

Truck Reprogramming Tool Installation and Use

June, 2012

General Background

The truck reprogramming tools provided with the PC Service Tool, version 4.7, allow several different types of files to be programmed onto the truck:

- VSM (truck controller software)
- CDF (truck configuration)
- Display
- Language (Selected ICE trucks only)

All files are obtained through Software Resources on Hypass online. Files will have a .hex or .prg extension. Downloaded files don't need to go in a specific location, but be sure to note where they are saved.

In order to perform programming operations on the truck, you must have a password that allows this level of access.

The reprogramming tools are “installed” and started through the PC Service Tool (PCST). See the section “PC Service Tool – Programming Tool Installation” for more detailed information. Also, refer to the PCST Installation and Use Guide for additional information. Note that there are several different versions of the programming tools, depending on truck type. You must install the correct version, depending on the truck being serviced.

The following sections provide some specific details regarding installation and use

Selection of Programming Tools and File Types

Different truck types require different programming tools to be used. The following table provides the most recent listing of which tool to use:

<u>Truck Type</u>	<u>General Name</u>	<u>Program Name (.exe)</u>	<u>File Type</u>	<u>Comment</u>
ICE Trucks – unit codes A967 and A974	Base or Standard Truck	NMHG Truck Programming Tool.exe	.prg	Used <i>only</i> for these unit code trucks
ICE Trucks – all other unit codes	Premium 1-8 Ton	ICE Reprogram.exe	.hex	Used for almost all other ICE trucks
Electric Rider	ER	ER Reprogram.exe	.hex	Used for “Next Gen” Electric Rider trucks
Electric Warehouse	Pallet 3 wheel Stand Order Selector	see comment		These trucks require specialized programming tools – see your dealer or support resource for further info

PC Service Tool – Programming Tool Installation - Application Configuration

Programming tools are installed and “associated” with the PCST using the Application Configuration menu. Application Configuration is used to change language and some software settings of the PC Service Tool (such as programming apps). To navigate to the Application Configuration main screen, select **File >> Application Configuration**.

The Application Configuration main screen contains the following two tabs:

- General: Used to change the operating language of the application or the unit of measurement.
- 3rd Party Applications: Used to add 3rd party or programming applications to the menus of PC Service tool.

Note: Ensure that you are in the OFF Line mode (not connected to the vehicle), before changing the configuration settings of the application.

3rd Party Applications: to add a 3rd party application, and make it available in the **File** and **Programming** Menus, execute the following procedure:

1. Select **File >> Application Configuration**.
2. Select the 3rd Party Applications tab.
3. Enter the name of the application that needs to be added in the Application Name field. You may choose any name.
4. Click  to locate the executable file of the application. The actual program to use is located in the same directory as other parts of the PCST (C:\Program Files\Hyster\PC Service Tool\ER Reprogram, ICE Reprogram, etc). The “executable” file to use is listed in the table under the “Selection of Programming Tools” section.
5. Define the command line option in the Command Line field (if applicable; this can usually be left blank).
6. If the application allows programming of truck parameters, or updating of truck software, check the “Programmable” box. Be sure to check this box if installing a programming application.
7. Click Add, to add the application.

Note: Adding a 3rd Party Application causes it to be listed in the **File >> Run** menu. Adding an application with the “Programmable” box checked causes it to be listed in the **Programming >> Truck Programming** menu.

Use – all Trucks

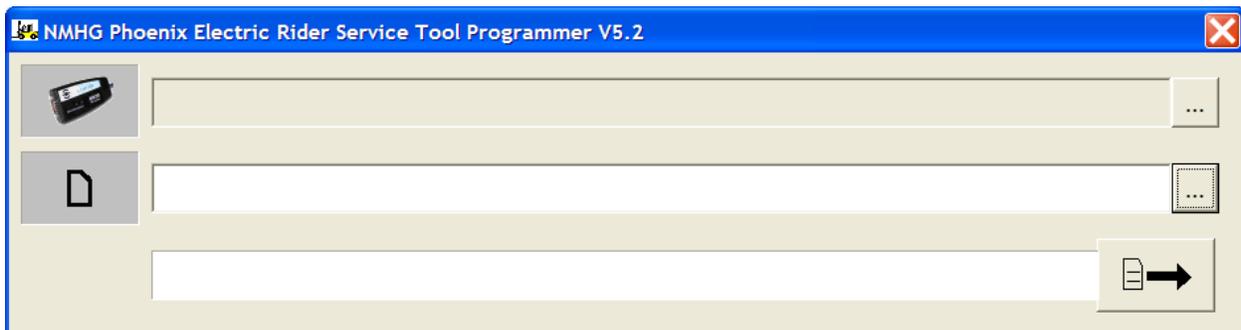
When a programming tool is started, the PC Service Tool disconnects itself from the truck automatically to prevent program conflicts. Due to this, the operator must manually re-connect the PC Service Tool using the standard **File >> Connect** procedure to start the PCST communicating with the truck again.

