AUTOPHIX®

USER'S MANUAL
9150

Safety precautions

To avoid body injury and damage to the device or your car, please read this manual carefully before using 9150.

1. The testing process described in the manual is generally the experience of technician.
2. Safety precaution is required in most of the process to avoid body injury and damage to the device or your car.
3. Read the vehicle maintenance manual before use this device and follow safety precautions.
4. It generates CO and other poisonous air when engine is running. To avoidthis kind of hurt, please repair the car in a well-air-ventilated place.
5. When the engine is running, many parts (such as the coolant fan,pulleys, fan belt etc.) rotate at high speed. To avoid serious injury,always be aware of moving parts. Keep a safe distance from these parts as well as other potentially moving objects.
6. Engine parts become very hot when the engine is running. Don't touch hot engine parts to avoid severe burns.
7. When the ignition is ON, Connecting or disconnecting test equipment will damage test equipment and the vehicle's electronic components. Turn the ignition OFF before connecting or discon-nectingthe device from the vehicle's Data Link Connector (DLC).
8. Fuel and battery vapors are highly flammable. To prevent an explosion,keep all sparks, heated items and open flames away from the batteryand fuel/ fuel vapors. Do not smoke near the vehicle during testing.

Coverage

1. Supports the vehicles of Ford, Lincoln and Mercury after 1996 with 16PIN Socket, including F150, Transit, VAN.
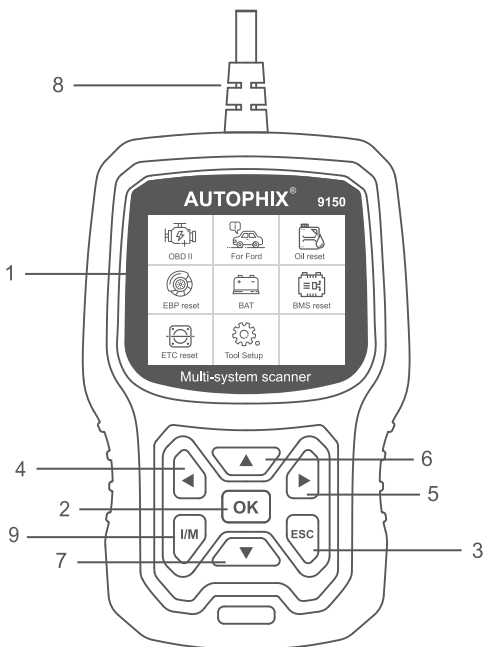2. Supports OBDII/EOBD Modes of operation

Product specification

2.8'LCD,320 X 240 pixels color screen
Operating Voltage: 8V-18V
Operating Temperature: -10°C-60°C(14-140°F)
Storage Temperature: -20°C-70°C(4-158°F)

Appearance and Key Descriptions

1. LCD DISPLAY – Indicates test results. Backlit, 320 x 240 pixels display

2. OK BUTTON – Confirms a selection (or action) from a menu.

3. ESC BUTTON – Cancels a selection (or action) from a menu or returns to the menu.

4. LEFT SCROLL BUTTON –Move to left menu in main menu mode; When more than one screen of data is retrieved, use the left button could move to previous screens.

5. RIGHT SCROLL BUTTON –Move to right menu in main menu mode; When more than one screen of data is retrieved, use the right button could move to next screen for additional data.

6. UP SCROLL BUTTON –Moves up through menu items in main menu mode； When more than one screen of data is retrieved, use the up button could move to previous screens.

7. DOWN SCROLL BUTTON –Moves down through menu items in main menu mode； When more than one screen of data is retrieved, use the down button could move to next screen for additional data.

8. OBD-16PIN CONNECTOR – Connects the scan tool to vehicle's Data Link Connector (DLC).

9. "I/M" BUTTON - A snapshot of emission-related systems states - i.e., misfire monitor, EVAP system monitor etc.

I/M Readiness			
IGN	Spark	DTC	0
MIL	🚗	PdDTC	0
MIS	⊘	EVAP	⊘
FUE	✓	AIR	⊘
CCM	✓	O2S	✕
CAT	✓	HTR	✕
HCAT	⊘	EGR	⊘

Remarks:

MIL Yellow- Dashboard MIL ON

MIL Gray-Dashboard MIL OFF

⊘ -not support

✓ -complete

✕ -not complete
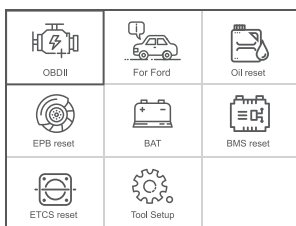
OPERATION INSTRUCTIONS

1. Connect 9150

1.1 Turn the ignition on.using 9150.

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

(Main interface)

(Main Menu)

