

Update process for the use of the TPX4.

The new TPX4 transponder, which has recently been added to the TPX family, completes the cloning of 2nd generation Philip´s Crypto (PCF7936), as well as its subsequent electronic simulations (PCF79xx).

Briefly the transponder has the following characteristics:

1. Fully compatible with the TPH Cloner/TRS5000 on the market, after their update.
2. Increase in the cover of vehicles supported by the TPX3 (2nd generation Philip´s Crypto).
3. Elimination of all the Warning messages that appeared with the TPX3 in certain vehicles of makes like: Chrysler / Renault / Nissan / Dacia.
4. Recognition of the new TPX4 (on TRS) automatically as well as visually (green colour code).
5. Same successful physical support for the TPX family without any need for external batteries for operation.

The new models incorporated, which complete those already covered by the TPX3 are:

MARCA	MODELO	AÑO	TP ORIG	TP JMA	LLAVE	TPX3+ (Q1-2011)
CADILLAC	CTS	2008-2010	PHI/CR2	TP12GM	GM-37.P	SI
CADILLAC	STS	2004-2009	PHI/CR2	TP12GM	GM-37.P	SI
CHEVROLET (USA)	CAMARO	2010	PHI/CR2	TP12GM	OP-11.P1	SI
CHEVROLET (USA)	EQUINOX	2010	PHI/CR2	TP12GM	OP-11.P1	SI
CHRYSLER	ASPEN	2007-2009	PHI/CR2	TP12CH	CHR-15.P	SI
CITROEN	C-CROSSER	2007	PHI/CR2	TP12	MIT-8D.P2	SI
GMC	TERRAIN	2010	PHI/CR2			SI
HOLDEN	ASTRA	2004	PHI/CR2	TP12GM	OP-11.P1	SI
HOLDEN	VECTRA	2004	PHI/CR2	TP12GM	OP-11.P1	SI
HOLDEN	ZAFIRA	2004	PHI/CR2	TP12GM	OP-11.P1	SI
INFINITI (NISSAN)	G35	2003-2007	PHI/CR2	TP12NS	DAT-15.P2	SI
INFINITI (NISSAN)	QX56	2004-2007	PHI/CR2	TP12NS	DAT-15.P2	SI
MITSUBISHI	MONTERO	2006	PHI/CR2	TP12MT	MIT-12.P2	SI
MITSUBISHI	OUTLANDER	2006	PHI/CR2	TP12MT	MIT-8D.P2	SI
OPEL-VAUXHALL	AGILA	2007	PHI/CR2	TP12GM	SUZU-14.P2	SI
OPEL-VAUXHALL	ANTARA	2007	PHI/CR2	TP12GM	DAE-4.P1	SI
OPEL-VAUXHALL	ASTRA	2004	PHI/CR2	TP12GM	OP-11.P1	SI
OPEL-VAUXHALL	CORSA	2006	PHI/CR2	TP12GM	OP-11.P1	SI
OPEL-VAUXHALL	INSIGNA	2008	PHI/CR2	TP12GM	OP-11.P1	SI
OPEL-VAUXHALL	MOVANO	2002	PHI/CR2	TP12RN	NE-38.P4	SI
OPEL-VAUXHALL	SIGNUM	2003	PHI/CR2	TP12GM	OP-11.P1	SI
OPEL-VAUXHALL	SIGNUM	2003-2005	PHI/CR2	TP12GM	OP-WH.P	SI
OPEL-VAUXHALL	VECTRA	2002-2004	PHI/CR2	TP12GM	OP-WH.P	SI
OPEL-VAUXHALL	VECTRA	2004	PHI/CR2	TP12GM	OP-11.P1	SI
OPEL-VAUXHALL	VIVARO	2002	PHI/CR2	TP12RN	NE-38.P4	SI
OPEL-VAUXHALL	ZAFIRA	2006	PHI/CR2	TP12GM	OP-11.P1	SI

In order to be able to use the TPX4 correctly, you have to update the following elements:

- 1) TRS5000 PC Software (Rev.2.70)
- 2) TPH Cloner (32.1.F).
- 3) TRS5000 firmware (Rev.tr5307.BIN).
- 4) TRS5000 TXT (Rev.3.07).

Note: Once you have downloaded TRS5000_V270.exe you have all the files necessary on your computer.

TRS5000 PC Software update with Windows XP.

Once you have downloaded the latest application for TRS5000 PC software, TRS5000.exe, available from the JMA website, (www.jma.es), run that file either directly from the web site, or from the location where you saved it.

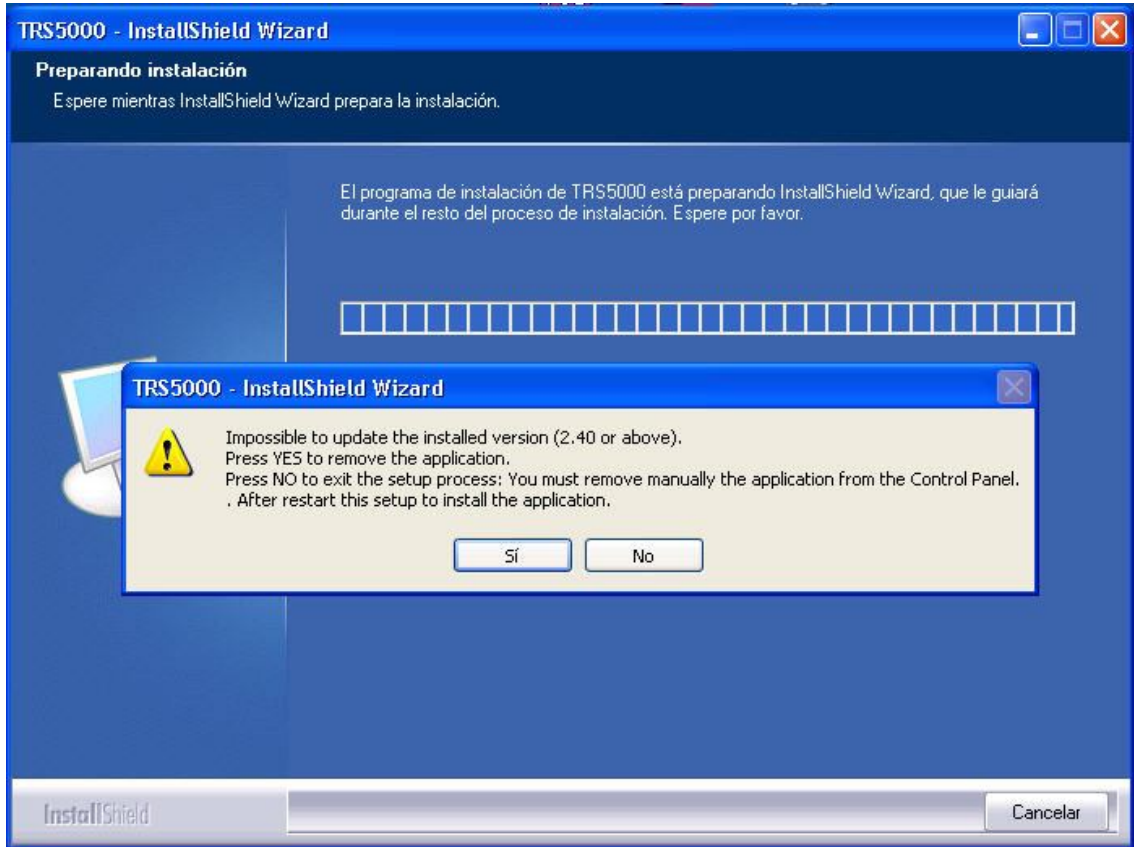
The quick installation guides are also available from the same JMA download web site.

If you have a previous update of the TRS5000, the messages that will appear will be those for steps 1-8. If you have no previous version installed, the steps necessary will be those from 4-8.

- 1) As soon as you run the trs5000.exe program, the first menu that appears refers to the fact that our software, like many others, does not have a digital signature recognised by the manufacturer of the Microsoft operating system.
Click **RUN** to continue installing the software.



