

**OFFICE UPDATE PROCEDURES USING REGIONAL OFFICE  
DATA ADMINISTRATION PROGRAM AND/OR NEW GENERIC  
PROGRAM (2B-EF-2)  
NO. 2B ELECTRONIC SWITCHING SYSTEM**

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3. PROCEDURES FOR A GENERIC RESTART AND/OR TRANSLATION ODA UPDATE . . . . .	3	1.01 This section describes procedures for updating the No. 2B Electronic Switching System (ESS) 2B-EF-2 generic program and/or translations. The term office data includes both translation and office parameter data. The generic program consists of data that is common to every 2B-EF-2 office. The office data may be changed by an ODA update by use of the office data administration (ODA) system of computer programs. This section includes the procedures necessary to update either or both the generic program and/or office data.	
A. Generic Restart Without an ODA Run . . . . .	3	1.02 This section is being reissued to include 2B-EF-2 changes and other miscellaneous corrections. Since this is a general revision, change arrows ordinarily used have been omitted.	
B. ODA Translation Update Only (No Generic Change) . . . . .	12	1.03 For a more detailed description of the ODA system for No. 2B ESS, refer to Section 232-324-101.	
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(b) If the two stores are presumed to be the same, both are audited for bad parity and for mismatches between the two stores.

**1.05** The ability of the 2B processor to quickly recover from faults is dependent on the contents of the main store of the standby control unit (off-line main store) being an exact replica of the contents of the active main store. If this is not the case, when a fault occurs, time is consumed by complement correction routines invoked by the microcode.

**1.06** Special hardware exists in the 2B processor to maintain an updated off-line main store whose contents are identical to those in the on-line main store. With the processor in the update mode, the data is automatically written into both stores every time a write-into-store instruction is encountered.

**1.07** It is not always possible to keep the processor in the update mode. The off-line main store may have a fault causing it to be taken out of service. When the system is returned to the update mode, the contents of the on-line main store must be copied to the off-line main store to establish an exact replica before it can be maintained by the automatic update mechanism.

**1.08 *Lettered Steps:*** A letter a, b, c, etc, added to a step number in this section, indicates an action which may or may not be required depending on local conditions. The condition under which a lettered step or a series of lettered steps should be made is given in the ACTION column, and all steps governed by the same condition are designated by the same letter within a test. Where a condition does not apply, all steps designated by that letter should be omitted.

## 2. PRELIMINARY PROCEDURES FOR A GENERIC RESTART AND/OR ODA TRANSLATION UPDATE

**2.01** Prior to a generic restart only [Item (a) in Part 3] order six list 2 tape cartridges of the desired generic point issue.

**2.02** Preparatory steps for an update involving an ODA translation update [Items (b) and (c), Part 3] are as follows:

(a) All questionnaires and input forms (No. 2B ESS 2000 series) are prepared and sent to the Western Electric computation center.

(b) A modification of the ODA run, giving the established schedule of actions, is received.

(c) Preserve all service order, recent changes, and customer-dialed changes during the ODA interval (see Section 232-324-101). To request the system to automatically generate paper tapes of every customer-dialed change, type the following input message at the maintenance TTY:

A RC:PUN:1!

**Note:** This TTY message must be typed at the time of the last RC update before the data transmission is to take place and must remain in the No. 2B ESS until the office update procedures are completed.

(d) Do a recent change update using the tape data facility (Refer to Section 232-304-301 for update procedures). Save all paper tapes corresponding to changes entered after this step (if any) for reinsertion at a later step. Hold all recent change activity to a minimum until completion of this procedure.

(e) Send two copies of the current office tape data to the Western Electric computation center as per schedule. Refer to Section 232-309-305 for procedures to make a tape copy. The TELCO will receive two list 1 tape cartridges for an ODA translation update only or six list 1 tape cartridges for a generic restart and ODA translation update. The list 1 tape cartridges will contain (among other things) generic (as ordered), an updated translation file, an empty overwrite file for pre-Issue 2 generic, a patch file containing all current patches for the Issue 2 or later generic, an empty backdate file, and label file. The list 2 tape referred to in paragraph 2.01 differs from a list 1 tape in that it does not include office-related information such as translation data. ***Ensure that sufficient spare tape cartridges are on hand to***

***maintain a minimum quantity of four working cartridges.***

**2.03** The ODA update uses WECO manufacturing to write complete updated program store translation information. These new tapes will be shipped to the No. 2B ESS office. Hashsums and documentation will accompany the translation data.

**2.04** This procedure will require tape handling operations (refer to Section 232-309-305).

### **3. PROCEDURES FOR A GENERIC RESTART AND/OR TRANSLATION ODA UPDATE**

**3.01** Prior to the installation of updated office data tapes in the No. 2B ESS, the WECO craft will inform the local TELCO as to which kind of system initialization will be required for the associated update. This information will determine which one of the following parts and tables will be used for the office update:

- (a) Part A—***Generic Restart Without an ODA Run:*** The generic Engineering Change Procedure (ECP) will specify the level of initialization needed. This could be any of the following:
  - (1) Initialization Procedures for CU Switch Only (Table A)
  - (2) Initialization Procedures for Switch and Transient Clear (Table B)
  - (3) Initialization Procedures for Switch and Recent Change Clear (Table C)
  - (4) Initialization Procedures for Switch and Stable Clear Initialization (Table D)
  - (5) Initialization Procedures for Switch and Recent Change and Stable Clear Initialization (Table E)
- (b) Part B—***ODA Update Only (No Generic Change):*** A stable clear, recent change initialization is always needed. The patches supplied with the new tape will not be used (Table E).
- (c) Part C—***Generic Restart/Retrofit and ODA Translation Update:*** This

procedure may also be used to install an ODA Translation Update on the same generic issue using the patches supplied with the new tapes. A stable clear recent change initialization is always needed.

**3.02** Preliminary steps in paragraphs 2.01 through 2.04 may be done in advance. However, all recent change activity must be held to a minimum between the time the recent change is updated as required by the procedure, and the entire procedure is completed.

**3.03** Tape cartridge procedures in paragraphs 3.01 through 3.08 may be done in advance but not more than 24 hours in advance. If done in advance, the new cartridge must be removed from the system at the completion of the Tape Cartridge Procedure section and reinserted at the start of the Updated Procedure section.

**3.04** The time required to run the update procedure in paragraphs 3.01 through 3.08 should be estimated or obtained from an office that has run the procedure. Thus, the procedure can be started at a time that permits the execution of Tables A, B, C, D, or E to be performed at a low traffic period.

**3.05** Before beginning the procedure, verify the following:

- (a) The system is in the normal mode of operation by observing that the SYSTEM NORMAL lamp is lighted.
- (b) All maintenance center functions are released and the SYSTEM EMERGENCY MANUAL CONTROL panel is clear.
- (c) Control unit 0, control unit 1, system status panel and maintenance TTY are in service.
- (d) The system is in standby, the MAS (main store) lamp, ATI, TDC, MISC, MANUAL FORCE lamps are extinguished.

