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Safety Precautions

To avoid body hurt and damage to the device or your car, please read this manual carefully before using M608.

The general testing process described in this manual is got by technologist of experience. Safety precaution is required in most of the process to avoid body hurt and damage to the device or your car. Prior to your using this device, please read vehicle maintenance code and follow the safety precautions. Keep mention to the following general safety precautions.

- It generates CO and other poisonous air when engine run. To avoid this kind of hurt, please repair the car in a well-air-ventilated location.
- To protect your eyes from the damage of the exposed objects, hot and harmful liquid, please wear good eye-protection tools.
- 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 M608 to or disconnecting the M608 from the vehicle’s Data Link Connector (DLC).
- To prevent damage to the on-board computer when taking vehicle electronic measurements, please 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 M608

1. Declaration

M608 contains powerful functions, which can support all MITSUBISHI cars, with smart outlook, competitive price and convenient run. It is a separately-operated tool without help of PC.

2. Function introduction

- ECU ID
- Read Trouble Code
- Clear Trouble Code
- Read Data Stream
- Active Test

3. Systems supported

- MPI/GDI/DIESEL
- ELC-AT/CVT
- ABS
- SRS-AIR BAG
- FULL AUTO A/C
- ECS
- IMMOBILIZER
- AUTO CRUISE
- TCL/STBLTY CNTRL
- 4WS
- SS4II
- HBB

4. Main features

- Competitive price: About 10% cost of that of the professional device with the similar functions
- On-board power charge
- Simply connected to the car and run

5.Appearance and Key Descriptions

The appearance of a M608 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: 12Pin、12+16Pin、16Pin

Operation Instructions

1. Preparation for Testing

M608 can test cars and delete Trouble codes while read the Trouble codes. Meanwhile, there are mechanical problems, such as poor engine performance due to lower fuel level, soft cubes damaged, electrical wire or electrical connections, which will also cause faked Trouble codes. Therefore, you need to refer to car service pamphlet for more details before you test the known mechanical problems.

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.

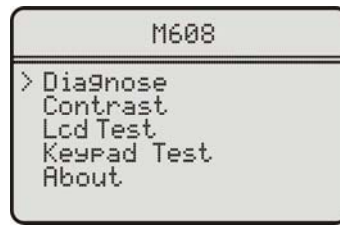
2. Connect the M608

2.1 Turn the ignition on.

2.2 Locate the vehicle's 16-pin Data Link Connector (DLC).

2.3 Connect the M608 cable connector to the vehicle's DLC. Turn on the ignition, Press [power button], The M608 will auto start, the following screen will be displayed.

2.4 Later, the screen will display as the following.



- **[Diagnose]**: diagnose
- **[Contrast]**: Contrast adaptation
- **[Lcd Test]**: Lcd test
- **[Keypad Test]**:Keypad test
- **[About]**:show device version

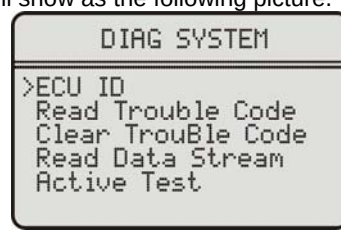
3. Diagnose

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

Choose [**Asian**] then press [Enter] key. The screen will display the system menu as the following.

Operation methods regarding of the systems M608 supports are similar. Here we take one for example. For example, [MPI/GDI/DIESEL] then press [Enter] key. The screen will display the following.

If succeed later, it will show as the following picture.

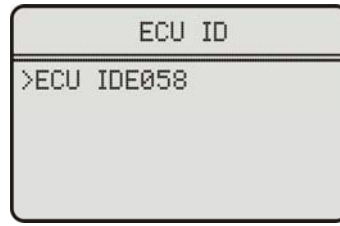


Press [Enter] key or [Esc] key.

When it fails, it shows the following.

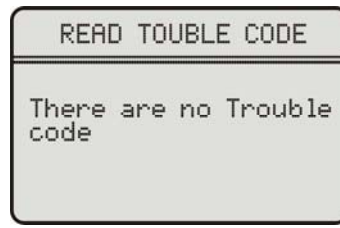
3-1 Read ECU ID

Choose [ECU ID], then press [Enter] key, it revealing the corresponding ID information, as the following picture shows.

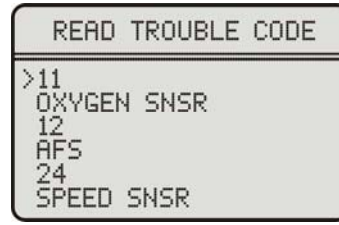


3-2 Read Trouble codes

Choose [Read Trouble Code], then press [Enter]. If there are no Trouble codes, it will show as the following.

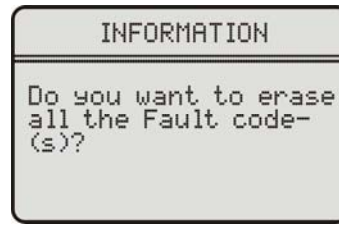


On the contrary, if there are Trouble codes, it will show them and you can press up/down key to check each Trouble code as the following.