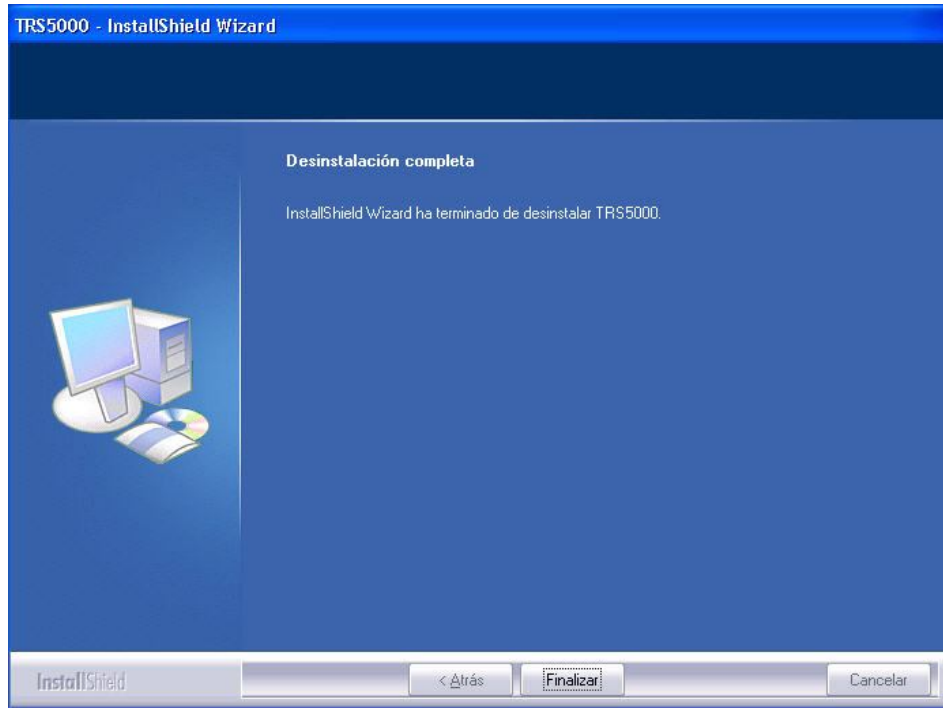
- 2) If the program detects an installed version prior to 2.50, you can choose between automatic removal (**click yes**) (preferential option) or manual removal (click NO). If you select **yes**, a backup copy is made of the customer database, and all the records stored are saved.



- 3) If you select the automatic option (**yes**), the following message appears. If you select yes again, all the files will be deleted **EXCEPT for the customer database**.

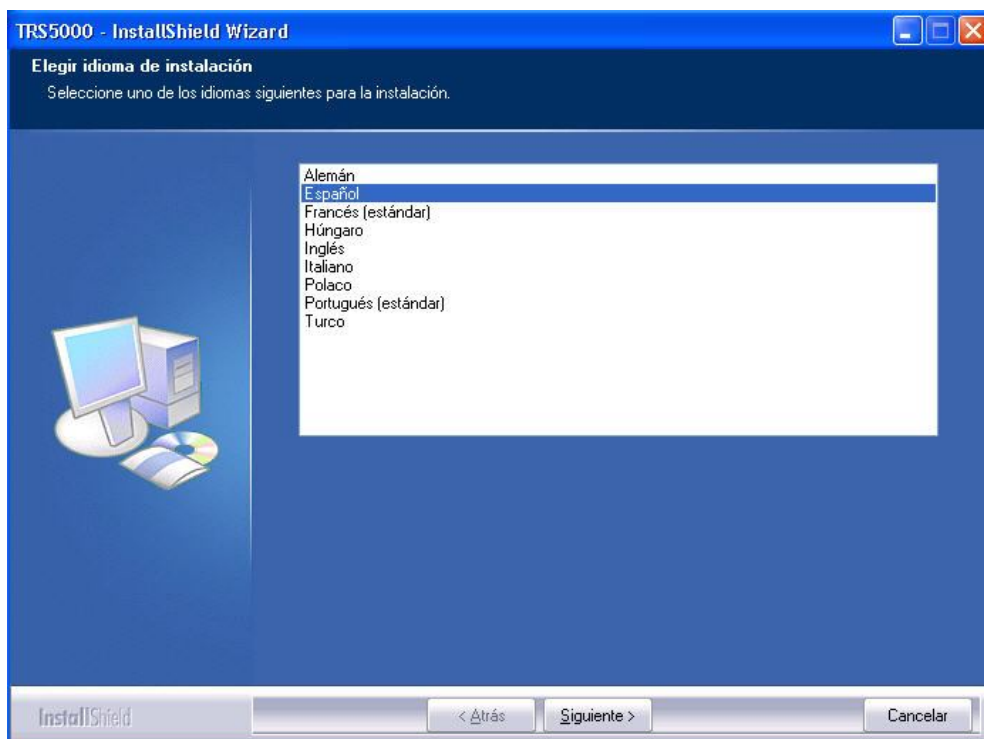


So automatically all the old files incompatible with the new operating systems Windows VISTA / 7 will be removed. Once the process has been completed, the following final message will appear:



Once you click **end**, **you have to run the trs5000.exe application again**, for the installation program to install the customer database, together with the files for the new version 2.70.

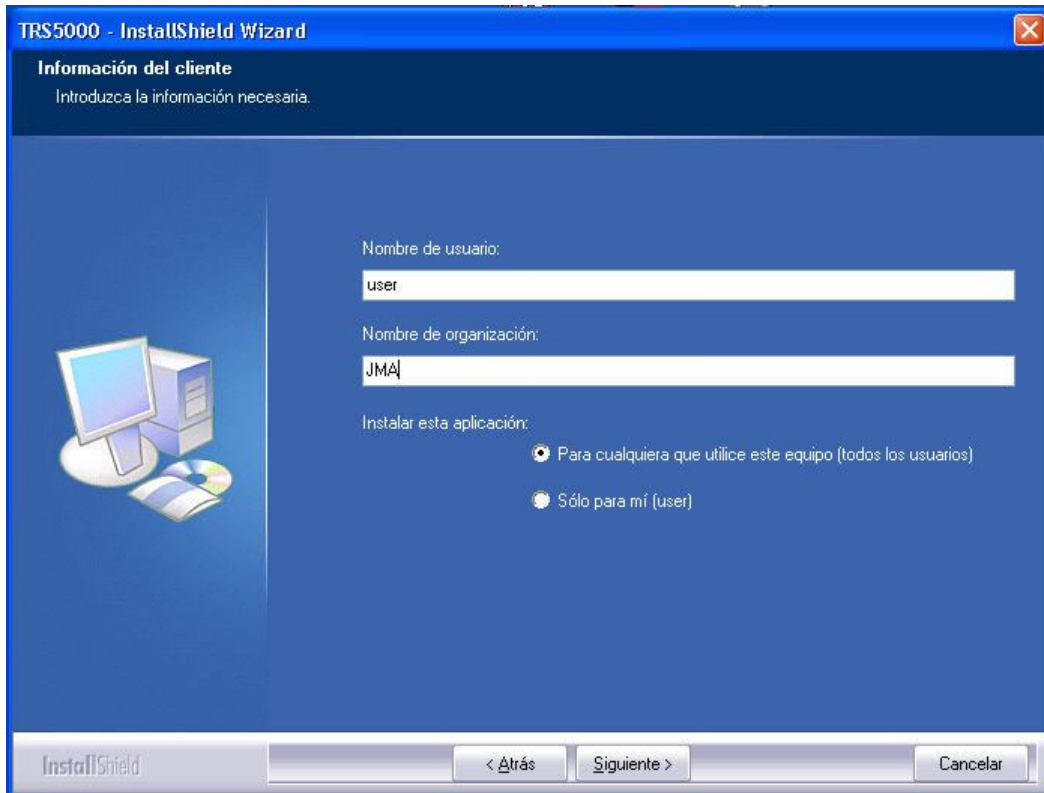
- 4) Run trs5000.exe again. It will show the same message from section 1. Then select the equipment configuration language:



