## Trademarks

Autel<sup>®</sup>, MaxiCOM<sup>®</sup>, MaxiDAS<sup>®</sup>, MaxiScan<sup>®</sup>, MaxiTPMS<sup>®</sup>, MaxiRecorder<sup>®</sup>, and MaxiCheck<sup>®</sup> are trademarks of Autel Intelligent Technology Corp., Ltd., registered in China, the United States and other countries. All other marks are trademarks or registered trademarks of their respective holders.

## **Copyright Information**

No part of this manual may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the prior written permission of Autel.

## **Disclaimer of Warranties and Limitation of Liabilities**

All information, specifications and illustrations in this manual are based on the latest information available at the time of printing. Autel reserves the right to make changes at any time without notice. While information of this manual has been carefully checked for accuracy, no guarantee is given for the completeness and correctness of the contents, including but not limited to the product specifications, functions, and illustrations.

Autel will not be liable for any direct damages or for any special, incidental, or indirect damages or for any economic consequential damages (including the loss of profits).

**()IMPORTANT**: Before operating or maintaining this unit, please read this manual carefully, paying extra attention to the safety warnings and precautions.

## For Services and Support:



pro.autel.com www.autel.com



1-855-288-3587/1-855-AUTELUS (North America) 0086-755-86147779 (China)



support@autel.com

For technical assistance in all other markets, please contact your local distributor.

# **Safety Information**

For your own safety and the safety of others, and to prevent damage to the device and vehicles upon which it is used, it is important that the safety instructions presented throughout this manual be read and understood by all persons operating or coming into contact with the device.

There are various procedures, techniques, tools, and parts for servicing vehicles, as well as in the skill of the person doing the work. Because of the vast number of test applications and variations in the products that can be tested with this equipment, we cannot possibly anticipate or provide advice or safety messages to cover every circumstance. It is the automotive technician's responsibility to be knowledgeable of the system being tested. It is crucial to use proper service methods and test procedures. It is essential to perform tests in an appropriate and acceptable manner that does not endanger your safety, the safety of others in the work area, the device being used, or the vehicle being tested.

Before using the device, always refer to and follow the safety messages and applicable test procedures provided by the manufacturer of the vehicle or equipment being tested. Use the device only as described in this manual. Read, understand, and follow all safety messages and instructions in this manual.

### **Safety Messages**

Safety messages are provided to help prevent personal injury and equipment damage. All safety messages are introduced by a signal word indicating the hazard level.



**DANGER:** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury to the operator or to bystanders.



**WARNING:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.

### **Safety Instructions**

The safety messages herein cover situations Autel is aware of. Autel cannot know, evaluate or advise you as to all of the possible hazards. You must be certain that any condition or service procedure encountered does not jeopardize your personal safety.



**DANGER:** When an engine is operating, keep the service area WELL VENTILATED or attach a building exhaust removal system to the engine exhaust system. Engines produce carbon monoxide, an odorless, poisonous gas that causes slower reaction time and can lead to serious personal injury or loss of life.



#### Do Not Turn the Volume Up Too Loud When Using Headphones

Listening at high volumes that over-stimulate the ear for long periods of time may result in loss of hearing.



#### SAFETY WARNINGS:

- Always perform automotive testing in a safe environment.
- Wear safety eye protection that meets ANSI standards.
- Keep clothing, hair, hands, tools, test equipment, etc., away from all moving or hot engine parts.
- Operate the vehicle in a well-ventilated work area.
- Put the transmission in PARK (for automatic transmission) or NEUTRAL (for manual transmission) and make sure the parking brake is engaged.
- Put blocks in front of the drive wheels and never leave the vehicle unattended while testing.
- Be extra cautious when working around the ignition coil, distributor cap, ignition wires and spark plugs. These components create hazardous voltages when the engine is running.
- Keep a fire extinguisher suitable for gasoline, chemical, and electrical fires nearby.
- Do not connect or disconnect any test equipment while the ignition is on or the engine is running.
- Keep the test equipment dry, clean, and free from oil, water, and grease. Use a mild detergent on a clean cloth to clean the outside of the equipment as necessary.
- Do not drive the vehicle and operate the test equipment at the same time. Any distraction may cause an accident.
- Refer to the service manual for the vehicle being serviced and adhere to all diagnostic procedures and precautions. Failure to do so may result in personal injury or damage to the test equipment.
- To avoid damaging the test equipment or generating false data, make sure the vehicle battery is fully charged and the connection to the vehicle DLC is clean and secure.
- Do not place the test equipment on the distributor of the vehicle. Strong electro-magnetic interference can damage the equipment.

# Contents

SAFETY INFO	DRMATION	II
CHAPTER 1	USING THIS MANUAL	1
1.1 COM	IVENTIONS	1
1.1.1	Bold Text	1
1.1.2	Notes	1
1.1.3	Important	1
1.1.4	Hyperlink	
1.1.5	Procedure	1
CHAPTER 2	GENERAL INTRODUCTION	3
2.1 MA	xISys MS906S Display Tablet	
2.1.1	Functional Description	
2.1.2	Power Sources	
2.1.3	Technical Specifications	5
2.2 MA	xiVCI Mini	
2.2.1	Functional Description	
2.2.2	Technical Specifications	
2.2.3	Power Sources	
2.3 Acc	essory Kit	
2.3.1	OBDI Adapters	
2.3.2	Other Accessories	9
CHAPTER 3	GETTING STARTED	11
3.1 Pov	VERING UP	11
3.1.1	Application Buttons	
3.1.2	Locator and Navigation Buttons	
3.1.3	App Switcher	15
3.1.4	System Status Icons	16
3.2 Pov	NERING DOWN	16
3.2.1	Reboot System	17
CHAPTER 4	DIAGNOSTICS OPERATIONS	18
4.1 Est/	ABLISHING VEHICLE COMMUNICATION	18
4.1.1	Vehicle Connection	18
4.1.2	VCI Connection	20
4.1.3	No Communication Message	21
4.2 Get	TING STARTED	22
4.2.1	Vehicle Menu Layout	22

4.3	VEHICLE IDENTIFICATION	. 24
4.3.1	1 Auto VIN Scan	. 24
4.3.2	2 Manual VIN Input	. 25
4.3.3	3 Manual Vehicle Selection	. 26
4.3.4	4 OBDII Direct Entry	. 27
4.4	NAVIGATION	
4.4.1	1 Diagnostics Screen Layout	. 27
4.4.2	2 Screen Messages	. 30
4.4.3	3 Making Selections	. 31
4.5	MAIN MENU	. 31
4.6	DIAGNOSIS	. 31
4.6.1	j	
4.6.2		
4.6.3		
4.6.4		
4.6.5		
4.7	GENERIC OBDII OPERATIONS	
4.7.1		
4.8	EXITING DIAGNOSTICS	. 47
СНАРТЕ	8 5 SERVICE OPERATIONS	. 48
5.1	FUNCTION DESCRIPTIONS	. 48
5.1 <i>5.1.</i> 2		
	1 Oil Reset Service	. 49
5.1.1	1 Oil Reset Service 2 Tire Pressure Monitor System (TPMS) Service	. 49 . 49
5.1.2 5.1.2	<ol> <li>Oil Reset Service</li> <li>Tire Pressure Monitor System (TPMS) Service</li> <li>Electric Parking Brake (EPB) Service</li> <li>ABS/SRS Services</li> </ol>	. 49 . 49 . 49 . 49 . 49
5.1.2 5.1.2 5.1.3	<ol> <li>Oil Reset Service</li> <li>Tire Pressure Monitor System (TPMS) Service</li> <li>Electric Parking Brake (EPB) Service</li></ol>	. 49 . 49 . 49 . 49 . 49
5.1.2 5.1.2 5.1.3 5.1.4	<ol> <li>Oil Reset Service</li> <li>Tire Pressure Monitor System (TPMS) Service</li> <li>Electric Parking Brake (EPB) Service</li> <li>ABS/SRS Services</li> <li>Steering Angle Sensor (SAS) Service</li> </ol>	. 49 . 49 . 49 . 49 . 50
5.1.2 5.1.2 5.1.3 5.1.4 5.1.4	<ul> <li>Oil Reset Service</li> <li>Tire Pressure Monitor System (TPMS) Service</li> <li>Electric Parking Brake (EPB) Service</li> <li>ABS/SRS Services</li> <li>Steering Angle Sensor (SAS) Service</li> <li>DPF Regeneration Service</li> </ul>	. 49 . 49 . 49 . 49 . 50 . 50
5.1.1 5.1.2 5.1.3 5.1.4 5.1.4 5.1.4 5.1.6 <b>CHAPTEF</b>	<ul> <li>Oil Reset Service</li> <li>Tire Pressure Monitor System (TPMS) Service</li> <li>Electric Parking Brake (EPB) Service</li> <li>ABS/SRS Services</li> <li>Steering Angle Sensor (SAS) Service</li> <li>DPF Regeneration Service</li> </ul>	. 49 . 49 . 49 . 49 . 50 . 50 <b>. 51</b>
5.1.1 5.1.2 5.1.3 5.1.4 5.1.4 5.1.4 5.1.6 <b>CHAPTEF</b>	<ul> <li>Oil Reset Service</li> <li>Tire Pressure Monitor System (TPMS) Service</li> <li>Electric Parking Brake (EPB) Service</li> <li>ABS/SRS Services</li></ul>	. 49 . 49 . 49 . 50 . 50 . 50 . 51
5.1.2 5.1.2 5.1.2 5.1.4 5.1.4 5.1.6 CHAPTEF 6.1	<ul> <li>Oil Reset Service</li></ul>	. 49 . 49 . 49 . 50 . 50 . 51 . 51 . 51
5.1.2 5.1.2 5.1.3 5.1.4 5.1.4 5.1.6 CHAPTEF 6.1 6.1.2	<ul> <li>Oil Reset Service</li></ul>	. 49 . 49 . 49 . 50 . 50 . 51 . 51 . 51 . 53
5.1.2 5.1.2 5.1.3 5.1.4 5.1.5 5.1.6 <b>CHAPTEF</b> 6.1 6.1.2	<ul> <li>Oil Reset Service</li></ul>	. 49 . 49 . 49 . 50 . 50 . 51 . 51 . 53 . 53
5.1.2 5.1.2 5.1.3 5.1.4 5.1.4 5.1.4 5.1.4 6.1.2 6.1.2 6.1.3	<ul> <li>Oil Reset Service</li></ul>	. 49 . 49 . 49 . 50 . 50 . 51 . 51 . 51 . 53 . 53 . 54
5.1.2 5.1.2 5.1.3 5.1.4 5.1.4 5.1.4 5.1.4 5.1.4 6.1 6.1.2 6.1.2 6.1.3 6.1.4	<ul> <li>Oil Reset Service</li></ul>	. 49 . 49 . 49 . 50 . 50 . 51 . 51 . 53 . 53 . 54 . 54
5.1.2 5.1.2 5.1.3 5.1.4 5.1.4 5.1.4 5.1.4 5.1.4 6.1.2 6.1 6.1.2 6.1.3 6.1.4 6.1.2 6.1.4	<ul> <li>Oil Reset Service</li></ul>	. 49 . 49 . 49 . 50 . 50 . 51 . 51 . 53 . 53 . 53 . 54 . 54 . 55
5.1.2 5.1.2 5.1.2 5.1.4 5.1.4 5.1.4 5.1.4 6.1.2 6.1 6.1.2 6.1.2 6.1.4 6.1.2 6.1.4 6.	<ul> <li>Oil Reset Service</li></ul>	. 49 . 49 . 49 . 50 . 50 . 51 . 51 . 51 . 53 . 53 . 54 . 55 . 56
5.1.2 5.1.2 5.1.2 5.1.4 5.1.4 5.1.4 5.1.4 6.1.2 6.1 6.1.2 6.1.2 6.1.4 6.1.2 6.1.4 6.	<ul> <li>Oil Reset Service</li></ul>	. 49 . 49 . 49 . 50 . 50 . 51 . 51 . 53 . 53 . 54 . 55 . 56 . 56

7.2.1	Home	60
7.2.2	Search Fix Features	60
7.2.3	Ask	60
7.2.4	My MaxiFix	61
7.2.5	My Messages	63
7.2.6	Support	64
CHAPTER 8	SETTINGS OPERATIONS	65
8.1 Ope	RATIONS	65
8.1.1	Unit	65
8.1.2	Language	65
8.1.3	Printing Settings	
8.1.4	Multitask	67
8.1.5	Auto Update	
8.1.6	Car Order	
8.1.7	System Settings	
8.1.8	About	68
CHAPTER 9	SHOP MANAGER OPERATIONS	70
9.1 VEH	ICLE HISTORY	71
9.1.1	Test Records	
9.2 Wo	RKSHOP INFORMATION	
9.3 Cus	TOMER MANAGER	74
CHAPTER 10	UPDATE OPERATIONS	76
CHAPTER 11	VCI MANAGER OPERATIONS	78
11.1 V	CI CONNECTION VIA BLUETOOTH	79
11.2 B	AS CONNECTION VIA BLUETOOTH	80
11.3 V	CI UPDATE	81
11.4 B	AS UPDATE	81
CHAPTER 12	SUPPORT OPERATIONS	83
12.1 P	RODUCT REGISTRATION	83
12.2 S	UPPORT SCREEN LAYOUT	83
12.3 N	1Y ACCOUNT	84
12.4 U	ISER COMPLAINT	85
12.5 D	ATA LOGGING	87
12.6 C	OMMUNITIES	88
12.7 T	RAINING CHANNELS	90
12.8 F	АQ DATABASE	91
CHAPTER 13	ACADEMY OPERATIONS	92

CHAPTER 14	REMOTE DESK OPERATIONS	. 93
14.1 Oper	RATIONS	. 93
CHAPTER 15	QUICK LINK OPERATIONS	. 95
CHAPTER 16	MAXISCOPE OPERATIONS	. 96
CHAPTER 17	BATTERY TEST OPERATIONS	. 97
17.1 Test	PREPARATION	. 97
17.1.1 In	spect the Battery	. 97
17.1.2 Co	onnect the Battery Tester	. 97
17.2 IN-V	EHICLE TEST	. 98
17.2.1 Bo	attery Test	100
17.2.2 St	tarter Test	102
17.2.3 G	enerator Test	102
17.3 Out	-VEHICLE TEST	104
	est Procedure	-
17.3.2 Te	est Results	105
CHAPTER 18	FUNCTION VIEWER OPERATIONS	106
CHAPTER 19	DIGITAL INSPECTION OPERATIONS	108
19.1 Add	ITIONAL ACCESSORIES	109
19.1.1 Te	echnical Specifications	112
19.2 Oper	RATIONS	112
CHAPTER 20	MAINTENANCE AND SERVICE	115
20.1 MAI	NTENANCE INSTRUCTIONS	115
20.2 Trou	UBLESHOOTING CHECKLIST	116
20.3 Аво	UT BATTERY USAGE	116
20.4 Serv	/ICE PROCEDURES	117
CHAPTER 21	COMPLIANCE INFORMATION	119
CHAPTER 22	WARRANTY	121

# Chapter 1 Using This Manual

This manual contains device usage instructions.

Some illustrations shown in this manual may contain modules and optional equipment that are not included in your system. Contact your sales representative for availability of other modules and optional tools or accessories.

## 1.1 Conventions

The following conventions are used.

## 1.1.1 Bold Text

Bold text is used to highlight selectable items such as buttons and menu options.

Example:

• Tap **OK**.

### 1.1.2 Notes

A **NOTE** provides helpful information such as additional explanations, tips, and comments.

#### 1.1.3 Important

**IMPORTANT** indicates a situation which, if not avoided, may result in damage to the test equipment or vehicle.

## 1.1.4 Hyperlink

Hyperlinks, or links, that take you to other related articles, procedures, and illustrations are available in electronic documents. Blue colored text indicates a selectable hyperlink.

### 1.1.5 Procedure

An arrow icon indicates a procedure.

#### Example:

- > To use the camera:
  - 1 Tap the **Camera** icon. The camera screen opens.
  - 2 Focus the image to be captured in the viewfinder.
  - 3 Tap the blue circle. The viewfinder now shows the captured picture and auto-saves the taken photo.

# Chapter 2 General Introduction

The MaxiSys<sup>®</sup> MS906S is an advanced diagnostic device developed for customers looking for a tool with ultra-convenient and modern design while delivering ultimate performance. Featuring the powerful Samsung Exynos 5260 Hexa-core processor (1.7 GHz), and an 8.0-inch LCD capacitive touchscreen, based on the Android multitasking operating system, and combined with the best possible coverage of OE-level diagnostics, the MaxiSys MS906S is an ideal solution to manage your repair jobs smartly and conveniently.

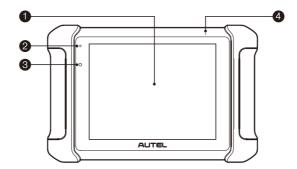
There are two main component to the MaxiSys MS906S system:

- MaxiSys Tablet the central processor and monitor for the system
- MaxiVCI Mini the Vehicle Communication Interface (VCI) for accessing vehicle data

This manual describes the construction and operation of the devices and how they work together to deliver diagnostic solutions.

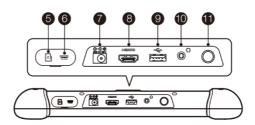
# 2.1 MaxiSys MS906S Display Tablet

## 2.1.1 Function Description



#### Figure 2-1 MaxiSys MS906S Tablet Front View

- 1. 8.0" LCD Capacitive Touchscreen
- 2. Power LED indicates battery level & charging or system status
- 3. Ambient Light Sensor detects ambient brightness
- 4. Microphone



#### Figure 2-2 MaxiSys MS906S Tablet Top View

- 5. Mini SD Card Slot holds the mini SD Card
- 6. Mini USB OTG Port
- 7. DC Power Supply Input Port connects the 12 volt power adapter to charge
- 8. HDMI (high-definition multimedia interface) Port
- 9. USB Port
- 10. Headphone Jack (3-band 3.5mm)
- 11. Lock/Power Button turns the device on & off with long press, or locks the screen with short press

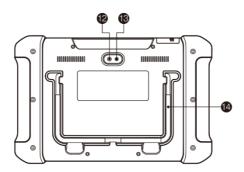


Figure 2-3 MaxiSys MS906S Tablet Back View

- 12. Camera Lens
- 13. Camera Flash
- 14. Collapsible Stand extends from the back to allow hands-free viewing of the tablet at a 30-degree angle

## 2.1.2 Power Sources

The tablet can receive power from any of the following sources:

- Internal Battery Pack
- AC/DC Power Supply
- Vehicle Power

#### **Internal Battery Pack**

The tablet can be powered with its internal rechargeable battery pack, which if fully charged can provide sufficient power for about 7 hours of continuous operation.

