

Abritus 72 Ltd

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**Programmer for transponders  
TAGProg  
and  
TagKeyTool software module for AVDI  
User's Manual**

A · B · R · I · T · E · S  
automotive solutions



Version: 1.0

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**1 INTRODUCTION..... 3**

1.1 SCOPE OF THE MANUAL..... 4

1.2 YOUR TRANSPONDER PROGRAMMER..... 4

**2 SYSTEM REQUIREMENTS ..... 4**

**3 GETTING STARTED ..... 5**

3.1 SOFTWARE INSTALLATION STEPS ..... 5

3.2 CONNECTION OF THE PROGRAMMER TO THE INTERFACE..... 9

3.3 STARTING OF THE SOFTWARE..... 9

**4 TAG KEY TOOL – WORKING WITH DIFFERENT TRANSPONDERS..... 11**

**5 TAG KEY TOOL – KEY TOOL AND PREPARATION OF A KEY BY DUMP OF IMMOBILIZER SYSTEM..... 13**

**6 TAG KEY TOOL – PRODUCTION UTILITY AND PREPARATION OF A KEY READY FOR PROGRAMMING BY DIAGNOSTIC EQUIPMENT ..... 15**

**7 TAG KEY TOOL – CLONING OF A KEY ..... 16**

## 1 INTRODUCTION

Congratulations for choosing our wonderful product!

TAG programmer together with TagKeyTool software will allow you to use your Windows based PC like powerful programmer for transponders and tool for programming of transponder based keys.

TAG programmer is a hardware unit produced by ABRITUS 72 Ltd. intended for programming of transponders via AVDI interface.

TAG programmer should be used with ABRITES software produced by Abritus 72 Ltd.

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## 1.1 Scope of the manual

This document describes software and hardware installation of your transponder programmer named "TAG Programmer" and corresponding software named "Abrates TagKeyTool".  
The document is applicable for the transponder programmers from Abritus 72 Ltd. - ZN001M.

## 1.2 Your transponder programmer

The basic package of TAG programmer consists:

- Small carry bag



- TAG programmer



- Installation CDs/DVDs (optional)

## 2 SYSTEM REQUIREMENTS

Minimum system requirements – Windows XP, Pentium 4 with 512 MB RAM  
USB port with supply 100 mA / 5V +/- 5%

### 3 GETTING STARTED

We suppose that already your AVDI interface is configured and fully working.

You can receive optional separate installation file of your "Abrites TagKeyTool" software for your AVDI and tag programmer.

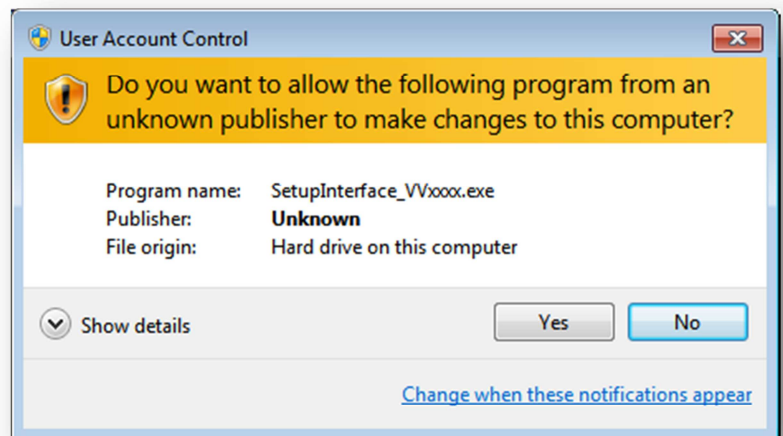
.

Software is a windows executable file named 'SetupTagKeyTool\_VVxxxx.exe' where VVxxxx is your interface identification number.

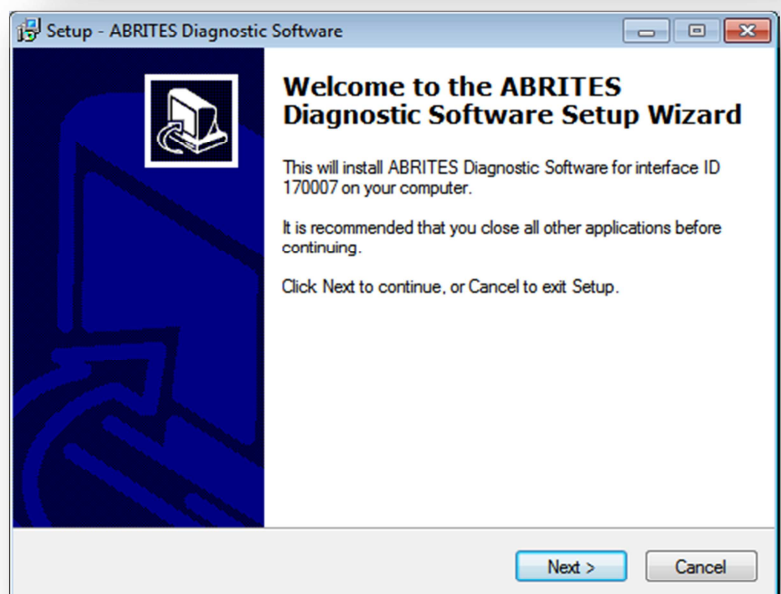
#### 3.1 Software installation steps

Please start the executable file above to initiate installation procedure and follow the onscreen instructions.

