



## QUICK REFERENCE GUIDE INSTALLING MCF FILES IN SSCC IIIA, III+ AND IV

Document No. SIG-QG-08-23-001A.1

### NOTE

This document provides the complete procedure for updating SSCC MCF files. If you have just completed MEF and SEF updates and the SSCC is still in the “**Install Software**” mode, proceed directly to the **MCF INSTALL** instructions.

### SETUP PROCEDURE

Tools required:

- Laptop PC with CD drive and running latest version of Siemens DT software.
- Standard RS-232 serial cable.
- Software Update disc (provided by Siemens).
- SSCC History Card
- List of MCFs and related CRCs (see list at end of this guide or instructions from RR office)

### NOTE

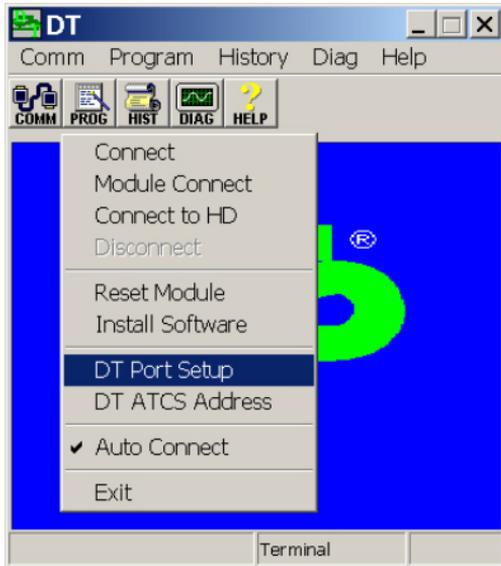
The following procedure applies to all MCF configuration software versions.

### WARNING

**DURING UPGRADE OF THE SSCC SOFTWARE, THE SSCC WILL NOT BE CONTROLLING THE CROSSING PROTECTION. ALTERNATE MEANS OF PROTECTING THE CROSSING (E.G., TRACK TIME, FLAGGING THE CROSSING, ETC.) MUST BE USED UNTIL THE UPDATE IS COMPLETE AND THE SSCC IS RETURNED TO NORMAL OPERATION.**

- 1) Verify that power is applied to the SSCC.
- 2) **IMPORTANT!** – Review the Program menu, Configure menu and lamp voltage settings and then compare the current system operating parameters with those recorded on the History Card retained with the SSCC. If necessary, update the History Card to the current programmed settings.
- 3) Copy the contents of the Software Update disc to a folder on the PC hard drive (e.g., **C:\Siemens**).

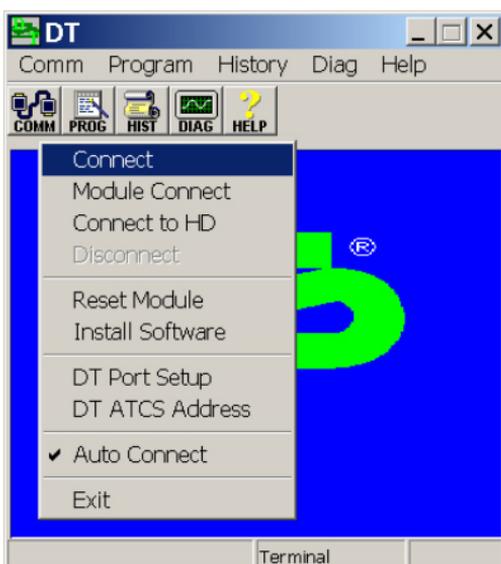
- 4) Connect serial cable from PC COM port 1 to the SSCC front panel **DIAGNOSTIC** port.
- 5) With the SSCC already powered up, start the DT software.
- 6) If the DT software does not connect to the SSCC automatically, select the **COMM** button or **COMM** drop down menu, then select **DT Port Setup**. Otherwise, go to step 10.