#### **AC/DC Power Supply**

The tablet can be powered from an electrical outlet using the AC/DC power adapter. The AC/DC power supply also charges the internal battery pack.

#### **Vehicle Power**

The tablet can be powered from the auxiliary power outlet or other suitable power port on the test vehicle through a direct cable connection. The vehicle power cable connects to the DC power supply port on the top side of the tablet.

## 2.1.3 Technical Specifications

Item	Description
Operating System	Android <sup>™</sup> 4.4.2, KitKat
Processor	Samsung Exynos Hexa-Core Processor (1.7 GHz)
Memory	2 GB RAM & 64 GB ROM
Display	8.0-inch LCD capacitive touchscreen with 1024 x 768 resolution

Table 2-1 Tablet Technical Specifications

Item	Description	
	• Wi-Fi (802.11 b/g/n)	
	• USB 2.0	
Connectivity	Mini USB 2.0	
Connectivity	• BT v2.1 + EDR	
	<ul> <li>HDMI 1.4a</li> </ul>	
	• SD Card (Support up to 32GB)	
Camera (Rear)	Rear-facing, 8.0 Megapixel, AF with Flashlight	
Sensors	Gravity Accelerometer, Ambient Light Sensor (ALS)	
	Microphone	
Audio Input/Output	Speaker	
	• 3-band 3.5 mm stereo/standard headset jack	
Damas and Dattern	• 3.7 V/10000 mAh lithium-polymer battery	
Power and Battery	• Charging via 12 V AC/DC power supply	
Input Voltage	12 V (9-35 V)	
Operating Tempe.	0 to 50°C (32 to 122°F)	
Storage Temp.	-20 to 60°C (-4 to 140°F)	
Housing	Strong plastic housing with protective rubber boot	
Dimensions (W x H x D)	270.8 mm (10.0") x 176.0 mm (6.9") x 36.0mm (1.4")	
Weight	1.05 kg (2.31 lb.)	
Protocols	ISO 9142-2, ISO 14230-2, ISO 15765-4, K-Line, L-Line, Flashing Code, SAE-J1850 VPW, SAE-J1850 PWM, CAN ISO 11898, Highspeed, Middlespeed, Lowspeed and Singlewire CAN, GM UART, UART Echo Byte Protocol, Honda Diag-H Protocol, TP 2.0, TP 1.6, SAE J1939, SAE J1708, Fault-Tolerant CAN	

## 2.2 MaxiVCI Mini

The MaxiVCI Mini is a small vehicle communication interface (VCI) used to connect to a vehicle's diagnostic connector (DLC) and connect with the tablet, as well as standalone PC, as a vehicle communication interface (VCI) for vehicle data transmission.

## 2.2.1 Function Description



#### Figure 2-4 MaxiVCI Mini

- 1. Vehicle Data Connector (16-pin)
- 2. Power LED lights solid green when powered on
- Connection Mode LED lights solid green when properly connected with the tablet via USB cable or wireless Bluetooth connection; or connected with standalone PC via USB cable
- 4. USB Port

#### Communication

The MaxiVCI Mini supports both the wireless Bluetooth and the USB communication. It can transmit vehicle data to the tablet without a physical connection.

## 2.2.2 Technical Specifications

Item	Description	
Communications	• BT V.2.1 + EDR	
communications	• USB 2.0	
Wireless Frequency	2.4 GHz	

Table 2-2 VCI Technical Specifications

Item	Description
Input Voltage Range	12 V DC
Supply Current	3 A @ 12 V DC
Operating Temperature	0°C to 50°C (ambient)
Storage Temperature	-20°C to 70°C (ambient)
Dimensions (L x W x H)	87.0 mm (3.43") x 52.0 mm (2.05") x24.5 mm (0.96")
Weight	0.076 kg (0.168 lb.)

## 2.2.3 Power Sources

The MaxiVCI Mini operates on 12-volt vehicle power, which it receives through the vehicle data connection port. The unit powers on whenever it is connected to an OBDII/EOBD compliant Data Link Connector (DLC).

## 2.3 Accessory Kit

## 2.3.1 OBDI Adapters

The OBDI adapters are for Non-OBDII vehicles. The adapter used depends on the type of vehicle being tested. The most common adapters are shown below (some adapters are optional, please contact your local distributor for details).







Honda-3

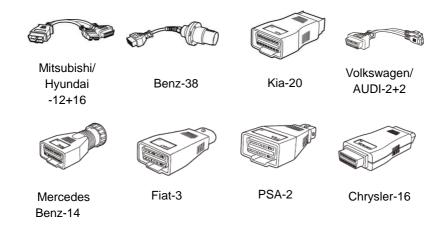


**BMW-20** 



GM/Daewoo

-12



## 2.3.2 Other Accessories



#### **AC/DC External Power Adapter**

Connects the tablet to the external DC power port for power supply.



#### Mini USB Cable

Connects the tablet to the VCI.



#### **Auxiliary Power Outlet Adapter**

Provides power to the tablet through the vehicle's auxiliary power outlet, as some non-OBDII vehicles cannot provide power via the DLC connection.



#### **Spare Fuses**

A safety device for the auxiliary power outlet adapter.



#### **OBD Extension Adapter**

Connects to the MaxiVCI Mini and inserts into the vehicle's OBDII port.

# Chapter 3 Getting Started

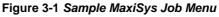
Make sure the tablet has sufficient battery level or is connected to the DC power supply (see 2.1.2 Power Sources on page 5).

# 3.1 Powering Up

Press the **Lock/Power** button on the top right side of the tablet to turn the unit on. The system boots up, and shows the lock screen. Pressing the inner ring with a Lock icon at the center displays 3 entry options:

- 1. **Unlock** drags the inner ring to the right edge of the circle to unlock the screen.
- 2. MaxiSys drags the inner ring to the top edge of the circle to enter the MaxiSys Job Menu.
- 3. **Camera** drags the inner ring to the left edge of the circle to launch the camera





- 1. Application Buttons
- 2. Locator and Navigation Buttons
- 3. Status Icons

NOTE: The screen is locked by default when you first turn on the tablet. It is recommended that you lock the screen to protect the information in the system and reduce the power consumption.

Almost all operations on the tablet are controlled through the touch screen. The touchscreen navigation is menu driven, which allows you to quickly locate the test procedure, or data that you need, through a series of choices and questions. Detailed descriptions of the menu structures are found in the chapters for the various applications.

## 3.1.1 Application Buttons

The Application buttons configure the MaxiSys for the type of operation or activity to be performed. The table below gives brief descriptions of the available applications.

Tap on the screen to select an application from the Job Menu.

Button Name Description Configures the unit to operate as a diagnostic Diagnostics tool. See *Diagnostics Operations* on page 18. Resets and matches the vehicle-related parts or vehicle data after vehicle repair or Service maintenance. See Service Operations on page 48. Opens the organization system for saved Data Manager data files. See Data Manager Operations on page 51. MaxiFix Launches the platform which provides the most compatible and abundant MaxiFix repair techniques and diagnostics database. See MaxiFix Operations on page 56. Allows you to set the MaxiSys system settings, and to view the general information Settings about the Display Tablet. See Settings Operations on page 65. Allows you to edit and save workshop Shop information and customer data, as well as reviewing test vehicle history records. See Manager Shop Manager Operations on page 70.

Table 3-1 Applications

Button	Name	Description
	Update	Checks for the latest update available for the MaxiSys system, and performs updating procedures. See <i>Update Operations</i> on page 76.
VCI	VCI Manager	Establishes and manages Bluetooth connection to the VCI device. See VCI Manager Operations on page 78.
÷ź÷	Support	Launches the Support platform which synchronizes Autel's on-line service base station with the MaxiSys tablet. See <i>Support Operations</i> on page 83.
	Academy	Allows you to store and play technical tutorial and training videos about the device usage or vehicle diagnostic techniques. See <i>Academy</i> <i>Operations</i> on page 92.
	Remote Desk	Configures your unit to receive remote support using the TeamViewer application program. See <i>Remote Desk Operations</i> on page 93.
	Quick Link	Provides associated website bookmarks to allow quick access to product updates, service, support and other information. See <i>Quick Link Operations</i> on page 95.
WV	MaxiScope	Configures the unit to operate as an automotive oscilloscope to perform electrical and electronic circuit tests and monitor signal activities. See <i>MaxiScope Operations</i> on page 96.
 7©	Battery Test	Accesses the Battery Test menu with two functions, including in-vehicle test and out-vehicle test. See <i>Battery Test Operations</i> on page 97.

Button	Name	Description
FQ	Function Viewer	Provides a quick search for supported functions and/or vehicles. See <i>Function Viewer Operations</i> on page 106.
Ĩ	Digital Inspection	Configures the unit to operate as a video scope device by connecting to an imager head cable for close vehicle inspections. See <i>Digital Inspection Operations</i> on page 108.

## 3.1.2 Locator and Navigation Buttons

Operations of the Navigation buttons at the bottom of the screen are described in the table below:

Button	Name	Description
	Page Control	Indicates the location of the current screen. Swipe the screen left or right to view the previous or next screen.
•	Back	Returns to the previous screen.
	Android Home	Returns to Android System's Home screen.
	Recent Apps	Displays a list of applications that are currently working. To open an app, touch it. To remove an app, swipe it to the right.
0	Browser	Launches the Android built-in browser.
6	Camera	Opens the camera with short press; takes and saves screenshot image with long press. Saved files are stored in the Data Manager application for later reviews. See <i>Data</i> <i>Manager Operations</i> on page 51.
	Display & Sound	Allows you to adjust the brightness of the screen and the volume of the audio output.

Table 3-2 Locator and Navigation Buttons

Button	Name	Description
M	MaxiSys Home	Returns to MaxiSys Job Menu.
VC& VC&	VCI	Opens the VCI Manager application. The tick icon at the bottom right corner indicates the diagnostic tablet is communicating with the VCI device, otherwise a red x icon displays.
	MaxiSys Shortcut	Returns to the MaxiSys operation interface from other Android applications.
	Service	Returns to the Service screen.

#### > To use the camera:

- 1. Tap the **Camera** icon. The camera screen opens.
- 2. Focus the image to be captured in the viewfinder.
- 3. Tap the inner blue circle. The viewfinder now shows the captured picture and auto-saves the taken photo.

## 3.1.3 App Switcher

The App Switcher can be enabled or disabled on Android System Settings.

- > To enable the App Switcher function:
  - 1. Tap the **Settings** application on the MaxiSys Job Menu.
  - 2. Tap the **System settings** option on the left column.
  - 3. Tap the **App Switcher** option on the left column.
  - 4. Mark the checkbox beside "Always show the App Switcher" on the right side of the screen, then the App Switcher icon shows.

Short pressing the App Switcher icon opens a control panel:

- Tapping a specific app shortcut button enables you to switch directly to the selected application screen.
- Long pressing a specific app shortcut button displays the app menu, on which you can select and change the app shortcut.

1. Pressing and dragging the App Switcher icon around allows you to change the icon position alongside the edge of the screen.

## 3.1.4 System Status Icons

As the tablet is working with the Android operating system, you may refer to Android-related documents for more information.

By tapping on the bottom right corner, a Shortcuts Panel will be displayed, on which you are allowed to adjust various system settings of the tablet. Operations of each button on the panel are described in the table below:

Button	Name	Description			
	Calculator	Launches calculator when pressed.			
	Clock	Launches clock when pressed.			
3	Bluetooth	Enables/disables Bluetooth when pressed.			
( <del>;</del>	Wi-Fi	Enables/disables Wi-Fi when pressed.			
۲	Auto Rotate	Enables/disables auto-rotate screen when pressed.			
•	Airplane Mode	Enables/disables Airplane Mode when pressed.			
•	System Settings	Launches the Android System Settings interface when pressed.			

#### Table 3-3 Shortcuts Panel Buttons

**NOTE**: The shortcuts buttons will be highlighted when enabled, and dimmed when disabled.

## 3.2 Powering Down

All vehicle communications must be terminated before shutting down the tablet. A warning message appears if you attempt to shut down the tablet when it is communicating with the vehicle. Forcing a shut-down while communicating may lead to ECU (Electronic Control Unit) problems on some

vehicles. Please fully exit the Diagnostics application before shutting off the tablet.

#### > To power down the tablet:

- 1. Press and hold the Lock/Power Button.
- 2. Tap Power Off.
- 3. Tap **OK**. The tablet will turn off in a few seconds.

## 3.2.1 Reboot System

In case of a system crash, press and hold the **Lock/Power** button for 8 seconds to reboot the system.

# Chapter 4 Diagnostics Operations

By establishing a data link to the electronic control systems of the vehicle being serviced directly, the Diagnostics application allows you to retrieve diagnostic information, view live data parameters, and perform active tests. The Diagnostics application can access the electronic control module (ECM) for various vehicle control systems, such as engine, transmission, antilock brake system (ABS), airbag system (SRS) and more.

## 4.1 Establishing Vehicle Communication

The Diagnostics operations require connecting the MaxiSys Diagnostic Platform to the test vehicle through the VCI device. To establish proper vehicle communication to the tablet, you need to perform the following steps:

- 1. Connect the MaxiVCI Mini to the vehicle's DLC for both communication and power source.
- 2. Connect the MaxiVCI Mini to the tablet via Bluetooth pairing or USB connection.
- 3. When these are done, check the VCI navigation button at the bottom bar on the screen, if the button displays a green badge, the diagnostic platform is ready to start vehicle diagnosis.

## 4.1.1 Vehicle Connection

The method used to connect the tablet to a vehicle's DLC depends on the vehicle's configuration as follows:

- A vehicle equipped with an On-board Diagnostics Two (OBDII) management system supplies both communication and 12-volt power through a standardized J-1962 DLC.
- A vehicle not equipped with an OBDII management system supplies communication through a DLC connection, and in some cases supplies 12-volt power through the auxiliary power outlet or a connection to the vehicle battery.

### **OBDII Vehicle Connection**

This type of connection only requires the VCI device without any additional adapter.

#### > To connect to an OBDII vehicle

1. Connect the MaxiVCI Mini to the vehicle's DLC, which is generally located under the vehicle dashboard.

**⊘ NOTE**: The vehicle's DLC is not always located under the dashboard. Refer to the user manual of the test vehicle for additional connection information.

### Non-OBDII Vehicle Connection

This type of connection requires both the main cable and a required OBDI adapter for the specific vehicle being serviced.

There are three possible conditions for Non-OBDII vehicle connection:

- DLC connection supplies both communication and power.
- DLC connection supplies communication and power is to be supplied via the vehicle's auxiliary power outlet.
- DLC connection supplies communication and power is to be supplied via connection to the vehicle battery.

#### > To connect to a Non-OBDII Vehicle

- 1. Locate the required OBDI adapter and connect its 16-pin jack to the MaxiVCI Mini's male adapter.
- 2. Connect the attached OBDI adapter to the vehicle's DLC.
- ✓ NOTE: Some adapters may have more than one adapter or may have test leads instead of an adapter. Whatever the case, make the proper connection to the vehicle's DLC as required.

#### > To connect the auxiliary power outlet adapter

- 1. Plug the DC power connector of the auxiliary power outlet adapter into the DC power supply input port on the device.
- 2. Connect the male connector of the auxiliary power outlet adapter into the vehicle's utility power outlet.

**NOTE**: After the MaxiVCI Mini is successfully connected to the vehicle, the Power LED on the VCI lights solid green, and a brief beep sound will be heard.

## 4.1.2 VCI Connection

After the MaxiVCI Mini is properly connected to the vehicle, and the Power LED on the VCI device illuminates solid green, it indicates that the MaxiVCI Mini is ready to establish communication with the tablet.

The MaxiVCI Mini supports 2 communication methods with the tablet, wireless Bluetooth and USB.

### Pairing via Bluetooth

Bluetooth (BT) pairing is recommended as the first choice for the communication between the tablet and the VCI. You can perform vehicle diagnosis freely around the workshop with greater convenience.

To expedite multi-vehicle diagnostics, more than one VCI can be used in busy repair shops enabling technicians to quickly pair (via Bluetooth) their diagnostic tablets to each VCI separately and therefore eliminating the need to physically connect the VCI to each vehicle.

#### > To pair the Tablet with the MaxiVCI Mini via Bluetooth

- 1. Power up the tablet.
- 2. Select the VCI Manager application from the MaxiSys Job Menu.
- When the VCI Manager application is opened, the tablet automatically starts scanning for available VCI devices around for Bluetooth pairing. Available VCIs are listed in the Settings section on the right side of the screen.
- NOTE: If no VCI is found, this may indicate that the signal strength of the transmitter is too weak to be detected. In this case, try to get closer to the device, or reposition the VCI and remove all possible objects that cause signal interference. When these are done, tap the Scan button at the top-right corner to start searching again.
  - The device name appeared on the tablet may appear as "Maxi" suffixed with the VCI's serial number. Select the required device for pairing.
  - 5. When paring is successfully done, the connection status displayed to the right of the device name reads **Paired**.
  - 6. Wait for a few seconds, and the VCI icon on the system navigation bar on the bottom of the screen shall display a green tick icon, indicating the tablet is connected to the MaxiVCI Mini, and is ready to perform vehicle diagnosis.

Refer to VCI Connection via Bluetooth on page 79 for additional information.