Depending of your operation system and settings you can be asked to confirm starting of installation procedure.

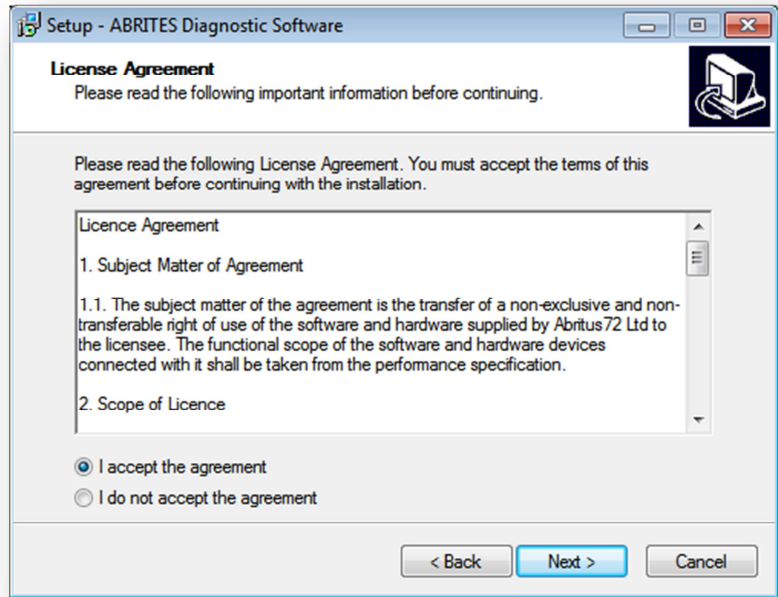


Press "Next" button to proceed with the installation.

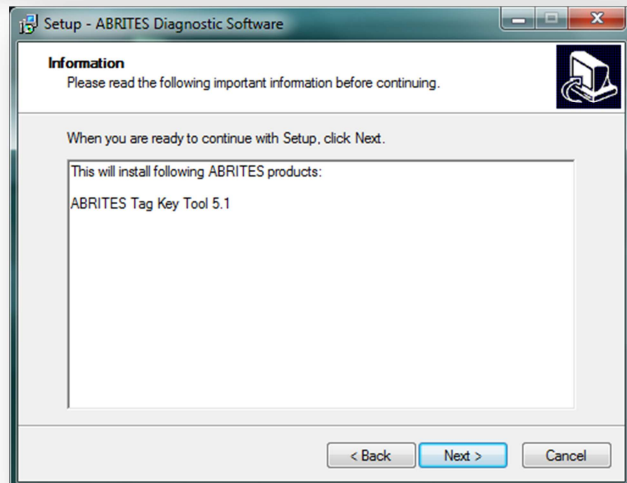


Read carefully license agreement and select "I accept the agreement" if you accepting all. Then press "Next" button.

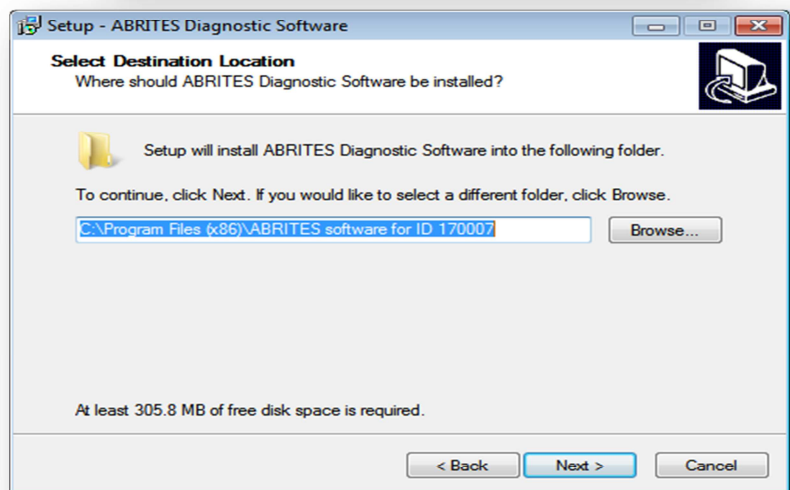
If you not agree press cancel to interrupt installation procedure.



