XTSI Controller Specifying
Phases 1 through 22 and Growth

1. At 1B Processor MTC terminal, enter message
   DGN:XTSI a,**CONTR** b:**PH 1-22,GROWTH!**

   where   a = XTSI member number
            b = XTSI controller (0 or 1).

   Response:

   DGN: XTSI a**, CONTR** b **PH 1 ATP MSG STARTED**
   DGN: XTSI a**, CONTR** b **PH 2 ATP MSG IP**
   DGN: XTSI a**, CONTR** b **PH 4 ATP MSG IP**
   DGN: XTSI a**, CONTR** b **PH 5 ATP MSG IP**
   DGN: XTSI a**, CONTR** b **PH 6 ATP MSG IP**
   DGN: XTSI a**, CONTR** b **PH 7 ATP MSG IP**
   DGN: XTSI a**, CONTR** b **PH 9 ATP MSG IP**
   DGN: XTSI a**, CONTR** b **PH 12 ATP MSG IP**
   DGN: XTSI a**, CONTR** b **PH 13 ATP MSG IP**
   DGN: XTSI a**, CONTR** b **PH 14 ATP MSG IP**
   DGN: XTSI a**, CONTR** b **PH 15 ATP MSG IP**
   DGN: XTSI a**, CONTR** b **PH 16 ATP MSG IP**
   DGN: XTSI a**, CONTR** b **PH 17 CATP (000000004 0000000020) MSG IP**
   DGN: XTSI a**, CONTR** b **PH 18 ATP MSG IP**
   DGN: XTSI a**, CONTR** b **PH 19 ATP MSG IP**
   DGN: XTSI a**, CONTR** b **PH 21 CATP (000000000 0000000020) MSG IP**
   DGN: XTSI a**, CONTR** b **PH 22 CATP (000000000 0000000020) MSG IP**
   DGN: XTSI a**, CONTR** b **COMPLETED CATP (000000004 0000000020) MSG COMPL**

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 6.
   If **No**, go to Step 3.

3. Is failure a result of TELCO/INST instruction?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Clear diagnostic failure [TOP 234-351-011]; repeat from Step 1.

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

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Restore XTSI IPUB

1. At 1B Processor MTC terminal, enter message **RST:XTSI** a**,IPUB** b**!**

   where   a = XTSI member number
             b = IPUB number (0 or 1).

   Response: **RMV: XTSI** a**, IPUB** b **COMPL** *
               DGN: XTSI a**, IPUB** b **COMPLETED ATP MSG COMPL**
               RST: XTSI a**, IPUB** b **COMPL**

               This message will not be received if IPUB is already removed from service.

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 6.
   If **No**, go to Step 3.

3. Output message indicates trouble is in?

   If **Peripheral growth equipment**, go to Step 5.
   If **Nongrowth equipment**, go to Step 4.

4. Clear diagnostic failure [TOP 234-351-011]; repeat from Step 1

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

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Diagnose TMSP Controller
Specifying Phase 8, LEVEL, CONTR, and GROWTH

1. Determine octal TMSP level assigned to associated XTSI.

XTSI MEMN	TMSP LEVEL (OCTAL)	XTSI MEMN	TMSP LEVEL (OCTAL)
0	0	32	10
2	0	34	10
4	1	36	11
6	1	38	11
8	2	40	12
10	2	42	12
12	3	44	13
14	3	46	13
16	4	48	14
18	4	50	14
20	5	52	15
22	5	54	15
24	6	56	16
26	6	58	16
28	7	60	17
30	7	62	17

2. At 1B Processor MTC terminal, enter message
   DGN:TMSP a,**CONTR** b:**PH 8,LEVEL** c,**CONTR** d,**GROWTH!**

   where   a = TMSP member number
                  b = TMSP controller (0 or 1)
                  c = octal TMSP level
                  d = Controller helper number (0 or 1)

   Response: **RMV: TMSP** a**, CONTR** b **COMPL**
                     DGN: TMSP a**, CONTR** b **, CONTR** d **PH 8 ATP MSG STARTED**
                     DGN: TMSP a**, CONTR** b **, CONTR** d **COMPLETED ATP MSG COMPL**
                     RST: TMSP a**, CONTR** b **STOPPED OS DGN**

Notes:

1. No CATP response allowed. ATP required.
2. It will take approximately 2 minutes before output messages are received.

3. Was printout received per the response message in Step 2?

   If **Yes**, go to Step 7.
   If **No**, go to Step 4.

4. Is failure a result of TELCO/INST instruction?

   If **Yes**, go to Step 6.
   If **No**, go to Step 5.

5. Clear diagnostic failure [TOP 234-351-011]; repeat from Step 1. See following Table for trouble-shooting diagnostics.

MESSAGE NUMBER	INPUT MESSAGES
1	**DGN:TMSP** a**,CONTR** b**:PH 9,TTSI** c**,TCONTR 0,RTSI** c**,RCONTR 0,GROWTH,TLP!**
2	**DGN:TMSP** a**,CONTR** b**:PH 9,TTSI** c**,TCONTR 0,RTSI** d**,RCONTR 0,GROWTH,TLP!**
3	**DGN:TMSP** a**,CONTR** b**:PH 9,TTSI** d**,TCONTR 0,RTSI** c**,RCONTR 0,GROWTH,TLP!**
4	**DGN:TMSP** a**,CONTR** b**:PH 9,TTSI** d**,TCONTR 0,RTSI** d**,RCONTR 0,GROWTH,TLP!**
5	**DGN:TMSP** a**,CONTR** b**:PH 9,TTSI** c**,TCONTR 1,RTSI** c**,RCONTR 1,GROWTH,TLP!**
6	**DGN:TMSP** a**,CONTR** b**:PH 9,TTSI** c**,TCONTR 1,RTSI** d**,RCONTR 1,GROWTH,TLP!**
7	**DGN:TMSP** a**,CONTR** b**:PH 9,TTSI** d**,TCONTR 1,RTSI** c**,RCONTR 1,GROWTH,TLP!**
8	**DGN:TMSP** a**,CONTR** b**:PH 9,TTSI** d**,TCONTR 1,RTSI** d**,RCONTR 1,GROWTH,TLP!**
a = TMSP being diagnosed (0, 1, 2, or 3)	
b = Controller number (0 or 1)	
c = Even growth XTSI member number	
d = Odd growth XTSI member number	

6. Refer trouble to installer for resolution; repeat from Step 1.

7. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Restore XTSI Controller to Service

1. At 1B Processor MTC terminal, enter message **RST:XTSI** a**,CONTR** b**!**

   where   a = XTSI member number
                  b = CONTR number (0 or 1)

   Response: **DGN: XTSI** a**, CONTR** b **COMPLETED {ATP | CATP 00000010 00000020}**
                      MSG COMPL
                      RST: XTSI a**, CONTR** b **COMPL**

2. Was printout received per the above response (Step 1)?

   If **Yes**, go to Step 6.
   If **No**, go to Step 3.

3. Output message indicates trouble is in?

   If **Peripheral growth equipment**, go to Step 5.
   If **Nongrowth equipment**, go to Step 4.

4. Clear diagnostic failure [TOP 234-351-011]; repeat from Step 1.

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

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify Nailups Are Not Assigned to Growth XTSI

1. At 1B Processor MTC terminal, enter message
   VER:NAILUP:TAN aa**00001-**bb**17127!**

   where   aa = Even growth XTSI 2-digit member number
                bb = Odd growth XTSI 2-digit member number

   Response: **VER: MESSAGE:**
                    NO DATA FOUND

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. No nailups are allowed at this time. Contact next higher support group for resolution; after resolving, repeat from Step 1.

4. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Diagnose Growth D3U Specifying Phases 1 Through 19 and GROWTH

1. At 1B Processor MTC terminal, enter message
   DGN:XTSI a,**D3U** b:**PH 1-19,GROWTH!**

   where   a = XTSI member number
                 b = Growth D3U (0 or 7).

   Response: **DGN: XTSI** a**, D3U** b **PH 1 ATP MSG STARTED**
                   DGN: XTSI a**, D3U** b **PH 2 ATP MSG IP**
                   DGN: XTSI a**, D3U** b **PH 3 ATP MSG IP**
                   DGN: XTSI a**, D3U** b **PH 4 ATP MSG IP**
                   DGN: XTSI a**, D3U** b **PH 5 ATP MSG IP**
                   DGN: XTSI a**, D3U** b **PH 6 ATP MSG IP**
                   DGN: XTSI a**, D3U** b **PH 7 ATP MSG IP**
                   DGN: XTSI a**, D3U** b **PH 8 ATP MSG IP**
                   DGN: XTSI a**, D3U** b **PH 9 ATP MSG IP**
                   DGN: XTSI a**, D3U** b **PH 10 ATP MSG IP**
                   DGN: XTSI a**, D3U** b **PH 11 ATP MSG IP**
                   DGN: XTSI a**, D3U** b **PH 12 ATP MSG IP**
                   DGN: XTSI a**, D3U** b **PH 13 ATP MSG IP**
                   DGN: XTSI a**, D3U** b **PH 14 ATP MSG IP**
                   DGN: XTSI a**, D3U** b **PH 15 {ATP|CATP (00200000 00000000)} MSG IP***
                   DGN: XTSI a**, D3U** b **PH 16 ATP MSG IP**
                   DGN: XTSI a**, D3U** b **PH 17 ATP MSG IP**
                   DGN: XTSI a**, D3U** b **PH 18 ATP MSG IP**
                   DGN: XTSI a**, D3U** b **PH 19 ATP MSG IP**
                   DGN: XTSI a**, D3U** b **COMPLETED {ATP|CATP (00200000 00000000)}**
                   MSG COMPL

   *ATP results will be received for D3Us 6 and 7; CATP results will be received
   for D3Us 0 through 5.

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 6.
   If **No**, go to Step 3.

3. Is failure a result of TELCO/INST instruction?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Clear diagnostic failure [TOP 234-351-011]; repeat from Step 1.

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

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify Proper D3U Software Is Being Run

1. At 1B Processor MTC terminal, enter message
   DUMP:TSIMEM;XTSI a,**D3U** b,**HADR (0,20,0000),L 10!**

   where   a = Even growth XTSI member number
                b = Growth D3U number (0 or 7).

   Response:

   DUMP:TSIMEM;XTSI a **D3U** b **HADR (20,0000) L 10 COMPLETED**
   200000   --------   --------   **4F41**----   --------
   200010   --------   --------   ------**55**   **3C3**h**3**i**3E**
   200020   **3**j**2E3**k**3**l   **3**m**000000**

         a   =   XTSI member number
         b   =   Growth D3U number
     4F41   =   Loaded operating software
       55   =   Signifies U for D3U software file
   h i j k l m   =   Software release issue (<hi>j.klm)

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Determine cause and resolve; repeat from Step 1.

   > **Note:** Each 8-digit data word is broken into two 4-digit words which are counted in octal (for example, the first data word in the response message in Step 1 are words 200000 and 200001).

4. Using printout and the response message in Step 1, verify word 200004 has value of **4F41**. Record discrepancy for later use.

5. Using printout and the response message in Step 1, verify word 200015 has value of **55**. Record discrepancy for later use.

6. Using printout and the response message in Step 1, verify words 200020 through 200022 contain software release issue (must be same as software release issue in saved 3B printout [DLP-538]). Record discrepancy for later use.

7. Were data words correct?

    If **Yes**, go to Step 9.
    If **No**, go to Step 8.

8. Contact next higher support group for resolution; after resolving, repeat from Step 1.

9. Have printouts been received for all D3Us being grown?

    If **Yes**, go to Step 11.
    If **No**, go to Step 10.

10. Repeat from Step 1 for next D3U being grown.

11. Compare printouts for D3Us being grown and determine if printouts are all the same.

12. Are all printouts the same?

    If **Yes**, go to Step 14.
    If **No**, go to Step 13.

13. Contact next higher support group for resolution; after resolving, repeat from Step 1, for printouts in error.

14. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Set DS3 Link Parameters for Growth D3Us and Verify

1. Obtain from installer, DS3 cable type (735A or 734D), and length of DS3 cable.

    Caution: Calling up RC form will cause all CRT data to be cleared.

2. At 1B Processor MTC terminal, enter message OP:RCFORM 704!

    Response: CRT displays RC Form 704.

    Note: Recent change must be performed for each D3U being grown in 0,1,2,3,4, and 5 D3U number order.

3. Fill in blanks on RC Form 704 per the following and enter message:

    RC:UTYPE;CHG:OPT(D3U),a**:   XTSI MEMN** b**,   D3U** c**,**

    ORNU d**,**

    REM ALARM e**,   MAX LBO** f**,   DS3 APPL** g**,**

	DS1 INFO		
EQP01 _,	**FRMF01** _,	**EQP02** _,	**FRMF02** _,
EQP03 _,	**FRMF03** _,	**EQP04** _,	**FRMF02** _,
EQP05 _,	**FRMF05** _,	**EQP06** _,	**FRMF06** _,
EQP07 _,	**FRMF07** _,	**EQP08** _,	**FRMF08** _,
EQP09 _,	**FRMF09** _,	**EQP10** _,	**FRMF10** _,
EQP11 _,	**FRMF11** _,	**EQP12** _,	**FRMF12** _,
EQP13 _,	**FRMF13** _,	**EQP14** _,	**FRMF14** _,
EQP15 _,	**FRMF15** _,	**EQP16** _,	**FRMF16** _,
EQP17 _,	**FRMF17** _,	**EQP18** _,	**FRMF18** _,
EQP19 _,	**FRMF19** _,	**EQP20** _,	**FRMF20** _,
EQP21 _,	**FRMF21** _,	**EQP22** _,	**FRMF22** _,
EQP23 _,	**FRMF23** _,	**EQP24** _,	**FRMF24** _,
EQP25 _,	**FRMF25** _,	**EQP26** _,	**FRMF26** _,
EQP27 _,	**FRMF27** _,	**EQP28** _,	**FRMF28** _,

    REMARKS   ----------------!

    where   a = **FTA**
                 b = Even member number of growth XTSI
                 c = Growth D3U number (0 to 5)
                 d = RC order number
                 e = **STD**
                 f = **225** or **450** per appropriate LBO table (TABLE A or B)
                 g = **CBP**

TABLE A		
XTSI NOT CONNECTED TO DSX		
DS3 CABLE TYPE	**CABLE LENGTH FOR LBO SETTING**	
	LBO (225)	**LBO (450)**
735A (thin)	000' - 250'	250' - 500'
734D (thick)	000' - 450'	450' - 900'

TABLE B		
XTSI CONNECTED TO DSX		
DS3 CABLE TYPE	**CABLE LENGTH FOR LBO SETTING ***	
	LBO (225)	**LBO (450)**
735A (thin)	000' - 125'	125' - 250'
734D (thick)	000' - 225'	225' - 450'
* The DSX must be at midpoint between growth XTSI and transmission facility. Length is distance from growth XTSI and DSX.		

4. Was **RC ORNU** d **ACTIVATED** message received?

    If **Yes**, go to Step 6.
    If **No**, go to Step 5.

5. Contact next higher support group for resolution; after resolving, repeat from Step 2 with corrected input data.

6. At 1B Processor MTC terminal, enter message
    VER:VFUNC XTSID3U:FD1 XTSIMEMN,DT1 a**,FD2 D3UN,DT2** b**!**

    where   a = Even XTSI member number
            b = D3U number (0, 1, 2, 3, 4, or 5).

    Response: **VER:MISC;OPT(XTSID3U):   XTSI MEMN** a**,   D3U** b**,**

                REM ALARM STD,   MAX LBO c**,   DS3 APPL CBP,**

                    DS1 INFO
    EQP01 F,   FRMF01 d**,   EQP02 F,   FRMF02** d**,**
    EQP03 F,   FRMF03 d**,   EQP04 F,   FRMF02** d**,**
    EQP05 F,   FRMF05 d**,   EQP06 F,   FRMF06** d**,**
    EQP07 F,   FRMF07 d**,   EQP08 F,   FRMF08** d**,**
    EQP09 F,   FRMF09 d**,   EQP10 F,   FRMF10** d**,**
    EQP11 F,   FRMF11 d**,   EQP12 F,   FRMF12** d**,**
    EQP13 F,   FRMF13 d**,   EQP14 F,   FRMF14** d**,**
    EQP15 F,   FRMF15 d**,   EQP16 F,   FRMF16** d**,**
    EQP17 F,   FRMF17 d**,   EQP18 F,   FRMF18** d**,**
    EQP19 F,   FRMF19 d**,   EQP20 F,   FRMF20** d**,**
    EQP21 F,   FRMF21 d**,   EQP22 F,   FRMF22** d**,**
    EQP23 F,   FRMF23 d**,   EQP24 F,   FRMF24** d**,**
    EQP25 F,   FRMF25 d**,   EQP26 F,   FRMF26** d**,**
    EQP27 F,   FRMF27 d**,   EQP28 F,   FRMF28** d**,**
    VER: MESSAGE:
    VERIFY PROCESSING COMPLETE

    where   a = Even member number of growth XTSI
            b = Growth D3U number (0 to 5)
            c = **225** or **450**
            d = Don't care

7. Is recent changed data displayed correctly?

    If **Yes**, go to Step 8.
    If **No**, go to Step 9.

8. Under **DS1 INFO** heading, is **P** displayed in any field?

    If **Yes**, go to Step 9.
    If **No**, go to Step 10.

9. Contact next higher support group for resolution; after resolving, repeat from Step 2.

10. Have DS3 links been equipped for all D3Us being added?

    If **Yes**, go to Step 12.
    If **No**, go to Step 11.

11. Repeat from Step 2, for next D3U.

12. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Diagnose Growth D3U Specifying Phase 90 and GROWTH

1. At 1B Processor MTC terminal, enter message
   DGN:XTSI a**,D3U** b**:PH 90,GROWTH!**

   where   a = XTSI member number
                 b = Growth D3U (0 to 7).

   Response: **DGN: XTSI** a**, D3U** b **PH 90 ATP MSG STARTED**
                    DGN: XTSI a**, D3U** b **COMPLETED ATP MSG COMPL**

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 6.
   If **No**, go to Step 3.

3. Is failure a result of TELCO/INST instruction?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Clear diagnostic failure [TOP 234-351-011]; repeat from Step 1.

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

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Remove D3U from Service

1. At 1B Processor MTC terminal, enter message
   RMV:XTSI a**,D3U** b**!**

   where   a = XTSI member number
                b = D3U (0 to 7)

   Response: **RMV: XTSI** a**, D3U** b **COMPL**

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 6.
   If **No**, go to Step 3.

3. Output indicates?

   If **system denied request**, go to Step 4.
   If **invalid input message**, go to Step 5.

4. Refer trouble to installer for resolution; after resolving, repeat from Step 1.

5. Repeat from Step 1 to ensure message was entered correctly.

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Set Up Near-End Loop

1. At 1B Processor MTC terminal, enter message
   ORD:DS3LOOP;OPR:XTSI a,**D3U** b**!**

   where   a = Even growth XTSI member number
            b = Submember number of D3U being tested.

   Response: **ORD:DS3LOOP;OPR;XTSI** a, **D3U** b
                COMPLETED

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 6.
   If **No**, go to Step 3.

3. Output indicates?

   If **system denied request**, go to Step 4.
   If **invalid input message**, go to Step 5.

4. Refer trouble to installer for resolution; after resolving, repeat from Step 1.

5. Repeat from Step 1 to ensure message was entered correctly.

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify Loopback Is Operating

1. At 1B Processor MTC terminal, enter message
   ORD:DS3LOOP;READ:XTSI a**,D3U** b**!**

   where   a = Even growth XTSI member number
               b = Submember number of D3U being tested.

   Response: **ORD:DS3LOOP;READ;XTSI** a**,D3U** b
                   OPERATED

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 6.
   If **No**, go to Step 3.

3. Output indicates?

   If **system denied request**, go to Step 4.
   If **Invalid input message**, go to Step 5.

4. Refer trouble to installer for resolution; after resolving, repeat from Step 1.

5. Repeat from Step 1 to ensure message was entered correctly.

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Restore D3U to Service

1. At 1B Processor MTC terminal, enter message
   RST:XTSI a,**D3U** b**!**

   where   a = XTSI member number
                  b = D3U number (0 to 7).

   > *Note:* Restore will take approximately 5 minutes to complete.

   Response: **DGN: XTSI** a**, D3U** b **COMPLETED ATP MSG COMPL**
                       RST: XTSI a**, D3U** b **COMPL**

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 6.
   If **No**, go to Step 3.

3. Output message indicates trouble is in?

   If **peripheral growth equipment**, go to Step 4.
   If **nongrowth equipment**, go to Step 5.

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

5. Clear diagnostic failure [TOP 234-351-011]; repeat from Step 1.

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Establish Frame Hardware Status for Running of
NETX Library Program

1. Refer to TABLE A for minimum hardware in-service requirements for running of NETX library program.

TABLE A	
1B PROCESSOR	
UNIT	**MINIMUM FRAME REQUIREMENTS**
BUSES	All buses in service and operating duplex.
CC	Operating full duplex.
CS	All CSs in service.
DUS	All DUSs in service (if equipped).
IOUS	All IOUS plus all required I/O channels in service.
PS	All PSs in service
TUC	Office requirements (if equipped).
PERIPHERAL	
UNIT	**MINIMUM FRAME REQUIREMENTS**
NCLK	All four chains in service operating duplex.
SP	Base SPs operating duplex plus all nonbase SPs in service. No more than 1 controller out-of-service.
TMS	All TMSs in service and operating duplex.
TSI/XTSI	Member number 0 operating duplex plus all other TSIs/XTSIs in service. No more than 1 controller out-of-service. All newly added XTSI member numbers associated with NETEX testing operating duplex.

2. At 1B Processor MTC terminal, enter **OP:OOSUNITS!** to obtain list of out-of-service units.

3. Conditionally restore each unit on out-of-service list required for running of library program, using restore message.

4. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify Trunks Set to CAD.DSA State

1. Determine one TAN to be used in **OP:TRKSTAT** message.

XTSI MEMN	TAN
Even	xx00001
Even	xx10001
Odd	yy00001
Odd	yy10001
xx = Even member number of growth XTSI yy = Odd member number of growth XTSI	

2. At 1B Processor MTC terminal, enter message
   OP:TRKSTAT,TAN a**;SUM:NUM 1008,STAT CAD.DSA!**

   where   a = Base TAN determined in Step 1.

   Response: **OP:TRKSTAT CAD.DSA ,TAN** a **NUM,STAT CAD.DSA SUM COMPLETED TRK COUNT** b

   where   a = Base Tan for unit
              b = At least 240.

3. Using printout and the response message in Step 2, was **TRK COUNT** of at least 240 received?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Contact provisioning group to assign more trunks; repeat from Step 1.

5. Have all TANs in Step 1 been verified?

   If **Yes**, go to Step 7.
   If **No**, go to Step 6.

6. Repeat from Step 1 for next TAN.

7. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Maintain Log Sheet

1. **General:**

    1. Log sheet is designed to aid in:

        • Keeping track of XTSIs and network routing paths currently under test.

        • Keeping track of XTSIs and network routing paths which have completed test interval.

        • Locating obvious trouble patterns in test runs.

    2. Copy log sheet locally as needed.

2. **Requirements to maintain log sheet:**

    1. Each growth XTSI and network routing path currently under test should have an entry on log sheet.

    2. When testing on XTSI and network routing path is repeated, new entry should be made on log sheet.

    3. If failure occurs, all applicable entries should be made.

3. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

GROWTH XTSI MEMN	NETWORK ROUTING	CONNECT LEVEL	DURATION OF TEST INTERVAL	BEGINNING OF TEST INTERVAL	DID TRPF OCCUR?	TIME OF FAILURE	WAS REPAIR ATTEMPTED	COMMENTS

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Determine if Library Tape Containing Program to be Used Resides in File System

1. At 1B Processor MTC terminal, enter message
   OP:LIBSTAT,FS!

   Response: **OP:LIBSTAT FS**
   OP:LIBSTAT COMPLETED
   FS LIBRARY DIRECTORY

PKG NAME	ADDRESS	LENGTH
•	•	•
•	•	•

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Determine cause and resolve; repeat from Step 1.

4. Is package **LG**a**NETX** listed in output message?

   If **Yes**, go to Step 5.
   If **No**, go to Step 7.

5. Note library tape does reside in file system.

6. Go to Step 8.

7. Note library tape does not reside in file system.

8. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Mount Tape on 3B Tape Unit or
Digital Audio Tape (DAT) Unit

1. What APS does office have?

    If **3B21D APS**, go to Step 2.
    If **3B20D Model 2/3 3B APS**, go to Step 6.
    If **3B20D Model 1 3B APS**, go to Step 22.

    > ***Note:*** Steps 2 through 4 are to be performed for a 3B21D APS.

2. Is tape to be written?

    If **Yes**, go to Step 3.
    If **No**, go to Step 4.

    > ***Note:*** The 4-mm tape length must be 90 M.

