

# Key Reader feature in ASW

## User manual



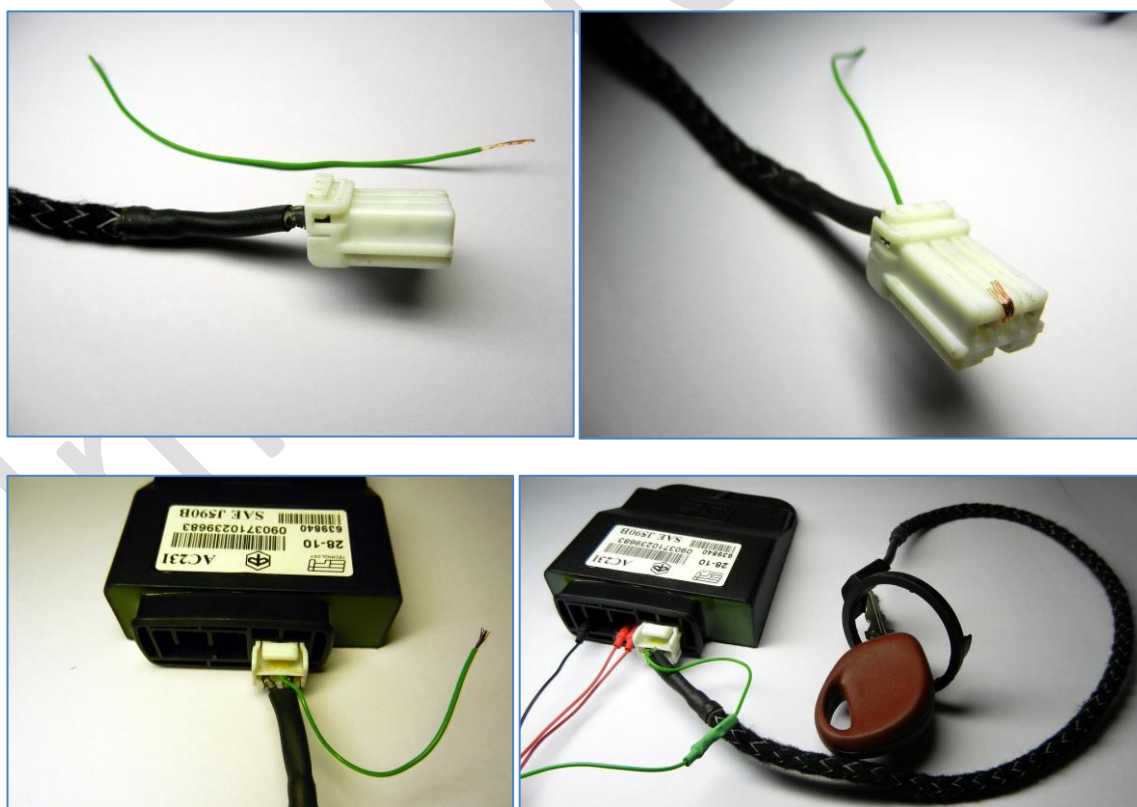
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## 1. Introduction

Starting from V2.83, ASW software incorporates transponder key data read function for **EFI TECHNOLOGY** CDI units. Transponder data is captured from key in the ignition lock by **K-Line**. This feature can be really useful for customers that have no transponder reader and therefore have no possibility to write key data directly to the memory dump of CDI or immobilizer control unit. Now any **EFI TECHNOLOGY** CDI unit can serve as a simple key reader for TEMIC-11 transponders. **Transponder data that has been read using reader, based on the EFI TECHNOLOGY CDI, can be programmed into memory of any CDI or immobilizer unit manufactured by any other manufacturer where TEMIC-11 is used.**

## 2. How to connect

K-Line in the most of **EFI TECHNOLOGY** CDIs (non EURO3) is located in the middle of 3-pin immobilizer antenna connector, as you can see in the connection manual. This pin became inaccessible when antenna connector is connected. This can be simply solved by using a short piece of wire: strip its insulation for about 1cm, insert into place of middle pin of connector and bend it. This will assure reliable connection. Refer to connection manual when connecting power supply “on-the-bench”.