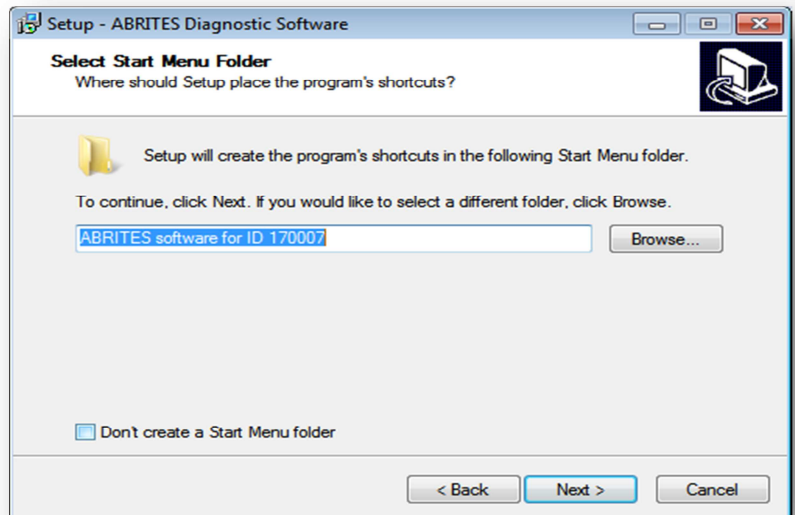
Press "Next" button to proceed with the installation.



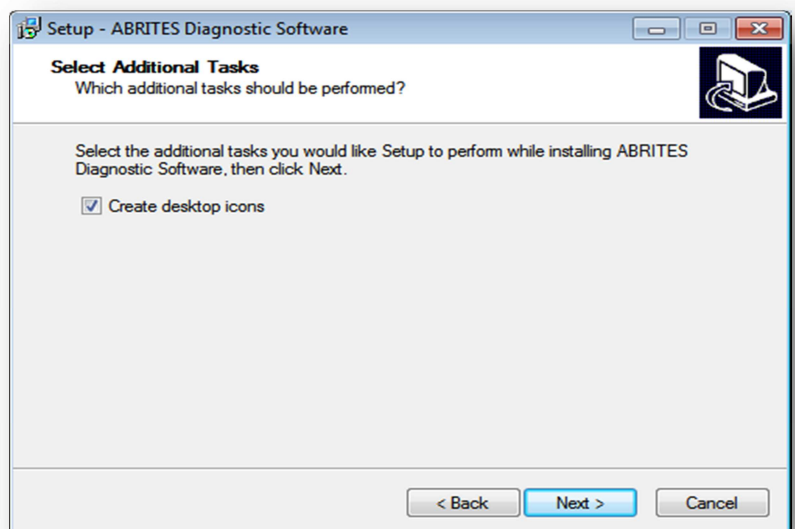
Press "Next" button to proceed with the installation.



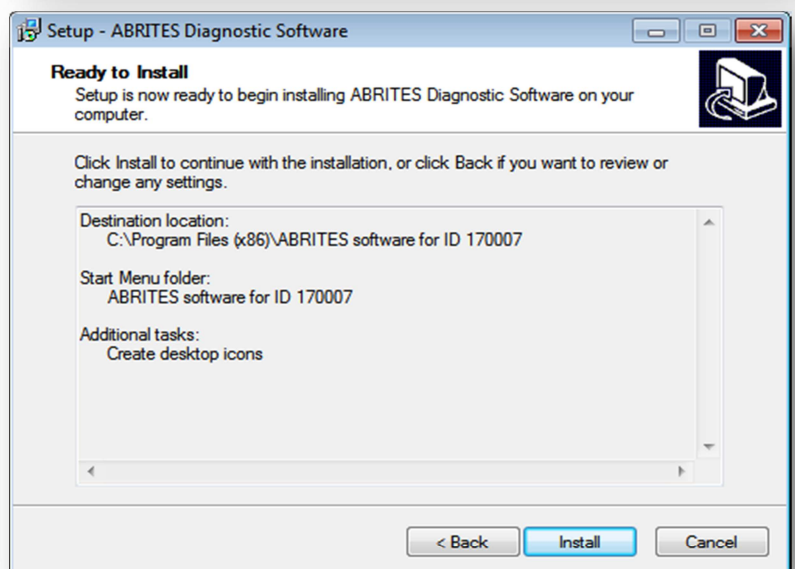
Press "Next" button to proceed.



If you don't want desktop icons uncheck the checkbox about creation of icons. Press "Next" button to proceed.