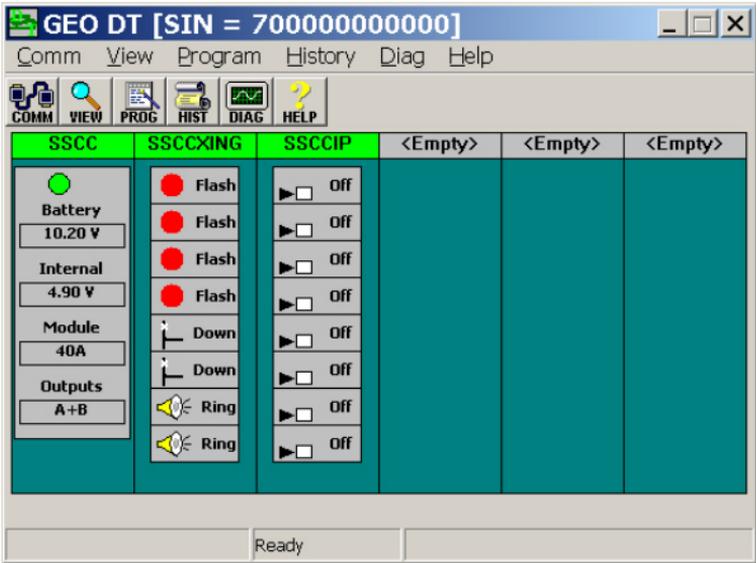
- 7) If **Discovery Protocol** is checked, deselect the check box.



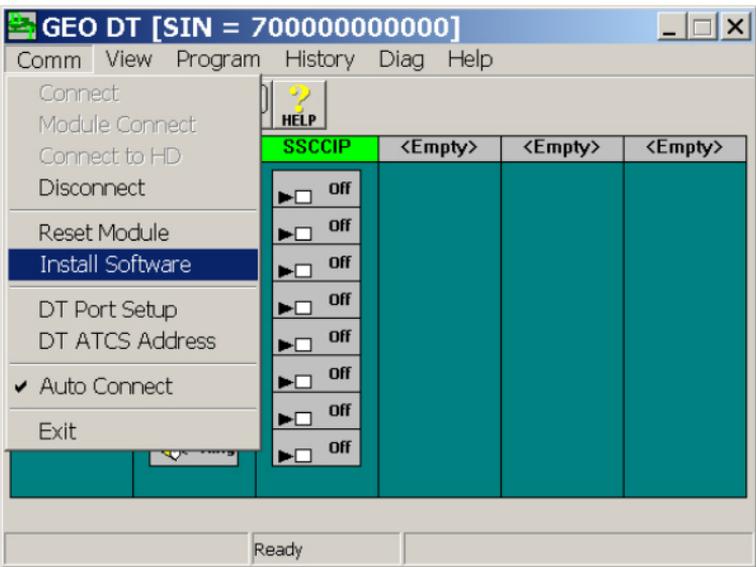
- 8) Select **COM1:** in the Serial Port Selection box and select **9600** baud rate.
- 9) Select the **COMM** button or **COMM** drop down menu, then select **Connect**.



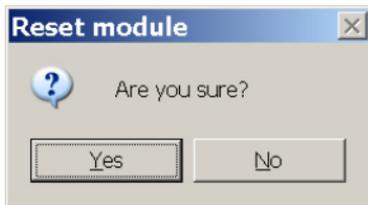
10) The DT main display appears.



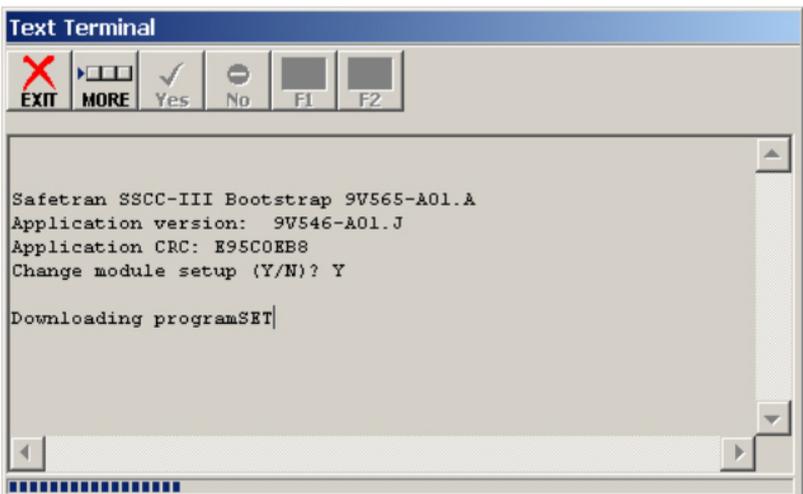
11) Select the **COMM** button or **COMM** drop down menu, then select **Install Software**.