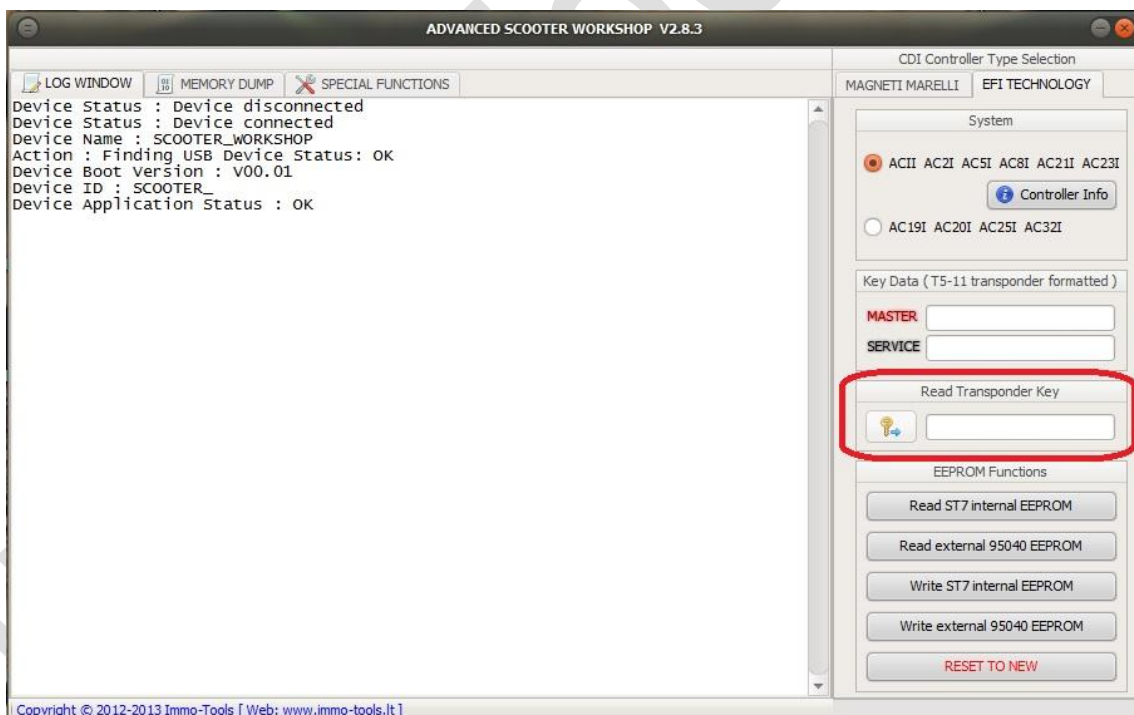
**Scooters with EURO3 CDI AC19I / AC20I / AC25I / AC32I have diagnostic connector – connect green wire of ASW to this connector (see connection manual).**

### 3. Reading the key

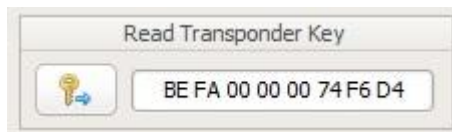
Insert key you want to read into ignition lock of a scooter and turn ignition to ON. Place key in the antenna ring if reading “on-the-bench” or if key doesn’t fit the lock.



Start **ASW** application and select **EFI TECHNOLOGY** in the system type selection. It is not necessary to select exact system type – transponder read procedure is same for all types of **EFI TECHNOLOGY** CDIs.



Press button with a key pictogram to read transponder data:



