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## Safety Precautions

***To avoid personal injury, instrument damage and/or damage to your vehicle; do not use the VAG5053 before reading this manual.***

This manual describes common test procedures used by experienced service technicians. Many test procedures require precautions to avoid accidents that can result in personal injury, and/or damage to your vehicle or test equipment. Always read your vehicle's service manual and follow its safety precautions before and during any test or service procedure.

**ALWAYS** observe the following general safety precautions:

- When an engine is running, it produces carbon monoxide, a toxic and poisonous gas. To prevent serious injury or death from carbon monoxide poisoning, operate the vehicle **ONLY** in a well-ventilated area.
- To protect your eyes from propelled objects as well as hot or caustic liquids, always wear approved safety eye protection.
- When an engine is running, many parts (such as the coolant fan, pulleys, fan belt etc.) turn at high speed. To avoid serious injury, always be aware of moving parts. Keep a safe distance from these parts as well as other potentially moving objects.
- Engine parts become very hot when the engine is running. To prevent severe burns, avoid contact with hot engine parts.
- Before starting an engine for testing or trouble-shooting, make sure the parking brake is engaged. Put the transmission in park (for automatic transmission) or neutral (for manual transmission). Block the drive wheels with suitable blocks.
- Connecting or disconnecting test equipment when the ignition is ON can damage test equipment and the vehicle's electronic components. Turn the ignition OFF before connecting the VAG5053 to or disconnecting the VAG5053 from the vehicle's Data Link Connector (DLC).
- To prevent damage to the on-board computer when taking vehicle electrical measurements, always use a digital multimeter with at least 10meg Ohms of impedance.
- Fuel and battery vapors are highly flammable. To prevent an explosion,

keep all sparks, heated items and open flames away from the battery and fuel / fuel vapors. DO NOT SMOKE NEAR THE VEHICLE DURING TESTING.

- Don't wear loose clothing or jewelry when working on an engine. Loose clothing can become caught in the fan, pulleys, belts, etc. Jewelry is highly conductive, and can cause a severe burn if it makes contact between a power source and ground.

# About VAG5053

## 1. Applications

VAG5053 is a powerful, affordable handy scanner designed for all VW, AUDI, SKODA, and SEAT vehicles. It is small in size, robust in design, competitive in price and easy to use. With only 10% of the cost of a large special tool, it can nearly do the same work as that of a VAG1551/1552. This is a stand alone unit; it does not need a laptop computer to operate.

## 2. Available Functions

- Control Unit Information
- Read Fault Codes
- Measuring Blocks
- Clear Fault Codes
- Basic Setting
- Adaptation
- Single Reading
- Output Tests
- Code Module
- Login
- Service Oil Reset
- Code Modes
- Dealership Code Set

## 3. Supported Systems

VAG5053 can support the following systems:

- Engine
- Transmission
- Airbag, etc.

## 4. Main Features

- Low price: the price is only about 10% of that for a large special tool
- Powerful functions: it can nearly do the same work as that of a VAG1551/1552
- Powered via diagnostic connector, no additional power is needed
- Plug and play, ease to use

- High reliable and accurate

## 5. Appearance and Key Descriptions



The appearance of a VAG5053 is as shown in the above figure.

1. LCD screen: 128\*64
2. Enter key: confirm selection and enter
3. Esc key: go back to the previous screens
4. up/down arrows: moves the selection pointer and scrolls up or down
5. LEFT/RIGHT arrows: move cursor.
6. Power button
7. Diagnostic extension cable: OBDII -16PIN

# Operation Instructions

## 1. Preparation for Testing

The VAG5053 aids in monitoring electronic and emissions-related faults in your vehicle and retrieving fault codes related to malfunctions in these systems. Mechanical problems such as low oil level or damaged hoses, wiring or electrical connectors can cause poor engine performance and may also cause a “false” fault code. Fix any known mechanical problems before performing any test. See your vehicle’s service manual or a mechanic for more information.

