

MOTO-1

User manual

User Manual of VINASHIN MOTOR EFI fault diagnostic scanner

Operate introduction

Dear user

Your purchased tool is belong to the MOTO-1 ® series, it cover all our technology and experience in many years. The tool will be a very useful work partner and friend to you, satisfy both you and your end customers.

We welcome you and your customer join in us and many thanks for you have expand the sell areas of our product and bring our value to our common customers, we firmly believe that we can achieve a win-win cooperation result if we based on the mutual benefit and equal principles.

Our authorized dealers and our service department will help you solve all the technology problems you encountered in the use process of this tool.

User Manual of VINASHIN MOTOR EFI fault diagnostic scanner

Notes

This manual is a necessary part of the tool. It contains its technology features and functions. Please reading the manual carefully before you use the tool or store it.

1. When the engine is working, please make sure that the indoor is ventilation or connect the exhaust gas equipment to the vehicle's exhaust system. We do this because the carbon monoxide produced by the engine is toxic gas what no color and odorless, excess intake by people will lead to serious results even die.
2. Before use the diagnostic scanner, please make sure the motorcycle has been parked in a stable state and don't use the scanner during driving process.
3. When you operate the diagnostic scanner during the engine running, please keep enough distance from any running parts of the engine or the driving belt. Because the running parts of engine or the driving belt may engulf clothes, the connecting line of the diagnostic scanner or any part of the Conner's body to lead serious hurt.
4. Unless there is other operation direction, you must turn off the ignition switch when connecting or removing the line of electronic circuit components.
5. When the engine is running, please don't touch the ignition coil, the ignition coil terminals or the spark plug, which can produce very high voltage.
6. Although the diagnostic scanner has a safety design that the battery can prevent from being connected reverse, but we still strongly remind you must make sure the battery polarity before you connecting the scanner.
7. Never put the diagnostic scanner on the battery. Because it is very likely to lead battery short-circuit, and cause personnel hurt, equipment damage and vehicle trouble.
8. Please don't touch the exhaust, engine or radiator system when it is running or just finished running. If you have to touch the hot parts, please wear the tested heat-resistant gloves to avoid burn.
9. Please don't expose the scanner in the flammable gas or steam.
10. This diagnostic scanner belongs to precise electronic product, please don't unweave or repair it by yourself.
11. If there is any change in the actual producing, we won't give a prior notice.

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Chapter One Product structure

1.1 External View of Mainframe

1.1.1 Front layout of Mainframe



Mainframe Length: 220mm
Mainframe Width: 150mm
Vision Screen Length: 104mm
Vision Screen Width: 81mm
Instruction of keyboard

【 ENTER 】 key: Confirmation to the current option.

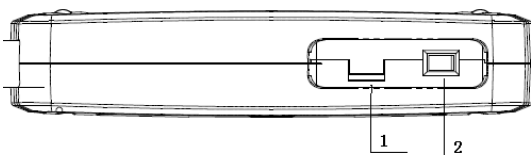
【 EXIT 】 key: Negation to the problem or return to the last menu

【 ↑ 】 key: Upward movement

【 ↓ 】 key: Downward movement

【 → 】 key: Move forward 【 ← 】 key: Move backward 【 RESET 】 key: Function key

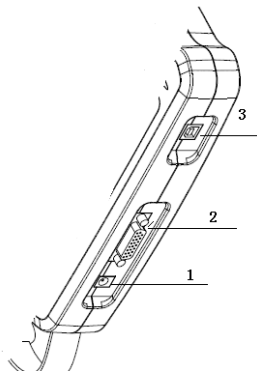
1.1.2 Operation guide for the top part of mainframe