#### **A. Generic Restart Without ODA Run**

**3.06** This part provides the steps required for a generic restart without an ODA run. The level of initialization needed is specified in the generic ECP.

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STEP	ACTION	VERIFICATION
<b>Tape Cartridge Procedure</b>		
<p><b>Note:</b> No action should be taken which would abort the multiscan functions used within the procedure (eg, ALW:TAPEUTIL! and ALW:OW!). (If repaging is necessary, the wrong version of the program could be loaded.)</p>		
1a	<p>If any steps will be performed between 0100 and 0200 hours— At maintenance TTY— Type in: INH:MSF x! 12- x = automatic long-term peripheral unit exercises multiscan function number.</p>	<p>At maintenance TTY— System response: OK</p>
2b	<p>If any steps will be performed between 2300 and 2315 hours— Type in: INH:MSF y! 11 y = automatic long-term CU exercises (CU diagnostics) multiscan function number.</p>	<p>System response: OK</p>
3	<p>Type in: A RC:PUN:1!</p>	<p>System response: OK</p>
4	<p>Do a recent change update using the tape data facility (refer to Section 232-304-301 for update procedures).</p> <p><b>Note:</b> The above step allows for the possibility of returning to the original data if the new data does not work.</p>	
5	<p>Type in: DGN:TAPE 0!</p>	<p>System response: IP INIT TAPE COMPL DGN TAPE 0 ATP</p>
6	<p>Type in: DGN:TAPE 1!</p>	<p>System response: IP INIT TAPE COMPL DGN TAPE 1 ATP</p>
7c	<p>If any steps will be performed between 0215 and 0235 hours— Type in: INH:MSF z! 7 z = tape diagnostics multiscan function number.</p>	<p>System response: OK</p>

STEP	ACTION	VERIFICATION
8d	If the on-line CU is not CU 0— Type in: SW:CU!	System response: REPT SW CU
9	Type in: ALW:TAPEUTIL!	System response: PF ALW TAPEUTIL COMPL
10	Type in: RMV:TAPE 0!	System response: OK
11	Type in: RMV:TAPE 1!	System response: OK
	<b>Note:</b> If the system attempts to bootstrap any time between the next step and completion of this procedure, release the LOCK key (if active); replace the original tapes in the transports and allow the system to recover with the bootstrap function. (The original tapes are the tapes in service at the beginning of paragraph 3.06.)	
12	Operate UNLOAD push buttons on both TDCs. Remove and save old cartridges. Insert both new cartridges.	
13	Type in: RST:TAPE 0;UCL!	System response: OK
14	Type in: RST:TAPE 1;UCL!	System response: OK
15	Type in: INIT:TAPE!	System response: IP INIT TAPE COMPL
	<b>Note:</b> Perform Step 15 a total of four times to ensure proper tape retensioning.	
16	Type in: AUDIT:TAPE;DETL!	System response: IP AUDIT TAPE MATCH 0 TAPEUTIL STOPPED

**Caution:** Do not proceed unless the tape audit passes. If audit errors are found, repeat Steps 9, 15, and 16. If audit errors are still present, obtain new tapes from the Regional Center. Replace original tapes in

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<b>STEP</b>	<b>ACTION</b>	<b>VERIFICATION</b>
	<i>TDCs and restore the system to normal.</i>	
17	Type in: RMV:TAPE 0!	System response: OK
18	Operate the UNLOAD button on TDC 0. Remove and save the new tape. Insert the original tape saved from Step 12.	
19	Type in: RST:TAPE 0;UCL!	System response: OK
20	Type in: ALW:TAPEUTIL!	System response: PF ALW TAPEUTIL COMPL
21	Type in: COPY:TAPE(0,4,172),TO(1,4,172)!	System response: IP COPY TAPE COMPL TAPEUTIL STOPPED
22	Type in: ALW:TAPEUTIL!	System response: PF ALW TAPEUTIL COMPL
23	Type in: COPY:FILE CHECKSUM!	System response: IP COPY FILE COMPL TAPEUTIL STOPPED
24	Type in: ALW:TAPEUTIL!	System response: PF ALW TAPEUTIL COMPL
25	Type in: COPY:FILE TRNSLN!	System response: IP COPY FILE COMPL TAPEUTIL STOPPED
26	Type in: ALW:TAPEUTIL!	System response: PF ALW TAPEUTIL COMPL
27	Type in: COPY:FILE LABEL!	System response: IP COPY FILE COMPL TAPEUTIL STOPPED
28	Type in: ALW:TAPEUTIL!	System response: PF ALW TAPE UTIL COMPL

STEP	ACTION	VERIFICATION
29	Type in: COPY:FILE BACKDT!	System response: JP COPY FILE COMPL TAPEUTIL STOPPED
30	Type in: RMV:TAPE 0!	System response: OK
31	Operate the UNLOAD button on TDC 0; remove and save the original tape. Insert the other new tape saved from Step 18.	
32	Type in: RST:TAPE 0;UCL!	System response: OK
33	Type in: ALW:TAPEUTIL!	System response: PF ALW TAPEUTIL COMPL
34	Type in: COPY:FILE PATCH!  <i>Note:</i> If COPY FILE:COMPL message is not given, one or both of the directories may not be correct. Do not proceed until the difficulty has been resolved.	System response: IP COPY FILE COMPL TAPEUTIL STOPPED
35	Type in: ALW:TAPEUTIL!  <i>Caution: In the following step, be sure to copy from TDC 1 to TDC 0.</i>	System response: PF ALW TAPEUTIL COMPL
36	Type in: COPY:TAPE(1),TO(0)!	System response: IP COPY TAPE COMPL TAPEUTIL STOPPED

#### Update Procedure

37	Type in: T PR:TWT!	System response: PF TR PR TWT aaa bbb day aaa = DSP if active bbb = SOL if active day = day of week.
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*Note:* Before performing Steps 38 through 40, abort any diagnostics on trunks, service circuits, or junctions.

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STEP	ACTION	VERIFICATION
38	Type in: T WT:ATT!	System response: OK
39	Type in: T WT:AST!	System response: OK
40	Type in: T WT:AJT!	System response: OK
41	Type in: T WT:LIT!	System response: OK
42	Type in: M TK:SI!	All trunk, service circuits, and junctor circuits that are marked out of service will be listed.
43e	If a switch and initialization (Table B, C, D, or E) is required— Type in: M PU:SI!	System response: PF MR AL SI MR AM SI MR LK ASO END
<p><b>Caution:</b> Do not proceed if any major piece of equipment is out of service.</p> <p><b>Note:</b> CU 0 must be on-line.</p>		
44	Type in: RMV:TAPE 0!	System response: OK
45	Operate the UNLOAD button on TDC 0, remove and save the new tape. Reinsert the original tape saved from Step 29.	
46	Type in: RST:TAPE 0;UCL!	System response: OK
47	Type in: RMV:TAPE 1!	System response: OK
48	Type in: DGN:CU!	System response: PF DGN CU x COMPL ATP UPD OMAS COMPL
49	Type in: ALW:TAPEUTIL!	System response: PF ALW TAPEUTIL COMPL
50	Type in: RST:TAPE 1;UCL!	System response: OK