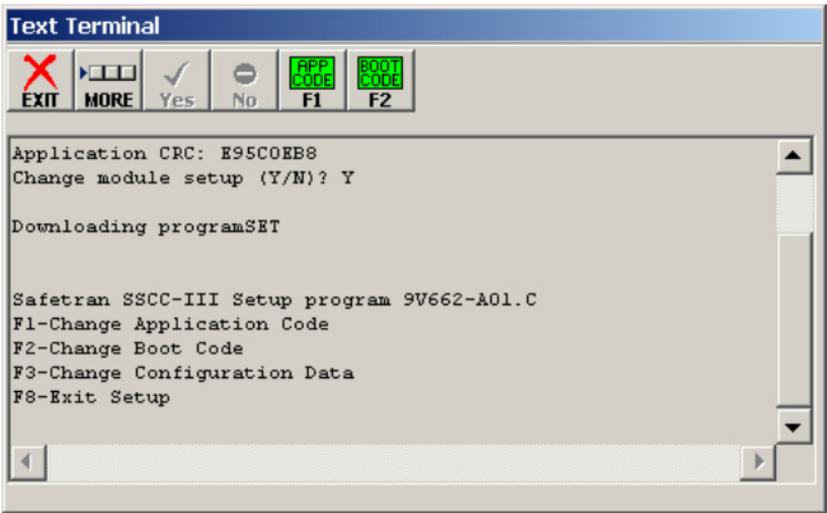
12) A prompt appears regarding module reset. Select **Yes**.



13) The SSCC reboots. A text terminal screen appears identifying boot code version, application version and application CRC. A progress bar at the bottom of this screen shows the download progress of the SSCC program set to the PC. The "Y" response to the "Change module setup" prompt is automatic.

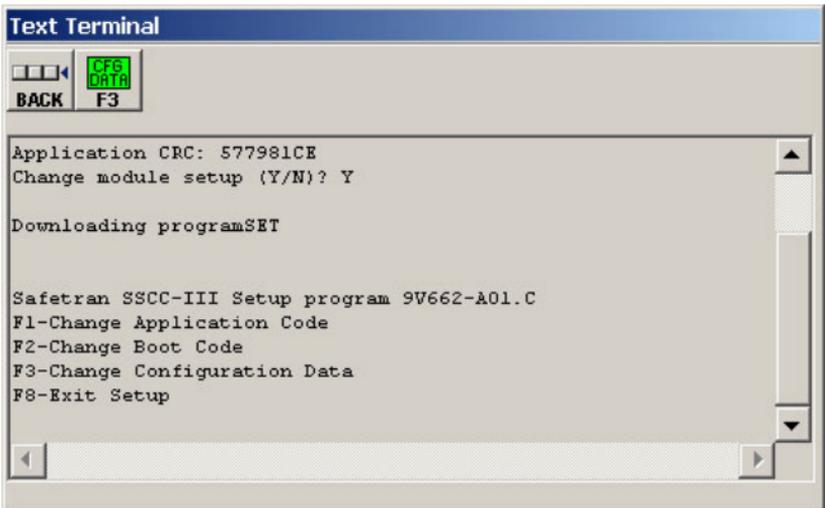


- Following download of the program set, a screen appears allowing selection of software type to be installed.