3. See Figure 1. Put write-protect tab on 4-mm tape in the up (unlocked) position.

```
                    WRITE-PROTECT
                    TAB
                    UP = UNLOCKED
                    DOWN = LOCKED
```
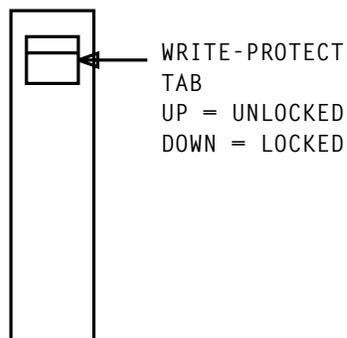
Figure 1.

Caution: Care must be take when inserting the tape into the DAT unit. Tape must not be forced.

4. See Figure 2. At available in-service digital audio tape (DAT) unit (EQL 11-124 or 62-124), carefully insert 4-mm tape.

WRITE-PROTECT
TAB

4-mm TAPE

ROS/RST

ACO-T

O ALM
O OOS
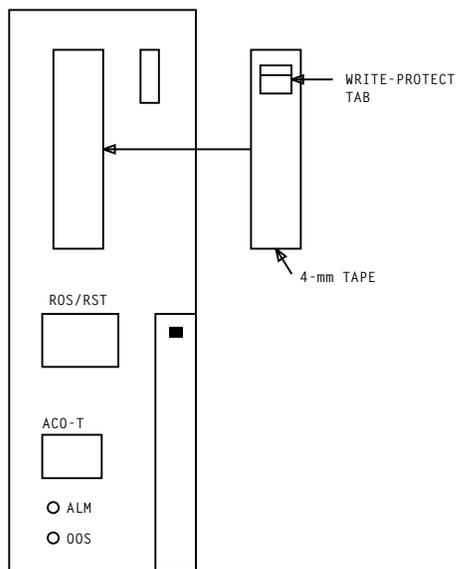
Figure 2.

5. Go to Step 34.

> *Note:* Steps 6 through 21 are to be performed for a 3B20D Model 2/3 APS.

6. If tape is to be written, attach write-enable ring on supply reel.

7. If **LOGIC OFF** LED lighted, touch **LOGIC ON** switch.

8. Open dust cover and verify circuit breaker at side 1.

9. See Figure 3. Place supply reel on hub and depress hub latch.
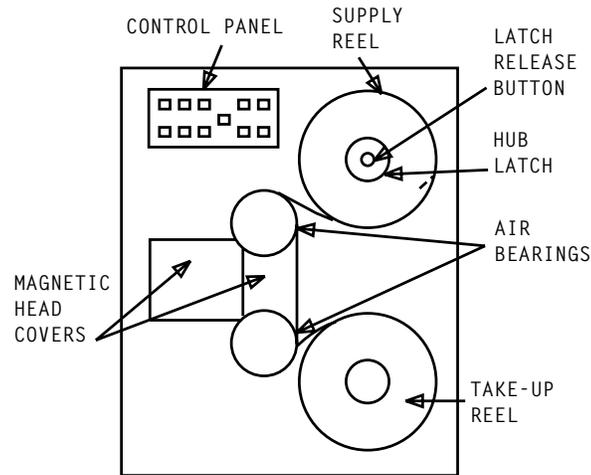
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Figure 3.

10. Thread tape from bottom of supply reel along path as shown in Figure 3.

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

12. At control panel, touch **LOAD/REWIND** switch.

13. Does tape move and stop, and is **BOT** LED lighted?

    If **Yes**, go to Step 20.
    If **No**, go to Step 14.

14. Touch **RESET** switch, attach beginning of tape (BOT) marker, and repeat from Step 9.

15. Thread tape from bottom of supply reel along path as shown in Figure 3.

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

17. At control panel, touch **LOAD/REWIND** switch.

18. Does tape move and stop, and is **BOT** LED lighted?

    If **Yes**, go to Step 20.
    If **No**, go to Step 19.

19. To clear fault, refer to TOP 254-301-812.

20. Touch **ON LINE** switch.

21. Go to Step 34.

    Note: Steps 22 through 33 are to be performed for a 3B20D Model 1 APS.

22. Open tape unit dust cover.

23. Lift supply (upper) reel hub tab. Place tape reel onto supply (upper) reel hub. See Figure 4.
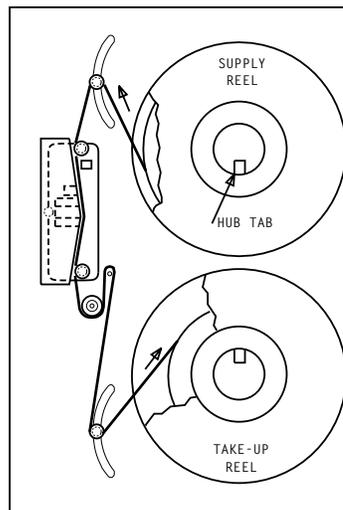
tpa 840188/01

Figure 4.

24. While holding tape reel, secure tape reel by returning supply hub tab to normal locked down position.

25. Thread tape along tape path as shown in Figure 4.

26. Hold end of tape against take-up reel and wrap several turns clockwise by rotating reel.

27. On control panel, depress **LOAD** switch.

28. Does tape stop at **LOAD POINT**?

    If **Yes**, go to Step 33.
    If **No**, go to Step 29.

29. On control panel, depress **REWIND** switch.

30. Does tape have **BOT** marker?

    If **Yes**, go to Step 32.
    If **No**, go to Step 31.

31. Put **BOT** marker on tape and repeat from Step 25.

32. To clear fault, refer to TOP 254-301-812.

33. On control panel, depress **ON LINE** switch and observe **ON LINE** lamp light. Close dust cover.

34. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Set Network Routing

Note: Member number entered must be an even number; for example, member numbers ten and eleven are used if ten is entered in conjunction with this message. An error message will be printed if the companion number is entered.

1. At 1B Processor MTC terminal, enter message
    SET:NETROUT;xxxx:**MEMN** a!

    where   xxxx = network routing path to be tested (**NORM**, **RTSI**, **TTSI**, and **BOTH**).
             a = even member number of XTSI to be tested.

    Response: **SET: NETROUT;** xxxx**: MEMN** a **COMPLETED**
                NETWORK ROUTING TABLE UPDATED
                TSI RESTORE REQUESTED.

2. Was printout received per the response message in Step 1?

    If **Yes**, go to Step 4.
    If **No**, go to Step 3.

3. Determine cause and resolve; repeat from Step 1.

4. Are more XTSI cabinets to be tested?

    If **Yes**, go to Step 5.
    If **No**, go to Step 6.

5. Repeat from Step 1 next pair of member numbers (XTSI cabinet) to be tested.

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Execute NETX Library Program and
Set Office Translations to In-Service

1. At 1B Processor MTC terminal, enter message
   EX:LIBSYS:PKG LGx**NETX,PGM NETX,TASK 0,CLIENT 0!** to copy NETX from file store
   to program store and begin executing idle loop.

   where x = Current generic program

   Response: Prompt output message indicating office status

2. Observe prompt output message and note if office translations indicate precut or in-service
   office status.

3. Prompt output message indicates?

   If **precut status**, go to Step 4.
   If **in-service status**, go to Step 7.

4. At 1B Processor MTC terminal, enter message
   IN:LIBSYS:CLIENT 0,ASC(NO)! to terminate program.

5. Contact next higher support group to enter overwrites to set office status to in-service.

6. Repeat from 1.

7. At 1B Processor MTC terminal, enter message
   IN:LIBSYS:CLIENT 0,ASC(YES)!

   Response: **NETX ENTER AVERAGE OCCUPANCY ON SPCS DESIRED DEC(50-960)**
   RANGE 841-960 IS APPLICABLE TO XTSI

8. Was printout received per the response message in Step 7?

   If **Yes**, go to Step 10.
   If **No**, go to Step 9.

9. Determine cause and resolve; repeat from Step 7.

10. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Input Initial NETX Program Execution Data

Notes:

1. NETX should be set to 200 connect level during initial NETX testing; however occupancy level requested must be less than the number of trunks available on growth XTSI.
2. If NETX testing is terminated to run audits, restart NETX program at the same connect level before termination unless otherwise instructed.

1. At 1B Processor MTC terminal, enter message
   IN:LIBSYS:CLIENT 0,DEC(xxx**)!**

   where x = occupancy level desired.

   Response: **NETX ENTER TSI MEMBER NUMBERS - DEC(0-63)**
   NETX CAUTION, CAN ONLY ENTER NEWLY GROWN TSI MEMNS

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Determine cause and resolve; repeat from Step 1.

   Note: Member numbers entered must be an even number; for example, member numbers ten and eleven are used if a ten is entered in conjunction with use message. An error message will be printed if companion number is entered.

4. At 1B Processor MTC terminal, enter message
   IN:LIBSYS:CLIENT 0,DEC(a**)!**

   where a = even-numbered growth XTSI.

   Response: **NETX ENTER RUN TO START THE EXERCISE - ASC(RUN)**

5. Was printout received per the response message in Step 4?

   If **Yes**, go to Step 7.
   If **No**, go to Step 6.

6. Determine cause and resolve; repeat from Step 1.

7. At 1B Processor MTC terminal, enter message
    IN:LIBSYS:CLIENT 0,ASC(RUN)!

    Response: **NETX EXERCISE IN PROGRESS**
    NETX TRUNK AUDIT IS RUNNING.
    NETX IO WILL BE LOCKED OUT UNTIL AUDIT IS COMPLETE.
    REPT:NETX TRUNK AUDIT COMPLETE. NETX IO IS UNLOCKED.
    REPT: NETX THE FOLLOWING AUDITS HAVE BEEN INHIBITED BY NETEX:
    8 16 19 27 28 29 32 33 34 36 46 48 52
    DO NOT RELEASE THESE AUDITS WHILE NETEX IS RUNNING.
    THESE AUDITS MUST BE RELEASED AFTER NETEX HAS BEEN TERMINATED.
    and additional output messages indicating
    XTSI/SPC and number of trunks available for
    testing.

8. Was printout received per the response message in Step 7?

    If **Yes**, go to Step 10.
    If **No**, go to Step 9.

9. Determine cause and resolve; repeat from Step 1.

10. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Test Growth XTSIs at 200 Connect Level

1. **Purpose:**

   The purpose of this initial test run is to determine if any faulty network paths exist due to marginal cable, circuit packs, etc., and if they do, determine where and note on log sheet for later use.

2. **General:**

   1. Growth XTSIs should be configured to each network routing state (NORM, RTSI, TTSI, and BOTH) for 15 minutes per state.

   2. If TRPF occurs during a 15-minute interval, network routing on this XTSI frame will automatically switch to next state. Make entry on log sheet and allow NETX to run on new routing configuration. Begin new 15-minute test interval for new routing.

   3. If NETX runs on route for 15 minutes without triggering a TRPF, network routing should be switched to a new state and new 15-minute test interval begun.

   4. Do not attempt to repair any trouble areas unless multiple TRPFs occur on a frame and there is a chance of this frame going simplex.

   5. To determine what program is doing, status can be obtained at any time by entering message: **IN:LIBSYS:CLIENT 0,ASC(GET)!**

      Response: **NETX STATUS=**a **OCCUPANCY=**b **(HOLD STATUS) NUMBER OF CONNECTIONS MADE BY NETEX PER TSI (TSI NUM CONNECTIONS ON SPC/CONNECTIONS ON SPC 1)**
      TSI 0 SPCO/SPC1 TSI 1 SPC0/SPC1 TSI 2 SPC0/SLC1 TSI 3 SPC0/SPC1
      • • •
      TSI60 SPC0/SPC1 TSI61 SPC0/SPC1 TSI62 SPC0/SPC1 TSI63 SPC0/SPC1
      TOTAL NUMBER OF CONNECTIONS MADE BY NETEX=c

      If NETX is in Hold condition, "HOLD STATUS" shows on the first line; if there is no hold in progress, no such indication is printed.

6. The following commands are available when needing to suspend, terminate or emergency abort the NETX program during its 1-hour run.

    - *SUSPEND* - If it is necessary to suspend NETX exercise for some time at its current spot in the test (to be resumed later), enter message:
      IN:LIBSYS:CLIENT 0,**ASC(HLD)!**

      Release Suspend Hold by entering message:
      IN:LIBSYS:CLIENT 0,ASC(RLS)!

    - *TERMINATE* - If it is necessary to terminate NETX testing before it has completed, do it gracefully (restoring back to original connections and status) by entering message: **IN:LIBSYS:CLIENT 0,ASC(TRM)!**

    - *ABORT* - If and only if it is necessary to abort execution of the NETX program at any time, enter message:
      STOP:LIBSYS:PKG LGaNETX,PGM NETX,TASK 0,CLIENT 0!

3. **Test Procedure:**

    1. Monitor growth XTSIs under test noting any TRPFs caused by a XTSI exposed to NETX testing.

    2. Did TRPF occur within a 15-minute test interval?

        If **Yes**, go to Step 3.3.
        If **No**, go to Step 3.7.

    3. Observe output message to determine path and growth XTSI where failure occurred.

    4. Make applicable entries on log sheet.

    5. Begin new 15-minute test interval on network routing the XTSI has switched to.

    6. Repeat from Step 3.1.

> *Note:* Steps 3.7 through 3.11 are being performed if no TRPFs occurred within a 15-minute test interval.

7. Make applicable entries on log sheet.

8. Have all four network routing states been successfully tested?

    If **Yes**, go to Step 3.12.
    If **No**, go to Step 3.9.

9. Set network routing to next network routing state to be tested using DLP-562.

10. Begin 15-minute test interval on new routing configuration.

11. Repeat from Step 3.1 for new network routing state.

12. Terminate NETX and run audits using DLP-566.

13. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Terminate NETX and Run Audits

1. At 1B Processor MTC terminal, enter message
   IN:LIBSYS:CLIENT 0,ASC(TRM)! to terminate NETX.

   Response: **EX: LIBSYS: PKG LG**x**NETX, PGM NETX, CLIENT 0
                  COMPLETED**

2. At 1B Processor MTC terminal, enter message
   ALW:AUD:NUM(8,16,19,27,28,29,32,33,34,36,46,48,52)! to allow audits.

3. At 1B Processor MTC terminal, enter message
   AUD:NUM(8,16,27,28,29,32,36,46,48)! to run audits; ensure no errors are received.

4. At 1B Processor MTC terminal, enter message **AUD:NUM 19!** to run audit 19; ensure no
   errors are received.

5. At 1B Processor MTC terminal, enter message **AUD:NUM 34!** to run audit 34; ensure no
   errors are received.

6. At 1B Processor MTC terminal, enter message **OP:PERIFINH;UCL!** and ensure that no
   additional pests are set. Investigate any errors and clear as appropriate.

7. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Investigate any Trouble Patterns

1. **Purpose:**

    This part of NETX testing is designed to eliminate any faulty network paths found during initial test run.

2. **General:**

    1. Possible trouble areas should be inspected one at a time.

    2. Each growth XTSI and network routing state under inspection should be entered on log sheet.

    3. Any repairs made should be noted under the comments column on the log sheet.

3. **Test Procedure:**

    1. Analyze log sheet to determine if any obvious trouble patterns exist which could indicate that a faulty marginal unit may be present in newly grown XTSI cabinet(s) and/or TMS interface.

        Note: Steps 3.2 through 3.5 are being performed to rerun NETX at 200 connect level on XTSI cabinet and network route where a faulty marginal unit may exist.

    2. Set network routing state that is believed to contain trouble using DLP-562.

    3. At 1B Processor MTC terminal, enter message
       EX:LIBSYS:PKG LGx**NETX,PGM NETX,TASK 0,CLIENT 0!**

       where   x = current generic program.

       Response: Prompt output message indicating office status.

    4. At 1B Processor MTC terminal, enter message
       IN:LIBSYS,CLIENT 0,ASC(YES)!

       Response: **NETX ENTER AVERAGE OCCUPANCY ON SPCS DESIRED**
                   DEC(50-960)
                   RANGE 841-960 IS APPLICABLE TO XTSI

5. Was printout received per the response message in Step 3.4?

    If **Yes**, go to Step 3.7.
    If **No**, go to Step 3.6.

6. Determine cause and resolve; repeat from Step 3.4.

7. Input NETX program execution data using DLP-564.

8. Monitor XTSI under test for 15 minutes.

9. Did TRPF occur within a 15-minute test interval?

    If **Yes**, go to Step 3.10.
    If **No**, go to Step 3.13.

10. Observe output messages to determine path where failure occurred and attempt to repair.

11. After repair (or attempt) is complete, set network routing back to state where failure occurred using DLP-562.

12. Repeat from Step 3.8.

    Note: Steps 3.13 through 3.15 are being performed if no TRPFs occurred during a 15-minute test interval.

13. Are more troubles to be tested?

    If **Yes**, go to Step 3.14.
    If **No**, go to Step 3.16.

14. Set network routing to next routing configuration and XTSI member number believed to contain trouble using DLP-562.

15. Repeat from Step 3.8.

16. Terminate NETX and run audits using DLP-566.

17. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Run NETX on Growth XTSIs at 960 Connect Level

1. **General:**

    1. Apply NETX on all growth XTSIs at the same time.

    2. When XTSI frame completes a 2-hour test interval on a network route without triggering any TRPFs, terminate NETX, allow and run audits per Step 2.23.

    3. It is very important to keep the log sheet up to date because NETX will be terminated and audits run several times during this portion of procedure. When NETX is restarted, network routing configuration on each growth XTSI member number will be entered separately and the time period will be picked up where it was when NETX was terminated. The amount of time NETX ran in each state before testing was terminated should be entered in comments column on the log sheet.

2. **Test Procedure:**

    1. Set network routing to NORM state on all growth XTSIs using DLP-562.

    2. At 1B Processor MTC terminal, enter message
       EX:LIBSYS:PKG LGx**NETX,PGM NETX,TASK 0,CLIENT 0!**

       where x = current generic program

       Response: Prompt output message which indicates office status.

    3. At 1B Processor MTC terminal, enter message
       IN:LIBSYS:CLIENT 0,**ASC(YES)!**

       Response: **NETX ENTER AVERAGE OCCUPANCY ON SPCS DESIRED
                   DEC(50-960)
                   RANGE 841-960 IS APPLICABLE TO XTSI**

    4. Was printout received per the response message in Step 2.3?

       If **Yes**, go to Step 2.6.
       If **No**, go to Step 2.5.

    5. Determine cause and resolve; repeat from Step 2.3.

6. Input NETX program execution data using DLP-564.

7. Monitor growth XTSIs while NETX is being applied to one of four routing states for 2 hours.

8. Did TRPF occur within a 2-hour test interval?

   If **Yes**, go to Step 2.9.
   If **No**, go to Step 2.18.

9. Analyze output message to determine where failure occurred, make applicable entries on log sheet and note any obvious trouble patterns.

10. Does obvious trouble pattern exist?

    If **Yes**, go to Step 2.11.
    If **No**, go to Step 2.15.

11. Attempt to locate trouble and repair.

12. When repair (or attempt) is complete, set network routing back to state where failure occurred using DLP-562.

13. Begin new 2-hour test interval.

14. Repeat from Step 2.7.

    Note: Steps 2.15 through 2.17 are being performed if no obvious trouble pattern exists, and TRPF appears to be intermittent.

15. Set network routing back to state where failure occurred using DLP-562.

16. Begin new 2-hour test interval.

17. Repeat from Step 2.7.

> ***Note:*** Steps 2.18 through 2.22 are being performed if no TRPFs occurred within a 2-hour test interval.

18. Note on log sheet the XTSI and network route which meet the final criteria of this test.

19. Have all four network routing states been successfully tested?

    If **Yes**, go to Step 2.23.
    If **No**, go to Step 2.20.

20. Set network routing to next state to be tested on this XTSI using DLP-562.

21. Begin 2-hour test interval for new state under test.

22. Repeat from Step 2.7.

23. After all network routing configurations have completed 2-hour test interval on each growth XTSI without triggering any TRPFs, terminate NETX and run audits using DLP-566.

24. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Terminate Execution of NETX Library Program

1. At 1B Processor MTC terminal, enter message
   STOP:LIBSYS;RELEASE!

   Response:

   STOP:LIBSYS: PKG LGa**NETX, PGM ????, TASK 0, CLIENT 0 RELEASE COMPLETED**

   where a = current generic program

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Determine cause and resolve; repeat from Step 1.

4. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify Nailups are not Assigned to Growth D3U

1. Determine first and last TANs for growth D3U per TABLE A.

TABLE A		
GROWTH	**GROUP A TANs**	
D3U	**FIRST TAN**	**LAST TAN**
0	cc00001	cc02080
1	cc02081	cc05032
2	cc05033	cc07112
3	dd00001	dd02080
4	dd02081	dd05032
5	dd05033	dd07112
cc = Even growth XTSI 2-digit member number		
dd = Odd growth XTSI 2-digit member number		

2. At 1B Processor MTC terminal, enter message
   VER:NAILUP:TAN a-b**!**

   where   a = first TAN
                 b = last TAN

   Response: **VER: MESSAGE:**
                 NO DATA FOUND

3. Was printout received per the response message in Step 2?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. No nailups are allowed at this time. Contact next higher support group for resolution; after resolving, repeat from Step 1.

5. Determine first and last TANs for growth D3U per TABLE B.

TABLE B		
GROWTH	**GROUP A TANs**	
D3U	**FIRST TAN**	**LAST TAN**
0	cc10001	cc12080
1	cc12081	cc15032
2	cc15033	cc17112
3	dd10001	dd12080
4	dd12081	dd15032
5	dd15033	dd17112
cc = Even growth XTSI 2-digit member number dd = Odd growth XTSI 2-digit member number		

6. At 1B Processor MTC terminal, enter message
   VER:NAILUP:TAN a-b**!**

   where   a = first TAN
               b = last TAN

   Response: **VER: MESSAGE:**
              NO DATA FOUND

7. Was printout received per the response message in Step 6?

   If **Yes**, go to Step 8.
   If **No**, go to Step 9.

8. No nailups are allowed at this time. Contact next higher technical support group for resolution; after resolving, repeat from Step 5.

9. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify DS1s for D3U are Set to Future (F)

1. At 1B Processor MTC terminal, enter message
   VER:VFUNC XTSID3U:FD1 XTSIMEMN,DT1 a**,FD2 D3UN,DT2** b**!**

   where   a = Even XTSI member number
   b = D3U number (0, 1, 2, 3, 4, or 5).

   Response: **VER:MISC;OPT(XTSID3U):   XTSI MEMN** a**,   D3U** b**,**

   REM ALARM c**,   MAX LBO** d**,   DS3 APPL** e**,**

   DS1 INFO
   EQP01 F,   FRMF01 f**,   EQP02 F,   FRMF02** f**,**
   EQP03 F,   FRMF03 f**,   EQP04 F,   FRMF02** f**,**
   EQP05 F,   FRMF05 f**,   EQP06 F,   FRMF06** f**,**
   EQP07 F,   FRMF07 f**,   EQP08 F,   FRMF08** f**,**
   EQP09 F,   FRMF09 f**,   EQP10 F,   FRMF10** f**,**
   EQP11 F,   FRMF11 f**,   EQP12 F,   FRMF12** f**,**
   EQP13 F,   FRMF13 f**,   EQP14 F,   FRMF14** f**,**
   EQP15 F,   FRMF15 f**,   EQP16 F,   FRMF16** f**,**
   EQP17 F,   FRMF17 f**,   EQP18 F,   FRMF18** f**,**
   EQP19 F,   FRMF19 f**,   EQP20 F,   FRMF20** f**,**
   EQP21 F,   FRMF21 f**,   EQP22 F,   FRMF22** f**,**
   EQP23 F,   FRMF23 f**,   EQP24 F,   FRMF24** f**,**
   EQP25 F,   FRMF25 f**,   EQP26 F,   FRMF26** f**,**
   EQP27 F,   FRMF27 f**,   EQP28 F,   FRMF28** f**,**
   VER: MESSAGE:
   VERIFY PROCESSING COMPLETE

   where   a = Even member number of XTSI
   b = D3U number (0, 1, 2, 3, 4, or 5)
   c = **STD**, **INV**, or **IGN**
   d = **225** or **450**
   e = **CBP** or **M23**
   f = **S** or **E**

2. Using printout and the response message in Step 1, determine if **EQP** is set to **F** for all
   DS1s.

3. Is **EQP** set to **F** for all DS1s?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Contact next higher support group for resolution; after resolving, repeat from Step 1.

5. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify Trunks for Degrowth D3U Are Not Active

1. Determine Group A TAN for degrowth D3U.

DEGROWTH D3U	GROUP A TAN
0	cc00001
1	cc02081
2	cc05033
3	dd00001
4	dd02081
5	dd05033
cc = Even degrowth XTSI 2-digit member number.	
dd = Odd degrowth XTSI 2-digit member number.	

2. At 1B Processor MTC terminal, enter message
    OP:TRKSTAT,TAN a**;SUM:NUM 336!**

    where a = TAN determined in Step 1.

