



SAFETRAN
systems

SOFTWARE UPGRADE INSTRUCTIONS

INSTALLING SOFTWARE RELEASE 9V309-01E IN THE
80115 DATA RECORDER MODEL
(FOR MODEL 3000 GCP)

May 2002 (Revised December 2008)

DOCUMENT NO. SIG-00-01-17
VERSION C

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A. BACKGROUND

Safetran periodically releases enhanced application software for the 80115 Data Recorder module used in the Model 3000 Grade Crossing Predictor. The following pages contain instructions for upgrading the application software in the 80115 Data Recorder Module.

B. SOFTWARE RELEASE DISK, Z224-9V333-A01B

Product Name: 3000 GCP	Software Revision: A01E
Module Number: 80115	SW P/N: 9V309-A01E
Memory Device: 9V309 (U10)	9V309-A01E CRC: 8E7CBF05B22F

C. SOFTWARE VERSION IDENTIFICATION

The software version resident in the 80115 Data recorder module is recorded on a sticker placed on flash PROM U10 of the Data Recorder module. The resident software version also appears as the second message displayed during event printout.

To observe the sticker it is necessary to remove the Data recorder module from the 3000 GCP case as follows:

Step 1 Set the 3000 GCP case **POWER** switch to the **OFF** position.

WARNING

INTERRUPTING GCP POWER WILL ACTIVATE THE CROSSING. TAKE NECESSARY PRECAUTIONS TO PROTECT PEDESTRIANS AND VEHICLES IN THE IMMEDIATE AREA.

Step 2 Remove the 80115 Data Recorder Module from the 3000 GCP case and place on static-shielding bag.

Step 3 Refer to figure 1 and locate flash PROM U10 (9V309).

A sticker on flash PROM U10 identifies the current Data Recorder software version.

Step 4 Return the Data Recorder Module to the proper slot in the 3000 GCP case. Ensure that the module is fully seated in the edge connector.

Step 5 Set the 3000 GCP case **POWER** switch to the **ON** position.

Step 6 Set time and date as required.

To initiate a Data Recorder event printout, refer to the applicable procedure described in the 3000 GCP Instruction and Installation manual.

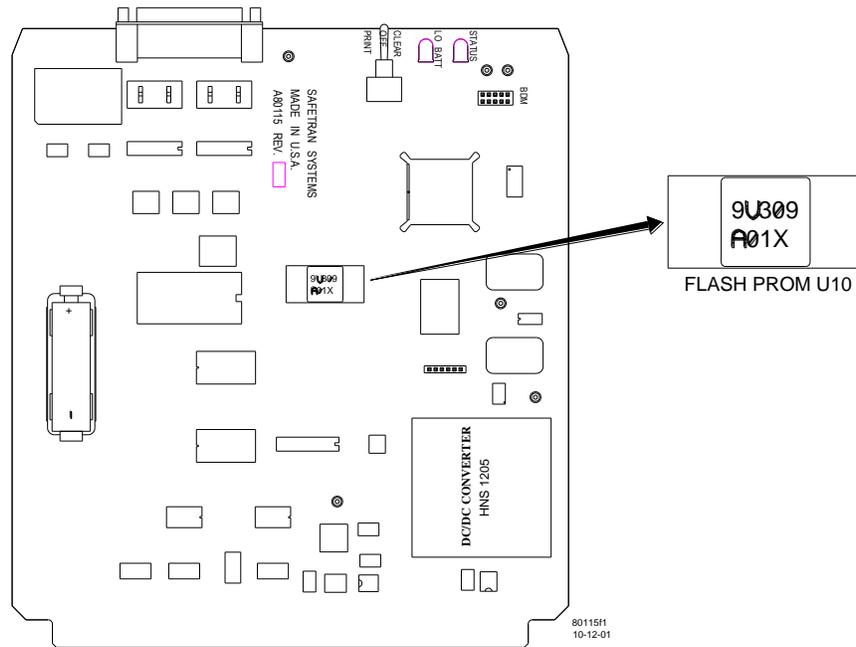


Figure 1. Flash PROM U10 Location

B. WHEN AND WHERE TO UPGRADE

The new software version may be uploaded into any 80115 module from a laptop computer in the field if so desired by the railroad.

E. PARTS/TOOLS REQUIRED

- Laptop Personal Computer (DOS compatible) with CD drive
- RS-232 cable, 9-pin female to 25-pin male
- Safetran provided software release disk (Z224-9V333-A01B)
- Software Upgrade Instructions (document number SIG-00-01-17, Version C)
- Static-shielding bag
- Flash PROM revision sticker

F. UPGRADE PROCEDURE

CAUTION

THIS UPDATE WILL AUTOMATICALLY CLEAR ALL RECORDED DATA FROM MEMORY.