1.3 Main menu functions：

[OBDII]: Detect the engine system.
[For Ford]: Test all systems.
[Oil reset]: Oil change reset
[EPB reset]: EPB Brake pad reset
[BAT]: To read real Time Battery Voltage
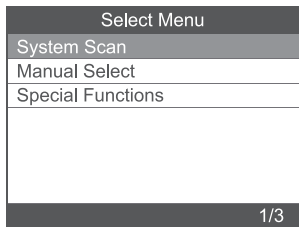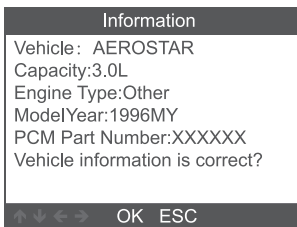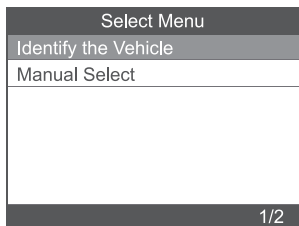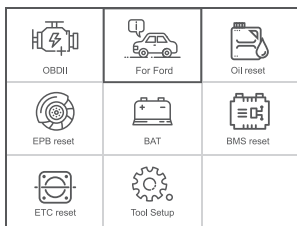[BMS reset]: Battery management system reset
[ETC reset]: Electric Throttle Control reset
[Tool Setup]: Language / Beeper/Instructions (Display at startup)/Unit of Measure/Skin Style/Feedback the test result

2. 9150 Features

2.1 Basic Functions

Choose [For Ford] and it displays as follows：

OBDII	For Ford	Oil reset
EPB reset	BAT	BMS reset
ETC reset	Tool Setup	

Select Menu

Identify the Vehicle
Manual Select

1/2

Information

Vehicle： AEROSTAR
Capacity:3.0L
Engine Type:Other
ModelYear:1996MY
PCM Part Number:XXXXXX
Vehicle information is correct?

OK   ESC

Select Menu

System Scan
Manual Select
Special Functions

1/3

[System scan] is to scan all vehicle systems. Press [System scan] and it displays as follows：

Scanning...[18%]

BCMii(Body Control Module)

1/1

Scanning...[36%]

BCMii(Body Control Module)   OK
DSM(Driver Front Seat Modu)

2/2
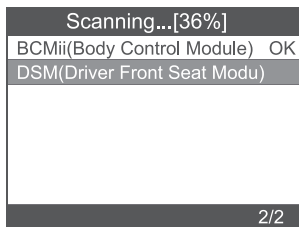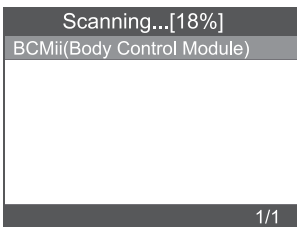
Scanning...[81%]		Select System Diagnose	
BCMii(Body Control Module)　OK		BCMii(Body Control Module)　OK	
PCM(Power train Control M...　OK		PCM(Power train Control M...　OK	
PDM(Passenger Front Door			
	3/3		1/2

[Manual select] is to display all possible systems, select one of the systems to diagnose.
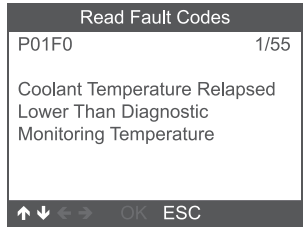
Choose [Manual select] and it displays as follows:

Select Menu		Select System Diagnose	
System Scan		ABS(Antilock braking system)	
Manual Select		BCMii(Body Control Module)	
Special Functions		DDM(Driver Front Door Module)	
		DSM(Driver Front Seat Module)	
		GWM(Gateway Module A)	
		HVAC(Heating Ventiletion Air C..)	
		IPC(Intrument Panel Control M...)	
	2/3		1/11

Select System Diagnose	
PCM(Power train Control Module)	
PDM(Passenger Front Door Mo...	
PSCM(Power Steering Control...	
RCM(Restraint Control Module)	
	8/11

2.1.1 Read Fault Codes

Choose [Read Fault Codes]. Press up or down button to check each fault code as follows:

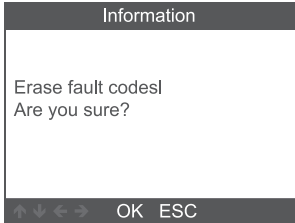| Select Function	
Read Fault Codes	
Erase Fault Codes	
Read Datastream	
	1/3

Read Fault Codes	
P01F0	1/55
Coolant Temperature Relapsed	
Lower Than Diagnostic	
Monitoring Temperature	
↑ ↓ ← → OK ESC	
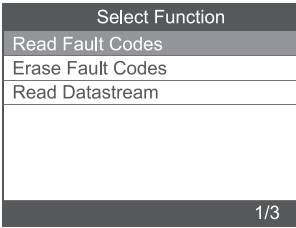
2.1.2 Erase Fault Codes

Choose [Erase Fault Codes] then press [OK] button, screen displays as follow:

Information
Erase fault codesl
Are you sure?
↑ ↓ ← → OK ESC

You need to press [OK] again to clear the fault codes.