3. At 1B Processor MTC terminal, enter message
    OP:TRKSTAT,TAN a**;SUM:NUM 336,STAT CAD.DSA!**

    where a = TAN determined in Step 1.

4. Using printout, determine if **TRK COUNT** is **0**.

5. Is **TRK COUNT 0**?

    If **Yes**, go to Step 10.
    If **No**, go to Step 5.

6. At 1B Processor MTC terminal, enter message
    OP:TRKSTAT,TAN a**;SUM:NUM 336,STAT TRAF<OOSI>!**

    where a = TAN determined in Step 1.

7. Using printouts in Steps 2, 5, and 6, determine if **TRK COUNT** is same for each message.

8. Is **TRK COUNT** same for each message?

   If **Yes**, go to Step 10.
   If **No**, go to Step 9.

9. Contact next higher support group for resolution; after resolving, repeat from Step 1.

10. Determine one Group B TAN for degrowth D3U.

DEGROWTH D3U	GROUP B TAN
0	cc10001
1	cc12081
2	cc15033
3	dd10001
4	dd12081
5	dd15033
cc = Even degrowth XTSI 2-digit member number. dd = Odd degrowth XTSI 2-digit member number.	

11. At 1B Processor MTC terminal, enter message
    OP:TRKSTAT,TAN a**;SUM:NUM 336!**

    where a = TAN determined in Step 10.

12. Using printout, determine if **TRK COUNT** is **0**.

13. Is **TRK COUNT 0**?

    If **Yes**, go to Step 10.
    If **No**, go to Step 9.

14. At 1B Processor MTC terminal, enter message
    OP:TRKSTAT,TAN a**;SUM:NUM 336,STAT CAD.DSA!**

    where a = TAN determined in Step 10.

15. At 1B Processor MTC terminal, enter message
    OP:TRKSTAT,TAN a**;SUM:NUM 336,STAT TRAF<OOSI>!**

    where a = TAN determined in Step 10.

16. Using printouts in Steps 11, 14, and 15, determine if **TRK COUNT** is same for each message.

17. Is **TRK COUNT** same for each message?

    If **Yes**, go to Step 19.
    If **No**, go to Step 18.

18. Contact next higher support group for resolution; after resolving, repeat from Step 10.

19. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Determine if FB211 Circuit Packs for Growth XTSI are Equipped and Install if Necessary

1. Using appropriate TABLE (TABLE A or TABLE B), obtain equipment location for **FB211** circuit pack associated with growth XTSI.

2. Using TABLE (Step 1), determine **A** and **B** fuses associated with **FB211** circuit pack (Step 1).

3. At NCLK frame, determine if **FB211** circuit packs are installed at location determined in Step 1 in bay 0 and bay 1.

4. Are **FB211** circuit packs, associated with growth XTSI, installed in bay 0 and bay 1?

   If **Yes**, go to Step 6.
   If **No**, go to Step 5.

5. At NCLK frame bay 0 and bay 1, request installer to install **FB211** circuit packs at location determined in Step 1.

6. At NCLK frame, determine if **A** and **B** fuses are installed in bay 0 and bay 1 for **FB211** circuit packs determined in Step 2.

7. Are **A** and **B** fuses for **FB211** circuit packs installed?

   If **Yes**, go to Step 9.
   If **No**, go to Step 8.

8. At NCLK frame fuse panel in bay 0 and bay 1, request installer to install **A** and **B** fuses at location determined in Step 2.

9. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Figure 1.

TABLE A					
FB211 Pack/Fuse/User Assignment For Offices **Equipped With (XTSI, CRTSIs and Other Types)**					
FB211 Pack LOC	**Fuse Desig**		**EQL***	**FB211 Pack LOC**	**Fuse Desig**	**EQL***
74-04	**A1**	**B6**	81,12	74-50	**A8**	**B4**	80,46
74-05	**A3**	**B5**	80,12	74-51	**A8**	**B3**	81,48
74-06	**A3**	**B6**	81,14	74-52	**A9**	**B4**	80,48
74-07	**A6**	**B5**	80,14	74-54	**A9**	**B3**	81,49
74-08	**A6**	**B6**	81,15	74-55	**A2**	**B4**	80,49
74-09	**A4**	**B5**	80,15	74-56	**A2**	**B3**	81,51
74-10	**A4**	**B6**	81,17	74-57	**A5**	**B4**	80,51
74-11	**A7**	**B5**	80,17	74-58	**A5**	**B3**	81,52
74-12	**A7**	**B6**	81,18	74-59	**A7**	**B4**	80,52
74-13	**A5**	**B5**	80,18	74-60	**A7**	**B3**	81,54
74-14	**A5**	**B6**	81,20	74-61	**A4**	**B4**	80,54
74-15	**A2**	**B5**	80,20	74-62	**A4**	**B3**	81,55
74-16	**A2**	**B6**	81,21	74-63	**A6**	**B4**	80,55
74-17	**A9**	**B5**	80,21	74-64	**A6**	**B3**	81,57
74-19	**A9**	**B6**	81,23	74-65	**A3**	**B4**	80,57
74-20	**A8**	**B5**	80,23	74-66	**A3**	**B3**	81,58
74-21	**A8**	**B6**	81,24	74-67	**A1**	**B4**	80,58
74-22	**A8**	**B7**	80,24	78-27	**A4**	**B7**	81,06
74-23	**A8**	**B8**	81,26	78-28	**A4**	**B8**	80,06
74-24	**A9**	**B7**	80,26	78-29	**A2**	**B7**	81,08
74-25	**A9**	**B8**	81,27	78-30	**A2**	**B8**	80,08
74-46	**A9**	**B2**	80,43	78-31	**A5**	**B7**	81,09
74-47	**A9**	**B1**	81,45	78-32	**A5**	**B8**	80,09
74-48	**A8**	**B2**	74,59	78-33	**A7**	**B7**	81,11
74-49	**A8**	**B1**	81,46	78-34	**A7**	**B8**	80,11
* EQL numbers (not stamped on coax jack panels) are equipment locations of coax jacks which feed clock signals to XTSI cabinet. See Figure 1. Assignments for thse positions are office engineered and XTSI member number is stamped adjacent to assigned output (coax jack). EQL = Equipment Location					

Table B					
FB211 Pack/Fuse/User Assignment For Offices Equipped With XTSIs and CRTSIs Only					
FB211 Pack LOC	**Fuse Desig**		**User***	**FB211 Pack LOC**	**Fuse Desig**	**User***
74-04	**A1**	**B6**	TSI 16,17	74-21	**A8**	**B6**	TSI 48,49
74-05	**A3**	**B5**	TSI 18,19	74-22	**A8**	**B7**	TSI 50,51
74-06	**A3**	**B6**	TSI 20,21	74-23	**A8**	**B8**	TSI 52,53
74-07	**A6**	**B5**	TSI 22,23	74-24	**A9**	**B7**	TSI 54,55
74-08	**A6**	**B6**	TSI 24,25	74-25	**A9**	**B8**	TSI 56,57
74-09	**A4**	**B5**	TSI 26,27	74-46	**A9**	**B2**	TSI 58,59
74-10	**A4**	**B6**	TSI 28,29	74-47	**A9**	**B1**	TSI 60,61
74-11	**A7**	**B5**	TSI 30,31	74-48	**A8**	**B2**	TSI 62,63
74-12	**A7**	**B6**	TSI 32,33	74-28	**A4**	**B8**	TSI 02,03
74-13	**A5**	**B5**	TSI 34,35	74-29	**A2**	**B7**	TSI 04,05
74-14	**A5**	**B6**	TSI 36,37	74-30	**A2**	**B8**	TSI 06,07
74-15	**A2**	**B5**	TSI 38,39	74-31	**A5**	**B7**	TSI 08,09
74-16	**A2**	**B6**	TSI 40,41	74-32	**A5**	**B8**	TSI 10,11
74-17	**A9**	**B5**	TSI 42,43	74-33	**A7**	**B7**	TSI 12,13
74-19	**A9**	**B6**	TSI 44,45	74-34	**A7**	**B8**	TSI 14,15
74-20	**A8**	**B5**	TSI 46,47				
* In USER column, TSI can be either XTSI or CRTSI.						

Verify Loopback is Removed

1. At 1B Processor MTC terminal, enter message
DGN:XTSI a**,D3U** b**:PH 90,GROWTH!**

   where   a = Even XTSI member number
              b = Growth D3U (0 to 7).

       Note: **STF** response is required and indicates loopback is removed.

2. Was printout received indicating **STF**?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Request Trunk Services Center to remove loopback for growth D3U; after loopback is removed, repeat from Step 1.

4. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Release Near-End Loop

1. At 1B Processor MTC terminal, enter message
   ORD:DS3LOOP;RLS:XTSI a,**D3U** b!

   where   a = Even growth XTSI member number
            b = Submember number of D3U being tested.

   Response: **ORD:DS3LOOP;RLS:XTSI** a,**D3U** b
                COMPLETED

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 6.
   If **No**, go to Step 3.

3. Output indicates?

   If **system denied request**, go to Step 4.
   If **invalid input message**, go to Step 5.

4. Refer trouble to installer for resolution; after resolving, repeat from Step 1.

5. Repeat from Step 1 to ensure message was entered correctly.

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Set Up Aims Terminal and Load Command Files

> ***Note:*** The floppy to be loaded contains the input messages to perform XTSI growth/degrowth. If there is a discrepancy between the messages on the floppy and this TOP, the TOP should be followed.

> ***Note:*** It is recommended to use an AIMS terminal assigned to SREC1 channel.

1. Ensure AIMS software is operating (colored function bar displayed at bottom of screen).

2. At AIMS terminal, depress **Shift** and **F4** keys simultaneously to clear screen memory.

3. Was Do you really want to reset message received?

    If **Yes**, go to Step 4.
    If **No**, go to Step 5.

4. Enter **Y**

5. Depress **F4** key.

    Response: **TERMINAL OPTIONS** menu displayed.

6. Using arrow keys, move cursor to **Session modes/Session options**.

7. Depress **Return** key.

    Response: **SESSION MODES/SESSION OPTIONS** menu displayed.

8. In **SESSION MODES/SESSION OPTIONS** menu, is **Manual receive** highlighted green?

    If **Yes**, go to Step 11.
    If **No**, go to Step 9.

9. Using arrow keys, move cursor to **Manual receive.**

10. Depress **Return** key to highlight **Manual receive.**

11. Depress **F4** key.

    Response: **TERMINAL SETUP/TERMINAL OPTIONS** menu displayed.

12. Using arrow keys, move cursor to **User Files**.

13. Depress **Return** key.

    Response: **USER FILE SETUP** menu displayed.

14. Using arrow keys, move cursor to **Change user directory**.

15. Depress **Return** key.

    Response: **Change User Directory** window displayed.

16. Ensure floppy disk labeled **AIMS XTSI Rel-**a **Growth Aid** (a = Release number of floppy) is not write-enable protected (floppy disk write protection window must be closed - unlocked); then place floppy disk into drive.

17. In **Change User Directory** window type **A:E**xxxx or **B:E**xxxx (drive that will accept AIMS floppy disks).

    Note: Pick the generic closest to the office generic which is not a later generic.

    where   xxxx = **22R1**
                        = **23R1**
                        = **24R1**
                        = **24R2**

18. Depress **Return** key twice.

19. Depress **F4** key twice.

    Response: Blank screen displayed.

20. Depress **F8** key to inhibit terminal screen from receiving output.

21. Depress **CTRL** and **F10** keys simultaneously to activate printouts to the ROP.

22. Ensure ROP is in On-Line mode.

23. Ensure printer associated with AIMS terminal is receiving output.

> ***Note:*** No output will be received on terminal display. All output will be observed on the printer.

24. Depress **Shift** and **F4** keys simultaneously to clear screen memory.

25. Depress **F8** key to inhibit receive mode.

26. Depress **F3** key twice.

Response:

REGION COMMANDS menu displayed.

27. Using arrow keys, move cursor to **Read from file.**

28. Depress **Return** key.

Response: List of command files displayed.

29. Using arrow keys, move cursor to file to be loaded.

30. Depress **Return** key.

Response: Form entered messages displayed.

> ***Caution: You must ensure that cursor is on proper command before entering.***

31. See TABLE A for helpful hints when running command list from AIMS terminal.

TABLE A	
A.	All portions of command list are in green except variables which are shown in white.
B.	Use Tab key to jump to variable.
C.	Only update variable(s) in command to be entered
D.	After filling in variable(s), depress **Shift** and **Return** keys simultaneously to get cursor to beginning of line.
E.	Use arrow keys to go to line that is desired.
F.	After entering command, cursor will stop at end of command just inputted.
G.	Output must be observed on printer associated with AIMS terminal.
H.	Observe output on printer to determine if command was accepted or blocked (needing to be sent again).
I.	When all commands are completed, depress **Shift** and **Return** keys simultaneously to clear out screen memory.
J.	**OP:RCFORM** a**!** message must not be entered when using AIMS terminal.
K.	At 1B Processor MTC terminal, enter message **MON:CHAN SREC1!** to be able to monitor the SREC1 channel.
L.	At 1B Processor MTC terminal, enter message **STOP:MON;CHAN SREC1!** to stop monitoring the SREC1 channel.

32. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Set Up Aims Terminal and Load Command Files

1. At AIMS terminal, depress **HOME** key.

2. Depress **F5** key.

3. Depress **F1** key to clear screen memory.

4. Depress **F3** key twice.

   Response: **REGION COMMANDS** menu displayed

5. Using arrow keys, move cursor to **Read from file**.

6. Depress **Return** key.

   Response: List of command files displayed.

7. Using arrow keys, move cursor to file to be loaded.

8. Depress **Return** key.

   Response: Form entered messages displayed.

9. Depress **F5** key to remove form enter mode.

   Caution: You must ensure that cursor is on proper command before entering.

10. See TABLE A for helpful hints when running command list from AIMS terminal.

	TABLE A
A.	All portions of command list are in green except variables which are shown in white.
B.	Use Tab key to jump to variable.
C.	Only update variable(s) in command to be entered
D.	After filling in variable(s), depress **Shift** and **Return** keys simultaneously to get cursor to beginning of line.
E.	Use arrow keys to go to line that is desired.
F.	After entering command, cursor will stop at end of command just inputted.
G.	Output must be observed on printer associated with AIMS terminal.
H.	Observe output on printer to determine if command was accepted or blocked (needing to be sent again).
I.	When all commands are completed, depress **Home** key, then **F5** key, then **F1** key to clear out screen memory.
J.	**OP:RCFORM** a**!** message must not be entered when using AIMS terminal.
K.	At 1B Processor MTC terminal, enter message **MON:CHAN SREC1!** to be able to monitor the SREC1 channel.
L.	At 1B Processor MTC terminal, enter message **STOP:MON;CHAN SREC1!** to stop monitoring the SREC1 channel.

11. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Diagnose XTSI Controller Specifying
Phases 40 and 41; and Growth

At 1B Processor MTC terminal, enter message
DGN:XTSI a**,CONTR** b**:PH 40-41,GROWTH!**

where   a = Even XTSI member number
               b = XTSI controller (0 or 1).

Response: **DGN: XTSI** a**, CONTR** b **PH 40 ATP MSG STARTED**
                 DGN: XTSI a**, CONTR** b **PH 41 CATP (00000010 00100000) MSG IP**
                 DGN: XTSI a**, CONTR** b **COMPLETED CATP (00000010 00100000) MSG**
                 COMPL.

1. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 6.
   If **No**, go to Step 3.

2. Is failure a result of TELCO/INST instruction?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

3. Clear diagnostic failure [TOP 234-151-011]; repeat from Step 1.

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

5. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Copy CIA0 Controller 0 to CIA1 Controller 1

Note: Copy command may take approximately 5 minutes.

1. At 1B Processor MTC terminal, enter message
   COPY:TSIFILE;XTSI a**,CONTR 0,ALL!**

   where a = Even growth XTSI member number

   Response: **COPY:TSIFILE XTSI** a **CONTR** b **ALL STARTED**

              COPY:TSIFILE XTSI a **CONTR** b **ALL**
              FILE 0 - COMPLETE

              COPY:TSIFILE XTSI a **CONTR** b **ALL**
              FILE 1 - COMPLETE

                     •
                     •

              COPY:TSIFILE XTSI a **CONTR** b **ALL**
              FILE nn **- COMPLETE**

              COPY:TSIFILE XTSI a **CONTR** b **ALL**
              COPY ALL FILES - COMPLETE

              nn = **27** for 4E23 generic or
                   47 for 4E24 or later generic

2. Was the response message in Step 1 received?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Refer trouble to installer for resolution; after resolving, repeat from Step 1.

4. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify Loopback is Released

1. At 1B Processor MTC terminal, enter message
   ORD:DS3LOOP;READ:XTSI a**,D3U** b**!**

   where   a = Even growth XTSI member number
            b = Submember number of D3U being tested

   Response   **ORD:DS3LOOP;READ:XTSI** a**,D3U** b
               RELEASED

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 6.
   If **No**, go to Step 3.

3. Output indicates?

   If **system denied request**, go to Step 4.
   If **invalid input message**, go to Step 5.

4. Refer trouble to installer for resolution; after resolving, repeat from Step 1.

5. Repeat from Step 1 to ensure message was entered correctly.

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Diagnose TMSP Controller Specifying Phase 8

1. At 1B Processor MTC terminal, enter message
    DGN:TMSP a**,CONTR b:PH 8!**

    where   a = TMSP member number
               b = TMSP controller (0 or 1)

    Response   **RMV: TMSP** a**, CONTR** b **COMPL** *
                      DGN: TMSP a**, CONTR** b **PH 8 ATP MSG STARTED**
                      DGN: TMSP a**, CONTR** b **COMPLETED ATP MSG COMPL**
                      RST: TMSP a**, CONTR** b **STOPPED OS DGN**

                    * This message will not be received if TMSP Controller is already removed.

2. Was printout received per the response message in Step 1?

    If **Yes**, go to Step 6.
    If **No**, go to Step 3.

3. Is failure a result of TELCO/INST instruction?

    If **Yes**, go to Step 4.
    If **No**, go to Step 5.

4. Clear diagnostic failure [TOP 234-151-011]; repeat from Step 1.

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

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Run Audit 26

1. At 1B Processor MTC terminal, enter message **OP:AUDSTAT!**

2. In the printout, is audit 26 listed?

    If **Yes**, go to Step 3.
    If **No**, go to Step 4.

3. At 1B Processor MTC terminal, enter message **ALW:AUD:NUM 26!**

4. At 1B Processor MTC terminal, enter message **AUD:NUM 26!**

5. Was **0 ERROR** message received?

    If **Yes**, go to Step 9.
    If **No**, go to Step 6.

6. At 1B Processor MTC terminal, enter message **AUD:NUM 26!**

7. Was **0 ERROR** message received?

    If **Yes**, go to Step 9.
    If **No**, go to Step 8.

8. Contact next higher support group for resolution; after resolving, repeat from Step 6.

9. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Run Audit 1, 2, 26, and 50

1. At 1B Processor MTC terminal, enter message **OP:AUDSTAT!**

2. In the printout, is audit 1, 2, 26, and/or 50 listed?

   If **Yes**, go to Step 3.
   If **No**, go to Step 4.

3. At 1B Processor MTC terminal, enter message **ALW:AUD:NUM** a**!**

   where a = audit number listed in Step 2.

4. At 1B Processor MTC terminal, enter message **AUD:NUM (1,2,26,50)!**

5. Was **0 ERROR** message received for all audits run?

   If **Yes**, go to Step 9.
   If **No**, go to Step 6.

6. At 1B Processor MTC terminal, enter message **AUD:NUM (1,2,26,50)!**

7. Was **0 ERROR** message received for all audits run?

   If **Yes**, go to Step 9.
   If **No**, go to Step 8.

8. Contact next higher support group for resolution; after resolving, repeat from Step 4.

9. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Diagnose Growth D3U Specifying Phases 1 Through 19 and Growth

1. At 1B Processor MTC terminal, enter message
   DGN:XTSI a**,D3U** b**:PH 1-19,GROWTH!**

   where   a = Even XTSI member number
             b = Growth D3U (0 to 7).

   Response: **DGN: XTSI** a**, D3U** b **PH 1 ATP MSG STARTED**
               DGN: XTSI a**, D3U** b **PH 2 ATP MSG IP**
                                 •
                                 •
                                 •
               DGN: XTSI a**, D3U** b **PH 19 ATP MSG IP**
               DGN: XTSI a**, D3U** b **COMPLETED ATP MSG COMPL**

2. Was printout received per the response above (Step 1)?

   If **Yes**, go to Step 6.
   If **No**, go to Step 3.

3. Is failure a result of TELCO/INST instruction?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Clear diagnostic failure [TOP 234-351-011]; repeat from Step 1.

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

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Diagnose Growth XTSI Controller Specifying Phase 90 and Growth

1. At 1B Processor MTC terminal, enter message
   DGN:XTSI a,**CONTR** b:**PH 90,GROWTH!**

   where   a = Even growth XTSI member number
            b = Controller number (0 or 1)

   > *Note:* Phase 90 diagnostic will take approximately 35 minutes to complete.

   Response: **DGN: XTSI** a**, CONTR** b **PH 90 ATP MSG STARTED**
                DGN: XTSI a**, CONTR** b **COMPLETED ATP MSG COMPL**

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 9.
   If **No**, go to Step 3.

   > *Note:* Copy command may take approximately 5 minutes.

3. At 1B Processor MTC terminal, enter message
   COPY:TSIFILE;XTSI a,**CONTR** b,**ALL!**

   where   a = Even growth XTSI member number
            b = Controller number -
                1 (if diagnosing controller 0) or
                0 (if diagnosing controller 1)

4. Was **COMPLETE** message received for each file copied?

   If **Yes**, go to Step 6.
   If **No**, go to Step 5.

5. Refer trouble to installer for resolution; after resolving, repeat from Step 3.

6. At 1B Processor MTC terminal, enter message
   DGN:XTSI a**,CONTR** b**:PH 90,GROWTH!**

   where   a = Even growth XTSI member number.
            b = Controller number (0 or 1)

   Note: Phase 90 diagnostic will take approximately 35 minutes to complete.

   Response: **DGN: XTSI** a**, CONTR** b **PH 90 ATP MSG STARTED**
                DGN: XTSI a**, CONTR** b **COMPLETED ATP MSG COMPL**

7. Was printout received per the response message in Step 6?

   If **Yes**, go to Step 9.
   If **No**, go to Step 8.

8. Refer trouble to installer for resolution; after resolving, repeat from Step 6.

9. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Remove XTSI Controller from Service

1. At 1B Processor MTC terminal, enter message **RMV:XTSI** a**,CONTR** b**!**

   where   a = Even XTSI member number
             b = Controller number being removed (0 or 1)

   Response: **RMV: XTSI** a**, CONTR** b **COMPL**

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 6.
   If **No**, go to Step 3.

3. Output indicates?

   If **system denied request**, go to Step 4.
   If **invalid input message**, go to Step 5.

4. Determine why request was denied, resolve, and repeat from Step 1.

5. Repeat from Step 1 to ensure message was entered correctly.

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Recent Change and Verify D3U Submember Equipage
From UNEQ to GROW

Caution: Calling up RC form will cause all CRT data to be cleared.

1. At 1B Processor MTC terminal, enter message **OP:RCFORM 705!**

   Response: CRT displays RC Form 705

2. Fill in blanks on RC Form 705 per the following and enter message:

   RC:UTYPE;CHG;OPT(SUXTSI),a**:**   **XTSI MEMN** b,

   ORNU c,

XTCN	0	1						
XTCHV	-,	-,						
XTCSV	-,	-,						
D3UN	0	1	2	3	4	5	6	7
D3UEQ	d,	d,	d,	d,	d,	d,	d,	d,
D3UHV	-,	-,	-,	-,	-,	-,	-,	-,
D3USV	-,	-,	-,	-,	-,	-,	-,	-,

SPUN	0	1	2	3	4	5	6	7	8	9	10 11
SPUEQ	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-, -,
SPUHV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-, -,
SPUSV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-, -,

   REMARKS   ----------------!

   where   a = **FTA**
           b = XTSI member number
           c = RC order number
           d = either **G** for D3U being grown or left blank for D3Us not being grown

3. Was **RC ORNU** c **ACTIVATED** message received?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Determine cause for rejection and repeat from Step 1, with the correct input message.

5. At 1B Processor MTC terminal, enter message
    VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1 a**!** for even-numbered growth XTSI.

    where   a = XTSI member number

    Response: **VER:MISC;OPT(SUXTSI):   XTSI MEMN** a**,**

XTCN	**0 1**
XTCHV	**-, -,**
XTCSV	**-, -,**

D3UN	**0 1 2 3 4 5 6 7**
D3UEQ	b, b, b, b, b, b, b, b,
D3UHV	**-, -, -, -, -, -, -, -,**
D3USV	**-, -, -, -, -, -, -, -,**

SPUN	**0 1 2 3 4 5 6 7 8 9 10 11**
SPUEQ	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUHV	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUSV	**-, -, -, -, -, -, -, -, -, -, -, -,**

    where   a = XTSI member number
             b = **G** for D3Us being grown

6. Are message format and member identification correct per the above response (Step 5)?

    If **Yes**, go to Step 8.
    If **No**, go to Step 7.