### Check the following areas before starting any test:

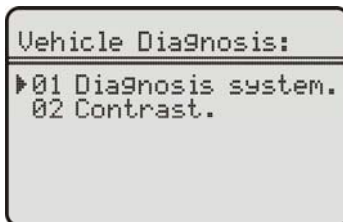
- Check the engine oil, power steering fluid, transmission fluid (if applicable), engine coolant and other fluids for proper levels. Top off low fluid levels if needed.
- Make sure the air filter is clean and in good condition. Make sure all air filter ducts are properly connected. Check the air filter ducts for holes, rips or cracks.
- Make sure all engine belts are in good condition. Check for cracked, torn, brittle, loose or missing belts.
- Make sure mechanical linkages to engine sensors (throttle, gearshift position, transmission, etc.) are secure and properly connected. See your vehicle’s service manual for locations.
- Check all rubber hoses (radiator) and steel hoses (vacuum/fuel) for leaks, cracks, blockage or other damage. Make sure all hoses are routed and connected properly.
- Make sure all spark plugs are clean and in good condition. Check for damaged, loose, disconnected or missing spark plug wires.
- Make sure the battery terminals are clean and tight. Check for corrosion or broken connections. Check for proper battery and charging system voltages.
- Check all electrical wiring and harnesses for proper connection. Make sure wire insulation is in good condition, and there are no bare wires.
- Make sure the engine is mechanically sound. If needed, perform a compression check, engine vacuum check, timing check (if applicable), etc.

## 2. Connect the VAG5053

- 2.1 Turn the ignition off.
- 2.2 Locate the vehicle's 16-pin Data Link Connector (DLC).
- 2.3 Connect the VAG5053 cable connector to the vehicle's DLC. Turn on the ignition, Press [power button], The VAG5053 will auto start, the following screen will be displayed.



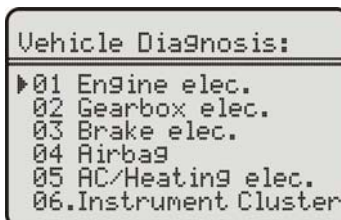
- 2.4 Wait a moment, the screen will auto display the main menu:



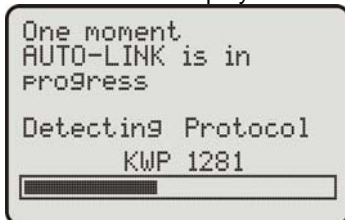
- **[Diagnosis system]**: enter the control module selection menu.
- **[Contrast]**: adjust the contrast.

## 3. Diagnosis system

Select [Diagnosis system] and then press [enter] key. The screen will display the system selection menu as follow:



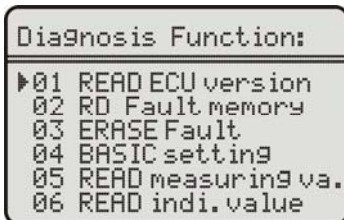
Here let's take [01. Engine Elec.] for example. Select [01. Engine Elec.], and press [Enter] key. The screen will display the following message:



After successful communication, the screen will display the ECU version information as shown in the figure below:



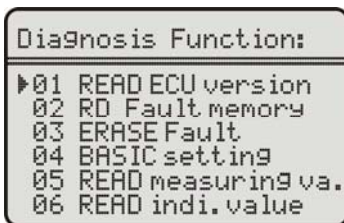
press any key.



Select [01. READ ECU version], and press [Enter] key. The screen will display the following message:



press [Esc] key, VAG5053 will enter the function menu for engine electronics system:



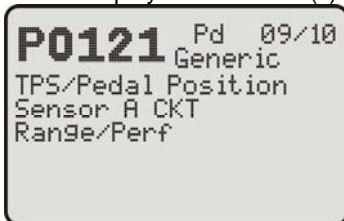
### 3.1 READ ECU version

Select [01.READ ECU version] and then press [Enter] key. The screen will display the control unit information:



### 3.2 Read Fault memory

Select [02. RD Fault memory] and then press [Enter] key. If the system has fault code(s), the screen will display the fault code(s) and descriptions:

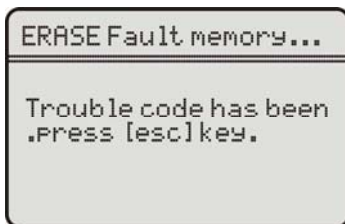


As seen on the top right corner, the front digit is the No. of the displayed fault code, while latter digit is the number of total fault codes.

Press [down] key to read the next page, press [up] key for the previous page.

### 3.3 ERASE Fault

Select [03. ERASE Fault] and then press [Enter] key. The fault codes will be erased.