**NOTE:** cycle ignition OFF/ON before to read next key.

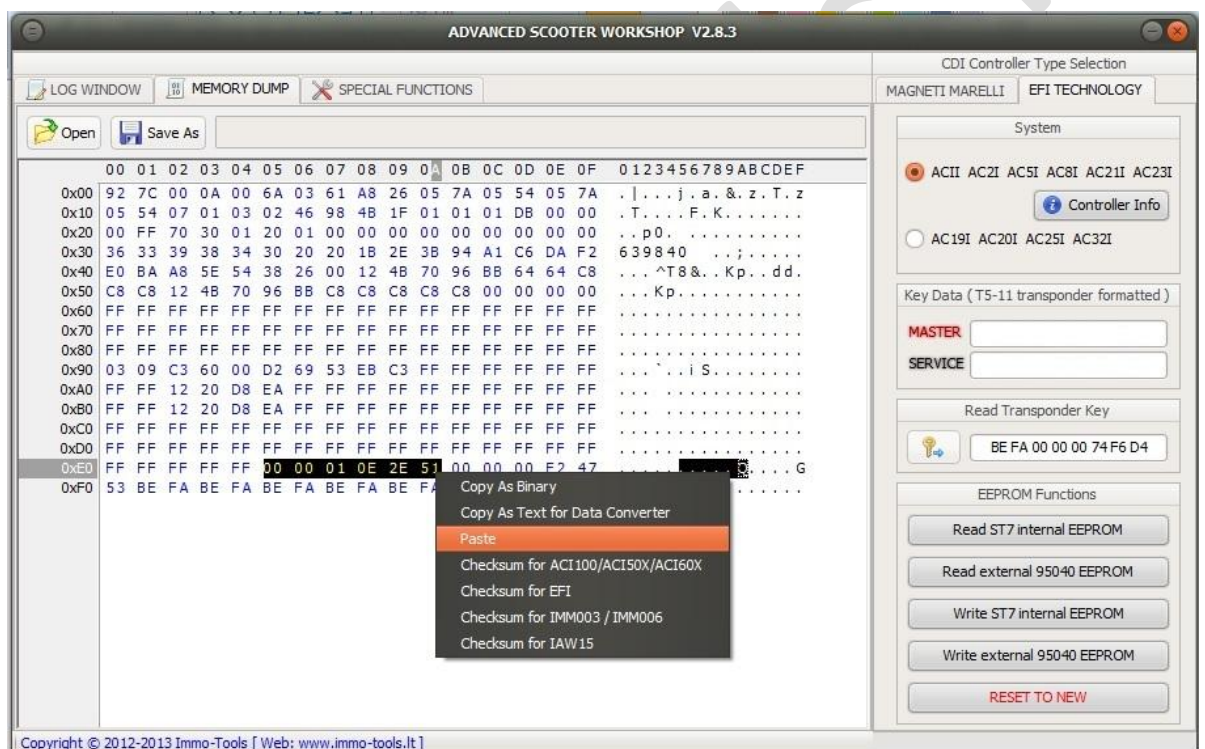
## 4. Transferring transponder data to the file

Transponder data can be copied to the desired file easily, after key has been read. Press right mouse button in the transponder data field:

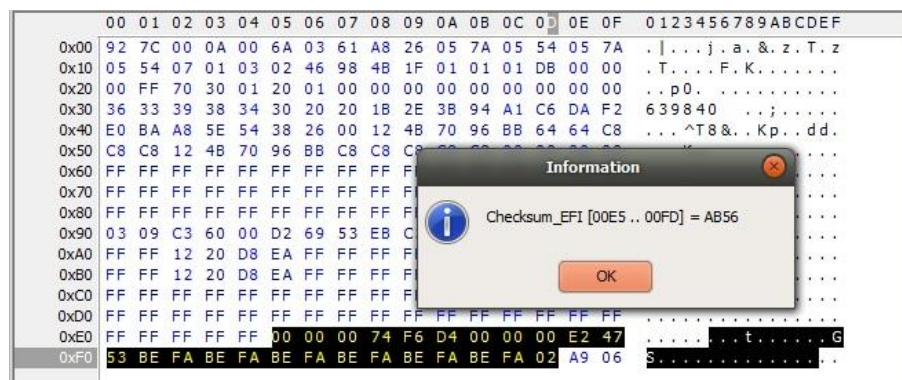


Select **Copy All** for MIU controllers, select **Copy last 6 bytes** for most controllers where 6 bytes of key data is stored. Data will be copied into the clipboard.

Select 6 or 8 bytes of key data in the memory dump: 6 bytes if **Copy last 6 bytes** has been used to copy, 8 bytes if **Copy All**. Right click with mouse on a selection and press **Paste**.



Data will be transferred to the memory dump. Select key data block and right-click on it to calculate CRC. Fix CRC value in the file. Now you can write this file into memory of CDI controller - transponder key has been assigned!



## 5. Copyright information

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