



X6000 电器系统故障维修培训 ***Training on Maintenance of*** ***X6000 Electrical System***





X6000保险盒分布图

Distribution of X6000 Fuse Boxes

保险丝作为整车电器的重要防护，也是最容易损坏的地方。遇到任何电器故障第一步就是应该先检查保险，确保保险丝的功能完好。目前X6000的保险盒共有三个位置，分布如下。

As an important protection for the consumers of the vehicle, the fuse is also the most vulnerable part. In case of any fault, the first step is to check the fuse to make sure it is functioning properly. At present, the X6000 has three fuse boxes in the following locations.

名称：中央电器装置板

Name: Central electric panel

位置：驾驶室副驾脚底处，位于检修盖板内
Location: inside the access panel at the footwell of the co-pilot in the cab

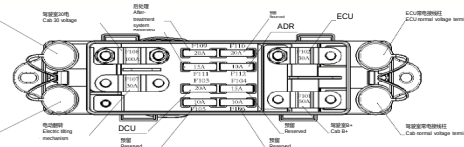


名称：底盘电器盒

Name: Chassis electrical box

位置：蓄电池箱体盖板内

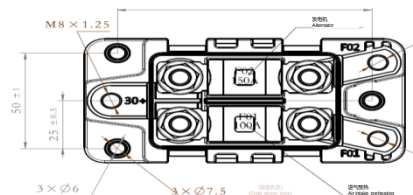
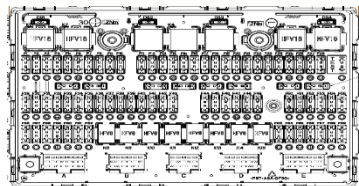
Location: Inside the cover of the battery box



名称：发动机保险丝盒

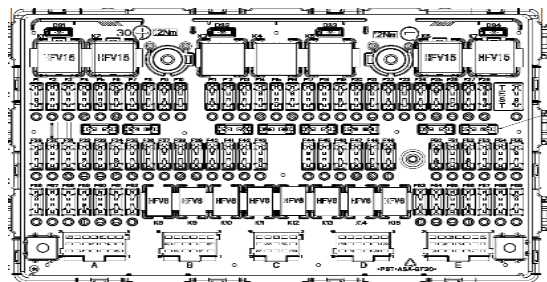
Name: Engine fuse box

位置：将驾驶室翻起，位于发动机本体左侧
Location: Tilt the cab and locate it on the LH side of the engine body





中央电器装置板 Central electric panel



检修盖板背部保险说明

Instructions for fuses on the back of the access panel

F1	10A	点烟器 Cigar lighter	F24	10A	座椅加热 Heated seat	F47	10A	后工作灯 R rear work lamp	K1	40A	R档继电器 R position relay	外挂电器盒保险 Fuse of external electrical box		
F2	5A	门控制继电器 R Door control unit R	F25	10A	挂车位置灯 Trailer position lamp	F48	15A	AMT2 30+	K2	40A	倒车继电器 DR position relay	F70	5A	ACC 30+
F3	5A	收音机天线继电器 R Radio/TEL R	F26	5A	雾灯灯 Backlight	F49	10A	喇叭 Speaker	K3	30A	远光灯继电器 High beam relay	F71	20A	辅助制动冷却器 Auxiliary cooling/heating
F4	5A	仪表 R IC R	F27	10A	右侧位置灯 RH position lamp	F50	15A	门控模块2 B+ DCM 2 B+	K4	30A	辅助远光灯继电器 Auxiliary high beam relay	F72	10A	BSM 上装一 BSM bodywork 1
F5	5A	BCM DR	F28	10A	左侧位置灯 LH position lamp	F51	10A	收音机 B+ Radio B+	K5	30A	近光灯继电器 Low beam relay	F73	10A	BSM 上装二 BSM bodywork 2
F6	5A	ABS/EBDS DR	F29	5A	TPMS/胎压监测 TPMS/EVM	F52	10A	驻车制动 B+ EVM B+	K6	40A	倒车继电器 Position lamp relay	F74	20A	提升脚踏控制 Lift axis control
F7	5A	发电机励磁 Alternator excitation	F30	10A	12V/220V R	F53	5A	TPMS B+	K7	40A	位置灯继电器 Position lamp relay	F75	10A	喇叭灯 Side marker lamp
F8	10A	NO 传感器/LNG 变送器 NO sensor/LNG transmitter	F31	5A	空滤控制继电器 A/C	F54	5A	点火钥匙/IMMO Ignition key/IMMO	K8	20A	压缩机继电器 Compressor relay	F76	15A	前工作灯 Front working lamp
F9	10A	尿素泵/燃气泄漏 Urea pump/gas leak	F32	10A	燃油继电器 Retarder DR	F55	5A	电子转向柱 Retarder DR	K9	20A	水泵继电器 Electric pump heat filter relay	F77	15A	雾灯灯 Snow lamp
F10	5A	开关传感器DR Switch/sensor DR	F33	5A	AMT DR	F56	25A	空滤鼓风机 A/C blower	K10	20A	预留继电器 Reserved relay	F78	15A	雾灯灯 Snow lamp
F11	15A	ABS/EBDS 30+	F34	10A	ECU DR+	F57	10A	24V 30+	K11	20A	低速挡继电器 Wiper low speed relay	F79	10A	旋转警告灯 Rotating warning lamp
F12	15A	电动水泵 30+ Electric Sunroof 30+	F35	5A	诊断 Diagnosis	F58	20A	DR 外灯总保险 Wiper external main fuse	K12	20A	前挡风玻璃继电器 Wiper high speed relay	F80	10A	前挡风清洗 Headlamp cleaning
F13	10A	近光灯左 High beam LH	F36	20A	ABS/EBDS 130+	F59	5A	VCU DR	K13	20A	R 档外挂继电器 R position external relay	F81	10A	油箱加热 Fuel tank heating
F14	10A	近光灯右 High beam RH	F37	5A	压缩机 Compressor	F60	5A	ECAS DR	K14	20A	后工作灯继电器 Rear work lamp relay	F82	40A	独立空调 Independent air conditioning
F15	10A	辅助远光灯左 Auxiliary high beam LH	F38	10A	开关 30+ Switch 30+	F61	25A	220V 电压泵 30+ 220V transformer 30+	K15	20A	喇叭继电器 Speaker relay	F83	15A	次水机 Water dispenser
F16	10A	辅助远光灯右 Auxiliary high beam RH	F39	30A	水泵宝 Electric pump+heat filter	F62	15A	燃油继电器 Retarder 30+	外挂电器盒继电器 External electrical box relay			F84	10A	车载冰箱 Vehicle refrigerator
F17	10A	近光灯左 Low beam LH	F40	10A	空滤控制继电器 A/C	F63	25A	VCU B+	K16	20A	雾灯继电器 Side marker lamp relay	F85	5A	低速挡声源 Reducer
F18	10A	近光灯右 Low beam RH	F41	15A	预留 Reserved	F64	5A	天行健、记录仪 TEL recorder	K17	20A	前工作灯继电器 Front work lamp relay	F86	5A	BSM
F19	5A	ABS/EBDS 挂车 DR ABS/EBDS trailer DR	F42	10A	12V 30+	F65	20A	门脚踏继电器 DCM 1 B+	K18	20A	雪灯继电器 Snow lamp relay	F87	5A	AFS
F20	20A	ABS/EBDS 挂车 30 ABS/EBDS trailer 30	F43	15A	雨刮电机 Wiper motor	F66	5A	网关 Gateway	K19	20A	雾灯灯继电器 Snow lamp relay	F88	5A	车速巡航 DR LWS DR
F21	5A	车速巡航30+ LWS 30+	F44	15A	AMT1 30+	F67	20A	BCM1、怠机报警 BCM1, hazard warning	K20	20A	旋转警告灯继电器 Turn the hazard warning lamp relay	F89	5A	ACC DR
F22	10A	空气净化系统 Air dryer	F45	30A	驻车总保险 R external main fuse	F68	5A	仪表 B+ IC B+	K21	20A	前挡风清洗继电器 Headlamp washer relay	F90	5A	燃油监控 TMS
F23	5A	预留 Reserved	F46	15A	ECAS 30+	F69	20A	BCM2 B+	K22	20A	油箱加热继电器 Fuel tank heating relay	F91	5A	HUD

说明：中央电器装置板上全部为片式速融保险和主要继电器，功能基本涵盖了整车的用电设备。位置在副驾脚底处，检修盖板背部有保险和继电器说明。

Note: On the central electric panel are all chip-type fast-blow fuses and main relays, whose functions basically cover the electrical equipment of the vehicle. It is located at the footwell of the co-driver. There are fuse and relay instructions on the back of the access panel.

维修点：当遇到单个电器件功能失效时，例如：雨刮电机不工作、点烟器不工作等，应先检查装置板处的保险丝是否损坏。

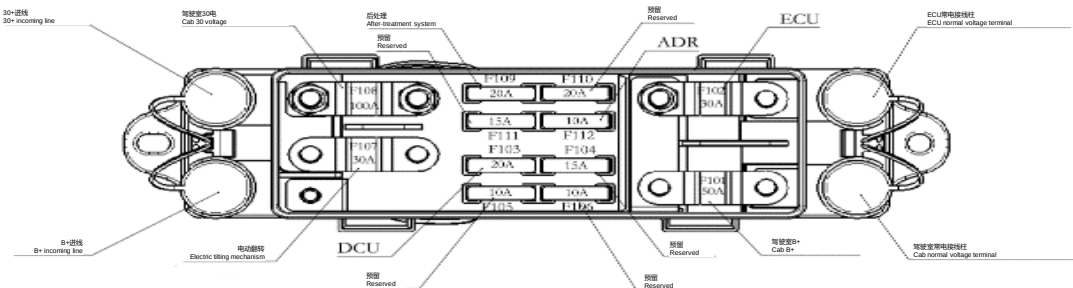
Maintenance point: When a single electrical component fails, such as: the wiper motor does not work, the cigar lighter does not work, etc., first check whether the fuse at the electric panel is damaged.

当保险丝损坏或者工作异常时，对应的保险丝下方LED红灯会点亮，应及时更换保险。
When the fuse is damaged or working abnormally, the red LED lamp below the corresponding fuse will go on, and the fuse should be replaced in time.

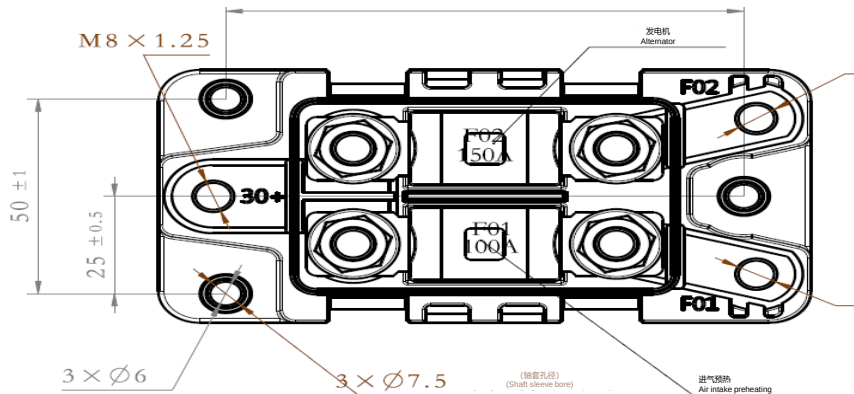




底盘电器盒 Chassis electrical box



发动机保险丝盒 Engine fuse box



说明： 底盘电器盒上有4路慢融保险和8路片式速溶保险。功能主要包含驾驶室、发动机、电动翻转和后处理的主供电源。

Note: There are 4 slow-blow fuses and 8 chip-type fast-blow fuses on the chassis electrical box. The functions mainly include the main power supply for the cab, engine, electric tilting and after-treatment system.