STEP	ACTION	VERIFICATION
51	Type in: RMV:TAPE 0!	System response: OK
52	Operate the UNLOAD button on TDC 0; remove and save the original tape. Reinsert the new tape saved from Step 45.	
53	If switch and initialization (Table B, C, D, or E) is required— At 3A CC panels— Depress both MANUAL keys.	At 3A CC panels— Both MANUAL lamps lighted. System response: REPT CU STAT MAN REPT ERR KEY
54	At system status panel (SSP)— Depress LOCK key.	At SSP— LOCK lamp lighted. System response: REPT CU STAT UAV
55	Type in: LOD:OMAS;BOOT:FULL!	System response: IP LOD OMAS COMPL TAPEUTIL STOPPED If Table A was used— Additional system response: UPD OTS COMPL
56	Operate the UNLOAD button on TDC 0; remove and save the new tape. Reinsert the original tape saved from Step 52.	
57	Type in: RST:TAPE 0;UCL!	System response: OK
58	Type in: RMV:TAPE 1!	System response: OK
	<b>Note:</b> Do not make any TTY request that may cause multiscan functions to be initiated until Step 75 has been executed.	
59	Type in: ALW:OW;UCL!	System response: PF ALW OW COMPL
60	Type in: RMV:TAPE 0!	System response: OK
61	Operate the UNLOAD button on TDC 0; remove and save the original tape. Reinsert the new tape saved from Step 56.	

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<b>STEP</b>	<b>ACTION</b>	<b>VERIFICATION</b>
62	Type in: RST:TAPE 0;UCL!	System response: OK
63	Type in: RST:TAPE 1; UCL!	System response: OK
64f	If any overwrites must be made to the generic data in the off-line main store— Perform the overwrite procedure in Table F.	
65	Compute generic hashsums for the off-line main store by typing in: OP:HASH:GENERIC!	System response: PF OP HASH adr bbbbbb . . . OP HASH COMPL adr = Absolute address of requested hashsum. bbbbbb = hashsum value (decimal).
	<b>Caution: Resolve all hashsum mismatches before proceeding.</b>	
66	Type in: OP:HASHNR:SEG!	System response: PF OP HASHNR ident hashum OP HASHNR COMPL ident = Segment number. hashsum = Hashsum value (decimal).
	<b>Caution: Resolve all hashsum mismatches before proceeding.</b>	
67	Type in: OP:HASHNR:BOOT!	System response: PF OP HASHNR ident hashum OP HASHNR COMPL ident = Segment number. hashsum = Hashsum value (decimal).
	<b>Caution: Resolve all hashsum mismatches before proceeding.</b>	
68	Initialize the system in accordance with applicable Table A, B, C, D, or E.	
69	Make calls through each network to determine that the system is working properly. Also perform system evaluation in accordance with Section 232-325-501. If Table A was used, do not perform any operation which would update the off-line store.	

STEP	ACTION	VERIFICATION
	<b>Note:</b> If the system is not working properly, wait until the end of the initialization interval (SERVICE LOSS lamp lighted steadily) and switch or force the system back to the original working CU.	
70	If switch and initialization (Table B, C, D, or E) is required— Restore AMA service observing to its prior state (Step 43e) by typing in: M AM:OBS:fg hi n!	System response: IP
71	Delay until the new on-line CU has run for a total of 15 to 30 minutes.	
72	If a CU switch only (Table A) was used— At (new) off-line 3A CC panel— Depress MANUAL key.	At off-line 3A CC panel— MANUAL lamp lighted. System response: REPT CU STAT MAN
73g	Type in: STOP:OW!	System response: PF ALW OW STOPPED
74e	If switch and initialization (Table B, C, D, or E) was used— Type in: ALW:MSF x! x = main store update multiscan function number.	System response: OK
75	At 3A CC panels— Depress MANUAL keys on off-line CU and on-line CU (if active).	At 3A CC panels— MANUAL lamps extinguished. System response: UPD OMAS COMPL At off-line 3A CC panel— STANDBY lamp lighted.
	<b>Note:</b> The off-line store is updated when UPD OMAS COMPL is printed.	
76	Type in: T WT:RST!	System response: OK
77	Type in: T PR:TWT!	System response: PF aaa = DSP if active TR PR TWT aaa bbb day bbb = SOL if active day = day of week.

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STEP	ACTION	VERIFICATION
78	Verify that the traffic work tables are returned to their original state given in Step 35.	
79g	If a CU switch only (Table A) was used— Ensure all multiscan functions previously inhibited are now allowed by typing in: ALW:MSF w! w = All multiscan functions previously inhibited.	
80	Type in: M PU:EX!	System response: PF MI PU EX END
81	Type in: A AU:RC!	System response: PF AR AU RC ATP AR AU RCBIT ATP
82g	Clear the paging buffer by typing: CMPR:MAS:0 !	System response: PF CMPR MAS COMPL
83f	If any overwrites were made to translation data by the overwrite procedure (Table F), perform a recent change update procedure. Immediately following this procedure use the overwrite program to deactivate (CNL:OW) all activate <i>translation</i> overwrites loaded via the procedure in Table F.	
84	Type in: ALW:OW!	System response: PF ALW OW COMPL
85	Type in: UPD:HASH:GENERIC!	System response: PF UPD HASH COMPL
86	Type in: STOP:OW!	System response: PF ALW OW STOPPED
87	Use the tape copy procedure in Section 232-309-305 to bring the remaining new tapes from WEC0 up to the current status of the present tapes.	
<b>B. ODA Translation Update Only (No Generic Change)</b>	stable clear, recent change initialization is always needed.	
<b>3.07</b> This part provides the steps needed for an ODA update with no generic change. A		

## Tape Cartridge Procedure

STEP	ACTION	VERIFICATION
	<p><b>Note:</b> No action should be taken which would abort the multiscan functions used within the procedures (eg, ALW:TAPEUTIL! and ALW:OW!). (If repaging is necessary the wrong version of the program could be loaded.)</p>	
1a	<p>If any steps will be performed between 0100 and 0200 hours— At maintenance TTY— Type in: INH:MSF x! // x = automatic long-term peripheral unit exercises multiscan function number.</p>	<p>At maintenance TTY— System response: OK</p>
2b	<p>If any steps will be performed between 2300 and 2315 hours— Type in— INH:MSF y! /2 y = automatic long term CU exercises (CU diagnostics) multiscan function number.</p>	<p>System response: OK</p>
3	<p>Do a recent change update using the tape data facility. (Refer to Section 232-304-301 for update procedures.)</p>	
	<p><b>Note:</b> The above step allows for the possibility of returning to the original data if the new data does not work.</p>	
4	<p>Type in: DGN:TAPE 0!</p>	<p>System response: IP INIT TAPE COMPL DGN TAPE 0 ATP</p>
5	<p>Type in: DGN:TAPE 1!</p>	<p>System response: IP INIT TAPE COMPL DGN TAPE 1 ATP</p>
6c	<p>If any steps will be performed between 0215 and 0235 hours— Type in: INH:MSF z! 7 z = tape diagnostics multiscan function number.</p>	
7d	<p>If the on-line CU is not CU 0— Type in: SW:CU!</p>	<p>System response: REPT SW CU</p>