It shows as follow after clearing the fault codes.

Information
Erase fault codes had Success.
Please wait 10 seconds.Turn
ignition off and Switch on again.
Read fault codes to verify.
↑ ↓ ← → OK ESC
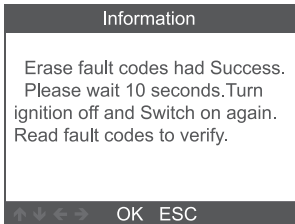
If you give up clearing fault codes, please press [ESC] button.

2.1.3 Read Datastream

Choose [Read Datastream] then press [OK] button, screen displays as follows:

Select Function	
Read Fault Codes	
Erase Fault Codes	
Read Datastream	
	3/3

Datastream	
View All Items	
Select Items	
	1/2

Choose [View All Items] then press [OK] button, screen displays as follow:

Datastream	
A/C Pressure Sensor Voltage[Voits]	1.40
A/C clutch output fault detected.	NO Fault
CMP and CKP Synchronized	Yes
o2s11 Status	NO Fault
o2s11 is warm and ready to operate.	Yes
	1-5/471

Choose [Select Items] then press [OK] button, screen displays as follows:

Datastream	
View All Items	
Select Items	
	2/2

Select Datastream	
[ ]	All Datastream of Page
[ ]	A/C Pressure Sensor Voltage
[ ]	A/C clutch output fault detected.
[ ]	A/C Pressure sensor
[ ]	CMP and CKP Synchronized
	1-4/284

Press [LEFT] and [RIGHT] buttons to page.

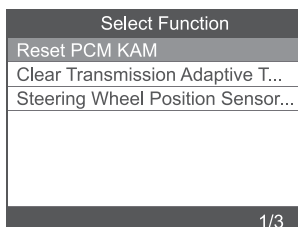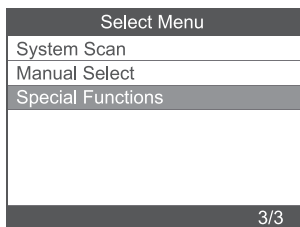Press [UP] and [DOWN] buttons to select one by one.

2.2 Main special functions

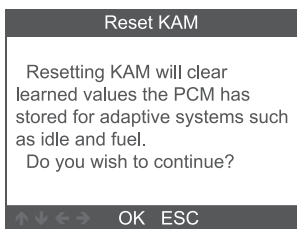Different car models have different special functions.

(Here are some common special functions. If you want to learn more about the special features of the 9150, please call or email us.)

2.2.1 Reset PCM KAM

Choose [Special Functions] and it displays as follows:

Select Menu	
System Scan	
Manual Select	
Special Functions	
	3/3

Select Function	
Reset PCM KAM	
Clear Transmission Adaptive T...	
Steering Wheel Position Sensor...	
	1/3

Choose [Reset PCM KAM] and it displays as follow:

Reset KAM

Resetting KAM will clear learned values the PCM has stored for adaptive systems such as idle and fuel.
Do you wish to continue?

↑ ↓ ← →   OK   ESC

Press [OK] button to next and complete special function operation:

Reset KAM

This test is now complete.

↑ ↓ ← →   OK   ESC

Reset KAM

Set ignition switch to OFF (Position 0).

↑ ↓ ← →   OK   ESC
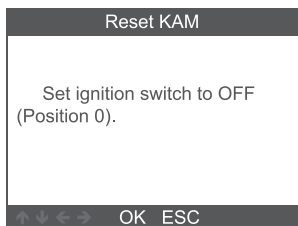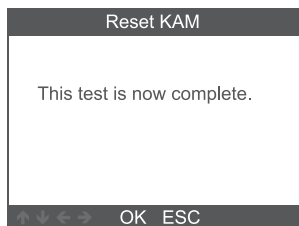
2.2.2 DPF Reset

Choose [Special Functions] and it displays as follows：

Select Menu	
System Scan	
Manual Select	
Special Functions	
	3/3

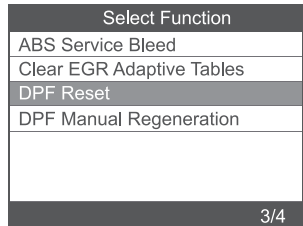| Select Function	
ABS Service Bleed	
Clear EGR Adaptive Tables	
DPF Reset	
DPF Manual Regeneration	
	3/4