维修点： 当遇到整个驾驶室突然断电、发动机启动无响应、电动翻转不工作、后处理工作异常等应先检查此处保险，看保险功能是否完好。如果损坏，应立即跟换。

Maintenance point: When the entire cab is powered off suddenly, the engine won't start, the electric tilting does not work, and the after-treatment system is abnormal, first check whether the fuses are intact. If damaged, they should be replaced immediately.

说明： 发动机保险丝盒上有两路慢融保险。分别是发电机保险丝和进气预热保险丝。

Note: There are two slow-blow fuses on the engine fuse box, i.e., the alternator fuse and the intake preheater fuse.

维修点： 当遇到整车发电机不发电或者整车启动后，仪表  指示灯仍未熄灭。应先检查发电机保险丝是否完好。当遇到仪表显示进气加热相关故障时，也应当先检查进气预热保险丝是否完好。

Maintenance point: When the alternator does not work or the IC indicator lamps do not go out after the vehicle is started, first check whether the alternator fuse is intact. When the IC displays a fault related to intake air preheater, first check whether the intake air preheater fuse is intact.





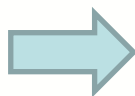
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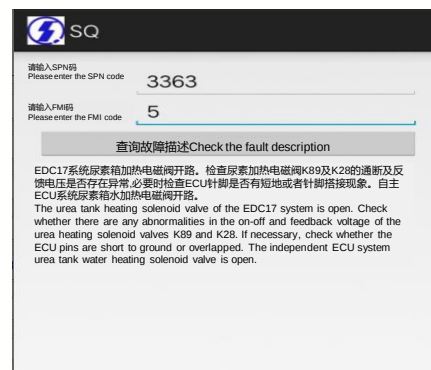
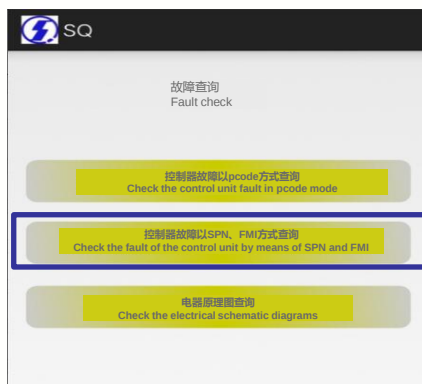
故障码解析 DTC analysis



故障码解析软件
DTC analysis software



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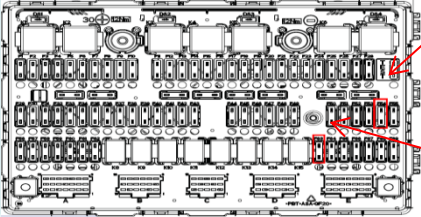


试销、试验常见故障及处理方法

Troubleshooting of common faults in trial sales and experiments

一、启动、熄火问题

I. Start-stop faults

问题现象 Fault phenomenon	原因分析 Cause analysis	处理方案 Solution
	可能原因1: 蓄电池馈电 Possible cause 1: battery loss	步骤1: 检查蓄电池电压是否为24V, 如低于21V, 需充电; Step 1: Check whether the battery voltage is 24V. If it is lower than 21V, it needs to be charged;
	可能原因2: 钥匙未插接到位 Possible cause 2: The key is not inserted in place	步骤2: 重新插拔钥匙, 卡槽指示灯蓝灯亮起表示钥匙插入到位; Step 2: Re-insert and remove the key. When the blue indicator lamp of the slot goes on, it means that the key is inserted in place; 
	可能原因3: 中央电器板保险丝熔断 Possible cause 3: The central electric panel fuse is blown	步骤3: 检查驾驶室内的中央电器装置板上F54、F63熔断丝是否正常; Step 3: Check whether the F54 and F63 fuses on the central electric panel in the cab are normal;  PSU/IMMO熔断丝 PSU/IMMO fuse VCU熔断丝 VCU fuse



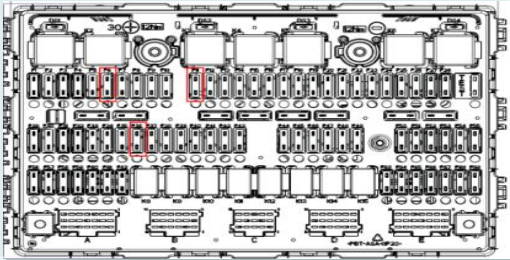


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问题现象 Fault phenomenon	原因分析 Cause analysis		处理方案 Solution
踩制动启动时，车辆自动掉电 When the brake is applied, the vehicle automatically powers off. 	EBS车型 EBS models	可能原因1：EBS供电问题； Possible cause 1: EBS power supply problem; 可能原因1：EBS角阀损坏； Possible cause 1: The EBS angle valve is damaged;	步骤1：检查驾驶室内的中央电器装置板上F36熔断丝、F11熔断丝（EBS 30电）、F6熔断丝（EBS DR电）是否正常； Step 1: Check whether the F36 fuse, the F11 (EBS 30 voltage) fuse, and the F6 fuse (EBS DR voltage) on the central electric panel in the cab are normal; 
	非EBS车型 Non-EBS models	可能原因2：制动开关间隙太大； Possible cause 2: The gap of the brake switch is too large;	步骤2：调整制动开关间隙； Step 2: Adjust the brake switch gap;





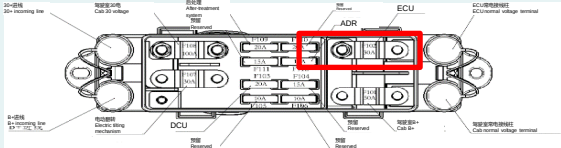
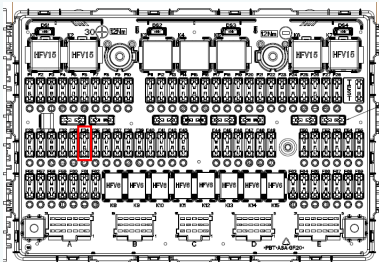
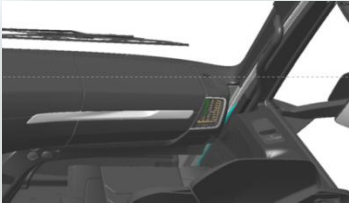
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一、启动、熄火问题

I. Start-stop faults

问题现象 Fault phenomenon	原因分析 Cause analysis	处理方案 Solution
静态车辆启动不了，仪表报VCU与EMS失去通讯 The vehicle won't start, and the IC displays that the communication between VCU and EMS is lost.  同时仪表水温报警 At the same time, the high water temperature alarm is displayed. 	可能原因1: ECU保险损坏，导致发动机ECU不工作; Possible cause 1: The ECU fuse is damaged, causing the engine ECU to not work;  可能原因2: 发动机15使能保险损坏，ECU无法唤醒; Possible cause 2: The engine 15 enable fuse is damaged, making the ECU fail to wake up; 	步骤1: 打开底盘电器盒，检查ECU电源保险; Step 1: Open the chassis electrical box and check the ECU power supply fuse;  步骤2: 打开检修盖板，检查ECU15使能保险 (F34) ; Step 2: Open the access panel and check the ECU15 enable fuse (F34); 





试销、试验常见故障及处理方法 Troubleshooting of common faults in trial sales and experiments

一、启动、熄火问题 I. Start-stop faults

问题现象 Fault phenomenon	原因分析 Cause analysis	处理方案 Solution
车在行驶过程中，遇到颠簸路面，突发油门失效故障。发动机进入怠速运行模式。重新上下电后车能正常行驶。 When the vehicle is travelling, the accelerator suddenly fails on a bumpy road, and the engine enters the idling mode, but it can run normally after powering on and off again. 	可能原因1：线路故障，需检查发动机线束； Possible cause 1: Line fault, the engine wire harness needs to be checked;	步骤1：检查线路连接器有无松脱； Step 1: Check whether the connector is loose;
	可能原因2：ECU负极搭铁松动，搭铁不实； Possible cause 2: The negative ground of the ECU is loose and the ground is incorrect;  GIF 制作 GIF making	步骤2：检查发动机ECU负极搭铁； Step 2: Check the negative ground of the engine ECU;  蓄电池负极 Battery negative terminal





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I. Start-stop faults

问题现象 Fault phenomenon	原因分析 Cause analysis	处理方案 Solution
在行驶过程中，突发发动机熄火，但是仪表和整个驾驶室供电正常，仪表不熄屏，报VCU与EMS失去通讯。 During travelling, the engine suddenly stalls, but the power supply of the IC and the entire cab is normal, the IC screen does not go off, and the screen displays that the communication between VCU and EMS is lost. 	可能原因1：线路故障，需检查相应线束； Possible cause 1: Line fault, the corresponding harness needs to be checked;	步骤1：检查发动机ECU连接器，重新插拔； Step 1: Check the engine ECU connector and replug it;
同时仪表水温报警 At the same time, the high water temperature alarm is displayed. 	可能原因2：线路故障，需检查相应线束； Possible cause 2: Line fault, the corresponding harness needs to be checked;	步骤2：检查蓄电池负极线束有无断裂； Step 2: Check whether the battery negative harness is broken; 
	可能原因3：线路故障，需检查相应线束； Possible cause 3: Line fault, the corresponding harness needs to be checked;	步骤3：检查线路有无磨损点； Step 3: Check the circuit for any wear; 



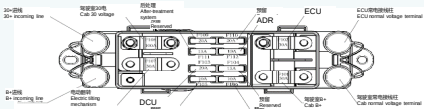
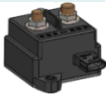