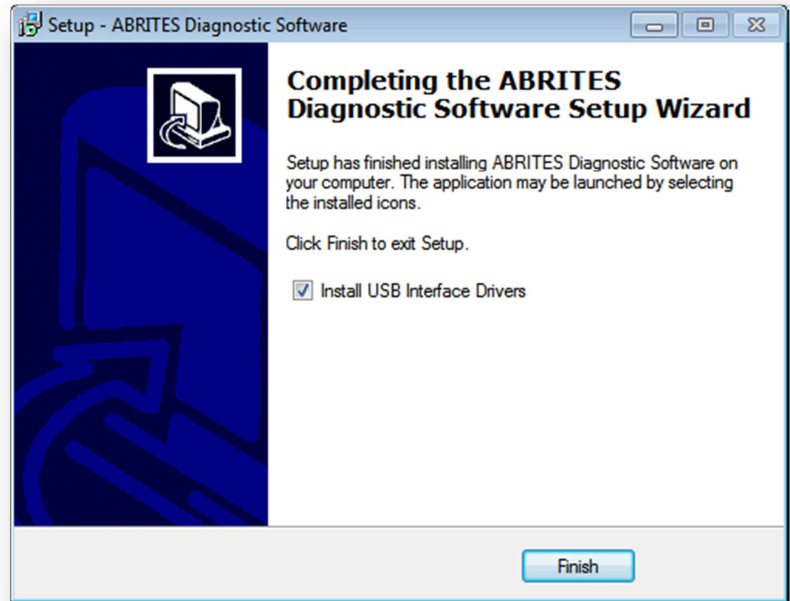


Press "Install" and wait until installation complete.



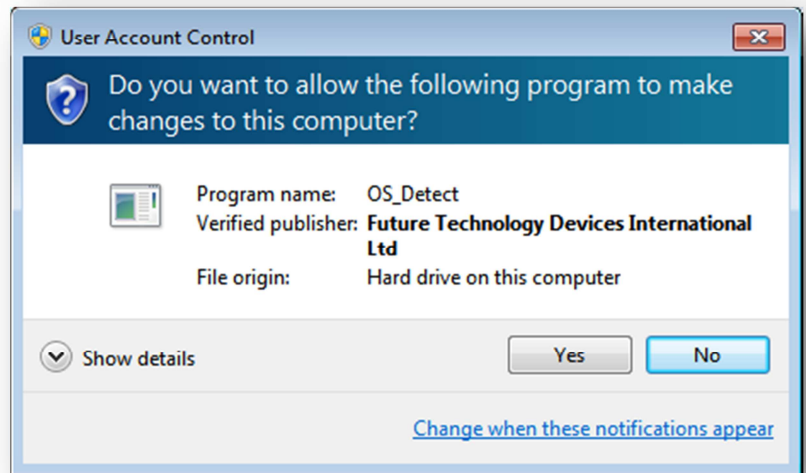
Be sure that checkbox about installation of interface's USB drivers is set especially if you installing for first time Abrates Diagnostic Software.

Press "Finish".

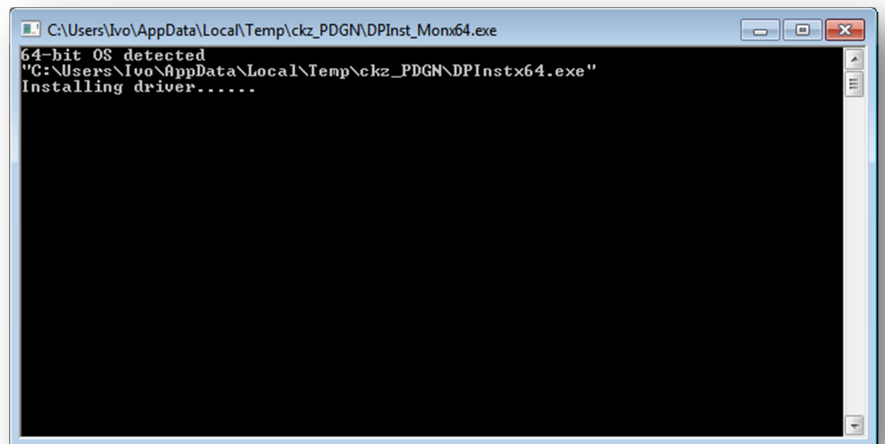


Depending setting of your operation system you can be asked to confirm installation of USB drivers.

Press "Yes".



Wait until installation of USB driver finish.





