



智能驱动
物联未来

C-BOX 云盒

——中电物联网终端使用手册

C-Box External Remote System Manual



扫描获取快速服务

<http://www.canplus.cn>

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Full coverage vehicle, condition&alarm, 2-CAN, 24P Connector
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Adapt to multi site installation mode



物联网云平台



专业·专注



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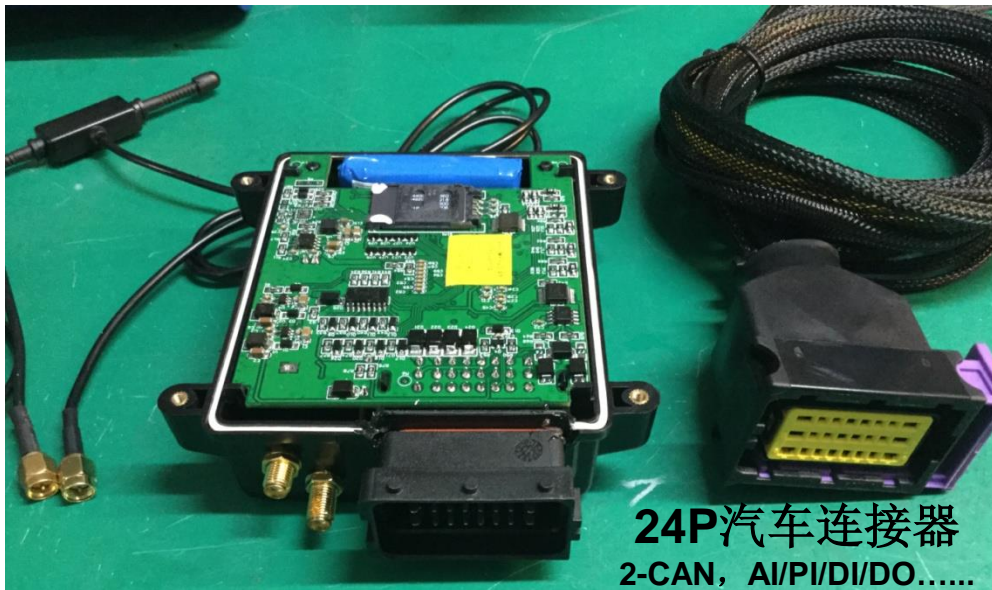
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中电 C-BOX 物联网终端



常规/同行第三方 GPS终端



全车型覆盖, 全协议侦听与自适应, 全车况、工况及报警, 过程记录与统计指导预维护, 北斗GPS蜂窝三模优选定位.....

系统基本应用与管控

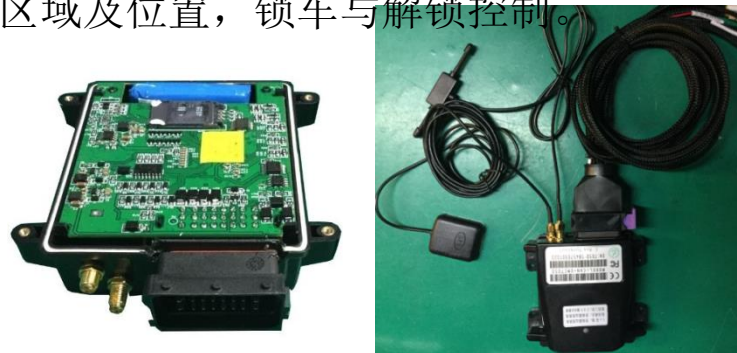
用于车辆远程系统信息的采集、远传和监管控制，实时设备车况及作业工况、报警及GPS等信息；重点在车况、工况信息，报警信息，车辆区域及位置，锁车与解锁控制。

System application and function:

It is used for remote system information acquisition and control , equipment operating conditions real-time monitoring, warning and GPS etc.

Main functions include:

real-time location information collection, working condition information collection, alarm information collection, vehicle lock and unlock control.



系统组成:

C-BOX控制盒及安装线束（依据车型及车体上的插头不同而不同），参见右图。

System components:

C-box control BOX and mounting wire harness (plug part no is adjustable to compatible with connectors of the original platform), as shown in the pictures.