Step 1 Verify that GCP **POWER** switch is **ON**.

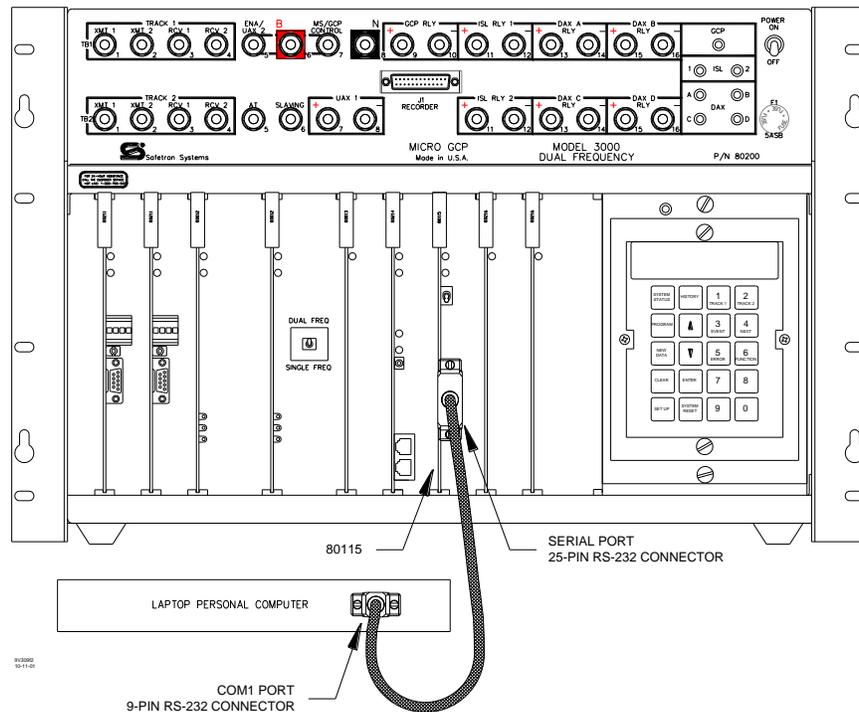
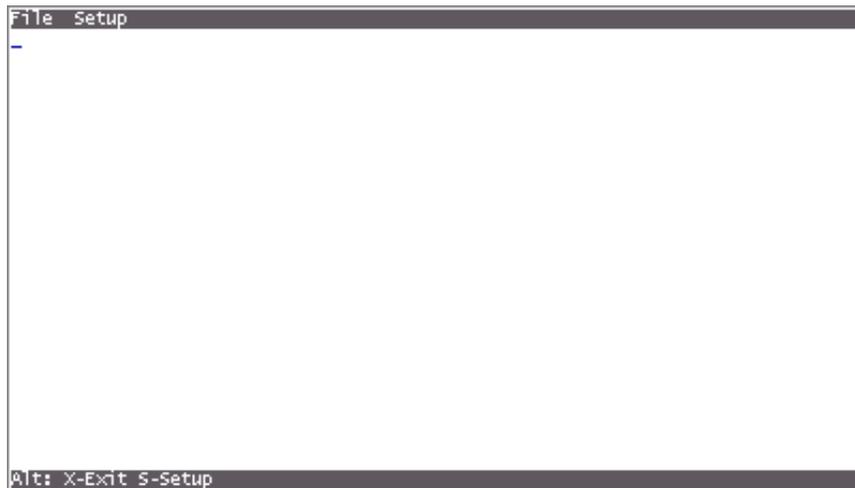


Figure 2. 80115 Data recorder Module Serial Port to PC Interconnection

- Step 2 Connect personal computer serial port (COM1) to 80115 module 25-pin, RS-232 connector using a 9-pin female to 25-pin male cable (see figure 2).
- Step 3 Install 9V333-A01B CD (supplied by Safetran) in the computer CD drive.
- Step 4 Select the CD drive in the Windows Explorer and copy all of the files on the CD to a folder on the root of the computer hard drive (for example **C:\Safetran**).
- Step 5 Exit to DOS, Windows® DOS shell or Command Prompt.
- Step 6 At the **C:\>** prompt, type **CD\name of folder** (example: **CD\safetran**).
- Step 6.1 Press the **Enter** key.
- Step 7 At the prompt type **LOADBOOT**
- Step 7.1 Press the **Enter** key.
- The Setup screen displays (see figure 3).