### **USB** Connection

The USB connection is a simple and stable way to establish communication between the tablet and the MaxiVCI Mini. After properly connecting the USB cable from the tablet to the VCI device, the VCI navigation button at the bottom bar of the screen shows a green tick icon in a few seconds, and the Connection Mode LED on the MaxiVCI Mini illuminates solid green, indicating the connection between the devices is successful.

**NOTE**: When both the communication methods are applied at the same time, the MaxiSys system will use the USB communication as the default priority.

## 4.1.3 No Communication Message

- A. If the tablet is not connected to the MaxiVCI Mini correctly, an error message may display. This indicates that the tablet cannot access to the vehicle control module. In this case, you need to do the following check-ups:
  - Check if the MaxiVCI Mini is powered up.
  - In case of wireless connection, check if the network is configured correctly, or if the right MaxiVCI Mini has been paired.
  - If during the diagnosis process, the communication is suddenly interrupted due to the loss of signal, check if there is any object that causes signal interruption.
  - Check if the MaxiVCI Mini is properly positioned.
  - Try standing closer to the MaxiVCI Mini to obtain more stable signals, and faster communication speed.
  - In case of wired connection, check the cable connection between the tablet and the MaxiVCI Mini.
  - Check if the Connection Mode LED on the MaxiVCI Mini is illuminated for Bluetooth or USB.
  - Check if the Power LED on the MaxiVCI Mini is flashing red, this may indicate there is a hardware problem with the VCI device, in this case contact for the technical support.
- B. If the MaxiVCI Mini is unable to establish a communication link, a prompt message displays with check instructions. The following conditions are the possible causes:

- The MaxiVCI Mini is unable to establish a communication link with the vehicle.
- You've selected a system for testing that the vehicle is not equipped with.
- There is a loose connection.
- There is a blown vehicle fuse.
- There is a wiring fault on the vehicle or the adapter.
- There is a circuit fault in the adapter.
- Incorrect vehicle identification was entered.

## 4.2 Getting Started

Prior to first use of the Diagnostics application, make sure the MaxiVCI Mini has been synchronized with the tablet to establish a communication link. See *VCI Manager Operations* on page 78.

## 4.2.1 Vehicle Menu Layout

When the MaxiVCI Mini is properly connected to the vehicle and paired to the tablet, the platform is ready to start the vehicle diagnosis. Tap on the **Diagnostics** application button on the MaxiSys Job Menu, the Vehicle Menu will appear on the screen.

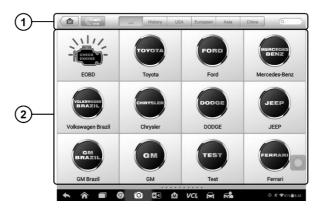


Figure 4-1 Sample Vehicle Menu Screen

- 1. Top Toolbar Buttons
- 2. Automobile Manufacturer Buttons

### **Top toolbar Buttons**

The operations of the Toolbar buttons at the top of the screen are listed and described in the table below:

Button	Name	Description			
	Home	Returns to the MaxiSys Job Menu.			
	VIN Scan	can Touching this button opens a drop-down list tap Auto Detect for auto VIN detection; tap Manual Input to enter a VIN code manually.			
All	All	Displays all the vehicle makes in the vehicle menu.			
History	History	Displays stored test vehicle history records. This option provides you direct access to previously tested vehicle records. See <i>Vehicle History</i> on page 71.			
USA	USA Displays the USA vehicle menu.				
Europe	Europe	Displays the European vehicle menu.			
Asia	Asia	Displays the Asian vehicle menu.			

Table 4-1 Top Toolbar Buttons

Button	Name	Description			
China	China	Displays the Chinese vehicle menu.			
QSearch	Search	Touching this button opens the virtual keyboard, allowing you to manually enter the specific vehicle make required.			
Cancel	Cancel	Touching this button exits the search screen, or cancels an operation.			

### **Automobile Manufacturer Buttons**

The Automobile Manufacturer buttons display various vehicle logos and the brand names. Select the required manufacturer button after the MaxiVCI Mini is properly connected to the test vehicle to start a diagnostics session.

## 4.3 Vehicle Identification

The MaxiSys diagnostics system supports four methods for Vehicle Identification.

- 1. Auto VIN Scan
- 2. Manual VIN Input
- 3. Manual Vehicle Selection
- 4. OBDII Direct Entry

## 4.3.1 Auto VIN Scan

The MaxiSys diagnostics system features the latest VIN-based Auto VIN Scan functions to identify CAN vehicles in just one touch, which allows the technician to quickly detect vehicles, scan all the diagnosable ECUs on every vehicle and run diagnostics on the selected system.

#### > To perform an Auto VIN Scan

- 1. Tap the **Diagnostics** application button from the MaxiSys Job Menu. The Vehicle Menu appears. (**Figure 4-1**)
- 2. Tap the **VIN Scan** button on the top toolbar.
- Select Auto Detect. The tester starts VIN scanning on the vehicle's ECU. Once the test vehicle is successfully identified, the system will guide you to the Vehicle Diagnostics screen directly.

Toyota v7.50.		-	Q	一合	0		, com		
			N	lain menu			_	VCb	EE 12.08
02		£				4			
T	54	P			F				
Diagr	nosis	Hot f	functions		Vehicle p	orofile			
									C
VIN: Car: Toyota/Corol									
our royota/coror									ESC

#### Figure 4-2 Sample Vehicle Diagnostics Screen

In some cases, when users have selected the vehicle brand instead of performing Auto VIN Scan in the first place, the system still provides an option to perform a vehicle VIN scan.

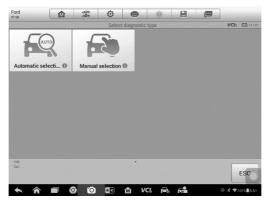


Figure 4-3 Sample Vehicle Selection Screen

Select **Automatic Selection** and the system will proceed to acquire VIN information automatically or allow users to input the VIN manually.

## 4.3.2 Manual VIN Input

For some vehicles that do not support the Auto VIN Scan function, the MaxiSys diagnostic system allows you to enter the vehicle VIN manually.

#### > To perform Manual VIN Input

- Tap the **Diagnostics** application button from the MaxiSys Job Menu. The Vehicle Menu displays.
- 2. Tap the VIN Scan button on the top toolbar.
- 3. Select Manual Input.
- 4. Tap the input box and enter the correct VIN.



Figure 4-4 Manual VIN Input

- Tap Done. The vehicle will be identified in a few seconds, and once the matching is successful, the system will guide you to the Vehicle Diagnostics screen directly. (*Figure 4-2*)
- 6. Tap **Cancel** to exit Manual Input.

## 4.3.3 Manual Vehicle Selection

When the vehicle's VIN is not automatically retrievable through the vehicle's ECU, or when the specific VIN is unknown, you can choose to select the vehicle manually.

#### Manual Vehicle Selection

This mode of vehicle selection is menu-driven; you can simply follow the on-screen prompts and make a series of choices. Each selection you make advances you to the next screen. A **Back** button at the lower right corner of the screen will bring you back to the previous step. Exact procedures may vary

somewhat by various vehicles being serviced.

## 4.3.4 OBDII Direct Entry

Occasionally, you may identify a test vehicle that the tester does not recognize; the database does not support, or has some unique characteristics that prevent it from communicating with the tester through the normal channels. In these instances, you are provided with the OBDII direct entry, through which you can perform generic OBDII or EOBD tests. See *Generic OBDII Operations* on page 45 for details.

## 4.4 Navigation

This section describes how to navigate the Diagnostics interface and select test options.

## 4.4.1 Diagnostics Screen Layout

The diagnostic screens typically include four sections. (Figure 4-5)



Figure 4-5 Sample Diagnostics Screen

- 1. Diagnostics Toolbar
- 2. Status Information Bar
- 3. Main Section
- 4. Function Buttons

## **Diagnostics Toolbar**

The Diagnostics Toolbar contains a number of buttons that allow you to print or save the displayed data and make other controls. The table below provides a brief description for the operations of the Diagnostics Toolbar buttons:

Button	Name	Description			
M	Home	Returns to the MaxiSys Job Menu.			
କଳ୍ପ	Vehicle Swap	Touching this button allows you to exit the diagnostic session of the currently identified test vehicle, and returns you to the vehicle menu screen to select another vehicle for testing.			
Ø	Settings	Opens the Settings screen. See Settings Operations on page 65.			
<b>e</b>	Print	Saves and prints a copy of the displayed data. See <i>Print Operations</i> for additional information on page 66.			
	Help	Provides instructions or tips for operations of various diagnostic functions.			
	Save	<ul> <li>Tapping this button opens a submenu, on which there are 2 options available to save the displayed data.</li> <li>Tap Save This Page to take a screenshot image</li> <li>Tap Save All Data to save a PDF file (mostly used to save data that cover more than 1 page)</li> <li>All saved data are stored in the Data Manager application for later reviews. See Data Manager Operations on page 51.</li> </ul>			
, m	Data Logging	Records the communication data and ECU information of the test vehicle. The saved data can be reported and sent to the technical center via the internet. You can go to the Support application to follow up the processing progress, see <i>Data Logging</i> on page			

Table 4-2 Diagnostics Toolbar Buttons

Button	Name	Description
		87 for detailed information.

#### > To print data in Diagnostics

- 1. Tap the **Diagnostics** application button from the MaxiSys Job Menu. The **Print** button on the diagnostic toolbar is available throughout the whole Diagnostics operations.
- 2. Tap **Print** whenever you want to make a printing. A drop-down menu appears.
  - a) **Print This Page** prints a screenshot copy of the current screen
  - b) **Print All Page** prints a PDF copy of all displayed data
- 3. A temporary file will be created and send to the computer for printing.
- 4. When the file is transferred successfully, a confirmation message displays.

**NOTE**: Make sure the Display Tablet is connected to the computer network, either via Wi-Fi or LAN, before printing. For more instructions on printing, see *Print Operations* on page 66 for details.

#### > To submit Data Logging reports in Diagnostics

- Tap the **Diagnostics** application button from the MaxiSys Job Menu. The **Data Logging** button on the diagnostics toolbar is available throughout all Diagnostics operations.
- 2. Tap the **Data Logging** button to display the error options. Select a specific error, and a submission form will appear to let you enter the report information.
- 3. Tap the **Send** button to submit the report form via the internet, a confirmation message appears when sending is successful.

#### **Status Information Bar**

The Status Information Bar at the top of the Main Section displays the following items:

1. Menu Title - indicates the menu subject of the Main Section

- 2. VCI Icon indicates the communication status between the tablet and the VCI device
- 3. Battery lcon indicates the battery status of the vehicle

### Main Section

The Main Section of the screen varies depending on the stage of operations. The Main Section can show vehicle identification selections, the main menu, test data, messages, instructions and other diagnostics information.

### **Function Buttons**

The displayed Function Buttons at this section of the screen varies depending on the stage of operations. They can be used to navigate, save or clear the diagnostic data, exit scanning as well as make other functional controls. The functions of these buttons will be introduced respectively in the following sections of the corresponding test operations.

### 4.4.2 Screen Messages

Screen messages appear when additional input is needed before proceeding. There are mainly three types of on-screen messages as to their purposes: Confirmation, Warning, and Error.

#### **Confirmation Messages**

This type of message usually appears as an "Information" screen, which informs you when you are about to perform an action that cannot be reversed or when an action has been initiated and your confirmation is needed to continue.

When a user-response is not required to continue, the message appears briefly before automatically disappearing.

#### Warning Messages

This type of message informs you when completing the selected action may result in an irreversible change or loss of data. The typical example for this is the "Erase Codes" message.

#### **Error Messages**

Error messages inform you when a system or procedural error has occurred. Examples of possible errors include a disconnection or communication interruption due to certain reasons.

## 4.4.3 Making Selections

The Diagnostics application is a menu-driven program that presents a series of choices one at a time. As you select from a menu, the next menu in the series appears. Each selection narrows the focus and leads to the desired test. Use your fingertip to make menu selections.

# 4.5 Main Menu

The Diagnostics application allows you to establish a data link to the electronic control system of the test vehicle via the MaxiVCI Mini for vehicle diagnosis, and service. You can operate functional tests, retrieve vehicle diagnostics information such as trouble codes, event codes and live data for various vehicle control systems, such as engine, transmission, ABS and more.

The Vehicle Diagnostics screen (Figure 4-2) has 2 main options:

- 1. **Diagnosis** a comprehensive section which includes all available functions: reading, clearing, saving and printing diagnostic information, as well as performing active tests and special functions
- Service a separate section designed to perform vehicle scheduled service and maintenance, such as to reset the service lights and perform calibration for various systems

After a section is selected and the tablet establishes communication with the vehicle via the MaxiVCI Mini, the corresponding function menu or selection menu displays.

# 4.6 Diagnosis

There are two options available when accessing the Diagnosis section:

- 1. Auto Scan starts auto scanning for all the available systems on the vehicle
- 2. **Control Units** displays a selection menu of all available control units of the test vehicle

#### Auto Scan

The Auto Scan function performs a comprehensive scanning over all the systems on the vehicle's ECU in order to locate fault systems and retrieve DTCs. The sample operation interface of Auto Scan appears as below:



#### Figure 4-6 Sample Auto Scan Operation Screen

- 1. Navigation Bar
- 2. Main Section
- 3. Function Buttons
- Navigation Bar
- 1. List Tab displays the scanned data in list format
- 2. Progress Bar indicates the test progress
- Main Section

List Tab

Column 1 — displays the system numbers

Column 2 — displays the scanned systems

Column 3 — displays the diagnostic marks indicating different conditions of the test result:

-!-: Indicates that the scanned system may not support the code-reading function, or there is a communication error between the tester and the control system.

-?-: Indicates that the vehicle control system has been detected, but the tester cannot accurately locate it.

**Fault | #**: Indicates there is/are detected fault code(s) present; "#" indicates the number of the detected faults.

Pass | No Fault: Indicates the system has passed the scanning

process and no fault has been detected.

#### • Function Buttons

The table below provides a brief description of the Function Buttons' operations in Auto Scan:

Name	Description					
ESC	Returns to the previous screen or exit Auto Scan.					
Pause	Suspends scanning and changes to show the <b>Continue</b> buttor					
ок	Confirms the test result, and continues to the system diagnosis after selecting the required system by tapping the item in the Main Section.					
Quick Erase	Deletes codes. A warning message screen will display to inform you of possible data loss when this function is selected.					
Report	Displays the diagnostic data in the report form.					
Save	Saves the diagnostic session as a history record, this allows you to quickly restore access to the test systems.					

### **Control Units**

This option allows you to manually locate a required control system for testing through a series of choices. Simply follow the menu-driven procedure, and make proper selection each time; the program will guide you to the diagnostic function menu after a few choices you've made.

Mercedes-Benz v18.31.02		1	¢	-	0			0
			Fu	inction men	J			VCb 🖽 🗤
ECU information		n	Trouble codes			Live data		
Acti	ve test		Control	l unit adap	otations			
VN: Car: Benz/177.002 - A	160 d							
								ESC

Figure 4-7 Sample Function Menu Screen

Available functions may vary by vehicle. The function menu may include:

- ECU Information provides the retrieved ECU information in detail. Selecting opens an information screen.
- Trouble Codes contains Read Codes and Erase Codes. The former displays detailed DTC information retrieved from the vehicle control module, the latter allows you to erase DTCs and other data from the ECU.
- Live Data retrieves and displays live data and parameters from the vehicle's ECU.
- Active Test provides specific subsystem and component tests. This selection may appear as *Actuators*, *Actuator Test*, or *Function Tests*, etc., and the tests options vary depending on the manufacturer and model.
- Special Functions provides component adaptation or variant coding functions for custom configurations, and also allows you to reprogram adaptive values for certain components after making repairs. Depending on the test vehicle, this selection may sometimes appear as *Control Unit Adaptations*, *Special Functions*, *Variant Coding*, *Configuration*, etc.

NOTE: With the diagnostic toolbar located on the top of the screen throughout the whole diagnostic procedures, you are allowed to make various controls of

the diagnostic information at any time, such as printing and saving the displayed data, getting help information, or performing data logging, etc.

#### > To perform a diagnostic function

- 1. Establish communication with the test vehicle via the MaxiVCI Mini.
- 2. Identify the test vehicle by selecting from the menu options.
- 3. Select the **Diagnosis** section.
- 4. Locate the required system for testing by **Auto Scan** or through menu-driven selections in **Control Unit**.
- 5. Select the desired test from the **Function Menu**.

# 4.6.1 ECU Information

This function retrieves and displays the specific information for the tested control unit, including unit type, version numbers and other specifications.

Benz vo.so	<b>A Z</b>	© (	• 0	e 📮	9
		ECU Info	mation		VCb CE 11.80
Control unit			ME 9.7 (AMG)	,	
MB number			0034462040		
Supplier			Bosch		
Hardware status			0/0		
Software sta	atus		6/40		
VIN					_

The sample ECU Information screen displays as below:

Figure 4-8 Sample ECU Information Screen

- Diagnostics Toolbar Buttons see Table 4-2 Diagnostics Toolbar Buttons on page 28 for detailed descriptions of the operations for each button.
- 2. **Main Section** the left column displays the item names; the right column shows the specifications or descriptions.
- 3. Function Button in this case, only a Back (or sometimes the ESC) button is available. Tap it to exit after viewing.

# 4.6.2 Trouble Codes

### **Read Codes**

This function retrieves and displays DTCs from the vehicle's control system. The Read Codes screen varies for each vehicle being tested. On some vehicles, freeze frame data can also be retrieved for viewing. The sample Read Codes screen displays as below:



Figure 4-9 Sample Read Codes Screen

- Diagnostics Toolbar Buttons see Table 4-2 Diagnostics Toolbar Buttons on page 28 for detailed descriptions of the operations for each button.
- 2. Main Section
  - Code Column displays the retrieved codes from the vehicle.
  - Status Column indicates the status of the retrieved codes.
  - Description Column detailed descriptions for the retrieved codes.
  - Snowflake Icon only displays when freeze frame data is available for viewing. Selecting this icon will display a data screen, which looks very similar to the Read Codes interface, therefore same operation method may be applied.
- 3. Function Button only a Back (or sometimes an ESC) button is available. Tap it to return to the previous screen or exit the function.