系统特点(Main Features):

- 1) 产品**适应性广**——全系产品覆盖，安装简单方便。

Wide adaptability, simple & convenient installation, can be directly attracted to vehicle.

- 2) 接线简单方便，**常规**只需接**5**根线即可实现（**2-电源 2-CAN** 和**1-控制**）。

Simple & convenient wiring with only five wires can be connected.

- 3) 统一接入远程云服务平台，融合臂式、剪式等一体化电控系统及**ECU**，可实时管理。

Access to remote management platform, provide equipment real-time monitoring service.

- 4) 高可靠与稳定性，**PCB**板卡提供**三年**质量保证。

High reliability & stability, PCB board provide three years of quality assurance

- 5) 多重保护与使用防护，**IP65** 防护等级。

Multiple protection & use protection, IP65 protection grade .

- 6) **2**路-标准 **CAN2.0B** 总线通讯协议（其中**1**路可接电喷发动机），并可选用**ModBus**接口。

24芯汽车连接器可扩展**IO**（**AI PI DI DO ...**）

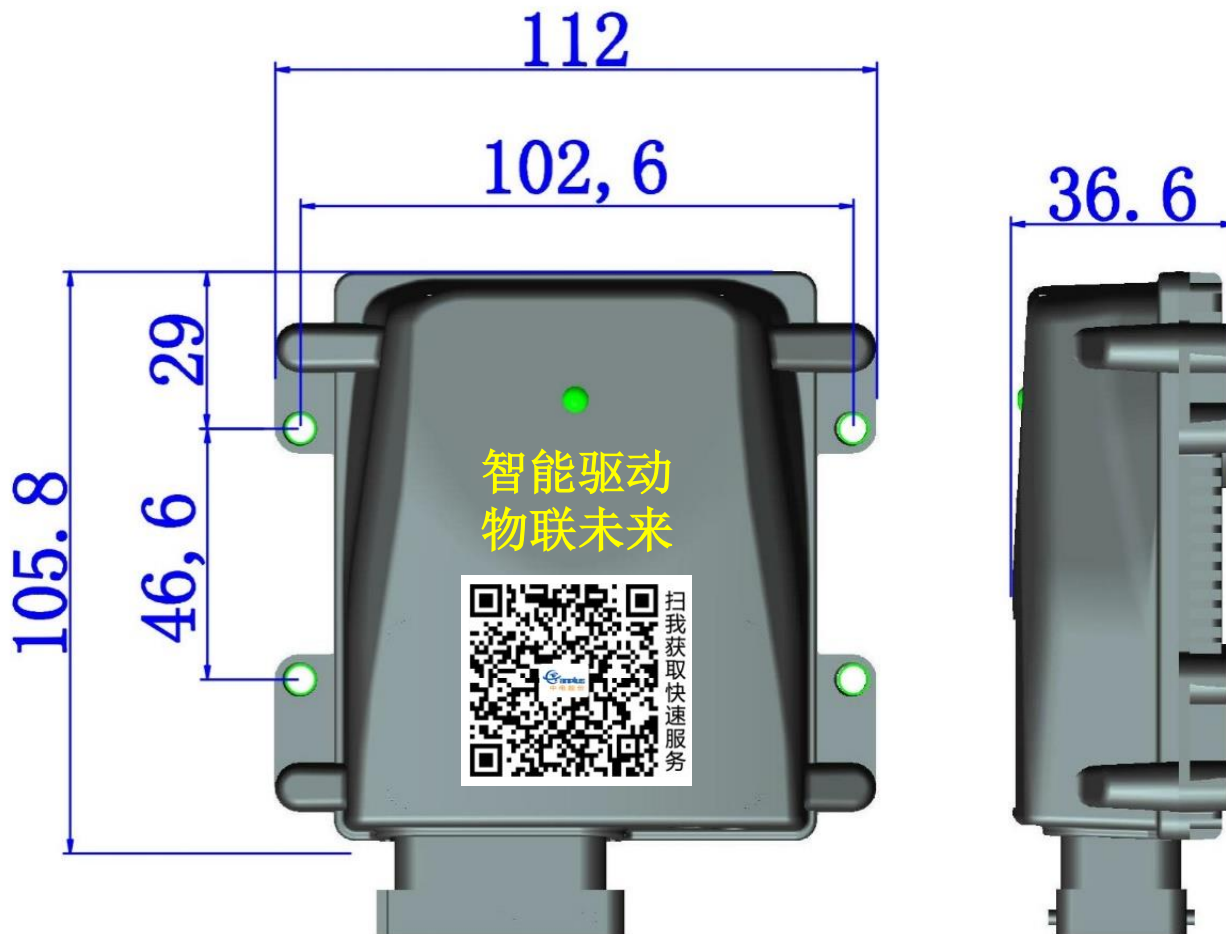
Standard can2.0B bus communication protocol. 24-IO Extend.

