Software update procedure

EXP-1050 Ford
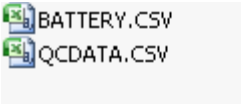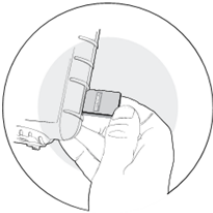# Revision G

This instruction manual describes the process to successfully update your battery tester.

Read the instruction carefully and follow the steps listed.

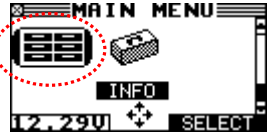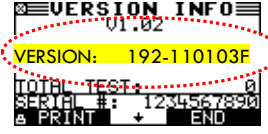| Note:	The location of the Icons shown on the screen pictures in this procedure may be different from the real location in your battery tester due to different versions.

Step 1. Preparing tester for update

During the following update process, the SD card will be formatted and therefore the stored data will be lost. To save the historical data, remove the SD card from the tester and save the files on the SD card onto a local PC first!

	Insert SD card into computer Insert the SD card into the PC.
BATTERY.CSV QCDATA.CSV	**Store historical data** Store both *.CSV file stored onto the SD card to a local PC first to prevent loss of the data during the update process.
	Insert SD card back into tester Insert the SD Card back into the tester
MAIN MENU / UTILITY / SELECT	**Select Utility menu in tester** Turn on the tester and select **UTILITY** from the **MAIN MENU** of the tester
UTILITY / FORMAT CARD / BACK SELECT	**Format SD Card inside tester** Select **FORMAT CARD** from the **UTILITY MENU**
WARNING ** WARNING ** FORMATING DISK WILL ERASE ALL FILES! NO YES	**Format SD Card inside tester** Select **YES** when the warning screen appears.
UTILITY / UPDATE / BACK SELECT	**Save tester configuration** Select **UPDATE** from the **UTILITY MENU**
UPDATE 1 ◯ FIRMWARE 2 ◉ SAVE CONFIG 3 ◯ LOAD CONFIG BACK NEXT	**Save tester configuration** Select option 2 **SAVE CONFIG** and press **NEXT / OK**

Step 2. Check required download version and save update files onto the SD card
The update files required for your battery tester are depending on the current software version of your tester. Check the current software version of your battery tester and download the matching update files via the process below.

	Select Info Menu in tester Turn on the tester and select *INFO* in the main menu of the tester
	Select Version Info Select *VERSION INFO* in the info menu.
	Determine current firmware The version info screen shows the current firmware version of the tester. Check the current version and determine the required download file based on the table below.

Insert SD card into computer

Remove SD Card from tester and insert into SD card reader of your PC

<div align="center">

WARNING:
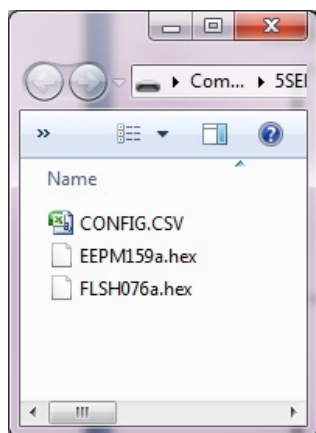**NEVER FORMAT THE SD CARD INSIDE A COMPUTER!**

</div>

Download update files

Download / copy the **Update** files from your computer location and save them to the SD Card.

NOTE: The New update files version type should be the same as before.

e.g. An original "A" version should be replaced with an Update "A" version.

