CODECARD.LT

CARPROG

Introduction to reading an EEPROM

Using the CarProg, the user can read an eeprom using various methods. One popular method is on the PCB (Printer Circuit Board) and in most cases, the eeprom can be read. Some examples are the 24C02, 24C04, 24C08, 24C16 and others can be the 83C86 and 95080. In some occasions, the eeprom may not be read and an oscillator **may need to be shorted. In other cases, the eeprom may need to be removed to be read.**
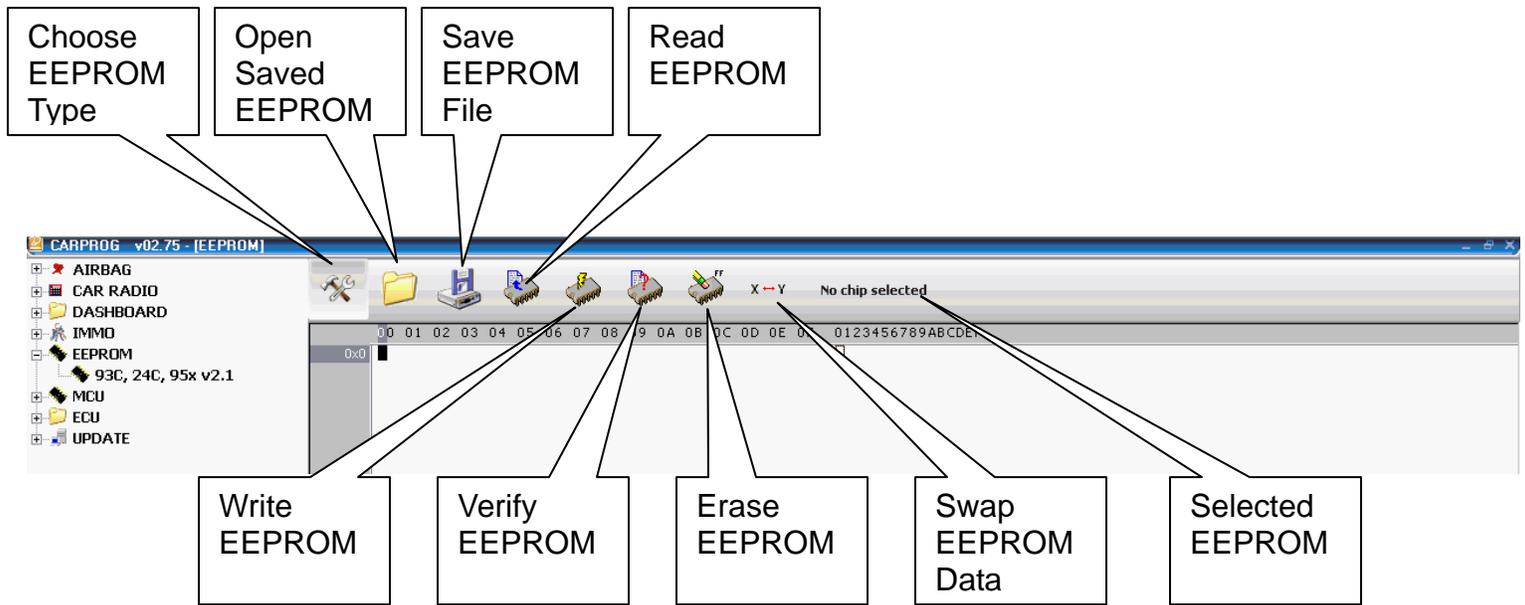
These are generic examples of some eeproms that were read off-board. The first operation is that the Carprog should be updated at least once a week for the latest software revisions.

Connect the CarProg and open the program. Choose "UPDATE" and wait until the updates are completed.

Choose the EEPROM tab and follow the menu descriptions below.