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STEP	ACTION	VERIFICATION
8	Type in: ALW:TAPEUTIL!	System response: PF ALW TAPEUTIL COMPL
9	Type in: RMV:TAPE 0!	System response: OK
10	Type in: RMV:TAPE 1!	System response: OK
<p><b>Note:</b> If the system attempts to bootstrap any time between the next step and completion of this procedure, release the LOCK key (if active); replace the original tapes in the transports and allow the system to recover with the bootstrap function. (The original tapes are the tapes in service at the beginning of paragraph 3.07.)</p>		
11	Operate UNLOAD push buttons on both TDCs. Remove and save old cartridges. Insert both new cartridges.	
12	Type in: RST:TAPE 0;UCL!	System response: OK
13	Type in: RST:TAPE 1;UCL!	System response: OK
14	Type in: INIT:TAPE!	System response: IP INIT TAPE COMPL
<p><b>Note:</b> Perform Step 14 a total of four times to ensure proper tape retensioning.</p>		
15	Type in: AUDIT:TAPE;DETL!	System response: IP AUDIT TAPE MATCH 0 TAPEUTIL STOPPED
<p><b>Caution:</b> Do not proceed unless the tape audit passes. If audit errors are found, repeat Steps 8, 14, and 15. If audit errors are still present, obtain new tapes from the Regional Center. Replace original tapes in TDCs and restore the system to normal.</p>		
16	Type in: RMV:TAPE 0!	System response: OK

STEP	ACTION	VERIFICATION
17	Operate the UNLOAD button on TDC 0. Remove and save the new tape. Insert the original tape saved from Step 11.	
18	Type in: RST:TAPE 0;UCL!	System response: OK
19	Type in: ALW:TAPEUTIL!	System response: PF ALW TAPEUTIL COMPL
20	Type in: COPY:FILE PATCH!	System response: IP COPY FILE COMPL TAPEUTIL STOPPED
	<b>Note:</b> If COPY FILE COMPL message is not given, one or both of the directories may not be correct. Do not proceed until the difficulty has been resolved.	
21	Type in: ALW:TAPEUTIL!	System response: PF ALW TAPEUTIL COMPL
22	Type in: COPY:FILE PAGEMON!	System response: IP COPY FILE COMPL TAPEUTIL STOPPED
23	Type in: RMV:TAPE 0!	System response: OK
24	Operate the UNLOAD key on TDC 0. Remove and save the original tape. Reinsert the new tape saved from Step 17 in TDC 0.	
25	Type in: RST:TAPE 0;UCL!	System response: OK
26	Type in: ALW:TAPEUTIL!	System response: PF ALW TAPEUTIL COMPL
	<b>Caution:</b> In the following step, be sure to copy from TDC 1 to TDC 0.	
27	Type in: COPY:TAPE(1),TO(0)!	System response: PF COPY TAPE COMPL TAPEUTIL STOPPED

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STEP	ACTION	VERIFICATION
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Update Procedure

28	Type in: T PR:TWT!	System response: PF TR PR TWT aaa bbb day aaa = DSP if active bbb = SOL if active day = day of week.
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**Note:** Before performing Steps 29 through 31, abort any diagnostics on trunks, service circuits, or junctors.

29	Type in: T WT:ATT!	System response: OK
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30	Type in: T WT:AST!	System response: OK
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31	Type in: T WT:AJT!	System response: OK
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32	Type in: T WT:LIT!	System response: OK
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33	Type in: M TK:SI!	All trunk, service circuits, and junctor circuits that are marked out of service will be listed.
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34	Type in: M PU:SI!	System response: PF MR AL SI MR AM SI MR LK ASO END
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**Caution:** Do not proceed if any major piece of equipment is out of service.

**Note:** CU 0 must be on-line.

35	Type in: DGN:CU!	System response: PF DGN CU x COMPL ATP UPD OMAS COMPL
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36	Type in: ALW:TAPEUTIL!	System response: PF ALW TAPEUTIL COMPL
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**Note:** Make sure CU 0 has not switched to CU 1.

STEP	ACTION	VERIFICATION
37	At 3A CC panels— Depress both MANUAL keys.	At 3A CC panels— Both MANUAL lamps lighted. System response: REPT CU STAT MAN REPT ERR KEY
38	At system status panel (SSP)— Depress LOCK key.	At SSP— LOCK lamp lighted. System response: REPT CU STAT UAV
39	Type in: <i>erase for 3A</i> LOD:OMAS;BOOT:FULL!	System response: IP LOD OMAS COMPL TAPEUTIL STOPPED
40	Type in: ALW:OW;UCL!	System response: PF ALW OW COMPL
41	Compute translation hashsums on off-line main store by typing in: OP:HASH:TRNSLN adr bgn! adr = last address of new translation data bgn = starting address of new translation data.	System response: PF OP HASH adr bbbbbb . . . OP HASH COMPL  adr = Absolute address of the requested hashsum. bbbbbb = Hashsum value (decimal).
	<b>Note:</b> The adr and bgn fields need not be specified unless different from present (on-line) translation boundaries.	
	<b>Caution:</b> <i>Resolve all hashsum mismatches before proceeding.</i>	
42f	If any overwrites must be made to the translation data in the off-line main store— Perform the overwrite procedures in Table F.	
43	Initialize the system in accordance with Table E.	
44	Make calls through each network to determine that the system is working properly. Also perform system evaluation in accordance with Section 232-325-501.	

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STEP	ACTION	VERIFICATION
	<p><b>Note:</b> If the system is not working properly, wait until the end of the initialization interval (SERVICE LOSS lamp lighted steadily) and switch or force the system back to the original working CU.</p>	
45	<p>Restore AMA service observing to its prior state (from Step 34) by typing in: M AM:OBS:fg hi n!</p>	<p>System response: IP</p>
46	<p>Delay until the new on-line CU has run for a total of 15 to 30 minutes.</p>	
47	<p>Type in: ALW:MSF x! /3 x = main store update multiscan function number.</p>	<p>System response: OK</p>
48	<p>At 3A CC panels— Depress MANUAL keys on off-line and on-line CU.</p>	<p>At 3A CC panels— MANUAL lamps extinguished. System response: UPD OMAS COMPL At off-line 3A CC panel— STANDBY lamp lighted.</p>
	<p><b>Note:</b> The off-line store is updated when UPD OMAS COMPL is printed.</p>	
49	<p>Type in: T WT:RST!</p>	<p>System response: OK</p>
50	<p>Type in: T PR:TWT!</p>	<p>System response: PF TR PR TWT aaa bbb day aaa = DSP if active bbb = SOL if active day = day of week.</p>
51	<p>Verify that the traffic work tables are returned to their original state given in Step 28.</p>	
52	<p>Type in: M PU:EX!</p>	<p>System response: PF MI PU EX END</p>
53	<p>Run diagnostics on all new peripheral units put into service by the restart procedure.</p>	
54	<p>Type in: A AU:RC!</p>	<p>System response: PF AR AU RC ATP AR AU RCBIT ATP</p>

STEP	ACTION	VERIFICATION
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- |     |   |  |
|-----|---|--|
| 55f | If any overwrites were made to translation data by the overwrite procedure (Table F), perform a recent change update procedure. Immediately following this procedure use the overwrite program to deactivate (CNL:OW) all activate <b>translation</b> overwrites loaded via the procedure in Table F. |  |
| 56  | If no translation overwrites were performed, do the following steps.  |  |
| 57  | Type in:<br>ALW:OW!   | System response:<br>PF<br>ALW OW COMPL   |
| 58  | Type in:<br>UPD:HASH:TRNSLN!  | System response:<br>PF<br>UPD HASH COMPL |

**C. Generic Restart and ODA Translation Update**

stable clear, recent change initialization is always needed.