电气规格(Electrical Specifications):

项目 NO	C-BOX
工作电压 Operating Voltage	9V ~ 36V DC
其它电性性能 Other Electrical Characteristics	IEC61000, IEC60950, EN55022, EN55024

常用接口定义(其他扩展另见手册) (Common Interface):

Pin 引脚	Input 输入/Output 输出	Function 功能	Character 特性
A7(2)	Communication 通信	PCU Communication PCU通信+	CAN Level CAN 电平
A6(3)	Communication 通信	PCU Communication PCU通信-	CAN Level CAN 电平
A1 (8)	Output 输出	Output Control 输出控制	24VDC/2A
B7(10)	Communication 通信	PCU Communication PCU通信+	CAN Level CAN2 电平
B6(11)	Communication 通信	PCU Communication PCU通信-	CAN Level CAN2 电平
C8 (17)	Power 电源	地Ground	0VDC/2.5A
C1 (24)	Power 电源	Power in电源入+24V	24VDC/2.5A

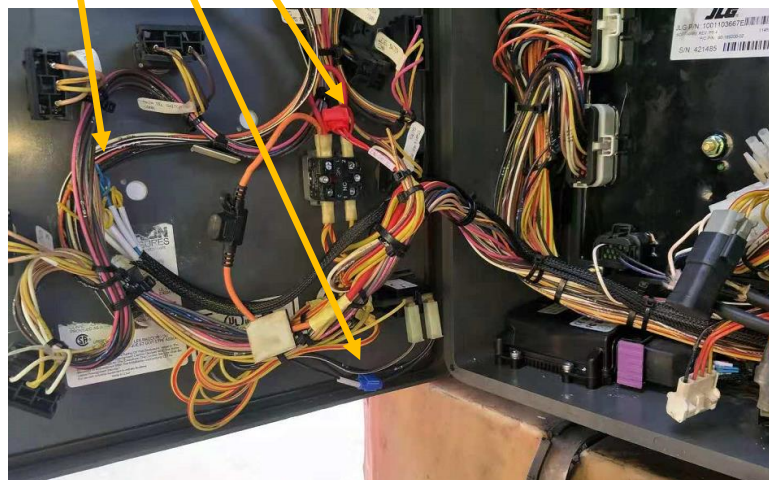


1: 参照相关设备接线图或建议，连接或监测电源电瓶（参见剪叉部分）。

The c-box wiring harness's battery is positive and the negative terminal is installed on the vehicle's battery is positive and the negative terminal (see the scissor lift part).

2: 把C-BOX控制盒的输入、输出信号线与面版上相应的信号线(如平台/转台转换, 发动机相关报警, 臂架起升输出等)接在一起, 接好后把线束固定好。(视需要而接)

Connect the input signal line of the c-box control BOX with the corresponding input line on the surface, and then fix the wire harness.