Always use an anti-static pad when working with sensitive electronic devices
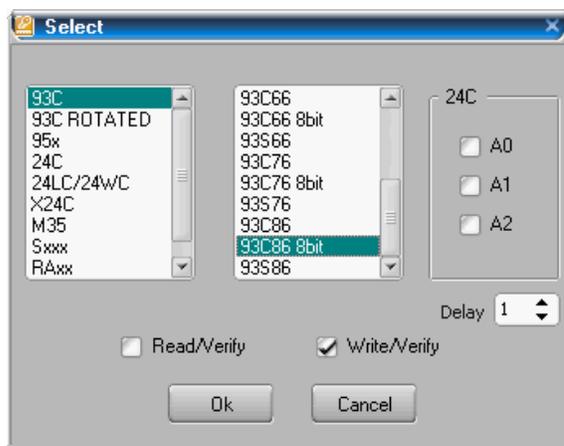
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Choose
EEPROM
Type

Open
Saved
EEPROM

Save
EEPROM
File

Read
EEPROM

CARPROG   v02.75 - [EEPROM]

AIRBAG
CAR RADIO
DASHBOARD
IMMO
EEPROM
93C, 24C, 95x v2.1
MCU
ECU
UPDATE

X ↔ Y   No chip selected

00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F 0123456789ABCDEF

0x0

Write
EEPROM

Verify
EEPROM

Erase
EEPROM

Swap
EEPROM
Data

Selected
EEPROM

Inspect the EEPROM that needs to be read. There will be a series of numbers to inspect in order to correctly identify and connect the eeprom to the clip. It is advised that users be familiar with the eeprom types and connections. Searches can be done to find the correct data sheets for the eeprom.

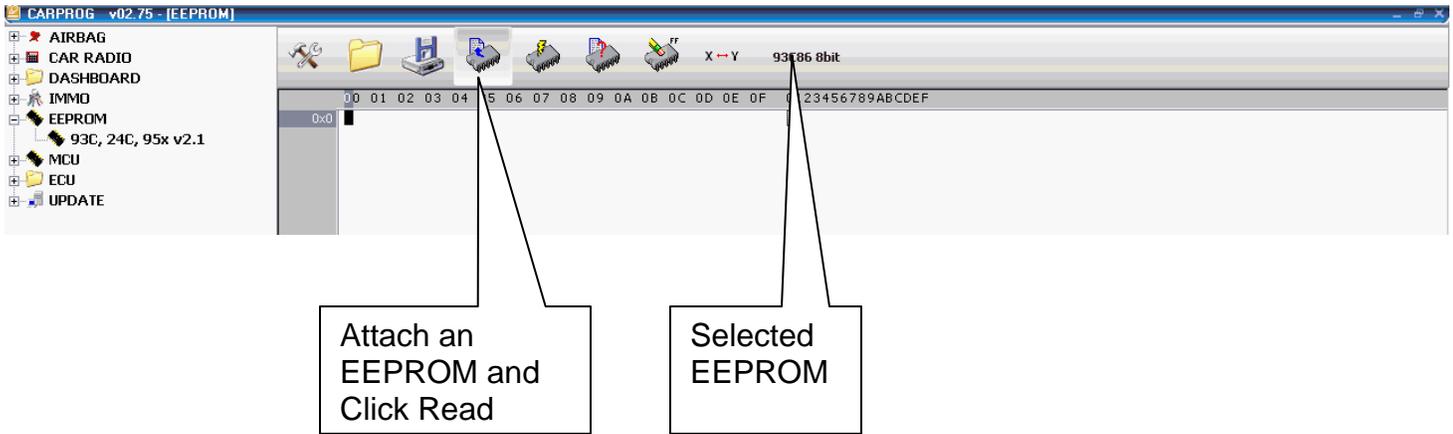This is an example of an eeprom search page.
http://www.datasheetcatalog.com/datasheets_pdf/9/3/C/8/93C86.shtml

This example is the 93C86 EEPROM that was found in the menu
[Choose EEPROM Type]