### 3.4 Basic Setting

Basic Settings mode is very similar to Measuring Blocks. The content of each display group is the same. The difference between the functions is that the Control Module may try to perform various calibrations while in Basic Settings mode.

#### Warning!

**You should refer to the Factory Repair Manual for your particular car (or some other documented procedure) before "playing" with the Basic Settings function. Failure to follow the proper procedures can result in serious damage to the vehicle.**

Select [04. Basic Setting] and then press [enter] key. The screen will be displayed as shown below.



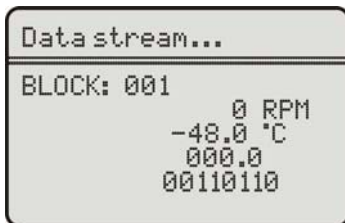
You should input the Channel Number first (from 0-255).



You can input the Channel Number with the [up], [down], [left],[right]and [enter] key:

- [up] and [down] keys: increase or decrease the number.
- [left] and [right] keys: moves the cursor [---] and select the digit.
- [enter] key: confirm and enter.

For example, enter Channel number 001 and press [enter] key, the screen will display the data stream for data block 001, as shown in the figure below:



**Notes:**

**Multiple Groups are not permitted in Basic Settings. The data presented in each Basic Settings Group varies greatly from Control Module to Control Module and between different models and years. Some groups are documented in the Factory Repair Manuals, but many are not.**

### **3.5 READ Measuring value**

Select [05. READ Measuring value] and then press [enter] key. The screen will be displayed as shown below.



You should input the Channel Number first (from 0-255).



When the Block number is entered, press [enter]. The screen will be displayed as shown in the figure:



Here you can press [down] key to switch to the next block, or press [up] to return to the previous block.

### 3.6 READ indi. value

Select [06. READ indi. value] and then press [enter] key. The screen will be displayed as shown below.



You should input the Channel Number first (from 0-255).



When the Block number is entered, press [enter]. The screen will be displayed as shown in the figure:



### 3.7 Adaptation

The Adaptation function allows you to alter certain values and/or settings in control modules that support it.

Select [07. Adaptation] and then press [enter] key. The screen will be displayed as shown below.



You should input the Channel Number first (from 0-255).



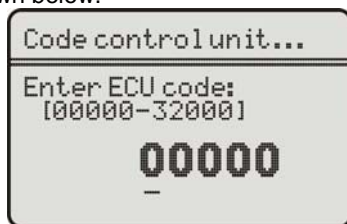
When the Block number is entered, press [enter]. The screen will be displayed as shown in the figure:



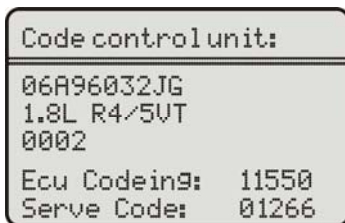
Here you can press [up] and [down] keys to adjust the adaptation value, and then press [enter] key to save the adaptation value, or press [esc] key to cancel the operation and return.

### 3. 8 Code Control unit

Select [08. Code Control unit] and then press [enter] key. The screen will be displayed as shown below.

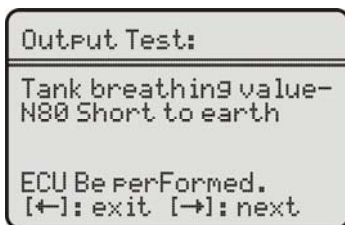


Input the Channel Number and press [enter] key, The screen will display the control unit information:



### 3.9 FND Output

Select [09. FND Output] and then press [enter] key. The screen will be displayed as shown below.



The VAG5053 is testing the displayed actuator. Here you can press [up] key to switch to the next actuator, or press [down] key to cancel the operation and return.

### 3.10 Login procedure

The Login Function must be used on some (but not all) Control Modules before you can Recode or change Adaptation values. On others, it "enables" certain features like cruise control. Valid Login codes can be found in the Factory Repair Manual for your car.

Select [10. Login procedure] and then press [enter] key. The screen will be displayed as shown below.



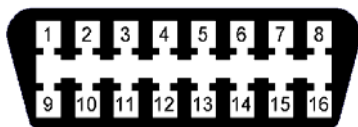
### **Warning!**

**Make sure get the correct module code before performing this function; otherwise the system may be destroyed.**

### **4. Location of Data Link Connector**

The OBD-II 16pin connector is as shown in the figure below. For Golf, it is located on the right side of steering column; For Jetta, it is located in the left driver room below instrument panel; For Santana, it is located in front of the gearbox dust cover.