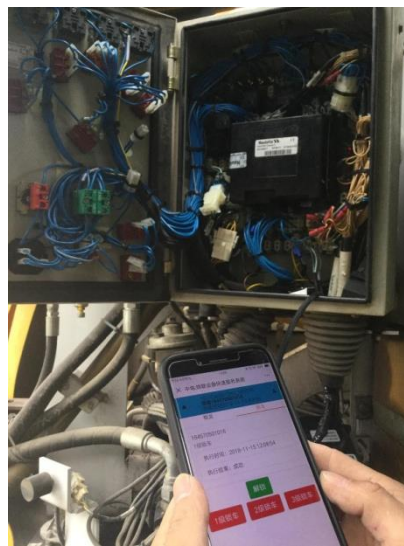
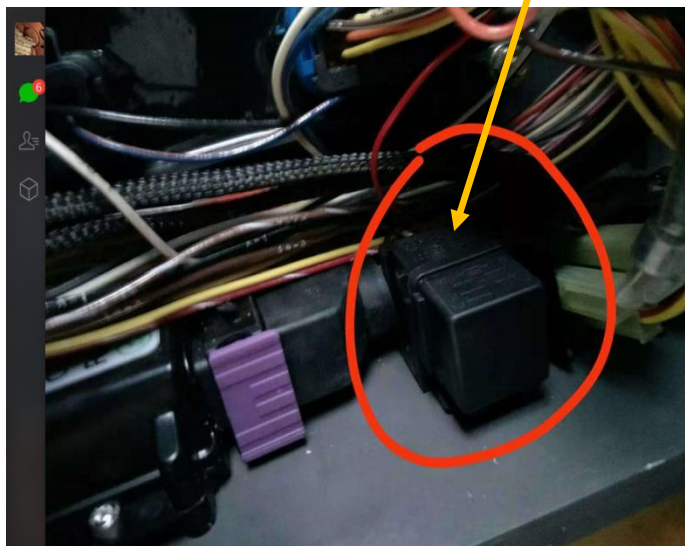
3: 把C-BOX的CAN1H, CAN1L与臂车系统的CAN_H,CAN_L分别接在同一个并线扣中, 并压好线, 红色为CAN_H。

The c-box CAN1H, CAN1L and CAN_H and CAN_L of the arm boom system are respectively connected in the same draw buckle, and the line is pressed well. The red is CAN_H.



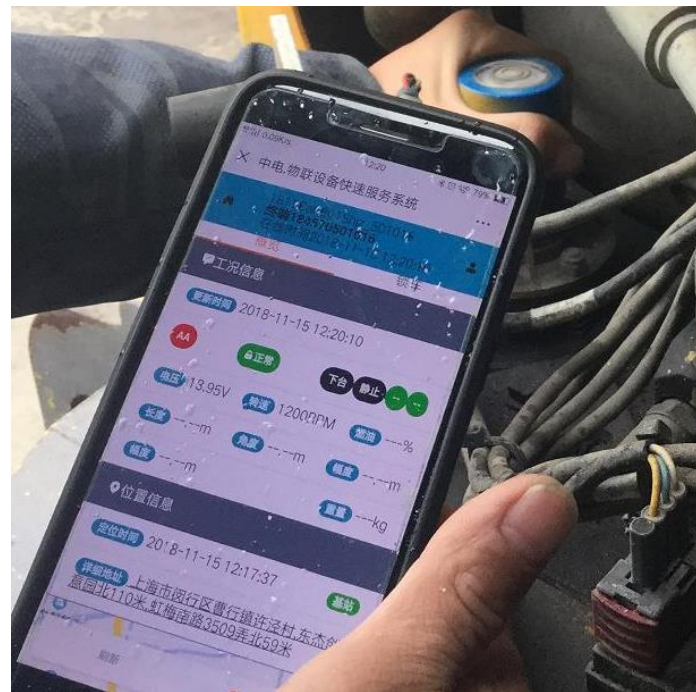
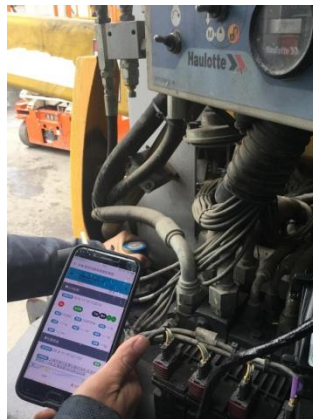
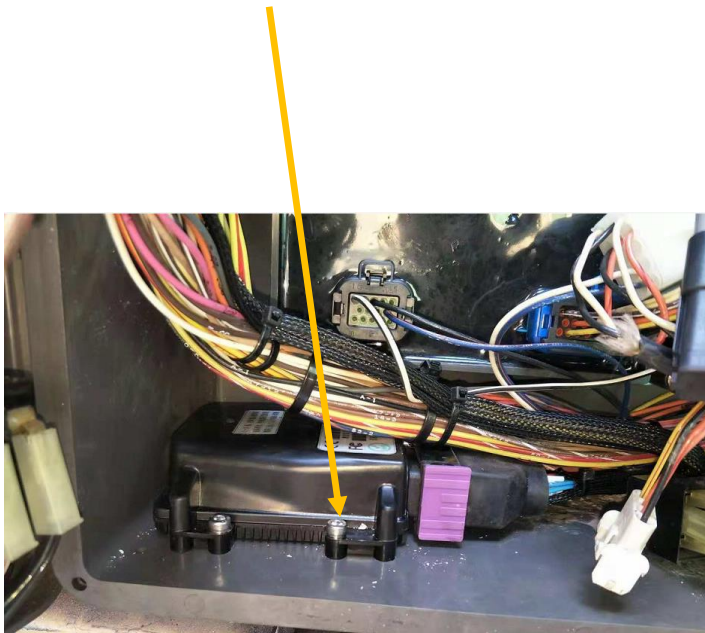
4: 断开臂升信号线（依实际锁车内容而不同），引线的两端接到C-BOX的锁车继电器触点两端，并固定好继电器。