Press [OK] button to next:

DPF Reset	
Resetting completed.	
↑ ↓ ← →　OK　ESC	

Press [OK] button to next:

DPF Reset	
Warning	
This procedure resets the DPF date.	
Do you wish to continue?	
↑ ↓ ← →　OK　ESC	
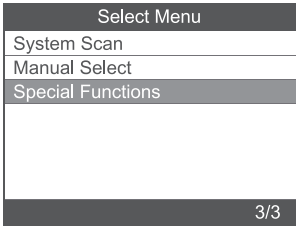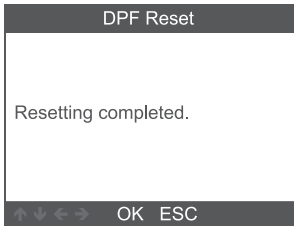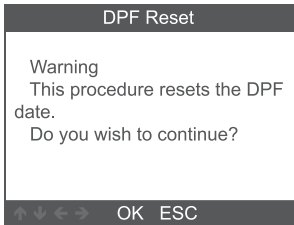
2.2.3 Injector Quantity Adjustment

In the Engine system, choose [Special Function] and it displays as follow:

Select Function
ABS Service Bleed
Reset TCM KAM
Clear Transmission Adaptive T...
DPF Manual Regeneration
IQA
5/5

Choose [Injector Quantity Adjustment] and it displays as follows:

Injector Quantity Adjustment
Carry out this procedure to enter the new IQA date whenever a fuel in ject is replaced or to make a correction to the existing in jector IQA data currently stored in the PCM.
↑ ↓ ← ➔   OK   ESC

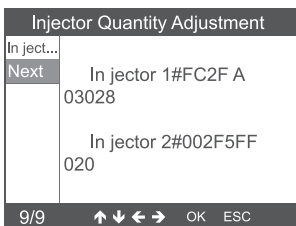| Injector Quantity Adjustment |
| --- |
| On the following screen,the diagnostic tester will attempt to retrieve the in jector IQA data from the PCM allowing for verification and data entry. Perform the following : |
| ↑ ↓ ← ➔   OK   ESC |

Press [OK] button to next step:

Injector 1	
OK	
Delete	
0	Enter the character IQA data
1	
2	
3	
4	
3/38 ↑ ↓ ← ➔ OK ESC	

Press [OK] button, you will need to OK values manually and
it displays as follow:

Injector Quantity Adjustment

In ject...
Next
    In jector 1#FC2F A
03028

    In jector 2#002F5FF
020

9/9   ↑ ↓ ← →   OK   ESC

Press left button to character selection page down.
Press Right button to information page down.

Press [OK] button to next:

Injector Quantity Adjustment

   Set ignition switch to OFF
(Position 0).

↑ ↓ ← →   OK   ESC

Injector Quantity Adjustment

   Set the ignition switch to ON.

↑ ↓ ← →   OK   ESC

Press [OK] button to next:

Injector Quantity Adjustment

    The following injector IQA
data is currently stored in the
PCM.
    In jector 1:FC2FA03028
    In jector 2:002F5FF020
    In jector 3:FC201F5028

↑ ↓ ← →   OK   ESC
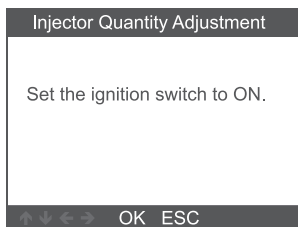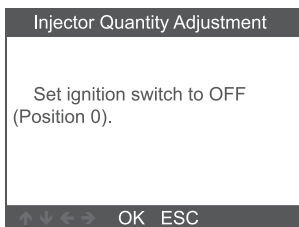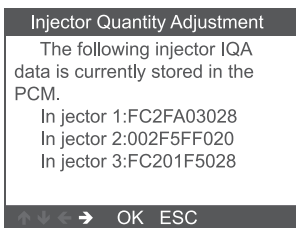
Note: Different models may have different configurations and
special features maybe different.

3 OBDII Diagnose

Choose [OBDII] and it displays as follows：

OBDII	For Ford	Oil reset
EPB reset	BAT	BMS reset
ETCS reset	Tool Setup	

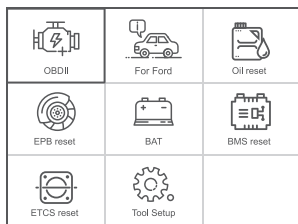| Select System Diagnose	
J1850 VPW	[fail]
J1850 PWM	[fail]
ISO15765-4 CAN (11bit)	[fail]
ISO15765-4 CAN (29bit)	[ ]
ISO14230-4 KWP	[ ]
ISO14230-4 KWP(5BPS)	[ ]
ISO9141	[ ]
Processing	

3.1 Read Codes

Stored codes are also known as "hard codes" or "permanent codes".
These codes cause the control module to illuminate the malfunction
indicator lamp (MIL) when an emission-related fault occurs.