### **3.2 Connection of the programmer to the interface**

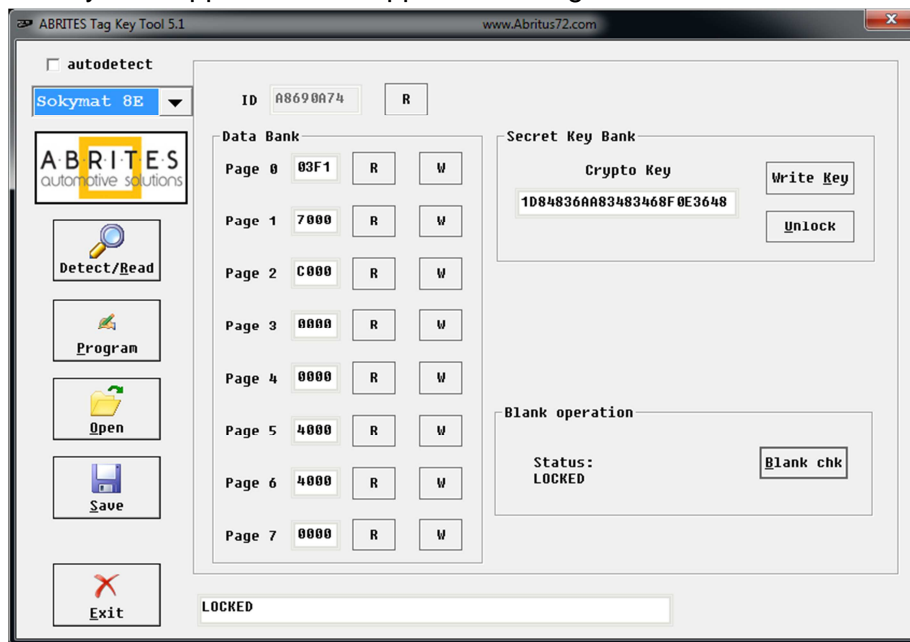
Once your AVDI interface ready for working you can connect TAG programmer to the interface.



