

J3 Chip Programming Instructions.

The programming module is a USB device which allows reprogramming of the ATP J3 Module used in Ford EEC-IV and EEC-V Engine Management Unit. The device works in conjunction with the TunerPro RT software available from <http://tunerpro.markmansur.com/downloadApp.htm> . Make sure to download the RT version. The RT version is fully functional without registering but it's good to do so.

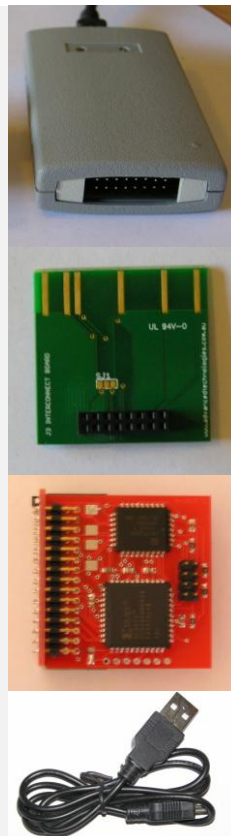
Components:

Programming Unit.

Interconnecting Board

J38B
EEC Chip Module

USB Cable

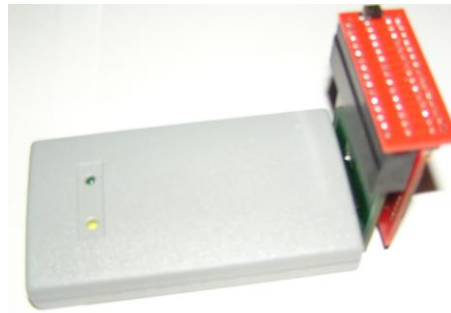


To get started plug the interconnecting board into the programmer, as the plug is not keyed it is possible to plug it upside down. With the led's on the programmer being the up side, the interconnecting board should also point up. See picture below.



Notice in the second picture there is an even gap either side of the board when plugged in. Make sure yours looks the same. It's a good idea to keep the two parts connected.

Plug your chip into the interconnecting board as pictured. Don't worry which way as it can only be put on in 1 direction.



You are now ready to connect to your PC's USB port. This device uses windows built in USBSER.SYS but still needs an .inf

Plug your programmer into the USB port.

Windows hardware wizard will popup asking what you want to do, pick "Install from a list or specific location" and click next.

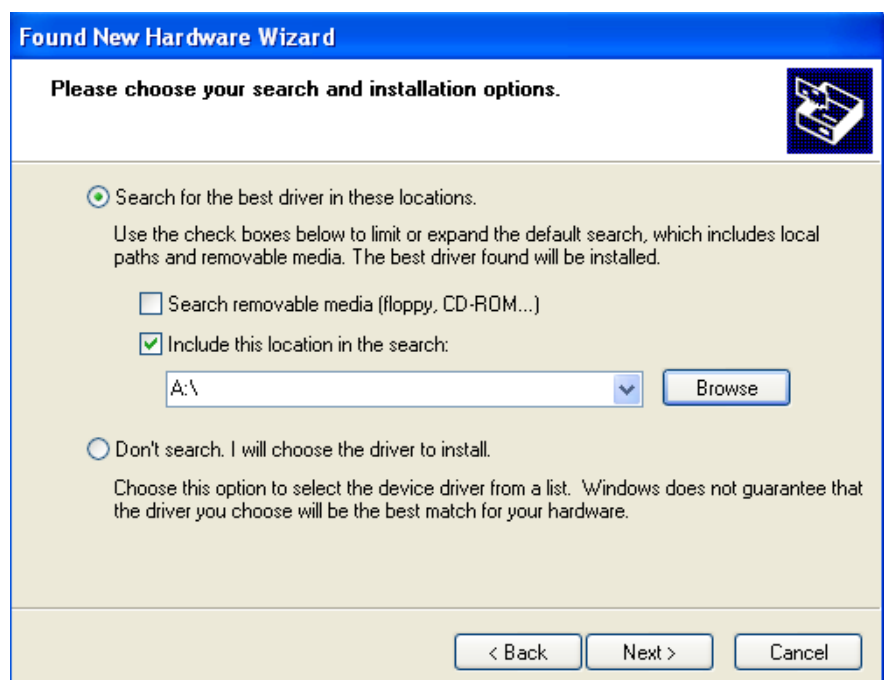


On the next dialog box, untick "Search removable media" and tick Include this location in the search.