1. Brightness adjusting knob of the Mainframe screen

2. Power supply switch of the Mainframe

1.1.3 Operation guide for the bottom part of mainframe



1. Power supply insert

2. Diagnose interface

3. USB interface

1.2 Technical parameter

Working Voltage: DC12V

Working current: <1A

Working temperature: 0~40°C

Humidity: <80%

Chapter Two Function introduction

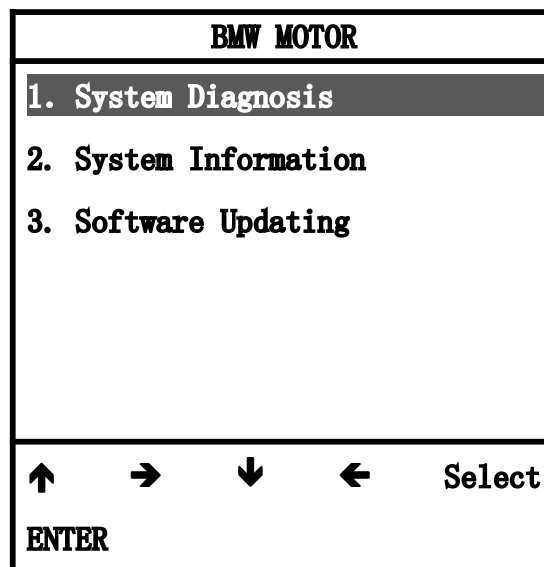
2.1 Mainframe power supply modes

VINASHIN MOTOOR EFI fault diagnostic instrument has several power supply modes

1. Motorcycle diagnostic connector power supply.
2. A.C.transformer power supply
3. Provide electricity with USB interface, mainly used during the software updating.

2.2 Menu introduction of boot-strap

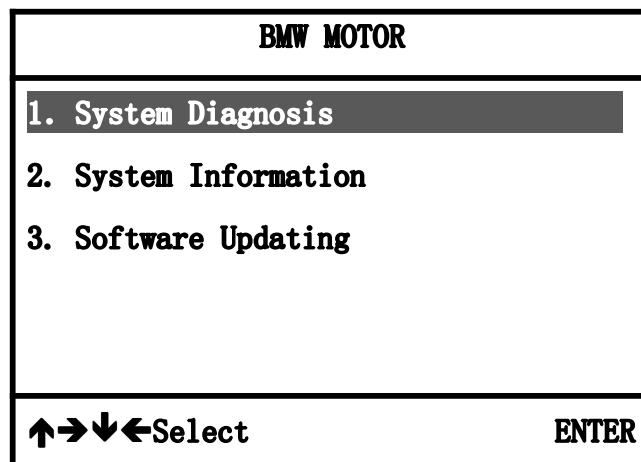
After electrifying the mainframe, turn on the power supply. The mainframe displays the application object of the scanner: MOTORCYCLE SCANNER. After waiting for 1sec. it can enter the main menu automatically.



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The main menu displays the function menu of VINASHIN MOTOR EFI fault diagnostic instrument. There are three correlative function menus. As shown in the picture above, the black item means the choosing item.

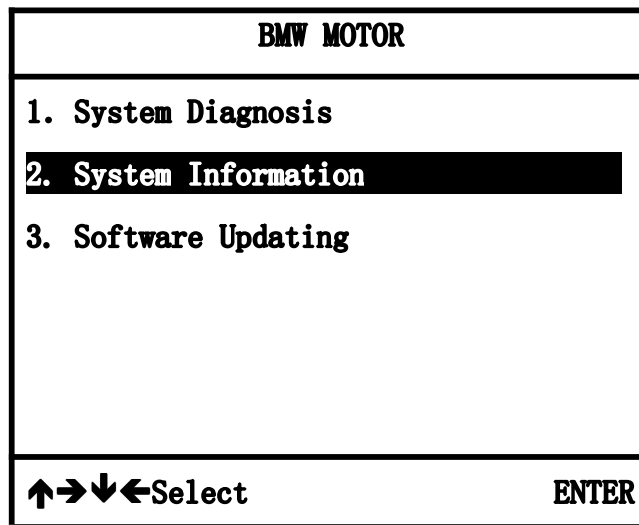
2.3 System Diagnosis Menu



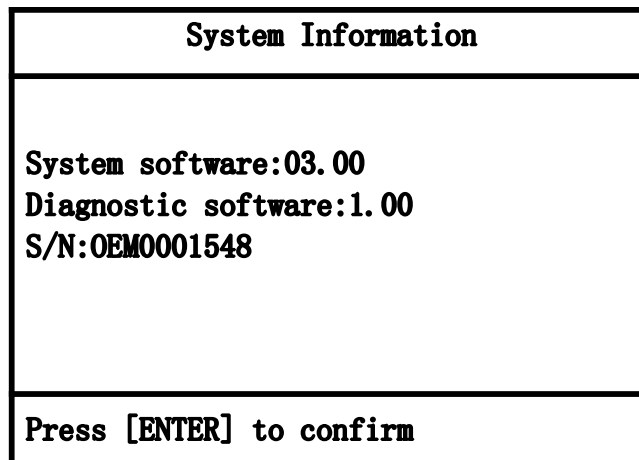
This menu is the main menu of this diagnostic scanner; all the diagnostic functions enter from this menu. Because of its importance, we will give a detailed description in the later section.