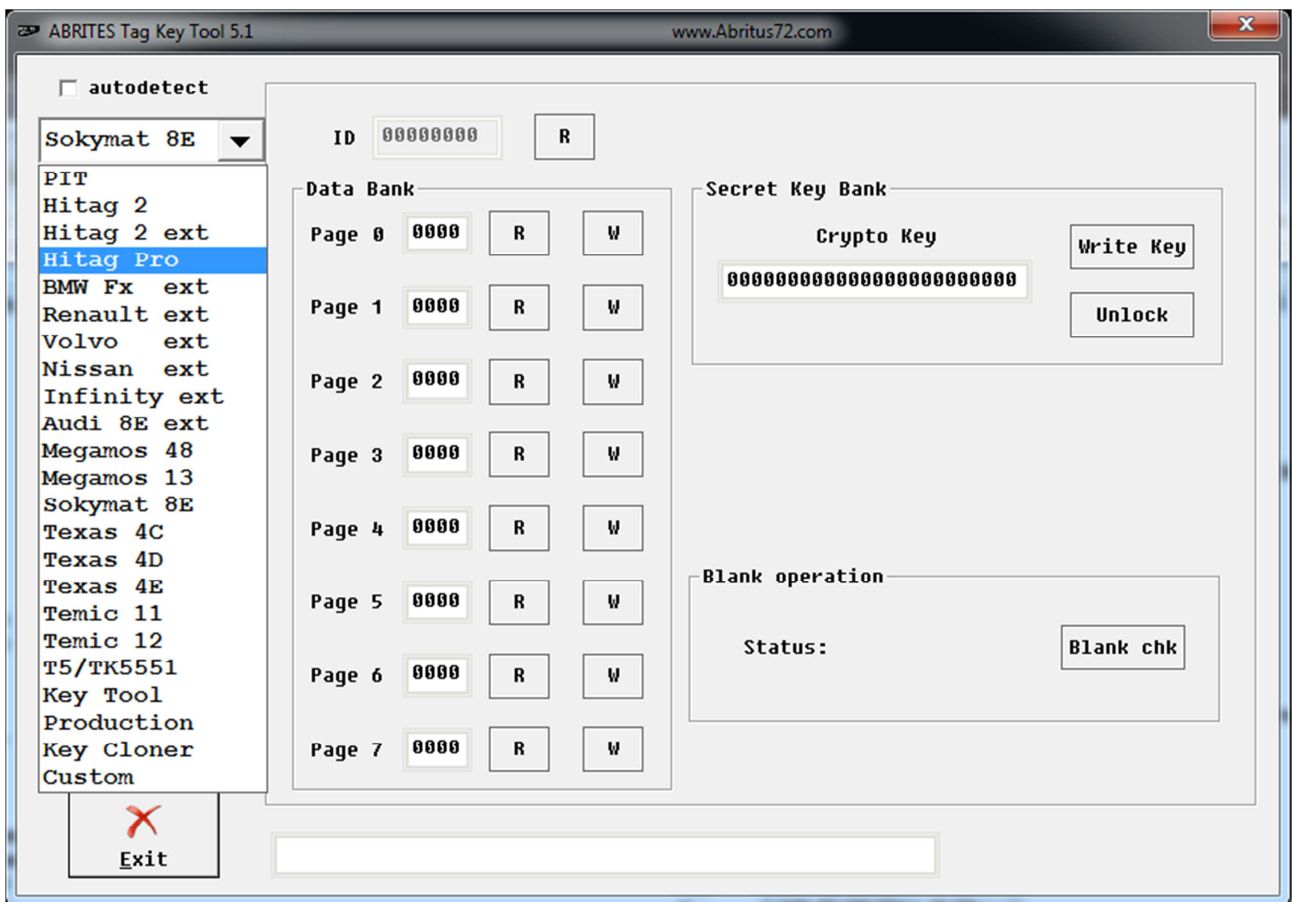
### **3.3 Starting of the software**

When programmer is ready and connected to the interface you can start some of the applications from your installation package. Each of these applications will notify you that TAG programmer is found and will use TAG programmer when is needed.

If you using TAG Key Tool application will appear following screen:



From the drop down list you can select some of needed transponders types or utilities which you needed.



Supported transponders from version 5.1 are:

Philips PIT transponders – PCF7930, PCF7931, PCF7935

HITAG-2 transponders – PCF7936, PCF7941, ....

HITAG-Pro transponders – PCF7937, PCF7938, PCF7939, PCF7952

Megamos 13 transponders (fixed)

Megamos 48 transponders (crypto)

Sokymat 8E transponders

Temic 11

Temic 12

Temic T5

Texas TIRIS 4C (fixed)

Texas TIRIS 4D (crypto) / TPX2

Texas TIRIS 4E (crypto) / TPX2

Also you have ability to access additional EEPROM memory of the keys, to prepare a keys ready for starting of the vehicle using 'Key Tool', to prepare transponders ready for programming by diagnostic equipment – 'Production' and also you can prepare a 'cloning' of a key using function 'Key Cloner'.

## 4 TAG KEY TOOL – WORKING WITH DIFFERENT TRANSPONDERS

Once selected from the drop down list needed for you transponder will appear corresponding screen with options for reading and programming of the fields of the transponder.

The main buttons name “Read/Detect” and “Program” are intended where is possible to read and program whole memory of the transponder.

Many types of transponder are read only and function of the button “Program” is to prepare compatible transponder which can emulate target transponder.

Bellow is emulation list:

Megamos 13 can be emulated with T5 or PIT transponder.

Temic 11/12 can be emulated with T5.

Texas 4C can be emulated with TPX1 (available from version 5.2 of TagKey Tool).

Texas 4D/4E can be emulated with TPX2.

HITAG-2 can be emulated with TPX3/TPX4 (available from version 5.2 of TagKey Tool).

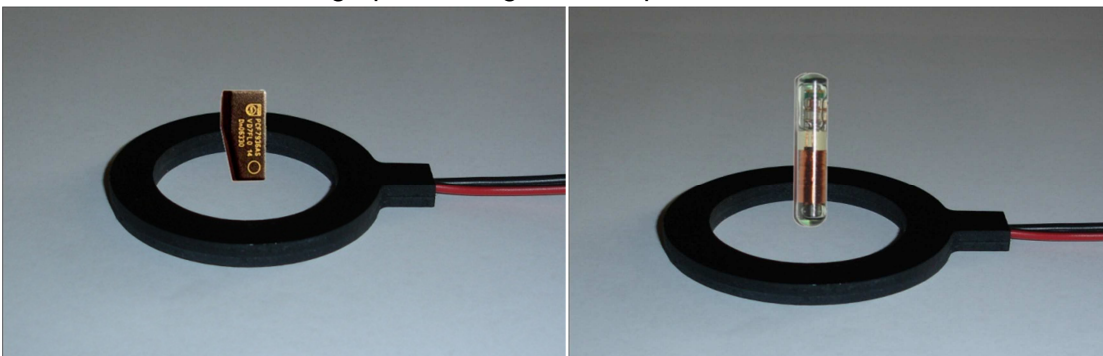
The small buttons “R” and “W” are intended to read or program only separate field from transponder memory.

Please when working with transponder be informed about corresponding transponder specification. Many of the fields from transponder memory can be programmed only once.

Important is place of the transponder when you read or program.

Different transponder and keys have different direction of the fields. Bellow you can see the right positions for different transponders and keys.

