X74Ph2 Hands-Free Card Renew

For Renault ECU Tool interface

Short User Manual

Immo Tools.lt

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Software and further user manual applies to silver colour 3 button card with Hands-Free used in Laguna II Ph2 (X74) / Espace IV (X81).

NOTE: Procedure described below produces 100% correctly prepared card. Please look for programming faults in the process of reset-to-virgin if card is rejected during learning to car and if RF remote or Hands-Free does not work. Also please check PCB for a physical damage.

- Open the card by cutting edge of plastic casing carefully.
  Card consist of two separate units – transponder **PCF7936** and PCB with RF remote control and Hands-Free (HF) circuitry with MCU and **EEPROM 25AA040**
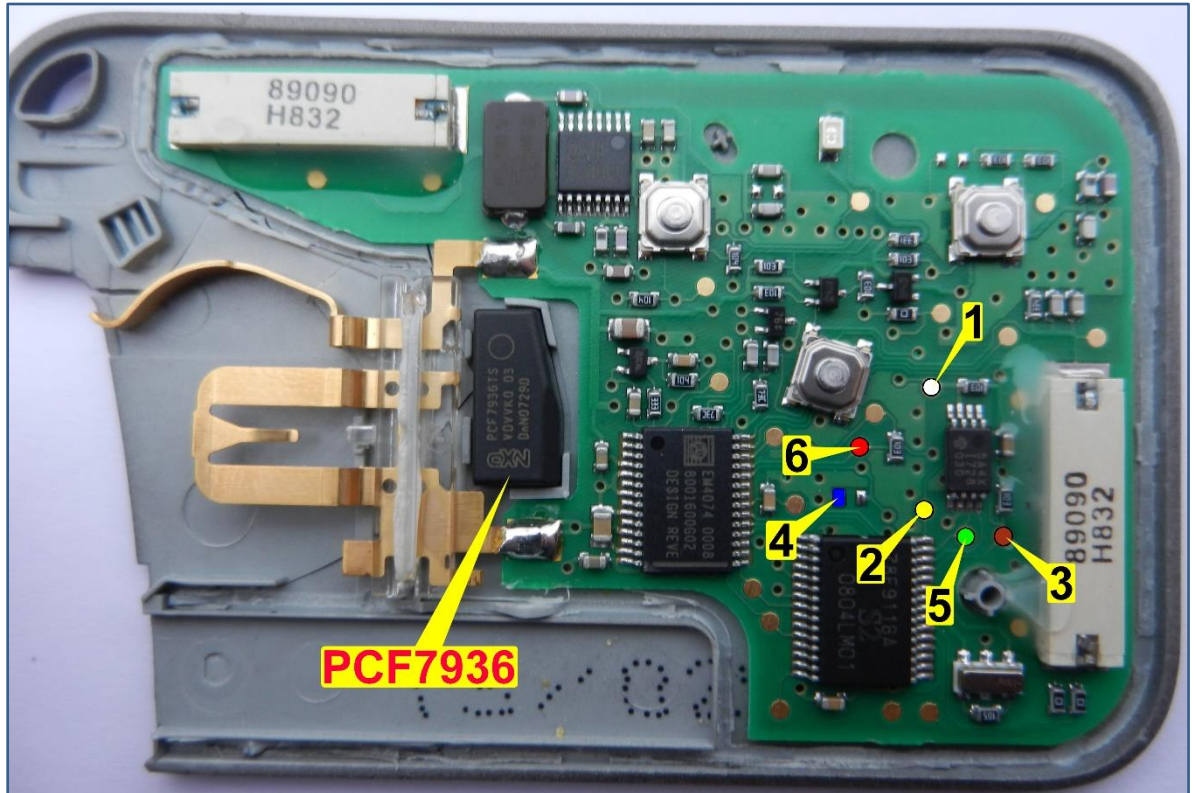
- To erase programmed values from card you need **EEPROM** programmer for **25040** and **Hitag2** programmer for **PCF7936**.