Disconnect the tower arm hoisting signal line, connect both ends of the lead to the c-box's lock car relay contact, and fix the relay.



5: 把装好的C-BOX控制盒贴在电控箱合适部分，螺钉固定。最后将线束固定好。

Stick the c-box control BOX in the secret place of the electric control BOX, and the control BOX is attracted by magnet. Place the wire harness in place.



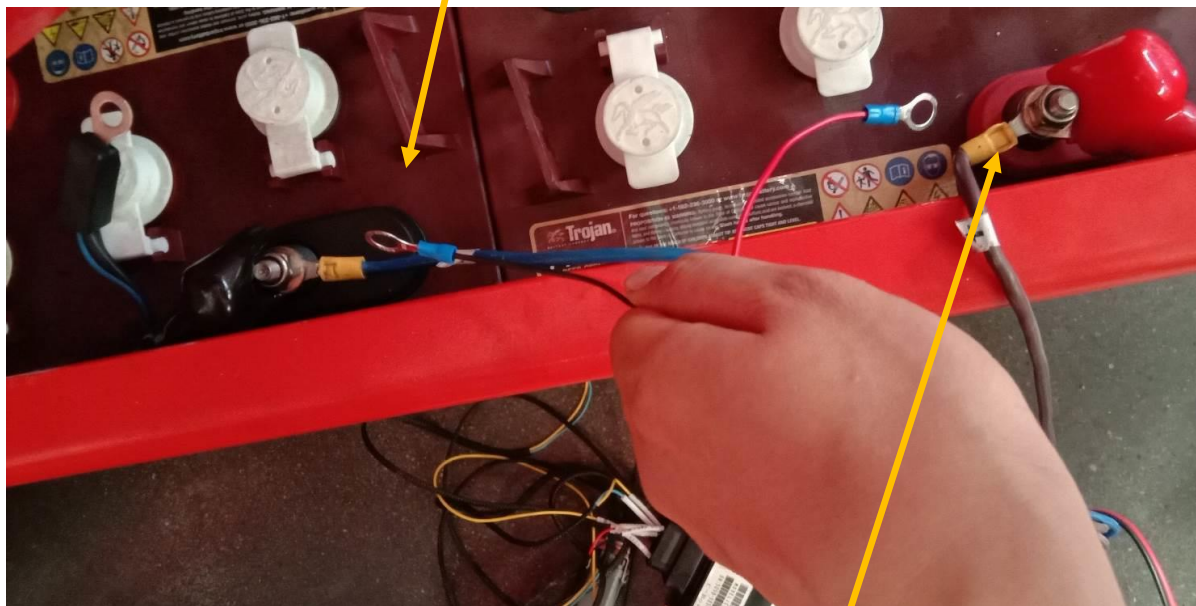
6: 把C-BOX的GPS天线装在车身上, 类似这个地方。

Install c-box's GPS antenna on vehicle body,i.e. place as shown in the picture.



