Terminator X Replacement SD Card

Handheld Firmware Version: _____

ECU Firmware Version: _____

Overview: The Terminator X EFI System comes with an SD card inserted in the handheld touchscreen display. Sometimes, these get lost. Other times, folks need an updated version of the firmware and don't want to hassle with the process of creating a new SD card. If that's you then keep reading!

NOTE! The process of initially using this SD card involves updating the firmware on your Terminator X EFI System (both the handheld and on the ECU.) This is normally a very straight-forward process but if you were to lose power in the middle of an update then you could turn either the handheld or the ECU into the electronic equivalent of a brick. So ensure your battery is charged, that all of your connections are sound and that it would be impossible for anyone to switch off the key or do anything similar during the update process.

1. Start by inserting the new SD card into the handheld and switching on the ignition so that the Terminator X is powered. You will note that the start-up process takes a little bit longer than usual. This is the handheld doing its firmware update--automatically. Even if you purchased the same version as you currently have on the handheld it is going to go through this process. Once it is complete then you will be prompted to "Remove SD Card and Reboot Device." In truth, removing the SD card does itself initiate the reboot, so simply remove the SD card, wait until the handheld finishes booting up, and replace the SD card.

2. In step 3, below, you are going to reflash the firmware on the ECU. Doing so will **erase** your configuration so now is a good time to create a backup. Simply use the handheld to navigate to File > Global Configs and select the "Download From ECU" button. A window will pop up and in the bottom-left corner is a button to "Save GCF As…". Press that, give the file a unique name, and your configuration will be saved on the SD card in the indicated directory. *Read below if upgrading from a version 1.x build to a version 2.x build.

3. With your handheld updated and your configuration backed up then use the handheld to navigate to File > ECU HW/FW and press "Update ECU Firmware". While this will go through the process of reflashing the firmware on your ECU, it will only update it if this SD card has an updated version of the firmware. If this SD card has the same firmware then you will just be reflashing the same version of the firmware (which is just fine.)

4. At this point your handheld and ECU have been updated and you simply need to replace the configuration back on your Terminator X ECU to be ready to run. Navigate to File > Global Configs, select "Upload to ECU" and pick the unique file name that you saved in step 2, above. Follow the prompts and then cycle the power. You're ready to run!

*For those upgrading from a version 1.x build to a version 2.0 build: There is a catch to step 2, above. With the version 1.8 firmware, the storage location for configuration files on the SD card was in a subdirectory called /HOLLEY/FW0100/Saved GCF. When Holley released version 2.0, they left the FW0100 directory on the SD card and added a new directory called FW0200.

 As a result, when you save your configuration in step 2 before upgrading to version 1.x in step 3 it is saved to /HOLLEY/FW0100/Saved GCFs. After completing the upgrade, when you are ready to restore your configuration in step 4, you are required to choose files in /HOLLEY/FW0101/Saved GCF. Not only is your configuration file not there, but there is no way to switch to /HOLLEY/FW0100/Saved GCFs so you can select it.

Unfortunately, the only way to retrieve your original configuration is to put the SD card into a computer and move it from /HOLLEY/FW0100/Saved GCF to /HOLLEY/FW0200/Saved GCF. Then, when you put the SD card back into the handheld and repeat step 4, you will find the file you need to complete the configuration.

Closing Note: If you have an existing SD card and bought this one for the update then it would be best not to use the previous Terminator X SD Card in your handheld any more to avoid accidentally reversing the firmware update. However, you might want to copy any existing configuration files or data logs while you're thinking about it. After that you can find another use for the old SD card. It will work in any device that takes a similar type SD card.