Pending Codes are also referred to as "maturing codes" or
"continuous monitor codes".
It indicates the problems that control module has detected during
the current or last driving cycle,but they are not considered
seriously.
Pending Codes will not turn on the malfunction indicator light ,and
codes will be cleared from memory if there is no failure during the
following warm-up period

1. Select [Read Codes] , then press [OK]

Diagnostic Menu	
Read Codes	
Erase Codes	
I/M Readiness	
Data Stream	
Evap System Test	
Vehicle Information	
	1/6

If there are no Diagnostic Trouble Codes present, the display indicates "No (pending) codes are stored in the module!" Wait a few seconds or press any key to return to the Diagnostic Menu.

2.View DTCs and their definitions on screen

 (The control module number; Sequence of the DTCs; Total number of codes detected; Type of codes (Generic of Manufacturer specific)

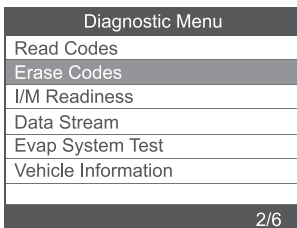| DTC	
P1113	1/3
FORD	Pending
IAT Sensor Open/Short	
↑ ↓ ← → OK ESC	

3.2 Erase Codes

Notes:

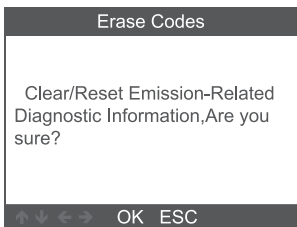This function is performed with key on engine off . Do not start the engine.

Before performing this function, make sure to retrieve and record the trouble codes.

After clearing, you should retrieve trouble codes once more or turn ignition on and retrieve codes again. If there is still some trouble codes for hard troubles, please find the reason caused the trouble code firstly, and then solve the problem. Now, the trouble codes can be erased.

1. Select [Erase codes] , then press [OK]

Diagnostic Menu
Read Codes
Erase Codes
I/M Readiness
Data Stream
Evap System Test
Vehicle Information
2/6

2. A warning message comes up asking for your confirmation.

Erase Codes
Clear/Reset Emission-Related Diagnostic Information,Are you sure?
↑ ↓ ← →   OK   ESC

3. Press [OK] to confirm.

Erase Codes
Please Turn Ignition ON with Engine Off,Press OK key to continue!
↑ ↓ ← →   OK   ESC

Erase Codes
Emission-Related Diagnostic Information has been Cleared!
↑ ↓ ← →   OK   ESC
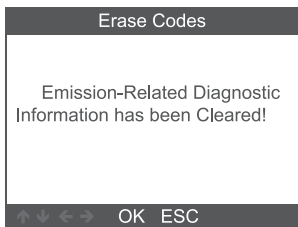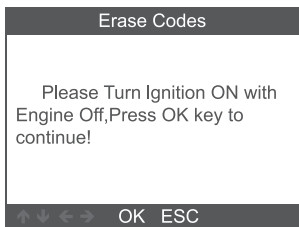
3.3 I/M Readiness

Select I/M Readiness option, press [OK], the screen will display as follows:

Diagnostic Menu	
Read Codes	
Erase Codes	
I/M Readiness	
Data Stream	
Evap System Test	
Vehicle Information	
	3/6

I/M Readiness	
Since DTCs Were Cleared	
This Drive Cycle	
	1/2

Use UP or Down button to select, then press [OK], the screen will display as follow

I/M Readiness	
Misfire monitor	OK
Fuel system monitor	OK
Comprehensive component monitor	OK
Catalyst monitor	INC
Heated catalyst monitor	N/A
	1-5/10

N/A means not available on this vehicle, INC means incomplete or not ready,OK means Completed or Monitor OK.

3.4 Data Stream

Choose [Data Stream] and it displays as follows:

Diagnostic Menu	
Read Codes	
Erase Codes	
I/M Readiness	
Data Stream	
Evap System Test	
Vehicle Information	
	4/6

Datastream	
View All Items	
Select Items	
	1/2

Datastream	
Fuel system 1 status	OL
Fuel system 2 status	OL
Calculated LOAD Value	0.0%
Engine Coolant Temperature	-31°C
Short Term Fuel Trim-Bank 1	0.0%
	1-5/19

3.5 EVAP System Test

This function enables the conditions required to conduct an evaporative system leak test, but does not actually run the test. The vehicle manufacturer is responsible to determine the criteria to automatically stop the test.

Before performing this function, please check the vehicle's service repair manual to determine the necessary procedures.