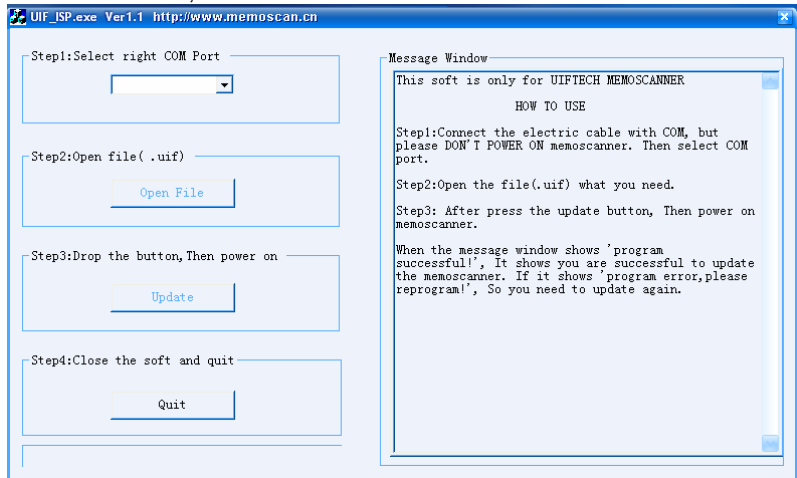
For more detailed information, please refer to the Repair Manual of your vehicle.



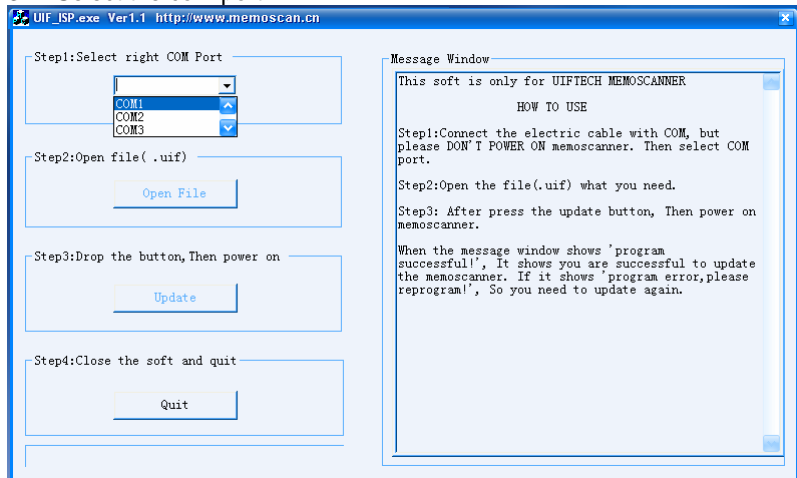
# The use of upgrading software

Correct installation of updated software is through com cable connecting the com mouth of the computer. (You don't need to open the power of the memo scanner.)

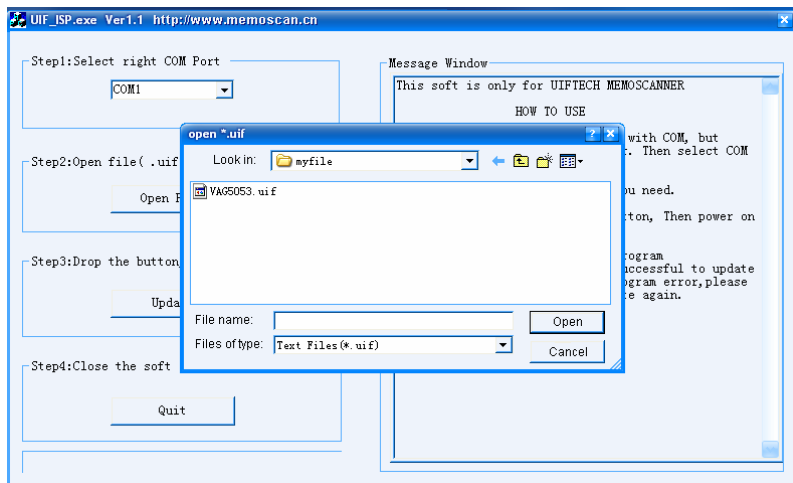
1. visit website [ww.memoscan.cn](http://www.memoscan.cn), download the software
2. Run UIF-ISP, there will be the interface as follows