#### **Erase Codes**

After reading the retrieved codes from the vehicle and making repairs, you can

erase the codes from the vehicle using this function. Before performing this function, make sure the vehicle's ignition key is in the ON (RUN) position with the engine off.

#### > To erase codes

- 1. Tap **Erase Codes** from the Function Menu.
- 2. A warning message appears to inform you of data loss when this function is applied.
  - a) Tap **Yes** to continue. A confirming screen appears when the operation is successfully done.
  - b) Tap **No** to exit.
- 3. Tap **ESC** on the confirmation screen to exit Erase Codes.
- 4. Perform the Read Codes function again to check if the code erasing is successful.

### 4.6.3 Live Data

When this function is selected, the screen displays the data list for the selected module. The items available for any control module vary from one vehicle to another. The parameters appear in the order that they are transmitted by the ECU, so expect variation between vehicles.

Gesture scrolling allows you to quickly move through the data list. Simply swipe the screen up or down to locate the data you want. The figure below shows a typical Live Data screen:



Figure 4-10 Sample Live Data Screen

1. Diagnostics Toolbar Buttons — taps the toolbar menu icon at the top

center of the screen and the toolbar buttons will display. See *Table 4-2 Diagnostics Toolbar Buttons* on page 28 for detailed descriptions of the operations for each button.

#### 2. Main Section

- Name Column this column displays parameter names.
  - a) **Check Box** taps the check box at the left side of the parameter name to make selection of an item. Taps the check box again to deselect the item.
  - b) **Drop-down Menu** tapping the drop-down menu at the right side of the parameter name opens a submenu, which provides various choices for data display mode.
- Value Column displays the values of the parameters.
- Range Column displays the minimum and the maximum value.
- Unit Column displays the units of the parameter values.
- To change the unit mode, tap the Settings button on the top toolbar and select a required mode. See Unit on page 65 for more information.

#### **Display Mode**

There are 4 types of display modes available for data viewing, allowing you to view various parameters in the most suitable way.

Tapping the drop-down menu on the right side of the parameter name opens a submenu. There are 4 buttons to configure the data display mode, and one Help button on the right that you can tap for additional information.

Each parameter displays the selected mode independently.

Analog Gauge Mode — displays the parameters in form of an analog meter graph

 $\mbox{Text Mode}$  — this is the default mode which displays the parameters in texts and shows in list format

NOTE: Reading of status parameters, such as a switch reading, which are mostly in word form, like ON, OFF, ACTIVE, and ABORT, etc., can only be displayed in Text Mode. Whereas reading of value parameters, such as a sensor reading, can be displayed in text mode and other graph modes. Waveform Graph Mode — displays the parameters in waveform graphs

When this mode is applied, three control buttons will appear on the right side of the parameter item, allowing you to manipulate the display status.

- **Text Button** resumes Text Display Mode
- Scale Button changes the scale values, which are displayed below the waveform graph. There are 4 scales available: x1, x2, x4 and x8.
- Zoom-in Button taps once to display the selected data graph in full screen

**Digital Gauge Mode** — displays the parameters in form of a digital gauge graph

**Full Screen Display** — this option is only available in the waveform graph mode, and is mostly used in Graph Merge status for data comparison. There are three control buttons available on the top-right side of the screen under this mode.

- Edit Button tapping this button opens an edit window, on which you can set the waveform color and line thickness displayed for the selected parameter item.
- Scale Button changes the scale values, which are displayed below the waveform graph. There are 4 scales available: x1, x2, x4 and x8.
- Zoom-out Button exits full screen display.

#### > To edit the waveform color and line thickness in a data graph

- 1. Select 1 to 3 parameter items to display in Waveform Graph mode.
- 2. Tap the **Zoom-in Button** on the right to display the data graph in full screen.
- 3. Tap the **Edit Button** and an edit window appears.
- 4. Select a parameter item on the left column.
- 5. Select a desired sample color from the second column.
- 6. Select a desired sample line thickness from the right column.
- 7. Repeat step 4-7 to edit the waveform for each parameter item.

8. Tap **Done** to save the setting and exit, or tap **Cancel** to exit without saving.

#### 3. Function Buttons

The operations of all the available function buttons on Live Data screen are described below:

Show Selected/Show All — tap to switch between the two options; one displays the selected parameters, the other displays all the available items.

**Graph Merge** — tap to merge selected data graphs (for Waveform Graph Mode only). This function is very useful when making comparison between different parameters.

- NOTE: This mode supports Graph Merge for 2 to 3 parameters only, so select no less than 2 or no more than 3 items each time when making graph merge.
  - To cancel Graph Merge mode, tap the drop-down menu on the right side of the parameter name, and select a data display mode.
  - To Top moves a selected data item to the top of the list.

**Settings** — tap to open a setting screen, which allows you to set the trigger mode, recording duration, and various threshold values for data recording, and make other controls.

Cancel	Selected Record	Done
Q Search	Coolant temperature(Unit	:°C)
Calculate load	MIN 40	
Coolant temperature	<b>MAX</b> 60	
Short ft 1	Buzzer alarm	OFF
Long FT 1		
Engine speed		
Vehicle speed		0
Ignition advance		
Intake air		
	🖅 🏠 VCI, 🚘 🖓	◎ £ ♥75%∎6:23

Figure 4-11 Sample Setting Mode in Live Data

There are four navigation buttons on the top of the **Settings** mode screen.

- Selected Button displays the configuration screen on which you can set the threshold values, an upper limit and a lower limit, for triggering the buzzer alarm. This function is only applied to the Waveform Graph display mode.
  - a) MIN tap to open a virtual keyboard, which allows you to enter the required lower limit value
  - b) MAX tap to open a virtual keyboard, which allows you to enter the required upper limit value
  - c) **Buzzer Alarm** switches the alarm on and off. The alarm function makes a beep sound as a reminder whenever the data reading reaches the preset minimum or maximum point

#### > To set threshold limits for the parameter values

- 1. Tap the **Settings** function button at the bottom of the Live Data screen.
- 2. Tap the **Selected** navigation button.
- 3. Select a parameter on the left column, or enter the item name in the Search bar.
- 4. Tap on the right side of the **MIN** button, and enter the required minimum value.
- 5. Tap on the right side of the **MAX** button, and enter the required maximum value.
- 6. Tap the **ON/OFF** button on the right side of the Buzzer Alarm button to turn it on or off.
- 7. Tap **Done** to save the setting and return to the Live Data screen; or tap **Cancel** to exit without saving.

If the threshold limits are successfully set, two horizontal lines will appear on each of the data graphs (when Waveform Graph Mode is applied) to indicate the alarming point. The threshold lines are shown in different colors from the waveform of the parameters for distinction.

- **Record Button** displays the configuration screen for Record Setting, on which you can set the trigger type, duration and trigger point for the data recording function.
  - a) Trigger Type sets the trigger mode for data recording,

mainly of two kinds: Manual and Auto. There are four options available:

- 1) **Manual** allows you to manually start and stop data recording
- 2) **DTC** auto triggers data recording when any DTC is detected
- 3) **DTC Check Mode** auto triggers data recording when certain pre-selected DTC types are detected
- 4) **Parameter** auto triggers data recording when any parameter value reaches the preset threshold
- b) **Duration** sets the recording time (for Auto trigger mode only)
- c) Trigger Point reserves a relative percentage of a record length before the data recording start point for reference (for Auto trigger mode only)

#### > To perform setting for live data record

- 1. Tap the **Settings** function button at the bottom of the Live Data screen.
- 2. Tap the **Record** navigation button.
- 3. Tap the S button on the right of **Trigger Type** bar and select the required trigger mode.
- 4. Tap the  $\bigcirc$  button on the right of **Duration** bar and select a length of time.
- 5. Tap the  $\bigcirc$  button on the right of **Trigger Point** bar and select a relative percentage of a record length to be reserved before the data recording start point.
- Tap Done to save the setting and return to the Live Data screen or tap Cancel to cancel without saving and exit Setting.

**Clear Data** — clears all previously retrieved parameter values at a cutting point whenever you choose.

**Freeze** — displays the retrieved data in freeze mode.

• Previous Frame — moves to the previous frame in the freeze data.

• Next Frame — moves to the next frame in the freeze data.

**Resume** — this button appears when the Record or Freeze function is applied. Tapping this button stops data recording, or exit freeze data mode, and resumes normal data display mode.

**Record** — starts recording the retrieved live data; the recorded data is then stored as a video clip in the Data Manager application for future reviews. This function could be triggered automatically at preset threshold value or manually as you choose, and the triggering mode and record duration can be configured in the Setting mode of Live Data.

**Flag** — this button appears when the Record function is applied. Tapping this button sets flags for the recorded data at points wherever you choose. When playing back the recorded video clip later in *Data Manager*, the preset flag will enable a popup to allow input of text to take notes.

**Back** — returns you to the previous screen or exit the function.

### 4.6.4 Active Test

The Active Test function is used to access vehicle-specific subsystem and component tests. Available tests vary depending on the manufacturer, year, and model, and only the available tests display in the menu.

During an active test, the tester outputs commands to the ECU in order to drive the actuators. This test determines the integrity of the system or parts by reading the engine ECU data or by monitoring the operation of the actuators, such as toggling a solenoid, relay, or switch, between two operating states.

Selecting Active Test opens a menu of test options that varies by make and model. Selecting a menu option activates the test. Follow all screen instructions while performing tests. The content and pattern of the on-screen information vary according to the type of test being performed. Some toggle and variable control tests display Active Test Controls at the top of the screen with data stream information below, or vice versa.

Sprinter vo.so		F-8	Ö		0		, m		
	_		Lo	cking sole	noid	_	-	VC	b ⊡11.82V
Locking solenoid request					YES	ŧ.			
Output current of locking solenoids			921	92170		mA			
Locking se	olenoid				ON				
Locking se	olenoid [CAN	N, EWM]			OFF				
It is only p solenoid is It is only p	te lock solen ossible to sl ossible to sl ossible to sl s not operate	hift from F							
VIN: Car: Benz/169.03	1 A 150				F	5 Start	F4 St	op	ESC
<b>∧</b> ∧		9 0		<u>ش</u> ۱	/CI. F	÷ ==		÷ .	10:38

Figure 4-12 Sample Active Test Screen

The function buttons at the lower-right corner of the Active Test screen manipulate the test signals. The operational instructions are displayed on the main section of the test screen. Simply follow the on-screen instructions and make appropriate selections to complete the tests. Each time when an operation is successfully executed, message such as "Command Finished", "Activation Successful", or something similar displays.

Tap the **ESC** button to exit the test when finished.

## 4.6.5 Special Functions

These functions perform various component adaptations, allowing you to recalibrate or configure certain components after making repairs or replacement.

The main section of the Adaptation Operation screen displays a list of operational and vehicle status information, which mainly consists of four parts:

- 1. The first part in the top line shows the description of the operation being performed, and the execution status is displayed on the right, such as Completed, Activated, etc.
- 2. The second part shows the preconditions or requirements for executing the operation being selected.
- The third part displays the current conditions of the vehicle control module being learned for comparison to the preconditions suggested by the second part. If the current condition of the control module is out of the

suggested limit value, you must adjust the vehicle condition to meet the requirement.

4. The last part displays the instruction of how to use the functional button at the lower right corner of the screen to manipulate the teach-in operations.

Sprinter vo.so	1	X	٥	-	0		,		
		_	Loc	king solen	oid			VC6 11.82V	
Locking solenoid request									
Output current of locking solenoids						92170		mA	
Locking solenoid					ON				
Locking solenoid [CAN, EWM]					OFF				
It is only p solenoid is It is only p	te lock sole ossible to s operated ossible to s onot operat	hift from F							
VIN: Car: Benz/169.03	1 A 150				F	5 Start	F4 Stop	ESC	
♠ ŵ		0 0	*	ŵν	ci, 🚘	6	4	. 10:38	

Figure 4-13 Sample Adaptation Operation Screen

Read the information carefully and check the vehicle condition accordingly, when you are sure that the vehicle is ready to perform the adaptation, simply follow the instruction provided to make appropriate selections. When the operation is done, an execution status message such as Completed, Finished or Successful appears.

Tap the **ESC** button to exit the function.

# 4.7 Generic OBDII Operations

A fast-access option for OBDII/EOBD vehicle diagnosis is available on the Vehicle Menu screen (*Figure 4-1*). This option presents a quick way to check for DTCs, isolate the cause of an illuminated malfunction indicator lamp (MIL), check monitor status prior to emissions certification testing, verify repairs, and perform a number of other services that are emissions-related. The OBD direct access option is also used for testing OBDII/EOBD compliant vehicles that are not included in the diagnostics database.

Functions of the diagnostics toolbar buttons at the top of the screen are the same as those available for specific vehicle diagnostics. See *Table 4-2 Diagnostics Toolbar Buttons* on page 28 for details.

## 4.7.1 General Procedure

#### > To access the OBDII/EOBD diagnostics functions

- 1. Tap the **Diagnostics** application button from the MaxiSys Job Menu. The Vehicle Menu appears.
- 2. Tap the **EOBD** button. There are two options to establish communication with the vehicle.
  - Auto Scan select to establish communication using each protocol in order to determine which one the vehicle is broadcasting on.
  - Protocol select to open a submenu of various protocols. A communication protocol is a standardized way of data communication between an ECU and a diagnostic tool. Global OBD may use several different communication protocols.
- 3. Select a specific protocol under the **Protocol** option. Wait for the OBDII Diagnostic Menu to appear.



Figure 4-14 Sample OBDII Diagnostic Menu

**NOTE**: Tapping the **()** button displayed beside the function name opens a bubble with additional function information.

- 4. Select a function option to continue.
  - DTC & FFD
  - I/M Readiness
  - Live Data

- O2 Sensor Monitor
- On-Board Monitor
- Component Test
- Vehicle Information
- Vehicle Status

**NOTE**: Some functions are supported only on certain vehicle makes.

# 4.8 Exiting Diagnostics

The Diagnostics application remains open as long as there is an active communication with the vehicle. You must exit the diagnostics operation interface to stop all communications with the vehicle before closing the Diagnostics application.

NOTE: Damage to the vehicle electronic control module (ECM) may occur if communication is disrupted. Make sure all connections, such as USB cable and wireless connection, are properly connected at all times during testing. Exit all tests before disconnecting the test connection or powering down the tool.

#### > To exit the Diagnostics application

- 1. From an active diagnostic screen, tap the **Back** or **ESC** button to exit a diagnostic session step-by-step;
- 2. Tap the **Vehicle Swap** button on the diagnostics toolbar to return to the Vehicle Menu screen.

Now, the Diagnostics application is no longer communicating with the vehicle and it is safe to open other MaxiSys applications or exit the MaxiSys Diagnostic System and return to the tablet's Home screen.

# Chapter 5 Service Operations

The Service section is specially designed to provide you with quick access to the vehicle systems for various scheduled service and maintenance performances. The typical service operation screen is a series of menu-driven executive commands. By following the on-screen instructions to select appropriate execution options, enter correct values or data, and perform necessary actions, the system will guide you through the complete performance for various service operations.



Figure 5-1 Sample Service Menu

The most commonly performed service functions include:

- Oil Reset Service
- TPMS Programming Service
- EPB Service
- ABS/SRS Services
- SAS Calibration Service
- DPF Regeneration Service

# **5.1 Function Descriptions**

This section describes the main functions for vehicle service:

### 5.1.1 Oil Reset Service

This function performs a reset of the Engine Oil Life system, which calculates the optimal oil life change interval depending on the vehicle driving conditions and climate. The Oil Life Reminder must be reset each time the oil is changed, so the system can calculate when the next oil change is required.

# 5.1.2 Tire Pressure Monitor System (TPMS) Service

This function allows you to quickly look up the tire sensor IDs from the vehicle's ECU, as well as to perform TPMS programming and reset procedures after tire sensors are replaced.

### 5.1.3 Electric Parking Brake (EPB) Service

This function has a multitude of usages to maintain the electronic braking system safely and effectively. The applications include deactivating and activating the brake control system, assisting with brake fluid control, opening and closing brake pads, and setting brakes after disc or pad replacement, etc.

#### **EPB Safety**

It can be dangerous to perform EPB system maintenance, so before you begin the service work, please keep these rules in mind.

- ✓ Ensure that you are fully familiar with the braking system and its operation before commencing any work.
- ✓ The EPB control system may be required to be deactivated before carrying out any maintenance/diagnostic work on the brake system. This can be done from the tool menu.
- ✓ Only perform maintenance work when the vehicle is stationary and on level ground.
- ✓ Ensure that the EPB control system is reactivated after the maintenance work has been completed.

#### 🖉 NOTE

Autel accepts no responsibility for any accident or injury arising from the maintenance of the EPB system.

## 5.1.4 ABS/SRS Services

This function allows you to perform various bi-directional tests to check the

operating conditions of both the Anti-lock Braking System and the Supplemental Restraint System, such as Automated Bleeding, Pump Motor Test, and checking Module information, etc.

## 5.1.5 Steering Angle Sensor (SAS) Service

This service function allows you to perform calibration for the Steering Angle Sensor, which permanently stores the current steering wheel position as the straight-ahead position in the steering angle sensor EEPROM. On successful completion of the calibration, the steering angle sensor fault memory is automatically cleared.

## 5.1.6 DPF Regeneration Service

The Diesel Particulate Filter service function performs the regeneration procedure which is the DPF cleaning operation to clear the blockage through continuous burning of the particulate matter captured in the DPF filter. If the DPF light on the vehicle comes on and you successfully complete a DPF regeneration cycle, you will notice that the DPF light will automatically turn off.

# Chapter 6 Data Manager Operations

The Data Manager application is used to store, print, and review the saved files. Most operations are controlled through the toolbar.

Selecting the Data Manager application opens the file system menu. Different file types are sorted separately under different options, there are six types of information files to be viewed or played back.



Figure 6-1 Sample Data Manager Main Screen

# 6.1 **Operations**

Data Manager Operations are based on toolbar controls. Details are explained in the following sections.