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10-12-01

Figure 3. Data Recorder Module Software Installation Setup Screen

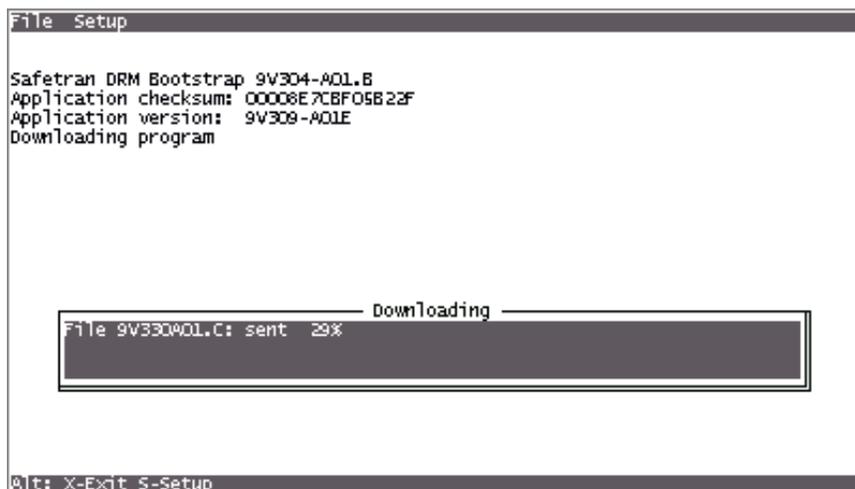
NOTE

A 5001 error message may appear within the alphanumeric display while downloading the data recorder software. This error message should be ignored.

Step 8 Set the MS/GCP **POWER** switch to **OFF**.

Step 8.1 Set the Recorder Module **CLEAR/OFF/PRINT** toggle switch to the **CLEAR** position and hold, then set the MS/GCP **POWER** switch to **ON**.

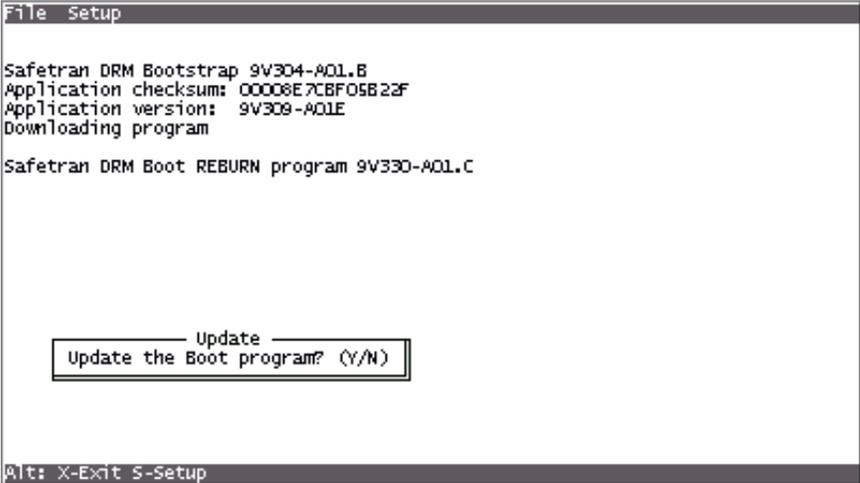
Step 8.2 Continue to hold the **CLEAR/OFF/PRINT** toggle switch in the **CLEAR** position until a **Downloading** window appears briefly within the Setup screen (see figure 4).



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Figure 4. Boot Program Downloading Window

At the completion of boot program downloading, an **Update** dialog box displays within the Setup screen (see figure 5).



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Figure 5. Boot Program Update Dialog Box

Step 9 Type **Y**.

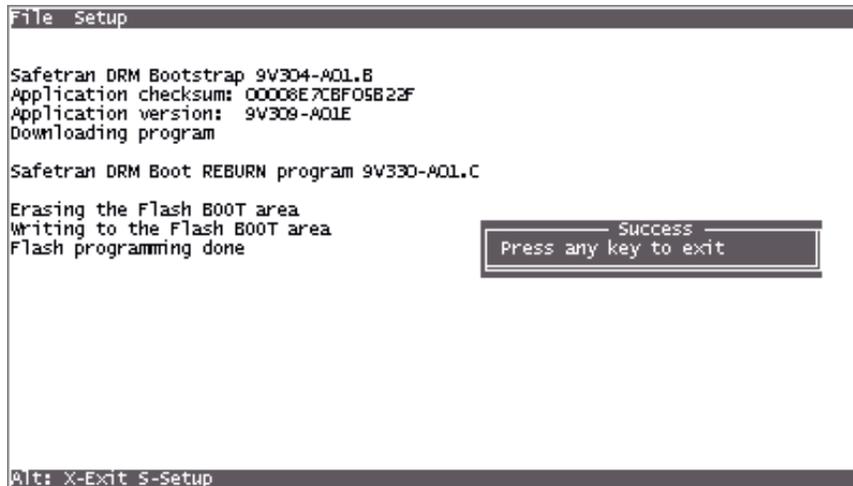
A boot reburn program **Downloading** window appears in the Setup screen (see figure 6).