试销、试验常见故障及处理方法

Troubleshooting of common faults in trial sales and experiments

一、启动、熄火问题

I. Start-stop faults

问题现象 Fault phenomenon	原因分析 Cause analysis	处理方案 Solution
情形1: 在行驶过程中, 突发发动机熄火, 仪表灭屏, 但是多媒体屏以及灯光都正常, 整车能上电, 无法启动。 Scenario 1: During travelling, the engine suddenly stalls and the IC screen goes off, but the multimedia screen and lights are normal, the vehicle can be powered on but won't start again. 	可能原因1: 中央电器板15+继电器损坏; Possible cause 1: The 15+ relay of the central electrical panel is damaged;	步骤1: 检查中央电器装置板15继电器, 如果松脱, 应立即插紧。如果没松动, 可能是继电器损坏, 应立即更换继电器; Step 1: Check whether the 15 relay on the central electric panel is loose. If yes, fix it in immediately. If no, the relay may be damaged and should be replaced immediately; 
情形2: 在行驶过程中, 突发发动机熄火, 驾驶室所有的用电设备均不工作, 整车无法启动, 无法上电。 Scenario 2: During travelling, the engine suddenly stalls, all electrical devices in the cab do not work, and the vehicle won't start again and can't be powered on.	可能原因1: 底盘电器盒驾驶室30电保险损坏; Possible cause 1: The 30 voltage fuse of the cab in the chassis electrical box is damaged; 可能原因2: 电磁开关损坏; Possible cause 2: The electromagnetic switch is damaged;	步骤1: 底盘电器盒驾驶室30电保险; Step 1: Check the 30 voltage fuse of the cab in the chassis electrical box;  步骤2: 更换电磁式电源总开关; Step 2: Replace the electromagnetic master power switch; 



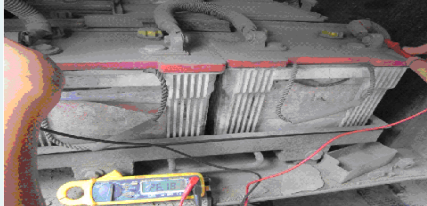


试销、试验常见故障

Common faults in trial sales and experiments

二、供电问题

II. Power supply faults

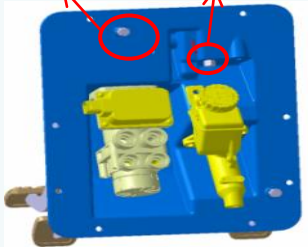
问题现象 Fault phenomenon	原因分析 Cause analysis	处理方案 Solution
车辆馈电 Battery loss  此处电池电压显示17 ~ 23V The battery voltage is 17 ~ 23V	可能原因一：用户忘拔钥匙导致蓄电池电量耗光； Possible cause 1: The owner forgets to remove the key, causing the battery to run out;  长时间不需上电时，应及时拔钥匙，防止车辆亏电 When there is no need to power on for a long time, the key should be removed in time to prevent the vehicle from running out of power	步骤1：电瓶充电； Step 1: Charge the battery; 步骤2：更换电瓶； Step 2: Replace the battery; 
车辆亏电状态判定方法一：车辆正常上电，但在启动时仪表盘闪烁或启动出现带不动的情况，可判定为车辆亏电。 Method 1 for identifying battery loss: The vehicle can be powered on normally, but the IC screen flashes when the vehicle is started or the vehicle won't start. 车辆亏电状态判定方法二：车辆无法正常上电，量取蓄电池电压低于21V。 Method 2 for identifying battery loss: The vehicle cannot be powered on normally and the measured battery voltage is lower than 21V.	原因二：充电系统出现故障，发动机启动后，发电机正常充电时，仪表灯不灭； Cause 2: There is a fault in the charging system. After the engine is started, the IC lamp does not go off when the alternator is working normally;	步骤1：检查充电保险是否正常； Step 1: Check whether the charging fuse is normal; 步骤2：检查发电机B+接线及连接器是否有松脱； Step 2: Check whether the alternator B+ wiring and connector are loose;  发动机副线盒 Engine fuse box 位于启动机侧 is located on the starter side 





试销、试验常见故障及处理方法 Troubleshooting of common faults in trial sales and experiments

三、巡航/辅助制动问题 III. Cruise/assisted brake faults

问题现象 Fault phenomenon	原因分析 Cause analysis	处理方案 Solution
巡航/辅助制动不起作用 The cruise/assisted brake does not work	可能原因一：制动踏板故障； Possible cause 1: Brake pedal fault;	步骤1：重新调整制动踏板间隙或者更换踏板； Step 1: Readjust the brake pedal clearance or replace the pedal;
	可能原因二：离合器开关未调节到位； Possible casue 2: The clutch switch is not adjusted in place;	步骤2：将离合器信号开关装配至极限位置；安装图中有明确； Step 2: Install the clutch signal switch to the limit position in accordance with the installation drawing; 制动调整螺栓 Brake adjustment bolt 离合调整螺栓 Clutch adjustment bolt 

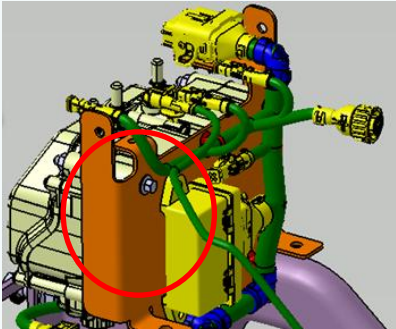


试销、试验常见故障及处理方法

Troubleshooting of common faults in trial sales and experiments

四、后处理问题

IV. After-treatment system faults

问题现象 Fault phenomenon	原因分析 Cause analysis	处理方案 Solution
车辆不烧尿素，发动机限扭 The vehicle does not burn urea and the engine torque is limited	可能原因一：用户改装过程中将进液管回液管接反； Possible cause 1: The owner connects the liquid inlet pipe and return pipe reversely during the modification process;	步骤1：更换尿素进液管和回液管的位置； Step 1: Replace the position of the urea inlet pipe and return pipe;
	可能原因二：用户未添加符合要求的尿素液； Possible cause 2: The owner does not add urea solution that meets the requirements;	步骤2：到正规服务站加装合格尿素液； Step 2: Go to a regular service station to add acceptable urea solution;
	可能原因三：Nox传感器故障； Possible cause 3: Nox sensor fault;	步骤3：检查Nox传感器线路是否有磨损； Step 3: Check the Nox sensor circuit for wear; 步骤4：更换Nox传感器； Step 4: Replace the Nox sensor;
后处理系统故障：仪表报后处理加热继电器开路故障 After-treatment system fault: the IC displays an open circuit of the after-treatment system heater relay	可能原因一：后处理线束故障，需检查相应线束； Possible cause 1: After-treatment system harness fault, the corresponding harness needs to be checked;	步骤1：检查尿素箱上后处理继电器盒连接器端子有无脱针； Step 1: Check whether the connector terminals of the after-treatment system relay box on the urea tank have any loose pins; 



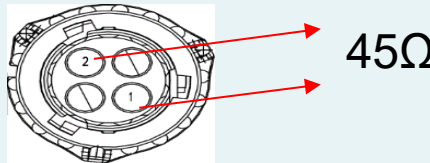


试销、试验常见故障及处理方法

Troubleshooting of common faults in trial sales and experiments

五、尿素箱加热水阀开路

V. The urea tank heater water valve is open

问题现象 Fault phenomenon	原因分析 Cause analysis	处理方案 Solution										
仪表报故障：尿素箱加热电磁阀开路 Fault displayed by the IC: urea tank heater solenoid valve open 	可能原因一：加热水阀损坏； Possible cause 1: the heater water valve is damaged;	步骤1：拔掉尿素箱加热水阀连接器，测量水阀两针脚之间的电阻，50Ω为正常值，无穷大或者几千欧说明水阀损坏，应及时更换水阀； Step 1: Unplug the urea tank heater water valve connector and measure the resistance between the two pins of the water valve. 50Ω is the normal value. Infinity or several thousand ohms indicates that the water valve is damaged and should be replaced in time; 										
	可能原因二：原装水阀带续流二极管，有正负极要求，用户自行更换了极性相反的水阀； Possible reason 2: The original water valve has a flyback diode, the positive and negative terminals of which shall be connected correctly, and the owner has replaced the water valve with the positive and negative terminals installed incorrectly; 	步骤2:更换合格水阀或调换水阀连接器针脚； Step 2: Replace it with an acceptable water valve or replace the pins of the water valve connector; 尿素罐加热回水管电磁阀 Urea tank heating return pipe solenoid valve Y121. A AM22 <table><tr><td>1</td><td>60002_5</td><td>0.75</td><td>C</td><td>AM84</td></tr><tr><td>2</td><td>60320_2</td><td>0.75</td><td>C</td><td>AM84</td></tr></table>	1	60002_5	0.75	C	AM84	2	60320_2	0.75	C	AM84
1	60002_5	0.75	C	AM84								
2	60320_2	0.75	C	AM84								





试销、试验常见故障及处理方法

Troubleshooting of common faults in trial sales and experiments

六、灯光/雨刮问题

VI. Lamp/wiper faults

问题现象 Fault phenomenon	原因分析 Cause analysis	处理方案 Solution
大灯近光3-5m, 不满足行车要求 The low beam of the headlamp is 3-5m, which does not meet the driving requirements.	未按规范合理使用调节功能; Improper use of the adjustment function in accordance with the specifications;	指导用户进行灯光调整 Guide the owner to adjust the lamps 
大灯远光过远, 主光线没在路面上 The high beam of the headlamp is too far and the main beam is not on the road		
近光太近, 用户反馈已调到最高, 无法再调整 The low beam is too close. The owner says it has been adjusted to the highest level		

普通卤素前照灯车型, 可通过此开关调节近光灯光束倾斜度。往上拨动开关, 近光灯灯光角度往上调节; 往下拨动时, 近光灯灯光角度往下调节; 其中0档位为近光照射最远, 6档位近光照射最近。

For models with ordinary halogen headlamps, the low beam inclination can be adjusted through this switch. Turn the switch upward to adjust the low beam angle upwards; turn it down to adjust the low beam light angle downwards; level 0 is the farthest low beam, and level 6 is the closest low beam.