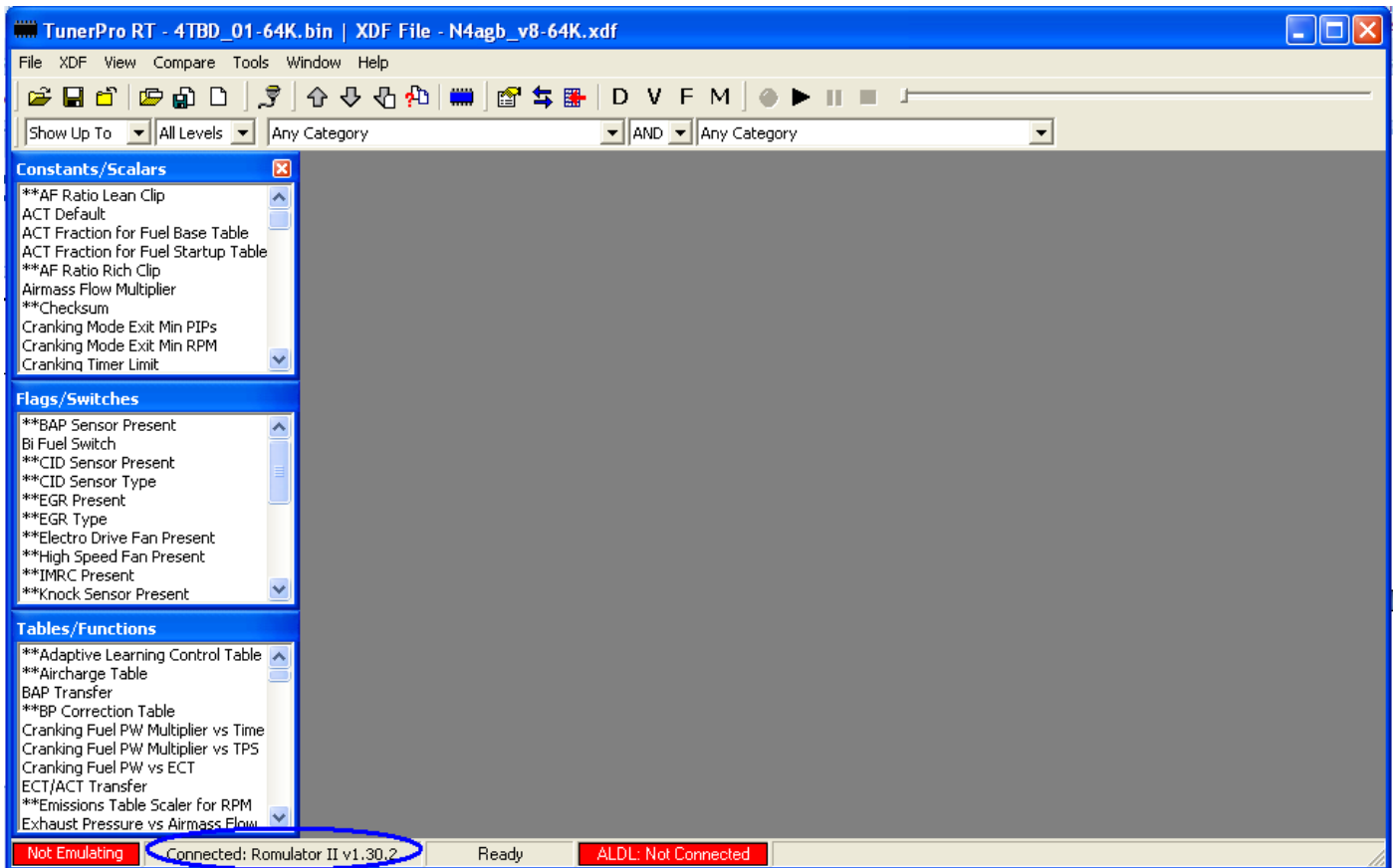
Click on browse and select the location where the mchpcdc.inf file is located. Either on the supplied disk or downloaded from the internet.