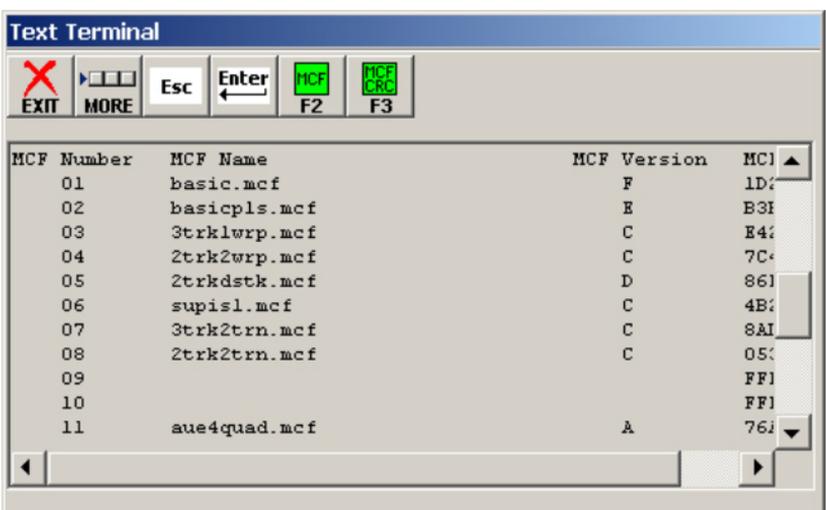


## MCF INSTALL

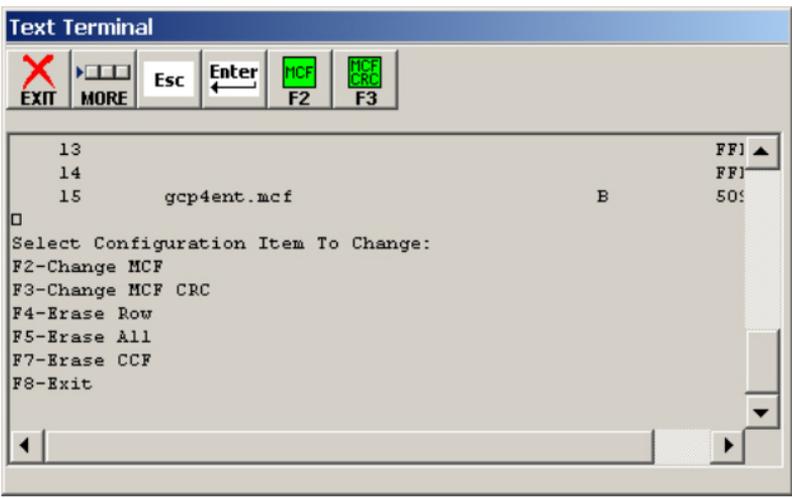
- Select the **MORE** button in the upper left corner of the screen.



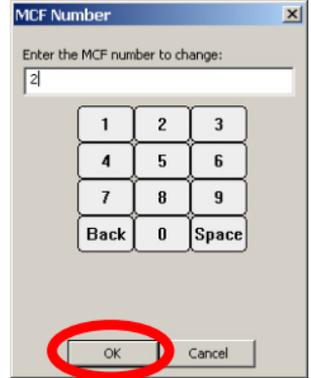
- Press the PC keyboard F3 function button or select the **CFG DATA F3** button at the top of the Text Terminal screen to change configuration software. A screen appears listing each MCF file currently installed, their MCF number, version and their CRC. Use the scroll bars at the right side of the screen and at the bottom of the screen to view all data as necessary. Make note of the **MCF Number** assigned to each MCF to be changed.