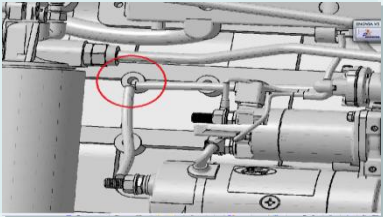


试销、试验常见故障及处理方法

Troubleshooting of common faults in trial sales and experiments

七、空调问题

VII. A/C faults

问题现象 Fault phenomenon	原因分析 Cause analysis	处理方案 Solution
空调不制冷，压缩机不工作。 The A/C does not cool and the compressor does not work.	可能原因一：冷媒压力异常； Possible cause 1: Abnormal refrigerant pressure;	步骤1：添加冷媒； Step 1: Add refrigerant; 步骤2：检查压缩机相关线路，紧固起动机旁的压缩机接地点； Step 2: Check the circuit related to the compressor, and fasten the ground point of the compressor next to the starter; 
	可能原因二：线路故障，检查相应线束； Possible cause 2: Line fault, check the corresponding harness;	
	可能原因一：室外温度传感器功能失效； Possible cause 1: The outdoor temperature sensor fails;	步骤1：更换室外温度传感器； Step 1: Replace the outdoor temperature sensor;



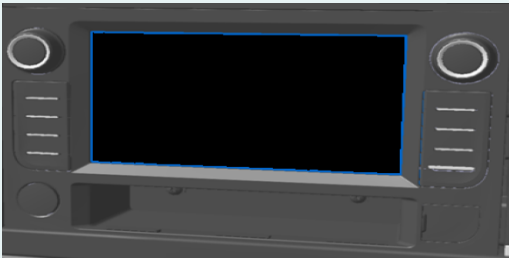


试销、试验常见故障及处理方法

Troubleshooting of common faults in trial sales and experiments

八、多媒体/门控/电动天窗问题

VIII. MMI/DCM/electric sunroof faults

问题现象 Fault phenomenon	原因分析 Cause analysis	处理方案 Solution
在行驶过程中突发多媒体灭屏重启，在颠簸路面，多媒体黑屏故障频发，但是仪表以及整车其他电器工作基本正常。 During the travelling, the MMI screen suddenly turns off and restarts. On bumpy roads, it turns black frequently, but the IC and other electrical appliances of the vehicle basically work normally. 	可能原因一：检查线束回路是否有松动； Possible cause 1: Check whether the harness circuit is loose;	步骤1：检查驾驶室左右搭铁点是否有松动并进行紧固； Step 1: Check whether the LH and RH GND points of the cab are loose and fasten them; 
	可能原因二：蓄电池负极或蓄电池传感器接线松动； Possible cause 2: the battery negative terminal or the battery sensor wiring is loose;	步骤2：检查蓄电池接线柱，看蓄电池负极线是否有断裂； Step 2: Check the battery terminal to see whether the negative wire of the battery is broken; 步骤3：检查蓄电池传感器，看是否有断裂； Step 3: Check the battery sensor to see whether it is broken; 





试销、试验常见故障及处理方法

Troubleshooting of common faults in trial sales and experiments

九、其它系统问题

IX. Other system faults

问题现象 Fault phenomenon	原因分析 Cause analysis	处理方案 Solution
仪表ABS和ASR故障灯常亮 The ABS and ASR fault lamps on the IC constantly on	可能原因一：ABS系统存在故障（故障为792-1、792-5），此故障均为轮速传感器与齿圈配合问题； Possible cause 1: There are faults in the ABS (DTCs are 792-1 and 792-5), which are caused by the matching between the wheel speed sensor and the ring gear;	步骤1：调整传感器与齿圈间隙。 Step 1: Adjust the gap between the sensor and the ring gear.
如果用户上检测线车速不够/提不起速 If the vehicle is put on the test line, the speed is not enough/cannot be increased	可能原因一：目前X6000车型标配ASR,当车上转鼓后，ABS检测前轮轮速为0,此时ASR功能激活，限扭导致车速起不来； Possible cause 1: The current X6000 model is equipped with ASR as standard. When the drum is rotated in the vehicle, the ABS detects that the front wheel speed is 0. At this time, the ASR function is activated, and the torque limit causes the vehicle to fail to increase the speed;	步骤1：通过方向盘上按键对ASR功能进行关闭。 Step 1: Deactivate the ASR function through the buttons on the steering wheel.
电动天窗不工作 The electric sunroof does not work	可能原因一：线束回路故障，需检查相应线束； Possible cause 1: Harness circuit fault, the corresponding harness needs to be checked;	步骤1：检查线束回路，紧固驾驶室左右搭铁点。 Step 1: Check the harness circuit and tighten the LH and RH GND points of the cab. 





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第二部分：售后诊断设备功能介绍及使用

Part II: Introduction to and Use of After-sales Diagnostic Unit

1

电脑配置、设置、登录

Computer configuration, settings, login

2

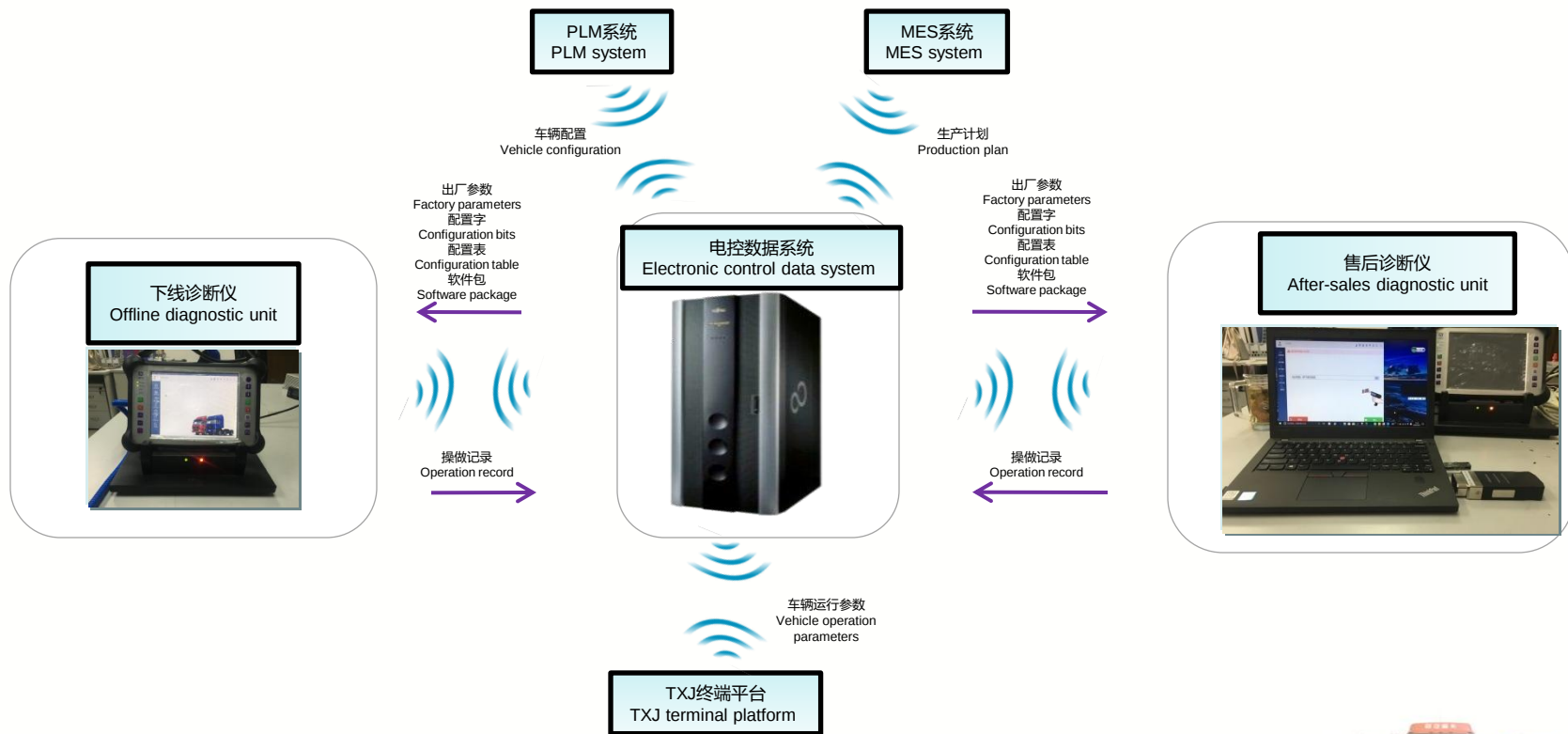
软件介绍和使用

Software introduction and use





车辆数据的应用概括 Application of vehicle data





1

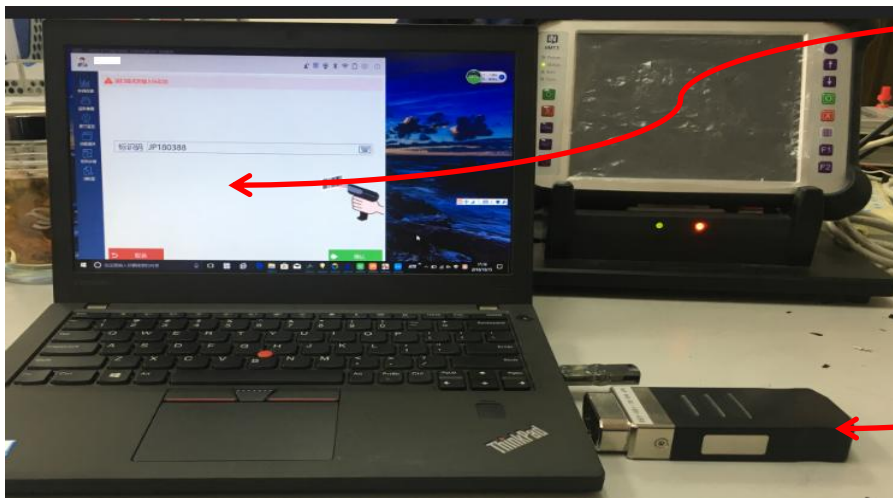
电脑配置、设置、登录

Computer configuration, settings, login

- 笔记本电脑（安装售后诊断仪软件）+OBD蓝牙接头
Laptop (with after-sales diagnostic unit software) + OBD Bluetooth connector



软件标识
Software identification



正在运行的软件
The software is running

OBD蓝牙接头
OBD Bluetooth connector



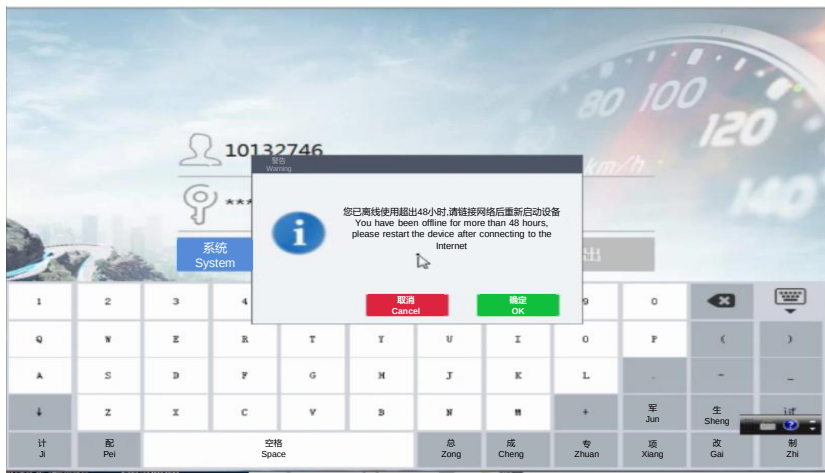


1

电脑配置、设置、登录

Computer configuration, settings, login

- 首先笔记本先连接上网络
First, connect the laptop to the Internet
- 打开蓝牙功能，与VDI蓝牙配对（蓝牙编号：DEP-VDI-18-04-0_），配对密码为1234
Turn on the Bluetooth function and pair with VDI Bluetooth (Bluetooth number: DEP-VDI-18-04-0_), and the pairing password is 1234
- 把OBD蓝牙接头插入车上OBD口，蓝牙头上灯闪烁表明物理连接正常（需要通过OBD接口给蓝牙头供电）
Plug the OBD Bluetooth connector into the OBD port on the car, the light on the Bluetooth head will flash to indicate that the physical connection is normal (the Bluetooth head needs to be powered through the OBD interface)