Use – ER Trucks

As noted, the files for reprogramming are downloaded from Hypass on-line, and have a .hex extension. They can be placed in any directory on the PC, but you must remember their location, as you will need to provide this to the programming tool.

To start the reprogramming tool, go to the PCST **Programming** menu, and select the **Truck Programming** submenu. If this menu is grayed out, you may not have the proper password, or the reprogramming tool has not been installed.

As the ER reprogramming tool starts, you’ll see this dialog:



In the upper box select the type of CAN interface you have. Click the “...” button to select the CAN interface. The iFak isCAN is most popular, but other options may be offered.

In the middle box, you must provide the directory and name of the file you downloaded. Click the “...” button to select the file.

Next, press the → button. Programming will start. The lowest line will show a progress indicator. Note that, in the case of VSM programming, the transfer process can take 10 minutes or more.

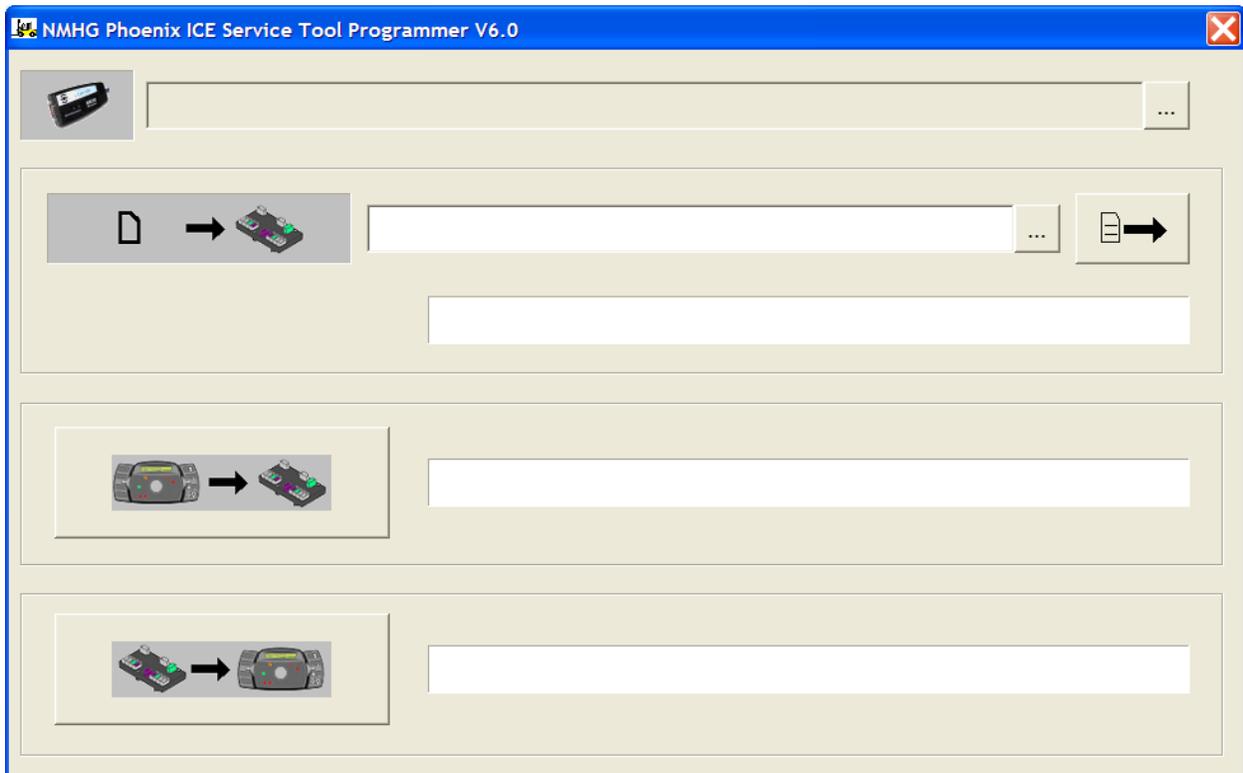
A completion message will be displayed when the transfer is complete. Close this dialog to return to PCST.

