

Foshan Kaitai technology Co., LTD

# Usage of ABS-ECU diagnostic software

Version: V1.0





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#### -. Establishing Connection between Computer and ECU

#### 1. Hardware Connection

Using the diagnostic connection cable (as shown in the figure below), insert one end into the diagnostic interface of the ECU (as indicated by the red circle in the figure below), and insert the other end into the USB port of the computer.



Connect as shown in the diagram:





#### 2. Software connection

Double-click to run the 'ABSClient.exe' diagnostic software (or click on the 'Kaitai TABS' shortcut), in the software's 'DevPort' area, select the port first, and then click the 'Open' button, as shown in the figure below.



After successfully connecting the diagnostic software to the ECU, the 'DevState' will display 'Connected', and the 'Device Info' area will show the information of the ECU, as shown in the figure below. (If the connection is not successful, please check if the device is powered on, whether the connection cable is connected correctly, and whether the connection port is secure. If none of the above methods work, close the software and reopen it.)



Connect
DevState Connected
DevPort COM4 - Close
Device Info
Code 24V
Variant 2S2M
Version V1.0
ECUType 带压力监控型

#### 3. Language Switching

In the 'Language' area, select 'zh-CN' or 'en', then click the 'Set' button to switch the diagnostic software display language between Chinese and English, as shown in the figure below. (It is recommended to switch languages outside of the wheel speed query process.)



#### ニ、ECU Data Reading

#### 1. Fault Query and Clearing

In the 'Operation' area of the diagnostic software, click on the 'Query' and 'Clear' buttons to respectively query and



clear faults in the ECU, as shown in the figure below.

Faults are divided into current faults and historical faults. Historical faults are faults recorded before the detection. After troubleshooting, the vehicle needs to be re-ignited to supply power, and then re-check whether the faults have been cleared.





#### 2. Wheel speed query and stop

In the 'Operation' area of the diagnostic software, click on the 'Start' and 'Stop' buttons to respectively start and stop querying the ECU for wheel speed, sensor voltage, power supply



voltage, battery voltage, and lamp status information, as shown in the figure below.



Data Data II	The first shaft of wheel speed. Olym th
JalaDelali	The first sharcleft wheel speed=0km/h
	The first shaft:Right wheel speed=0km/h
	The second shaft:Left wheel speed=0km/h
	The second shaft:Right wheel speed=0km/h
	The third shaft:Left wheel speed=0km/h
	The third shaft:Right wheel speed=0km/h
	The first shaft:Left sensor max voltage=0mV, min voltage=0mV。
	The first shaft:Right sensor max voltage=0mV, min voltage=0mV。
	The second shaft:Left sensor max voltage=0mV, min voltage=0mV。
	The second shaft:Right sensor max voltage=0mV, min voltage=0mV。
	The third shaft:Left sensor max voltage=0mV, min voltage=0mV $_{\circ}$
	The third shaft:Right sensor max voltage=0mV, min voltage=0mV。
	ECU power voltage=22.983V
	power switch voltage=23.124V
	light status = On



Annex:

### Troubleshooting instructions table

Fault	Solution specification
The first axis left (right) wheel speed sensor voltage is high (low) than the normal value or high (low) voltage short circuit	<ol> <li>Check that the first axle left (right) wheel speed sensor connection is stable;</li> <li>Check whether the first axle left (right) wheel speed sensor harness is worn or broken;</li> <li>Check the first axle left (right) wheel speed sensor for wear;</li> <li>Check the tooth ring on the left (right) of the first shaft for ferromagnetic interference or damage</li> </ol>
The second axis left (right) wheel speed sensor voltage is high (low) than the normal value or high (low) voltage short circuit	<ol> <li>Check that the second axle left (right) wheel speed sensor connection is stable;</li> <li>Check whether the second axle left (right) wheel speed sensor harness is worn or broken;</li> <li>Check the second axle left (right) wheel speed sensor for wear;</li> <li>Check the tooth ring on the left (right) of the second shaft for ferromagnetic interference or damage</li> </ol>
The third axis left (right) wheel speed sensor voltage is high (low) than the normal value or high (low) voltage short circuit	<ol> <li>Check that the third axle left (right) wheel speed sensor connection is stable;</li> <li>Check whether the third axle left (right) wheel speed sensor harness is worn or broken;</li> <li>Check the third axle left (right) wheel speed sensor for wear;</li> <li>Check the tooth ring on the left (right) of the third shaft for ferromagnetic interference or damage</li> </ol>
The first axis left (right) wheel speed sensor current is high (low) in the normal value or open, short circuit to the ground	<ol> <li>Check that the first axle left (right) wheel speed sensor connection is stable;</li> <li>Check whether the first axle left (right) wheel speed sensor harness is worn or broken;</li> <li>Check the first axle left (right) wheel speed sensor for wear;</li> <li>Check the tooth ring on the left (right) of the first shaft for ferromagnetic interference or damage</li> </ol>



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The second axis left (right) wheel speed sensor current is high (low) in the normal value or open, short circuit to the ground	<ol> <li>Check that the second axle left (right) wheel speed sensor connection is stable;</li> <li>Check whether the second axle left (right) wheel speed sensor harness is worn or broken;</li> <li>Check the second axle left (right) wheel speed sensor for wear;</li> <li>Check the tooth ring on the left (right) of the second shaft for ferromagnetic interference or damage</li> </ol>
The third axis left (right) wheel speed sensor current is high (low) in the normal value or open, short circuit to the ground	<ol> <li>Check that the third axle left (right) wheel speed sensor connection is stable;</li> <li>Check whether the third axle left (right) wheel speed sensor harness is worn or broken;</li> <li>Check the third axle left (right) wheel speed sensor for wear;</li> <li>Check the tooth ring on the left (right) of the third shaft for ferromagnetic interference or damage</li> </ol>
Power supply voltage (current) high (low) than the normal value or high (low) voltage short circuit or break	<ol> <li>Check whether the power supply is properly connected;</li> <li>Check whether the wiring harness of the power supply is worn or broken;</li> <li>Check whether the pin of the power supply is defined as the normal voltage value (12V version voltage is 12V, 24V version voltage is 24V) Check the first and third pins, and the second and fourth pins;</li> <li>Check whether the power supply circuit is on or off</li> </ol>
Abnormal frequency, pulse width, or period of the power supply	<ol> <li>Check whether the power supply is properly connected;</li> <li>Check whether the wiring harness of the power supply is worn or broken;</li> <li>Check whether the pin of the power supply is defined as the normal voltage value (12V version voltage is 12V, 24V version voltage is 24V) Check the first and third pins, and the second and fourth pins;</li> <li>Check whether the power supply circuit is on or off</li> </ol>
First axis left (right) wheel solenoid valve mechanical system response is not correct	<ol> <li>Check whether the valve body is blocked by foreign matter in the air path of the valve body;</li> <li>Check whether there is water entering the gas path of the valve body and blocking the valve body after freezing</li> </ol>