7. Determine the cause and resolve; repeat from Step 5.

8. Using the printout and the response message in Step 5, verify **G** is set for each D3U being grown.

9. Are all growth D3Us set to **G**?

    If **Yes**, go to Step 11.
    If **No**, go to Step 10.

10. Determine cause for rejection and repeat from Step 1, with correct input message.

11. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Recent Change and Verify D3U Submember Equipage
From GROW to SGRO

Caution: Calling up RC form will cause all CRT data to be cleared.

1. At 1B Processor MTC terminal, enter message **OP:RCFORM 705!**

   Response: CRT displays RC Form 705

2. Fill in blanks on RC Form 705 per the following and enter message:

   RC:UTYPE;CHG;OPT(SUXTSI),a**:**   **XTSI MEMN** b,

   ORNU c,

XTCN	0	1									
XTCHV	-,	-,									
XTCSV	-,	-,									

D3UN	0	1	2	3	4	5	6	7
D3UEQ	d,	d,	d,	d,	d,	d,	d,	d,
D3UHV	-,	-,	-,	-,	-,	-,	-,	-,
D3USV	-,	-,	-,	-,	-,	-,	-,	-,

SPUN	0	1	2	3	4	5	6	7	8	9	10	11
SPUEQ	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUHV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUSV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,

   REMARKS   ----------------!

   where   a = **FTA**
             b = XTSI member number
             c = RC order number
             d = either **S** for D3U being grown or left blank for D3Us not being grown

3. Was **RC ORNU** c **ACTIVATED** message received?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Determine cause for rejection and repeat from Step 1, with the correct input message.

5. At 1B Processor MTC terminal, enter message
    VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1 a**!** for even-numbered growth XTSI.

    where   a = XTSI member number

    Response: **VER:MISC;OPT(SUXTSI):   XTSI MEMN** a**,**

    | **XTCN** | **0 1** |
    | **XTCHV** | **-, -,** |
    | **XTCSV** | **-, -,** |

    | **D3UN** | **0 1 2 3 4 5   6 7** |
    | **D3UEQ** | b, b, b, b, b, b,   b, b, |
    | **D3UHV** | -, -, -, -, -, -,   -, -, |
    | **D3USV** | -, -, -, -, -, -,   -, -, |

    | **SPUN** | **0 1 2 3 4 5 6 7 8 9   10 11** |
    | **SPUEQ** | -, -, -, -, -, -, -, -, -, -,   -, -, |
    | **SPUHV** | -, -, -, -, -, -, -, -, -, -,   -, -, |
    | **SPUSV** | -, -, -, -, -, -, -, -, -, -,   -, -, |

    where   a = XTSI member number
               b = **S** for D3Us being grown

6. Are message format and member identification correct per the above response (Step 5)?

    If **Yes**, go to Step 8.
    If **No**, go to Step 7.

7. Determine the cause and resolve; repeat from Step 5.

8. Using the printout and the response message in Step 5, verify **S** is set for each D3U being grown.

9. Are all growth D3Us set to **S**?

    If **Yes**, go to Step 11.
    If **No**, go to Step 10.

10. Determine cause for rejection and repeat from Step 1, with correct input message.

11. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Recent Change and Verify D3U Submember Equipage
From SGRO to OPER

Caution: Calling up RC form will cause all CRT data to be cleared.

1. At 1B Processor MTC terminal, enter message **OP:RCFORM 705!**

   Response: CRT displays RC Form 705

2. Fill in blanks on RC Form 705 per the following and enter message:

   RC:UTYPE;CHG;OPT(SUXTSI),a**:   XTSI MEMN** b,

   ORNU c,

XTCN	**0**	**1**
XTCHV	-,	-,
XTCSV	-,	-,

D3UN	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
D3UEQ	d,	d,	d,	d,	d,	d,	d,	d,
D3UHV	-,	-,	-,	-,	-,	-,	-,	-,
D3USV	-,	-,	-,	-,	-,	-,	-,	-,

SPUN	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
SPUEQ	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUHV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUSV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,

   REMARKS   ----------------!

   where   a = **FTA**
             b = XTSI member number
             c = RC order number
             d = either **O** for D3U being grown or left blank for D3Us not being grown

3. Was **RC ORNU** c **ACTIVATED** message received?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Determine cause for rejection and repeat from Step 1, with the correct input message.

5. At 1B Processor MTC terminal, enter message
    VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1 a**!** for even-numbered growth XTSI.

    where   a = XTSI member number

    Response: **VER:MISC;OPT(SUXTSI):   XTSI MEMN** a**,**

XTCN	**0 1**
XTCHV	**-, -,**
XTCSV	**-, -,**

D3UN	**0 1 2 3 4 5 6 7**
D3UEQ	b, b, b, b, b, b, b, b,
D3UHV	**-, -, -, -, -, -, -, -,**
D3USV	**-, -, -, -, -, -, -, -,**

SPUN	**0 1 2 3 4 5 6 7 8 9 10 11**
SPUEQ	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUHV	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUSV	**-, -, -, -, -, -, -, -, -, -, -, -,**

    where   a = XTSI member number
             b = **O** for D3Us being grown

6. Are message format and member identification correct per the above response (Step 5)?

    If **Yes**, go to Step 8.
    If **No**, go to Step 7.

7. Determine the cause and resolve; repeat from Step 5.

8. Using the printout and the response message in Step 5, verify **O** is set for each D3U being grown.

9. Are all growth D3Us set to **O**?

    If **Yes**, go to Step 11.
    If **No**, go to Step 10.

10. Determine cause for rejection and repeat from Step 1, with correct input message.

11. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Guidelines for Assigning Dummy Trunks and Echo Cancellation for NETX Testing

Assigning Dummy Trunks for NETX Tests

960 minimum dummy trunks must be provisioned in CAD.DSA state as 2-way CCS (out-of-band) Data trunks.

> **Note:** Trunk provisioning for XTSI is not being done on a DS120 basis; rather than use only TAN timeslots N001-N120 PER TAN Level n, all TAN timeslots n000-n127 per XTSI SPC are used without breaks for maintenance slots (except that the very first TAN timeslot 0000 per SPC and the last 15 timeslots per SPC are reserved for maintenance). To extend a point, all trunks within a XTSI SPC could be defined and assigned with one statement for 1008 trunks (starting at TAN x0001) because they are consecutively numbered/used without breaks for maintenance use.

Assumptions:

1. A minimum of 960 dummy trunks in CAD.DSA state to the XTSI are needed for full NETX testing.
2. Each of four XTSI SPCs should have 240 dummy trunks minimum.
3. Each of the six DS3s should be set up for 160 minimum dummy trunks, with 80 minimum trunks assigned from DS1s 1-14 within each DS3 and 80 minimum trunks from DS1s 15-28 within each DS3.

Provision dummy trunks either as DS1s or as groups of 96 consecutive TANs (equivalent of four consecutive DS1s) per the following table:

Start TAN (16, 17, 18)	Finish TAN	D3U	DS1s	Start TANs for DS1s 2, 3, 4,		
xx00001	xx00096	0	1-4	xx00025,	xx00049,	xx00073
xx10001	xx10096	0	15-18	xx10025,	xx10049,	xx10073
xx02081	xx03048	1	1-4	xx02105,	xx03001,	xx03025
xx12081	xx13048	1	15-18	xx12105,	xx12105,	xx13001,
xx05033	xx06000	2	1-4	xx05057,	xx05081,	xx05105
xx15033	xx16000	2	15-18	xx15057	xx15081,	xx15105
yy00001	yy00096	3	4	yy00025,	yy00049,	yy00073
yy10001	yy10096	3	15-18	yy10025,	yy10049,	yy10073
yy02081	yy03048	4	1-4	yy02105,	yy03001,	yy03025
yy12081	yy13048	4	15-18	yy12105,	yy13001,	yy13025
yy05033	yy06000	5	1-4	yy05057,	yy05081,	yy05105
yy15033	yy16000	5	15-18	yy15057,	yy15081,	yy15105

where: xx is XTSI MEMN & yy is XTSI Mate (Odd-numbered MEMN

Load Library Program Packages from Original Tape Onto Disk

1. At 3B MCRT, enter message **LOAD:LIBSYS,FS;TAPE:TD** a**!**.

   where   a = tape/DAT unit with library tape is mounted.

   Response: **INIT:LIBSYS COMPLETED**
        LOAD:LIBSYS COMPLETED

2. Using printout and response message in Step 1, were **INIT:LIBSYS COMPLETED** and **LOAD:LIBSYS COMPLETED** messages received?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Determine cause and resolve; repeat from Step 1.

4. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Load Library Program Packages from Backup Tape Onto Disk

1. At 3B MCRT, enter message **VER:UPDATE:TAPE,MT** a

   where   a = Tape unit number that library tape is mounted.

   Response:

   ```
                                        THIS VALUE MUST BE
                                        SAME AS GENERIC OFFICE
              TAPE HEADER               IS RUNNING ON

              TAPE TYPE: LIB
              ORIGINAL GENERIC 4E< 22 >5A.00 R1
              MOST RECENT OFL GENERATION: . . . . .
              THIS TAPE WRITTEN: . . . . .
              FS IDS: . . . . .
              PARTL UPD FLG: . . . . .
   ```

2. Using printout and response message in Step 1, is **LIB** listed in **TAPE TYPE** field?

   If **Yes**, go to Step 3.
   If **No**, go to Step 4.

3. Using printout and response message in Step 1, is proper office generic listed in **ORIGINAL GENERIC** field?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Demount tape [DLP-599] and mount proper library tape [DLP-561]; repeat from Step 1.

5. At 1B Processor MTC terminal, enter message **AUD:LIBSYS,TD** a**;UCL!**.

     where   a = Tape unit number that library tape is mounted.

     Response: **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**

6. Using printout and response message in Step 5, Was
    AUD:LIBSYS,TD a**;UCL COMPLETED** message received?

    If **Yes**, go to Step 8.
    If **No**, go to Step 7.

7. Determine cause and resolve; repeat from Step 1.

8. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Remove Tape on 3B Tape Unit or
Digital Audio Tape (DAT) Unit

1. What APS does office have?

   If **3B21D APS**, go to Step 2.
   If **3B20D Model 2/3 APS**, go to Step 6.
   If **3B20D Model 1 APS**, go to Step 13.

   > ***Note:*** Steps 2 through 5 are to be performed for a 3B21D APS.

2. See Figure 1. At digital audio tape (DAT) unit that contains tape to be removed, depress eject button.
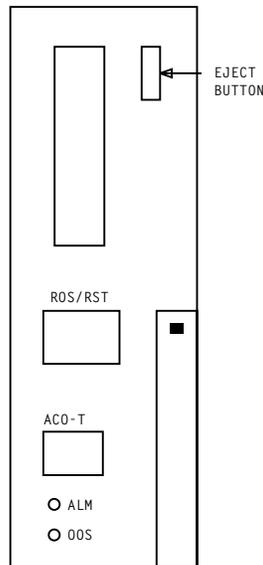
Figure 1.

3. Was tape just written?

   If **Yes**, go to Step 4.
   If **No**, go to Step 20.

4. See Figure 2. Put write-protect tab in the down (locked) position.

```
WRITE-PROTECT
TAB
DOWN = LOCKED
```
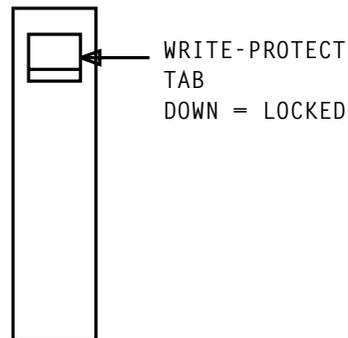
Figure 2.

5. Go to Step 20.

   Note: Steps 6 through 12 are to be performed for a 3B20D Model 2/3 APS.

6. At control panel, if **ON LINE** LED on, touch **RESET** switch.

   Response: **ON LINE** LED off

7. Touch **UNLOAD** switch.

   Response: Tape rewinds onto supply reel.

8. Open dust cover.

9. Depress latch, release button and remove reel.

10. Close dust cover.

11. If no more tapes are to be mounted, touch **LOGIC OFF** switch.

12. Go to Step 20.

> *Note:* Steps 13 through 19 are to be performed for a 3B20D Model 1 APS.

13. At control panel, if **ON LINE** lamp is on, depress **ON LINE** switch.

14. If tape is not at BOT, depress **REWIND** switch.

   Response: **LOAD POINT** LED lights

15. Depress **REWIND** switch.

   Response: Tape rewinds to end of tape and stops.

16. On tape unit, open dust cover.

17. Rotate supply (upper) hub knob counterclockwise until all of tape is rewound.

18. On supply (upper) hub, raise hub tab and remove tape reel.

19. Return hub tab to locked down position, then close dust cover.

20. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Degrow D3U Submember Equipage from OPER to SGRO

Caution: Calling up RC form will cause all CRT data to be cleared.

1. At 1B Processor MTC terminal, enter message **OP:RCFORM 705!**

   Response: CRT displays RC Form 705

2. Fill in blanks on RC Form 705 per the following and enter message:

   RC:UTYPE;CHG;OPT(SUXTSI),a**:   XTSI MEMN** b,

   ORNU c,

XTCN	0	1									
XTCHV	-,	-,									
XTCSV	-,	-,									
D3UN	0	1	2	3	4	5	6	7			
D3UEQ	d,	d,	d,	d,	d,	d,	d,	d,			
D3UHV	-,	-,	-,	-,	-,	-,	-,	-,			
D3USV	-,	-,	-,	-,	-,	-,	-,	-,			
SPUN	0	1	2	3	4	5	6	7	8	9	10	11
SPUEQ	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUHV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUSV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,

   REMARKS   ----------------!

   where   a = **FTA**
             b = XTSI member number
             c = RC order number
             d = either **S** for D3U being degrown or left blank for D3Us not being degrown

3. Was **RC ORNU** c **ACTIVATED** message received?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Determine cause for rejection and repeat from Step 1, with the correct input message.

5. At 1B Processor MTC terminal, enter message
    VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1 a**!** for even-numbered degrowth XTSI.

    where a = XTSI member number

    Response: **VER:MISC;OPT(SUXTSI):   XTSI MEMN** a**,**

XTCN	**0 1**
XTCHV	**-, -,**
XTCSV	**-, -,**

D3UN	**0 1 2 3 4 5 6 7**
D3UEQ	**b, b, b, b, b, b, b, b,**
D3UHV	**-, -, -, -, -, -, -, -,**
D3USV	**-, -, -, -, -, -, -, -,**

SPUN	**0 1 2 3 4 5 6 7 8 9 10 11**
SPUEQ	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUHV	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUSV	**-, -, -, -, -, -, -, -, -, -, -, -,**

    where a = XTSI member number
           b = **S** for D3Us being degrown

6. Are message format and member identification correct per the response above (Step 5)?

    If **Yes**, go to Step 8.
    If **No**, go to Step 7.

7. Determine the cause and resolve; repeat from Step 5.

8. Using the printout and the response message in Step 5, verify **S** is set for each D3U being degrown.

9. Are all degrowth D3Us set to **S**?

    If **Yes**, go to Step 11.
    If **No**, go to Step 10.

10. Determine cause for rejection and repeat from Step 1, with correct input message.

11. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Degrow D3U Submember Equipage from SGRO to GROW

Caution: Calling up RC form will cause all CRT data to be cleared.

1. At 1B Processor MTC terminal, enter message **OP:RCFORM 705!**

   Response: CRT displays RC Form 705

2. Fill in blanks on RC Form 705 per the following and enter message:

   RC:UTYPE;CHG;OPT(SUXTSI),a**:   XTSI MEMN** b,

   ORNU c,

XTCN	0	1					
XTCHV	-,	-,					
XTCSV	-,	-,					

D3UN	0	1	2	3	4	5	6	7
D3UEQ	d,	d,	d,	d,	d,	d,	d,	d,
D3UHV	-,	-,	-,	-,	-,	-,	-,	-,
D3USV	-,	-,	-,	-,	-,	-,	-,	-,

SPUN	0	1	2	3	4	5	6	7	8	9	10	11
SPUEQ	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUHV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUSV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,

   REMARKS   ---------------!

   where   a = **FTA**
              b = XTSI member number
              c = RC order number
              d = either **G** for D3U being degrown or left blank for D3Us not being degrown

3. Was **RC ORNU** c **ACTIVATED** message received?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Determine cause for rejection and repeat from Step 1, with the correct input message.

5. At 1B Processor MTC terminal, enter message
    VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1 a**!** for even-numbered degrowth XTSI.

    where a = XTSI member number

    Response: **VER:MISC;OPT(SUXTSI):**   **XTSI MEMN** a**,**

XTCN	**0 1**
XTCHV	**-, -,**
XTCSV	**-, -,**

D3UN	**0 1 2 3 4 5 6 7**
D3UEQ	**b, b, b, b, b, b, b, b,**
D3UHV	**-, -, -, -, -, -, -, -,**
D3USV	**-, -, -, -, -, -, -, -,**

SPUN	**0 1 2 3 4 5 6 7 8 9 10 11**
SPUEQ	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUHV	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUSV	**-, -, -, -, -, -, -, -, -, -, -, -,**

    where a = XTSI member number
        b = **G** for D3Us being degrown

6. Are message format and member identification correct per the above response (Step 5)?

    If **Yes**, go to Step 8.
    If **No**, go to Step 7.

7. Determine the cause and resolve; repeat from Step 5.

8. Using the printout and the response message in Step 5, verify **G** is set for each D3U being degrown.

9. Are all degrowth D3Us set to **G**?

    If **Yes**, go to Step 11.
    If **No**, go to Step 10.

10. Determine cause for rejection and repeat from Step 1, with correct input message.

11. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Degrow D3U Submember Equipage from GROW to UNEQ

Caution: Calling up RC form will cause all CRT data to be cleared.

1. At 1B Processor MTC terminal, enter message **OP:RCFORM 705!**

    Response: CRT displays RC Form 705

2. Fill in blanks on RC Form 705 per the following and enter message:

    RC:UTYPE;CHG;OPT(SUXTSI),a**:   XTSI MEMN** b,

    ORNU c,

XTCN	0	1						
XTCHV	-,	-,						
XTCSV	-,	-,						
D3UN	0	1	2	3	4	5	6	7
D3UEQ	d,	d,	d,	d,	d,	d,	d,	d,
D3UHV	-,	-,	-,	-,	-,	-,	-,	-,
D3USV	-,	-,	-,	-,	-,	-,	-,	-,

SPUN	0	1	2	3	4	5	6	7	8	9	10	11
SPUEQ	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUHV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUSV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,

    REMARKS   ----------------!

    where   a = **FTA**
    b = XTSI member number
    c = RC order number
    d = either **U** for D3U being degrown or left blank for D3Us not being degrown

3. Was **RC ORNU** c **ACTIVATED** message received?

    If **Yes**, go to Step 5.
    If **No**, go to Step 4.

4. Determine cause for rejection and repeat from Step 1, with the correct input message.

5. At 1B Processor MTC terminal, enter message
   VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1 a**!** for even-numbered degrowth XTSI.

   where   a = XTSI member number

   Response: **VER:MISC;OPT(SUXTSI):   XTSI MEMN** a**,**

XTCN	**0 1**
XTCHV	**-, -,**
XTCSV	**-, -,**

D3UN	**0 1 2 3 4 5 6 7**
D3UEQ	b, b, b, b, b, b, b, b,
D3UHV	**-, -, -, -, -, -, -, -,**
D3USV	**-, -, -, -, -, -, -, -,**

SPUN	**0 1 2 3 4 5 6 7 8 9 10 11**
SPUEQ	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUHV	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUSV	**-, -, -, -, -, -, -, -, -, -, -, -,**

   where   a = XTSI member number
            b = **U** for D3Us being degrown

6. Are message format and member identification correct per the above response (Step 5)?

   If **Yes**, go to Step 8.
   If **No**, go to Step 7.

7. Determine the cause and resolve; repeat from Step 5.

8. Using the printout and the response message in Step 5, verify **U** is set for each D3U being degrown.

9. Are all degrowth D3Us set to **U**?

   If **Yes**, go to Step 11.
   If **No**, go to Step 10.

10. Determine cause for rejection and repeat from Step 1, with correct input message.

11. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Copy CIA0 Files to CIA1

Caution: Ensure correct SFN and DFN numbers are entered to prevent wrong file being copied.

Note: Input messages must be entered one at a time in sequence from 1 through 7.

1. At 1B Processor MTC terminal, enter one of the following messages.

    1. **COPY:TSIFILE;XTSI** a**,SFN 0,DFN 1!**
    2. **COPY:TSIFILE;XTSI** a**,SFN 4,DFN 5!**
    3. **COPY:TSIFILE;XTSI** a**,SFN 8,DFN 9!**
    4. **COPY:TSIFILE;XTSI** a**,SFN 12,DFN 13!**
    5. **COPY:TSIFILE;XTSI** a**,SFN 16,DFN 17!**
    6. **COPY:TSIFILE;XTSI** a**,SFN 20,DFN 21!**
    7. **COPY:TSIFILE;XTSI** a**,SFN 24,DFN 25!**

    where   a = Even XTSI member number

2. Was **COMPLETE** message received?

    If **Yes**, go to Step 4.
    If **No**, go to Step 3.

3. Contact next higher support group for resolution; after resolving, repeat from Step 1 by entering same message in error.

4. Have all messages in Step 1 been entered?

    If **Yes**, go to Step 6.
    If **No**, go to Step 5.

5. Repeat from Step 1 for next input message.

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Diagnose TMSP Controller Memory Specifying Growth

1. At 1B Processor MTC terminal, enter message
   DGN:TMSP a**,CONTR** b**:MEMORY,GROWTH!**

   where   a = TMSP member number
              b = TMSP controller (0 or 1)

   Response: **RMV:TMSP** a**, CONTR** b **COMPL**
                   DGN:TMSP a**, CONTR** b **COMPLETED ATP MSG COMPL**
                   RST:TMSP a**, CONTR** b **STOPPED OS DGN**

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Refer trouble to installer for resolution; repeat from Step 1.

4. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Diagnose TMSP Controller Memory

1. At 1B Processor MTC terminal, enter message
   DGN:TMSP a**,CONTR** b**:MEMORY!**

   where   a = TMSP member number
             b = TMSP controller (0 or 1)

   Response: **DGN:TMSP** a**, CONTR** b **COMPLETED ATP MSG COMPL**
               RST:TMSP a**, CONTR** b **STOPPED OS DGN**

2. Was printout received per the response message in Step 1?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Refer trouble to installer for resolution; repeat from Step 1.

4. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify Software Version Pointers for Even-Numbered XTSI

1. At 1B Processor MTC terminal, enter message
   VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1 a**!** for even-numbered degrowth XTSI.

   where   a = XTSI member number

   Response: **VER:MISC;OPT(SUXTSI):   XTSI MEMN** a,

XTCN	0	1				
XTCHV	-,	-,				
XTCSV	0,	0,				

	CSP,	PUBI,	GRAM,	CIA,	ALF,	EXEC,
XTC0 PACKS	-,	-,	-,	-,	-,	-,
XTC1 PACKS	-,	-,	-,	-,	-,	-,

   XTSI FRAME INBAND ENABLED -,

   IBUEQ   -,
   IBUHV   -,
   IBUSV   0,

D3UN	0	1	2	3	4	5	6	7
D3UEQ	-,	-,	-,	-,	-,	-,	-,	-,
D3UHV	-,	-,	-,	-,	-,	-,	-,	-,
D3USV	0,	0,	0,	0,	0,	0,	0,	0,

SPUN	0	1	2	3	4	5	6	7	8	9	10	11
SPUEQ	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUHV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUSV	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,

   where   a = XTSI member number

2. Are message format and member identification correct per the response message in(Step 1)?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Determine cause and resolve; repeat from Step 1.

4. Using printout and the response message in Step 1, verify all fields for **XTCSV**, **IBUSV**, **D3USV**, and **SPUSV** are set to **0**.

5. Are all fields set to **0**?

    If **Yes**, go to Step 7.
    If **No**, go to Step 6.

6. Refer problem to installer to determine error and decide on corrective action. After resolving, repeat from Step 1.

7. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify XTSI Files Stored in 3B Computer

Note: This command will take from 5 to 15 minutes to complete, depending on system call load.

1. At 3B MCRT, enter message **EXC:ENVIR:UPROC,FN "/tools/prxtsihdrs"**

   Response:

   > *Note:* Some response output may appear in different order due to spooler processing.