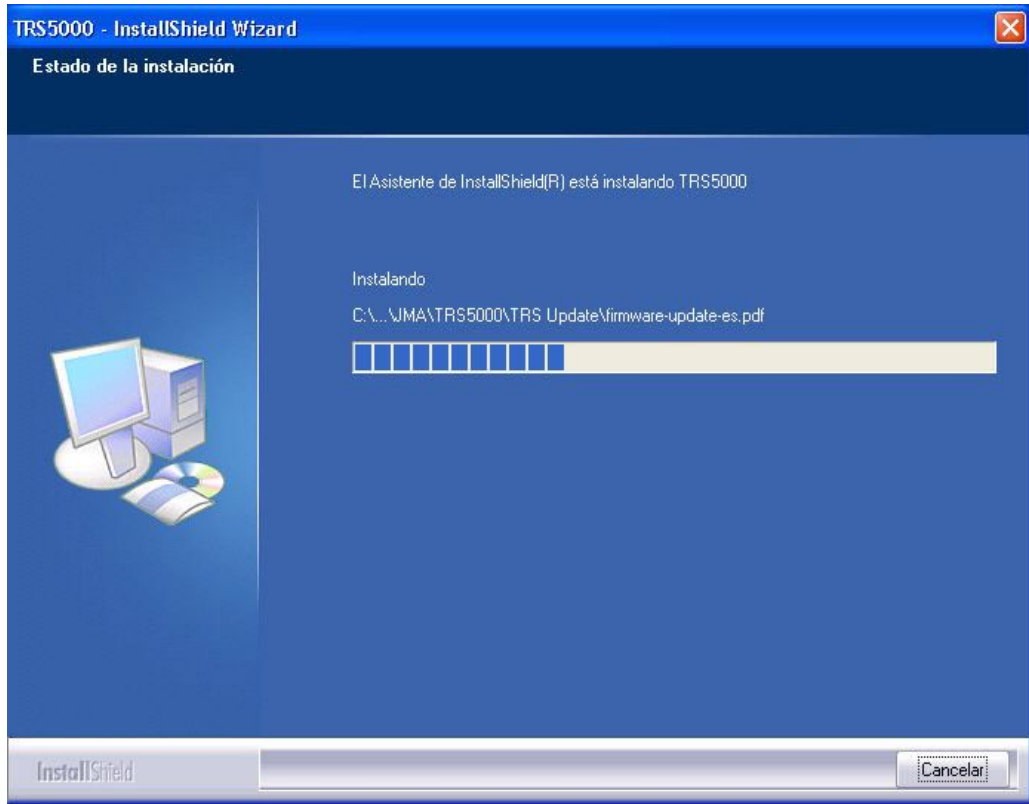
- 5) Once you have selected the installation language, accept the terms of the licence agreement, click **next** to continue installing the version:



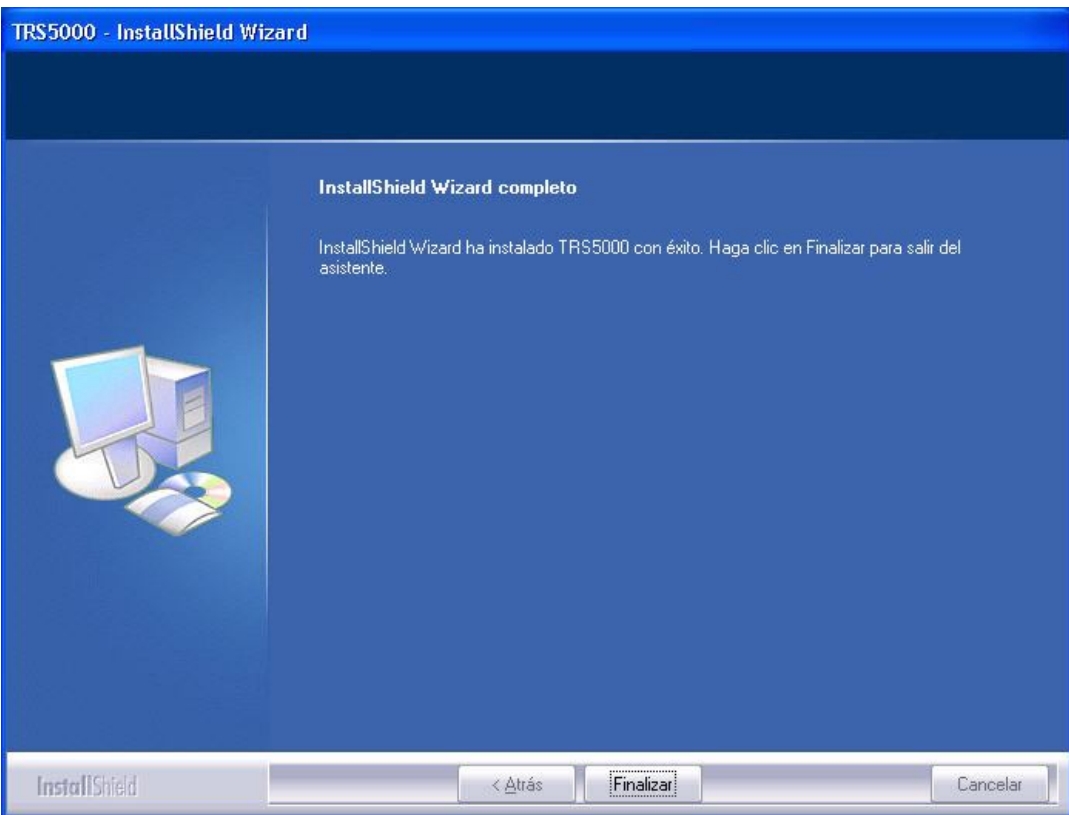
6) Enter the user name together with that of the organisation and click **NEXT**.



7) You can see at all times the status of the tasks being carried out, by looking at the process indicator bar:



8) Finally, click **END** to complete the updating process:

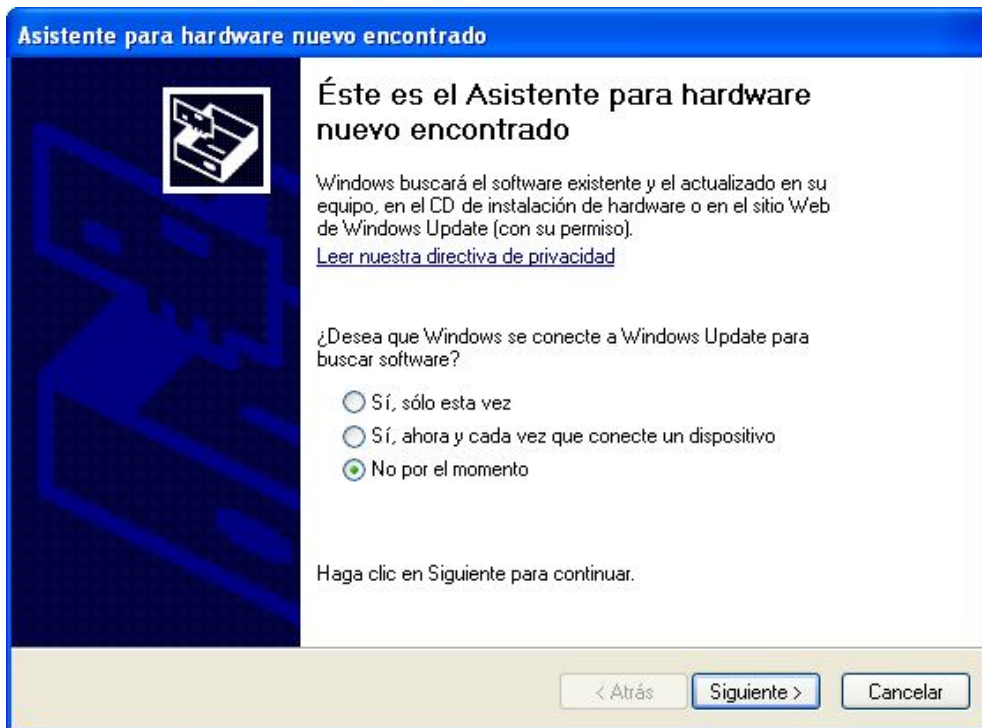


TPH Cloner Firmware Update.

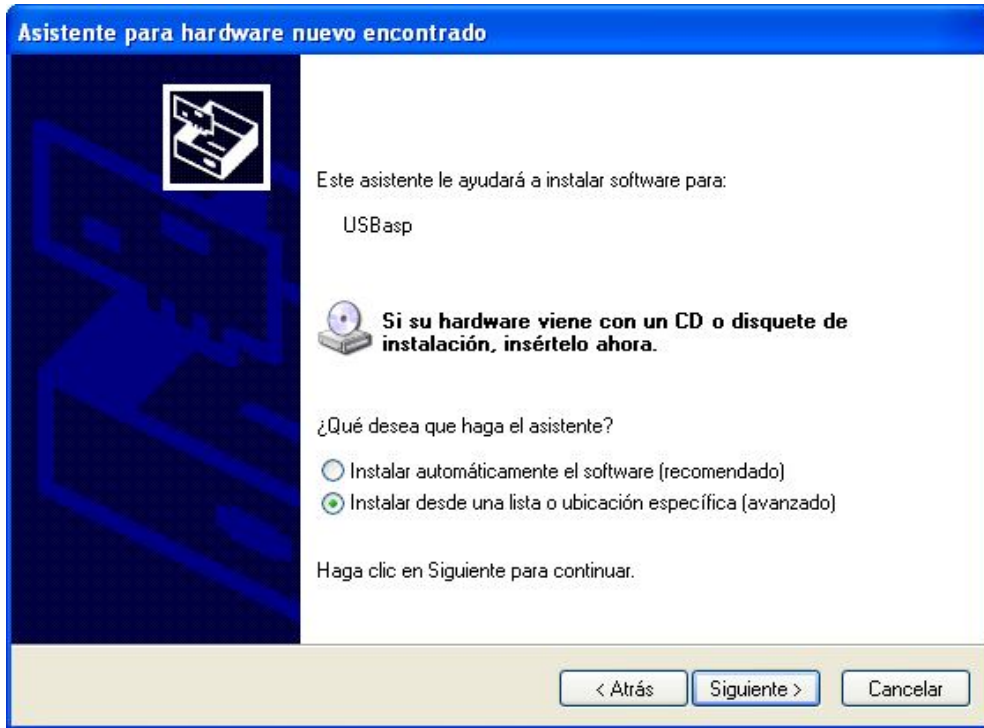
Once you have installed the new version of TRS5000 PC software, run the TPH cloner update program that appears in the pull-down menu on the left as well as on the title bar at the top. To continue with the update, take the following steps into account:

1. Switch on the TPH Cloner (Led changes from red (Initialization) to green (ready for cloning)).
2. You do not have to disconnect all the TPH-TPX-TRS500 wiring. However, to prevent any communication interference during the update process for the TPH Cloner, it is advisable to switch off the TRS5000.
3. Connect the usb between the PC and the TPH Cloner (TPH Cloner LED goes out).