- Use **EEPROM programmer** with in-circuit programming capability. Solder wires to PCB according pin numbering in the picture. Wire colors in the picture matches Carprog A4 cable, but any other programmer will be good here – just follow EEPROM pin numbers. We intentionally did not specified connection point for pin 8 – power supply to EEPROM. Most of EEPROM programmers provide +5V to pin 8, but this voltage is too high for PCB that is normaly supplied from +3V and can cause damage.

> **NOTE:** **To maintain power supply to EEPROM please attach 3V button cell battery to the card during EEPROM R/W!**

- Read EEPROM and save to file

- Connect Renault ECU Tool interface to PC, run software and select <**HANDS-FREE CARD RENEWAL FOR LAGUNA II PH2 / ESPACE IV**>. Click button <**Load EEPROM Dump**> to load EEPROM file to the software. File size must be 512 bytes.

- Press button <**Reset Card Data**> - dilalog STEP#1 will pop-up:

STEP #1

Original PCF7936

○ Card contain original PCF7936

◉ PCF7936 is lost

OK

Cancel

Replacement PCF7936

ID of replacement PCF7936: **D8 75 4B 19**

Select <**Card contain original PCF7936**> if original PCF7936 is available.

Select <**PCF7936 is lost**> if original transponder is missing and you are going to replace it with new blank PCF7936. If this is a case, please read ID of replacement transponder using Hitag2 programmer and enter it to yellow fields before to proceed to the next step.

- Press <**OK**> button. Next dialog will pop-up:

Data for VIRGIN Card (Original PCF7936 available)

Data to be programmed to original PCF7936

Pg.0	ID	30 B3 BB 1A
Pg.1	PASSWORD / ISK_LOW	
Pg.2	RESERVED / ISK_HIGH	
Pg.3	CFG / PSW	
Pg.4	USER_0	
Pg.5	USER_1	
Pg.6	USER_2	
Pg.7	USER_3	

XX = Leave as is

ISK for unlock original PCF7936

ISK_LOW **3B 6B 85 27**

ISK_HIGH **E0 9E**

Save VIRGIN EEPROM Dump

Save PCF7936 Data to Text File

Close

- Save VIRGIN EEPROM dump to file. Later you must to program it back to card

- Save PCF7936 data to text file. Data that you see in current dialog will be saved