   EXC ENVIR UPROC /tools/prxtsihdrs STARTED

   File(s)
   xtsi/fdt/xfdtver0
   xtsi/fdt/xfdtver1   0000 **xxxx** 0000 nnnn **C**Ann/nn/nn   nn:nn:nn**C**<nn>**d.efg**
   xtsi/xtc/xoprver0   0000 **xxxx** 0000 nnnn **O**Ann/nn/nn   nn:nn:nn**C**<nn>**d.efg**
   xtsi/xtc/xoprver1   0000 **xxxx** 0000 nnnn **O**Ann/nn/nn   nn:nn:nn**C**<nn>**d.efg**
   xtsi/xtc/xdgnver0   0000 **xxxx** 0000 nnnn **D**Ann/nn/nn   nn:nn:nn**C**<nn>**d.efg**
   xtsi/xtc/xdgnver1   0000 **xxxx** 0000 nnnn **D**Ann/nn/nn   nn:nn:nn**C**<nn>**d.efg**
   xtsi/d3u/doprver0 0000 **xxxx** 0000 nnnn **O**Ann/nn/nn   nn:nn:nn**U**<nn>**d.efg**
   xtsi/d3u/doprver1 0000 **xxxx** 0000 nnnn **O**Ann/nn/nn   nn:nn:nn**U**<nn>**d.efg**
   xtsi/d3u/ddgnver0 0000 **xxxx** 0000 nnnn **D**Ann/nn/nn   nn:nn:nn**U**<nn>**d.efg**
   xtsi/d3u/ddgnver1 0000 **xxxx** 0000 nnnn **D**Ann/nn/nn   nn:nn:nn**U**<nn>**d.efg**
   xtsi/spu/soprver0 0000 **xxxx** 0000 nnnn **O**Ann/nn/nn   nn:nn:nn**S**<nn>**d.efg**
   xtsi/spu/soprver1 0000 **xxxx** 0000 nnnn **O**Ann/nn/nn   nn:nn:nn**S**<nn>**d.efg**
   xtsi/spu/sdgnver0 0000 **xxxx** 0000 nnnn **D**Ann/nn/nn   nn:nn:nn**S**<nn>**d.efg**
   xtsi/spu/sdgnver1 0000 **xxxx** 0000 nnnn **D**Ann/nn/nn   nn:nn:nn**S**<nn>**d.efg**
   xtsi/xtc/xcspver0   0000 **xxxx** 0000 nnnn **S**Ann/nn/nn   nn:nn:nn**C**<nn>**d.efg**
   xtsi/xtc/xcspver1   0000 **xxxx** 0000 nnnn **S**Ann/nn/nn   nn:nn:nn**C**<nn>**d.efg**
   xtsi/ibu/ioprver0   0000 **xxxx** 0000 nnnn **O**Ann/nn/nn   nn:nn:nn**I**<nn>**d.efg**
   xtsi/ibu/ioprver1   0000 **xxxx** 0000 nnnn **O**Ann/nn/nn   nn:nn:nn**I**<nn>**d.efg**
   xtsi/ibu/idgnver0   0000 **xxxx** 0000 nnnn **D**Ann/nn/nn   nn:nn:nn**I**<nn>**d.efg**
   xtsi/ibu/idgnver1   0000 **xxxx** 0000 nnnn **D**Ann/nn/nn   nn:nn:nn**I**<nn>**d.efg**
   xtsi/ibu/imfver0   0000 **xxxx** 0000 nnnn **M**Ann/nn/nn   nn:nn:nn**I**<nn>**d.efg**
   xtsi/ibu/imfver1   0000 **xxxx** 0000 nnnn **M**Ann/nn/nn   nn:nn:nn**I**<nn>**d.efg**
   xtsi/ibu/idtmfver0 0000 **xxxx** 0000 nnnn **F**Ann/nn/nn   nn:nn:nn**I**<nn>**d.efg**
   xtsi/ibu/idtmfver1 0000 **xxxx** 0000 nnnn **F**Ann/nn/nn   nn:nn:nn**I**<nn>**d.efg**
   xtsi/ibu/ivpaver0   0000 **xxxx** 0000 nnnn **V**Ann/nn/nn   nn:nn:nn**I**<nn>**d.efg**
   xtsi/ibu/ivpaver1   0000 **xxxx** 0000 nnnn **V**Ann/nn/nn   nn:nn:nn**I**<nn>**d.efg**
   xtsi/ibu/itstver0   0000 **xxxx** 0000 nnnn **T**Ann/nn/nn   nn:nn:nn**I**<nn>**d.efg**
   xtsi/ibu/itstver1   0000 **xxxx** 0000 nnnn **T**Ann/nn/nn   nn:nn:nn**I**<nn>**d.efg**
   EXC ENVIR UPROC /tools/prxtsihdrs COMPLETED SEGMENT 2

   See next page for Legend.

Legend:

xxxx = Checksum/Hashsum value for file in hex

In Header Date Column:
  C means FDT file
  D means DGN file
  O means OPR file
  M (Don't Care)
  F (Don't Care)
  V (Don't Care)
  T (Don't Care)

In Issue Column:
  C means XTC subunit
  U means D3U subunit
  S means (Don't Care)
  I means (Don't Care)
  d.efg is file issue number

2. Using printout and the response message in Step 1, request next higher support
   group to verify that latest XTSI operating and diagnostic files are
   3B computer memory.

3. Save printout for later use to verify that XTSI subunits are
   running on latest software.

4. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Copy New Files from 3B Computer to Growth XTSI

> ***Note:*** Input messages must be entered one at a time in sequence from 1 through 5. Each copy command may take approximately 3 minutes.

1. At 1B Processor MTC terminal, enter one of the following messages:

    1. **COPY:XTSI** a**,CONTR 0,XTC,FDT,SVN 0,DVN 0;UCL!**
    2. **COPY:XTSI** a**,CONTR 0,XTC,OPR,SVN 0,DVN 0;UCL!**
    3. **COPY:XTSI** a**,CONTR 0,XTC,DGN,SVN 0,DVN 0;UCL!**
    4. **COPY:XTSI** a**,CONTR 0,D3U,OPR,SVN 0,DVN 0;UCL!**
    5. **COPY:XTSI** a**,CONTR 0,D3U,DGN,SVN 0,DVN 0;UCL!**

    where a = Even growth XTSI member number.

2. Was **TASK COMPLETED** message received?

    If **Yes**, go to Step 4.
    If **No**, go to Step 3.

3. Refer trouble to installer for resolution; after resolving, repeat from Step 1 by entering same message in error.

4. Have all input messages in Step 1 been entered?

    If **Yes**, go to Step 6.
    If **No**, go to Step 5.

5. Repeat from Step 1 for next input message.

> ***Note:*** Input messages must be entered one at a time in sequence from 1 through 28. Each copy command may take approximately 3 minutes.

6. At 1B Processor MTC terminal, enter one of the following messages:

   1. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 20!**
   2. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 21!**
   3. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 22!**
   4. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 23!**
   5. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 24!**
   6. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 25!**
   7. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 26!**
   8. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 27!**
   9. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 28!**
   10. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 29!**
   11. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 30!**
   12. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 31!**
   13. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 32!**
   14. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 33!**
   15. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 34!**
   16. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 35!**
   17. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 36!**
   18. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 37!**
   19. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 38!**
   20. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 39!**
   21. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 40!**
   22. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 41!**
   23. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 42!**
   24. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 43!**
   25. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 44!**
   26. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 45!**
   27. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 46!**
   28. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 47!**

   where a = Even growth XTSI member number.

7. Was **COMPLETE** message received?

   If **Yes**, go to Step 9.
   If **No**, go to Step 8.

8. Refer trouble to installer for resolution; after resolving, repeat from Step 6 by entering same message in error.

9. Have all input messages in Step 6 been entered?

    If **Yes**, go to Step 11.
    If **No**, go to Step 10.

10. Repeat from Step 6 for next input message.

11. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify Proper Controller 0 Software Is Being Run

Note: Input messages must be entered one at a time in sequence from 1 through 5.

1. At 1B Processor MTC terminal, enter one of the following messages:

   1. **DUMP:TSIFILE;XTSI** a**,CONTR 0,FILE 0,HADR 0,L 20!** /xtc/fdtver0

   2. **DUMP:TSIFILE;XTSI** a**,CONTR 0,FILE 4,HADR 0,L 20!** /xtc/oprver0

   3. **DUMP:TSIFILE;XTSI** a**,CONTR 0,FILE 8,HADR 0,L 20!** /xtc/dgnver0

   4. **DUMP:TSIFILE;XTSI** a**,CONTR 0,FILE 12,HADR 0,L 20!** /d3u/oprver0

   5. **DUMP:TSIFILE;XTSI** a**,CONTR 0,FILE 16,HADR 0,L 20!** /d3u/dgnver0

   where a = Even growth XTSI member number.

   Response:

   DUMP:TSIFILE XTSI a **CONTR 0 FILE** b **HADR 0 L 20:**
   COMPLETE

000000	**xxxx**	**0000**	----	**0000**	----	**yyyy**	----	----
000008	----	----	----	----	**--zz**	----	----	----
000010	**3**e**3**f	**3**d**--**	**0000**	**3**g**00**				

a	=	XTSI member number
b	=	File number (0, 4, 8, 12, or 16)
xxxx	=	Checksum/Hashsum value for this file in hex
yyyy	=	Type of file:
		4341 (for fdtver0) or
		4441 (for dgnver0) or
		4F41 (for oprver0)
zz	=	Type of subunit:
		43 (for XTC) or
		55 (for D3U)
e f d g	=	File issue number (in the format d.efg)

2. Was printout received per above response?

    If **Yes**, go to Step 4.
    If **No**, go to Step 3.

3. Determine cause and resolve; repeat from Step 1.

4. Using printout and response message in Step 1, compare checksum value in word 0 with associated checksum value from 3B printout saved earlier [DLP-617]. Record discrepancy for later use.

5. Using printout and response message in Step 1, compare software release issue in words 10, 11 and 13 with associated software release issue from 3B printout saved earlier [DLP-617]. Record discrepancy for later use.

6. Using printout and response message in Step 1, verify type of file data in word 5 for associated message inputted. Record discrepancy for later use.

7. Using printout and response message in Step 1, verify subunit type in word C (hex) for associated message inputted. Record discrepancy for later use.

8. Have all messages in Step 1 been entered?

    If **Yes**, go to Step 10.
    If **No**, go to Step 9.

9. Repeat from Step 1, for next input message.

10. Were data words correct?

    If **Yes**, go to Step 12.
    If **No**, go to Step 11.

11. Refer error(s) to installer for resolution; after resolving, repeat from Step 1.

12. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Copy Files to Remaining File Locations in CIA0 Pack

Note: Input messages must be entered one at a time in sequence from 1 through 16.

Caution: Ensure correct SFN and DFN numbers are entered to prevent wrong file being copied.

1. At 1B Processor MTC terminal, enter one of the following messages:

   1. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 2!**
   2. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 0,DFN 3!**
   3. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 4,DFN 6!**
   4. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 4,DFN 7!**
   5. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 8,DFN 10!**
   6. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 8,DFN 11!**
   7. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 12,DFN 14!**
   8. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 12,DFN 15!**
   9. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 16,DFN 18!**
   10. **COPY:TSIFILE;XTSI** a**,CONTR 0,SFN 16,DFN 19!**

   where a = Even growth XTSI member number.

2. Was **COMPLETE** message received?

   If **Yes**, go to Step 4.
   If **No**, go to Step 3.

3. Refer trouble to installer for resolution; after resolving, repeat from Step 1 by entering same message in error.

4. Have all input messages in Step 1 been entered?

   If **Yes**, go to Step 6.
   If **No**, go to Step 5.

5. Repeat from Step 1 for next input message.

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Provision Dummy Trunks for NETX Testing

1. Contact provisioning group and request information for field in Table A for the 12 TSGs listed in Table B. This information will be used on RC Form 100.

Table A
DPC (Destination Point Code)
FENPA (Far-End Numbering Plan Area)

Table B			
	TSG Name		**TSG Name**
1	1 NETX IL XX S0D 00T	7	1 NETX IL XX S0D 30T
2	1 NETX IL XX S1D 00T	8	1 NETX IL XX S1D 30T
3	1 NETX IL XX S0D 10T	9	1 NETX IL XX S0D 40T
4	1 NETX IL XX S1D 10T	10	1 NETX IL XX S1D 40T
5	1 NETX IL XX S0D 20T	11	1 NETX IL XX S0D 50T
6	1 NETX IL XX S1D 20T	12	1 NETX IL XX S1D 50T

> **Note:** Values shown for RC Form 100 are for 4E23 generic. If this is being used in an office that is not in 4E23 generic, TG-4 document or appropriate provisioning group must be consulted to determine if changes are required for RC Form 100.
>
> ***Caution: Calling up RC Form will cause all CRT data to be cleared.***

2. At 1B Processor terminal, enter message **OP:RCFORM 100!**

3. Fill in the fields per Table C for one TSG in Table B; then enter message.

TABLE C	
MESSAGE NUMBER	**INPUT MESSAGE**
1	RC:TSG;NEW;OPT(TWOWAY),a: BTFN TOWN ST BL FBS NBS ORNU b, TSG c PCF ANSI, AOPC , DPC d , FENCLASS , FENID , TFG , TSGBBC , VDCAP , DATAF , FEAREA , FESWID , EXSEQ , FEPTY , QTFN 336, TOT ETC , SAT N, DOM POTS, ACD N, IT , FAI , FENPA e , FEOFC , FELATA , FESC6 Y, IWZ1 , MEM Y, PSES Y, INSEP 3, MTSC 5, GNSC 0, GEOSEP 0, ISC ISUP , RFA N, ADIG , CCIS2WRE N, CBNPR , OSC ISUP , RFMP N, DPSTOP , DELAY , MFSPEED , DNHR N, XCPA 3, DNP , REV N, GLARE N, PSOLI , BN , BRL S, ITC 0, GSDN , GSDNPHSE , EAS N, NPARINH , WATSBN , PSBN , PSCPN , ANISID , WANISID , PSUUI N, BNPT , WBNPT , CMERGE , SCFN N, OVLP , PRIT , APS , CHNEG , PSATP N, PBXESGD , PBXAW , FAR4E N, DOFP Y, SBRIV , MEGC , SDNA , OWAT , DATA , CBC , DDD , IDDD , FOSPS , CCIF , SDNPLAN , BFTIS , BFTNI , SKSP , PBXNWW , HYBRD , CCTT , INCID B, ITELCO , S5DIG , SDS , FVSR , IFITR , PCPEACEL , UT15DA , LRN , CBN DIGS , CBN , ONCID 3, D3DBN , MULAW , CSCSET , CID , ITCENC , OFITR , SPN , LNPIC , ANCR , ACCID , PSTNG , FLDSPR , REVAMP , E1T1 , SUPBLK , ATRIG , IXC , FOLI , FELN , HUNT , CSN , CAREA 2, CPOS 0, SINDEX , CODSC , NEOTR N, TRIDX , OTSTT N , OTSTN OTMTT N , OTMTN , XTSTT N , XTSTN XTMTT N , XTMTN , S1 , S2 , S3 , S4 , S5 , S6 , S7 , S8 , S9 , S10 , REMARKS!

a = FTA   d = DPC received from provisioning group
b = Order number   e = FENPA received from provisioning group
c = TSG name from TABLE B, Page 1

4. Was **RC ORNU** b **ACTIVATED** message received?

   If **Yes**, go to Step 6.
   If **No**, go to Step 5.

5. Contact next higher support organization for resolution; after resolving, repeat from Step 3.

6. Has RC Form 100 been entered for each TSG in Table B?

   If **Yes**, go to Step 8.
   If **No**, go to Step 7.

7. Repeat from Step 3 for next TSG name in Table B.

   Caution: Calling up RC Form will cause all CRT data to be cleared.

8. At 1B Processor terminal, enter message **OP:RCFORM 203!**

9. Fill in the fields on RC Form 203 for one MESSAGE (See Table D); then enter message.

Table D (Note)			
	Messages		**Messages**
1	MESSAGE 1, PAGE 5	7	MESSAGE 7, PAGE 8
2	MESSAGE 2, PAGE 5	8	MESSAGE 8, PAGE 8
3	MESSAGE 3, PAGE 6	9	MESSAGE 9, PAGE 9
4	MESSAGE 4, PAGE 6	10	MESSAGE 10, PAGE 9
5	MESSAGE 5, PAGE 7	11	MESSAGE 11, PAGE 10
6	MESSAGE 6, PAGE 7	12	MESSAGE 12, PAGE 10
Note: Refer to Table E for Messages 1 through 12.			

10. Was **RC ORNU** b **ACTIVATED** message received?

    If **Yes**, go to Step 12.
    If **No**, go to Step 11.

11. Contact next higher support organization for resolution; after resolving, repeat from Step 9.

12. In Table D, place a checkmark at MESSAGE just activated.

13. Have all MESSAGES (MESSAGE 1 through 12) been entered?

    If **Yes**, go to Step 15.
    If **No**, go to Step 14.

14. Repeat from Step 9 for next MESSAGE.

15. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

	TABLE E
MESSAGE NUMBER	**INPUT MESSAGE**
| 1 | ```
RC:TRK;NEW;OPT(MANUAL,CCS), a :                         BTFN TOWN ST BL FBS NBS
ORNU  b  ,                                              TSG 1    NETX IL XX SOD OOT,
ES N   ,                                 PTERM      ,
                                         STERM      ,
                TAN                      LABEL
QTRK   FTFN        TSI SPC LVL FTS       FBAND FMEMN    FCIC    VCR    BBC    SCGA
24 , 1   ,        cc , 0,  0, 001,         ,   ,         ,      ,      ,       ,
24 , 25  ,        cc , 0,  0, 073,         ,   ,         ,      ,      ,       ,
24 , 49  ,        cc , 0,  1, 017,         ,   ,         ,      ,      ,       ,
24 , 73  ,        cc , 0,  1, 089,         ,   ,         ,      ,      ,       ,
24 , 97  ,        cc , 0,  2, 033,         ,   ,         ,      ,      ,       ,
  ,   ,      ,     ,  ,   ,   ,            ,   ,         ,      ,      ,       ,
REMARKS!
``` |
| 2 | ```
RC:TRK;NEW;OPT(MANUAL,CCS), a :                         BTFN TOWN ST BL FBS NBS
ORNU b     ,                                            TSG 1    NETX IL XX S1D OOT,
ES N   ,                                 PTERM      ,
                                         STERM      ,
                TAN                      LABEL
QTRK   FTFN        TSI SPC LVL FTS       FBAND FMEMN    FCIC    VCR    BBC    SCGA
24 , 1   ,        cc , 1,  0, 001,         ,   ,         ,      ,      ,       ,
24 , 25  ,        cc , 1,  0, 073,         ,   ,         ,      ,      ,       ,
24 , 49  ,        cc , 1,  1, 017,         ,   ,         ,      ,      ,       ,
24 , 73  ,        cc , 1,  1, 089,         ,   ,         ,      ,      ,       ,
24 , 97  ,        cc , 1,  2, 033,         ,   ,         ,      ,      ,       ,
  ,   ,      ,     ,  ,   ,   ,            ,   ,         ,      ,      ,       ,
REMARKS!
``` |
| | a = FTA
b = Order number
cc = Even member number of growth XTSI |

TABLE E (Contd)	
MESSAGE NUMBER	**INPUT MESSAGE**
| 3 | ```
RC:TRK;NEW;OPT(MANUAL,CCS), a :                          BTFN TOWN ST BL FBS NBS
ORNU b    ,                                              TSG 1    NETX IL XX SOD 1OT,
ES N   ,                                    PTERM   ,
                                            STERM   ,
                    TAN               LABEL
QTRK   FTFN         TSI SPC LVL FTS   FBAND FMEMN   FCIC    VCR     BBC     SCGA
24 , 1   ,          cc , 0, 2, 081,     ,  ,         ,       ,       ,       ,
24 , 25  ,          cc , 0, 3, 025,     ,  ,         ,       ,       ,       ,
24 , 49  ,          cc , 0, 3, 097,     ,  ,         ,       ,       ,       ,
24 , 73  ,          cc , 0, 4, 041,     ,  ,         ,       ,       ,       ,
24 , 97  ,          cc , 0, 4, 113,     ,  ,         ,       ,       ,       ,
    ,    ,       ,     ,  ,  ,  ,        ,  ,         ,       ,       ,       ,
REMARKS!
``` |
| 4 | ```
RC:TRK;NEW;OPT(MANUAL,CCS), a :                          BTFN TOWN ST BL FBS NBS
ORNU b    ,                                              TSG 1    NETX IL XX S1D 1OT,
ES N   ,                                    PTERM   ,
                                            STERM   ,
                    TAN               LABEL
QTRK   FTFN         TSI SPC LVL FTS   FBAND FMEMN   FCIC    VCR     BBC     SCGA
24 , 1   ,          cc , 1, 2, 081,     ,  ,         ,       ,       ,       ,
24 , 25  ,          cc , 1, 3, 025,     ,  ,         ,       ,       ,       ,
24 , 49  ,          cc , 1, 3, 097,     ,  ,         ,       ,       ,       ,
24 , 73  ,          cc , 1, 4, 041,     ,  ,         ,       ,       ,       ,
24 , 97  ,          cc , 1, 4, 113,     ,  ,         ,       ,       ,       ,
    ,    ,       ,     ,  ,  ,  ,        ,  ,         ,       ,       ,       ,
REMARKS!
``` |
| a = FTA b = Order number cc = Even member number of growth XTSI | |

TABLE E (Contd)	
MESSAGE NUMBER	**INPUT MESSAGE**
| 5 | ```
RC:TRK;NEW;OPT(MANUAL,CCS), a :                      BTFN TOWN ST BL FBS NBS
ORNU b    ,                                          TSG 1    NETX IL XX SOD 20T,
ES N   ,                                    PTERM    ,
                                            STERM    ,
                      TAN                   LABEL
QTRK   FTFN        TSI SPC LVL FTS    FBAND FMEMN    FCIC    VCR    BBC    SCGA
24 , 1   ,        cc , 0, 5, 033,      ,  ,          ,      ,      ,      ,
24 , 25  ,        cc , 0, 5, 105,      ,  ,          ,      ,      ,      ,
24 , 49  ,        cc , 0, 6, 049,      ,  ,          ,      ,      ,      ,
24 , 73  ,        cc , 0, 6, 121,      ,  ,          ,      ,      ,      ,
24 , 97  ,        cc , 0, 7, 065,      ,  ,          ,      ,      ,      ,
   ,     ,        ,   ,  ,  ,          ,  ,          ,      ,      ,      ,
REMARKS!
``` |
| 6 | ```
RC:TRK;NEW;OPT(MANUAL,CCS), a :                      BTFN TOWN ST BL FBS NBS
ORNU b    ,                                          TSG 1    NETX IL XX S1D 20T,
ES N   ,                                    PTERM    ,
                                            STERM    ,
                      TAN                   LABEL
QTRK   FTFN        TSI SPC LVL FTS    FBAND FMEMN    FCIC    VCR    BBC    SCGA
24 , 1   ,        cc , 1, 5, 033,      ,  ,          ,      ,      ,      ,
24 , 25  ,        cc , 1, 5, 105,      ,  ,          ,      ,      ,      ,
24 , 49  ,        cc , 1, 6, 049,      ,  ,          ,      ,      ,      ,
24 , 73  ,        cc , 1, 6, 121,      ,  ,          ,      ,      ,      ,
24 , 97  ,        cc , 1, 7, 065,      ,  ,          ,      ,      ,      ,
   ,     ,        ,   ,  ,  ,          ,  ,          ,      ,      ,      ,
REMARKS!
``` |
| a = FTA
b = Order number
cc = Even member number of growth XTSI | |

	TABLE E (Contd)
MESSAGE NUMBER	**INPUT MESSAGE**

7	RC:TRK;NEW;OPT(MANUAL,CCS), a : BTFN TOWN ST BL FBS NBS
	ORNU b , TSG 1 NETX IL XX SOD 30T,
	ES N , PTERM ,
	            STERM ,
	        TAN LABEL
	QTRK FTFN TSI SPC LVL FTS FBAND FMEMN FCIC VCR BBC SCGA
	24 , 1 , dd , 0, 0, 001, , , , , , ,
	24 , 25 , dd , 0, 0, 073, , , , , , ,
	24 , 49 , dd , 0, 1, 017, , , , , , ,
	24 , 73 , dd , 0, 1, 089, , , , , , ,
	24 , 97 , dd , 0, 2, 033, , , , , , ,
	  , , , , , , , , , , , ,
	REMARKS!