1

电脑配置、设置、登录

Computer configuration, settings, login

- 服务器IP: 数据管理平台地址(124.115.230.58)
Server IP: Data management platform address (124.115.230.58)
- 端口号: 默认为8090
Port No.: 8090 (default)
- 本地地址: 自动获取设备的IP
Local IP address: automatically obtaining
- VCI类型: VDI(蓝牙头)
VCI type: VDI (Bluetooth head)
- VCI编号: 软件会自动获取
VCI No.: automatically obtaining
- 点击保存, 退出设置
Click "Save" to exit the settings



系统设置
System setting

服务器地址:
Server address: 124 . 115 . 230 . 57

服务器端口:
Server port: 8090

本机IP地址:
Local IP address: 192 . 168 . 43 . 174

VCI类型:
VCI type: VDI

VCI编号:
VCI No.: 26003E000147363532313232

DEP-VDI-18-04-04

取消
Cancel

保存
Save

编号出现后说明信号连接建立正常
The number appears, indicating the signal connection is established normally



1

电脑配置、设置、登录--软件登录

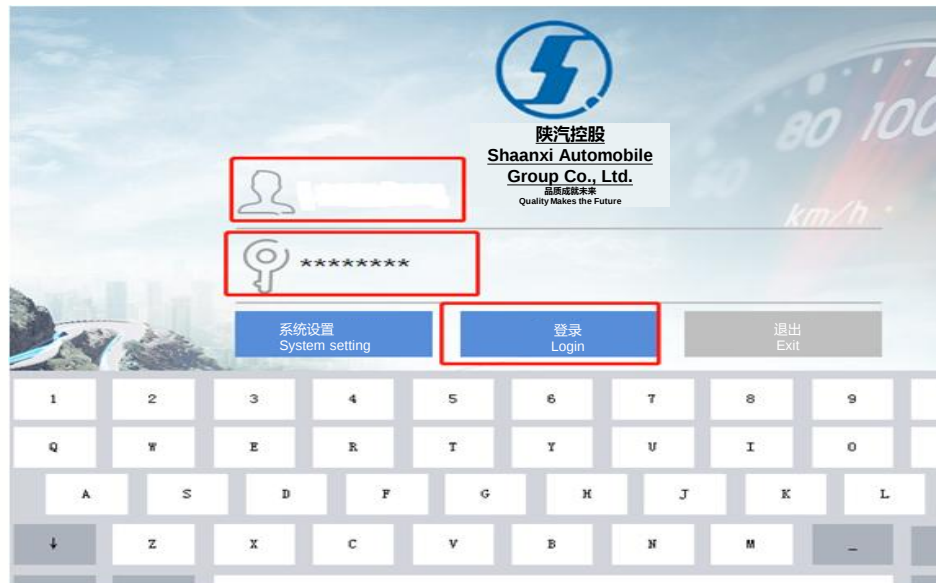
Computer configuration, settings, login--software login

1.填写用户名和密码，选择登录按钮；

1. Fill in the username and password and press the login button;

2.点击退出，软件关闭

2. Click Exit to close the software





2

软件介绍和使用-主界面

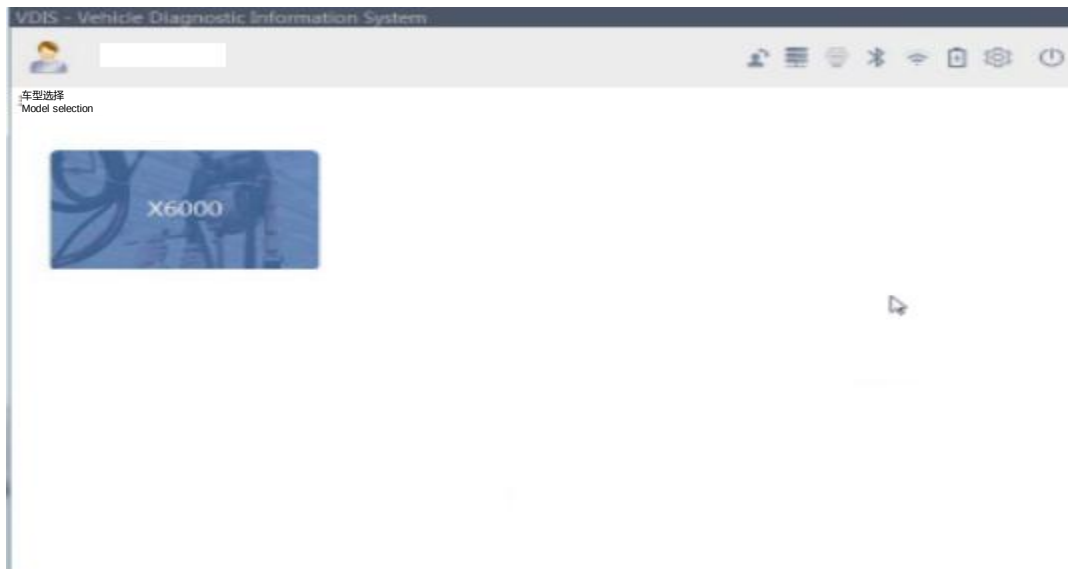
Software introduction and use-main interface

车型选择

Model selection

当前只有一种车型X6000

Only the X6000 is available at present





2

软件介绍和使用-主界面

Software introduction and use-main interface

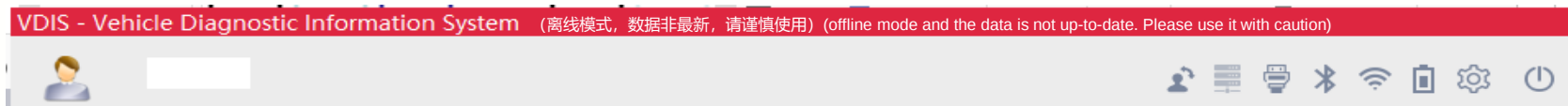
在线模式：联网

Online mode: Connected to the Internet



离线模式：网络异常，在该模式期间车辆数据、软件包都可能会更新，在该模式下最多可以使用两天，请尽量联网使用。

Offline mode: The network is abnormal. In this mode, vehicle data and software packages may be updated. This mode can be used for up to two days. Please try to use it online.





2

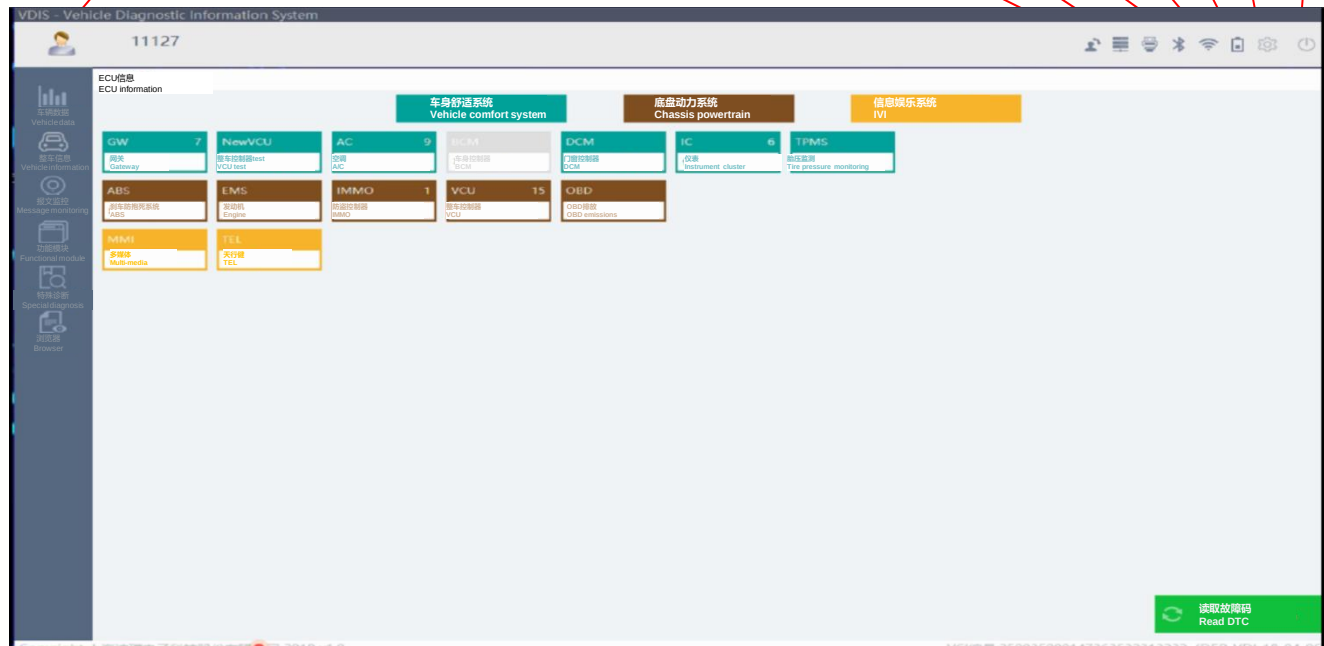
软件介绍和使用-主界面

Software introduction and use-main interface

1. 整车信息
1. Vehicle information
2. 报文监控
2. Message monitoring
3. 功能模块
3. Functional modules
4. 特殊诊断
4. Special diagnosis
5. 维护申请
5. Maintenance request

修改密码
Change the password

开关
Switch
系统设置
System setting
电池电量
Battery power
网络连接
Network connections
蓝牙连接
Bluetooth connectivity
设备连接
Equipment connection
用户切换
User switching





软件介绍和使用- ECU信息-输入VIN

Software introduction and use-ECU information-enter VIN

此处输入VIN有两种方式:

There are two ways to input the VIN here:

1.自动获取

1. Automatically obtaining

2.手动输入

2. Manual input

注: 先使用自动获取, 如果获取失败, 进行手动输入

Note: Automatically obtain first; if it fails, enter VIN manually.

VDIS - Vehicle Diagnostic Information System

32737

请扫码或输入车辆计划号
Please scan the QR code or enter the vehicle plan number

自动监测
Automatic monitoring

车辆数据
Vehicle data

整车信息
Vehicle information

报文监控
Message monitoring

功能模块
Functional module

特殊诊断
Special diagnosis

维护申请
Maintenance request

标识码
Identification code

1	2	3	4	5	6	7	8	9	0		
Q	W	E	R	T	Y	U	I	O	P	(	)
A	S	D	F	G	H	J	K	L	.	-	_
↓	Z	X	C	V	B	N	M	+	军 Jun	生 Sheng	试 Shi
计 Ji	配 Pei	空格 Space				总 Zong	成 Cheng	专 Zhuan	项 Xiang	改 Gai	制 Zhi

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VCI编号:25003E000147363532313232 (DEP-VDI-18-04-06)



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2

软件介绍和使用- ECU信息-ECU列表

Software introduction and use-ECU information-ECU list

1.输入计划号/VIN码

1. Enter the plan No./VIN

2.点击确认，软件会根据输入的号码获取该车安装的所有控制器，并显示到右侧屏幕上

2. Click "OK", the software will obtain the information of all control units installed in the car based on the input number and display them on the right screen.