Select

93C
93C ROTATED
95x
24C
24LC/24WC
X24C
M35
Sxxx
RAxx

93C66
93C66 8bit
93S66
93C76
93C76 8bit
93S76
93C86
93C86 8bit
93S86

24C
☐ A0
☐ A1
☐ A2

Delay 1 ↕

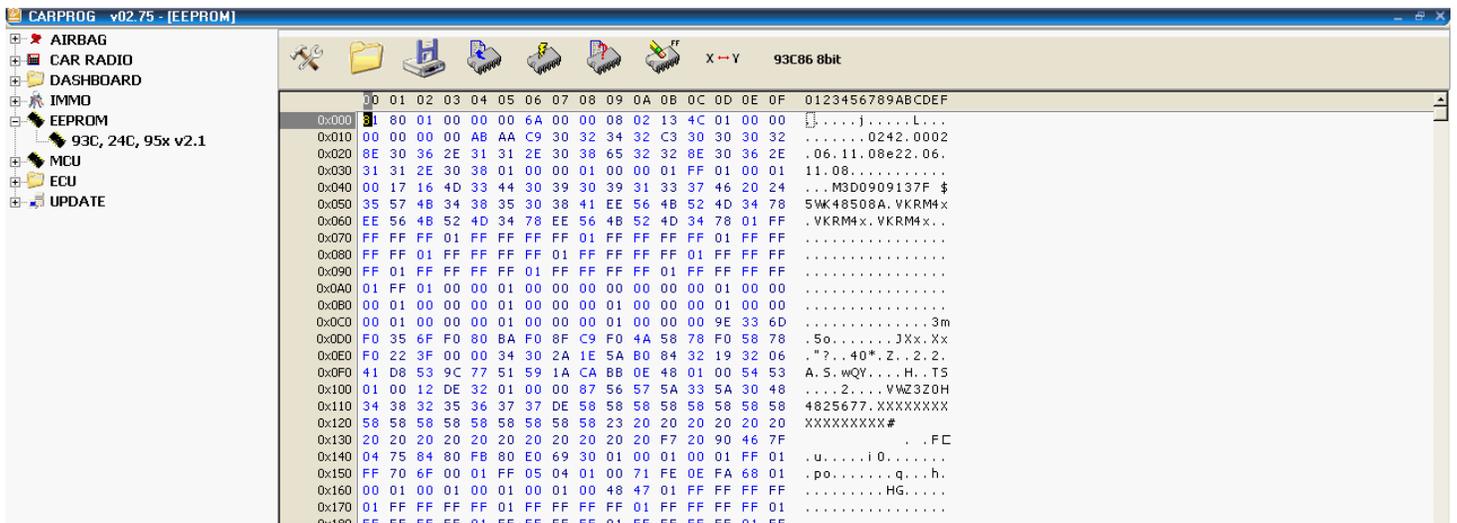☐ Read/Verify   ✔ Write/Verify

Ok   Cancel

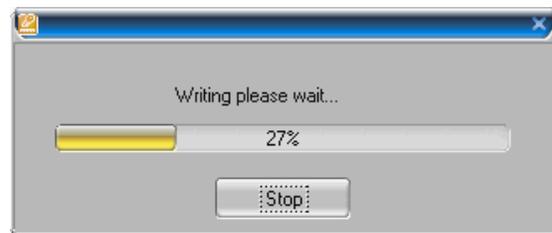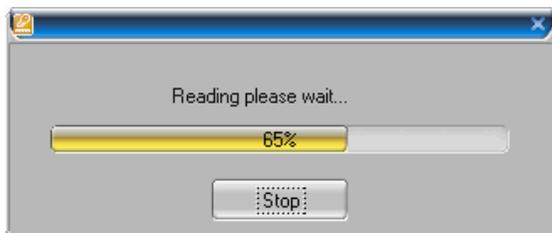Once the correct EEPROM is found in the list, the EEPROM type is illustrated in the image below.
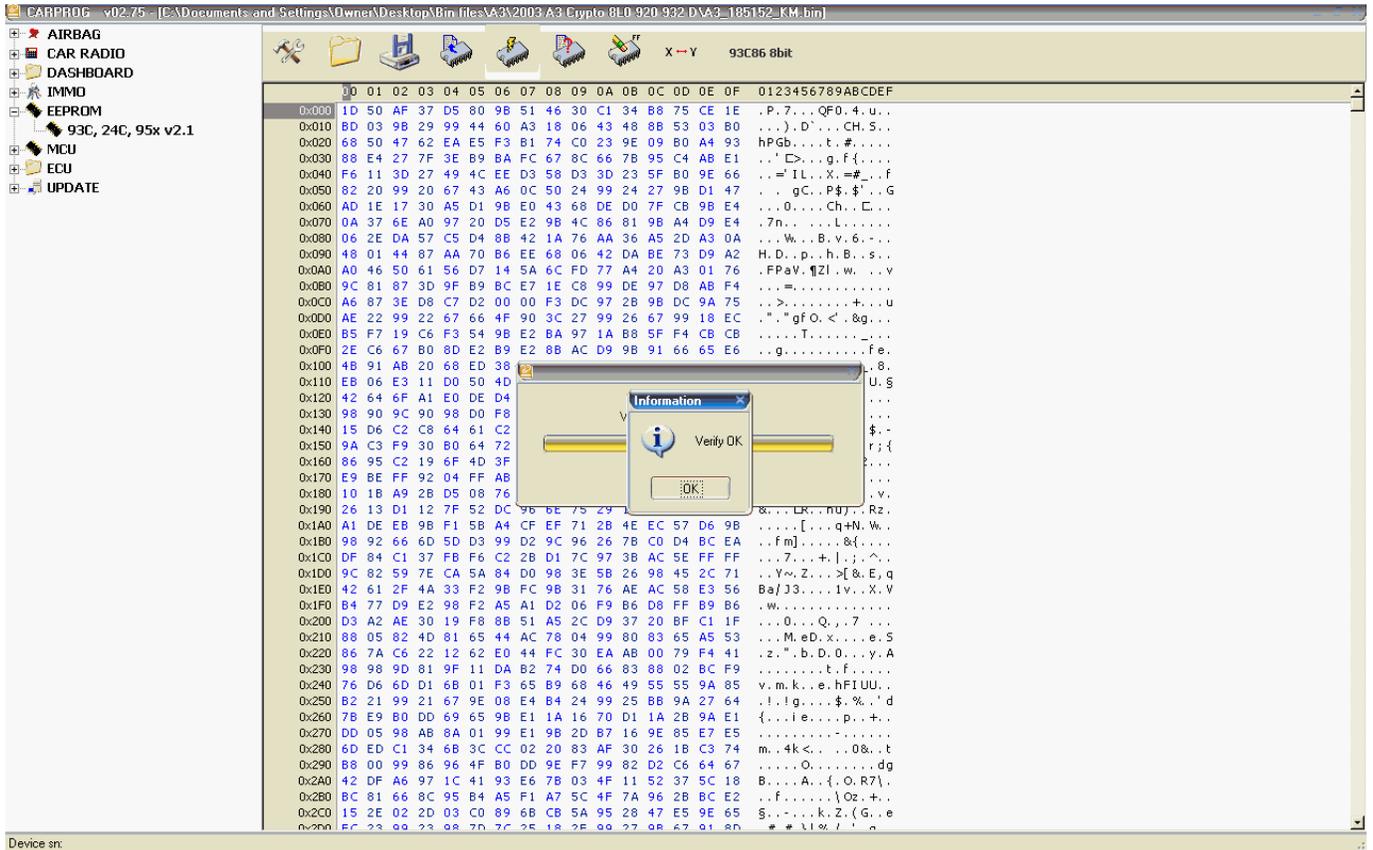
Click OK.

This is a partial example of a 93C86 EEPROM read into the window.