## 6.1.1 Image Files

The Image section is a JPG database containing all captured screenshot images.



Figure 6-2 Sample Image Database Screen

- 1. **Toolbar Buttons** used to edit, print and delete the image files. See *Table 6-1 Toolbar Buttons in Image* on page 52 for detailed information.
- 2. **Main Section** displays the stored images.

Button	Name	Description
ŧ	Back	Returns to the previous screen.
	Enter Edit	Tapping this button shows the editing toolbar to print, delete or view image information.
Cancel	Cancel	Tapping this button close the editing toolbar or cancels file search.
Q Search	Search	Quickly locates the image file by entering the vehicle name, test path, file name or file info.
	Info	Tapping this button opens a window displaying the details of the image.
÷	Print	Tapping this button prints the selected image.
	Delete	Tapping this button deletes the selected image.

#### Table 6-1 Toolbar Buttons in Image

#### > To edit image information

- 1. Select Data Manager application from the MaxiSys Job Menu.
- 2. Select **Image** to access the image database.

- 3. Select an image to display it in full screen.
- 4. Tapping the screen once displays the editing toolbar.
- 5. Tap the **Info** button to open a window displaying the image information.
- 6. Tap the **Edit** button on the top-right corner of the window. The editing screen displays.
- 7. Edit the image information by entering the new file name, and file information.
- 8. Tap **Done** to save the information and exit, or tap **Cancel** to exit without saving.

#### > To delete selected images

- 1. Select **Data Manager** application from the MaxiSys Job Menu.
- 2. Select **Image** to access the image database.
- 3. Tap the Enter Edit button to display the editing toolbar.
- 4. Select the images that need to be deleted by tapping the thumbnail images, the selected thumbnail displays a tick icon at the bottom right corner.
- 5. Tap the **Delete** button, and then **Delete Selected**, then the selected images will be deleted.

### 6.1.2 PDF Files

The PDF section stores and displays all PDF files of saved data. After entering the PDF database, select a PDF file to view the stored information.

This section uses the standard Adobe Acrobat Reader application for file viewing and editing, please refer to the associated Adobe Acrobat Reader manual for more detailed instructions.

### 6.1.3 Review Data

The Review Data section allows you to play back the recorded data frames from live data streams.

On the Review Data main screen, select a record file to play back.



Figure 6-3 Sample Data Playback Screen

- 1. **Drop-down Toolbar** taps the button at the top center of the screen to open the Drop-down Toolbar
- 2. **Main Section** displays the recorded data frames
- 3. Navigation Toolbar allows you to manipulate data playback

Use the Navigation Toolbar buttons to play back the record data from frame to frame.

Tap **Back** to exit data playback.

## 6.1.4 Apps Uninstall

This section allows you to manage the firmware applications installed on the MaxiSys Diagnostics System. Selecting this section opens a management screen, on which you can check all the available vehicle diagnostics applications.

Select the vehicle firmware you want to delete by tapping on the car brand icon. The selected item will display a blue tick at the upper-right corner. Tap the **Delete** button on the top bar to delete the firmware from the system database.

### 6.1.5 Vehicle Management

This section allows you to move the vehicle applications installed on the diagnostics tablet to the external memory. Please insert an SD card with the capacity of 16GB to 128GB to the tablet prior to using this function. Tap the **SD card** icon alongside the vehicle application to transfer it to the external memory.

## ⊘ NOTE

This function is supported only on certain vehicle makes including Mercedes-Benz, BMW, Volkswagen, Hyundai, Peugeot, and Porsche.

# 6.1.6 Data Logging

The Data Logging section allows you to launch Support platform to view all records with or without feedback on the diagnostics system. For more details, please refer to *Data Logging* on Page 87.

# Chapter 7 MaxiFix Operations

The MaxiFix application launches the on-line troubleshooter database, which not only provides you virtually all common diagnostic trouble code (DTC) database for most vehicles, but also serves as a forum allowing you to network with other MaxiSys users, and gives you access to a vast database of repair and diagnostic tips along with proven filed fixes.

While the MaxiFix provides the abundant troubleshooter information available, the database keeps growing with daily troubleshooting resources by recording the reported solution cases, and the advisory reports of the MaxiSys users from all over the world.

Information in the MaxiFix database is organized into a series of diagnostic tips that are designed to quickly lead you to the root cause of a particular problem on the test vehicle, which will help you quickly find solutions for various diagnostic problems.

# 7.1 Navigation

You need to register the device to your online account before launching the MaxiFix platform, see *Product Registration* on page 83 for details.

MaxiFix Select Vehicle		- L	Q
filter :			Remove All Filters
Subject	Reply	View	Last Response
vwyhdgdgdggsbsvs 2014 Acura Truck MDX FWD V6-3.5L (J35Y5) 3y: chenqichuan@auteltech.net 12/05/2014	2	2	12/15/2014
Citroen C5 DPF Fluid 2005 Pontiac Grand Prix V6-3.8L VIN 2 8y. g_clayton65@hotmail.com 08/27/2014	1	12	08/27/2014
nissan pathfinder 2005 usa 2003 Infiniti G35 Sedan V6-3.5L (VQ35DE) 3y: robertoalvaradoj7@yahoo.com 08/25/2014	6	13	08/28/2014
ower steering intermittant operation 1010 Ford Fusion FWD L4-2.5L ly: mastertech007@hotmail.com 08/23/2014	2	24	08/28/2014
VC blows warm at hwy speeds. 1005 Subaru Outback Sport F4-2.5L SOHC	3	26	08/26/2014

Figure 7-1 Sample MaxiFix Home Page

The MaxiFix screen layout consists of 3 main areas:

1. **The Header** — the tool bar across the top of the screen which allows you to select vehicles and perform searches.

- 2. **The Main Screen** located at the center of the screen displaying content based on the vehicle attributes and keywords specified. The tabs on the main screen vary in accordance with the section selected on the Navigation Menu, allowing you to switch between functions.
- 3. **The Navigation Menu** the main menu at the bottom of the screen, which provides you access to different sections of MaxiFix.

#### The Header

The Header at the top of the screen features:

- A Select Vehicle button to open the vehicle identification window, and vehicle information bar, for example "2014>Hyundai> Accord Coupe > L4-2.4L (K24W1)".
- A search field to find relevant information by entering keywords, codes, or problems.

### **Select Vehicle Button**

The "Select Vehicle" button on the Header allows you to specify the vehicle which you want to reference on MaxiFix, by selecting each of the vehicle attribute from a sequence of option lists. This feature helps to filter out the searches that allow only the information that applies to the identified vehicle to display.

#### > To select a vehicle

Follow the procedure below to select a vehicle:

- 1. If you haven't already done so, click the "Select Vehicle" button on the Header.
- 2. Select the *year* of the vehicle from the list.
- 3. Select the *make* of the vehicle from the list.
- 4. Select the *model* of the vehicle from the list.
- 5. Select the *submodel* of the vehicle from the list.
- 6. Select the *engine* of the vehicle from the list.
- 7. After completing the vehicle selection procedure, the identified vehicle is shown on the Header.

# 7.1.1 Terminology

### MaxiFix Tip

A MaxiFix Tip provides practical information of real fix of a specific vehicle repair issue with detailed descriptions. It is combined with proven fix and vehicle specific data, and filed into an all-in-one information source to provide you with quick and easy repair solutions.

On MaxiFix community you can find Tips or share your own Tip to help other community members solve vehicle issues.

#### > To search for a MaxiFix Tip

- 1. Select a Vehicle:
  - a) Click the "Select Vehicle" button on the Header at the top of the page.
  - b) Select the *year* of the vehicle from the list.
  - c) Select the *make* of the vehicle from the list.
  - d) Select the *model* of the vehicle from the list.
  - e) Select the *submodel* of the vehicle from the list.
  - f) Select the *engine* of the vehicle from the list.

After completing the vehicle selection procedure, the identified vehicle is shown on the Header.

2. Enter a Search Term.

MaxiFix has an exclusive one-stop lookup that helps you find all of MaxiFix resources by one click. Simply enter a search term into the search bar on the Header to begin the search.

3. Proven Results!

The powerful MaxiFix database gives you proven results! The typical MaxiFix Tips combine actual workshop fixes and data which may include:

- a) OBDII Fault Codes description and reference helps in diagnostic assessment by making clear the nature of an automotive problem so that beginner and advanced technicians can make effective repairs
- Real Fix Tips provides repair tips from actual shop practices and are presented in an easy to understand Complaint, Cause, Correction format.

If you still can't find the information you want, you can ask the MaxiFix community for help by clicking "Ask" on the Navigation Menu at the bottom of the screen.

### Adopted!

The "Adopted!" icon that displays at the top right side of a Tip page indicates that the related Tip has been adopted by at least 1 technician in the community. If a tip has helped you to solve a repair problem, you are encouraged to give an Adopted! count to the tip. Each member is allowed to click the "Adopted!" once for a tip, and each click will add 1 count to the total number of "Adopted!" The "Adopted!" count helps you easily identify which tips are really helpful for repairing vehicle issues. You can also post a comment about how the tip has helped you as reference to other members.

# 7.2 Operations

The Navigation Menu is at the bottom of the screen. Selecting the items on the Navigation Menu allows you to switch between the main sections on MaxiFix. These main sections include:

- **Home** shows all questions and allows you to specify questions about one or multiple makes.
- Search Fix allows you to search for information from all available resources on MaxiFix, including: Open Questions, Tips, and Real Fixes, and displays search results.
- Ask allows you to ask a question in the community.
- My MaxiFix shows all your posts including Questions and Fixes in the community, and allows you to view your personal profile, select your vehicle preference, and share your tips.
- My Messages shows a list of message notifications which is relevant

to your activities in the Question section.

• **Support** — opens the FAQ page, or a message box for contacting Customer Service by email.

### 7.2.1 Home

Home is the first option on the Navigation Menu at the bottom of the screen. Tapping it opens your MaxiFix home page. There is a list of questions posted on the community, and you can scroll down the page to the bottom and view more questions by tapping "View More". Tap any question and you will be linked to the detailed page in the Ask section.

You can configure your main screen to display questions only related to the vehicle makes you are interested in, by tapping the "Filter" button on the main page of Home, and select the desired vehicle makes. This filter can be canceled anytime by tapping the "Remove All Filters" button, and the default setting will be restored to display questions about all vehicle makes.

## 7.2.2 Search Fix Features

Search Fix, the second option on the Navigation Menu at the bottom of the screen, presents search results for the specified vehicle. Search results are listed in various categories:

- All includes all search results, including related Questions, Tips, and Real Fixes to your search.
- **Questions** presents a list of open Question discussed in the community that may be pertinent to your search.
- **Tips** presents a list of Tips that directly correlate to your search criteria. Select a Tip from the list to open and review the complete Tip.
- **Real Fixes** presents a list of Tips that have been collected from actual shop repair orders and are presented in an easy-to-understand Complaint, Cause, and Correction format.

### 7.2.3 Ask

Ask, the third option on the Navigation Menu at the bottom of the screen, allows you to ask a question about a particular vehicle repair issue in the community.

#### > To ask a MaxiFix Question

- 1. If not already done, tap **Select Vehicle** on the Header to specify the vehicle you are asking about.
- 2. Tap **Ask** on the Navigation Menu at the bottom of the screen to open the Ask page.
- 3. On the **Ask** page find **Ask for Help**, fill in the following sections to ask a question.

The Ask page has 4 sections:

- **Subject** enters a brief subject for the question.
- **My Question** asks a clear and concise question that you want to ask the community. Be sure to be descriptive and concise when asking your question.
- **Problem Description** describes how the vehicle is behaving.
- Repair History includes any previous diagnostic tests that you performed, including the results of the tests. Also list any parts that were replaced during previous diagnostic work.

Tap the "Cancel" button to cancel your question and return to the Ask page.

Tap the "Submit" button to post your question to the community.

Tap the "Attach File" button to include images or reference files with your question.

You are requested to select one Adopted Answer from all of the responses and then close the question. For details, please refer to My Messages section.

### 7.2.4 My MaxiFix

My MaxiFix, the fourth option on the Navigation Menu at the bottom of the screen, opens your personal MaxiFix page. To access the features on My MaxiFix page you can select from the tabs:

- **My Questions** opens a list with links to the opened questions that you have posted to the community
- **My Cases** opens a list with links to the closed questions and tips that you have contributed to the community.

- **Marked Posts** opens a list with links to Tips and discussions that you are actively participating in.
- My Profile allows you to view your Autel account information including: your Autel ID, personal information, MaxiFix score, phone number and register time, and edit your portrait.
- Vehicle Preference used to set up a list of preferred vehicles. The preferred list allows you to limit the choices that displayed on the "Select Vehicle" list to specific years, and makes. Tap "Set Year" or "Set Make" to set your preferred models. The preferred makes will also be displayed in the "Filter" options on the Home page.
- Share a Tip allows you to share your personal repair experience with the community.

Tap **My MaxiFix** on the Navigation Menu at the bottom of the screen, to display all questions and tips that you have contributed to the community.

### Create a Tip

A "Tip" is a concise and complete description of the fix for a particular vehicle repair issue.

- > To create a new MaxiFix Tip
  - 1. Select **My MaxiFix** from the Navigation Menu.
  - 2. Select **Select Vehicle** from the Header and enter the identifying attributes of the vehicle you are writing the Tip about.
  - 3. On the My MaxiFix page find **Share a Tip**; tap this link to open the **My Tips** page.
  - 4. Enter the Tip subject in the **Subject** field.
  - 5. Compose your Tip in the **Description** field. Include as much information as possible, while keeping the information concise and to the point. A Tip should provide accurate information that is reader-friendly.

Use the **Cancel** button at the right-side bottom of the page to cancel your tip and return to the My MaxiFix page. Or,

Use the **Submit** button at the right-side bottom of the page to contribute your tip to the community.

Use the **Attach File** button at the left-side bottom of the page to include images or other supporting data with your question.

### View Profile Information

You can view your personal profile by tapping on your account ID or "My Profile" in My MaxiFix section or edit portrait where applicable, and visit other community members' profile by tapping their portrait. Information included in your profile determines how you are presented to the community, and what type of information will be sent to you from the community.

## 7.2.5 My Messages

My Messages, the fifth option on the Navigation Menu at the bottom of the screen, shows a list of message notification which is relevant to your activities in the Question section. A notification icon will appear on the top-right corner of "My Messages" if there is any new or unread message in the Question section. The number on the notification icon indicates the total number of the new and unread messages. The displayed number will be reduced correspondingly after viewing. The message notification will appear under the following two conditions:

- 1. Your question or answer is replied by other MaxiFix community members.
- 2. Your answer is marked as the "Adopted!" by the MaxiFix community member who asked the question.

Tap **My Messages**, select and open the message you want to read from the list. If your problem is solved according to the reply, you should select one Adopted Answer and close the question. If your answer is marked as "Adopted!", the prompt "Adopted! + 4" will be displayed permanently.

Tap **Clear** to delete all message notifications.

#### Select "Adopted Answers"

Members are requested to select one Adopted Answer from all of the responses on "My Messages" page before closing a question. The community members who provided the Adopted Answer are rewarded with scores for their contribution.

About Adopted Answer:

- Only one answer can be selected as "Adopted Answer".
- Answers can only be rated by the MaxiFix member who asked the question.

### **Close a Question**

When a repair question that you've posted to the community is resolved, you are encouraged to write down the case as a way to share a good solution. This will help the other MaxiFix members to find useful information for practical fix.

To close a question, you need to select the question's response message from the message list on "My Messages" page first, then tap "Adopted Answer" and select "Close Question". Tap the "Cancel" button to cancel your submission and return to My Messages page. It is strongly recommended to share your repair solutions before closing a question. Your question will be converted to a MaxiFix Community Tip after closing.

### Score Rewarding System

- 1. A score of 3 is awarded when you close a question.
- 2. A score of 2 is awarded if your closed question is marked as "Adopted!" by no less than 20 community members.
- 3. A score of 4 is awarded if your answer is selected as the "Adopted Answer".
- 4. A score of 1 is awarded if your answer is selected as the "Adopted Answer" for a closed question which is marked as "Adopted!" by no less than 20 community members.
- 5. A score of 1 is awarded to each of the first three respondents.

## 7.2.6 Support

Support, the last option on the Navigation Menu at the bottom of the screen, opens a page that provides 2 ways to gain support from MaxiFix:

- 1. A message form to contact the administrator of MaxiFix.
- 2. A Frequently Asked Questions (FAQ) link that answers the most frequent questions we hear from MaxiFix community members.

If you wish to contact the administrator of this site please use the contact form. Select "Support" from the Navigation Menu to open the comment window. To allow the administrator to respond to your question or issue, the following information should be provided:

- Your name
- A contact email address
- A contact phone number

# **Chapter 8 Settings Operations**

Selecting Settings application opens a setup interface, on which you can adjust default setting and view information about the MaxiSys system. There are eight options available for the MaxiSys system settings:

- Unit
- Language
- Printing Settings
- Multitask
- Auto Update
- Car Order
- System Settings
- About

# 8.1 **Operations**

This section describes the operation procedures for the settings.

# 8.1.1 Unit

This option allows you to adjust the measurement unit for the diagnostic system.

#### > To adjust the unit setting

- 1. Tap the **Settings** application on the MaxiSys Job Menu.
- 2. Tap the **Unit** option on the left column.
- 3. Select the appropriate measurement unit, Metric or Imperial unit. A tick icon will display to the right of the selected unit.
- 4. Tap the **Home** button on the top left corner to return to the MaxiSys Job Menu. Or select another setting option for the system setup.

# 8.1.2 Language

This option allows you to adjust the display language for the MaxiSys system.

### > To adjust the language setting

- 1. Tap the **Settings** application on the MaxiSys Job Menu.
- 2. Tap the **Language** option on the left column.
- 3. Select the appropriate language. A tick icon will display to the right of the selected language.
- 4. Tap the **Home** button on the top left corner to return to the MaxiSys Job Menu. Or select another setting option for the system setup.