Diagnostic Menu
Read Codes
Erase Codes
I/M Readiness
Data Stream
Evap System Test
Vehicle Information
5/6

Erase System Test
Evaportive system leak test not supported.
↑ ↓ ← →   OK   ESC

3.6 Vehicle Information

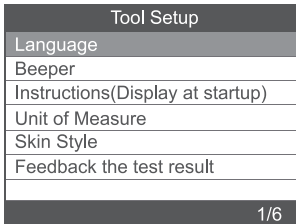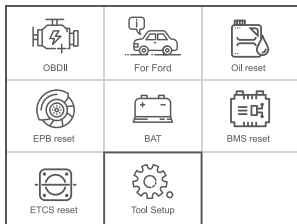Choose [Vehicle Information] and it displays as follows:

Diagnostic Menu
Read Codes
Erase Codes
I/M Readiness
Data Stream
Evap System Test
Vehicle Information
6/6

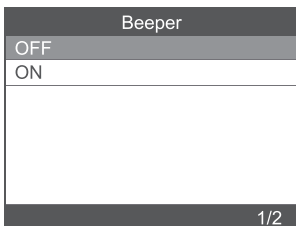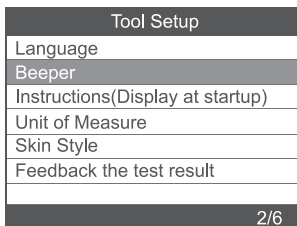| Vehicle Information |
|---|
| Vehice Identification Number (VIN) LVSFBFAC94F020950 |
| Calibration Identifications(CID) 000007550753 |
| Calibration Venfication Number (CVN) B5073064 |
| ↑ ↓ ← →   OK   ESC |

4. Tool Setup

4.1 Language

Choose [Language] and it displays as follows:

Tool Setup	
Language	
Beeper	
Instructions(Display at startup)	
Unit of Measure	
Skin Style	
Feedback the test result	
	1/6

Language	
English	
Français	
Deutsch	
Español	
русский	
Português	
Svenska	
	1/10

Language	
Dansk	
Suomalainen	
Norsk språk	
	8/10

4.2 Beeper

Choose [Beeper] and it displays as follows:

Tool Setup	
Language	
Beeper	
Instructions(Display at startup)	
Unit of Measure	
Skin Style	
Feedback the test result	
	2/6

Beeper	
OFF	
ON	
	1/2

4.3 Instructions (Display at startup)

Choose [Instructions (Display at startup)] and it displays as follows:

Tool Setup	
Language	
Beeper	
Instructions(Display at startup)	
Unit of Measure	
Skin Style	
Feedback the test result	
	3/6

Instructions(Display at startup)	
OFF	
ON	
	1/2

4.4 Unit of measure

Choose Unit of measure and it displays as follows:

Tool Setup	
Language	
Beeper	
Instructions(Display at startup)	
Unit of Measure	
Skin Style	
Feedback the test result	
	4/6

Unit of Measure	
Metric	
Imperial	
	1/2

4.5 Skin Style

Choose Skin Style and it displays as follows:

Tool Setup	
Language	
Beeper	
Instructions(Display at startup)	
Unit of Measure	
Skin Style	
Feedback the test result	
	5/6

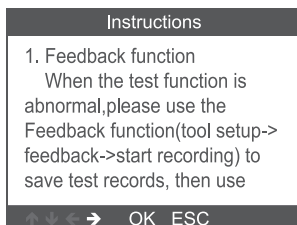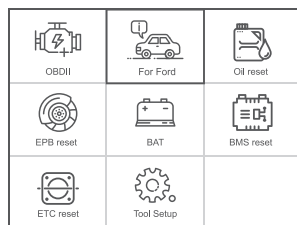| Skin Style	
Sky Gray	
Gem Blue	
	1/2

4.6 Feedback

If it shows connected error with vehicle or other problem during using, please using the feedback function.

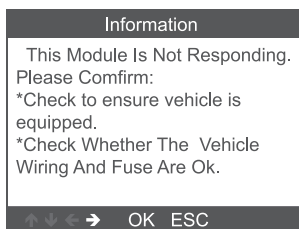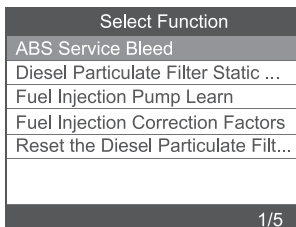Choose [Tool Setup], click on the [feedback the test result menu] and it display as follows:

Tool Setup	
Language	
Beeper	
Instructions(Display at startup)	
Unit of Measure	
Skin Style	
Feedback the test result	
Device Information	
	6/7

Feedback the test result

Automatic recording is ready, perform the related functions that require feedback.

After the execution,disconnect the car,connect to the computer via USB,use the update.exe tool.