8	RC:TRK;NEW;OPT(MANUAL,CCS), a : BTFN TOWN ST BL FBS NBS
	ORNU b , TSG 1 NETX IL XX S1D 30T,
	ES N , PTERM ,
	            STERM ,
	        TAN LABEL
	QTRK FTFN TSI SPC LVL FTS FBAND FMEMN FCIC VCR BBC SCGA
	24 , 1 , dd , 1, 0, 001, , , , , , ,
	24 , 25 , dd , 1, 0, 073, , , , , , ,
	24 , 49 , dd , 1, 1, 017, , , , , , ,
	24 , 73 , dd , 1, 1, 089, , , , , , ,
	24 , 97 , dd , 1, 2, 033, , , , , , ,
	  , , , , , , , , , , , ,
	REMARKS!

	a = FTA b = Order number dd = Odd member number of growth XTSI

TABLE E (Contd)	
MESSAGE NUMBER	**INPUT MESSAGE**
| 9 | ```
RC:TRK;NEW;OPT(MANUAL,CCS), a :                        BTFN TOWN ST BL FBS NBS
ORNU b    ,                                            TSG 1    NETX IL XX SOD 40T,
ES N   ,                                    PTERM     ,
                                            STERM     ,
                    TAN                     LABEL
QTRK   FTFN       TSI SPC LVL FTS    FBAND FMEMN    FCIC    VCR    BBC    SCGA
24 , 1   ,        dd , 0, 2, 081,       ,  ,          ,      ,      ,       ,
24 , 25  ,        dd , 0, 3, 025,       ,  ,          ,      ,      ,       ,
24 , 49  ,        dd , 0, 3, 097,       ,  ,          ,      ,      ,       ,
24 , 73  ,        dd , 0, 4, 041,       ,  ,          ,      ,      ,       ,
24 , 97  ,        dd , 0, 4, 113,       ,  ,          ,      ,      ,       ,
   ,     ,        ,   ,  ,  ,           ,  ,          ,      ,      ,       ,
REMARKS!
``` |
| 10 | ```
RC:TRK;NEW;OPT(MANUAL,CCS), a :                        BTFN TOWN ST BL FBS NBS
ORNU b    ,                                            TSG 1    NETX IL XX S1D 40T,
ES N   ,                                    PTERM     ,
                                            STERM     ,
                    TAN                     LABEL
QTRK   FTFN       TSI SPC LVL FTS    FBAND FMEMN    FCIC    VCR    BBC    SCGA
24 , 1   ,        dd , 1, 2, 081,       ,  ,          ,      ,      ,       ,
24 , 25  ,        dd , 1, 3, 025,       ,  ,          ,      ,      ,       ,
24 , 49  ,        dd , 1, 3, 097,       ,  ,          ,      ,      ,       ,
24 , 73  ,        dd , 1, 4, 041,       ,  ,          ,      ,      ,       ,
24 , 97  ,        dd , 1, 4, 113,       ,  ,          ,      ,      ,       ,
   ,     ,        ,   ,  ,  ,           ,  ,          ,      ,      ,       ,
REMARKS!
``` |
| a = FTA
b = Order number
dd = Odd member number of growth XTSI | |

TABLE E (Contd)	
MESSAGE NUMBER	**INPUT MESSAGE**
| 11 | ```
RC:TRK;NEW;OPT(MANUAL,CCS), a :                          BTFN TOWN ST BL FBS NBS
ORNU b    ,                                              TSG 1    NETX IL XX SOD 50T,
ES N   ,                                       PTERM    ,
                                               STERM    ,
                        TAN                    LABEL
QTRK   FTFN        TSI SPC LVL FTS     FBAND FMEMN    FCIC     VCR     BBC     SCGA
24 , 1   ,        dd , 0, 5, 033,       ,   ,          ,       ,       ,       ,
24 , 25  ,        dd , 0, 5, 105,       ,   ,          ,       ,       ,       ,
24 , 49  ,        dd , 0, 6, 049,       ,   ,          ,       ,       ,       ,
24 , 73  ,        dd , 0, 6, 121,       ,   ,          ,       ,       ,       ,
24 , 97  ,        dd , 0, 7, 065,       ,   ,          ,       ,       ,       ,
   ,     ,         ,   ,  ,   ,         ,   ,          ,       ,       ,       ,
REMARKS!
``` |
| 12 | ```
RC:TRK;NEW;OPT(MANUAL,CCS), a :                          BTFN TOWN ST BL FBS NBS
ORNU b    ,                                              TSG 1    NETX IL XX S1D 50T,
ES N   ,                                       PTERM    ,
                                               STERM    ,
                        TAN                    LABEL
QTRK   FTFN        TSI SPC LVL FTS     FBAND FMEMN    FCIC     VCR     BBC     SCGA
24 , 1   ,        dd , 1, 5, 033,       ,   ,          ,       ,       ,       ,
24 , 25  ,        dd , 1, 5, 105,       ,   ,          ,       ,       ,       ,
24 , 49  ,        dd , 1, 6, 049,       ,   ,          ,       ,       ,       ,
24 , 73  ,        dd , 1, 6, 121,       ,   ,          ,       ,       ,       ,
24 , 97  ,        dd , 1, 7, 065,       ,   ,          ,       ,       ,       ,
   ,     ,         ,   ,  ,   ,         ,   ,          ,       ,       ,       ,
REMARKS!
``` |
| a = FTA
b = Order number
dd = Odd member number of growth XTSI | |

Diagnose XTSI Controller Specifying
Phases 1 through 29 and Growth

1. At 1B Processor MTC terminal, enter message
    DGN:XTSI a**,CONTR** b**:PH 1-29,GROWTH!**

    where   a = XTSI member number
               b = XTSI controller (0 or 1).

    Response:

    DGN: XTSI a**, CONTR** b **PH 1 ATP MSG STARTED**
    DGN: XTSI a**, CONTR** b **PH 2 ATP MSG IP**
    DGN: XTSI a**, CONTR** b **PH 4 ATP MSG IP**
    DGN: XTSI a**, CONTR** b **PH 5 ATP MSG IP**
    DGN: XTSI a**, CONTR** b **PH 6 ATP MSG IP**
    DGN: XTSI a**, CONTR** b **PH 7 ATP MSG IP**
    DGN: XTSI a**, CONTR** b **PH 9 ATP MSG IP**
    DGN: XTSI a**, CONTR** b **PH 12 ATP MSG IP**
    DGN: XTSI a**, CONTR** b **PH 13 ATP MSG IP**
    DGN: XTSI a**, CONTR** b **PH 14 ATP MSG IP**
    DGN: XTSI a**, CONTR** b **PH 15 ATP MSG IP**
    DGN: XTSI a**, CONTR** b **PH 16 ATP MSG IP**
    DGN: XTSI a**, CONTR** b **PH 17 CATP (00000000 00000020) MSG IP**
    DGN: XTSI a**, CONTR** b **PH 18 ATP MSG IP**
    DGN: XTSI a**, CONTR** b **PH 19 ATP MSG IP**
    DGN: XTSI a**, CONTR** b **PH 23 ATP MSG IP**
    DGN: XTSI a**, CONTR** b **PH 25 ATP MSG IP**
    DGN: XTSI a**, CONTR** b **PH 27 CATP (00000000 00000020) MSG IP**
    DGN: XTSI a**, CONTR** b **PH 29 CATP (00000000 00000020) MSG IP**
    DGN: XTSI a**, CONTR** b **COMPLETED CATP (00000000 00000020) MSG COMPL**

2. Was response message in Step 1 received?

    If **Yes**, go to Step 6.
    If **No**, go to Step 3.

3. Is failure a result of TELCO/INST instruction?

    If **Yes**, go to Step 5.
    If **No**, go to Step 4.

4. Clear diagnostic failure [TOP 234-351-011]; repeat from Step 1.

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

6. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Recent Change and Verify D3U Submember Equipage From UNEQ to GROW

Caution: Calling up RC form will cause all CRT data to be cleared.

1. At 1B Processor MTC terminal, enter message **OP:RCFORM 705!**

    Response: CRT displays RC Form 705

2. Fill in blanks on RC Form 705 per the following response and enter message.

    Response: **RC:UTYPE;CHG;OPT(SUXTSI),**a**:   XTSI MEMN** b**,**

    ORNU c**,**

XTCN	**0**	**1**
XTCHV	**-,**	**-,**
XTCSV	**-,**	**-,**

	CSP,	**PUBI,**	**GRAM,**	**CIA,**	**ALF,**	**EXEC,**
XTC0 PACKS	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**
XTC1 PACKS	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**

    XTSI FRAME INBAND ENABLED -,

    IBUEQ   -,
    IBUHV   -,
    IBUSV   -,

D3UN	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
D3UEQ	d,	d,	d,	d,	d,	d,	d,	d,
D3UHV	-,	-,	-,	-,	-,	-,	-,	-,
D3USV	-,	-,	-,	-,	-,	-,	-,	-,

SPUN	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
SPUEQ	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUHV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUSV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,

    REMARKS   ----------------!

    where   a = **FTA**
             b = XTSI member number
             c = RC order number
             d = either **G** for D3U being grown or left blank for D3Us not being grown

3. Was **RC ORNU** c **ACTIVATED** message received?

    If **Yes**, go to Step 5.
    If **No**, go to Step 4.

4. Determine cause for rejection and repeat from Step 1, with the correct input message.

5. At 1B Processor MTC terminal, enter message
    VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1 a**!** for even-numbered growth XTSI.

    where   a = XTSI member number

    Response: **VER:MISC;OPT(SUXTSI):   XTSI MEMN** a**,**

XTCN	**0 1**
XTCHV	**-, -,**
XTCSV	**-, -,**

	CSP,	**PUBI,**	**GRAM,**	**CIA,**	**ALF,**	**EXEC,**
XTC0 PACKS	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**
XTC1 PACKS	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**

    XTSI FRAME INBAND ENABLED -,

IBUEQ	**-,**
IBUHV	**-,**
IBUSV	**-,**

D3UN	**0 1 2 3 4 5 6 7**
D3UEQ	b, b, b, b, b, b, b, b,
D3UHV	**-, -, -, -, -, -, -, -,**
D3USV	**-, -, -, -, -, -, -, -,**

SPUN	**0 1 2 3 4 5 6 7 8 9 10 11**
SPUEQ	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUHV	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUSV	**-, -, -, -, -, -, -, -, -, -, -, -,**

    where   a = XTSI member number
             b = **G** for D3Us being grown

6. Are message format and member identification correct per the above response (Step 5)?

    If **Yes**, go to Step 8.
    If **No**, go to Step 7.

7. Determine the cause and resolve; repeat from Step 5.

8. Using the printout and the response message in Step 5, verify **G** is set for each D3U being grown.

9. Are all growth D3Us set to **G** and proper D3U pack indicated?

   If **Yes**, go to Step 11.
   If **No**, go to Step 10.

10. Determine cause for rejection and repeat from Step 1, with correct input message.

11. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Set DS3 Link Parameters for Growth D3Us and Verify

1. Obtain from installer, DS3 cable type (735A or 734D), and length of DS3 cable.

   Caution: Calling up RC form will cause all CRT data to be cleared.

2. At 1B Processor MTC terminal, enter message **OP:RCFORM 704!**

   Response: CRT displays RC Form 704.

   Note: Recent change must be performed for one D3U being grown in 0,1,2,3,4, and 5 D3U number order.

3. Fill in blanks on RC Form 704 and enter message

   RC:UTYPE;CHG:OPT(D3U),a**:   XTSI MEMN** b**,   D3UN** c**,**

   ORNU d**,**

   REM ALARM e**,   MAX LBO** f**,   DS3 APPL** g**,   INBAND D3U** h**,**

		DS1 INFO											
DS1 NUMBER	1,	2,	3,	4,	5,	6,	7,	8,	9,	10,	11,	12,	13, 14,
EQUIPAGE	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-, -,
FRAME FORMAT	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-, -,
STATIC A/B	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-, -,
INBAND DS1	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-, -,

DS1 NUMBER	15,	16,	17,	18,	19,	20,	21,	22,	23,	24,	25,	26,	27, 28,
EQUIPAGE	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-, -,
FRAME FORMAT	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-, -,
STATIC A/B	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-, -,
INBAND DS1	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-, -,

   REMARKS   -----------!

   where   a = **FTA**
   b = Even member number of growth XTSI
   c = Growth D3U number (0 to 5)
   d = RC order number
   e = **STD**
   f = **225** or **450** per appropriate LBO table (TABLE A or B)
   g = **CBP**
   h = **N**

TABLE A		
XTSI NOT CONNECTED TO DSX		
DS3 CABLE	**CABLE LENGTH FOR LBO SETTING**	
TYPE	**LBO (225)**	**LBO (450)**
735A (thin)	000' - 250'	250' - 500'
734D (thick)	000' - 450'	450' - 900'

TABLE B		
XTSI CONNECTED TO DSX		
DS3 CABLE	**CABLE LENGTH FOR LBO SETTING ***	
TYPE	**LBO (225)**	**LBO (450)**
735A (thin)	000' - 125'	125' - 250'
734D (thick)	000' - 225'	225' - 450'
* The DSX must be at midpoint between growth XTSI and transmission facility. Length is distance from growth XTSI and DSX.		

4. Was **RC ORNU** d **ACTIVATED** message received?

   If **Yes**, go to Step 6.
   If **No**, go to Step 5.

5. Contact next higher support group for resolution; after resolving, repeat from Step 2 with corrected input data.

6. At 1B Processor MTC terminal, enter message
VER:VFUNC XTSID3U:FD1 XTSIMEMN,DT1 a**,FD2 D3UN,DT2** b**!**

where   a = Even XTSI member number
            b = D3U number (0, 1, 2, 3, 4, or 5).

Response: **VER:MISC;OPT(XTSID3U):**   **XTSI MEMN** a**,**   **D3U** b**,**

    REM ALARM STD,   **MAX LBO** c**,**   **DS3 APPL CBP,**   **INBAND D3U N,**

                        DS1 INFO

DS1 NUMBER	1,	2,	3,	4,	5,	6,	7,	8,	9,	10,	11,	12,	13,	14,
EQUIPAGE	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,
FRAME FORMAT	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
STATIC A/B	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
INBAND DS1	N,	N,	N,	N,	N,	N,	N,	N,	N,	N,	N,	N,	N,	N,

DS1 NUMBER	15,	16,	17,	18,	19,	20,	21,	22,	23,	24,	25,	26,	27,	28,
EQUIPAGE	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,
FRAME FORMAT	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
STATIC A/B	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
INBAND DS1	N,	N,	N,	N,	N,	N,	N,	N,	N,	N,	N,	N,	N,	N,

VER: MESSAGE:
VERIFY PROCESSING COMPLETE

where   a = Even member number of growth XTSI
            b = Growth D3U number (0 to 5)
            c = **225** or **450**
            - = Don't care

7. Is recent changed data displayed correctly in the above response (Step 6)?

If **Yes**, go to Step 9.
If **No**, go to Step 8.

8. Contact next higher support group for resolution; after resolving, repeat from Step 2.

9. Under **DS1 INFO** heading, is **P** displayed in any **EQUIPAGE** field?

If **Yes**, go to Step 10.
If **No**, go to Step 11.

10. Contact next higher support group for resolution; after resolving, repeat from Step 2.

11. Have DS3 links been equipped for all D3Us being added?

 If **Yes**, go to Step 13.
 If **No**, go to Step 12.

12. Repeat from Step 2, for next D3U.

13. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Recent Change and Verify D3U Submember Equipage
From GROW to SGRO

Caution: Calling up RC form will cause all CRT data to be cleared.

1. At 1B Processor MTC terminal, enter message **OP:RCFORM 705!**

    Response: CRT displays RC Form 705

2. Fill in blanks on RC Form 705 per the following response and enter message.

    Response: **RC:UTYPE;CHG;OPT(SUXTSI),**a**:   XTSI MEMN** b**,**

    ORNU c**,**

    XTCN   0 1
    XTCHV   -, -,
    XTCSV   -, -,

	CSP,	PUBI,	GRAM,	CIA,	ALF,	EXEC,
XTC0 PACKS	-,	-,	-,	-,	-,	-,
XTC1 PACKS	-,	-,	-,	-,	-,	-,

    XTSI FRAME INBAND ENABLED -,

    IBUEQ   -,
    IBUHV   -,
    IBUSV   -,

    D3UN   0 1 2 3 4 5   6 7
    D3UEQ   d, d, d, d, d, d,   d, d,
    D3UHV   -, -, -, -, -, -,   -, -,
    D3USV   -, -, -, -, -, -,   -, -,

    SPUN   0 1 2 3 4 5 6 7 8 9   10 11
    SPUEQ   -, -, -, -, -, -, -, -, -, -,   -, -,
    SPUHV   -, -, -, -, -, -, -, -, -, -,   -, -,
    SPUSV   -, -, -, -, -, -, -, -, -, -,   -, -,

    REMARKS   ----------------!

    where   a = **FTA**
              b = XTSI member number
              c = RC order number
              d = either **S** for D3U being grown or left blank for D3Us not being grown

3. Was **RC ORNU** c **ACTIVATED** message received?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Determine cause for rejection and repeat from Step 1, with the correct input message.

5. At 1B Processor MTC terminal, enter message
   VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1 a**!** for even-numbered growth XTSI.

   where   a = XTSI member number

   Response: **VER:MISC;OPT(SUXTSI):**   **XTSI MEMN** a**,**

XTCN	**0 1**
XTCHV	**-, -,**
XTCSV	**-, -,**

	CSP,	**PUBI,**	**GRAM,**	**CIA,**	**ALF,**	**EXEC,**
XTC0 PACKS	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**
XTC1 PACKS	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**

   XTSI FRAME INBAND ENABLED -,

IBUEQ	**-,**
IBUHV	**-,**
IBUSV	**-,**

D3UN	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**
D3UEQ	b,	b,	b,	b,	b,	b,	b,	b,
D3UHV	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**
D3USV	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**

SPUN	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
SPUEQ	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**
SPUHV	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**
SPUSV	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**

   where   a = XTSI member number
             b = **S** for D3Us being grown

6. Are message format and member identification correct per the above response (Step 5)?

   If **Yes**, go to Step 8.
   If **No**, go to Step 7.

7. Determine the cause and resolve; repeat from Step 5.

8. Using the printout and the response message in Step 6, verify **S** is set for each D3U being grown.

9. Are all growth D3Us set to **S** and proper D3U pack indicated?

    If **Yes**, go to Step 11.
    If **No**, go to Step 10.

10. Determine cause for rejection and repeat from Step 1, with correct input message.

11. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Recent Change and Verify D3U Submember Equipage
From SGRO to OPER

Caution: Calling up RC form will cause all CRT data to be cleared.

1. At 1B Processor MTC terminal, enter message **OP:RCFORM 705!**

    Response: CRT displays RC Form 705

2. Fill in blanks on RC Form 705 per the following response and enter message.

    Response: **RC:UTYPE;CHG;OPT(SUXTSI),**a**:**   **XTSI MEMN** b**,**

    ORNU c**,**

XTCN	**0 1**	
XTCHV	**-, -,**	
XTCSV	**-, -,**	

	CSP,	PUBI,	GRAM,	CIA,	ALF,	EXEC,
XTC0 PACKS	-,	-,	-,	-,	-,	-,
XTC1 PACKS	-,	-,	-,	-,	-,	-,

    XTSI FRAME INBAND ENABLED -,

IBUEQ	**-,**
IBUHV	**-,**
IBUSV	**-,**

D3UN	0	1	2	3	4	5	6	7
D3UEQ	d,	d,	d,	d,	d,	d,	d,	d,
D3UHV	-,	-,	-,	-,	-,	-,	-,	-,
D3USV	-,	-,	-,	-,	-,	-,	-,	-,

SPUN	0	1	2	3	4	5	6	7	8	9	10	11
SPUEQ	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUHV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUSV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,

    REMARKS   ----------------!

    where   a = **FTA**
    b = XTSI member number
    c = RC order number
    d = **O** for D3U being grown

3. Was **RC ORNU** c **ACTIVATED** message received?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Determine cause for rejection and repeat from Step 1, with the correct input message.

5. At 1B Processor MTC terminal, enter message
   VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1 a**!** for even-numbered growth XTSI.

   where   a = XTSI member number

   Response: **VER:MISC;OPT(SUXTSI):**   **XTSI MEMN** a**,**

XTCN	**0 1**
XTCHV	**-, -,**
XTCSV	**-, -,**

	CSP,	**PUBI,**	**GRAM,**	**CIA,**	**ALF,**	**EXEC,**
XTC0 PACKS	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**
XTC1 PACKS	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**

   XTSI FRAME INBAND ENABLED -,

IBUEQ	**-,**
IBUHV	**-,**
IBUSV	**-,**

D3UN	**0 1 2 3 4 5 6 7**
D3UEQ	**b, b, b, b, b, b, b, b,**
D3UHV	**-, -, -, -, -, -, -, -,**
D3USV	**-, -, -, -, -, -, -, -,**

SPUN	**0 1 2 3 4 5 6 7 8 9 10 11**
SPUEQ	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUHV	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUSV	**-, -, -, -, -, -, -, -, -, -, -, -,**

   where   a = XTSI member number
             b = **O** for D3Us being grown

6. Are message format and member identification correct per the above response (Step 5)?

   If **Yes**, go to Step 8.
   If **No**, go to Step 7.

7. Determine the cause and resolve; repeat from Step 5.

8. Using the printout and the response message in Step 6, verify **O** is set for D3U being grown.

9. Is growth D3U set to **O** and proper D3U pack indicated?

   If **Yes**, go to Step 11.
   If **No**, go to Step 10.

10. Determine cause for rejection and repeat from Step 1, with correct input message.

11. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Delete Dummy Trunks Used for NETX Testing

Caution: Calling up RC Form will cause all CRT data to be cleared.

1. At 1B Processor terminal, enter message **OP:RCFORM 202!**

2. Fill in the fields per Table A for one TSG in Table B; then enter message.

TABLE A	
MESSAGE NUMBER	**INPUT MESSAGE**
| 1 | ```
RC:TRK;OUT; a :            BTFN TOWN ST BL FBS NBS
ORNU b     ,          TSG c                        ,