Position of the so named graphite and glass transponders:



Position of some keys:



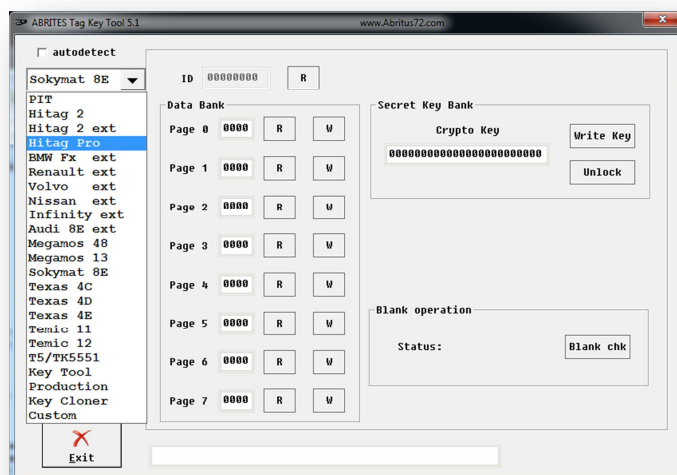
**IMPORTANT:**

Transponder or key should be kept in the right place in the TAG programmer.  
Absolutely never place antenna of the Tag programmer on a metal surface (such as the bonnet or roof of the car).  
It must be at least 50 cm from the metal surface.

## 5 TAG KEY TOOL – KEY TOOL AND PREPARATION OF A KEY BY DUMP OF IMMOBILIZER SYSTEM

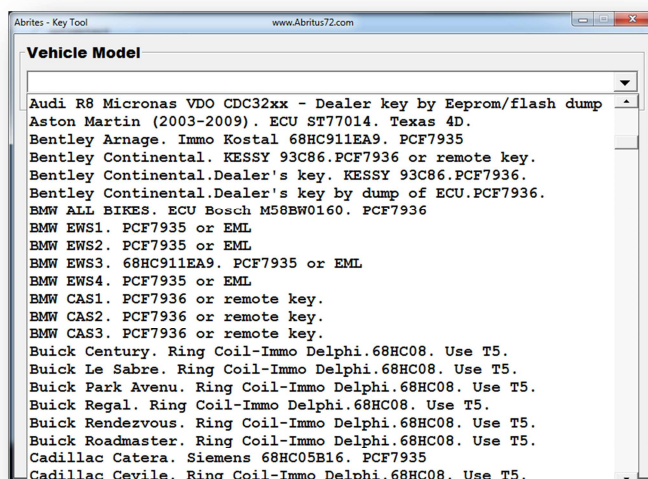
“Key tool” is an utility intended for preparation of a key when is present dump from immobilizer system of the vehicle.

From the list of transponders and functions of the main screen you can select this utility.



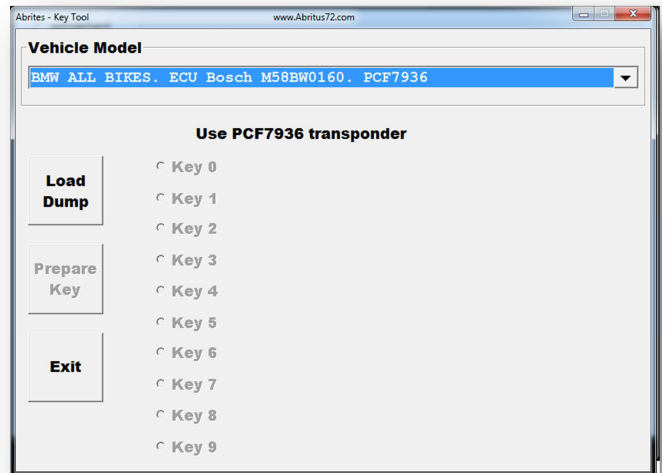
Once selected key tool will appear a screen with drop list from where you can select your model and immobilizer system.

In the list is described the model, immobilizer module, type of memory where is stored key data and needed transponder/key for programming.



When model is selected next your step should be to load file consist immobilizer data (dump).

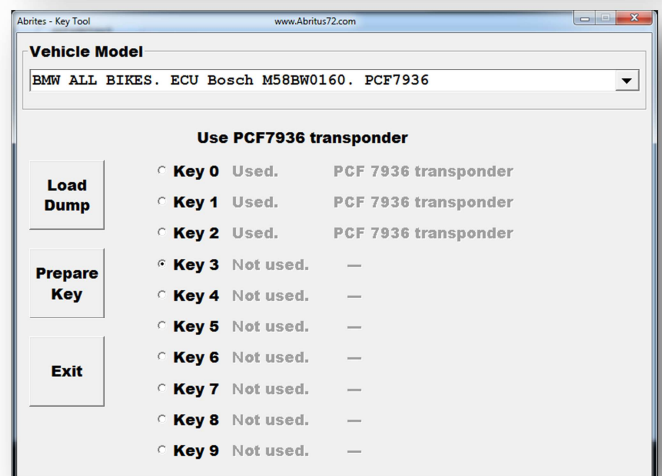
You can load the dump pressing button "Load Dump".