Click Next.

Follow the rest of the install as normal.



Now that the driver is installed you can proceed to load TunerPro RT. Once loaded



In the status bar of TunerPro, located at the bottom left of the screen it should let you know it's connected to Romulator II v1.30.2. Despite the name there is no emulator capabilities in the hardware it just uses its API.

You are now at the stage to modify your rom and upload it to the chip. Depending on what model car you are working with, you will need to select the right rom and definition combo.

The ROM or bin as we call it is the actual memory contents the ECU runs, much like the OS on your PC, it tells the computer what to do. The definition or def, is a mapping of parameters to the bin, which translates the values in the bin into a human readable form which we can understand. The definition creation is a very time consuming process requiring many hours and hours of work. If you would like to see the definitions be more defined than they are, please consider donating to their creators. See <http://www.techcore.com.au/eec/> for more information. If you find errors or new switches, scalars or tables in the definition , please contribute them back.

You need to match the definition to the ROM. Below is a small list for EF and EL models.

Definition	BIN	Model's covered
N4AGB_v8-64K.xdf	4DBG_8.bin, 4TBD_8.bin and 4TEG_8.bin	EF Fords. Covers 4DBG, 4TBD, 4TEG and other Auto's
N4MG3_v8-64K.xdf	4TAB_8.bin	EF Fords. Covers 4TAB and possibly 4DAB Manual's
HWAD3_V2-64K.xdf	6DBD_8.bin, 6DNB_8.bin, 6TGD_8.bin. Possible use on 6DAC_8.bin and 6DMA_8.bin	EL Fords, Auto and Manual. Covers 6DBD, 6DNB, 6DAC and 6DMA and others.
6DFC_64K.xdf	6DFC_8.bin	Covers EL V8 fords.

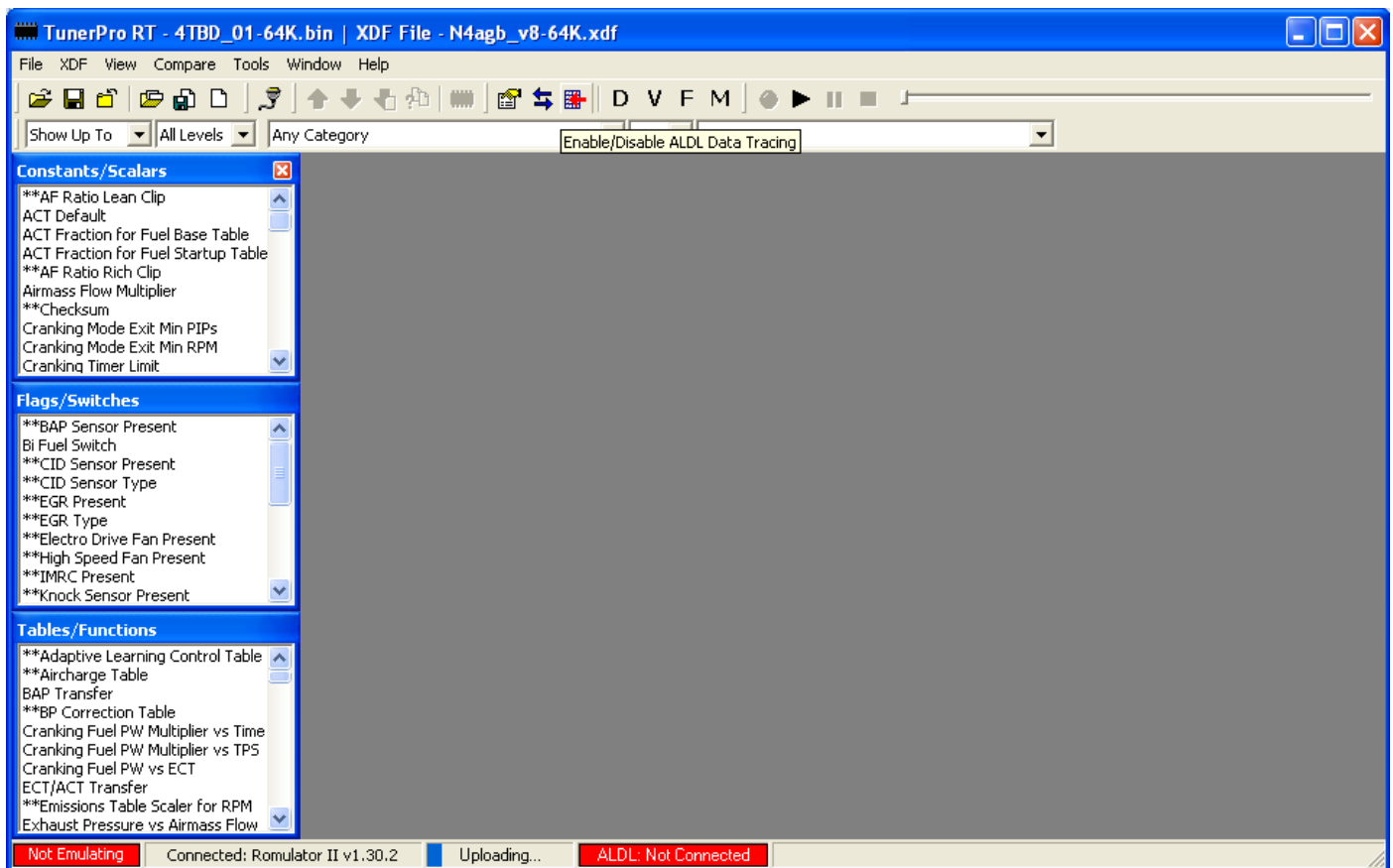
The above list is only a small set of what Ford used on these models from EF to EL. When selecting a Rom and definition to work with, match to your car. EG for a Auto GLi take the N4AGB_v8-64k.xdf and 4DBG_8.bin. For a Manual EF you would use N4MG3 and 4TAB.