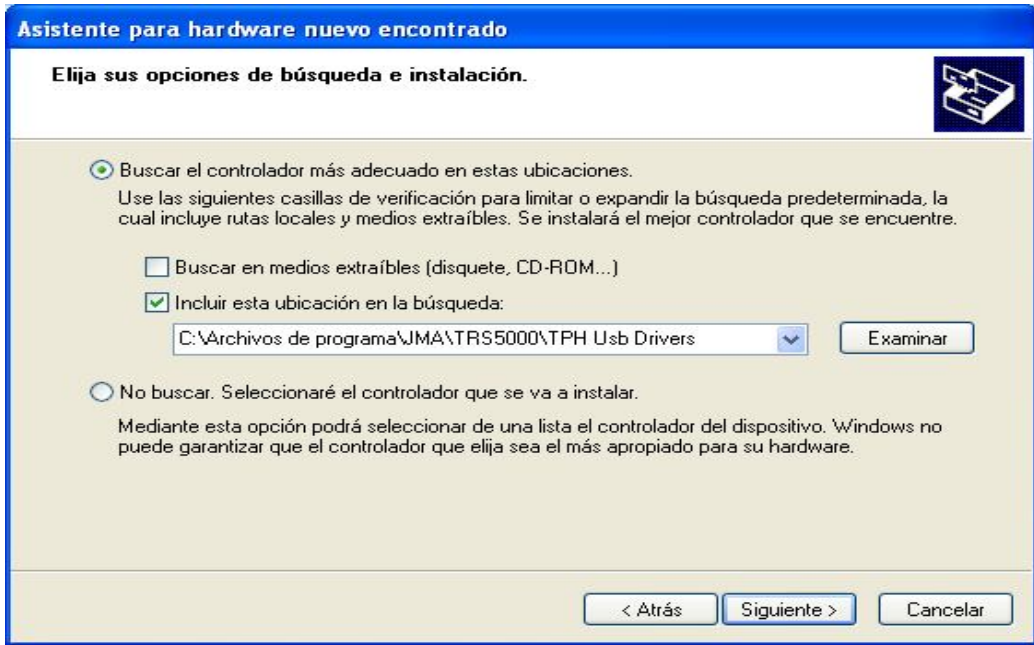
NOTE: When the TPH CLONER is connected to the computer, the Windows operating system will detect new hardware. You have to install the driver manually, so you must **NOT** allow Windows to select the driver automatically. In the Windows wizard, select the option “**no, NOT AT THIS TIME**”



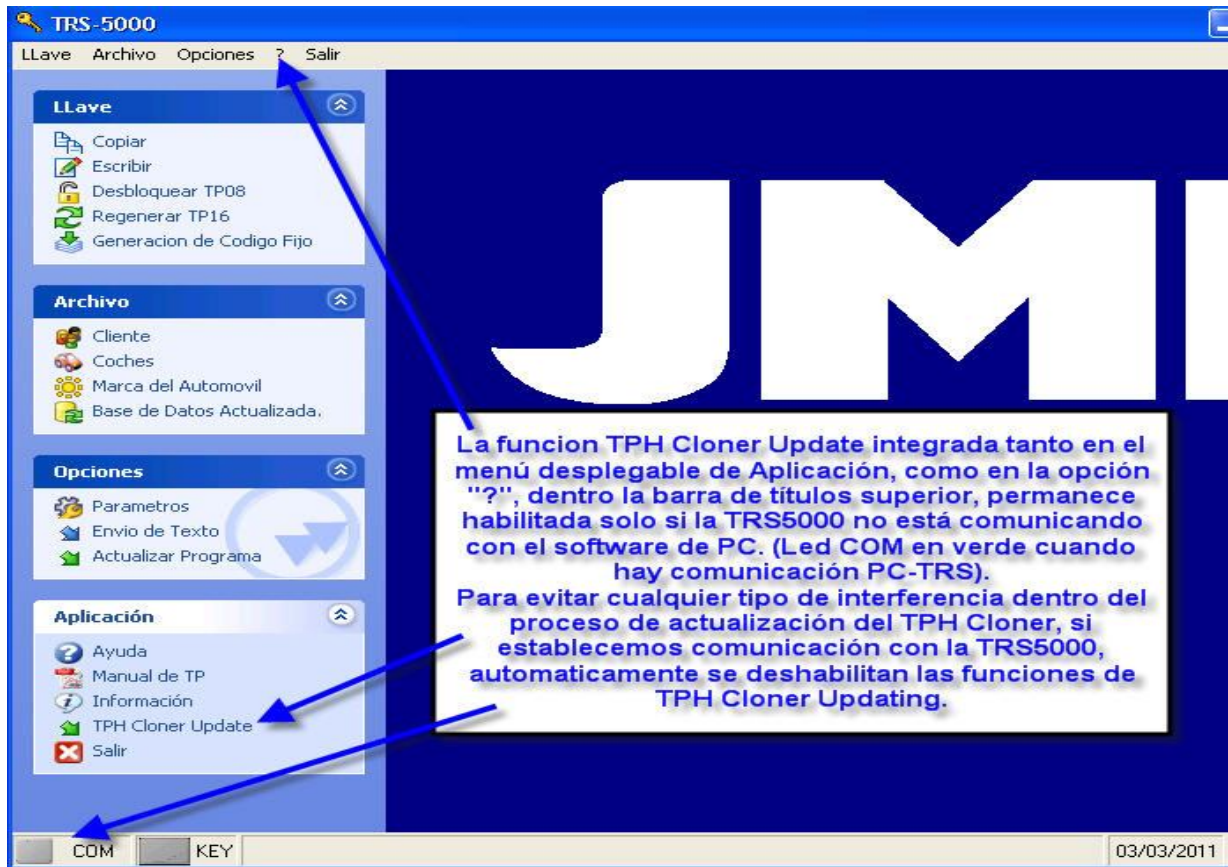
Select the driver from a specific location, therefore select “**Install from a list or SPECIFIC location**”.



And finally you have to select the folder containing the TPH CLONER driver. First, highlight “**SEARCH FOR the BEST DRIVER in these locations**”. After this option, just select the option “**include this location in the search**”. By default, the DRIVER is located in the following folder: “C:\PROGRAM FILES\JMA\TRS5000\TPH Usb Drivers” which you select by clicking the browse button.



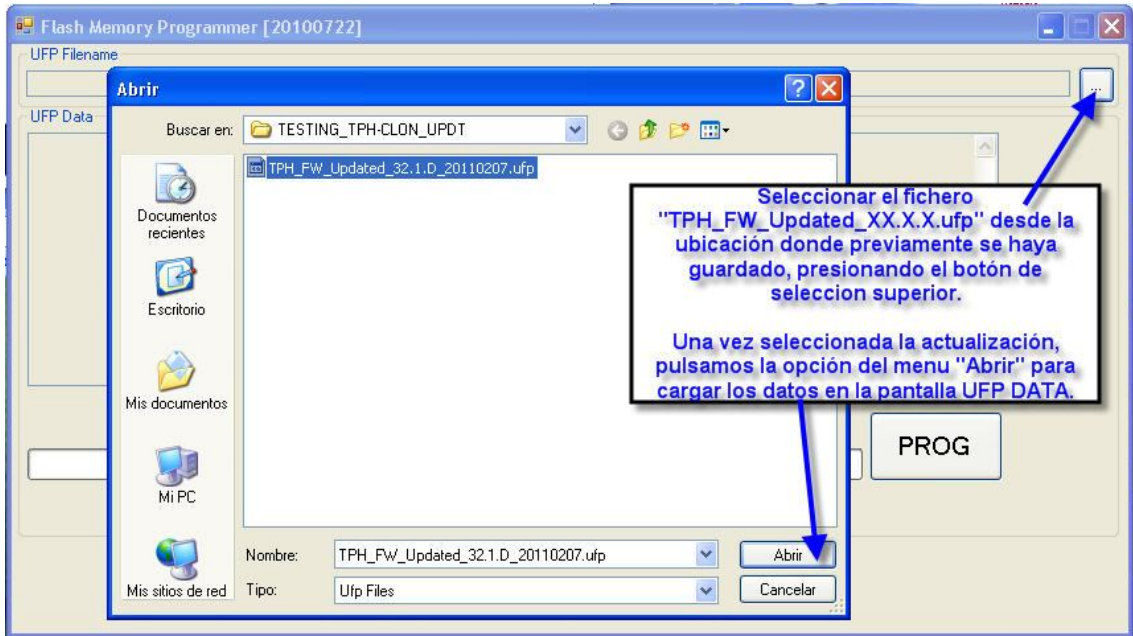
4. Run the TPH Cloner Updater program, from the updated TRS5000 PC software, in the application's pull-down menu or the top bar in the "?" section.