2.4 System Information Menu

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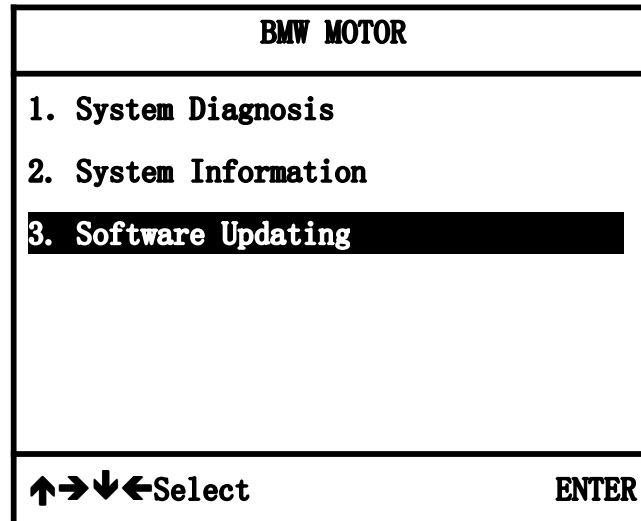


This menu displays some specific information of the diagnostic scanner. After pressing the [ENTER] key, it appears the following interface.



2.5 Software Updating Menu

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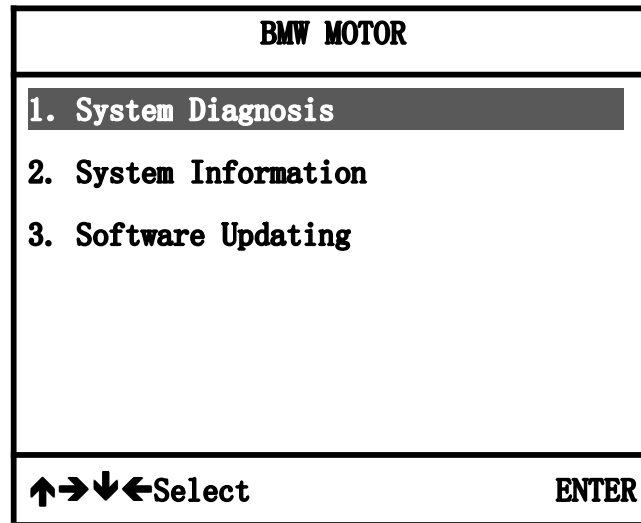
This function will be used when updating the software. According to this operation direction, you can finish the software update process.

Chapter Three System diagnostic

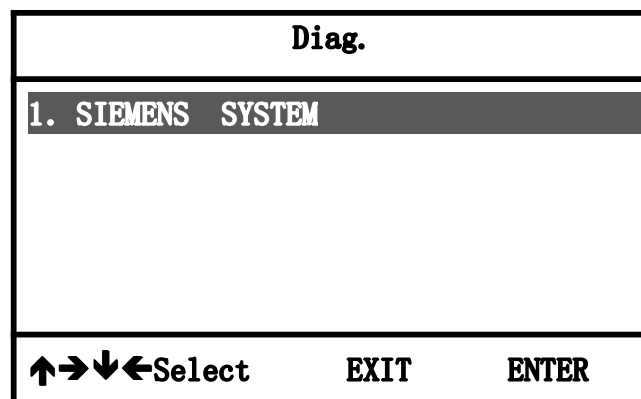
3. 1 System Diagnostic Introduction

Connect diagnostic connector to the motorcycle diagnostic connector and turn on the ignition switch. Open the power supply switch of the diagnostic scanner, and enter the following interface.