Make sure you get your bins and definitions from the right place, depending on the hardware they change. You will be able to find what you need at <http://www.advancedtechnologies.com.au>

Once you have worked out what file combination to use you can load them into TunerPro RT. On the menu bar of TunerPro click on XDF then select XDF and load the XDF suitable for the bin you want to modify or upload. Next on the menu bar, click on File and Open Bin and select a matching Bin.

You are now ready to make any changes to your calibration. Tuning is beyond the scope of this document, there is a lot of useful tuning information to be found on the net. Just remember small changes at a time and to have some way of monitoring air fuel mixture. A wide band O2 meter is a good device to have but just monitoring the ECU's stock O2's sensors is better than nothing. See the www.techcore.com.au website for links and visit www.fordmods.com for advice.

Once you're ready to Upload your bin to your chip, first save your bin, use a different name once the bins are modified. On the TunerPro menu bar select Tools, Emulation and Upload bin to Emulator.



When uploading, TunerPro will show the status of the operation in the bottom status bar. At the end you will see Upload successful or Upload failed. If it fails double check all your connections, after some use the finger contacts on the interconnecting board may need cleaning. A pencil eraser works well for this. Its a good idea to verify the upload afterwards, go to Tools, Emulation and Verify EMU ram against current Bin. If you see verify success all is good if it fails Upload again.

You are now ready to fit the chip to the car, first unplug the USB to remove power to the programmer then remove the chip.

Before plugging the programmer back into the USB, in TunerPro, go to Tools and Initialise attached hardware, the connected part in the status screen will disappear. You can then plug the programmer back in and repeat the Initialise attached hardware and you should see "Connected: Romulator II v1.30.2" again.

There will be a programmer Firmware Update in the future to allow hot plugging of the CHIP.

When following the chip install instructions, it states to disconnect the battery when installing and removing the chip. Although it is good practice it's not needed, just make sure the ignition is switched off. If your changing strategy's like running a 4TBD in a 4DCD ECU it's a good idea to clear the KAM memory in the ECU by disconnecting the battery for 10 minutes, only needed the first time on install.

If you have issues with the when installing the chip into the car, double check the finger contacts on the ECU, unless its making a good connection it will be unreliable. Ford never designed the service port to be used in this way and is not an ideal connection.

Happy tuning.

Email inquire@advancedtechnologies.com.au for issues, help or feedback.