3.点击想要检测的控制器

3. Click the control unit you want to detect

4.如果控制器不在线，会呈现灰色，

4. If the control unit is not online, it will be grayed out,

5.点击读取故障，软件会自动读取该车有所控制的故障码，并将结果显示到相对应的控制器的右上角，如：

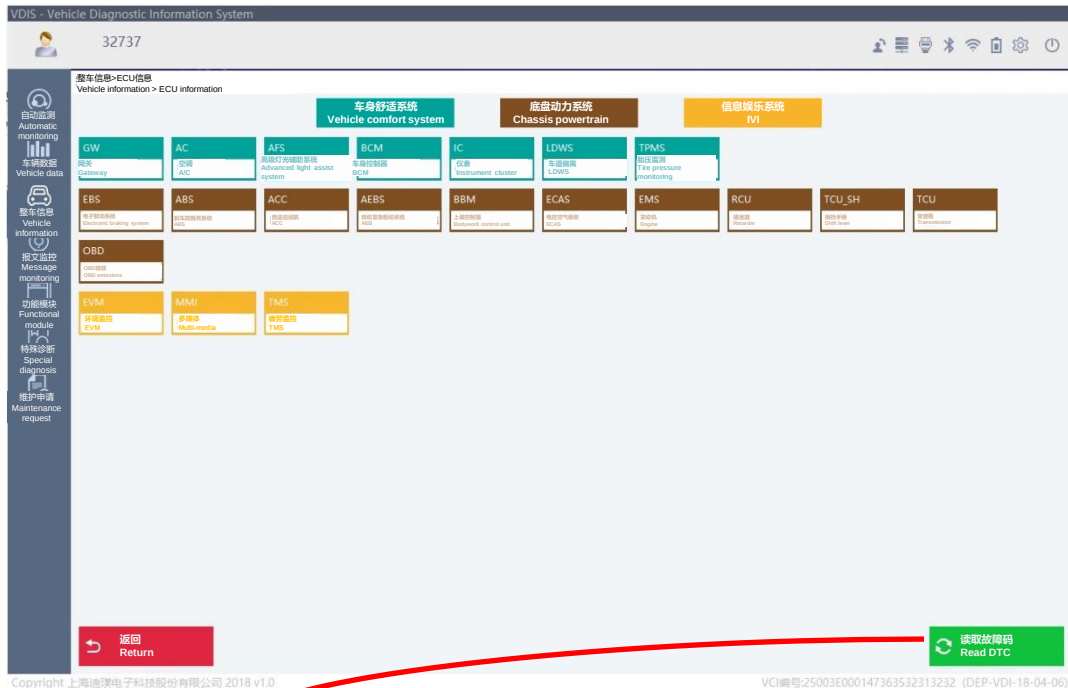
5. Click to read the fault, and the software will automatically read the DTC controlled by the vehicle and display the result in the upper right corner of the corresponding control unit, such as:

GW,AC,BCM等

GW, AC, BCM, etc.

6.右下角的读故障码为连续读取整车所有故障码

6. The DTC in the lower right corner is to continuously show all the fault codes of the whole vehicle

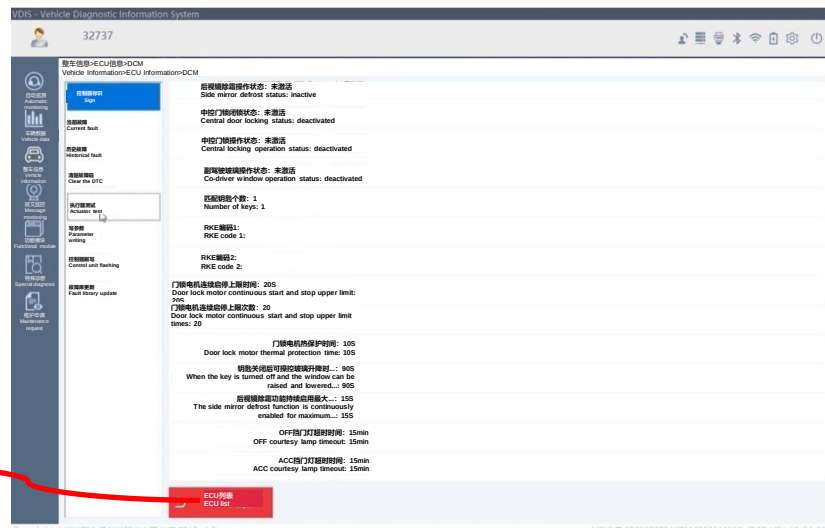
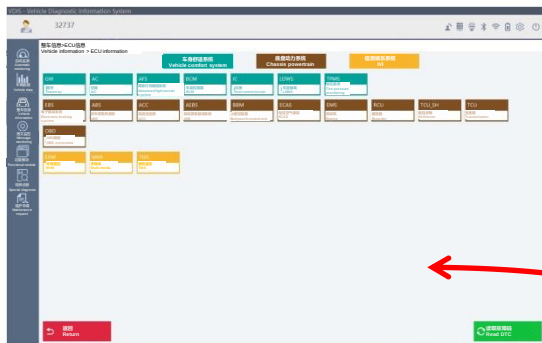




软件介绍和使用- ECU列表-控制器详细界面

Software introduction and use-ECU list-control unit detailed interface

1. 点击DCM后，右侧界面会出现一系列菜单
1. Click DCM and a menu will appear on the right interface
2. 基本信息：读取控制的相关标识符左侧是名称，右侧是具体的值
2. Basic information: The left side of the relevant identifier of the read control shows the name, and the right side shows the specific value
3. 当前故障
3. Current fault
4. 历史故障
4. Historical faults
5. 清除故障码
5. DTC
6. 控制器标识：读取控制的标识符信息值
6. Control unit identification: read the identifier information value of the control
7. 执行器测试
7. Actuator test
8. 例程控制
8. Routine control
9. ECU刷写
9. ECU flashing
10. 写参数
10. Parameter writing





2

软件介绍和使用- ECU列表-控制器详细界面

Software introduction and use-ECU list-control unit detailed interface

点击控制器标识后，右侧屏幕会陆续的显示一些基本信息值

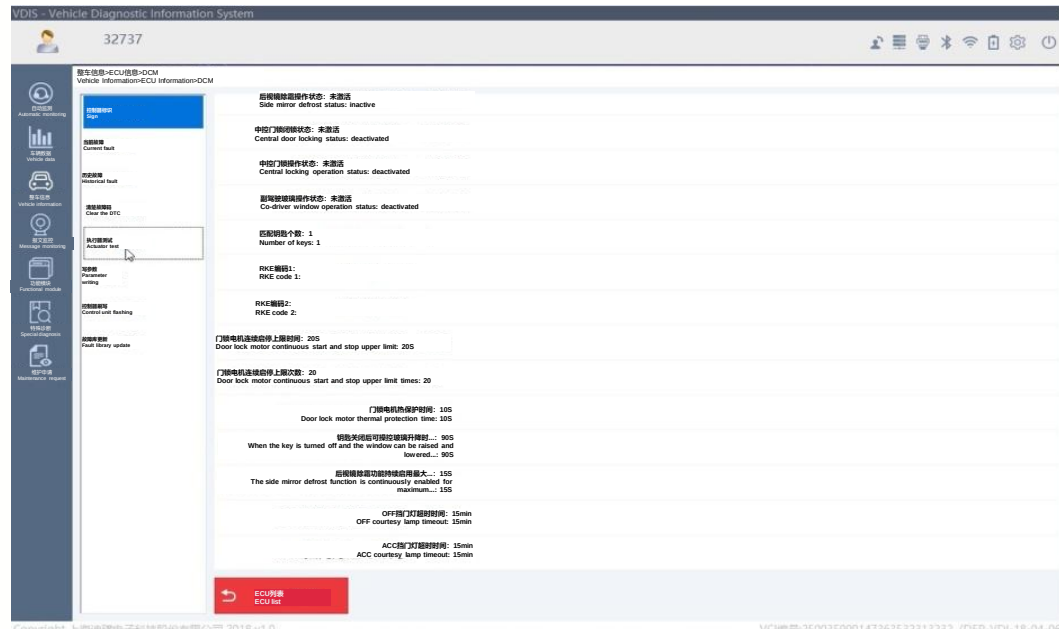
Click the control unit icon, the RH screen will display some basic information values one after another

注：选中界面上下滑动，可以显示

Note: Swipe up and down on the selected interface to display

更多的信息

more information





2

软件介绍和使用- ECU列表-控制器详细界面

Software introduction and use-ECU list-control unit detailed interface

故障码界面:

DTC interface:

1.第一列: 故障码代码

1. First column: DTC

2.第二列: 相对应的SPN码

2. Second column: the corresponding SPN code

3.第三列: 具体故障对应的中文描述

3. Third column: Chinese description of the specific fault

4.第四列: 冻结帧, 发生故障时车辆的运行情况

4. Fourth column: Freeze frame, the condition of the vehicle at the time of failure

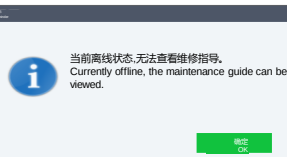
5.第五列: 该故障的维修方法:

5. Fifth column: the troubleshooting method of the fault:

ECU信息>ECU信息>BCM
ECU information > BCM

基本信息 Basic information	故障码: DTC: B110101
当前故障 Current fault	电源电压: Power supply voltage: OV
历史故障 Historical fault	里程计数: 0公里 Mileage: 0 km
清除故障码 Clear the DTC	电源模式: OFF档 Power supply mode: OFF
控制器标识 Sign	日期时间: 2000年0月0日08时0分0秒 Date and time: 0/0/2000 00:00:00
执行器测试 Actuator test	发动机转速: Engine speed: ORPM
例行控制 Routine control	车速: Vehicle speed: 0km/h
BCM刷写 BCM flashing	EMS使用时间: 3073.15小时 EMS service time: 3,073.15 h
写参数 Parameter writing	

故障代码 DTC	SPN/FMI	描述 Description	冻结帧 Freeze frame	维修指南 Maintenance guide
B110101	523702/5	近光灯开路故障 Low beam open circuit		
B110103	523700/5	远光灯开路故障 High beam open circuit		
B11010D				
B110111				
B110113				
B110115				
B110119				





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Success with Quality

德赢天下 服务领先 品质成就未来

Renown with Virtues, Leading by Service, Success with Quality

2

软件介绍和使用- ECU列表-控制器详细界面

Software introduction and use-ECU list-control unit detailed interface

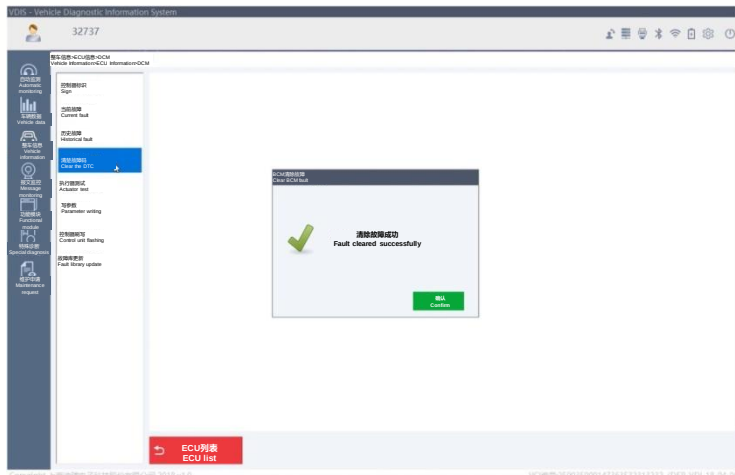
故障代码 DTC	SPN/FMI	描述 Description	冻结帧 Freeze frame	维修指导 Maintenance guide
U100703	521009/4	接收BCM1(0x18FE4EEC)报文超... Receive BCM1 (0x18FE4EEC) message...		
U10070F	521009/16	接收EBC1-ABS(0x18F0010B)报... Receive EBC1-ABS (0x18F0010B) message...		
U100710	521009/17	接收EEC1(0x0CF00400)报文超... Receive EEC1 (0x0CF00400) message...		
B110005	523765/4	气压传感器1开路/对地短路故障 Air pressure sensor 1 open circuit/short to ground		
B110007	523766/4	气压传感器2开路故障 Air pressure sensor 2 open circuit		