- 3.08** This part provides the steps needed for a generic restart with an ODA update. A

STEP	ACTION	VERIFICATION
------	--------	--------------

**Tape Cartridge Procedure**

- |    |  |   |
|----|--|---|
| 1a | If any steps will be performed between 0100 and 0200 hours—<br>At maintenance TTY—<br>Type in:<br>INH:MSF x! / 1<br>x = automatic long-term peripheral unit exercises multiscan function number. | At maintenance TTY—<br>System response:<br>OK |
| 2b | If any steps will be performed between 2300 and 2315 hours—<br>Type in:<br>INH:MSF y! / 2<br>y = automatic long term CU exercises (CU diagnostics) multiscan function number.                    | System response:<br>OK                        |

**Note:** *No action should be taken which would abort the multiscan function used within the procedure (eg, ALW:TAPEUTIL! and ALW:OW!). (If repaging is necessary, the wrong version of the program could be loaded.)*

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STEP	ACTION	VERIFICATION
3	Do a recent change update using the tape data facility (refer to Section 232-304-301 for update procedures).	
	<b>Note:</b> The above step allows for the possibility of returning to the original data if the new data does not work.	
4	Type in: DGN:TAPE 0!	System response: IP INIT TAPE COMPL DGN TAPE 0 ATP
5	Type in: DGN:TAPE 1!	System response: IP INIT TAPE COMPL DGN TAPE 1 ATP
6c	If any steps will be performed between 0215 and 0235 hours— Type in: INH:MSF z! 7 z = tape diagnostics multiscan function number.	System response: OK
7d	If the on-line CU is not CU 0— Type in: SW:CU!	System response: REPT SW CU
8	Type in: ALW:TAPEUTIL!	System response: PF ALW TAPEUTIL COMPL
9	Type in: RMV:TAPE 0!	System response: OK
10	Type in: RMV:TAPE 1!	System response: OK
	<b>Note:</b> If the system attempts to bootstrap any time between the next step and completion of this procedure, release the LOCK key (if active); replace the original tapes in the transports, and allow the system to recover with the bootstrap function. (The original tapes are the tapes in service at the beginning of paragraph 3.08.)	
11	Operate UNLOAD push buttons on both TDCs. Remove and save old cartridges. Insert both new cartridges.	

BWM  
2 B-E 2-2B  
2B-311

STEP	ACTION	VERIFICATION
12	Type in: RST:TAPE 0;UCL!	System response: OK
13	Type in: RST:TAPE 1;UCL!	System response: OK
14	Type in: INIT:TAPE!	System response: IP INIT TAPE COMPL
	<b>Note:</b> Perform Step 14 a total of four times to ensure proper tape retensioning.	
15	Type in: AUDIT:TAPE;DETL!	System response: IP AUDIT TAPE MATCH 0 TAPEUTIL STOPPED

**Caution:** Do not proceed unless the tape audit passes. If audit errors are found, repeat Steps 8, 14, and 15. If audit errors are still present, obtain new tapes from the Regional Center. Replace original tapes in TDCs and restore the system to normal.

#### Update Procedure

16	Type in: T PR:TWT!	System response: PF TR PR TWT aaa bbb day aaa = DSP if active bbb = SOL if active day = day of week.
	<b>Note:</b> Before performing Steps 17 through 19, abort any diagnostics on trunks, service circuits, or junctors.	
17	Type in: T WT:ATT!	System response: OK
18	Type in: T WT:AST!	System response: OK
19	Type in: T WT:AJT!	System response: OK
20	Type in: T WT:LIT!	System response: OK

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STEP	ACTION	VERIFICATION
21	Type in: M TK:SI!	All trunk, service circuits, and junctor circuits that are marked out of service will be listed.
22	Type in: M PU:SI!	System response: PF MR AL SI MR AM SI MR LK ASO END
<b>Caution: Do not proceed if any major piece of equipment is out of service.</b>		
<b>Note:</b> CU 0 must be on-line.		
23	Type in: RMV:TAPE 0!	System response: OK
24	Operate the UNLOAD button on TDC 0, remove and save the new tape. Reinsert the original tape saved from Step 11.	
25	Type in: RST:TAPE 0;UCL!	System response: OK
26	Type in: RMV:TAPE 1!	System response: OK
27	Type in: DGN:CU!	System response: PF DGN CU x COMPL ATP UPD OMAS COMPL
28	Type in: ALW:TAPEUTIL!	System response: PF ALW TAPEUTIL COMPL
29	Type in: RST:TAPE 1;UCL!	System response: OK
30	Type in: RMV:TAPE 0!	System response OK
31	Operate the UNLOAD button on TDC 0, remove and save the original tape. Reinsert the new tape saved from Step 24.	
32	Type in: RST:TAPE 0;UCL!	System response: OK
33	At 3A CC panels— Depress both MANUAL keys.	At 3A CC panels— Both MANUAL lamps lighted.

STEP	ACTION	VERIFICATION
		System response: REPT CU STAT MAN REPT ERR KEY
34	At system Status panel (SSP)— Depress LOCK key.	At SSP— LOCK lamp lighted. System response: REPT CU STAT UAV
35	Type in: LOD:OMAS;BOOT:FULL!	System response: IP LOD OMAS COMPL TAPEUTIL STOPPED
36	Type in: RMV:TAPE 0!	System response: OK
37	Operate the UNLOAD button on TDC 0; remove and save the new tape. Reinsert the original tape saved from Step 31.	
38	Type in: RST:TAPE 0;UCL!	System response: OK
39	Type in: RMV:TAPE 1!	System response: OK
40	Type in: ALW:OW;UCL!	System response: PF ALW OW COMPL
41	Type in: RST:TAPE 1;UCL!	System response: OK
42	Compute translation hashsums on off-line main store by typing in: OP:HASH:TRNSLN adr bgn! adr = last address of new translation data bgn = starting address of new translation data.	System response: PF OP HASH adr bbbbbb . . OP HASH COMPL adr = Absolute address of the requested hashsum. bbbbbb = Hashsum value (decimal).
	<b>Caution: Resolve all hashsum mismatches before proceeding.</b>	
43	Type in: RMV:TAPE 0!	System response: OK