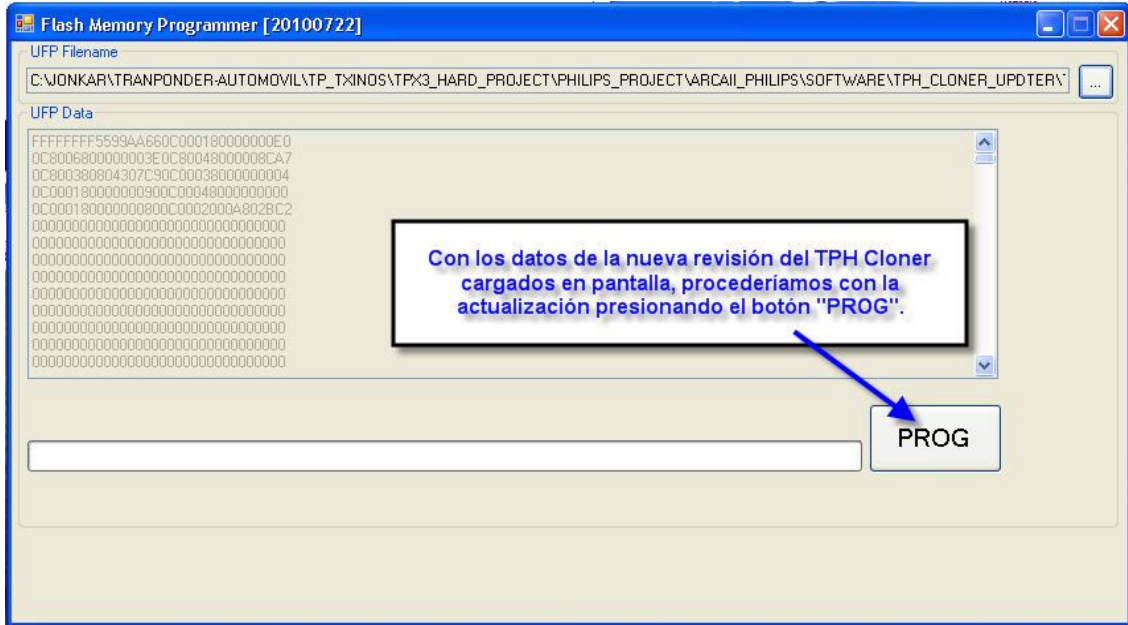
Once the TPH Cloner update program is running, the program opening time depends on the customer's PC, you have to select the file with the .ufp extension which will be loaded into the TPH Cloner and will enable you to use the new TPX4 transponder.



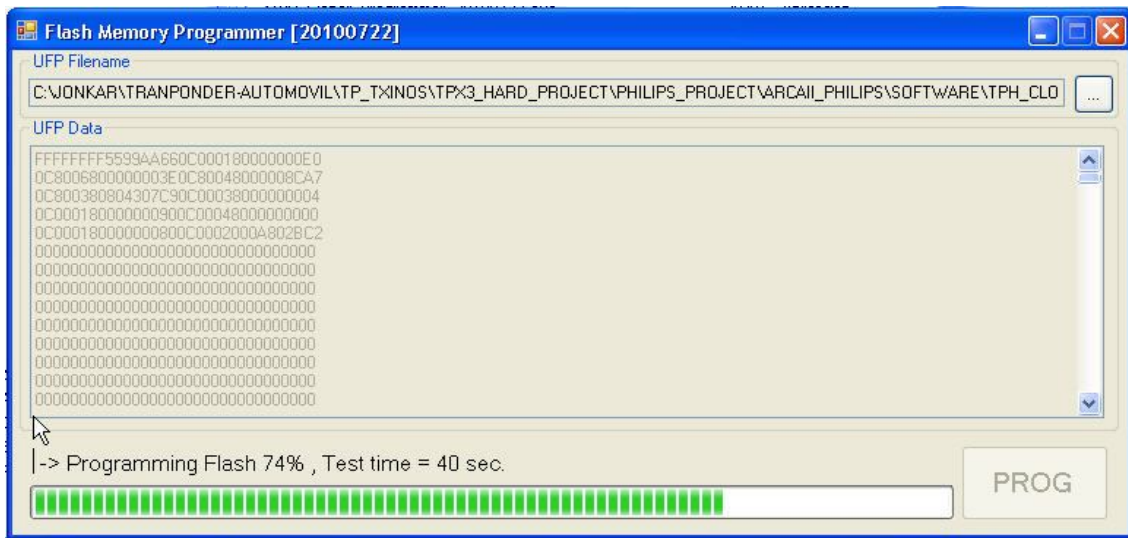
The file is selected automatically by the program, from the default location (C:\PROGRAM FILES\JMA\TRS5000) or where you saved it, by clicking the **FILE** button on the UFP Filename bar. Select **open** on the pull-down menu to continue with the update.



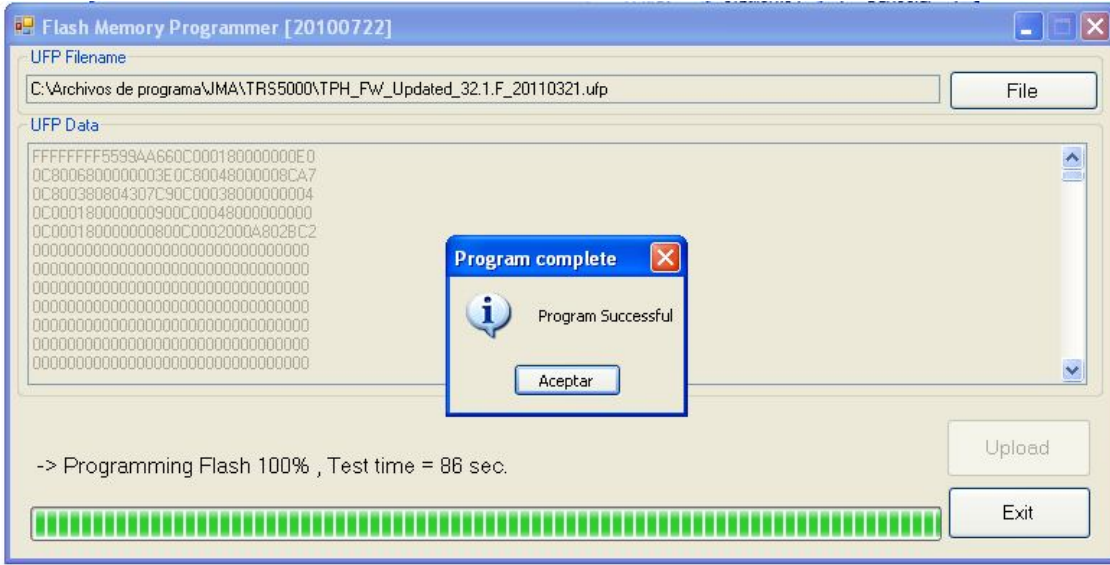
Once you have loaded the file, which you can check by simply looking at the data in the UFP DATA area, click the **PROG** option.



The program automatically deletes and loads the new version in the TPH Cloner FPGA. You can follow the progress of the installation with the progress bar and the time it is taking with the time counter.



Once the process has been completed, which can take from 1 to 3 minutes, the “program complete/program successful” message will appear.



Once the program shows the “Program Successful” screen click “Exit”.