读取历史故障

Read the history fault

清除故障

Clear fault





2

软件介绍和使用- ECU列表-控制器详细界面

Software introduction and use-ECU list-control unit detailed interface

1. 点击执行器测试，屏幕右侧出现对应的功能

1. Click on the actuator test and the corresponding function will appear on the right side of the screen.

2. 找到想要执行的功能，然后选择下拉框(倒三角)，选择具体的值后，点击执行，如果执行成功，在对应的结果一列会显示

2. Find the function you want to execute, then select the drop-down box (inverted triangle), select the specific value, and click Execute. If the execution is successful, it will be displayed in the corresponding result column. ✓

整车信息ECU信息>DCM
Vehicle information ECU
information>DCM

基本信息 Basic information	名称 Description	控制 Control	执行 Execute	结果 Results
当前故障 Current fault	位置灯报警 Position lamp alarm	未激活 Inactive	执行 Execute	?
历史故障 Historical fault	天窗操作 Sunroof operation	打开 Enable	执行 Execute	?
清除故障码 Clear the DTC	多媒体开关 Multimedia switch	打开 Enable	执行 Execute	?
控制器标识 Sign	音量加 Volume up	打开 Enable	执行 Execute	?
执行器测试 Actuator test	右日间行车灯 RH daytime running light	关闭 Disable	执行 Execute	?
例程控制 Routine control	近光灯 Low beam	打开 Enable	执行 Execute	?
BCM刷写 BCM flashing	远光灯 High beam	关闭 Disable	执行 Execute	?
写参数 Parameter writing	超车灯 Overtaking lamp	打开 Enable	执行 Execute	?

近光灯 Low beam	打开 Enable	执行 Execute	✓
-----------------	--------------	---------------	---





例程控制:

Routine control:

1. 车身控制器

1. BCM

负载测试, 车上所有的灯依次点亮, 功能已经实现, 界面正在优化。

Load test, all lamps in the vehicle light up in sequence. The functions have been realized, and the interface is being optimized.

2. 仪表

2. IC

指示灯检测, 仪表上所有的指示灯依次点亮, 功能已经实现, 界面正在优化。

Indicator lamp testing, all lamps on the IC light up in sequence. The functions have been realized, and the interface is being optimized.

指针检测, 仪表上所有的指针进行摆动测试, 功能已经实现, 界面正在优化。

Pointer testing, all pointers on the IC undergo an oscillating test. The functions have been realized, and the interface is being optimized.





2

软件介绍和使用- ECU列表-控制器详细界面

Software introduction and use-ECU list-control unit detailed interface

写参数:

Write parameters:

共有三大类参数:

There are three major categories of parameters:

1. 数值型

1. Numerical type

点击执行, 会弹出一个取值范围和一个输入框, 在输入框内输入想要写得具体值, 然后点击写入
Click Execute, a value range and an input box will pop up, enter the specific value you want to write in the input box, and then click Write

功能检测
Functional testing

写入室内设定温度值
Write the indoor set temperature value

范围: $-40 \sim 210^{\circ}\text{C}$
Range:

40

放弃
Give up

键盘
Keypad

写入
Write





2

软件介绍和使用- ECU列表-控制器详细界面

Software introduction and use-ECU list-control unit detailed interface

2. 开关型

2. Enable-Disable type

一般都是功能和配置类的;

Generally they are function and configuration related;

写入方法和执行器测试一样，先点击倒三角的下拉菜单，选择具体值，点击执行，如果成功，结果会呈绿色，失败，结果会呈红色;

The writing method is the same as the executor test. First click the drop-down menu of the inverted triangle, select the specific value, and click Execute. If it succeeds, the result will be green; if it fails, the result will be red;

整车信息>ECU信息>BCM
Vehicle information>ECU information>BCM

基本信息 Basic information	名称 Description	控制 Control	结果 Results
当前故障 Current fault	自动灯光雨刮功能 Auto light and wiper system functions	开启 Enable	执行 Execute
历史故障 Historical fault	高精度燃油传感器 High precision fuel sensor	开启 Enable	执行 Execute
清除故障码 Clear the DTC	燃油防滴功能 Fuel anti-drip function	禁用 Disabled	执行 Execute
控制器标识 Sign	发动机机油尺传感器安装 Engine oil dipstick sensor installation	禁用 Disabled	执行 Execute
执行器测试 Actuator test	主节点睡眠请求信号 Master node sleep request signal	开启 Enable	执行 Execute
例行控制 Routine control	电磁阀总开关功能 Electromagnetic master power switch function	关闭 Disable	执行 Execute
BCM刷写 BCM flashing	发动机油品传感器 Oil quality sensor	无 None	执行 Execute
写参数 Parameter writing	前桥油品传感器 Front axle OQS	禁用 Disabled	执行 Execute
	后桥油品传感器 Rear axle OQS	禁用 Disabled	执行 Execute
	变速箱油品传感器 Transmission fluid quality sensor	禁用 Disabled	执行 Execute
	发动机类型 Engine type		执行 Execute
	常速辅助制动启用车速 Static cornering lamp activation speed		执行 Execute
	日间行车灯开启发动机转速 Daytime running lamp activation speed		执行 Execute





软件介绍和使用- ECU列表-控制器详细界面

Software introduction and use-ECU list-control unit detailed interface

3.需要申请权限的参数

3. Parameters that require permissions

例如：修改总里程、重新计算综合油耗等

For example: modify the total mileage, recalculate comprehensive fuel consumption, etc.

诊断仪自动连接到公司数据服务器，填写申请表，表的内容包括：车辆的VIN、特殊值名称、修改的目标值、申请原因、诊断仪登录的账号等信息，发送到销售公司，进行审核，审核通过后，会自动写入控制器（注：写入的目标值为申请表中填写的值，不能修改）

The diagnostic unit automatically connects to the company's data server and fills out the application form. The contents of the form include: the vehicle's VIN, special value name, modified target value, reason for application, the account number used to log in to the diagnostic unit and other information, which is sent to the sales company for review. After the review, it will be automatically written to the control unit (Note: the target value written is the value filled in the application form and cannot be modified)

观看录制视频：《2-1 IC功能、新增维修指导、特殊值申请》
Watch the recorded video: "2-1 IC Functions, New Maintenance Guide, Special Value Application"



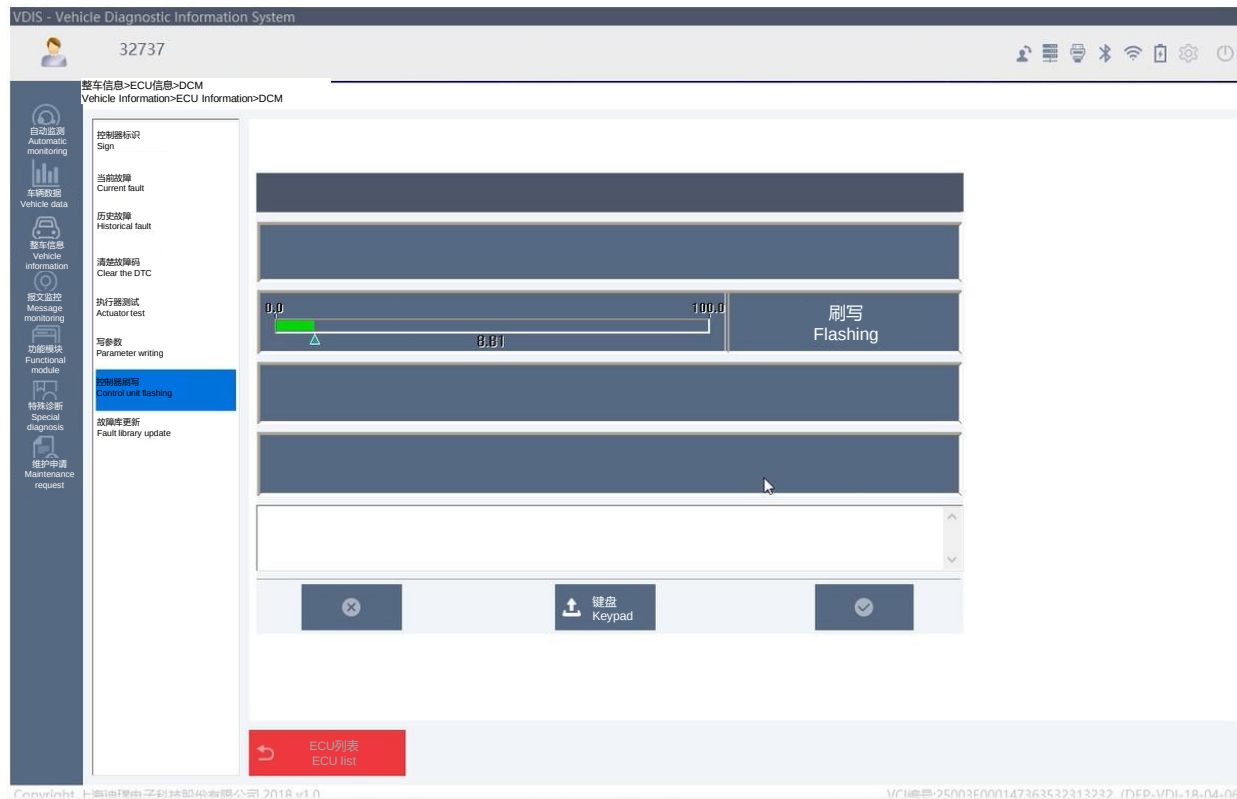


2

软件介绍和使用- ECU列表-控制器详细界面

Software introduction and use-ECU list-control unit detailed interface

控制器程序更新 Control unit program update





软件介绍和使用-报文监控

Software introduction and use - message monitoring

报文监控功能里有三个选项分别为：

There are three options in the message monitoring function:

开始、清空、加载DBC文件

Start, clear, load DBC files

第一步：加载DBC文件

Step 1: Load the DBC file

第二步：点击开始，界面会显示信号和报文

Step 2: Click Start and the interface will

display signals and messages

点击清空，会重新开始记录

Click Clear to start recording again.