↑ ↓ ← ➔   OK   ESC
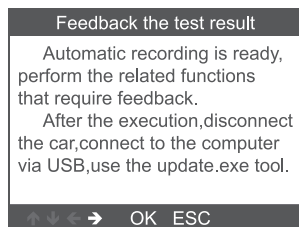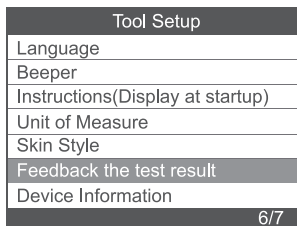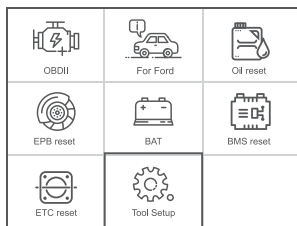
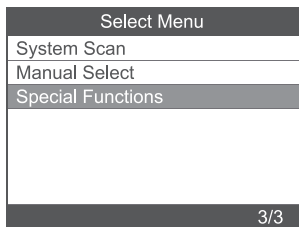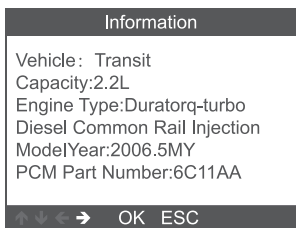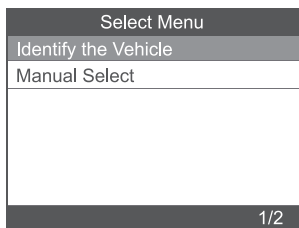The device will display the "Feedback" prompt and exit the feedback menu. Press [Esc] to exit to the main menu.

For example: If the Ford ABS system fails to connect, please follow the steps below:

Instructions

1. Feedback function
When the test function is abnormal,please use the Feedback function(tool setup-> feedback->start recording) to save test records, then use

↑ ↓ ← ➔   OK   ESC

After exiting the feedback menu, return to the main menu: Open Ford menu, Enter the interface that failed to connect or the operation was unsuccessful during the diagnosis.

Select Menu	
Identify the Vehicle	
Manual Select	
	1/2

Information
Vehicle：Transit
Capacity:2.2L
Engine Type:Duratorq-turbo
Diesel Common Rail Injection
ModelYear:2006.5MY
PCM Part Number:6C11AA
↑ ↓ ← ➜   OK   ESC

Select Menu	
System Scan	
Manual Select	
Special Functions	
	3/3

Select Function	
ABS Service Bleed	
Diesel Particulate Filter Static ...	
Fuel Injection Pump Learn	
Fuel Injection Correction Factors	
Reset the Diesel Particulate Filt...	
	1/5

| Information |
|---|
| This Module Is Not Responding. Please Comfirm: |
| *Check to ensure vehicle is equipped. |
| *Check Whether The Vehicle Wiring And Fuse Are Ok. |
| ↑ ↓ ← ➜   OK   ESC |

Note: In the above steps, the diagnostic instrument and the vehicle must be connected.
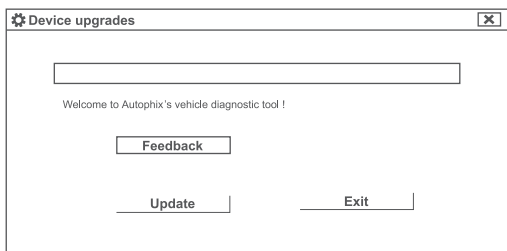
After the recording is successful, unplug the device to the computer to export the data.
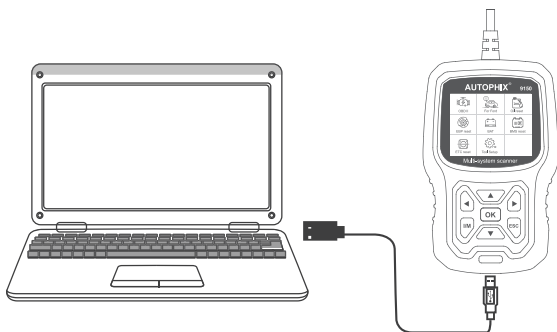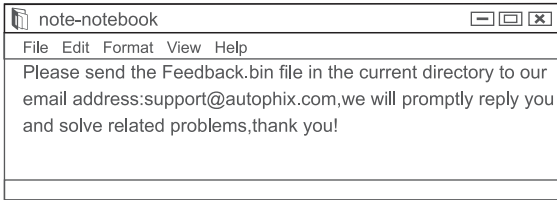