Reading and writing an EEPROM will bring up separate windows. These windows will inform the user of the functions that are being performed. The images below are an example of what the user should see.

Sometimes the user will need to write data to the EEPROM from a saved file or a new – edited file to an EEPROM. When the process is complete, the lower image will inform the user that it is verified.


The next image is of a different EEPROM that was read on-board. The 95080 was chosen and read into the window. Remember to [Choose EEPROM Type]
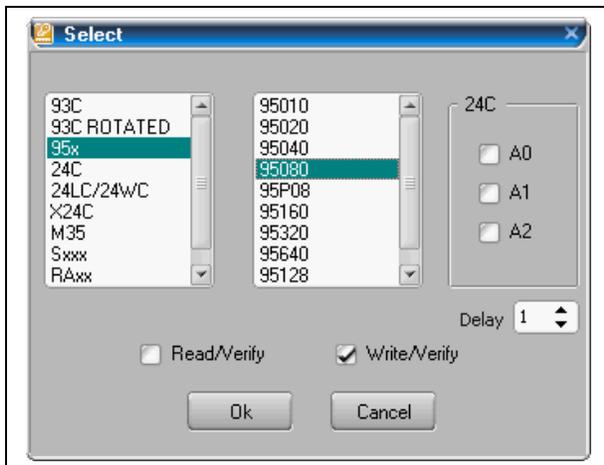
Once the correct EEPROM is found in the list, the EEPROM type is illustrated in the image below.

Click OK.