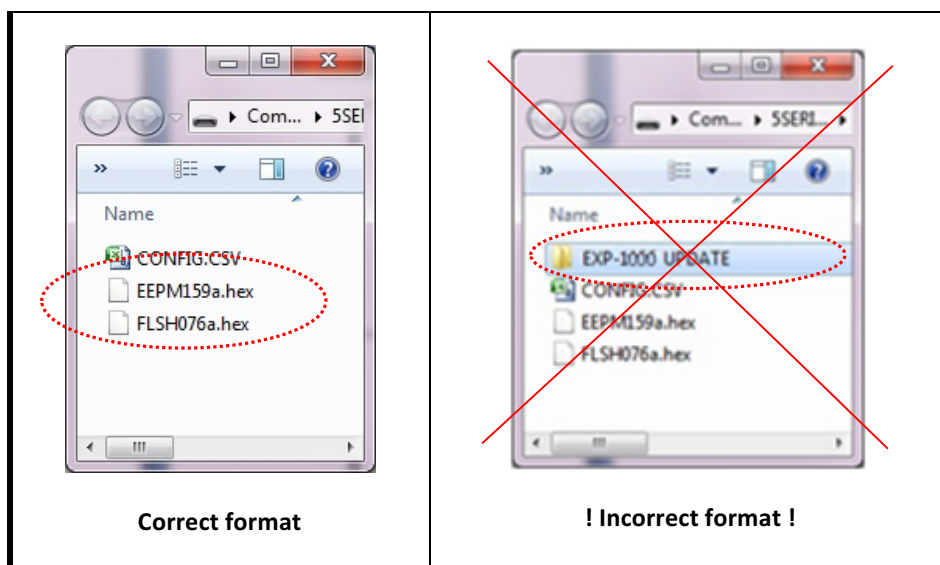| Current Version	Required update files
192-110103**F**	FLSH071**F** EEPM088**F** (Update from Rev F to Rev G)
192-110103**E**	FLSH071**E** EEPM088**E** (Update from Rev E to Rev G)
192-110103**D**	FLSH071**D** EEPM088**D** (Update from Rev D to Rev G)
192-110103**C**	FLSH071**C** EEPM088**C** (Update from Rev C to Rev G)
192-110103**B**	FLSH071**B** EEPM088**B** (Update from Rev B to Rev G)
192-110103**A**	FLSH071**A** EEPM088**A** (Update from Rev A to Rev G)

Save update files onto SD Card

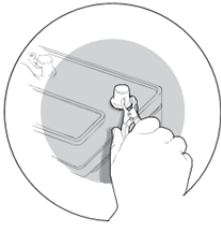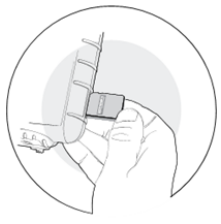The update folder contains **2 update files** marked as *.hex

Save both files directly into the root of the SD Card.

<div align="center">

WARNING:
NEVER COPY A FOLDER ONTO THE SD CARD!

</div>

Example of SD Card content for update

| Correct format | ! Incorrect format ! |

Step 3. Update tester firmware

After step 1 and 2 are completed, the tester is now ready to be updated with the update files copied onto the SD card. Follow the steps below to update the tester firmware.
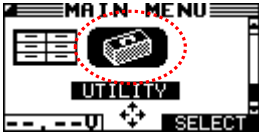
	Connect to 12 volt battery Connect the tester to a 12 volt external battery to prevent loss of power during the software update
	Insert SD card in tester Insert the SD Card back into the tester
	Select Utility menu Select **UTILITY** from the **MAIN MENU** of the tester
	Select Update menu Select **UPDATE** in the **UTILITY MENU**
	Update tester firmware Select option 1 **FIRMWARE** and press **NEXT / OK**
Example screen 	**Update tester firmware** As soon as the update warning screen appears, select **YES**
	Update tester firmware The tester will start reprogramming the FLASH memory. This will take approximately 5 minutes

Step 4. Update tester firmware *continued*

MIDTRONICS MMC EEPROM UPDATE ★ COPYRIGHT 2008 ★	**Update tester firmware** After the Flash update the tester will reprogram the EEPROM memory
SUCCESS UPDATE COMPLETE TURN OFF TOOL AND REPLACE MMC UPDATE CARD WITH DATA CARD REBOOT TO CONTINUE	**Reboot tester** After the reprogramming is complete, the tester will prompt to restart the tester. Switch the tester **OFF** and **ON** again. The new software is now loaded onto the tester

Step 5. Reinstall original tester configuration

After the update of the firmware the tester is back into factory settings. To reload the original configuration settings of the tester, follow the steps below.

MAIN MENU UTILITY --.--V SELECT	**Select Utility menu** Turn on the tester and select **UTILITY** from the **MAIN MENU** of the tester
UTILITY UPDATE BACK SELECT	**Select Update menu** Select **UPDATE** from the **UTILITY MENU**
UPDATE 1○FIRMWARE 2○SAVE CONFIG 3◉LOAD CONFIG BACK NEXT	**Load original configuration** Select option 3 **LOAD CONFIG** and press **NEXT / OK**
UPDATE CONFIGURATION LOADED INTO TESTER. SWITCH TESTER OFF AND ON.	**Reboot tester** After your personal configuration settings is reloaded onto the tester, switch the tester **OFF** and **ON** again