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STEP	ACTION	VERIFICATION
44	Operate the UNLOAD button on TDC 0; remove and save the original tape. Reinsert the new tape saved from Step 37.	
45	Type in: RST:TAPE 0;UCL!	System response: OK
46f	If any overwrites must be made to the generic or translation data in the off-line main store— Perform the overwrite procedure in Table F.	
47	Compute generic hashsums on the off-line main store by typing in: OP:HASH:GENERIC adr! adr = last address of new generic data.	System response: PF OP HASH adr bbbbbb . . .
	<b>Note 1:</b> The adr need not be specified unless different from the present (on-line) generic boundary.	OP HASH COMPL
	<b>Note 2:</b> If temporary store boundaries have changed, consult the IM for appropriate TTY input message variable fields.	adr = Absolute address of the requested hashsum. bbbbbb = Hashsum value (decimal).
	<b>Caution:</b> <i>Resolve all hashsum mismatches before proceeding.</i>	
48	Type in: OP:HASHNR:SEG!	System response: PF OP HASHNR ident hashsum OP HASHNR COMPL ident = Segment number hashsum = Hashsum value (decimal).
	<b>Caution:</b> <i>Resolve all hashsum mismatches before proceeding.</i>	
49	Type in: OP:HASHNR:BOOT!	System response: PF OP HASHNR ident hashsum OP HASHNR COMPL ident = Segment number hashsum = Hashsum value (decimal).
	<b>Caution:</b> <i>Resolve all hashsum mismatches before proceeding.</i>	
50	Initialize the system in accordance with the applicable Table C or E.	
51	Make calls through each network to determine that the system is working properly. Also	

STEP	ACTION	VERIFICATION
	perform system evaluation in accordance with Section 232-325-501.	
	<b>Note:</b> If the system is not working properly, wait until the end of the initialization interval (SERVICE LOSS lamp lighted steadily) and switch or force the system back to the original working CU.	
52	Restore AMA service observing to its prior state (Step 22) by typing in: M AM:OBS:fg hi n!	System response: IP
53	Delay until the new on-line CU has run for a total of 15 to 30 minutes.	00-6440 ESL ESC
54	Type in: ALW:MSF x! 13 x = main store update multiscan function number.	System response: OK
55	At 3A CC panels— Depress MANUAL keys on off-line and on-line CU.	At 3A CC panels— MANUAL lamps extinguished. System response: UPD OMAS COMPL At off-line 3A CC panel— STANDBY lamp lighted.
	<b>Note:</b> The off-line store is updated when UPD OMAS COMPL is printed.	08
56	Type in: T WT:RST!	System response: OK
57	Type in: T PR:TWT!	System response: PF TR PR TWT aaa bbb day aaa = DSP if active bbb = SOL if active day = day of week.
58	Verify that the traffic work tables are returned to their original state given in Step 16.	
59	Type in: M PU:EX!	System response: PF MI PU EX END
60	Run diagnostics on all new peripheral units put into service by the restart procedure (if applicable).	

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<b>STEP</b>	<b>ACTION</b>	<b>VERIFICATION</b>
61	Type in: A AU:RC!	System response: PF AR AU RC ATP AR AU RCBIT ATP
62f	If any overwrites were made to translation data by the overwrite procedure (Table F), perform a recent change update procedure. Immediately following this procedure use the overwrite program to deactivate (CNL:OW) all activate <i>translation</i> overwrites (only headed via procedure in Table F earlier.	
63	Type in: ALW:OW!	System response: PF ALW OW COMPL
64	Type in: UPD:HASH:GENERIC!	System response: UPD HASH COMPL
65	If no translation overwrites were performed, do the following two steps.	
66	Type in: ALW:OW!	System response: PF ALW OW COMPL
67	Type in: UPD:HASH:TRNSLN!	System response: PF UPD HASH COMPL
68	Type in: STOP:OW!	System response: PF ALW OW STOPPED
69	Use the tape copy procedure in Section 232-309-305 to bring the remaining new tapes from WECO up to the current status of the present tapes.	

**4. GLOSSARY**

**4.01** The following is a glossary of terms used in this section:

**ATP**—All Tests Passed

**BOT**—Beginning of Tape

**CS**—Call Store, that part of MAS that is not write protected

**CU**—Control Unit

**EOT**—End of Tape

**MAS**—Main Store

**ODA**—Office Data Administration

**PS**—Program Store, that part of MAS that is write protected

**SSP**—System Status Panel

**TDC**—Tape Data Controller

**RC**—Recent Change

**TTY**—Teletypewriter.

TABLE A

INITIALIZATION PROCEDURES FOR CU SWITCH ONLY

STEP	ACTION	VERIFICATION
1	Remove the active CU from lock-up by releasing the SSP LOCK key.	System response: REPT CU STAT AVL
2	Switch CUs by typing the following TTY message: SW:CU!	System response: REPT SW CU
3	Check for dial tone and place at least one test call.	

**Note:** If the new on-line CU fails to process calls, switch or force the system back to the original working CU.

TABLE B

## INITIALIZATION PROCEDURES FOR SWITCH AND TRANSIENT CLEAR

STEP	ACTION	VERIFICATION
1	At maintenance TTY— Type in: STOP:OW!	At maintenance TTY— System response: PF ALW OW STOPPED
2	If the office is equipped with LAMA, ensure that the AMA block currently being recorded is properly ended by typing (for each AMA frame): M AM:SWO:fg h-!  fg = two-digit AMA frame number and h = AMA transport number.	System response: MR AM SWO fg hi
3	If AMA transport 0 (for each frame) is not on-line, type in: M AM:SWO:fg 1-!	System response: MR AM SWO fg hi
4	Remove the active CU from lock-up by depressing the SSP LOCK key.	System response: REPT CU STAT AVL
5	At SSP— Depress ENABLE key.	At SSP— ENABLE lighted. System response: REPT ERR SSP KEY
	<b>Caution: Do NOT depress INIT EXEC key. Initialize by performing Steps 6 and 7 with minimum delay between the steps.</b>	
6	At TTY— Type the following input message: SW:INIT!  <b>Note:</b> The off-line CU will switch active and continue processing using the new data.	The system will initialize. System response: INIT TTYC ALL RCOVRY CU INIT
7	Type in: INH:MSF x! x = main store update multiscan function number.	System response: OK
8	At SSP— Depress ENABLE key.	At SSP— ENABLE lamp extinguished.
9	At SSP— Depress ALARM RELEASE key.	Alarm is released.

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<b>STEP</b>	<b>ACTION</b>	<b>VERIFICATION</b>
10	Check for dial tone and place at least one test call.  <b>Note:</b> If the new on-line CU fails to process calls, wait until the end of the initialization interval (SERVICE LOSS lamp lighted steadily) and switch or force the system back to the original working CU.	
11	Type in: M SY:RSL!	System response: PF MR SY RSL
12	Type in: T WT:ATT!	System response: OK
13	Type in: T WT:AST!	System response: OK
14	Type in: T WT:AJT!	System response: OK
15	Type in: T WT:LIT!	System response: OK
16	Remove any trunks or service circuits which are known to be bad.	