This next image will give the user the choices of editing and or saving the file that was read from an EEPROM. The user can open a saved file and get the same results and write to an EEPROM.
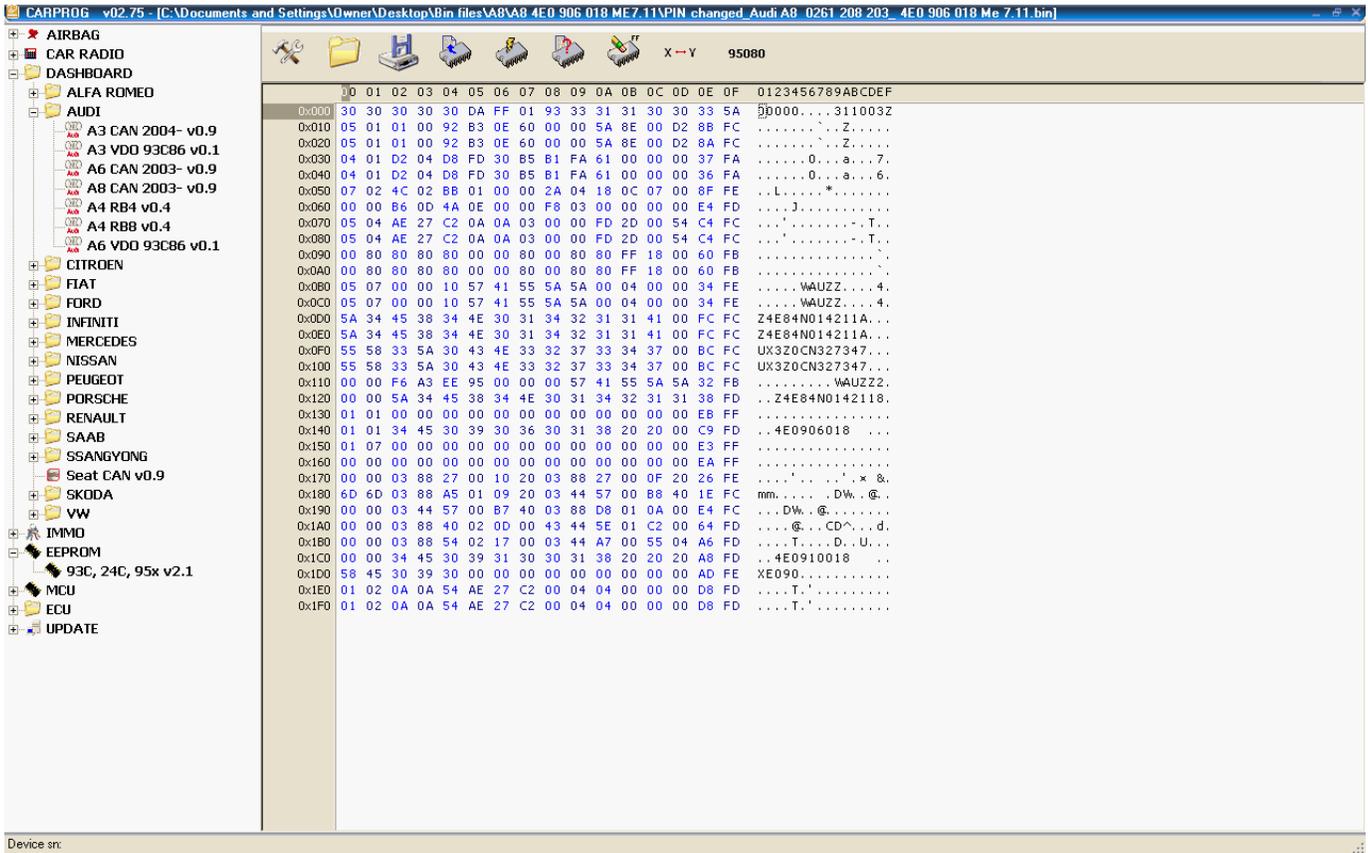
Follow this advice to gain practice and save future mistakes.
1. Inspect the EEPROM clearly
2. Find the correct EEPROM data sheet
3. Read the EEPROM using the correct EEPROM type
4. Save the EEPROM data to a folder and file name
5. Save all edited EEPROM tests with new file names
6. Practice using older or new EEPROMS
7. If required, use a perfectly clean power supply to all controllers and the CarPog device.
8. Update the CarProg weekly
9. Remember that static electricity will harm electronic devices