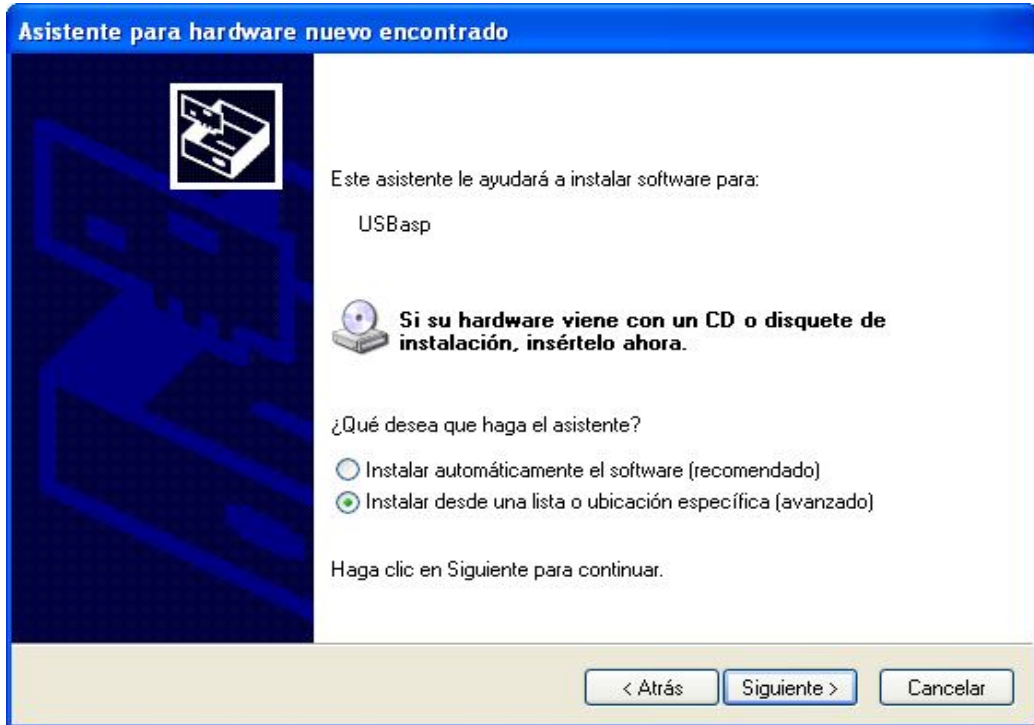
TRS5000 firmware update.

To update the TRS-5000 machine you have to connect it to the computer using the USB cable. If this is not the first time you have connected the TRS-5000 to the computer, jump to page **17**. If it is the first time you have connected the **TRS-5000** to the computer, the computer will show the Found New Hardware Wizard. You need to follow these steps:

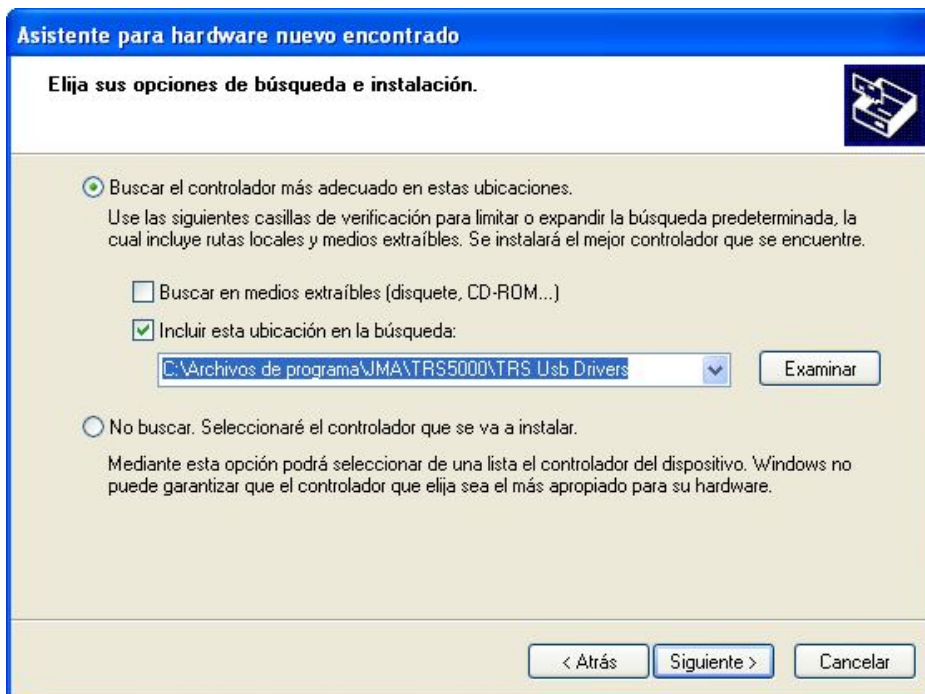
When you connect the TRS-5000 to the computer using the USB cable, the Windows operating system will detect new hardware. You have to select the driver manually. So you must **NOT** allow Windows to select the driver automatically. In the Windows wizard select the option "**No, not this time**".



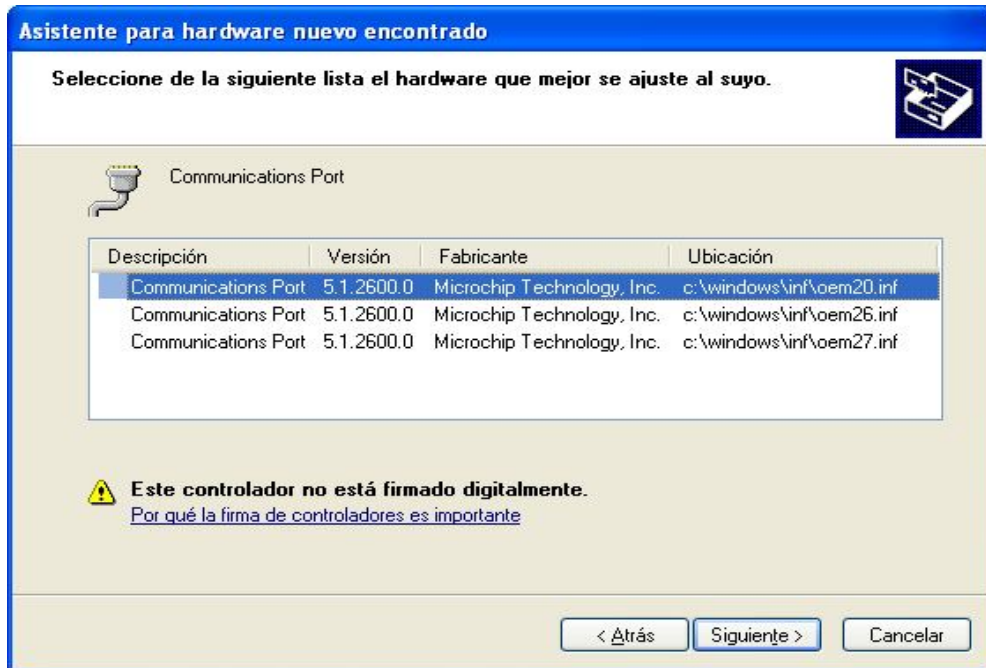
Select the driver from a specific location. To do this select **“Install from a list or specific location”**.



And you have to select the folder where the TRS-5000 driver is. First highlight **“Search for the best driver in these locations”**. After this option, just select the option **“Include this location in the search”**. By default the driver is located in the following folder: **“C:\PROGRAM FILES\JMA\TRS5000\TRS Usb Drivers”** which you can select by clicking the browse button.