TABLE C

## INITIALIZATION PROCEDURES FOR SWITCH AND RECENT CHANGE CLEAR

STEP	ACTION	VERIFICATION
1	At maintenance TTY— Type in: STOP:OW!	At maintenance TTY— System response: PF ALW OW STOPPED
2	Dump and save the line trace list by typing in: A CT:LST!	System response: Printout is a list of the directory numbers contained in the Calling Line Identification (CLID) table. These are outgoing directory numbers that are being call traced.
3	Dump and punch the call forward list by typing: A CF:PUN!	System response: The A CF:PUN! input message is used to punch on paper tape the entire contents of call forward list.
	OR	
	If it is not desirable to punch a paper tape, type: A CF:PR!	System response: The A CF:PR! message is used to print all the active entries in the call forward list.
		<b>Note:</b> If many lines are forwarded, the response to this message may be very long.
4	Dump and punch the controlled restriction list by typing: A CR:PUN!	System response: The A CR:PUN! input message is used to punch on paper tape the entire contents of controlled restriction list.
	OR	
	If it is desirable to punch a paper tape, type: A CR:PR!	System response: The A CR:PR! message is used to print all the active entries in the controlled restriction list.
5	If the office is equipped with LAMA, ensure that the AMA block currently being recorded is properly ended by typing (for each AMA frame): M AM:SWO:fg h!	
	fg = two-digit AMA frame number and h = AMA transport number.	System response: MR AM SWO fg hi

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STEP	ACTION	VERIFICATION
6	If AMA transport 0 (for each frame) is not on-line, type in: M AM:SWO:fg 1-!	System response: MR AM SWO fg hi
7	Remove the active CU from lock-up by depressing the SSP LOCK key.	At SSP— LOCK lamp extinguished. System response: REPT CU STAT AVL
8	At SSP— Depress the ENABLE and RECENT CHANGE keys.	At SSP— ENABLE and RECENT CHANGE lamps lighted. System response: REPT ERR SSP KEY
<b>Caution: Do NOT depress INIT EXEC key. Initialize by performing Steps 9 and 10 with minimum delay between the steps.</b>		
9	At TTY— Type the following input message: SW:INIT!  <b>Note:</b> The off-line CU will switch active and continue processing using the new data.	System will initialize. System response: INIT TTYC ALL RCOVRY CU INIT At SSP— RECENT CHANGE lamp extinguished.
10	Type in: INH:MSF x! x = main store update multiscan function number.	System response: OK
11	At SSP— Depress ENABLE key.	At SSP— ENABLE lamp extinguished.
12	At SSP— Depress ALARM RELEASE key.	Alarm is released.
13	Check for dial tone and place at least one test call.  <b>Note:</b> If the new on-line CU fails to process calls, wait until the end of the initialization interval (SERVICE LOSS lamp lighted steadily) and switch or force the system back to the original working CU.	
14	Type in: M SY:RSL!	System response: PF MR SY RSL

STEP	ACTION	VERIFICATION
15	Type in: T WT:ATT!	System response: OK
16	Type in: T WT:AST!	System response: OK
17	Type in: T WT:AJT!	System response: OK
18	Type in: T WT:LIT!	System response: OK
19	Restore the call trace list by typing for each entry: A CT:ENT:aaa bbb cccc!  aaa = area code bbb = office or service code cccc = directory number last four digits.	System response: OK
20	Reinsert the call forward list by typing in: A RC:CF/ (use paper tape if available)	System response: OK
21	Reinsert the controlled restriction list by typing in: A RC:CR/	System response: OK
22	Begin reinserting all recent change paper tapes as well as any tapes which may have been initialized by the customer. All recent changes should be reinserted in original order.	
23	Remove any trunks or service circuits which are known to be bad.	

TABLE D

## INITIALIZATION PROCEDURES FOR SWITCH AND STABLE CLEAR INITIALIZATION

STEP	ACTION	VERIFICATION
1	At maintenance TTY— Type in: STOP:OW!	At maintenance TTY— System response: PF ALW OW STOPPED
2	Type in: T PR:PLT!	System response: PF TR PR PLT
	<b>Note:</b> Perform Steps 3 and 4 in parallel.	
3	Check for emergency calls in progress using local procedures.	
	<b>Caution:</b> <i>Do not proceed until all emergency calls have terminated.</i>	
4	Check the number of stable calls in progress by typing: M AU:TMR:1!	System response: PF MR AU TMR
	<b>Caution:</b> <i>Proceed in accordance with local operating practices.</i>	
5	If the office is equipped with LAMA, ensure that the AMA block currently being recorded is properly ended by typing (for each AMA frame) M AM:SWO:fg h-!	System response: MR AM SWO fg hi
	fg = two-digit AMA frame number and h = AMA transport number.	
6	If AMA transport 0 (for each frame) is not on-line type: M AM:SWO:fg 1-!	System response: MR AM SWO fg hi
7	Remove the active CU from lock-up by depressing the SSP LOCK key.	System response: REPT CU STAT AVL At SSP— LOCK lamp extinguished.
8	At SSP— Depress ENABLE and STABLE CALLS keys.	At SSP— ENABLE and STABLE CALLS lamps lighted. System response: REPT ERR SSP KEY

STEP	ACTION	VERIFICATION
	<b>Caution: Do NOT depress INIT EXEC key. Initialize by performing Steps 9 and 10 with minimum delay between the steps.</b>	
9	Type in: SW:INIT!  <b>Note:</b> The off-line CU will switch active and continue processing using the new data.	The system will initialize. System response: INIT TTYC ALL RCOVRY CU INIT At SSP— STABLE CALLS lamp extinguished.
10	Type in: INH:MSF x! x = main store update multiscan function number.	System response: OK
11	At SSP— Depress ENABLE key.	At SSP— ENABLE lamp extinguished.
12	At SSP— Depress ALARM RELEASE key.	Alarm is released if initialization interval is completed.
13	Check for dial tone and place at least one test call.  <b>Note:</b> If the new on-line CU fails to process calls, wait until the end of the initialization interval (SERVICE LOSS lamp lighted steadily) and switch or force back to the original working CU.	
14	Insert the day and time into the system by typing in: SET:CLK:TIME (hr,min,sec),day(mo,da,yr)!	System response: OK
15	Type in: M SY:RSL!	System response: PR MR SY RSL
16	Type in: T WT:ATT!	System response: OK
17	Type in: T WT:AST!	System response: OK
18	Type in: T WT:AJT!	System response: OK
19	Type in: T WT:LIT!	System response: OK

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<b>STEP</b>	<b>ACTION</b>	<b>VERIFICATION</b>
20	Remove any trunks or service circuits which are known to be bad.	