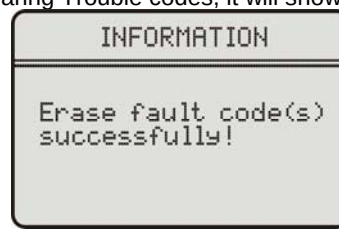
3-3 Clear Trouble codes

Choose [Clear Trouble Code] and then press [Enter].Refer to the following.



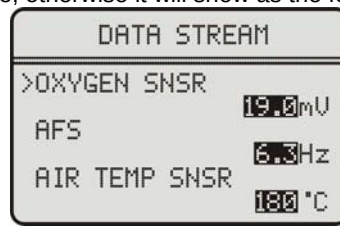
You will be reminded “Do you want to erase all the fault code(s)?”. If you don’t need to clear Trouble codes, press [Esc]; if need, press [Enter]. Then, it will show as the following.

If you succeed in clearing Trouble codes, it will show the following.



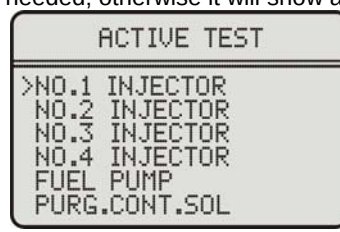
3-4 Read Data Stream

Choose [Read Data Stream], and then press [Enter]. Screen is empty when there is no data value, otherwise it will show as the following.

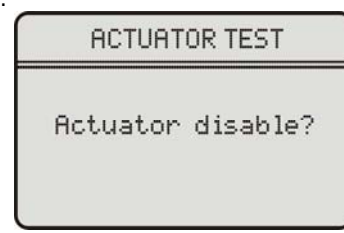


3-5 Activity test

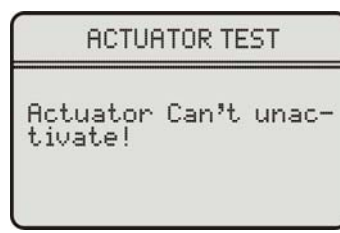
Choose [Active Test], and then press [Enter]. Screen reveals empty if there are no functions test needed; otherwise it will show as the following.



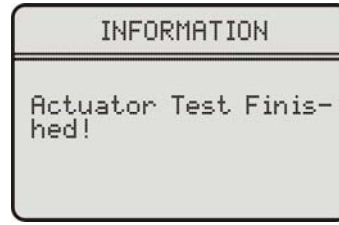
Press up/down to choose what you need to test and then press [Enter]. The following will appear.



Press [Esc] to retreat. Press [Enter]. If there is one testing that has not been activated, it will show the following.

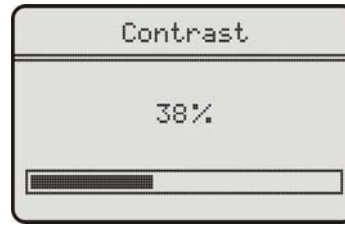


Otherwise, actuator test will be finished soon as the following picture shows.



4. Contrast Adaptation

Choose [Contrast] at the main menu. Then press [Enter]. The screen will display as the following.

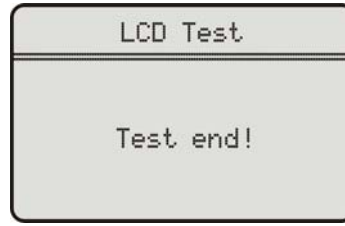


Simply press up/down arrow to set and then press [Enter] to confirm.

5. Lcd test

Choose[Lcd Test] at the main menu, Press Enter],The screen will display the following dynamic image.

When after testing, it will show “Test end!” as what the following shows.



6. Key testing

Choose [Keypad Test] at the main menu. Press [Enter]. The screen will display the following interface.

Press any key then the screen will flash due to corresponding to your cooperation. Double [Esc], you can withdraw from the testing.

7.About

Choose [About] and then press [Enter]. Then screen will display the version of this device.

8. Location of DLC

Refer to the following diagrams regarding of 12Pin、12+16Pin、16Pi. It is usually located in the cab on the left below the instrument dash. For more information, please refer to the Car Repairing Pamphlet.

Diagram and NO. for Mitsubishi rectangular 12 PIN.

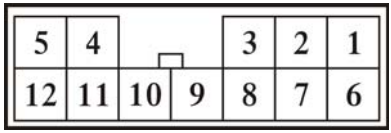
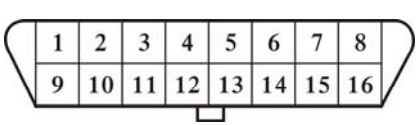


Diagram and NO. for Mitsubishi 12+16PIN diagnostic socket.



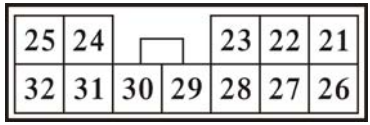


Diagram and NO. for 16PIN diagnostic socket.