### 8.1.3 Printing Settings

This option allows you to print from the tablet to a network printer via a computer.

- > To setup the printer connection
  - 1. Tap the **Settings** application on the MaxiSys Job Menu.
  - 2. Tap the **Printing Settings** option on the left column.
  - 3. Tap the **Print via Network** item to activate the printing function, which enables the device to send files to the printer through the PC via Wi-Fi connection.
  - 4. Tap the **Home** button on the top left corner to return to the MaxiSys Job Menu. Or select another setting option for the system setup.

### **Print Operations**

- > To install the printer driver program
  - Download Maxi PC Suite from www.autel.com > Support > Downloads > Autel Update Tools, and install to your windows-based computer.
  - 2. Double tap the **Setup.exe** item.
  - 3. Select the installation language and the wizard will load.
  - 4. Follow the wizard instructions on the screen and tap **Next** to continue.
  - 5. Tap **Install** and the printer driver program will be installed onto the computer.

6. Tap **Finish** to complete the whole installation procedure.

**NOTE**: The MaxiSys Printer runs automatically after the installation.

#### > To print from a computer

- 1. Install the printer driver to the computer.
- 2. Before printing, make sure the tablet is connected to the computer network, either via Wi-Fi or LAN.
- 3. Run the MaxiSys Printer program on the computer to open up the printer interface.
- 4. Tap **Test Print** to make sure the printer is working successfully.
- 5. Tap the **Print** button on the toolbar. A temporary document will be created and sent to the computer for printing.
- 6. The MaxiSys Printer will print the received document automatically when the **Auto Print** option is selected.

If you need to print the document later, tap **Open PDF file** and select the document, and double tap the **Print** button on the MaxiSys Printer interface to start the printing.

**NOTE**: Make sure the computer installed with the Printing Driver program is connected to a printer.

### 8.1.4 Multitask

The Multitask option allows you to turn the Multitask function on or off. The Multitask feature enables you to browse and navigate more freely among different applications on the MaxiSys system. Tap the Multitask button, the Multitask menu displays all active applications.

#### > To enable the Multitask function

- 1. Tap Settings on the MaxiSys Job Menu.
- 2. Tap **Multitask** on the left column.
- 3. Tap **ON/OFF** to enable or disable the Multitask function. If the function is enabled, the button displays blue, or if disabled the button displays gray.
- 4. Tap **Home** on the top left corner to return to the MaxiSys Job Menu.

Or select another setting option to configure another system setting.

### 8.1.5 Auto Update

This option allows you to preset a time to update the software. There are three update options: OS Update, MaxiSys Update and Vehicle Update.

Tap **ON/OFF** to enable Auto Update. The button displays blue if Autel Update is enabled and displays grey if the Auto Update is disabled. Set the time of the day for updating. If a specific time is set, the selected software will be automatically updated at this specific time.

### 8.1.6 Car Order

This option allows you to sort the vehicles either by alphabetical order or by frequency of use.

#### > To adjust the vehicle list setting

- 1. Tap the **Settings** application on the MaxiSys Job Menu.
- 2. Select Car Order on the left column.
- 3. Select the appropriate sort type. A check mark will display to the right of the selected type.
- 4. Tap the **Home** button in the top left corner to return to the MaxiSys Job Menu. Or select another setting option for system setup.

### 8.1.7 System Settings

This This function provides you with direct access to the Android system setting interface, where you can adjust various system settings for the Android system platform, regarding wireless and networks settings, various device settings such as sound and display, as well as system security settings, and check related information about the Android system. Refer to Android documentation for additional information.

### 8.1.8 About

The About option provides information of the MaxiSys diagnostic device regarding the product name, version, hardware, and serial number, etc.

#### > To check the MaxiSys product information in About

- 1. Tap the **Settings** application on the MaxiSys Job Menu.
- 2. Tap the **About** option on the left column. The product information screen displays on the right.
- 3. Tap the **Home** button on the top left corner to return to the MaxiSys Job Menu, or select another setting option for the system setup, after viewing.

# Chapter 9 Shop Manager Operations

The Shop Manager application helps you to manage the workshop information, customer information records, and keep test vehicle history records, which can be a great assist in dealing with daily workshop business and improves customer service. There are three main functions available:

- Vehicle History
- Workshop Information
- Customer Manager

The operations of these functions of the Shop Manager application are mainly manipulated by the toolbar buttons, which are listed and described in the table below:

Button	Name	Description
	Back	Tap to return to the previous screen.
A	Diagnostics	Tap to access the vehicle's Diagnostics screen to activate a direct test session.
	Enter Edit	Tap to show the editing toolbar to print or delete the selected file.
団	Delete	Tap to delete the selected vehicle record item from the list.
QSearch	Search	Quickly locates the vehicle record by entering the vehicle name or test path.
Cancel	Cancel	Tap to cancel edit or file search.
	Edit	Tap to edit information for the displayed file.
2+	Add Account	Tap to create a new customer account file.
	History Notes	Tap to open a note form, which allows you to create audio record, attach picture or video, or edit text notes, etc.

Button	Name	Description
F	Vehicle History	Tap to open the Vehicle History screen which displays the correlated test vehicle records.
Done	Done	Completes editing and saves the file.

# 9.1 Vehicle History

This function stores records of test vehicle history, including vehicle information and the retrieved DTCs from previous diagnostic sessions, and displays all information in an easy-to-check table list, on which you can view summarized details and manually input other information about the test vehicle and diagnostic loggings, etc. The Vehicle History also provides direct access to the previously tested vehicle and allows you to restart a diagnostic session without the need to do vehicle identification again.



Figure 9-1 Sample Vehicle History Screen

- 1. **Top Toolbar Buttons** navigates and makes various controls of the application.
- 2. Main Section displays all the vehicle history records information.
- > To activate a test session for the recorded vehicle
  - 1. Tap the **Shop Manager** application on the MaxiSys Job Menu.
  - 2. Select Vehicle History
  - 3. Tap the Diagnostics button at the bottom of the thumbnail of a

vehicle record item. Or,

- 4. Select a vehicle record item by tapping the thumbnail.
- A Test Records window appears. Check the recorded information of the recorded test vehicle, and tap the **Diagnostics** button on the upper-right corner.
- 6. The vehicle's Diagnostics screen displays, now a new diagnostic session is activated, see *Diagnosis* on page 31 for detailed instructions on vehicle diagnostic operations.

### 9.1.1 Test Records

The Test Record sheet of the tested vehicle is a detailed data form, which includes all general information of the vehicle such as vehicle year, make and model, etc., and the diagnostic trouble codes retrieved from previous test sessions, as well as other service details which can be added manually by the technician himself.

Title	2003 Toyota Corolla			Diagnostics
Vehicle info	rmation			Congrission
Year	2003	VIN		
Make	Toyota	License		6
Model	Corolla	Odometer Mileage		
Sub mode	el.	Color		
Engine	1FE	Status No	ot started	
Service rec	ord			
Technicia	in			
Technician Notes	l.			
nuces				
				-
Customeri	nformation e			

Figure 9-2 Sample Test Records Sheet

### > To edit the Test Records

- 1. Tap the **Shop Manager** application on the MaxiSys Job Menu.
- 2. Select Vehicle History.
- 3. Select the specific vehicle history record thumbnail from the main section. The test record sheet displays.
- 4. Tap the **Edit** button to start editing.
- 5. Tap on each item to enter the corresponding information or add attaching files or images.

NOTE: The vehicle VIN number, or license and the customer information account are associated by default. Adding one of the information will automatically associate the other item in the record sheet, provided that the later one exists.

- Tap Add to Customer to associate the test record sheet to an existing customer account, or add a new associating account to be associated with the test vehicle record. See *Customer Manager* on page 74 for more information.
- 7. Tap **Done** to save the updated record sheet, or tap **Cancel** to exit without saving.

## 9.2 Workshop Information

The Workshop Information form allows you to edit, enter and save detailed workshop information, such as shop name, address, phone number and other remarks, which, when printing vehicle diagnostics reports and other associated test files, will appear as the header of your printed documents.

•	Workshop information	
Set page header logo	Set shop logo	
+	+	
Shop name		100
Shop Number		
Address		
Address Zip code	Managername	
Number Address Zip code City State	Manager name Manager title	

Figure 9-3 Sample Workshop Information Sheet

### > To edit the Workshop Information sheet

- 1. Tap the **Shop Manager** application on the MaxiSys Job Menu.
- 2. Select Workshop Information.
- 3. Tap the **Edit** button on the top toolbar.
- 4. Tap on each field to enter the appropriate information.
- 5. Tap **Done** to save the updated workshop information sheet, or tap **Cancel** to exit without saving.

## 9.3 Customer Manager

The Customer Manager function allows you to create and edit customer accounts. It helps you to save and organize all customer information accounts that are associated with the test vehicle test records, which is a great support for the arrangement of daily workshop business.

- > To create a customer account
  - 1. Tap the **Shop Manager** application on the MaxiSys Job Menu.
  - 2. Select Customer Manager.
  - 3. Tap the **Add Account** button. A blank information form appears, tap each field to enter the appropriate information.
- NOTE: Required fields are denoted by an asterisk.
  - 4. Tap the 🛨 photo frame beside the Name chart to add a photo. A

sub menu displays, select **Take Photo** to take a new photo for the account, or select **Choose Photo** to choose from the existing files.

- 5. Some customers may have more than one vehicle for service; you can always add new vehicle information to the account to be correlated. Tap **Add New Vehicle Information**, and then fill in the vehicle information. Tap the **(x)** button to cancel adding.
- 6. Tap **Done** to save the account, or tap **Cancel** to exit without saving.

#### > To edit a customer account

- 1. Tap the **Shop Manager** application on the MaxiSys Job Menu.
- 2. Select Customer Manager.
- 3. Select a customer account by tapping the corresponding name card. A Customer Information sheet displays.
- 4. Tap the **Edit** button on the top toolbar to start editing.
- 5. Tap on the input field to edit the information.
- 6. Tap **Done** to save the updated information, or tap **Cancel** to exit without saving.

#### > To delete a customer account

- 1. Tap the **Shop Manager** application on the MaxiSys Job Menu.
- 2. Select Customer Manager.
- 3. Select a customer account by tapping the corresponding name card. A Customer Information sheet appears.
- 4. Tap the **Edit** button on the top toolbar to start editing.
- 5. Tap the **Delete Customer Information** button. A confirmation message appears.
- 6. Tap **OK** to confirm the command, and delete the account. Tap **Cancel** to cancel the request.

# **Chapter 10 Update Operations**

The Update application allows you to download the latest released software. The updates can improve the MaxiSys applications' capabilities, typically by adding new tests, new models, or enhanced applications to the database.

The Display Tablet automatically searches for available updates for all of the MaxiSys software when it is connected to the internet. Any updates that are found can be downloaded and installed on the device. This section describes installing an update to the MaxiSys System.



Figure 10-1 Sample Update Screen

### 1. Navigation and Controls

- Home Button returns to the MaxiSys Job Menu.
- Update All updates all available updates.
- Diagnostics Tab displays all available vehicle diagnostic software.
- Search Bar searches specific update item by entering the file name, for example: a specific vehicle manufacturer.

#### 2. Status Bar

- Left Side displays the MaxiSys device model information and serial number.
- Right Side displays an update progress bar indicating the completion status.
- 3. Main Section

- Left Column displays vehicle logos and update software version information.
- Middle Column displays a brief introduction about the new changes to the software operation or capabilities. Tap (i) button to open an information screen to view more details, and tap the dim area around to close the window.
- Right Column according to the operation status of each software item, the button appears differently.
  - a) Tap **Update** to update the selected item.
  - b) Tap **Pause** to suspend the update procedure.
  - c) Tap **Continue** to go on updating the suspended update.

#### > To update the diagnostic software

- 1. Make sure the Display Tablet is connected to a power source with stable access to the internet.
- Tap the Update application button from the MaxiSys Job Menu; or tap the update notification message when received one; or tap the Update icon on Vehicle Menu in Diagnostics application. The Update application screen appears.
- 3. Check all available updates:
  - If you decide to update all the items of diagnostic software, select **Diagnostics** Tab and then tap the **Update All** button.
  - If you only want to update one or some of the item(s), tap the **Update** button on the right column of the specific item(s).
- 4. Tap the **Pause** button to suspend the updating process. When you tap **Continue** to renew the update, the updating process will resume from the break point.
- 5. When the updating process is completed, the firmware will be installed automatically. The previous version will be replaced.

# **Chapter 11 VCI Manager Operations**

This application allows you to pair up the Display Tablet with the VCI device or BT506 battery tester, check the communication status, and update the VCI or battery tester firmware. The BT506 battery tester should be purchased separately.



Figure 11-1 Sample VCI Manager Screen

- 1. **Connection Mode** there are four connection modes available for selection. The connection status is displayed alongside.
  - 1. VCI BT Pairing when the VCI is paired to a wireless device, the connection status reads "Connected". Otherwise it reads "Disconnected".
  - BAS BT Pairing when the battery tester is paired successfully via Bluetooth, the connection status reads "Connected". Otherwise it reads "Disconnected".
  - 3. VCI Update updates VCI firmware via Internet through the diagnostic tablet networking via Bluetooth pairing.
  - 4. BAS Update updates the firmware of the battery tester.
    - > Select a connection mode to manage and set up a connection.
- 2. Settings this section allows you to manage wireless connectivity.
  - BT Setting searches and displays the type and partial serial number of devices available for Bluetooth pairing. Tap a device to start pairing. The BT status icon displays the received signal strength for the device.

# 11.1 VCI Connection via Bluetooth

The VCI device needs to be connected to a vehicle or to an available power source, so that it is powered up during the synchronization procedure. Make sure the Display Tablet has sufficient battery level or is connected to an external power supply.

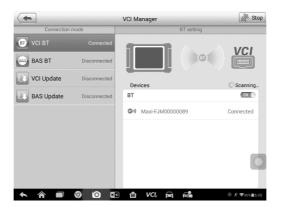


Figure 11-2 Sample VCI BT Pairing Screen

### > To pair the VCI device with the Display Tablet

- 1. Power on the Display Tablet.
- 2. Insert the 16-pin vehicle data connector of the MaxiVCI V100 to the vehicle Data Link Connector (DLC).
- 3. Tap the **VCI Manager** application on the MaxiSys Job Menu of the Display Tablet.
- 4. Select **VCI BT** from the connection mode list.
- 5. Toggle the Bluetooth **ON**. Tap the **Scan** button at the top-right corner. The device will start searching for available units to pair with.
- 6. The device name may appear as "Maxi" suffixed with the VCI's serial number. Select the appropriate device for pairing.
- 7. When paring is successfully done, the connection status displayed to the right of the device name reads "Paired."
- 8. After a few seconds, the VCI button on the system Navigation bar at the bottom of the screen will display a green tick icon, indicating

that the Display Tablet is connected to the VCI device.

- 9. Tap the paired device again to unpair it.
- 10. Tap the **Back** button on the top left to return to the MaxiSys Job Menu.

**NOTE**: A VCI device can be paired to only one Display Tablet each time, and once it's been paired, the device will not be discovered for any other unit.

## 11.2 BAS Connection via Bluetooth

Ensure that the BT506 battery tester is sufficiently charged or is connected to the external power supply before use.

#### > To pair the Battery Tester with the tablet

- 1. Power on the diagnostics tablet and the battery tester.
- 2. Connect the red clamp to the positive (+) battery terminal and the black clamp to the negative (–) battery terminal.
- 3. Tap VCI Manager on the MaxiSys Job Menu of the tablet.
- 4. Select **BAS BT** from the connection mode list.
- 5. Toggle the Bluetooth **ON**. Tap **Scan** at the top-right corner. The device will start to search for available units to pair with.
- Depending on the type of battery tester, the device name may appear as "Maxi" suffixed with the battery test's serial number. Select the appropriate device for pairing.
- 7. When paired successfully, the connection status reads "Paired."

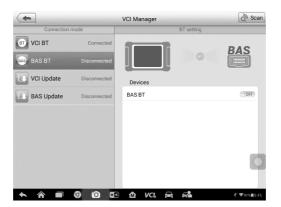


Figure 11-3 Sample BAS BT Pairing Screen

# 11.3 VCI Update

The Update module provides the latest update for the VCI. Before updating the VCI firmware, please make sure the network connection is stable.



Figure 11-4 Sample VCI Update Screen

#### > To update the VCI device firmware

- 1. Power on the Display Tablet. Insert the MaxiVCI Mini to the vehicle's DLC.
- 2. Connect the VCI device to Display Tablet via Bluetooth or USB cable.
- 3. Tap the VCI Manager application on the MaxiSys Job Menu of the Display Tablet.
- 4. Select VCI Update from the connection mode list.
- 5. The current version and the latest version of the VCI firmware will be displayed after a few seconds, tap **Update Now** to update the VCI firmware if available.

### 11.4 BAS Update

Before updating the Battery Tester firmware, please make sure the network connection is stable.



Figure 11-5 Sample BAS Update Screen

#### > To update the battery tester firmware

- 1. Power on the Display Tablet and the battery tester.
- 2. Connect the battery tester to Display Tablet via Bluetooth or USB cable.
- 3. Tap the **VCI Manager** application on the MaxiSys Job Menu of the Display Tablet.
- 4. Select **BAS Update** from the connection mode list.
- 5. The current version and the latest version of the battery tester firmware will be displayed after a few seconds, tap **Update Now** to update the battery tester firmware if available.

**NOTE:** Do not leave the BAS Update page during upgrade.

# **Chapter 12 Support Operations**

This application launches the Support platform which synchronizes Autel's on-line service base station with the Display Tablet. In order to synchronize the device to your on-line account, you need to register the product online when you use it for the first time. The Support application is connected to Autel's service channel and on-line communities which provides the quickest way for problem solutions, allowing you to submit complaints or sent help requests to obtain direct services and supports.

# **12.1 Product Registration**

In order to get access to the Support platform and obtain update and other services from Autel, you are required to register the MaxiSys Diagnostics Device the first time you use it.