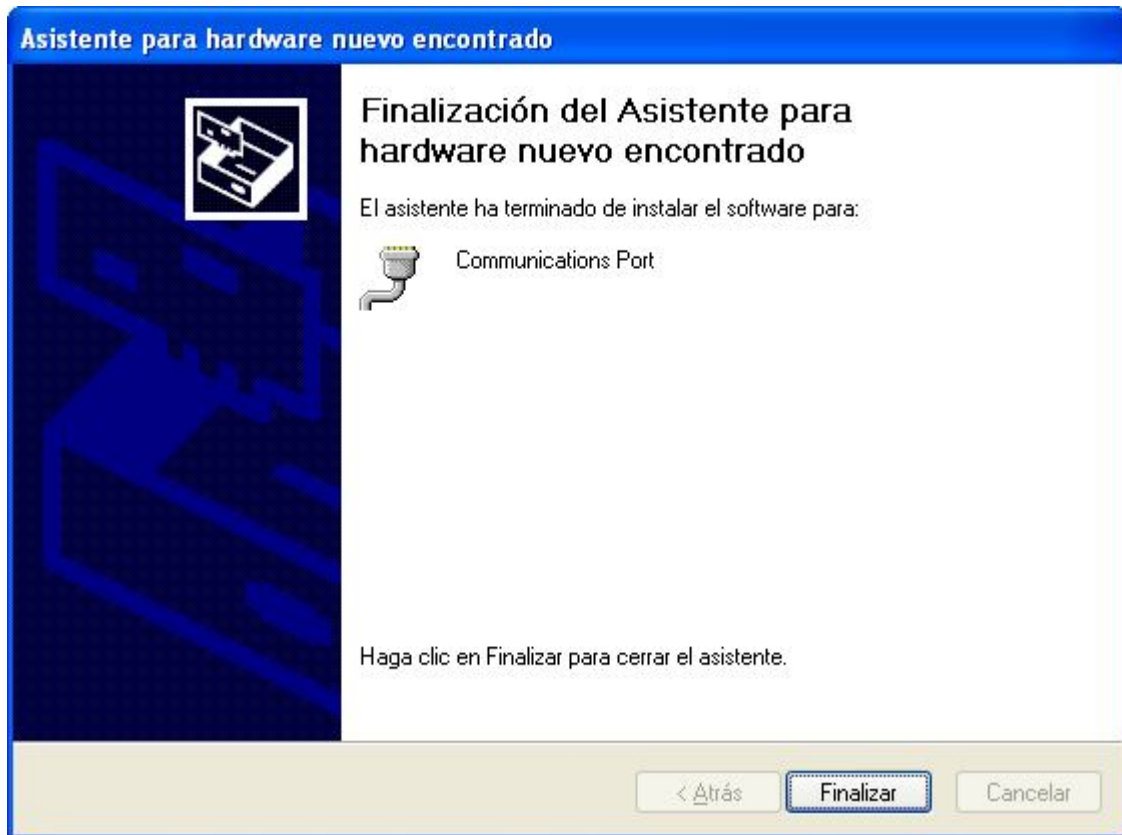
On the following screen you can select any file from the list and then click continue.



In the following confirmation message, you have to click "Continue".



And after clicking finish on the following screen, the driver installation is completed. You can now continue updating the TRS-5000 firmware.



LOADING THE FIRMWARE ONTO THE TRS-5000

Finally, and to complete this installation process for the correct use of the TPX4, you need to update the TRS5000, as you regularly do:

1. On the Options Menu, in the pull-down bar on the left, or in the title bar at the top, select the **SETTINGS** option, where you can select both the communication port and the graphic interface language.

The Communication Port pull-down bar will show all the ports available at that moment to establish communication between the TRS5000 and the PC.

You have to select the virtual serial USB port (USB logo to the left of the port number) which in the case of the figure shown below is COM22.

The number of this port will change depending on which physical USB port you connect the TRS5000 to, as well as any programs installed previously which use those ports. If, at first, the USB port does not appear, click **RELOAD COM PORT LIST**, for a new reading of the ports available.

To establish communication, select the port and click **START COMMUNICATION** or double click on the port in question.

Opciones Programa

Parámetros de Comunicación

Puerto de Comunicación: COM22 (Communications Port)

- COM3 (Conexant HDA D110 MDC V.92 Modem)
- COM1 (Puerto de comunicaciones)
- COM22 (Communications Port)

Comenzar Comunicación

Parar Comunicación

Recarga listado puertos de comunicación

Lenguajes

Italiano Inglés Alemán Francés Español Polaco

Idioma Actual: Español

JMA

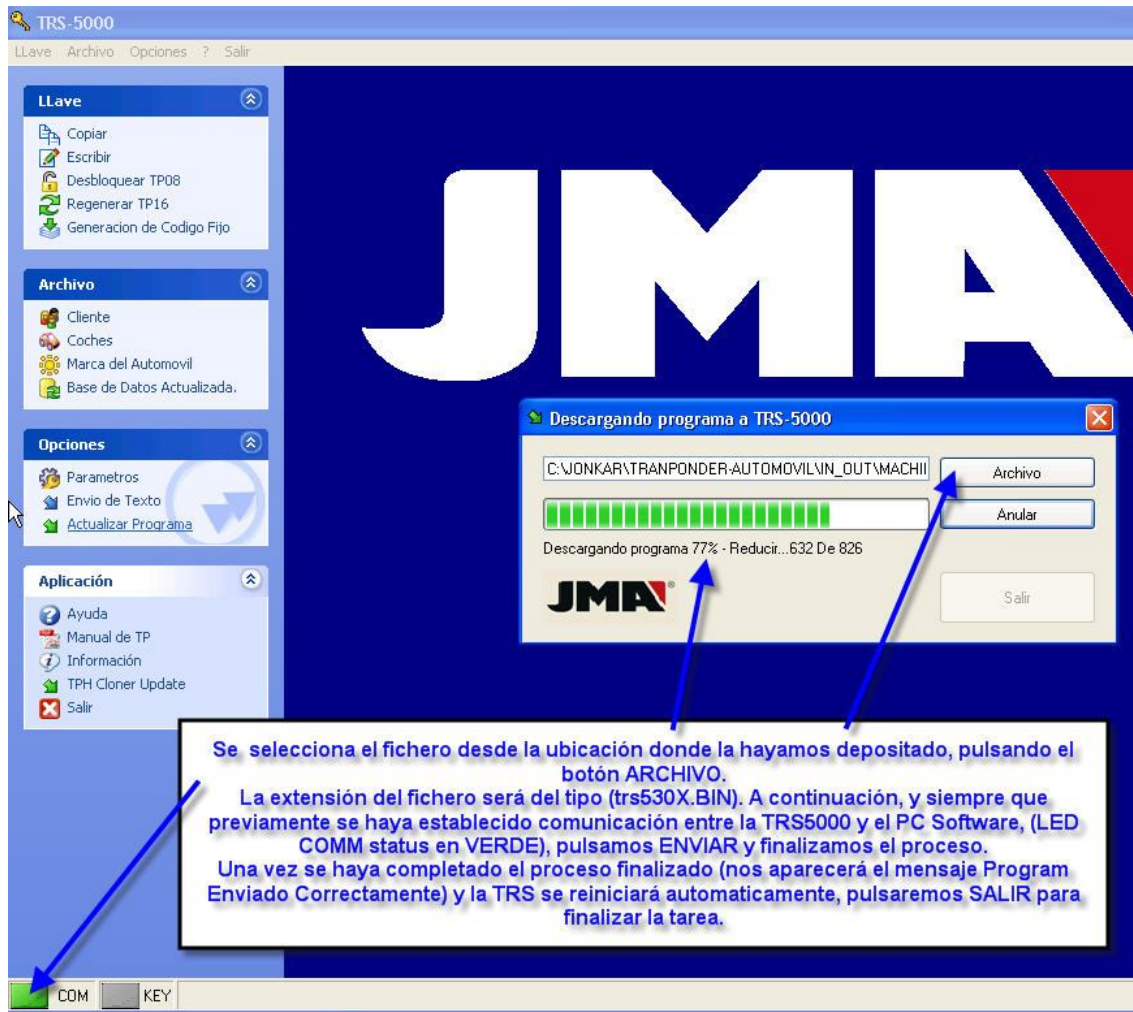
OK

Dentro del Menu OPCIONES/Parametros, en el listado desplegable "Puerto de Comunicaciones", se nos muestra los puertos disponibles en ese PC. Dependiendo del puerto físico USB que se utilice, así como de los programas instalados, el número de puerto USB asignado tendrá un valor diferente. Para establecer la comunicación entre la TRS y el puerto serie USB virtual, no tenemos mas que pulsar el botón "Comenzar Comunicación".

NOTA: Si no nos apareciera en primera instancia el símbolo USB dentro del listado de puertos desplegable, seleccionariamos el botón "Reload Comm Port List".

- To download the file (trs5307.BIN) to the TRS5000, you just have to select the **UPDATE PROGRAM** option in the Options Menu, either in the pull-down menu on the left or in the title bar at the top.

Select the file with the new version, in the location where it is (by default in this folder **"C:\Documents and Settings\All Users\program data\JMA\TRS5000\TRS Update"**), and click **FILE**, download by clicking **SEND**.



NOTE: The COM status LED must be green, which indicates there is communication between the PC-TRS5000.

- Finally, download the .TXT file linked to each new version of firmware. To do this, as in the section above, select the **SEND TEXT** option in the Options Menu, either in the pull-down menu on the left or in the title bar at the top. Select the file based on the language you want the TRS to display.

As in the section above, select the .TXT file from the location in which it has been placed, click **FILE**, then download by clicking **SEND**.



NOTE: As already mentioned, the COM status LED must be green, which indicates there is communication between the PC-TRS5000.

Points to bear in mind with the TPX4.

As already mentioned, the inclusion of the new TPX4 transponder completes the range of vehicles covered by the TPX3.