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10-12-01

Figure 6. Boot Reburn Program Download Window

At completion of the boot reburn program download the **Success** window displays within the Setup screen (see figure 7).



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Figure 7. Boot Program Update Success Window

Step 10 Press any key.

The Setup screen closes and the DOS window displays.

Step 11 At **C:\name of folder >** prompt type **INSTALL**.

Step 11.1 Press the **Enter** key.

The Setup screen displays (see figure 2).

Step 12 Set the MS/GCP **POWER** switch to **OFF**.

Step 12.1 Set the Recorder Module **CLEAR/OFF/PRINT** toggle switch to the **CLEAR** position and hold, then set the MS/GCP **POWER** switch to **ON**.

Step 12.2 Continue to hold the **CLEAR/OFF/PRINT** toggle switch in the **CLEAR** position until a **downloading** window appears briefly within the Setup screen (see figure 8).

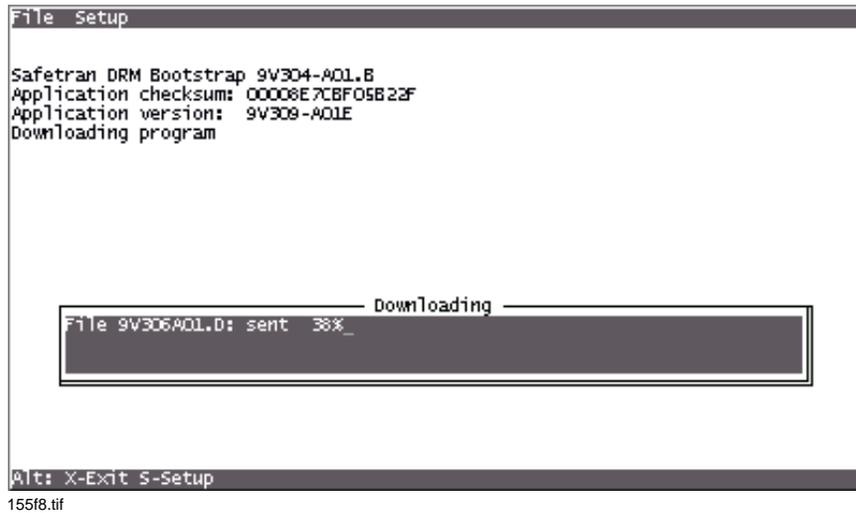


Figure 8 Setup Program Download Window

At the completion of file downloading, an **Update** dialog box displays within the Setup screen (see figure 9).

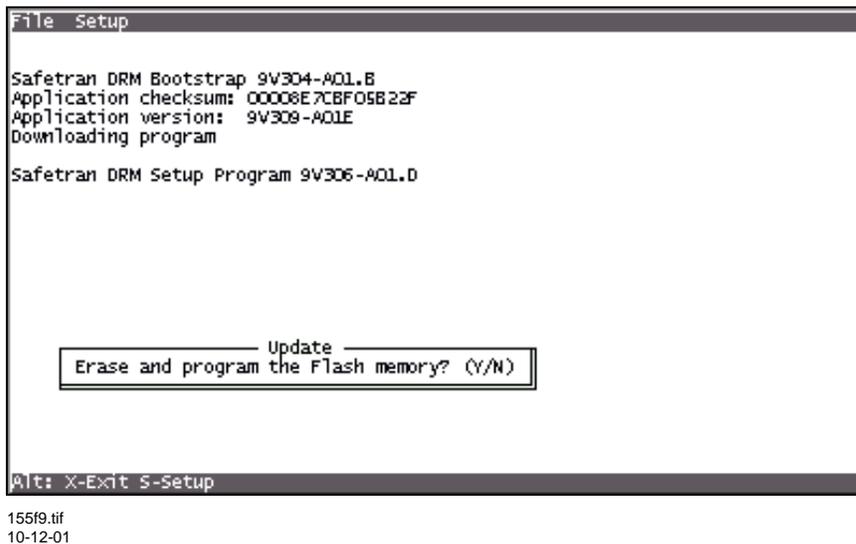


Figure 9. Setup Program Flash Memory Update Dialog Box

Step 13 Type **Y**.