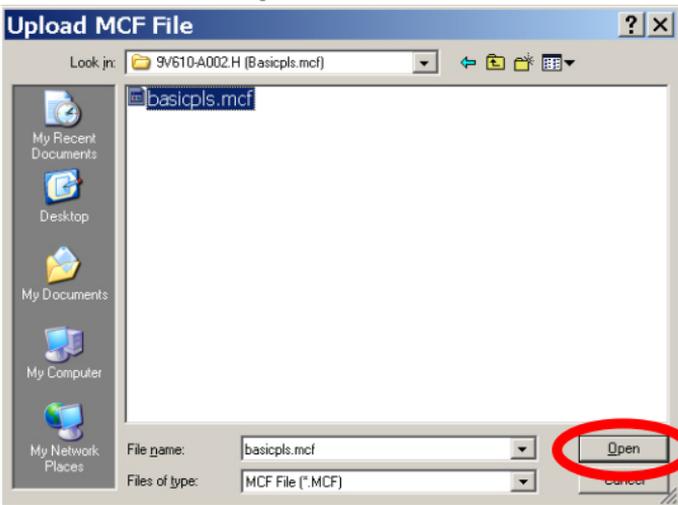
- MCF change options are listed at the bottom of the screen.



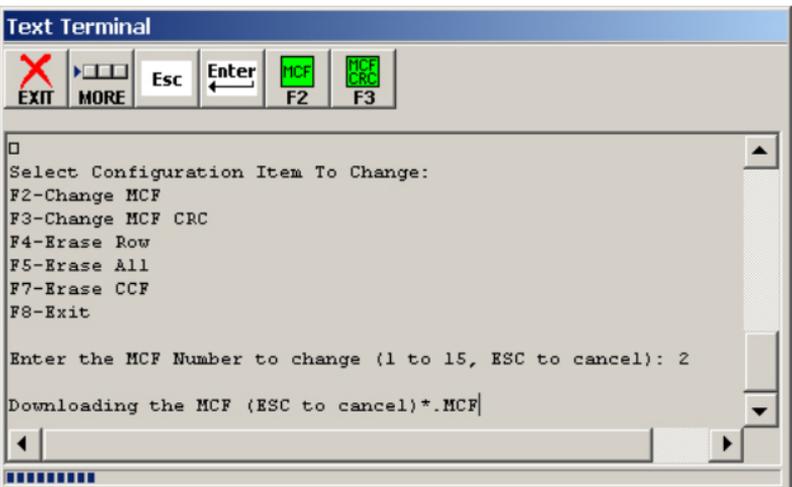
- 4) Press PC keyboard F2 function key or select the **MCF F2** button at the top of the screen to change an MCF. A keypad is displayed. Enter the number of the MCF to be changed and then select the **OK** button.



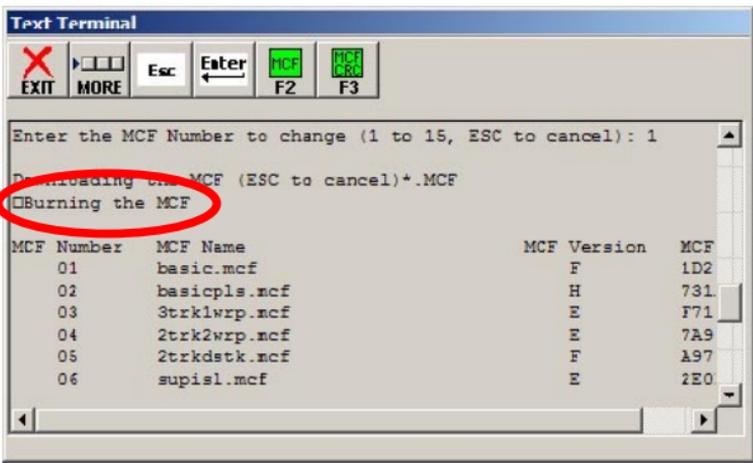
- 5) Select the MCF file to be installed from the folder created on the PC hard drive (e.g., **C:\Siemens**), then select the **Open** button.



- 6) The selected file is downloaded. Download progress is indicated at bottom of screen.



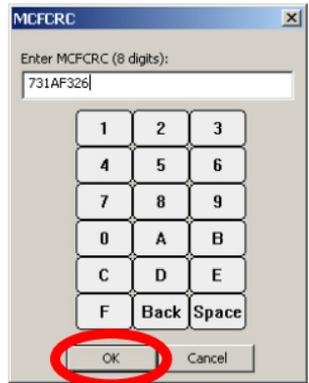
- 7) Wait for the download to complete before proceeding. Screen will indicate **Burning the MCF**. Wait for the list of MCFs to appear after this statement before proceeding. See the following example screen.