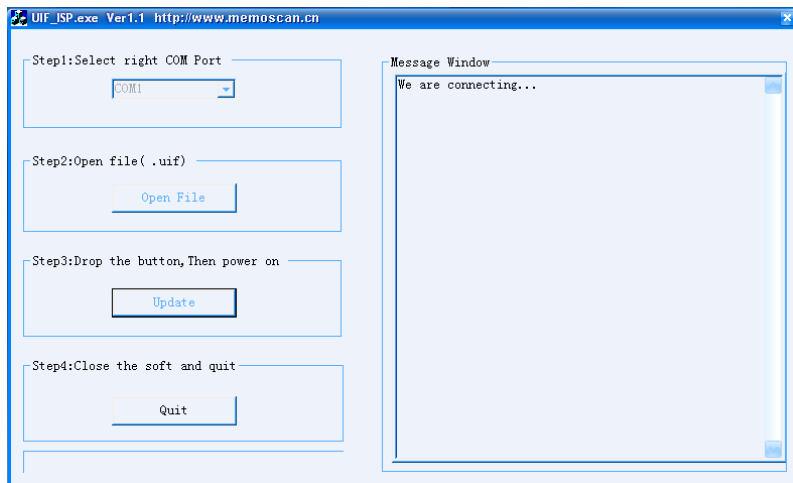
3. Select the com port.



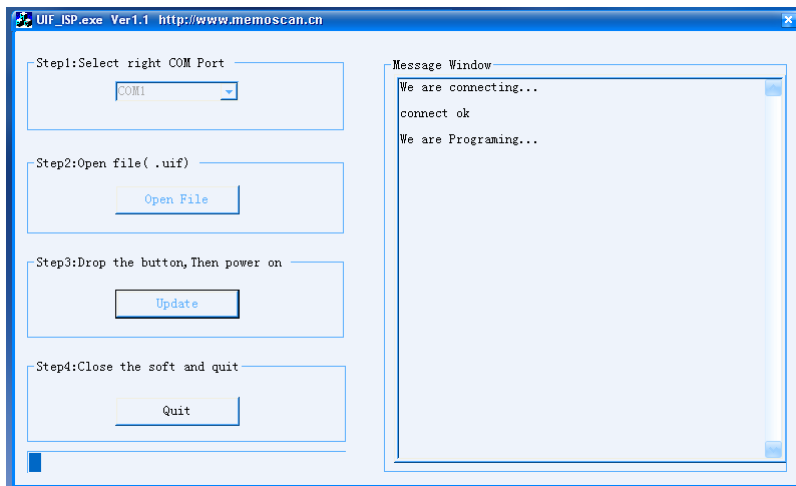
4. Press “Open File” button, select the file for update(expand: .uif)



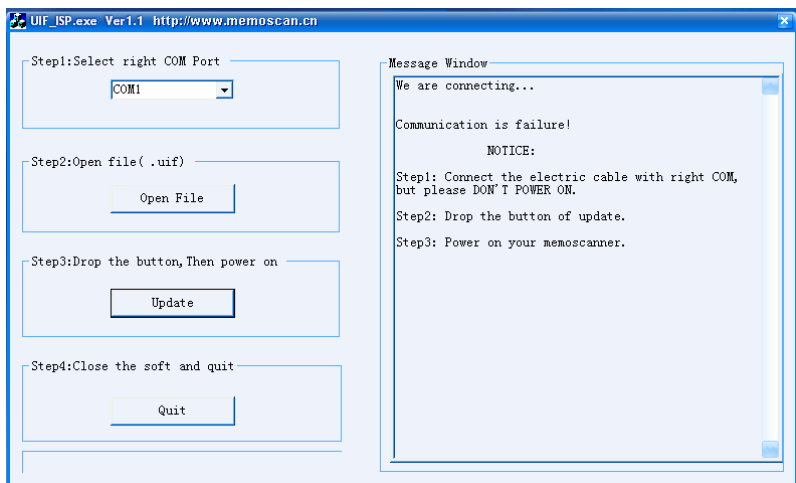
5. Press “update”, open the power of memo scanner, there will be the interface as follows. The Memo scanner is trying to connect with PC.