1: 把C-BOX 线束的电池负极端子装在整车的电池负极。

Install battery negative terminal of c-box harness to battery negative terminal of vehicle .

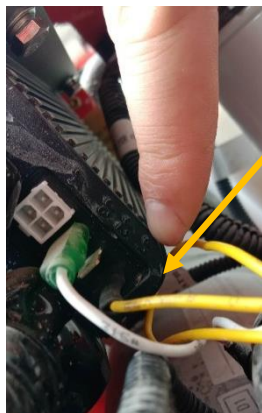


2: 把C-BOX 线束的电池正极端子装在整车的电池正极。

Install battery positive terminal of c-box harness to battery positive terminal of vehicle .

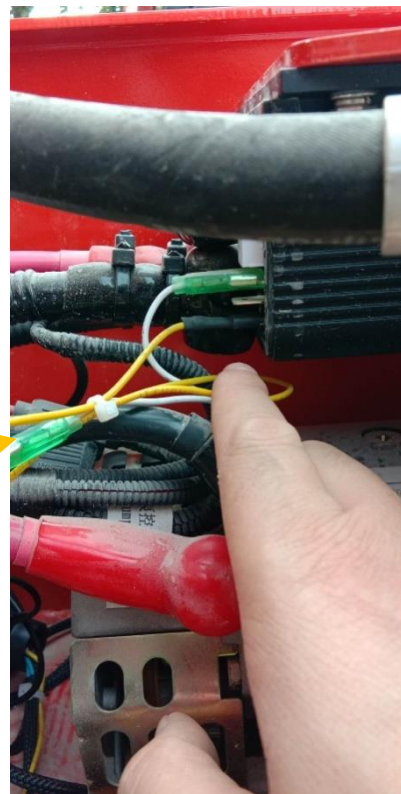
- 3: 把原车上的驱动器的电机使能J1上的插头拔下来，把外置远程的锁车输出线插到 J1位置上

Unplug connector of drive motor enable key J1 of original platform,
plug in remote vehicle lock output line into J1 position.



- 4: 把电机使能附近的线用扎带扎好。

Tie the wires near the motor with straps.



C-BOX 线束带转接头时,按步骤5a-6a安装。 Follow step 5a-6a to install C-BOX (harness with adapter).

5a: 把车身上的上下台连接插头拔开。

Unplug connectors that connecting platform and turntable of vehicle.



6a: 把C-BOX 线束的对插插头分别与拔开的上下台连接插头插, 插完后见下图。

Plug in c-box wire harness connectors with connectors of platform and turntable respectively as show in the picture.



附：各品牌的车身对插插头如下： Attached: the body plugs of each brand are as follows:

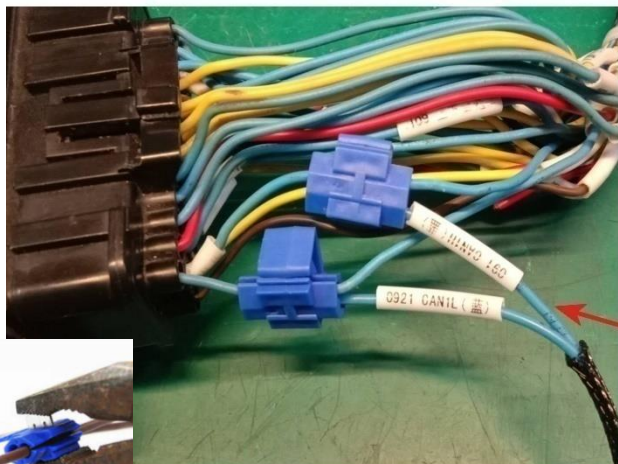
序号 NO	品牌 Brand	插头型号 Connector NO	插头图片 Connector Picture	车上位置图片
1	吉尼 Genie	德驰DT04-6P/DT06-6S Deutch DT04-6P/DT06-6S		
2	鼎力 DingLi	西霸王插头套件-公头、母头（公头带金属扣） Sebase plug suite-male(with metal buckle),female		