注：如果不加载DBC文件，无法去解析每一条报文的
具体解释

Note: If the DBC file is not loaded, it is impossible to parse the specific explanation of each message.

DIS - Vehicle Diagnostic Information System

32737

序号 SN	时间 Time	类型 Type	长度 Length	CAN ID	内容 Content
1	19:10:28.418	0	8	0X10FE6F2A	00 00 00 00 00 00 00 00
2	19:10:28.470	0	8	0X18FEF100	00 00 00 00 00 00 00 00
3	19:10:28.526	0	8	0XCF00400	00 00 00 00 00 00 00 00
4	19:10:28.578	0	8	0XCF00300	00 00 00 00 00 00 00 00
5	19:10:28.618	0	8	0X18FEAE30	00 00 00 00 00 00 00 00
PsToEBS 信号名称 Signal name 直接值 Direct value 物理值 Physical value 描述 Value description BrakeAirPress1 0.00 0 "制动回路1气压信号" "Brake circuit 1 air pressure signal" BrakeAirPress2 0.00 0 "制动回路2气压信号" "Brake circuit 2 air pressure signal"					
6	19:10:28.665	0	8	0X18FF9627	00 00 00 00 00 00 00 00
7	19:10:28.715	0	8	0X18F00503	00 00 00 00 00 00 00 00
8	19:10:28.767	0	8	0X18FFDA21	00 00 00 00 00 00 00 00
9	19:10:28.819	0	8	0X18FFC825	00 00 00 00 00 00 00 00
10	19:10:28.877	0	8	0XCFE6CEE	00 00 00 00 00 00 00 00
11	19:10:28.944	0	8	0X10FE6F2A	00 00 00 00 00 00 00 00
12	19:10:29.004	0	8	0X18FEF100	00 00 00 00 00 00 00 00
13	19:10:29.067	0	8	0XCF00400	00 00 00 00 00 00 00 00
14	19:10:29.137	0	8	0XCF00300	00 00 00 00 00 00 00 00
15	19:10:29.221	0	8	0X18FEAE30	00 00 00 00 00 00 00 00
16	19:10:29.292	0	8	0X18FF9627	00 00 00 00 00 00 00 00
17	19:10:29.368	0	8	0X18F00503	00 00 00 00 00 00 00 00
18	19:10:29.432	0	8	0X18FFDA21	00 00 00 00 00 00 00 00
19	19:10:29.517	0	8	0X18FFC825	00 00 00 00 00 00 00 00
20	19:10:29.616	0	8	0XCFE6CEE	00 00 00 00 00 00 00 00
21	19:10:29.702	0	8	0X10FE6F2A	00 00 00 00 00 00 00 00
22	19:10:29.783	0	8	0X18FEF100	00 00 00 00 00 00 00 00
23	19:10:29.882	0	8	0XCF00400	00 00 00 00 00 00 00 00

开始 Start 清空 Clear 卸载DBC Uninstall DBC

26003F00014735352 201-18-04-01





软件介绍和使用-功能模块

Software introduction and use-functional module

功能模块作用：应用于售后或者维修或者更换控制器后重新对控制器进行刷写，写车辆原始参数和功能配置，一次性自动完成

Functional module: it is used to re-flash the control unit with the original parameters and function configuration of the vehicle automatically in one operation for maintenance or replacement of the control unit



网关写配置字
Write gateway configuration bits

更换整车控制器
Replace VCU

更换车身控制器
Replace BCM

更换网关控制器
Replace the GWM

更换门窗控制器
Replace DCM

更换疲劳监控
Replace TMS

更换仪表控制器
Replace IC control unit

更换一键启动控制器
Replace the PEPS

更换上装控制器
Replace bodywork control unit

更换防盗控制器
Replace the IMMO

更换胎压控制器
Replace tire pressure control unit

更换天行健
Replace TEL





软件介绍和使用-功能模块

Software introduction and use-functional module

	功能模块 Functional module	ECU-控制器刷写功能 ECU-control unit flash function
BCM、VCU	1.新控制器，内无软件； 1. New control unit, without software installed; 2.需要扫描外壳贴的二维码； 2. It is necessary to scan the QR code attached to the case; 3.刷完后，会自动写入车辆原始参数； 3. After flashing, it will automatically write the original parameters of the vehicle;	1.旧控制器，进行软件升级； 1. For the old control unit, upgrade the software; 2.刷完后，会自动写入车辆原始参数； 2. After flashing, the original parameters of the vehicle will be automatically written;
TPMS	刷写完成后，自动匹配轮胎传感器 After the flashing is completed, it will automatically match the tire sensor	更新完成后，自动匹配轮胎传感器 After the update is complete, automatically match the tire sensor
其他控制器 Other control units	刷写完成后，自动设置功能参数 After flashing is completed, the function parameters will be automatically set.	只做软件更新 Only software updates





软件介绍和使用-特殊诊断

Software introduction and use-special diagnosis

特殊诊断:

Special diagnosis:

1: 监控电源切换报文信号

1: Monitor the power supply switching message signal

2: 监控发动机启动报文信号

2: Monitor the engine start message signal

3: 监控油门报文信号

3: Monitor the accelerator message signal

4: 监控个网段通信信号

4: Monitor the communication signals of individual network segments

5: 网段管理信号

5: Network segment management signal

6: 开关状态信号

6: Switch status signal

7: PSU正式钥匙匹配

7: PSU official key matching

8: 遥控钥匙匹配

8: Remote key matching

9: VCU控制器激活

9: VCU control unit activation

操作人员根据自己想要执行哪一功能然后相对应的去选择

The operator chooses the function he wants to perform.



程序测试
Program test

电源切换信号
Power supply switching
Signal

发动机启动信号
Engine start signal

油门信号
Accelerator signal

网段管理信号
Network segment
management signal

开关状态信号
Switch status signal

PSU匹配正式钥匙
PSU matching official key

遥控配钥匙
Remote control key

VCU激活
VCU activation

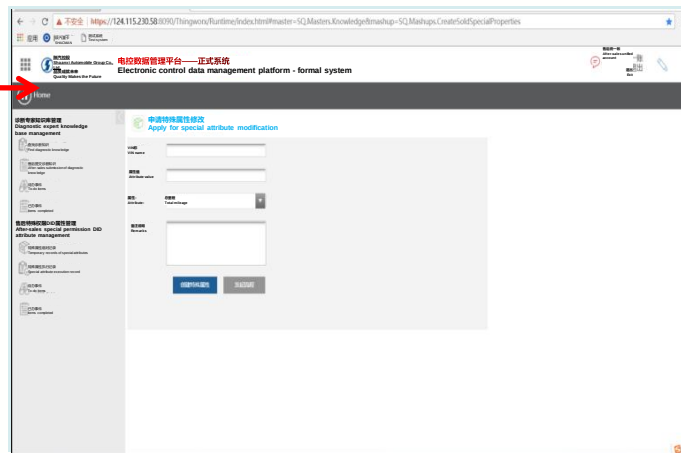
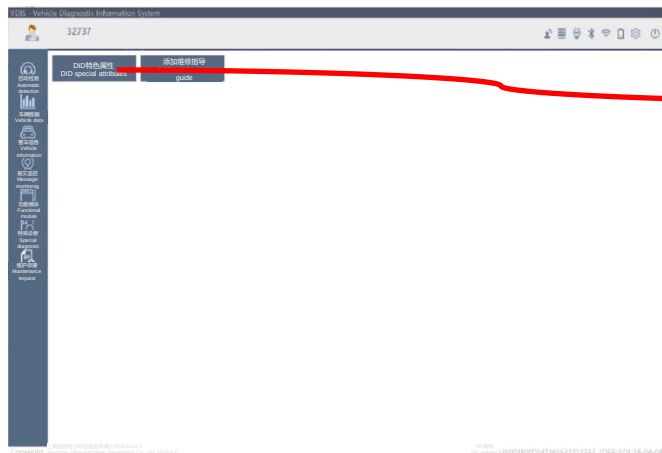
PSU匹配临时钥匙
PSU matching temporary key





软件介绍和使用- 维护申请-特殊值申请

Software introduction and use - maintenance request - special value request



需要申请权限的参数

Parameters that require permissions

例如：修改总里程、重新计算综合油耗等

For example: modify the total mileage, recalculate comprehensive fuel consumption, etc.

诊断仪自动连接到公司数据服务器，填写申请表，表的内容包括：车辆的VIN、特殊值名称、修改的目标值、申请原因、诊断仪登录的账号等信息，发送到销售公司，进行审核，审核通过后，会自动写入控制器（注：写入的目标值为申请表中填写的值，不能修改）。

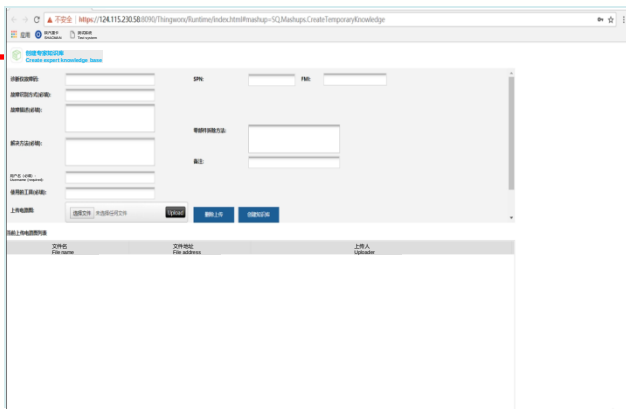
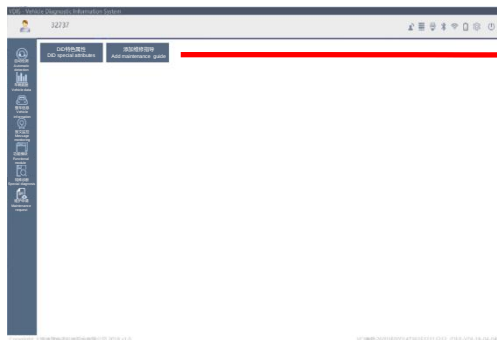
The diagnostic unit automatically connects to the company's data server and fills out the application form. The contents of the form include: the vehicle's VIN, special value name, modified target value, reason for application, the account number used to log in to the diagnostic unit and other information, which is sent to the sales company for review. After the review, it will be automatically written to the control unit (Note: the target value written is the value filled in the application form and cannot be modified)





软件介绍和使用-维护申请-新增维修指导

Software introduction and use-maintenance request-new maintenance guide



售后/装配车间维修人员可以在系统中新增故障的维修方法，填写故障的现象、维修的方法、使用的工具等信息（备注必填项，填写完成后才能创建成功）。创建了新的故障信息后，有专人进行故障的审核，如果属实，会分配故障码讲剩余信息补充全后在故障库中归档。

After-sales/assembly workshop maintenance personnel can add troubleshooting methods in the system, fill in the fault phenomenon, repair method, tools used and other information (remarks are required, and can only be created successfully after filling). After new fault information is created, a special person will review the fault. If it is true, a DTC will be assigned, and the remaining information will be supplemented and archived in the fault database.





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谢谢，请批评指正!

Thank you !