QTRK  FTFN
24 , 1  ,
24 , 25 ,
24 , 49 ,
24 , 73 ,
24 , 97 ,
   ,    ,
REMARKS!
``` |
| a = FTA
b = Order number
c = TSG name from TABLE B | |

Table B			
	TSG Name		**TSG Name**
1	1 NETX IL XX S0D 00T	7	1 NETX IL XX S0D 30T
2	1 NETX IL XX S1D 00T	8	1 NETX IL XX S1D 30T
3	1 NETX IL XX S0D 10T	9	1 NETX IL XX S0D 40T
4	1 NETX IL XX S1D 10T	10	1 NETX IL XX S1D 40T
5	1 NETX IL XX S0D 20T	11	1 NETX IL XX S0D 50T
6	1 NETX IL XX S1D 20T	12	1 NETX IL XX S1D 50T

3. Was **RC ORNU** b **ACTIVATED** message received?

If **Yes**, go to Step 5.
If **No**, go to Step 4.

4. Contact next higher support organization for resolution; after resolving, repeat from Step 2.

5. Has RC Form 202 been entered for each TSG in Table B?

    If **Yes**, go to Step 7.
    If **No**, go to Step 6.

6. Repeat from Step 3 for next TSG name in Table B.

    Caution: Calling up RC Form will cause all CRT data to be cleared.

7. At 1B Processor terminal, enter message **OP:RCFORM 106!**

8. Fill in the fields on RC Form 106 per Table C for one TSG in Table D; then enter message.

TABLE C	
MESSAGE NUMBER	**INPUT MESSAGE**
1	RC:TRK;OUT; a : BTFN TOWN ST BL FBS NBS ORNU b , TSG c , REMARKS!
a = FTA b = Order number c = TSG name from TABLE D	

Table D			
	TSG Name		**TSG Name**
1	1 NETX IL XX S0D 00T	7	1 NETX IL XX S0D 30T
2	1 NETX IL XX S1D 00T	8	1 NETX IL XX S1D 30T
3	1 NETX IL XX S0D 10T	9	1 NETX IL XX S0D 40T
4	1 NETX IL XX S1D 10T	10	1 NETX IL XX S1D 40T
5	1 NETX IL XX S0D 20T	11	1 NETX IL XX S0D 50T
6	1 NETX IL XX S1D 20T	12	1 NETX IL XX S1D 50T

9. Was **RC ORNU** b **ACTIVATED** message received?

 If **Yes**, go to Step 12.
 If **No**, go to Step 11.

10. Contact next higher support organization for resolution; after resolving, repeat from Step 9.

11. Has RC Form 106 been entered for each TSG in Table D?

 If **Yes**, go to Step 15.
 If **No**, go to Step 14.

12. Repeat from Step 9 for next TSG Name in Table D.

13. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify No Out of Service Units in Conversion XTSI

1. At 1B Processor MTC terminal, enter message **OP:OOSUNITS:XTSI!**

2. Using printout, are units listed for associated XTSI?

   If **Yes**, go to Step 3.
   If **No**, go to Step 4.

3. Clear out of service condition on listed units [TOP 234-351-011]; then repeat from Step 1.

4. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify Proper Hardware Designations

1. At 1B Processor MTC terminal, enter message
   VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1 a**!** for even-numbered degrowth XTSI.

   where　　a = XTSI member number

   Response:　**VER:MISC;OPT(SUXTSI):**　　　**XTSI MEMN** a,

XTCN	0 1
XTCHV	0, 0,
XTCSV	-, -,

	CSP,	PUBI,	GRAM,	CIA,	ALF,	EXEC,
XTC0 PACKS	-,	-,	-,	-,	-,	-,
XTC1 PACKS	-,	-,	-,	-,	-,	-,

   XTSI FRAME INBAND ENABLED -,

IBUEQ	-,
IBUHV	-,
IBUSV	-,

D3UN	0	1	2	3	4	5	6	7
D3UEQ	-,	-,	-,	-,	-,	-,	-,	-,
D3UHV	b,	b,	b,	b,	b,	b,	b,	b,
D3USV	-,	-,	-,	-,	-,	-,	-,	-,

SPUN	0	1	2	3	4	5	6	7	8	9	10	11
SPUEQ	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUHV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUSV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,

   where　　a = XTSI member number
   　　　　　d = **0** if D3U pack is **4WB3** or **1** if D3U pack is **4WB11** (In-Band Capable)

> ***Note:*** The D3U pack types in a protection group may be mixed only if the protection spare pack (D3U 6 for D3Us 0, 1, and 2 or D3U 7 for D3Us 3, 4, and 5) is **4WB11** pack (In-Band capable); otherwise, all D3U packs must be **4WB3**.

2. Using printout and the response message in Step 1, determine if **D3UHV** fields are set properly for each growth D3U in the growth XTSI cabinet.

3. Are **D3UHV** fields set properly?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Refer problem to installer to determine error and decide on corrective action. After resolving, repeat from Step 1.

5. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Recent Change and Verify D3UHV to Proper Value

Note: This procedure must only be performed for one D3U.

Caution: Calling up RC form will cause all CRT data to be cleared.

1. At 1B Processor MTC terminal, enter message **OP:RCFORM 705!**

   Response: CRT displays RC Form 705

2. Fill in blanks for D3U being recent changed on RC Form 705 per the following and enter message:

   RC:UTYPE;CHG;OPT(SUXTSI),a**:   XTSI MEMN** b**,**

   ORNU c**,**

XTCN	0	1
XTCHV	-,	-,
XTCSV	-,	-,

	CSP,	PUBI,	GRAM,	CIA,	ALF,	EXEC,
XTC0 PACKS	-,	-,	-,	-,	-,	-,
XTC1 PACKS	-,	-,	-,	-,	-,	-,

   XTSI FRAME INBAND ENABLED -,

IBUEQ	-,
IBUHV	-,
IBUSV	-,

D3UN	0	1	2	3	4	5	6	7
D3UEQ	-,	-,	-,	-,	-,	-,	-,	-,
D3UHV	d,	d,	d,	d,	d,	d,	d,	d,
D3USV	-,	-,	-,	-,	-,	-,	-,	-,

SPUN	0	1	2	3	4	5	6	7	8	9	10	11
SPUEQ	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUHV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
SPUSV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,

   REMARKS   ----------------!

   where   a = **FTA**
   b = XTSI member number
   c = RC order number
   d = **0** if D3U pack is **4WB3** or **1** if D3U pack is **4WB11** (In-Band capable)

3. Was **RC ORNU** c **ACTIVATED** message received?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Determine cause for rejection and repeat from Step 1, with the correct input message.

5. At 1B Processor MTC terminal, enter message
   VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1 a**!** for even-numbered growth XTSI.

   where   a = XTSI member number

   Response: **VER:MISC;OPT(SUXTSI):   XTSI MEMN** a**,**

XTCN	**0 1**
XTCHV	**-, -,**
XTCSV	**-, -,**

	CSP,	**PUBI,**	**GRAM,**	**CIA,**	**ALF,**	**EXEC,**
XTC0 PACKS	-,	-,	-,	-,	-,	-,
XTC1 PACKS	-,	-,	-,	-,	-,	-,

   XTSI FRAME INBAND ENABLED -,

IBUEQ	**-,**
IBUHV	**-,**
IBUSV	**-,**

D3UN	**0 1 2 3 4 5 6 7**
D3UEQ	**-, -, -, -, -, -, -, -,**
D3UHV	b, b, b, b, b, b, b, b,
D3UHV	**-, -, -, -, -, -, -, -,**
D3USV	**-, -, -, -, -, -, -, -,**

SPUN	**0 1 2 3 4 5 6 7 8 9 10 11**
SPUEQ	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUHV	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUSV	**-, -, -, -, -, -, -, -, -, -, -, -,**

   where   a = XTSI member number
             b = **0** if D3U pack is **4WB3** or **1** if D3U pack is **4WB11** (In-Band
             capable)

6. Are message format and member identification correct per the above response (Step 5)?

   If **Yes**, go to Step 8.
   If **No**, go to Step 7.

7. Determine the cause and resolve; repeat from Step 5.

8. Using printout and the response message in Step 5, verify **D3UHV** field being recent changed is set correctly.

9. Is **D3UHV** field set correctly?

    If **Yes**, go to Step 11.
    If **No**, go to Step 10.

10. Contact next higher support group for resolution; after resolving, repeat from Step 1.

11. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify DS1s for D3U are Set to Future (F)

1. At 1B Processor MTC terminal, enter message
    VER:VFUNC XTSID3U:FD1 XTSIMEMN,DT1 a**,FD2 D3UN,DT2** b**!**

    where   a = Even XTSI member number
                  b = D3U number (0, 1, 2, 3, 4, or 5).

    Response: **VER:MISC;OPT(XTSID3U):   XTSI MEMN** a**,   D3UN** b**,**

                       REM ALARM c**,   MAX LBO** d**,   DS3 APPL** e**,   INBAND D3U N,**

                                                DS1 INFO

DS1 NUMBER	1,	2,	3,	4,	5,	6,	7,	8,	9,	10,	11,	12,	13,	14,
EQUIPAGE	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,
FRAME FORMAT	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
STATIC A/B	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
INBAND DS1	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,

DS1 NUMBER	15,	16,	17,	18,	19,	20,	21,	22,	23,	24,	25,	26,	27,	28,
EQUIPAGE	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,	F,
FRAME FORMAT	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
STATIC A/B	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,
INBAND DS1	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,

VER: MESSAGE:
VERIFY PROCESSING COMPLETE

    where   a = Even member number of XTSI
                  b = D3U number (0, 1, 2, 3, 4, or 5)
                  c = **STD**, **INV**, or **IGN**
                  d = **225** or **450**
                  e = **CBP** or **M23**

2. Using printout and the response message in Step 1, determine if **EQUIPAGE** is set to **F** for all DS1s.

3. Is **EQUIPAGE** set to **F** for all DS1s?

    If **Yes**, go to Step 5.
    If **No**, go to Step 4.

4. Contact next higher support group for resolution; after resolving, repeat from Step 1.

5. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify Software Version Pointers and Equipage
For Even-Numbered XTSI

1. At 1B Processor MTC terminal, enter message
   VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1 a**!** for even-numbered degrowth XTSI.

   where   a = XTSI member number

   Response: **VER:MISC;OPT(SUXTSI):   XTSI MEMN** a,

XTCN	**0 1**
XTCHV	**-, -,**
XTCSV	**0, 0,**

	CSP,	**PUBI,**	**GRAM,**	**CIA,**	**ALF,**	**EXEC,**
XTC0 PACKS	-,	-,	-,	-,	-,	-,
XTC1 PACKS	-,	-,	-,	-,	-,	-,

   XTSI FRAME INBAND ENABLED -,

IBUEQ	**-,**
IBUHV	**-,**
IBUSV	**0,**

D3UN	**0**	**1**	**2**	**3**	**4**	**5**	**6 7**
D3UEQ	**O,**	b,	b,	b,	b,	b,	b, b,
D3UHV	-,	-,	-,	-,	-,	-,	-, -,
D3USV	**0,**	**0,**	**0,**	**0,**	**0,**	**0,**	**0, 0,**

SPUN	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10 11**
SPUEQ	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-, -,
SPUHV	-,	-,	-,	-,	-,	-,	-,	-,	-,	-,	-, -,
SPUSV	**0,**	**0,**	**0,**	**0,**	**0,**	**0,**	**0,**	**0,**	**0,**	**0,**	**0, 0,**

   where   a = XTSI member number
            b = **U** for UNEQ, **G** for GROW, or **O** for OPER.

2. Using printout and the response message in Step 1, verify all fields for **XTCSV**, **IBUSV**, **D3USV**, and **SPUSV** are set to **0**.

3. Are all fields set to **0**?

    If **Yes**, go to Step 5.
    If **No**, go to Step 4.

4. Refer problem to installer to determine error and decide on corrective action. After resolving, repeat from Step 1.

5. Using printout and the response message in Step 1, verify equipage in **D3UEQ** field for growth D3U is **U**.

6. Is equipage for growth D3U set to **U**?

    If **Yes**, go to Step 8.
    If **No**, go to Step 7.

7. Refer problem to installer to determine error and decide on corrective action. After resolving, repeat from Step 1.

8. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Degrow D3U Equipage From OPER to SGRO

Caution: Calling up RC form will cause all CRT data to be cleared.

1. At 1B Processor MTC terminal, enter message **OP:RCFORM 705!**

    Response: CRT displays RC Form 705

2. Fill in blanks on RC Form 705 per the following and enter message:

    RC:UTYPE;CHG;OPT(SUXTSI),a**:   XTSI MEMN** b**,**

    ORNU c**,**

    XTCN   0 1
    XTCHV   -, -,
    XTCSV   -, -,

	CSP,	PUBI,	GRAM,	CIA,	ALF,	EXEC,
XTC0 PACKS	-,	-,	-,	-,	-,	-,
XTC1 PACKS	-,	-,	-,	-,	-,	-,

    XTSI FRAME INBAND ENABLED -,

    IBUEQ   -,
    IBUHV   -,
    IBUSV   -,

    D3UN   0 1 2 3 4 5   6 7
    D3UEQ   d, d, d, d, d, d,   d, d,
    D3UHV   -, -, -, -, -, -,   -, -,
    D3USV   -, -, -, -, -, -,   -, -,

    SPUN   0 1 2 3 4 5 6 7 8 9   10 11
    SPUEQ   -, -, -, -, -, -, -, -, -, -,   -, -,
    SPUHV   -, -, -, -, -, -, -, -, -, -,   -, -,
    SPUSV   -, -, -, -, -, -, -, -, -, -,   -, -,

    REMARKS   ----------------!

    where   a = **FTA**
             b = XTSI member number
             c = RC order number
             d = **S**

3. Was **RC ORNU** c **ACTIVATED** message received?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Determine cause for rejection and repeat from Step 1, with the correct input message.

5. At 1B Processor MTC terminal, enter message
   VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1 a**!** for even-numbered growth XTSI.

   where   a = XTSI member number

   Response: **VER:MISC;OPT(SUXTSI):   XTSI MEMN** a**,**

XTCN	**0 1**
XTCHV	**-, -,**
XTCSV	**-, -,**

	CSP, PUBI, GRAM, CIA, ALF, EXEC,
XTC0 PACKS	**-, -, -, -, -, -,**
XTC1 PACKS	**-, -, -, -, -, -,**

   XTSI FRAME INBAND ENABLED -,

IBUEQ	**-,**
IBUHV	**-,**
IBUSV	**-,**

D3UN	**0 1 2 3 4 5 6 7**
D3UEQ	**b, b, b, b, b, b, b, b,**
D3UHV	**-, -, -, -, -, -, -, -,**
D3USV	**-, -, -, -, -, -, -, -,**

SPUN	**0 1 2 3 4 5 6 7 8 9 10 11**
SPUEQ	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUHV	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUSV	**-, -, -, -, -, -, -, -, -, -, -, -,**

   where   a = XTSI member number
             b = **S**

6. Are message format and member identification correct per the above response (Step 5)?

   If **Yes**, go to Step 8.
   If **No**, go to Step 7.

7. Determine the cause and resolve; repeat from Step 5.

8. Using the printout and the response message in Step 5, verify **S** is set for each **D3UEQ** being recent changed.

9. Is **D3UEQ** set to **S** for each D3U being recent changed?

   If **Yes**, go to Step 11.
   If **No**, go to Step 10.

10. Determine cause for rejection and repeat from Step 1, with correct input message.

11. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Degrow D3U Equipage From SGRO to GROW

Caution: Calling up RC form will cause all CRT data to be cleared.

1. At 1B Processor MTC terminal, enter message **OP:RCFORM 705!**

    Response: CRT displays RC Form 705

2. Fill in blanks on RC Form 705 per the following and enter message:

    RC:UTYPE;CHG;OPT(SUXTSI),a**:   XTSI MEMN** b,

    ORNU c,

    XTCN   0 1
    XTCHV   -, -,
    XTCSV   -, -,

	CSP,	**PUBI,**	**GRAM,**	**CIA,**	**ALF,**	**EXEC,**
XTC0 PACKS	-,	-,	-,	-,	-,	-,
XTC1 PACKS	-,	-,	-,	-,	-,	-,

    XTSI FRAME INBAND ENABLED -,

    IBUEQ   -,
    IBUHV   -,
    IBUSV   -,

    D3UN   0 1 2 3 4 5   6 7
    D3UEQ   d, d, d, d, d, d,   d, d,
    D3UHV   -, -, -, -, -, -,   -, -,
    D3USV   -, -, -, -, -, -,   -, -,

    SPUN   0 1 2 3 4 5 6 7 8 9   10 11
    SPUEQ   -, -, -, -, -, -, -, -, -, -,   -, -,
    SPUHV   -, -, -, -, -, -, -, -, -, -,   -, -,
    SPUSV   -, -, -, -, -, -, -, -, -, -,   -, -,

    REMARKS   ----------------!

    where   a = **FTA**
              b = XTSI member number
              c = RC order number
              d = **G**

3. Was **RC ORNU** c **ACTIVATED** message received?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Determine cause for rejection and repeat from Step 1, with the correct input message.

5. At 1B Processor MTC terminal, enter message
   VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1 a**!** for even-numbered growth XTSI.

   where   a = XTSI member number

   Response: **VER:MISC;OPT(SUXTSI):   XTSI MEMN** a**,**

XTCN	**0 1**
XTCHV	**-, -,**
XTCSV	**-, -,**

	CSP,	**PUBI,**	**GRAM,**	**CIA,**	**ALF,**	**EXEC,**
XTC0 PACKS	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**
XTC1 PACKS	**-,**	**-,**	**-,**	**-,**	**-,**	**-,**

   XTSI FRAME INBAND ENABLED -,

IBUEQ	**-,**
IBUHV	**-,**
IBUSV	**-,**

D3UN	**0 1 2 3 4 5 6 7**
D3UEQ	b, b, b, b, b, b, b, b,
D3UHV	**-, -, -, -, -, -, -, -,**
D3USV	**-, -, -, -, -, -, -, -,**

SPUN	**0 1 2 3 4 5 6 7 8 9 10 11**
SPUEQ	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUHV	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUSV	**-, -, -, -, -, -, -, -, -, -, -, -,**

   where   a = XTSI member number
             b = **G**

6. Are message format and member identification correct per the above response (Step 5)?

   If **Yes**, go to Step 8.
   If **No**, go to Step 7.

7. Determine the cause and resolve; repeat from Step 5.

8. Using the printout and the response message in Step 5, verify **G** is set for each **D3UEQ** being recent changed.

9. Is **D3UEQ** set to **G** for each D3U being recent changed?

    If **Yes**, go to Step 11.
    If **No**, go to Step 10.

10. Determine cause for rejection and repeat from Step 1, with correct input message.

11. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Degrow D3U Equipage From GROW to UNEQ

Caution: Calling up RC form will cause all CRT data to be cleared.

1. At 1B Processor MTC terminal, enter message **OP:RCFORM 705!**

    Response: CRT displays RC Form 705

2. Fill in blanks on RC Form 705 per the following and enter message:

    RC:UTYPE;CHG;OPT(SUXTSI),a**:   XTSI MEMN** b**,**

    ORNU c**,**

XTCN	0 1
XTCHV	-, -,
XTCSV	-, -,

	CSP,	PUBI,	GRAM,	CIA,	ALF,	EXEC,
XTC0 PACKS	-,	-,	-,	-,	-,	-,
XTC1 PACKS	-,	-,	-,	-,	-,	-,

    XTSI FRAME INBAND ENABLED -,

IBUEQ	-,
IBUHV	-,
IBUSV	-,

D3UN	0 1 2 3 4 5 6 7
D3UEQ	d, d, d, d, d, d, d, d,
D3UHV	-, -, -, -, -, -, -, -,
D3USV	-, -, -, -, -, -, -, -,

SPUN	0 1 2 3 4 5 6 7 8 9 10 11
SPUEQ	-, -, -, -, -, -, -, -, -, -, -, -,
SPUHV	-, -, -, -, -, -, -, -, -, -, -, -,
SPUSV	-, -, -, -, -, -, -, -, -, -, -, -,

    REMARKS ----------------!

    where   a = **FTA**
              b = XTSI member number
              c = RC order number
              d = **U**

3. Was **RC ORNU** c **ACTIVATED** message received?

   If **Yes**, go to Step 5.
   If **No**, go to Step 4.

4. Determine cause for rejection and repeat from Step 1, with the correct input message.

5. At 1B Processor MTC terminal, enter message
   VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1 a**!** for even-numbered growth XTSI.

   where   a = XTSI member number

   Response: **VER:MISC;OPT(SUXTSI):**   **XTSI MEMN** a**,**

        XTCN   **0 1**
        XTCHV   **-, -,**
        XTCSV   **-, -,**

                     CSP, PUBI, GRAM, CIA, ALF, EXEC,
        XTC0 PACKS   **-,**   **-,**   **-,**   **-,**   **-,**   **-,**
        XTC1 PACKS   **-,**   **-,**   **-,**   **-,**   **-,**   **-,**

        XTSI FRAME INBAND ENABLED -,

        IBUEQ   **-,**
        IBUHV   **-,**
        IBUSV   **-,**

        D3UN   **0 1 2 3 4 5   6 7**
        D3UEQ   **b, b, b, b, b, b,   b, b,**
        D3UHV   **-, -, -, -, -, -,   -, -,**
        D3USV   **-, -, -, -, -, -,   -, -,**

        SPUN   **0 1 2 3 4 5 6 7 8 9   10 11**
        SPUEQ   **-, -, -, -, -, -, -, -, -, -,   -, -,**
        SPUHV   **-, -, -, -, -, -, -, -, -, -,   -, -,**
        SPUSV   **-, -, -, -, -, -, -, -, -, -,   -, -,**

   where   a = XTSI member number
               b = **U**

6. Are message format and member identification correct per the above response (Step 5)?

   If **Yes**, go to Step 8.
   If **No**, go to Step 7.

7. Determine the cause and resolve; repeat from Step 5.

8. Using the printout and the response message in Step 5, verify **U** is set for each **D3UEQ** being recent changed.

9. Is **D3UEQ** set to **U** for each D3U being recent changed?

   If **Yes**, go to Step 11.
   If **No**, go to Step 10.

10. Determine cause for rejection and repeat from Step 1, with correct input message.

11. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Set Up Loop and Scope Expanded
Pollable Bits at Peripheral Frame

1. Obtain PK-4A002 for the appropriate 4E generic.

2. In the Address Map part of PK-4A002, under the **PIDENT**, **STRIP**, and **SECTION** columns, locate the line that contains **PUDGPBGR**, **AF**, and **PUDGPBTS**.

3. On the line located in Step 2, under the **ADDR** column, obtain the address listed. Record for use in the next step.

4. Add octal 1271 to the address recorded in the previous step and record this new address for use in the next step.

> ***WARNING: Do not enter UPD:HDATA! message while this procedure is being performed.***

5. At 1B Processor MTC terminal, enter message for one expanded pollable bit
   IN:OWBUF:FS,ID PGPGM,ADR a**,DATA** b**,OLDDATA 02004010!**

   where   a = Address recorded in Step 4
              b = Expanded pollable bit data:
                01002040 (for PDGB - PPU065) or
                01002020 (for PSZB - PPU064) or
                01002010 (for PLPB - PPU063) or
                01002004 (for PHPB - PPU062)

   Response: **IN:OWBUF**

FS ADR	**IDTAG**	**OLD DATA**	**NEW DATA**
a	**PGPGM**	**02004010**	b

6. Was printout received per the response message in Step 5?

   If **Yes**, go to Step 9.
   If **No**, go to Step 7.

7. Using TABLE A, identify explanation of error code that was received.

8. Contact next higher support group and inform personnel of actions performed and results obtained.

9. At 1B Processor MTC terminal, enter message
    COPY:OWBUF!

    Response: **COPY:OWBUF COMPLETED**

10. Was printout received per the response message in Step 9?

    If **Yes**, go to Step 13.
    If **No**, go to Step 11.

11. Using TABLE A, identify explanation of error code that was received.

12. Contact next higher support group and inform personnel of actions performed and results
    obtained.

13. At 1B Processor MTC terminal, enter start looping message
    EX:PUB a**;START!**

    where a = bus 0 or 1

    Response: **RMV: PUB** a **COMPL**
                EX: PUB a **SUSPENDED MSG COMPL**

14. Was printout received per the response message in Step 13?

    If **Yes**, go to Step 16.
    If **No**, go to Step 15.

15. Determine cause and resolve; repeat from Step 13.

16. At 1B Processor MTC terminal, enter message for one CC
    EX:PUB a**:PH 2,ENABLE** b**,ADR 1262-1275!**

    where   a = bus 0 or 1
             b = **3195** (for CC 0) or
                 56955 (for CC 1)

    Response: **EX: PUB** a **LOOPING STARTED MSG STARTED**

17. Was printout received per the response message in Step 16?

    If **Yes**, go to Step 19.
    If **No**, go to Step 18.

18. Determine cause and resolve; repeat from Step 16.

19. Frame to be scoped is?

If **SCS** or **XTSI**, go to Step 20.
If **DIFE**, go to Step 22.

> *Note:* Scope probe leads are twisted together. The ground leads of the two probes are connected together, but are not grounded.

20. Connect scope probes across the BTR locations for expanded pollable bit to be scoped per FIG. 1.

21. Go to Step 23.

> *Note:* Scope probe leads are twisted together. The ground leads of the two probes are connected together, but are not grounded.

22. Connect scope probes across the BTR locations for expanded pollable bit to be scoped per FIG. 2.

23. Verify the expanded pollable bit per the waveform in FIG. 3.

24. Was the expanded pollable bit per the waveform in FIG. 3?

If **Yes**, go to Step 26.
If **No**, go to Step 25.

25. Clear equipment trouble per 234-351-015.

26. At 1B Processor MTC terminal, enter stop looping message
EX:PUB a**!**

where a = bus 0 or 1

Response: **EX: PUB** a **PH 2 STF (nnnn,nnnnnnnn nnnnnnnn) MSG IP**
EX: PUB a **LOOPING COMPLETED STF MSG IP**
EX: PUB a **SUSPENDED MSG COMPL**

27. Was printout received per the response message in Step 26?

If **Yes**, go to Step 29.
If **No**, go to Step 28.

28. Determine cause and resolve; repeat from Step 26.

29. At 1B Processor MTC terminal, enter stop overwrite message
STOP:OVRWRT!

Response: **STOP:OVRWRT COMPLETED**

30. Was printout received per the response message in Step 29?

If **Yes**, go to Step 33.
If **No**, go to Step 31.

31. Using TABLE A, identify explanation of error code that was received.

32. Contact next higher support group and inform personnel of actions performed and results obtained.

33. Have all four expanded pollable bits in Step 5 for this CC been scoped?

If **Yes**, go to Step 36.
If **No**, go to Step 34.

34. Stop maintenance control program client using DLP-515.

35. Repeat from Step 5 for next expanded pollable bit.

36. Have all four expanded pollable bits been scoped for both CCs?

If **Yes**, go to Step 38.
If **No**, go to Step 37.

37. Repeat from Step 5 for the other CC.

38. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

TABLE A
OVERWRITE ERROR CODES

ERROR CODE	EXPLANATION
DPLX FAIL	GULP cannot be paged to parse the message because the file stores are duplex failed.
50	Conditional printout may follow. This acknowledgement is used if disk files are duplex failed and GULP is being paged from tape.
100	Invalid syntax. Check input manual to verify that no extra keywords have been input.
101	No argument for keyword ID.
102	No argument for keyword PKG.
103	No argument for keyword FPKG.
104	No argument for keyword ADR.
105	No argument for keyword DATA.
106	Number of arguments of OLDDATA is different from number of arguments of DATA.
110	Overwrites of system merge ID tag cannot be mixed with overwrites of other ID tags.
111	Overwrite overlaps two ID tags.
112	Wrong ID tag specified for a library file store only overwrite.
113	Input address is not in hashed range.
114	Invalid ID tag mnemonic.
115	Incorrect ID tag specified for a file store only overwrite.
120	Part or all non-library main memory overwrite is not backed up on file store.
121	File store backup range is not contiguous. Overwrite must be split on main memory store boundary.
122	PKG, ADR conversion failed. This is due to either invalid or unknown PKG name, relative address larger than size of PKG, or library package not loaded.
123	FPKG, ADR conversion failed. Invalid FPKG name.
124	Library overwrite outside of library Kcode.
131	Overwrite in progress from another channel.
132	Previously input **COPY:OWBUF** request has not yet completed. Enter **STOP:OVRWRT**.
133	Hash mismatch on **COPY:OWBUF**. Enter **STOP:OVRWRT**.
134	Previously input **UPD:HDATA** request has not yet completed. Enter **STOP:OVRWRT**.
135	No overwrite in progress

TABLE A (CONTD)
OVERWRITE ERROR CODES

ERROR CODE	EXPLANATION	ERROR CODE	EXPLANATION
136	UPD:HDATA may be input only from the maintenance channel (or its backup if the maintenance channel is out-of-service) or the SCC channel. Before entering message, check for audit printouts or interrupts to assure overwrite is not incorrect.	160	File store queue full.
		161	DKAD reject — core ADR is out of range. Request technical assistance.
137	A COPY:OWBUF message must be input.	162	DKAD reject — file store address mismatches ID tag.
138	Core only overwrite backed out.	163	DKAD reject — write request not multiple of 32 or not on sector boundary.
140	Overwrite buffer full.	164	DKAD reject — size too big.
141	Library program not loaded in PS36 library Kcode.	165	DKAD reject — file specified is out-of-service.
143	Input overwrite overlaps with overwrite currently in buffer.	166	DKAD reject — blocked.
		167	DKAD reject — write (trouble) to in-service file.
144	Old data specified in message does not match data in system.	168	DKAD reject — queue invalid for GULP.
145	Library system in transition state. Wait a few seconds and reenter the message.	169	DKAD reject — mutilated queue.
		170	DKAD reject — no queue specified.
150	Library program is not currently loaded in library Kcode. The overwrite has been bypassed.	180	Execution of GULP function is in progress.
		181	Message processing in progress.
152	Hash sum input on COPY:OWBUF does not match computed hash. This indicates that some data in the buffer is different than was expected when input hash was generated. Enter STOP:OVRWRT and check printout.	182	Dataset input mode in progress on another channel.
		183	Dataset execution is in progress.
153	Hash update by SAWS failed. Enter STOP:OVRWRT. Tape audit (SAST) must be run to correct hash errors.	184	Message print in progress.
		185	Failure to page in GULP or failure to seize general buffer table (GBT).

200 NS

2V

NORMAL PULSE AT DRIVER

200 NS

2V

NORMAL PULSE 500 FEET FROM DRIVER

FIG. 3

24   14   09   00

P* N*

PDGB
PSZB
PLPB
PHPB

0
1
2
3

DIF or DIFE   (24-31)
BUS 0   180-067
BUS 1   180-215

* P FOR POSITIVE LEAD AND
  N FOR NEGATIVE LEAD

FIG. 2

56   32   24   00

P   N

PDGB
PSZB
PLPB
PHPB

SCS   BUS 0 045-144   XTSI   BUS 0 052-156
            BUS 1 053-144   BUS 1 061-156

FIG. 1

Set Up Loop and Scope Expanded
Pollable Bits at PUBB Frame

1. Obtain PK-4A002 for the appropriate 4E generic.

2. In the Address Map part of PK-4A002, under the **PIDENT**, **STRIP**, and **SECTION** columns, locate the line that contains **PUDGPBGR**, **AF**, and **PUDGPBTS**.

3. On the line located in Step 2, under the **ADDR** column, obtain the address listed. Record for use in the next step.

4. Add octal 1271 to the address recorded in the previous step and record this new address for use in the next step.

> ***WARNING: Do not enter UPD:HDATA! message while this procedure is being performed.***

5. At 1B Processor MTC terminal, enter message for one expanded pollable bit
   IN:OWBUF:FS,ID PGPGM,ADR a**,DATA** b**,OLDDATA 02004010!**

   where a = Address recorded in Step 4
   　　　　b = Expanded pollable bit data:
   　　　　　01002040 (for PDGB - PPU065) or
   　　　　　01002020 (for PSZB - PPU064) or
   　　　　　01002010 (for PLPB - PPU063) or
   　　　　　01002004 (for PHPB - PPU062)

   Response:　**IN:OWBUF**
   　　　　　FS ADR　**IDTAG**　**OLD DATA**　**NEW DATA**
   　　　　　a　　　　　**PGPGM**　**02004010**　b

6. Was printout received per the response message in Step 5?

   If **Yes**, go to Step 9.
   If **No**, go to Step 7.

7. Using TABLE A, identify explanation of error code that was received.

8. Contact next higher support group and inform personnel of actions performed and results obtained.

9. At 1B Processor MTC terminal, enter message
   COPY:OWBUF!

   Response: **COPY:OWBUF COMPLETED**

10. Was printout received per the response message in Step 9?

    If **Yes**, go to Step 13.
    If **No**, go to Step 11.

11. Using TABLE A, identify explanation of error code that was received.

12. Contact next higher support group and inform personnel of actions performed and results obtained.

13. At 1B Processor MTC terminal, enter start looping message
    EX:PUB a**;START!**

    where a = bus 0 or 1

    Response: **RMV: PUB** a **COMPL**
    　　　　　　EX: PUB a **SUSPENDED MSG COMPL**

14. Was printout received per the response message in Step 13?

    If **Yes**, go to Step 16.
    If **No**, go to Step 15.

15. Determine cause and resolve; repeat from Step 13.

16. At 1B Processor MTC terminal, enter message for one CC
    EX:PUB a**:PH 2,ENABLE** b**,ADR 1262-1275!**

    where   a = bus 0 or 1
    　　　　　 b = **3195** (for CC 0) or
    　　　　　　　 56955 (for CC 1)

    Response: **EX: PUB** a **LOOPING STARTED MSG STARTED**

17. Was printout received per the response message in Step 16?

    If **Yes**, go to Step 19.
    If **No**, go to Step 18.

18. Determine cause and resolve; repeat from Step 16.

> ***Note:*** Scope probe leads are twisted together. The ground leads of the two probes are connected together, but are not grounded.

19. Connect scope probes across the BTR locations for expanded pollable bit to be scoped per FIG. 1.

20. Verify the expanded pollable bit per the waveform in FIG. 2.

21. Was the expanded pollable bit per the waveform in FIG. 2?

    If **Yes**, go to Step 23.
    If **No**, go to Step 22.

22. Clear equipment trouble per 234-351-015.

23. At 1B Processor MTC terminal, enter stop looping message
    EX:PUB a**!**

    where a = bus 0 or 1

    Response: **EX: PUB** a **PH 2 STF (nnnn,nnnnnnnn nnnnnnnn) MSG IP**
                     EX: PUB a **LOOPING COMPLETED STF MSG IP**
                     EX: PUB a **SUSPENDED MSG COMPL**

24. Was printout received per the response message in Step 23?

    If **Yes**, go to Step 26.
    If **No**, go to Step 25.

25. Determine cause and resolve; repeat from Step 23.

26. At 1B Processor MTC terminal, enter stop overwrite message
    STOP:OVRWRT!

    Response: **STOP:OVRWRT COMPLETED**

27. Was printout received per the response message in Step 26?

    If **Yes**, go to Step 30.
    If **No**, go to Step 28.

28. Using TABLE A, identify explanation of error code that was received.

29. Contact next higher support group and inform personnel of actions performed and results obtained.

30. Have all four expanded pollable bits in Step 5 for this CC been scoped?

    If **Yes**, go to Step 33.
    If **No**, go to Step 31.

31. Stop maintenance control program client using DLP-515.

32. Repeat from Step 5 for next expanded pollable bit.

33. Have all four expanded pollable bits been scoped for both CCs?

    If **Yes**, go to Step 35.
    If **No**, go to Step 34.

34. Repeat from Step 5 for the other CC.

35. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

TABLE A
OVERWRITE ERROR CODES

ERROR CODE	EXPLANATION	ERROR CODE	EXPLANATION
DPLX FAIL	GULP cannot be paged to parse the message because the file stores are duplex failed.	115	Incorrect ID tag specified for a file store only overwrite.
50	Conditional printout may follow. This acknowledgement is used if disk files are duplex failed and GULP is being paged from tape.	120	Part or all non-library main memory overwrite is not backed up on file store.
100	Invalid syntax. Check input manual to verify that no extra keywords have been input.	121	File store backup range is not contiguous. Overwrite must be split on main memory store boundary.
101	No argument for keyword ID.	122	PKG, ADR conversion failed. This is due to either invalid or unknown PKG name, relative address larger than size of PKG, or library package not loaded.
102	No argument for keyword PKG.		
103	No argument for keyword FPKG.	123	FPKG, ADR conversion failed. Invalid FPKG name.
104	No argument for keyword ADR.		
105	No argument for keyword DATA.	124	Library overwrite outside of library Kcode.
106	Number of arguments of OLDDATA is different from number of arguments of DATA.	131	Overwrite in progress from another channel.
110	Overwrites of system merge ID tag cannot be mixed with overwrites of other ID tags.	132	Previously input **COPY:OWBUF** request has not yet completed. Enter **STOP:OVRWRT**.
111	Overwrite overlaps two ID tags.	133	Hash mismatch on **COPY:OWBUF**. Enter **STOP:OVRWRT**.
112	Wrong ID tag specified for a library file store only overwrite.	134	Previously input **UPD:HDATA** request has not yet completed. Enter **STOP:OVRWRT**.
113	Input address is not in hashed range.	135	No overwrite in progress
114	Invalid ID tag mnemonic.		

TABLE A (CONTD)
OVERWRITE ERROR CODES

ERROR CODE	EXPLANATION	ERROR CODE	EXPLANATION
136	UPD:HDATA may be input only from the maintenance channel (or its backup if the maintenance channel is out-of-service) or the SCC channel. Before entering message, check for audit printouts or interrupts to assure overwrite is not incorrect.	160	File store queue full.
		161	DKAD reject — core ADR is out of range. Request technical assistance.
137	A COPY:OWBUF message must be input.	162	DKAD reject — file store address mismatches ID tag.
138	Core only overwrite backed out.	163	DKAD reject — write request not multiple of 32 or not on sector boundary.
140	Overwrite buffer full.	164	DKAD reject — size too big.
141	Library program not loaded in PS36 library Kcode.	165	DKAD reject — file specified is out-of-service.
143	Input overwrite overlaps with overwrite currently in buffer.	166	DKAD reject — blocked.
144	Old data specified in message does not match data in system.	167	DKAD reject — write (trouble) to in-service file.
145	Library system in transition state. Wait a few seconds and reenter the message.	168	DKAD reject — queue invalid for GULP.
		169	DKAD reject — mutilated queue.
150	Library program is not currently loaded in library Kcode. The overwrite has been bypassed.	170	DKAD reject — no queue specified.
		180	Execution of GULP function is in progress.
152	Hash sum input on COPY:OWBUF does not match computed hash. This indicates that some data in the buffer is different than was expected when input hash was generated. Enter STOP:OVRWRT and check printout.	181	Message processing in progress.
		182	Dataset input mode in progress on another channel.
		183	Dataset execution is in progress.
153	Hash update by SAWS failed. Enter STOP:OVRWRT. Tape audit (SAST) must be run to correct hash errors.	184	Message print in progress.
		185	Failure to page in GULP or failure to seize general buffer table (GBT).

P†   N†