- Run Hitag2 programmer and enter ISK for transponder unlock. Set factory ISK for blank replacement transponder when original transponder is lost:
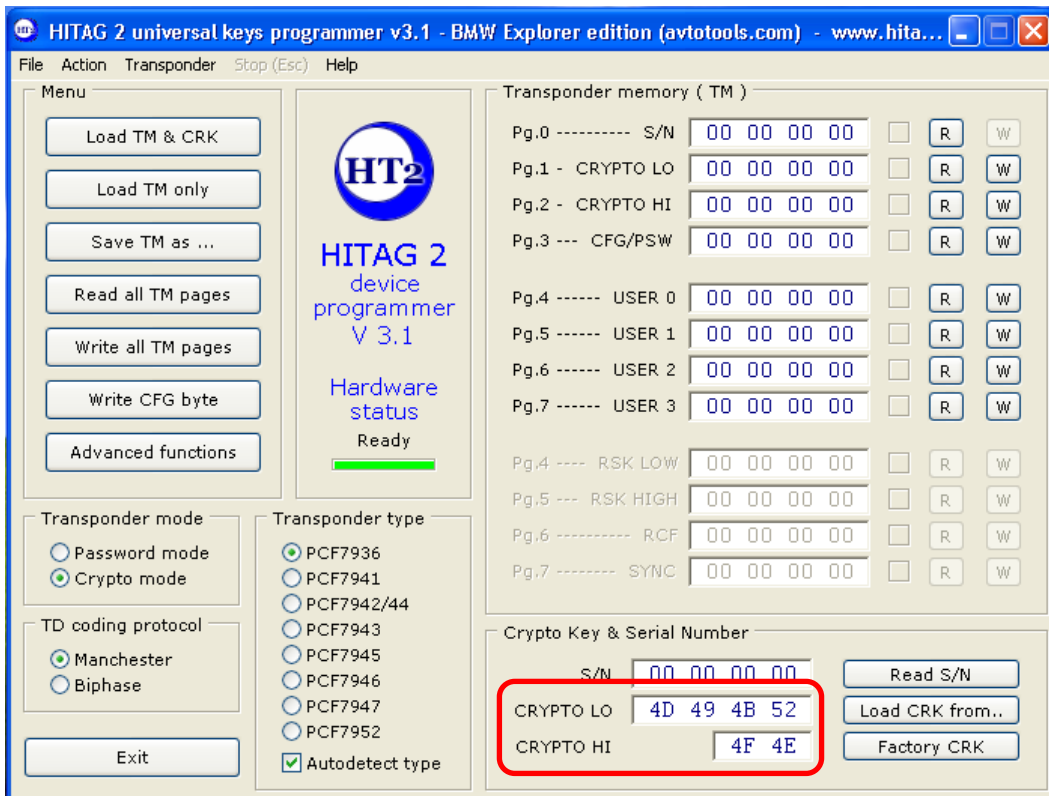
Use ISK, extracted from EEPROM if original transponder is available:
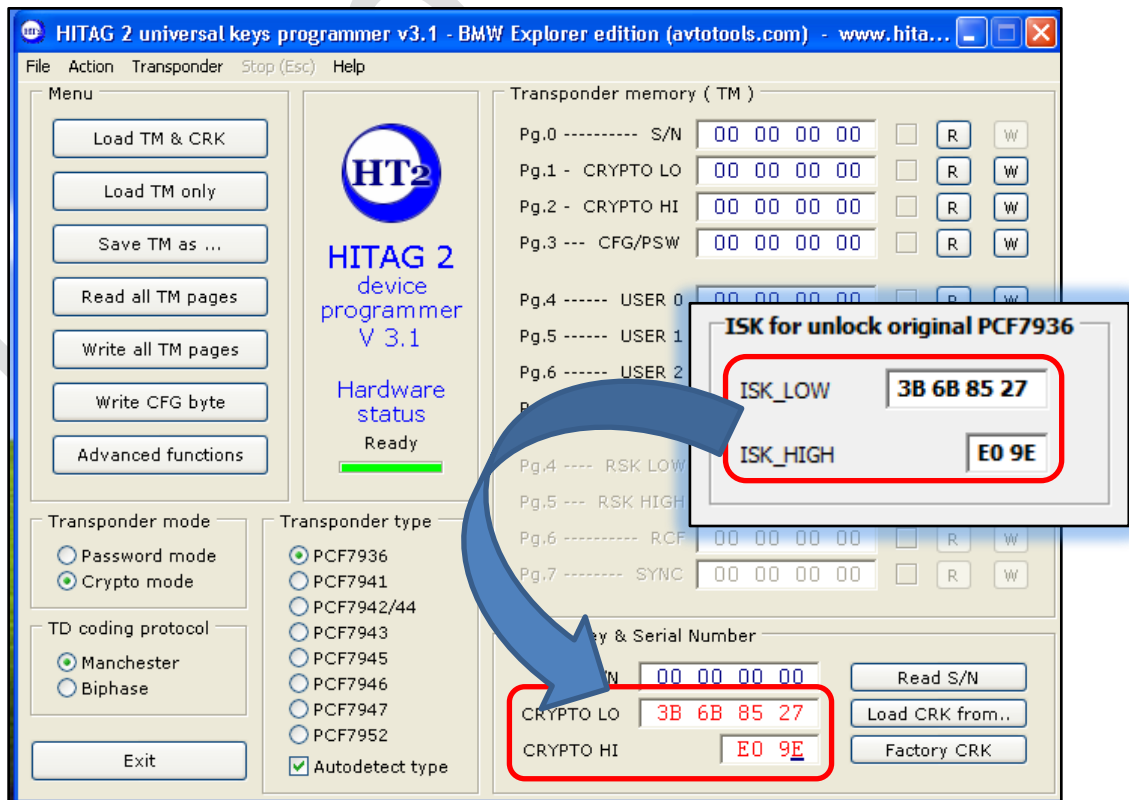
- Page by page write calculated data to PCF7936

- Write virgin data to EEPROM on the card

- Done – you got virgin card and now it is ready to be learned to any car