A setup program **Downloading** window appears in the Setup screen (see figure 10).

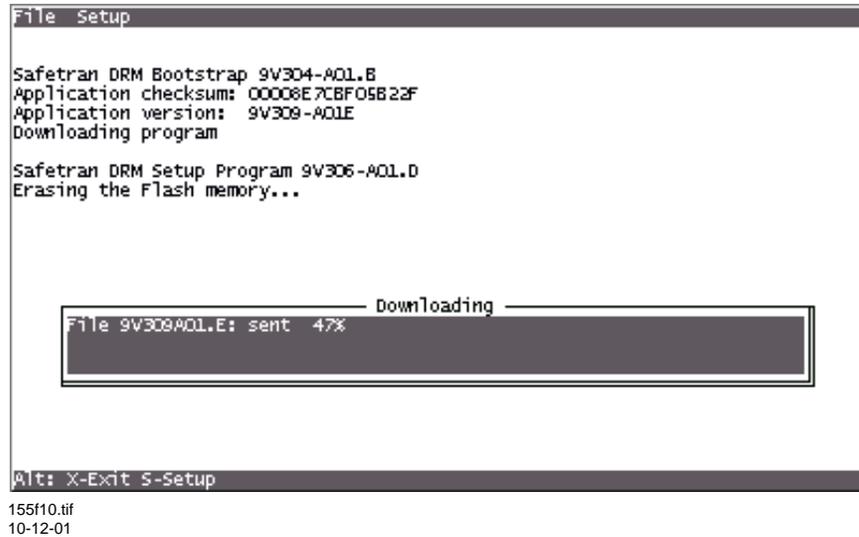


Figure 10. Setup Program Download Window

At completion of download, the **Success** window displays within the Setup screen (see figure 11).

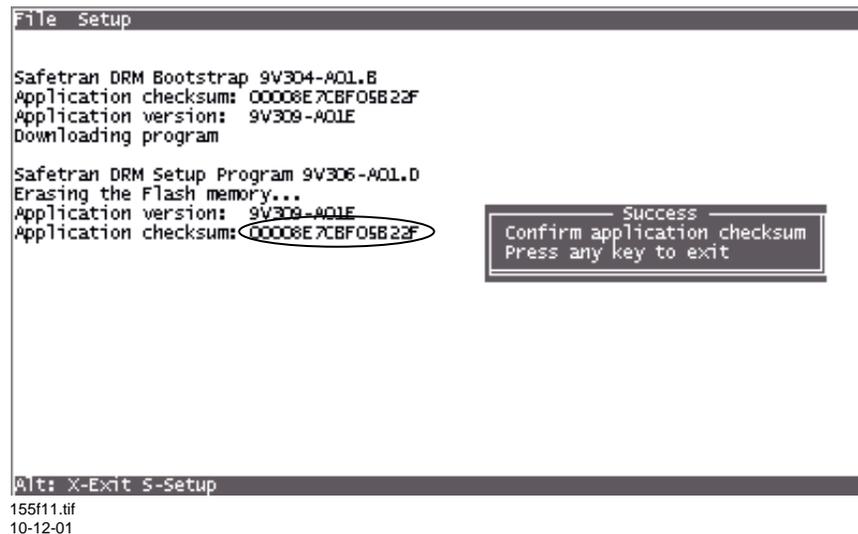


Figure 11. Setup Program Success Window

Step 14 Verify that checksum displayed in Setup screen (circled on figure 11) is identical to checksum supplied with program disk.

This completes application software installation.

Step 15 Set the 3000 GCP case **POWER** switch to the **OFF** position.

WARNING

INTERRUPTING GCP POWER WILL ACTIVATE THE CROSSING. TAKE NECESSARY PRECAUTIONS TO PROTECT PEDESTRIANS AND VEHICLES IN THE IMMEDIATE AREA.

Step 16 Remove the 80115 Data Recorder Module from the 3000 GCP case and place on static-shielding bag.

Step 17 Refer to figure 1 and locate flash PROM U10 (9V309).

Step 18 Affix a “9V309 A01E” flash PROM revision sticker to flash PROM U10 as shown in figure 1. Ensure that the new revision sticker covers the old revision sticker.

Step 19 Return the Data Recorder Module to the proper slot in the 3000 GCP case. Ensure that the module is fully seated in the edge connector.

Step 20 Set the 3000 GCP case **POWER** switch to the **ON** position.

Step 21 Set time and date as required.

This concludes the update.