- 8) Following MCF download, press PC keyboard F3 function key or select **MCF CRC F3** button to change the CRC for the MCF just changed. A keypad is displayed. Enter channel number (same MCF number as in step 3) for MCF just changed, then select **OK**.

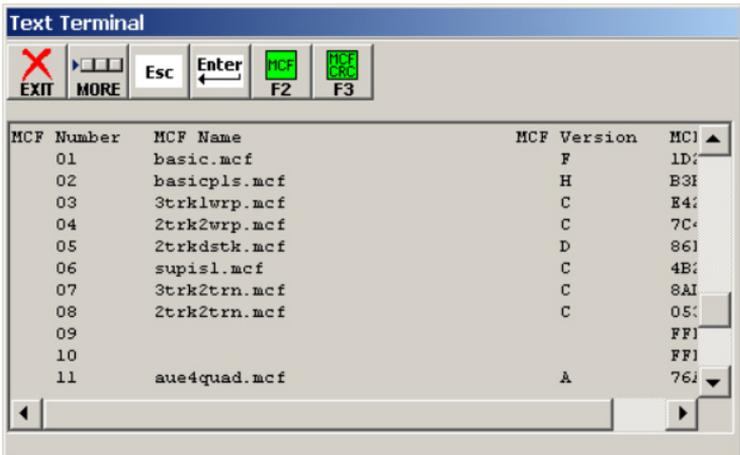


- 9) A second keypad is displayed. Enter MCF CRC supplied with software update disc for MCF just changed, then select **OK**.

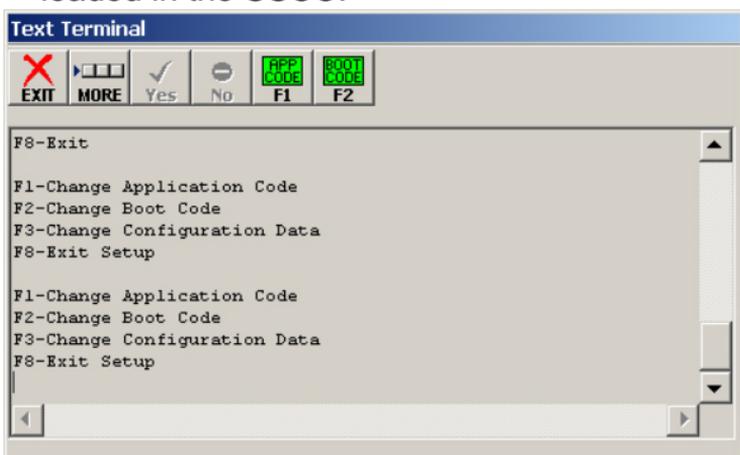


NOTE: The CRC values and MCF versions are also listed for each MCF at the end of this guide.

- 10) Following CRC entry, verify that selected MCF was installed and that the CRC and version are correct.



- 11) Repeat steps 3 through 8 for each MCF to be loaded in the SSCC.



- 12) After all MCFs are loaded and the CRC values entered and verified, press the PC keyboard F8 function key to exit the change mode.
- 13) Press F8 again to exit Setup and start application.
- 14) Press the **EXIT** button in the upper left corner of the screen to close the Text Terminal screen.
- 15) Proceed to the **RETURN TO SERVICE** section.

## RETURN TO SERVICE

This table contains the unique MCF ID numbers that must be entered in the Configuration menu after an MCF is changed. **Failure to enter the proper Unique ID number when prompted on the front panel display will cause the SSCC to reboot every 2 minutes.** Proceed to MCF Change Instructions below.