TABLE E

## INITIALIZATION PROCEDURE FOR SWITCH AND RECENT CHANGE AND STABLE CLEAR INITIALIZATION

STEP	ACTION	VERIFICATION
1	At maintenance TTY— Type in: STOP:OW!	At maintenance TTY— System response: PF ALW OW STOPPED
2	Dump and save the line trace list by typing in: A CT:LST!	System response: Printout is a list of the directory numbers contained in the Calling Line Identification (CLID) table. These are outgoing directory numbers that are being call traced.
3	Dump and punch the call forward list by typing: A CF:PUN!	System response: The A CF:PUN! input message is used to punch on paper tape the entire contents of call forward list.
	OR	
	If it is desirable to punch a paper tape, type: A CF:PR!	System response: The A CF:PR! message is used to print all the active entries in the call forward list.  <b>Note:</b> If many lines are forwarded, the response to this message may be very long.
4	Dump and punch the controlled restriction list by typing: A CR:PUN!	System response: The A CR:PUN! input message is used to punch on paper tape the entire contents of controlled restriction list.
	OR	
	If it is desirable to punch a paper tape, type: A CR:PR!	System response: The A CR:PR! message is used to print all the active entries in the controlled restriction list.
5	Type in: T PR:PLT!	System response: PF TR PR PLT
	<b>Note:</b> Perform Steps 6 and 7 in parallel.	
6	Check for emergency calls in progress using local procedures.  <b>Caution: Do not proceed until all emergency calls have terminated.</b>	

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STEP	ACTION	VERIFICATION
7	Check the number of stable calls in progress by typing: M AU:TMR:1!	System response: PF MR AU TMR ATP
	<b>Caution: Proceed in accordance with local operating practices.</b>	
8	If the office is equipped with LAMA, ensure that the AMA block currently being recorded is properly ended by typing (for each AMA frame): M AM:SWO:fg h-! fg = two-digit AMA frame number and h = AMA transport number.	System response: MR AM SWO fg hi
9	If AMA transport 0 (for each frame) is not on-line, type: M AM:SWO:fg 1-!	System response: MR AM SWO fg hi
10	Remove the active CU from lock-up by depressing the SSP LOCK key.	At SSP— LOCK lamp extinguished. System response: REPT CU STAT AVL
11	At SSP— Depress ENABLE, <sup>Post office Data</sup> <del>RECENT CHANGE</del> , and STABLE CALLS keys.	At SSP— ENABLE, RECENT CHANGE, and STABLE CALLS lamps lighted. System response: REPT ERR SSP KEY
	<b>Caution: Do NOT depress INIT EXEC key. Initialize by performing Steps 12 and 13 with minimum delay between the steps.</b>	
12	Type in: SW:INIT;UCL!	The system will initialize. System response: INIT TTYC ALL RCOVRY CU INIT At SSP— RECENT CHANGE and STABLE CALLS lamp extinguished.
13	Type in: 13 INH:MSF x! x = main store update multiscan function number.	System response: OK
14	At SSP— Depress ENABLE key.	At SSP— ENABLE lamp extinguished.

STEP	ACTION	VERIFICATION
15	At SSP— Depress ALARM RELEASE key.	Alarm is released.
16	Check for dial tone and place at least one test call.  <b>Note:</b> If the new on-line CU fails to process calls, wait until the end of the initialization interval (SERVICE LOSS lamp lighted steadily) and switch or force the system back to the original working CU.	
17	Insert the day and time into the system by typing in: SET:CLK:TIME(hr,min,sec),day(mo,da,yr)!	312-936 3636
18	Type in: M SY:RSL!	System response: PF MR SY RSL
19	Type in: T WT:ATT!	System response: OK
20	Type in: T WT:AST!	System response: OK
21	Type in: T WT:AJT!	System response: OK
22	Type in: T WT:LIT!	System response: OK
23	Restore the call trace list by typing for each entry: A CT:ENT:aaa bbb cccc! aaa = area code bbb = office or service code cccc = directory number last four digits.	System response: OK
24	Reinsert the call forward list by typing in: A RC:CF/ (use paper tape if available)	System response: OK
25	Reinsert the controlled restriction list by typing: A RC:CR/	System response: OK
26	Begin reinserting all recent change paper tapes as well as any tapes which may have been initiated by the customer. All recent changes should be reinserted in original order.	

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<b>STEP</b>	<b>ACTION</b>	<b>VERIFICATION</b>
27	Remove any trunks or service circuits which are known to be bad.	

**TABLE F**  
**OVERWRITE PROCEDURE**

STEP	ACTION	VERIFICATION
1	<p>At maintenance TTY— Type in: IN:GENID:xxxxxxx!</p> <p>xxxxxxx = 2B-EF-2 for generic 2B-EF-2.</p>	<p>At maintenance TTY— System response: OK</p>
2	<p>Type in: IN:ISSID:zzzzzzzz!</p> <p>zzzzzzzz = current generic issue.</p>	<p>System response: OK</p>
3	<p>Type in: IN:OW nnnnn;TTY! nnnnn = number from the BWT (generic) or next available overwrite number (translations).</p>	<p>System response: PF IN OW COMPL</p>
4	<p>Type in: IN:OWDATA:ck,seg,adr,old,new!</p> <p><b>Note 1:</b> If this is a translation overwrite, set bit 22 of the old data field to 1 and substitute a minus sign (-) for CK.</p> <p><b>Note 2:</b> Repeat Step 4 for each changed word.</p>	<p>System response: OK</p>
5	<p>Type in: VER:OW:OLD!</p> <p><b>Caution: Do not proceed unless the specified system response is given. If a mismatch is detected, resolve the mismatch and repeat Step 5.</b></p> <p><b>Note:</b> If any errors were made in the data fields on input, repeat Step 4 for each incorrect entry. This will result in an IN OWDATA ERR message to be generated. For addressing errors, reinput all changes by restarting at Step 3.</p>	<p>System response: PF VER OW COMPL</p>
6	<p>Type in: OP:OW;TTY!</p>	<p>System response: PF OP OW nnnnn</p>

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STEP	ACTION	VERIFICATION
		IN OWDATA seg adr old new . . .
		OP OW COMPL

**Caution: Resolve all errors before proceeding.**

7 Visually inspect the contents of the overwrite buffer (via the TTY output message) from Step 6.

8	Type in: OP:OW;TAPE!	System response: PF OP OW COMPL
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9	Type in: LOD:OW:NEW!	System response: PF LOD OW COMPL VER OW COMPL
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**Caution: Do not proceed unless the specified system response is given. If an error is found, repeat Step 9.**

**Note:** If the error is still found, after repeating Step 9, manually request main store audits for hardware memory faults. If necessary, request CU diagnostics to resolve the problem. After the trouble has been cleared, restore the system to normal and repeat all steps of the *Update Procedure*. Then restart Table F by typing IN;OW nnnnn;TAPE! and continuing with Step 9 (for all overwrites) after the off-line CU is restored.

10a	If this is a generic overwrite— Type in: ACT:OW!	System response: PF ACT OW COMPL
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11b	If this is a translation overwrite— Type in: ACT:OW;UCL!	System Response: PF ACT OW COMPL
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**Caution: Activating a Translation Overwrite is a temporary measure. Subsequent procedures will instruct you to cancel translation overwrites after a recent change update.**

STEP	ACTION	VERIFICATION
12	Repeat Steps 3 through 11 for additional overwrites.	