- > To register the diagnostics device
  - 1. Visit the website: http://pro.autel.com.
  - 2. On the Sign In page, enter your account ID and other information to log in, if you already have an account.
  - 3. If you are a new member to Autel and do not have an account yet, tap the **Create Autel ID** button on the left side.
  - 4. Enter the required information in the input fields, and tap the **Get Verification Code** button.
  - 5. The online system will automatically send a verification code to the registered email address. Input the code in the Verification Code field and complete other required fields. Read through Autel's Terms and Conditions and tap Agree, and then tap Create Autel ID at the bottom. A product registration screen opens.
  - 6. Find out the device's serial number and password from the *About* section of the Settings application on the Display Tablet.
  - 7. Select the product model of your device, enter the product serial number and password on the Product Registration screen, and tap **Submit** to complete the registration procedure.

# 12.2 Support Screen Layout

The Support application interface is navigated by 4 simple buttons on the top

navigation bar, operation of each is described below in turn from left to right:

- Home Button returns to the MaxiSys Job Menu.
- **Back** returns to the previous screen, each press takes you back one step.
- Forward each press moves forward one screen until you've reached the last screen visited.
- **Refresh** reloads and updates the screen.



Figure 12-1 Sample Support Application Screen

The main section of the Support screen is divided into two sections. The narrow column on the left is the main menu; selecting one subject from the main menu displays the corresponding functional interface on the right.

## 12.3 My Account

The My Account screen displays comprehensive user and product information, which is synchronized with your account, including User Info, Device Info, Update Info and Service Info.

### **Personal Info**

The User Info and Device Info are both included under the Personal Info section.

• User Info — displays detailed information from your registered Autel

account, such as your Autel ID, Name, Address and other contact information, etc.

• **Device Info** — displays the registered product information, including the serial number, registration date, expiration date, and warranty period.

### Update Info

The Update Info section displays a detailed record list of the product's software update history, including the product serial number, software version or name, and the update time.

### Service Info

The Service Info section displays a detailed record list of the device's service history. Every time the device has been sent back to Autel for repair, the device's serial number and the detailed repair information, such as the fault type, changed components, or system reinstallation, etc., will be recorded and updated to the associated online product account, which will be available in the Service Info section.

# 12.4 User Complaint

The User Complaint screen allows you to establish a new complaint case, as well as to view historical complaint records.

### **Screen Layout**



Figure 12-2 Sample Complaint Screen

The User Complaint screen consists of two parts.

### 1. Option Bar

- Period Filter displays only the complaint records within the defined period on the list
- Status Filter displays the corresponding complaint records according to the selected case status
- New Complaint Button starts a new complaint case.

### 2. Complaint List

The complaint list normally displays all the complaint records of all time and all status by default. The summary information for each complaint item includes the Subject Name, Ticket ID, User's Account ID, Date, and the Case Status.

There are four kinds of the case status:

- **Open** indicates the complaint case has been started but not processed yet
- Suspended indicates the complaint case is being processed
- Waiting Customer Reply indicates the complaint has been replied by the service personnel, and requires feedback from the customer
- **Closed** indicates the complaint case has been processed, solved, and ended
- ➢ To view the detailed complaint session, tap the S button on the right side of the case item.

#### > To establish a new complaint session

- 1. Register the product online.
- 2. Tap the **Support** application on the MaxiSys Job Menu. The device information is automatically synchronized with the online account.
- 3. Tap **Complaint** on the Main Menu.
- 4. Tap the **New Complaint** button at the upper-right corner. A selection menu with a category of service channels displays.
- 5. Select your target service channel and click Next to continue. A standard complaint form displays, on which you are allowed to enter detailed information, such as personal information, vehicle information, and device information, you can also attach image or PDF files with the form.

- 6. Enter in each input field the appropriate information, in order to settle the complaint more efficiently, it is recommended to fill out the complaint form as detailed as possible.
- 7. Select the required processing time on the last section according to the urgency of the case.
- 8. Tap **Submit** to send the completed form to Autel's online service center, or tap **Reset** to refill it. The submitted complaints will be carefully read and handled by the service personnel, and the respond speed may depend on the processing time you've required.

#### > To make a reply in a complaint session

- 1. Register the product online.
- 2. Tap the **Support** application on the MaxiSys Job Menu. The device information is automatically synchronized with the online account.
- 3. Tap **Complaint** on the Main Menu.
- Select an existing complaint case item on the record list by tapping the button on its right side. The screen displays the complaint session details.
- 5. Tap the **Post Reply** button on the upper-right side after viewing, to make a reply. An edit screen displays.
- 6. Enter the content in the input field, and if necessary, upload an attaching file.
- 7. Tap **Submit** to post the reply.
- 8. Tap the **States** selection drop-down menu to reset a case state.
- 9. Tap the **Update** button to commit the newest update

## 12.5 Data Logging

The Data Logging section keeps records of all **Feedback** (submitted), **Not Feedback** (but saved) or **History** (up to the latest 20 test records) data logs on the diagnostic system. The support personnel receive and process the submitted reports through the Support platform, and send back problem solutions within 48 hours to the corresponding Data Logging session, on which you are also allowed to have a direct conversation with the support personnel.

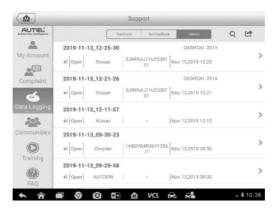


Figure 12-3 Sample Data Logging Screen

### > To submit a reply in a Data Logging session

- 1. Tap on the **Feedback** tab to view a list of submitted data loggings.
- 2. Select a specific item to view the latest update of the processing progress.
- 3. Tap on the input field at the bottom of the screen, and enter the texts. Or tap the **Audio** button to record a voice message, or **Camera** button to take a picture.
- 4. Tap **Send** to deliver your message to the technical center.

### **12.6 Communities**

The Communities section launches and synchronizes with the Technical Forums on Autel's official website www.autel.com, where you are allowed to discuss technical topics or share information with, as well as ask for technical advices or offer technical supports to all other members in Autel's online support communities.



Figure 12-4 Sample Communities Home Screen

### > To start a discussion

- 1. Tap **Start a discussion** on the Communities Home screen. A list of the major forums is displayed.
- 2. Select a desired group according to the subject you are about to discuss. For example, if you are going to ask a question about the MaxiSys tablet, tap **MaxiSys** to start a discussion.
- 3. Enter your topic and the discussion content in the appropriate input field.
- 4. Select a category or edit tags for the discussed post. This will help other members with similar interest to find your post.
- 5. Tap **OK** to submit the post.

#### > To join and reply to a discussion post

- 1. Select a forum group that you are interested in, whether by the product or the features, on the Communities Home screen. A list of the latest posts is displayed.
- 2. Select a specific category on the Categories menu to better pinpoint the topics you are most interested with.
- 3. Tap the (>) button on the right side of the topic item to view the discussion. The posts contents are displayed.
- 4. Browse through all the posts by sliding the screen up and down. Tap **Go to original post** when reaching the end of the discussion to return to the first post.

- 5. Tap **Reply** to reply a specific post, or tap **Reply to original post** to join and continue the whole discussion.
- 6. Enter your comment in the input field, and tap **OK** to submit your post.

### **User Profile**

The User Profile section allows you to set profile photo, check your member status and other information, as well as to review your personal posts in the communities.

Tap the profile photo on the Communities screen to open the User Profile.



Figure 12-5 Sample User Profile Screen

- Profile displays the user's personal information and member status. The Related links allow you to check the Top Users (ranked according to their points and levels) in the communities, as well as to find out other online users.
- **Profile Photo** allows you to select an image to set as your profile photo to be displayed in the communities.
- **Stuff** displays all the discussions you've posted at various forums in a list.

## 12.7 Training Channels

The Training section provides quick links to Autel's online video library. Select a video channel by the language to see all the available online tutorial videos from Autel for various technical supports, such as product usage techniques and vehicle diagnostics practice, etc., may be available for your interests.

# 12.8 FAQ Database

The FAQ section provides you comprehensive and abundant references for all kinds of questions frequently asked and answered about the use of Autel's online member account, and shopping, and payment procedures.

- Account displays questions and answers about the use of Autel's online user account.
- Shopping & Payment displays questions and answers about online product purchase and payment methods or procedures.

# **Chapter 13 Academy Operations**

The Academy application provides and allows you to play various tutorial videos stored on the device. The stored training materials mainly consists of product usage tutorials and vehicle diagnostic training videos, all produced by top-notch technicians and product experts. The application also allows you to download or watch more associated videos online, by providing quick links to Autel's online video database.

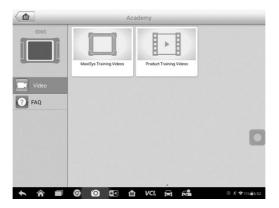


Figure 13-1 Sample Training Application Screen

- 1. Navigation Buttons allows you to navigate the application interface.
  - Home Button returns to the MaxiSys Job Menu
  - More Video Button displays all available video files with stable network connection
- 2. Main Section displays the available video files for watching

#### > To play a video

- 1. Tap the **Training** application on the MaxiSys Job Menu. The Training application screen displays.
- 2. Select a video file from the main section.
- 3. Select a Player from the popup window if necessary. Now you can watch the video, it is played in full screen mode.

# **Chapter 14 Remote Desk Operations**

The Remote Desk application launches the TeamViewer Quick Support program, which is a simple, fast and secure remote control interface. You can use the application to receive ad-hoc remote support from Autel's support center, colleagues, or friends, by allowing them to control your MaxiSys tablet on their PC via the TeamViewer software.

# 14.1 Operations

If you think of a TeamViewer connection as a phone call, the TeamViewer ID would be the phone number under which all TeamViewer Clients can be reached separately. Computers and mobile devices that run TeamViewer are identified by a globally unique ID. The first time the Remote Desk application is started, this ID is generated automatically based on the hardware characteristics and will not change later on.

Make sure the Display Tablet is connected to the Internet before launching the Remote Desk application, so that the Display Tablet is accessible to receive remote support from a third party.

	ow to connect				
-	> C ( tripschater	L1eamviewer.com		Your ID -	
	On any other d	levice, go to			
ŀ	ttps://start.tear	nviewer.com			
		•			

Figure 14-1 Sample Remote Desk Screen

#### > To receive remote support from a partner

- 1. Power on the Display Tablet.
- 2. Tap the **Remote Desk** application on the MaxiSys Job Menu. The TeamViewer interface displays and the device ID is generated and shown.
- 3. Your partner must install the Remote Control software to his/her

computer by downloading the TeamViewer full version program online (http://www.teamviewer.com), and then start the software on his/her computer at the same time, in order to provide support and take control of the Display Tablet remotely.

- 4. Provide your ID to the partner, and wait for him/her to send you a remote control request.
- 5. A popup displays to ask for your confirmation to allow remote control on your device.
- 6. Tap Allow to accept, or tap Deny to reject.

Refer to the associated TeamViewer documents for additional information.

# **Chapter 15 Quick Link Operations**

The Quick Link application provides you with convenient access to Autel's official website and many other well-known sites in automotive service, which offers you abundant information and resources, such as technical help, knowledge base, forums, training, and expertise consultations, etc.

	Quick	Link	Q Search
AUTEL	ALLDATA	OBD WIKI	HAYNESPRO
AUTEL	ALLDATA	OBD wiki	HaynesPro
IDENTIFIX	MITCHELL1	NASTF	TST
IDENTIFIX	Mitchell1	NASTF	TST
AUTODATA	ETI	IATN	L
autodata	eti	iATN	
	9 10 II M	VCI 🛱 🛤	© £ ♥70%≣6.52

Figure 15-1 Sample Quick Link Screen

### > To open a quick link

- 1. Tap the **Quick Link** application on the MaxiSys Job Menu. The Quick Link application screen displays.
- 2. Select a website thumbnail from the main section. The Chrome browser is launched and the selected website is opened.
- 3. Now you can start exploring the website!

# **Chapter 16 MaxiScope Operations**

The MaxiScope application configures the MaxiSys Diagnostic Device to operate as an automotive oscilloscope when work in combination with the MaxiScope module. This function provides all the features needed for performing electrical and electronic circuit tests as well as monitoring signal activities on any modern vehicles, which shows you what is really going on with a vehicle's electrical system.

Please download the latest user manual for Autel MaxiScope from www.autel.com > Products > Specialty Tools > MORE PRODUCTS > MaxiScope MP408 > Downloads.

# **Chapter 17 Battery Test Operations**

The Battery Test application allows user to perform in-vehicle battery test and out-vehicle battery test functions when the BT506 battery tester is connected to the MS906S tablet and a battery. The BT506 battery tester enables technicians to view the health status of the vehicle's battery and electrical system.



**NOTE:** The BT506 battery tester should be purchased separately.

Figure 17-1 Sample Battery Test Screen

# **17.1 Test Preparation**

### 17.1.1 Inspect the Battery

Before starting a test, inspect the battery for:

- Cracking, buckling or leaking. If you see any of these defects, replace the battery.
- Corroded, loose or damaged cables and connections. Repair or replace as needed.
- Corrosion on the battery terminals, and dirt or acid on the case top. Clean the case and terminals using a wire brush and a mixture of water and baking soda.

### 17.1.2 Connect the Battery Tester

### > To pair with the MS906S tablet

1. Press and hold the **Lock/Power** Button to turn on the MS906S. Ensure that the unit is sufficiently charged before using.

- 2. Enable Bluetooth on the MS906S by tapping VCI Manager > BAS BT. Tap Scan at the top-right corner. The device will start to search for available pairing units.
- 3. Depending on the type of battery tester, the device name may display as "Maxi" suffixed with a serial number. Select the appropriate device for pairing.
- 4. When paired successfully, the connection status reads **Paired**.

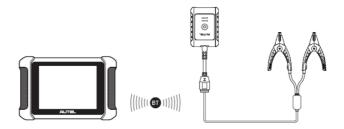


Figure 17-2 Sample Battery Tester Connection 1

- > To connect to a battery
  - 1. Connect the red clamp to the positive (+) terminal and the black clamp to the negative (-) terminal of the battery.

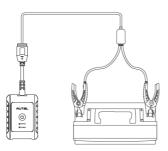


Figure 17-3 Sample Battery Tester Connection 2

### 17.2 In-vehicle Test

In-vehicle Test is used for testing batteries that are installed in a vehicle. An in-vehicle test includes Battery Test, Starter Test, and Generator Test. These tests help determine the health status of the battery, the starter, and the generator.

### **U**IMPORTANT

A disclaimer will appear when accessing any function on the **Home** screen for the first time. Please read the end user agreement and Tap **Accept** to continue. If you tap **Decline**, you will not be able to use the features properly.

Prior to testing any battery, ensure that the battery tester is paired with the tablet via Bluetooth and connected properly to a battery.

#### > To start the in-vehicle test

- 1. Tap the Battery Test on the MaxiSys Job Menu screen. Select In-vehicle Test.
- 2. Confirm the vehicle information on the left side of the screen. Make sure the VIN is entered.
- 3. Confirm your battery information, including voltage, type, standard, and capacity. Tap **Next** to continue in-vehicle test functions.

	venicie	information			
License					
	•	Туре	Standard	Capacity	-
* VIN				190	
WDB22: 456	•	FLOODED	CA	195	
Make		AGM	EN	200	
Mercedes-Benz	>				
Series		AGM SPIRAL	EN2	205	
S (222)	>				
Model					
S 350 d	>				
Others					
None	>				
			Batt local	tion Next	
A      O     O     O		VCL 🛱	F.C.	© £ ♥47%	4:5

Figure 17-4 Sample Battery information Screen

Please refer to the table below for a list of buttons that may appear when accessing the functions:

Name	Button	Description
Battery Connection	12.3	The value on the icon indicates the real-time voltage of the tested battery. In the battery test, the button will turn green if the battery is good; otherwise, it will turn red.

Table 17-1 Top Toolbar Buttons

Name	Button	Description
Next	Next	Tap to proceed.
Home		Returns to the battery test main screen.
Back		Returns to the previous screen.
Exit	<b>[+</b>	Returns to the Job Menu.

### 17.2.1 Battery Test

1. Follow the on-screen instructions. Check the boxes once all required tasks are completed, and tap **Start Testing**.

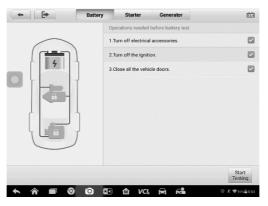


Figure 17-5 Sample Battery Screen

2. Wait until the test is completed. The test results will be displayed on the tool.



Figure 17-6 Sample Battery Test Results Screen

### **Battery Test Results**

The battery test results include a color-coded results summary, a list of test data, and repair tips.

Result	Repair Tip	
Good Battery	Battery is good.	
Good & Recharge	Battery is good but insufficiently charged. Recharge the battery.	
Charge & Retest	Battery requires charge to determine its condition.	
Bad Cell	Replace the battery.	
Replace Battery	Replace the battery.	

### Table 17-2 Test Results

### ⊘NOTE

Please always complete the battery test before you proceed to the starter and generator tests.

### 17.2.2 Starter Test

Follow the on-screen instructions to complete the test. Start the engine and let it idle. The test results will appear as follows:



Figure 17-7 Sample Starter Test Result Screen

Table 17-	3 Starter	Test Results
-----------	-----------	--------------

Result	Description	
Cranking Normal	The starter is good.	
Current Too Low	Low momentary discharge capacity.	
Voltage Too Low	Low battery storage capacity.	
Not Started	The starter is not detected for starting.	

## 17.2.3 Generator Test

Follow the on-screen instructions to complete the test. The test results will appear as follows:



Figure 17-8 Sample Generator Test Results Screen

Table 17-4 Generator Test Results

Result	Description		
Charging Normal	The generator is functioning normally.		
Output Too Low	<ul> <li>The belt linking the starter and the generator is loose;</li> <li>The cable linking the starter and battery is loose or corroded.</li> </ul>		
Output Too High	<ul> <li>The generator is not properly connected to the ground;</li> <li>The voltage adjuster is broken and needs replacement.</li> </ul>		
Ripple Too Large	The commutation diode is broken.		
No Output	<ul> <li>The cable is loose;</li> <li>Some vehicles with power management systems do not provide path for charging due to the sufficient load capacity of the battery;</li> <li>The generator or the voltage adjuster is broken and needs replacement.</li> </ul>		

### **NOTE**

To measure the current, connect the current clamp. Tap the **Settings** button on the main menu to enter the application. Swipe the **Current Clamp** toggle to turn it **ON**.