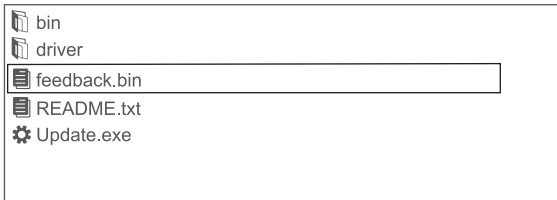Connect tool with computer, Open the upgrade files, choose "Update".

```
📄 bin
📄 driver
📄 README.txt
⚙ Update.exe
```
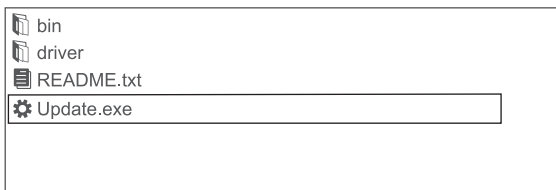
Then pop up: "Upgrade Tools" window, click "Feedback" will appear a TXT text to explain,Please follow the instructions.

```
┌─────────────────────────────────────────────────────────┐
│ 📖  note-notebook                              [─][□][✖] │
├─────────────────────────────────────────────────────────┤
│ File  Edit  Format  View  Help                          │
│ Please send the Feedback.bin file in the current directory to our │
│ email address:support@autophix.com,we will promptly reply you │
│ and solve related problems,thank you!                   │
│                                                         │
│                                                         │
└─────────────────────────────────────────────────────────┘
```
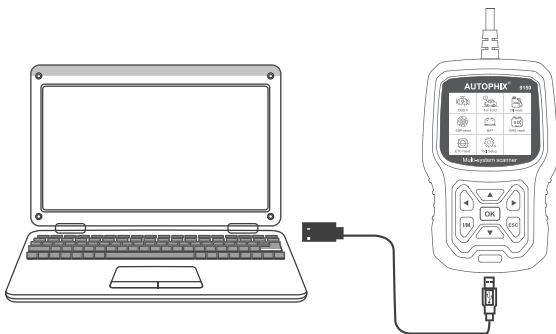
Choose the note file; send the Feedback.bin text to
support@autophix.com .

```
┌─────────────────────────────────────────────────────────┐
│ 📖  bin                                                  │
│ 📖  driver                                               │
│ ▤ feedback.bin                                          │
│ ▤ README.txt                                            │
│ ⚙ Update.exe                                            │
│                                                         │
└─────────────────────────────────────────────────────────┘
```

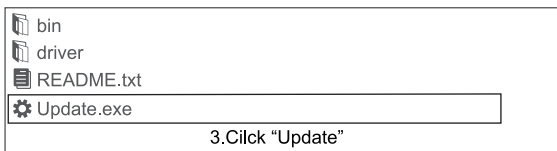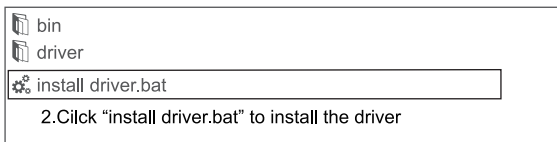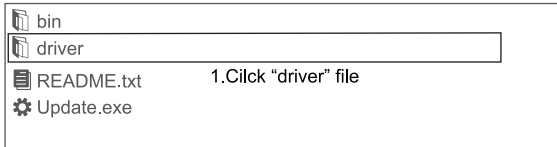Remark: In the above steps, keep the tool connected to the
computer.

5. Update

1.Download update software.

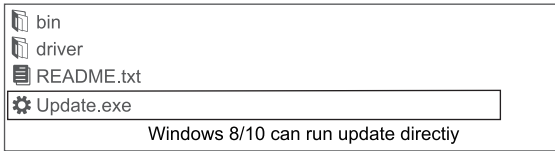2. Connect the devise with computer through USB cable.

3. The update software is only supported by 7/8/10.

   * If computer system is Windows 7, please click "install driver.bat" in the driver files to install the driver.

📘 bin	
📘 driver	
📄 README.txt	1.Cilck "driver" file
⚙ Update.exe	

📘 bin
📘 driver
⚙ install driver.bat
2.Cilck "install driver.bat" to install the driver

📘 bin
📘 driver
📄 README.txt
⚙ Update.exe
3.Cilck "Update"

* Windows 8/10 can run update software directly.

```
📃 bin
📃 driver
📄 README.txt
⚙ Update.exe
        Windows 8/10 can run update directiy
```

6. Warranty

1) This warranty is limited to the person who purchases AUTOPHIX products.
2) AUTOPHIX product is warranted against defects in materials and workmanship for one year (12 months) from date of delivery to the user.

7. Service Procedures

If you have any questions, please contact your local store distributor or visit our website www. autophix.com .
If it becomes necessary to return the scan tool for repair, contact your local distributor for more information.

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Website: www.autophix.com

UK CA ℅ CE FC Rohs

MADE IN CHINA