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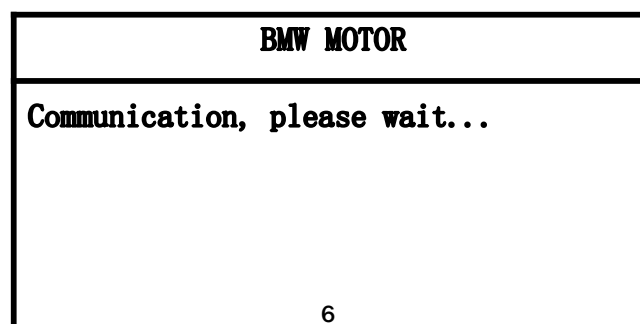


Press the [ENTER] key to enter the following interface.



3.2 Read Trouble Code

Press [ENTER] key to enter the following interface.



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If communication failure with ECU will appear the following interface

BMW MOTOR
Communication failure!
Press [ENTER] to confirm

If communication with motorcycle ECU is successful will enter the following interface.

SELECT FUNCTION
1. Read DTC
2. Clear DTC
3. Read Datastream
4. Test Unit
5. Read ECU ID
↑ → ↓ ← Select EXIT ENTER

Choose **【1.Read DTC】** , press **【ENTER】** key it will display following interface.

BMW
Reading the DTCs, please wait...
7

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When read trouble code finished it will appear the following interface.

BMW	
P0105 Intake manifold pressure Sensor	
P0110 Intake air temperature sensor	
DTC number :2	EXIT

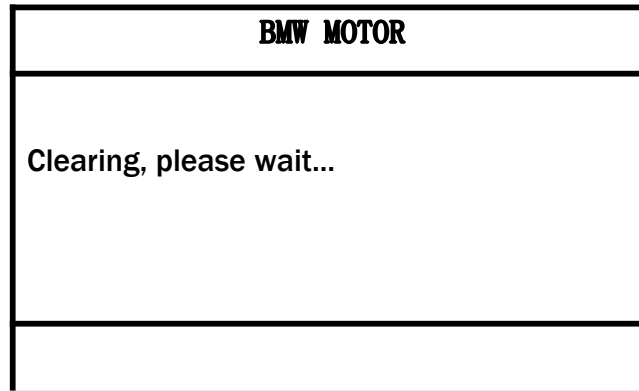
3.3 Clear Trouble Code

Choose **【2. Clear DTC】** will appear the following interface.

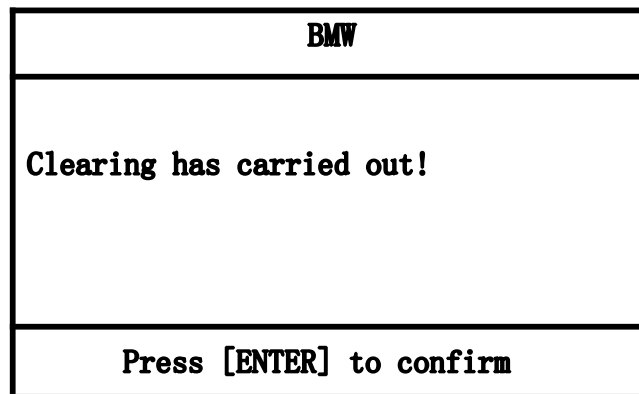
SELECT FUNCTION		
1. Read DTC		
2. Clear DTC		
3. Read Datastream		
4. Test Unit		
5. Read ECU ID		
↑ → ↓ ← Select	EXIT	ENTER

Press [ENTER] key appear the following interface. .

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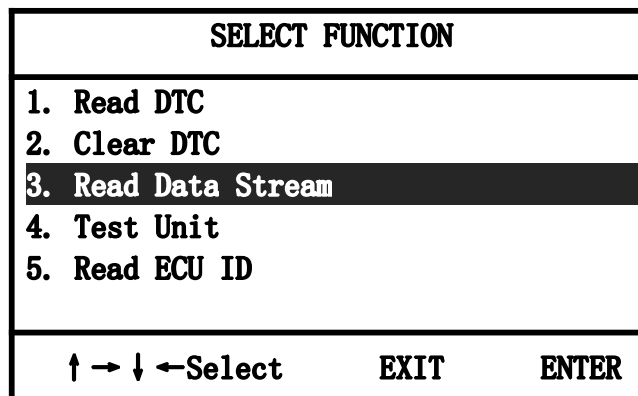


Later will appear the following interface.



3.4 Read Data Stream

Choose **【3.Read Data Stream】** enter the following interface.