序号 NO	品牌 Brand	插头型号 Connector No	插头图片 Connector Picture	车上位置图片
3	星邦 Sinoboom	西霸士插头套件- 公头、母头（公 头不带金属扣） Sebase plug suite- male(with metal buckle),female		
4	星邦 Sinoboom	德驰DTM04- 6P/DTM06-6S Deutch DTM04- 6P/DTM06-6S		

C-BOX 线束不带转接头时,按步骤5b-6b安装。 Follow step 5b-6b to install C-BOX (harness without adapter).

5B: 找到ECU的通信线1B和C-BOX的CAN_H引线装入同一个并线扣中,用钳子压好。

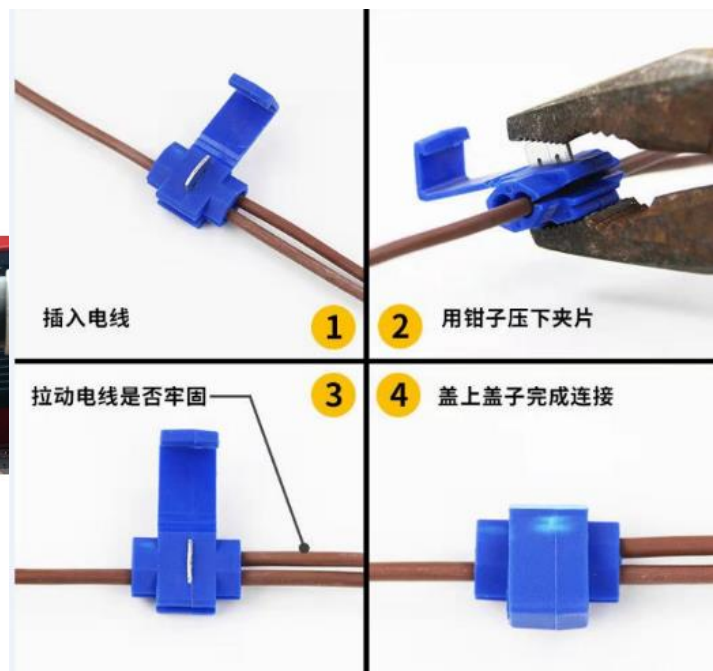
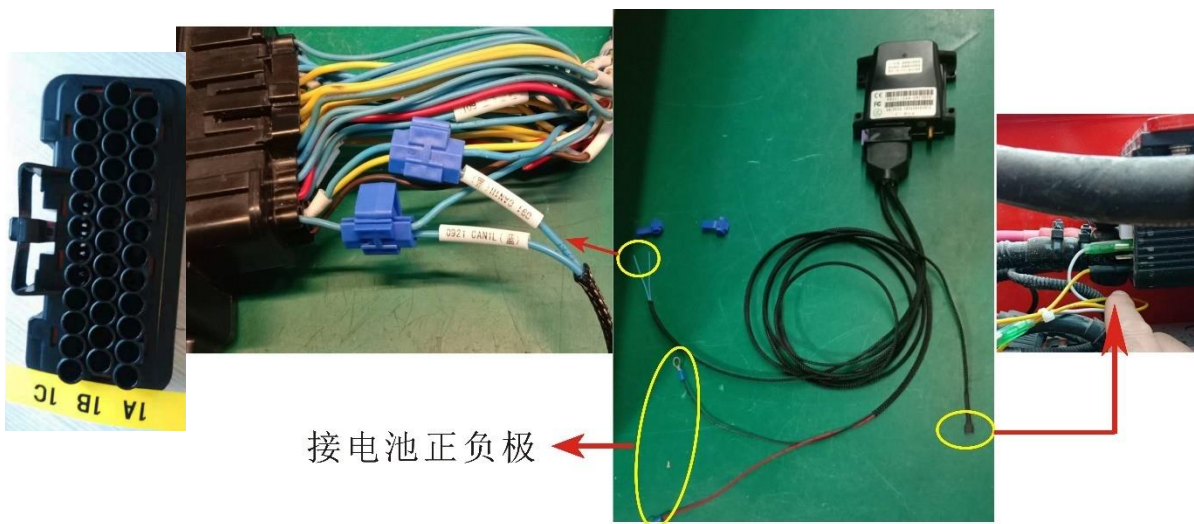
Put ECU's communication line 1B and c-box's CAN_H lead into one parallel buckle, press them with pliers as the following steps shown.