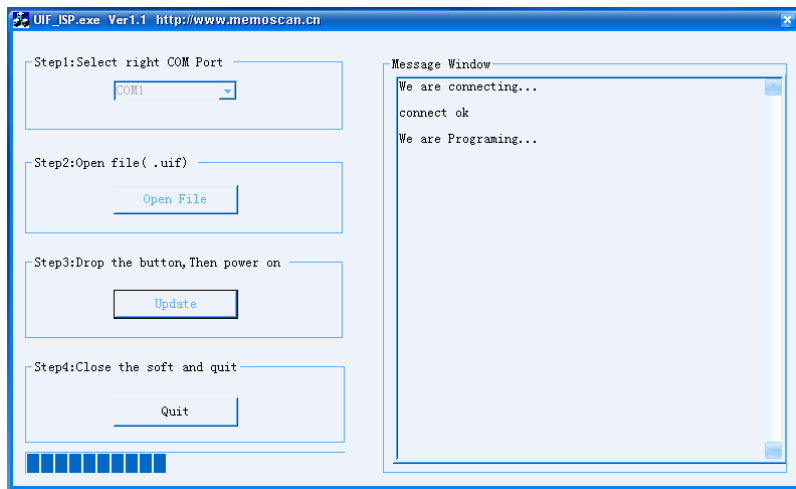
5-1. The blow interface will appear if the connection is success.



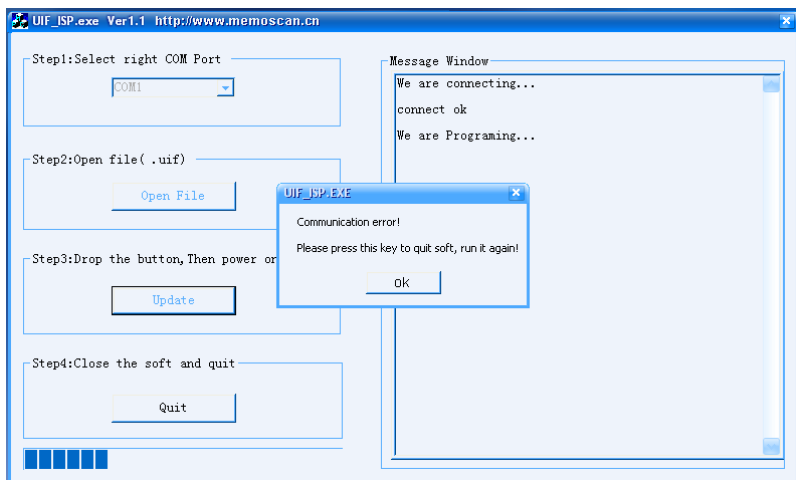
5-2. If the connection is fail, this time requests to close the power of memo scanner and check whether the connection and the choice of COM mouth are right or not.



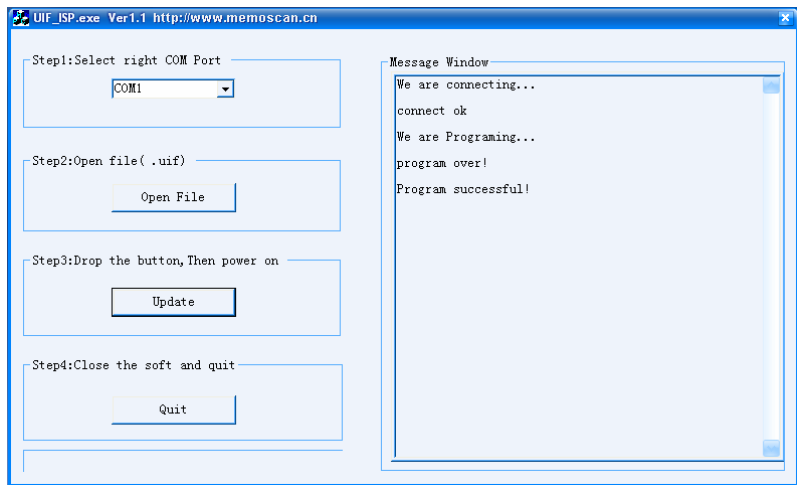
## 6. Connection succeed, upgrading starts.



6-1. If the below interface appears in the process of upgrading, that's to say the communications failures, this time requests to close the procedures and re-run the programmer



## 7. update successful



7-1. If the below interface appears, that's to say the upgrading failure. This time requests to close the power of memo scanner and back to step 1 to re-upgrading .