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This function is used to display the current data condition of ECU system. Using this data, you can estimate the vehicle working condition. Press [ENTER]. After the guide information, it appears the following interface.

Data stream	
AMP	96.6kPa
CRASH	4.9973V
CTR_ERR_DYN_VR	0
CUR_IGC_DIAG_cyl1	0.0000V
DIST_ACT_MIL	0
ENG_HOUR	1.50h
IGA_1	5.156699
←PageUp	→PageDown EXIT

Press [→] key continue to look over other data stream.

3.5 Action Testing

Choose [4.Test Unit] will appear the following interface.

SELECT FUNCTION		
1. Read DTC		
2. Clear DTC		
3. Read Datastream		
4. Test Unit		
5. Read ECU ID		
↑ → ↓ ←Select	EXIT	ENTER

Press [ENTER] key appear the following interface.

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Actuator		
1. Fuel Injector		
2. Ingition Coil		
3. Fuel Pump		
4. MIL		
5. All Tests At The Same Time		
↑ → ↓ ←Select	EXIT	ENTER

Choose **【1.Fuel Injector】** will appear the following interface.

SELECT FUNCTION		
1. ON		
2. OFF		
↑ → ↓ ←Select	EXIT	ENTER

Choose **【1.ON】** will appear the following interface.

BMW MOTOR		
Testing, please wait...		

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The carry out finished will display the following interface.

BMW MOTOR
Test has carried out!
Press [ENTER] to confirm

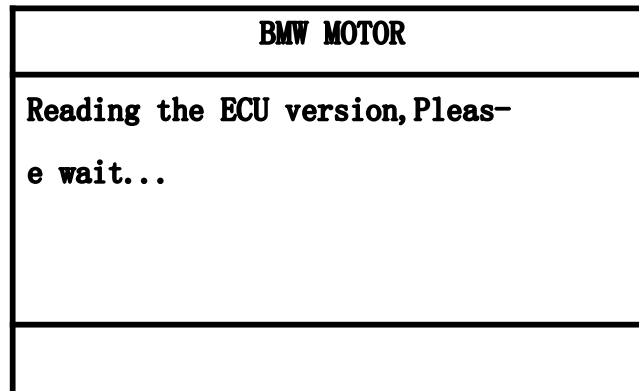
3.5 Read ECU ID

Choose [5. Test Unit] will appear the following interface.

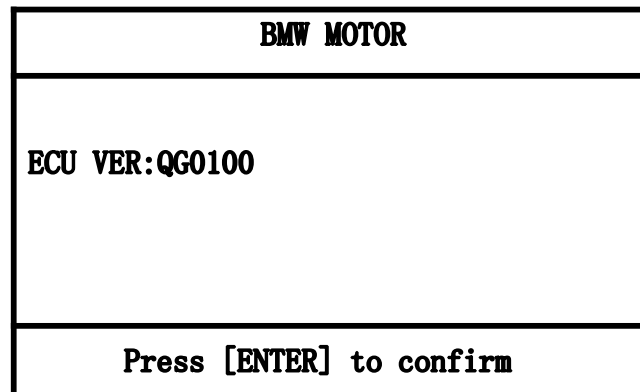
SELECT FUNCTION
1. Read DTC
2. Clear DTC
3. Read Datastream
4. Test Unit
5. Read ECU ID
↑ → ↓ ← Select EXIT ENTER

Press **【ENTER】** key appear the following interface.

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Later display the following information.



Appendix I: FAQ and Solution

1. When testing the motorcycle ECU with the diagnostic scanner, it displays “Communication failure!” what is the problem? How to deal with it?

This problem may be caused by the reasons as below:

- 1.1 Please check up whether the ignition switch is turn to the “ON” position?.
- 1.2 Please check up whether the cable between the diagnostic scanner and the diagnostic connector of motorcycle is connected reliable?

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2 After electrifying the diagnostic instrument, press the switch of the mainframe, it displays white screen or black screen. What is the problem? How to deal with it?

2.1 Maybe you adjusted the adjustable knob of the mainframe by accident to lead the white screen or black screen of the mainframe. After starting up normally, adjust the adjustable knob on the top right side of the mainframe screen to make the mainframe display normally.

2.2 Please check up whether the powers supply voltage of the diagnostic scanner is normal?