```
              19
PDGB →
PSZB →
PLPB →
PHPB →
              10
              09
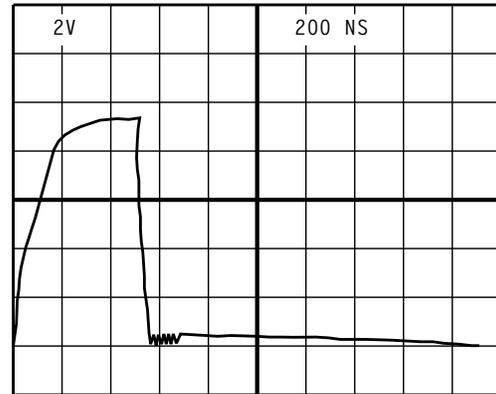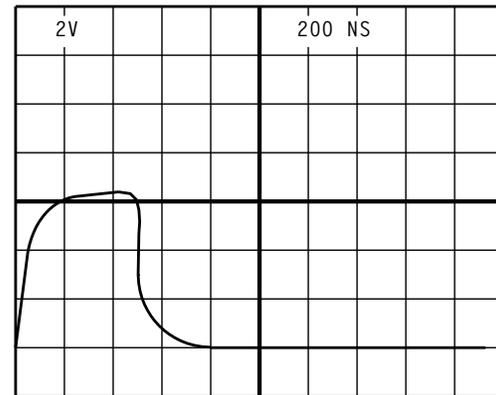



              00
PUBB FRAME   3    2    1    0
```

BRANCH A	*76-28
BRANCH B	*76-28
BRANCH C	*76-28
BRANCH D	*76-28
BRANCH E	*64-28
BRANCH F	*64-28
BRANCH G	*64-28
BRANCH H	*64-28
BRANCH K	*48-28
BRANCH L	*48-28
BRANCH M	*48-28
BRANCH R	*48-28
BRANCH T	*36-28
BRANCH V	*36-28
BRANCH W	*36-28
BRANCH X	*36-28

* 0 FOR BUS 0 OR 1 FOR BUS 1
† P FOR POSITIVE LEAD AND N FOR
  NEGATIVE LEAD

FIG. 1

2V   200 NS

NORMAL PULSE AT DRIVER

2V   200 NS

NORMAL PULSE 500 FEET FROM DRIVER

FIG. 2

Verify XTSI Unit Equipage

1. At 1B Processor MTC terminal, enter message
   VER:VFUNC SUXTSI:FD1 XTSIMEMN,DT1 a**!** for even-numbered growth XTSI.

   where   a = XTSI member number

   Response: **VER:MISC;OPT(SUXTSI):   XTSI MEMN** a,

XTCN	**0 1**
XTCHV	**-, -,**
XTCSV	**-, -,**

	CSP, PUBI, GRAM, CIA, ALF, EXEC,
XTC0 PACKS	**-, -, -, -, -, -,**
XTC1 PACKS	**-, -, -, -, -, -,**

   XTSI FRAME INBAND ENABLED -,

IBUEQ	**-,**
IBUHV	**-,**
IBUSV	**-,**

D3UN	**0 1 2 3 4 5 6 7**
D3UEQ	b, b, b, b, b, b, b, b,
D3UHV	**-, -, -, -, -, -, -, -,**
D3USV	**-, -, -, -, -, -, -, -,**

SPUN	**0 1 2 3 4 5 6 7 8 9 10 11**
SPUEQ	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUHV	**-, -, -, -, -, -, -, -, -, -, -, -,**
SPUSV	**-, -, -, -, -, -, -, -, -, -, -, -,**

   where   a = XTSI member number
   b = D3U equipage - **O** for OPER or **U** for UNEQ

2. Using printout and the response message in Step 1, determine which D3Us, in the D3UEQ
   line, are set to O and record each D3U set to O for later use when degrowing the D3Us.

3. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Checklist

ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE
IXL-001		DLP-527		DLP-562		DLP-597	
NTP-002		DLP-528		DLP-563		DLP-598	
NTP-003		DLP-529		DLP-564		DLP-599	
NTP-004		DLP-530		DLP-565		☐ DLP-600	
NTP-005		DLP-531		DLP-566		☐ DLP-601	
NTP-006		DLP-532		DLP-567		☐ DLP-602	
NTP-007		DLP-533		DLP-568		☐ DLP-603	
NTP-008		DLP-534		DLP-569		☐ DLP-604	
DLP-500		☐ DLP-535		DLP-570		☐ DLP-605	
DLP-501		DLP-536		☐ DLP-571		DLP-606	
DLP-502		DLP-537		DLP-572		DLP-607	
DLP-503		DLP-538		DLP-573		DLP-608	
DLP-504		DLP-539		DLP-574		☐ DLP-609	
DLP-505		DLP-540		DLP-575		☐ DLP-610	
DLP-506		DLP-541		DLP-576		☐ DLP-611	
DLP-507		DLP-542		DLP-577		DLP-612	
DLP-508		DLP-543		DLP-578		DLP-613	
DLP-509		DLP-544		DLP-579		DLP-614	
DLP-510		DLP-545		DLP-580		☐ DLP-615	
DLP-511		DLP-546		DLP-581		DLP-616	
DLP-512		DLP-547		DLP-582		DLP-617	
DLP-513		DLP-548		DLP-583		DLP-618	
DLP-514		DLP-549		DLP-584		DLP-619	
DLP-515		DLP-550		DLP-585		DLP-620	
DLP-516		DLP-551		DLP-586		DLP-621	
DLP-517		DLP-552		DLP-587		DLP-622	
DLP-518		DLP-553		DLP-588		DLP-623	
DLP-519		DLP-554		DLP-589		DLP-624	
DLP-520		DLP-555		DLP-590		DLP-625	
DLP-521		DLP-556		☐ DLP-591		DLP-626	
DLP-522		DLP-557		☐ DLP-592		DLP-627	
DLP-523		DLP-558		☐ DLP-593		☐ DLP-628	
DLP-524		DLP-559		☐ DLP-594		☐ DLP-629	
DLP-525		DLP-560		☐ DLP-595		☐ DLP-630	
DLP-526		DLP-561		DLP-596		☐ DLP-631	

- Revised or added item

☐ Canceled item

ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE
☐ DLP-632 ☐ DLP-633 ☐ DLP-634 ☐ DLP-635 ☐ DLP-636		☐ DLP-667 ☐ DLP-668 ☐ DLP-669 DLP-670 DLP-671					
☐ DLP-637 ☐ DLP-638 ☐ DLP-639 ☐ DLP-640 ☐ DLP-641		DLP-672 DLP-673 DLP-674 DLP-675 DLP-676					
☐ DLP-642 ☐ DLP-643 ☐ DLP-644 ☐ DLP-645 ☐ DLP-646		CKL-891 TNG-893					
☐ DLP-647 ☐ DLP-648 ☐ DLP-649 ☐ DLP-650 ☐ DLP-651							
DLP-652 ☐ DLP-653 ☐ DLP-654 ☐ DLP-655 ☐ DLP-656							
☐ DLP-657 ☐ DLP-658 ☐ DLP-659 DLP-660 ☐ DLP-661							
DLP-662 ☐ DLP-663 ☐ DLP-664 ☐ DLP-665 ☐ DLP-666							

• Revised or added item

☐ Canceled item

HOW TO USE THIS DOCUMENT

This document gives you all the step-by-step instructions you need to do your job (task). These instructions are given in the order that they *must* be done. Failure to follow the instructions in the order given may cause service interruptions.

This document is divided into parts called procedures. Each procedure is given a 3-digit number. These numbers range from 001 through 893. Procedures are arranged in this document in numerical order beginning with 001.

Figure 1 is a typical IXL-001 procedure and is titled *Task Index List*. It is an alphabetical listing of the jobs that you may have to do. To use an IXL-001 procedure, just find the job you need to do in the FIND YOUR JOB IN THE LIST BELOW column. Next, follow the dotted line to the procedure number and begin the task. For example, suppose you are given the job of doing a system test. On the IXL-001 procedure, as shown in Figure 1, notice that it is listed in the THEN GO TO column as NTP-016. It could have been any other 3-digit number.

Figure 2 is an example of an NTP (Non-Trouble Procedure). Each NTP provides specific instructions for doing a job. It consists of numbered items (or steps) listed in the order that you must do them to complete your job. To use this procedure, you must start with item 1 in the DO THE ITEMS BELOW IN ORDER LISTED column and continue until all items have been done. When you get to an item that you do not know how to do, look for the procedure number for that item under the FOR DETAILS, GO TO column. This is the number of the procedure that will give you detailed, step-by-step instructions to do that item. Note that item 2 in Figure 2 uses lettered (A, B) entries. This means that there are alternate ways of doing item 2 depending on equipment options or equipment conditions. You do only the one that fits your equipment options or equipment conditions.

For example, suppose you are doing a System Test. The IXL-001 as shown in Figure 1, has directed you to NTP-016 as shown in Figure 2, and you are on item 8 ''Mount Tape'' in the DO ITEMS BELOW IN ORDER LISTED column. Mount the tape if you know how. If you do not know how to mount the tape, go to the procedure number listed in the FOR DETAILS, GO TO column for the detailed, step-by-step instructions. In this case, it happens to be DLP-500. In either case, you must continue with the next item listed in NTP-016 until you complete the job.

AT&T 123-456-789
Issue 2

IXL-001
Page 1 of 2

TASK INDEX LIST

FIND YOUR JOB IN THE LIST BELOW	THEN GO TO
Alert; External - Horn, Ringer, Etc. - Remove...........................	NTP-028
Amplifiers; Channel - Recorded Announcement Frame - Test.....	NTP-009
BRDG LED - Does Not Light - Correct	TAP-117
Bridging Controller; Trunk - J1C015MB - Replace	DLP-572
Channel Amplifiers - Recorded Announcement Frame - Test......	NTP-009
Extended Station Capability - Nonkey Set Only - Reported Failure	TAP-123
External Alert - Horn, Ringer, Etc. - Remove...........................	NTP-028
Interchange Two Working Station Numbers.............................	NTP-081
LED: BRDG - Does Not Light - Correct	TAP-117
Loudspeaker Paging - Add	NTP-059
New International Trunk, R1 Signaling - Incoming - Establish	NTP-010
New Tandem Trunk - T-Carrier and Digroup Terminal - Establish	NTP-008
Station Capability; Extended - Nonkey Set Only - Reported Failure	TAP-123
System Test - Perform...	NTP-016
Trunk Bridging Controller - J1C015MB - Replace	DLP-572

Figure 1.   Typical List of Jobs You May Have to Do

AT&T 123-456-789

NTP-016

Issue 2

Page 1 of 2

PERFORM SYSTEM TEST

DO THE ITEMS BELOW IN ORDER LISTED	FOR DETAILS, GO TO
1 Test Local Maintenance Terminal	DLP-531
2 Place SEC/SEB in Off-Line Mode	
A. If in On-Line Mode, Change System From On-Line to Off-Line	DLP-509
B. If Powered Down, Condition System for Off-Line Operation as Follows	
1. Power up Minicomputer	DLP-503
2. Power up Line Printer	DLP-503
3. Power up Maintenance Terminal	DLP-510
. . .	
7 Run Computer Display Terminal Test For All Positions	DLP-513
8 Mount Tape	DLP-500
9 Test Computer Display	DLP-522

Figure 2.   Typical List of Specific Instructions for Doing a Job

Figure 3 is a typical page of a DLP-500 (Detailed Level Procedure - 500) that gives numbered, step-by-step instructions. To use this procedure, you must start with Step 1 and proceed as directed by the instructions until you complete this procedure. Note that Step 1 of this procedure is preceded by a statement called a SUMMARY.   A summary is used as a memory jogger, and briefly tells you how to do the procedure and what measurements or results you can observe. If you can do the procedure after reading the SUMMARY, go ahead and do it without reading any further.

Now, look at Step 6 of DLP-500 as shown in Figure 3. Note that following the action statement there is the sentence, For help see DLP-563. When you see a statement like this, it means that additional step-by-step instructions for doing just that step are given in the referenced procedure. In this case, DLP-563 gives you the details on how to ensure that the write-enable ring is not installed on the file reel. If you, in this case, cannot do Step 6, then go to DLP-563. In either case, you must continue with Step 7 until you have completed the procedure. In some cases, you may be directed to a procedure where the procedure number is preceded by the letters TAP (Trouble Analysis Procedure); for example, TAP-109. This means that you have trouble in the equipment, and in this case TAP-109 will give you step-by-step instructions to fix the trouble. After you have fixed the trouble, you must return to Step 1 of the procedure that sent you to TAP-109. However, if you came directly from IXL-001 to TAP-109, then your job is completed when you have fixed the trouble.

Admonishments: Three admonishments are used in this document as follows:

> ***DANGER: This means there is a possibility of personal injury.***
>
> ***Caution: This means there is a possibility of service interruption.***
>
> ***WARNING: This means there is a possibility of equipment damage.***

Important Items: Table A lists the more important items used in this document.

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MOUNT TAPE

SUMMARY: Install tape with or without write enable ring, as required.
Thread tape and position tape at BOT (Beginning Of Tape) marker.

1. Get file reel and empty take-up reel.
2. Set **START/STOP** switch to **STOP**.
3. Set **ON LINE/OFF LINE** switch to **OFF LINE.**
4. Set **LOAD/BR REL** switch to center position.
5. Is data to be written on tape?
   If **yes**, then install write enable ring on file reel and go
   to Step **7**.
   If **no**, then do Step **6**.
6. Ensure that write enable ring is not installed on file reel. For help
   see DLP-563.
7. Open tape transport door.

Figure 3.   Typical List of Detailed Instructions for Doing a Job

TABLE A Important Procedural Items and Definitions

Item	Definition
Acceptance (NTP-002)	Provides information and identifies jobs to be done to accept equipment after it is installed.
Maintenance Philosophy	The maintenance philosophy, when provided, gives an overview of the considerations designed into the trouble-clearing procedures.
DLP (Detailed Level Procedure)	Detailed, step-by-step instructions.
TAP (Trouble Analysis Procedure)	Step-by-step, trouble-clearing instructions to locate and/or fix troubles.
NTP (Non-Trouble-Clearing Procedure)	A list of items to perform normal work other than trouble-clearing.