# 17.3 Out-vehicle Test

Out-vehicle Test is used to test the condition of batteries that are not connected to a vehicle. This function aims to check the health status of the battery only.

# 17.3.1 Test Procedure

#### > To start the out-vehicle test

- 1. Connect the tester clamps to the battery terminals.
- 2. Select the appropriate battery type, rating standard, and CCA value. Tap **Start Testing** button to start the test.



Figure 17-9 Sample Out-vehicle Test Screen

3. The test results will display in a few seconds.

	Charge & R	etest
	500	675
40	Voltage	6/% 12.34 V
Charge & Retest	Measured Capacity	401 CCA
	Capacity	600 CCA
	Temperature	27 °C
		Report

Figure 17-10 Sample Out-vehicle Test Results Screen

# 17.3.2 Test Results

Result	Description
Good Battery	Battery meets required standards.
Good & Recharge	Battery is good, but low on charge. Fully charge the battery. Check for causes of low charge.
Charge & Retest	Battery requires charge to determine its condition.
Replace Battery	Battery fails to meet industry-accepted standards.
Bad Cell	Battery fails to meet industry-accepted standards.

# **Chapter 18 Function Viewer Operations**

Function Viewer allows you to search for functions supported by our tools and the version information. There are two ways of searching, either by searching the tool and the vehicle or searching the functions.

#### > To search by vehicle

- **1.** Tap the Function Viewer application on the MaxiSys Job Menu. The Function Viewer application screen displays.
- **2.** Tap the tool name on the top left to drop down the tool list, tap the one you want to search.

MaxiSys 🔻 Hyundai(I	Europe)/Accent(MC/Y 🔺		
Honda	All	All	Empty recor
Hummer	Accent(LC)	2006	
Hummer H-1	Accent(MC)	2007	
	Accent(RB)	2008	
Hyundai(General)	Accent(X3)	2009	
Hyundai(Korea)	Accent/Solaris(RBr)	2010	
Hyundai(USA)	Atos prime(MXL)	2011	

3. Tap the vehicle brand, model, and year you want to search.

#### Figure 18-1 Sample Function Viewer Screen 1

**4.** All the functions supported by the selected tool for the selected vehicle display within three columns, function, sub function, and version.

AaxiSys ▼	Hyur	ndai(Europe)/Accent(M	C/2 ▼	Syste	em 🔻 SubSy 🔻	Capacit
System		Sub system	Capacity	Function	Sub function	Version
A/T (Auton Transaxl		Automatic transaxle	G 1.6 DOHC	Active test	1	Above Hyundai
A/T (Auton Transaxl		Automatic transaxle	D 1.5 TCI-U	Active test	1	Above Hyundai
A/T (Auton Transaxl		Automatic transaxle	G 1.4 DOHC	Active test	/	Above Hyundai
A/T (Auton Transaxl		Automatic transaxle	G 1.6 DOHC	ECU informatio	1	Above Hyundai
A/T (Auton Transaxl		Automatic transaxle	D 1.5 TCI-U	n	/	Above Hyundai
A/T (Auton Transaxl		Automatic transaxle	G 1.4 DOHC	ECU informatio n	/	Above Hyundai
A/T (Auton Transax		Automatic transaxle	G 1.6 DOHC	Erase	1	Above Hyundai

Figure 18-2 Sample Function Viewer Screen 2

#### > To search by the functions

- 1. Tap the Function Viewer application on the MaxiSys Job Menu. The Function Viewer application screen displays.
- 2. Tap the tool name on the top left to drop down the tool list, tap the one you want to search.
- 3. Enter the function you want to search in the top right search box. The screen will display all vehicles that support this function, along with information such as the vehicles' year, system, capacity, type, function, sub-function, and version.

#### 

Fuzzy search is supported, type in some part of the function-related keywords to find all the available information.

# **Chapter 19 Digital Inspection Operations**

The Digital Inspection application configures the Display Tablet to operate as a digital video scope by simply connecting the tablet to a Digital Inspection Camera. This function allows you to examine difficult-to-reach areas normally hidden from sight, with the ability to record digital still images and videos, which offers you an economical solution to inspect machinery, facilities, and infrastructure in a safe and quick way.

### MARNINGS & IMPORTANTS:

Follow these instructions to reduce the risk of injury from electric shock, entanglement and other causes and prevent tool damage.

- Do not place the imager head and cable into anything or anywhere that may contain a live electric charge or moving parts, which increases the risk of electric shock or entanglement injuries.
- Do not use the imager head cable to modify surroundings, clear pathways or clogged areas.
- When inspection is completed, carefully withdraw the imager head and cable from the inspection area.
- The imager head cable were waterproof to a depth of 3m (10'), greater depths may cause leakage into the imager head cable and cause electric shock or damage the tool.
- The working temperature of the imager head is between 32 °F (0 °C) and 113 °F (45 °C).

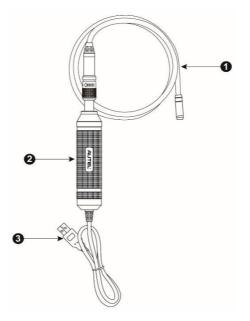
### Check-Ups:

- ✓ FOR AUTOMOBILES: Ensure the automobile is not running during inspection. Metal and liquid under the hood may be hot. Don't get oil or gas on the imager head.
- ✓ FOR PIPES: If you suspect a metal pipe could contain an electric charge, have a qualified electrician to check the pipe before using.
- ✓ FOR WALLS: For inspecting the inside walls, be sure to shut off the circuit breaker to the whole house before using the tool.
- ✓ WORK AREA: Ensure the work area has sufficient light.

# **19.1 Additional Accessories**

The Digital Inspection Camera and its fittings are the additional accessories. Both sizes (**8.5** *mm and* **5.5** *mm*) of the imager head are optional and available for purchase along with the standard MaxiSys tool kit.

## **Digital Inspection Camera**



#### Figure 19-1 Digital Inspection Camera

- 1. **Removable Imager Head Cable** connects to the tool when performing digital inspections for image and video viewing
- 2. **Handgrip** ergonomically designed handle for comfortable grips and agile operation
- 3. USB Cable connects the Digital Inspection Camera to MaxiSys tablet

## **Imager Head Accessories**

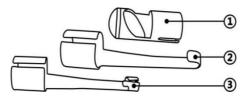


Figure 19-2 8.5 mm Imager Head Accessories

- 1. Magnet picks up small metal objects, such as dropped rings or screws
- 2. **Hook** unclogs obstacles and picks up wires in the pipes or confined areas
- 3. Mirror helps to look around corners and see the unreachable areas

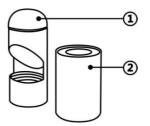


Figure 19-3 5.5 mm Imager Head Accessories

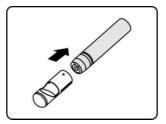
- 1. Mirror helps to look around corners and see the unreachable areas
- 2. Magnet picks up small metal objects, such as dropped rings or screws

### **Accessory Assembly**

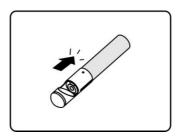
#### For 8.5 mm Imager Head

The three accessories, including the Magnet, Hook, and Mirror (*Figure 19-2*), can be attached to the Imager Head with the same manner described below:

1. Hold the accessory and the imager head.



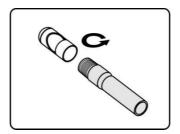
2. Slip the end of the accessory over the imager head and then fix the accessory.



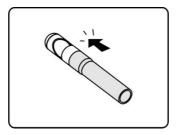
#### For 5.5 mm Imager Head

The two accessories, including the Magnet and Mirror (*Figure 19-3*), can be attached to the Imager Head with the same manner described below:

1. Hold the accessory and the imager head.



2. Screw the thread part of the accessory over the imager head to fix the accessory.



## **19.1.1 Technical Specifications**

Table 19-1	Technical	Specifications
------------	-----------	----------------

Item	Description	
Optimal Viewing Distance	1" to 14" (2.54cm to 35.56cm) with 8.5 mm diameter imager head 3/8" to 12" (0.95cm to 30cm) with 5.5 mm diameter imager head	
Image Capture	JPG images (640x480) AVI videos (320 x 240)	
Operating Temperature	Main Unit: 0°C to 55°C (ambient) Cable: -10°C to 70°C	
Storage Temperature	-20°C to 75°C (ambient)	
Waterproof	Imager head and cable to 1m	
Weight	0.3 kg with 8.5 mm diameter imager head 0.2 kg with 5.5 mm diameter imager head	

# **19.2 Operations**

Before performing the Digital Inspection application, the Imager Head Cable must be connected to the Display Tablet through the USB port. Install the correct imager head accessories for use in the appropriate application.

**NOTE**: When in operation, the imager head cable can be bent into a certain shape. This may help you operate the cable into confined areas.

#### > To take pictures using the Digital Inspection application

- 1. Connect the Imager Head Cable to the USB port on the top side of the Display Tablet.
- 2. If not already done, power up the Display Tablet.
- Tap the **Digital Inspection** application on the MaxiSys Job Menu. The Digital Inspection application interface displays, showing a camera operating screen. The default camera is now the Imager head.
- 4. Select the **camera** icon at the lower right corner to take photos.
- 5. Focus the image to be captured in the view finder by adjusting and properly locating the imager head cable.
- 6. Tap the blue ring on the operating screen. The view finder now shows the captured picture and auto-saves the taken photo.
- 7. Tap the thumbnail image on the top right corner of the screen to view the stored image, slide the screen left and right to view the images one by one.
- 8. Tap on the selected image and the edit toolbar instantly displays.
- 9. Tap the appropriate button to **share**, **delete**, or **edit** the image.
- 10. Tap the **Back** or **Home** button on the Navigation bar at the bottom of the screen to exit the Digital Inspection application.

#### > To record a video using the Digital Inspection application

- 1. Connect the Imager Head Cable to the USB port on the top side of the Display Tablet.
- 2. If not already done, power up the Display Tablet.
- Tap the **Digital Inspection** application on the MaxiSys Job Menu. The Digital Inspection application interface displays, showing a camera operating screen. The default camera is now the Imager head.
- 4. Select the **video** icon at the lower right corner to record a video.
- 5. Properly locate the imager head cable to focus the inspection scene for recording.
- 6. Tap the red ring on the operating screen to start recording.

- 7. Tap the red circle again to stop recording. The recorded video is automatically saved to the system Gallery.
- 8. Tap the thumbnail image on the top right corner to review the recorded video.
- 9. Tap the **Play** button to play the video.
- 10. Tap on the selected video and the edit toolbar instantly displays.
- 11. Tap the appropriate button to **share**, **delete**, or **edit** the video.
- 12. Tap the **Back** or **Home** button on the Navigation bar at the bottom of the screen to exit the Digital Inspection application.
- > To configure various settings for the work mode of the imager head
  - 1. Tap **I** button at the bottom edge of the circle.
  - 2. Select each item to make appropriate adjustments.

For more tips and detailed information about the camera application, please refer to associated Android documentations.

# Chapter 20 Maintenance and Service

To ensure that the MaxiSys diagnostic tablet and the combined VCI unit perform at their optimum level, we advise that the product maintenance instructions covered in this section is read and followed.

# 20.1 Maintenance Instructions

The following shows how to maintain your devices, together with precautions to take.

- Use a soft cloth and alcohol or a mild window cleaner to clean the touch screen of the tablet.
- Do not use any abrasive cleansers, detergent, or automotive chemicals to the tablet.
- Maintain the devices in dry conditions and keep them within normal operating temperatures.
- Dry your hands before using the tablet. The touch screen of the tablet may not work if the touch screen is moist, or if you tap the touch screen with wet hands.
- Do not store the devices in humid, dusty or dirty areas.
- Check the housing, wiring, and connectors for dirt and damage before and after each use.
- At the end of each work day, wipe the device housing, wiring, and connectors clean with a damp cloth.
- Do not attempt to disassemble your tablet or the VCI unit.
- Do not drop or cause severe impact to the devices.
- Use only authorized battery chargers and accessories. Any malfunction or damage caused by the use of unauthorized battery charger and accessories will void the limited product warranty.
- Ensure that the battery charger does not come in contact with conductive objects.
- Do not use the tablet beside microwave ovens, cordless phones and some medical or scientific instruments to prevent signal interference.

# 20.2 Troubleshooting Checklist

#### Α. When the Display Tablet does not work properly:

- Make sure the tablet has been registered online.
- Make sure the system software and diagnostic application software are properly updated.
- Make sure the tablet is connected to the Internet.
- Check all cables, connections, and indicators to see if the signal is being received.

#### Β. When battery life is shorter than usual:

This may happen when you are in an area with low signal strength. Turn off your device if is not in use.

#### С. When you cannot turn on the tablet:

Make sure the tablet is connected to a power source or the battery is charged.

#### D. When you are unable to charge the tablet:

- Your charger maybe out of order. Contact your nearest dealer.
- You may be attempting to use the device in an overly hot/cold temperature. Try changing the charging environment.
- Your device may have not been connected to the charger properly. Check the connector.

**NOTE**: If your problems persist, please contact Autel's technical support personnel or your local selling agent.

# 20.3 About Battery Usage

Your tablet is powered by a built-in Lithium-ion Polymer battery. This means that, unlike other forms of battery technology, you can recharge your battery while some charge remains without reducing your tablet's autonomy due to the "battery memory effect" inherent in those technologies.



A DANGER: The built-in Lithium-ion Polymer battery is factory replaceable only; incorrect replacement or tampering with the battery pack may cause an explosion.

- Do not use a damaged battery charger.
- Do not disassemble or open crush, bend or deform, puncture or shred.
- Do not modify or remanufacture, attempt to insert foreign objects into the battery, expose to fire, explosion or other hazard.
- Make sure to use the charger and USB cables only that come together in the package. If you use the other charger and USB cables, you might incur malfunction or failure of the device.
- Only use the charging device that has been qualified with device per the standard. Use of an unqualified battery or charger may present a risk of fire, explosion, leakage, or other hazard.
- Avoid dropping the tablet. If the tablet is dropped, especially on a hard surface, and the user suspects damage, take it to a service center for inspection.
- The closer you are to your network's base station, the longer your tablet usage time because less battery power is consumed for the connection.
- The battery recharging time varies depending on the remaining battery capacity.
- Battery life inevitably shortens over time.
- Since over charging may shorten battery life, remove the tablet from its charger once it is fully charged. Unplug the charger, once charging is complete.
- Leaving the tablet in hot or cold places, especially inside a car in summer or winter, may reduce the capacity and life of the battery. Always keep the battery within normal temperatures.

# 20.4 Service Procedures

This section introduces information for technical support, repair service, and application for replacement or optional parts.

### **Technical Support**

If you have any question or problem on the operation of the product, please:

• Call 1-855-288-3587 / 1-855-AUTELUS (North America),

Or 0086-755-86147779 (China).

- Contact the local distributer or agent.
- Visit our website http://pro.autel.com or www.autel.com.

### **Repair Service**

If it becomes necessary to return your device for repair, please download the repair service form from www.autel.com, and fill in the form. The following information must be included:

- Contact name
- Return address
- Telephone number
- Product name
- Complete description of the problem
- Proof-of-purchase for warranty repairs
- Preferred method of payment for non-warranty repairs

⊘ NOTE: For non-warranty repairs, payment can be made with Visa, Master Card, or with approved credit terms.

#### Send the device to your local agent, or to the below address:

8th Floor, Building B1, Zhiyuan, Xueyuan Road, Xili, Nanshan, Shenzhen, 518055, China

#### **Other Services**

You can purchase the optional accessories directly from Autel's authorized tool suppliers, and/or your local distributor or agent.

Your purchase order should include the following information:

- Contact information
- Product or part name
- Item description
- Purchase quantity

# **Chapter 21 Compliance Information**

### FCC Compliance

### FCC ID: WQ8MAXISYSMY906BT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### SAR:

The device has been tested and is compliant with SAR limits, users can obtain information on SAR report and compliance. Nevertheless, the device should be used in such a manner that the potential for human contact is minimized during normal operation.

The exposure standard for wireless devices employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/Kg. Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. This is because the device is designed to operate at multiple power levels so as to use only the power required to reach the network. To avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to antenna should be minimized.

# **Chapter 22 Warranty**

### 12-Month Limited Warranty

Autel Intelligent Technology Corp., Ltd. (the Company) warrants to the original retail purchaser of this MaxiSys Diagnostic Device, that should this product or any part thereof during normal consumer usage and conditions, be proven defective in material or workmanship that results in product failure within twelve (12) months period from the date of delivery, such defect(s) will be repaired, or replaced (with new or rebuilt parts) with Proof of Purchase, at the Company's option, without charge for parts or labor directly related to the defect(s).

The Company shall not be liable for any incidental or consequential damages arising from the use, misuse, or mounting of the device. Some states do not allow limitation on how long an implied warranty lasts, so the above limitations may not apply to you.

### This warranty does not apply to:

- Products subjected to abnormal use or conditions, accident, mishandling, neglect, unauthorized alteration, misuse, improper installation or repair or improper storage;
- b) Products whose mechanical serial number or electronic serial number has been removed, altered or defaced;
- c) Damage from exposure to excessive temperatures or extreme environmental conditions;
- d) Damage resulting from connection to, or use of any accessory or other product not approved or authorized by the Company;
- e) Defects in appearance, cosmetic, decorative or structural items such as framing and non-operative parts.
- f) Products damaged from external causes such as fire, dirt, sand, battery leakage, blown fuse, theft or improper usage of any electrical source.
- IMPORTANT: All contents of the product may be deleted during the process of repair. You should create a back-up copy of any contents of your product before delivering the product for warranty service.