When dump is loaded you should select which exactly key position you want to be programmed.

Remaining is to place your transponder/key on the programmer's antenna and to press the button "Prepare Key".

When programming of the transponder finish if is needed you will be asked for the file name of the modified dump.



NOTE: Because different programmers can read from the immobilizer dump differently - NORMAL or SWAPED, if after programming the transponder/key it does not work, you need to SWAP dump after that load back into the software and program a new key or transponder.

## 6 TAG KEY TOOL – PRODUCTION UTILITY AND PREPARATION OF A KEY READY FOR PROGRAMMING BY DIAGNOSTIC EQUIPMENT

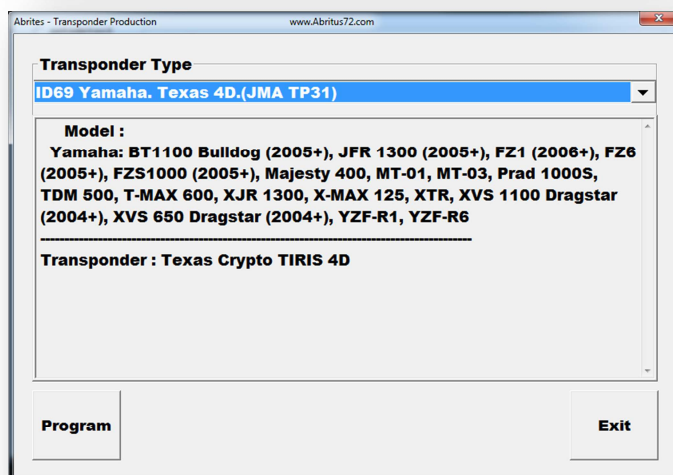
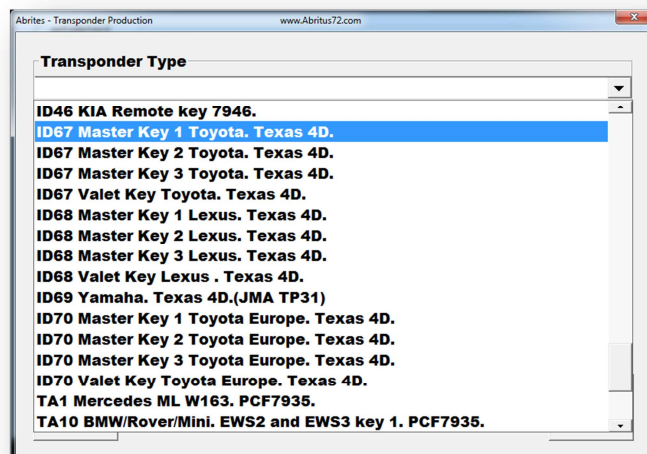
“Production” is an utility intended for preparation of transponders ready for programming by diagnostic equipment.

From the list of transponders and functions of the main screen you can select this utility.

From the screen of “Production” utility you have to choice which type of transponder key want to be prepared. Then simply place your transponder/key on the programmer’s antenna and to press the button “Program”.

When programming of the transponder finish if is needed you will be asked for the file name of the modified dump.

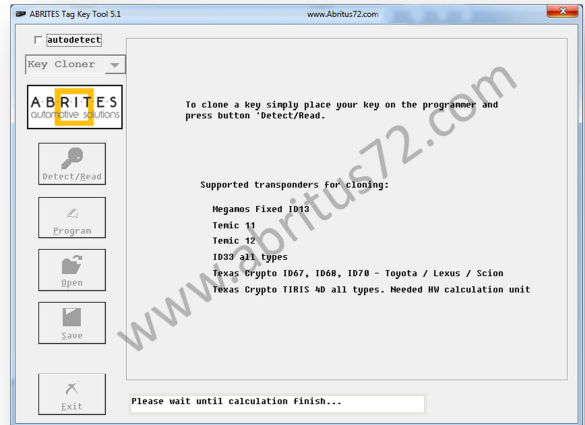
Information about needed transponder is displayed.



## 7 TAG KEY TOOL – CLONING OF A KEY

The function cloning allow you to prepare a cloning of some key. Supported keys/transponders for cloning currently are : Megamos 13, Temic 11, Temic 12, Toyota/Lexus/Scion Texas TIRIS 4D and all types ID33.

When existing key is placed on the programmer's antenna press the button "Read/Detect". Programmer will read the key and will show you a message what kind of transponder to place on the programmer to prepare cloned transponder.



If you have INTERNET connected to your PC, you've the ability to cloning all kind of TIRIS 4D transponders not only Toyota/Lexus/Scion Texas 4D (ID67, ID68, ID70).