Use – Premium 1-8 Ton Trucks

As noted, the files for reprogramming are downloaded from Hypass on-line, and have a .hex extension. They can be placed in any directory on the PC, but you must remember their location, as you will need to provide this to the programming tool.

To start the reprogramming tool, go to the PCST **Programming** menu, and select the **Truck Programming** submenu. If this menu is grayed out, you may not have the proper password, or the reprogramming tool has not been installed.

As the ICE reprogramming tool starts, you'll see this dialog:



In the upper box select the type of CAN interface you have. Click the “...” button to select the CAN interface. The iFak isCAN is most popular, but other options may be offered.

In the second row, which is used to program files to the truck & VSM, you must provide the directory and name of the file you downloaded. Click the “...” button to select the file. Press the → button to start the transfer and programming process.

The third row is used for the specific operation of copying files from the display to the VSM (due to VSM replacement).

The fourth and final row is used to copy files from VSM to Display.

For the third and fourth rows, the buttons that start the process are decorated with icons indicating the procedure. The box on the right side will show a progress indicator.

*Note that, in the case of VSM programming, the transfer process can take 10 minutes or more.

A completion message will be displayed when the transfer is complete. Close this dialog return to PCST.

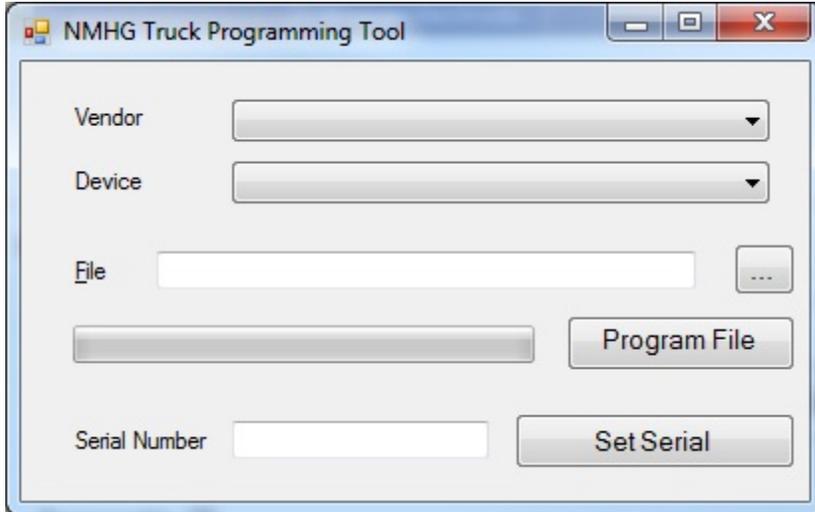
Other Notes – General ICE Trucks

- 1) The operation of copying files from the display to the VSM is exclusive to the ICE trucks. ER trucks perform this operation automatically.
- 2) The operation of copying a CDF to the display is also exclusive to the ICE trucks. ER trucks perform this operation automatically.
- 3) If the truck software in a General ICE truck is being upgraded from version 4.xx to version 5.xx, a special sequence of steps is required to perform this upgrade. There are numerous service bulletins and grams referring to this procedure. However, in general, the required sequence is:
 - a) Load the Application file
 - b) Load the Language / optional strings file
 - c) Load the calibration file (CDF)
- 4) Note that in the “upgrade” case (note 3, above), the PC Service Tool may not “connect” to the truck in the normal manner (i.e. using the connect menu may not work). However, the programming tools can still be launched and used normally from the PCST Programming menu.

Use – Base or Standard Trucks

As noted, the files for reprogramming are downloaded from Hypass on-line, and have a .prg extension. They can be placed in any directory on the PC, but you must remember their location, as you will need to provide this to the programming tool.

As this reprogramming tool starts, you'll see this dialog:



In the “Vendor” box, which has a drop down menu, you must select the type of CAN interface you have, based on the Vendor. The iFak isCAN is most popular, but other options may be offered.

In the “Device” box, provide specific information about which CAN interface you will be using.

In the “File” box, provide the directory and name of the file you downloaded. Click the “...” button to select the file.

Press the “Program File” button to program the truck.

A completion message will be displayed when the transfer is complete. Close this dialog to return to PCST

Note: the dialog box and button on the bottom line allow the truck serial number to be programmed or changed. This is not a typical service operation, and would only be used in rare circumstances.