MCF Unique ID Numbers

| MCF NAME | UNIQUE ID NO. | SSCC Where Used                         |
|----------|---------------|---|
| BASIC    | 130           | III A, III+, IV                         |
| BASICPLS | 087           | III+, IV                                |
| 3TRK1WRP | 682           | III+, IV                                |
| 2TRK2WRP | 606           | III+, IV                                |
| 2TRKDSTK | 320           | III+, IV                                |
| SUPISL   | 285           | III+, IV                                |
| 3TRK2TRN | 962           | III+, IV                                |
| 2TRK2TRN | 065           | III+, IV                                |
| DAXPRMT  | 413           | III+ (40-Amp only),<br>IV (40-Amp only) |
| ENT4QUAD | 460           | IV                                      |
| EXT4QUAD | 021           | IV                                      |
| AUE4QUAD | 534           | IV                                      |
| AUX4QUAD | 197           | IV                                      |
| GCP4ENT  | 808           | IV                                      |
| 4QUADLIT | 729           | IV                                      |

### MCF Change Instructions

- 1) Select SSCC **CONFIGURATION** menu using front panel switches, scroll to current MCF and then press ENTER.
- 2) Scroll to new MCF, press ENTER.
- 3) Verify correct CRC, change N to Y, press ENTER.
- 4) Enter Unique ID Number, press ENTER.
- 5) SSCC will reboot.
- 6) Set SSCC to default configuration.
- 7) Set configuration parameters according to RR plan.

Before returning the SSCC to service, the following must be performed:

- 1) Select the SSCC **PROGRAM** menu using front panel switches.
- 2) Scroll to **SET TO DEFAULT**, press ENTER.
- 3) Reprogram the SSCC. Verify that all system application parameters, configuration settings and lamp voltages are as previously recorded on the History Card.
- 4) Run system verification tests from the **TEST** menu.

- 5) Perform any additional operational tests required by the railroad.
- 6) Return the system to service.

The following table provides the CRC values for the latest revisions of each MCF used in the SSCC, plus earlier MCFs that are compatible with current MEF/SEF releases.

| <b>MCF Name / Version</b> | <b>CRC</b> |
|---------------------------|------------|
| <b>BASIC.MCF</b>          |            |
| F                         | 1D240612   |
| E                         | 8F638122   |
| <b>BASICPLS.MCF</b>       |            |
| H                         | 731AF326   |
| F                         | 72ADEE59   |
| E                         | B3B8592E   |
| <b>3TRK1WRP.MCF</b>       |            |
| E                         | F71FB717   |
| D                         | 1DA21069   |
| C                         | E4237E2F   |
| <b>2TRK2WRP.MCF</b>       |            |
| E                         | 7A946518   |
| D                         | 137F504A   |
| C                         | 7C4D8659   |
| <b>2TRKDSTK.MCF</b>       |            |
| F                         | A9776265   |
| E                         | C8E74111   |
| D                         | 86E6FB77   |
| <b>SUPISL.MCF</b>         |            |
| E                         | 2E0E7907   |
| D                         | 7B52400D   |
| C                         | 4B2DFA28   |
| <b>3TRK2TRN.MCF</b>       |            |
| E                         | 054AA764   |
| D                         | D691CE34   |
| C                         | 8AD37401   |
| <b>2TRK2TRN.MCF</b>       |            |
| E                         | 716DF247   |
| D                         | 5E1E7B13   |
| C                         | 05331932   |
| <b>DAXPRMT.MCF</b>        |            |
| F                         | 670AE50F   |
| E                         | 7B0CE142   |
| D                         | 8F53E816   |
| <b>ENT4QUAD.MCF</b>       |            |
| B                         | EB027435   |
| A                         | 04896812   |
| <b>EXT4QUAD.MCF</b>       |            |
| A                         | 9346AF17   |
| <b>AUE4QUAD.MCF</b>       |            |
| A                         | 76A51167   |
| <b>AUX4QUAD.MCF</b>       |            |
| A                         | 6080DA28   |
| <b>GCP4ENT.MCF</b>        |            |
| B                         | 5096A830   |
| A                         | 51CB8B53   |
| <b>4QUADLIT.MCF</b>       |            |
| A                         | EF779954   |