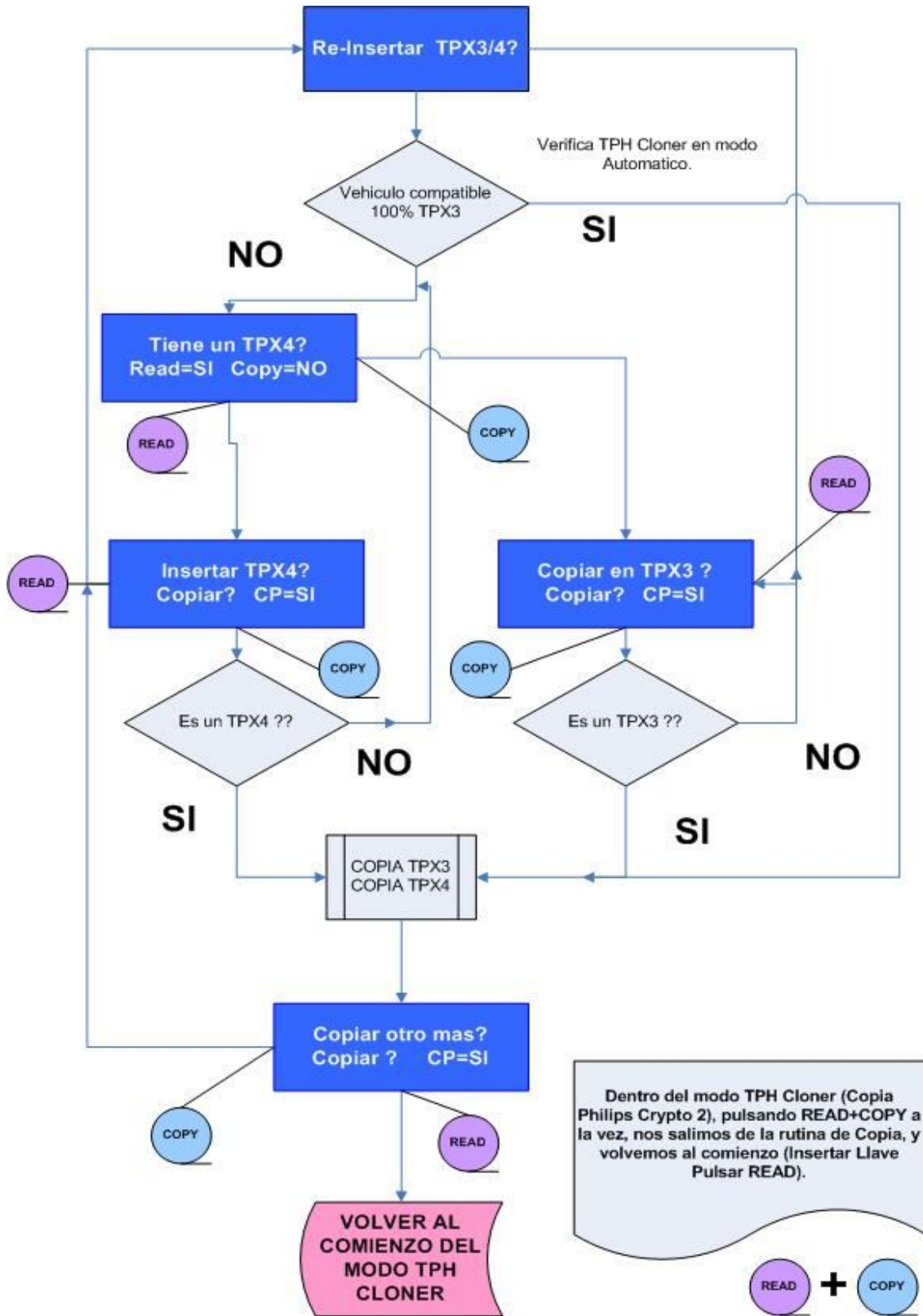
Likewise, the two transponders will coexist without any problems until all the TPX3 stock is used up.

TPX3/4 will always appear in the TRS5000 messages, as the two transponders are compatible in most cases.

The TRS will only tell us when the vehicle in question needs a TPX4.

In any case, if you do not have a TPX4 at that moment, you can make the copy just as until now using the TPX3.

The flow chart below shows in a simple way when the use of a TPX4 is required and the options the program provides.



There follows a brief explanation of how the TPH Cloner and TRS5000 work together as a unit, detailed from the flow chart provided above:

1. It is the TPH Cloner that automatically analyses and selects the need to use a TPX3 or TPX4 based on the reading of the key (once the secret key has been obtained, the page data are accessible for reading and subsequent copying).
2. Therefore the TRS5000 has to go into TPH Cloner mode, ("TPH Cloner Ready" will appear on the display together with "Ins Original Key" "pRESS READ").
3. Depending on the page 3 TMCF values, more specifically the MS0, MS1 and ENC values, the TPH Cloner will indicate whether you need a TPX4 or not.
4. The current messages: "Warning!!! E1. see TP list" will disappear when using the TPX4.
5. If you do not have a TPX4, when the vehicle requires one, you can still copy onto a TPX3, as you have done until now and the warning message will then appear.
(However, in this specific case you won't be able to cover the vehicles on the new list).

The text messages the TRS will show when the TPH Cloner detects that the vehicle is not 100% compatible with the TPX3 and needs a TPX4 are as follows:



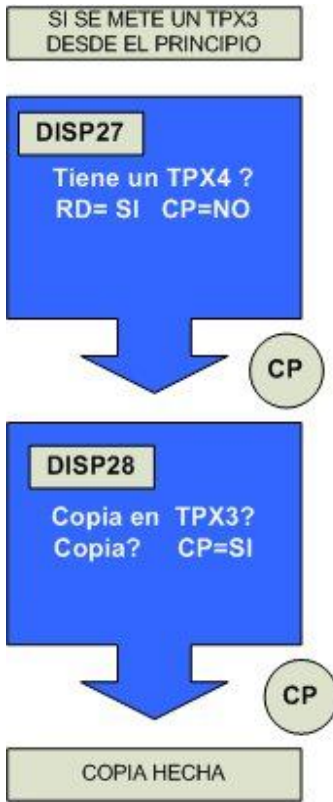
EL TPH CLONER detecta automáticamente la incompatibilidad del TPX3 con el modelo que se está tratando de clonar.
Aparecerá el mensaje del Display 27, que nos indica la necesidad de un TPX4.

De todas formas, sino disponemos de TPX4, se puede forzar la copia sobre TPX3, pulsando el botón CP, como se venía haciendo hasta el momento, ya que en la práctica mayoría de los vehículos, si exceptuamos los OPEL/VAUXHALL, pueden utilizar ambos transponders.
El mensaje que aparece es el del Display 28.

EL TPH CLONER detecta automáticamente la incompatibilidad del modelo que se está tratando de clonar con el TPX3.
Así nos lo indica el mensaje Disp 27.
Si se dispone de un TPX4, procederemos con la copia tras presionar el botón RD.

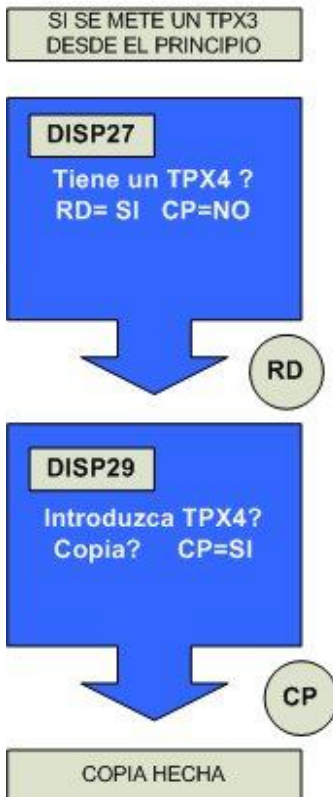
En el mensaje 29, se nos indica que metamos el TPX4 y que finalicemos con la clonación tras pulsar el botón CP.

Possible confusion on the part of the customer when inserting a TPX3 instead of a TPX4 and vice versa has also been taken into account.



El TPH CLONER también detecta automáticamente si nos confundimos en la selección del transponder.

Por ejemplo; pulsamos CP, porque creemos que no tenemos un TPX4, el TPH Cloner espera lógicamente un TPX3, pero se introduce un TPX4. El Cloner lo detecta y realiza la copia en el formato TPX4.



El TPH CLONER también detecta automáticamente el caso contrario.

Por ejemplo; Si pulsamos RD, porque creemos que tenemos un TPX4, pero introducimos un TPX3, el Cloner lo detecta y nos enviará al punto de programación de selección de TPX4, Disp 27, hasta que escojamos el transponder adecuado.