接电池正负极

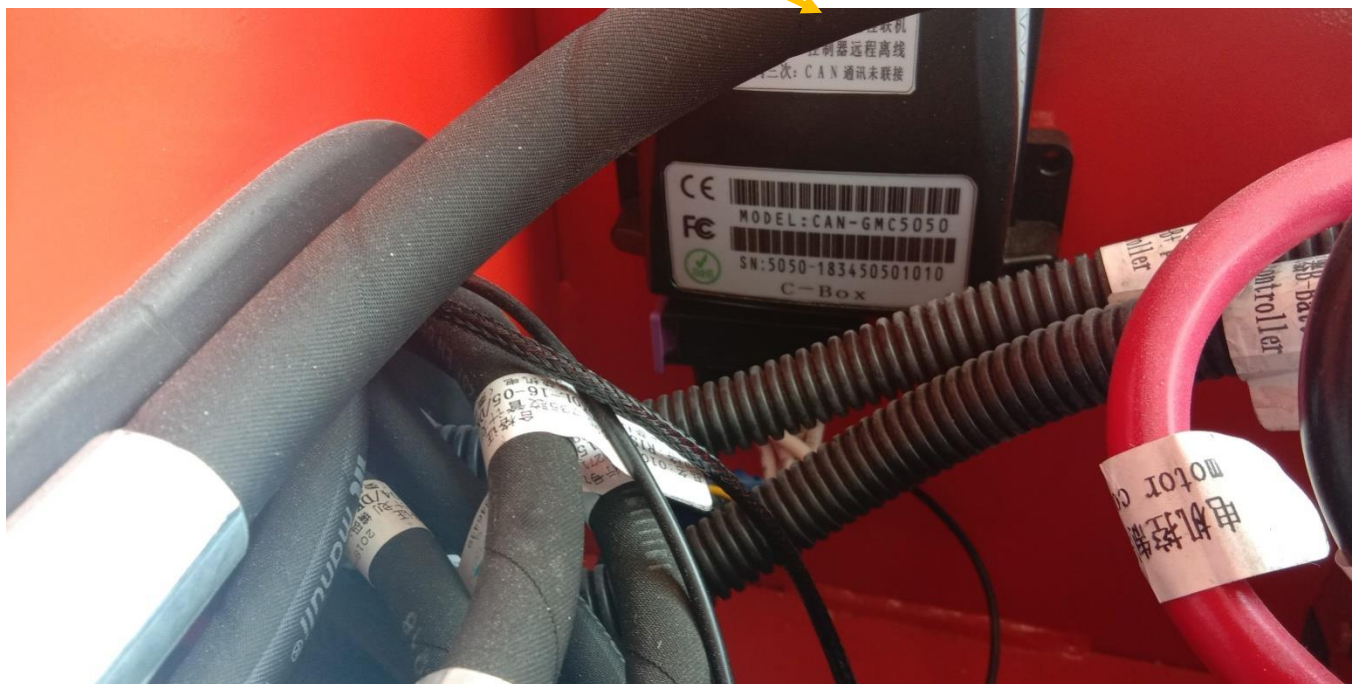
6B: 找到ECU的通信线1C和C-BOX的CAN_L引线装入同一个并线扣中，用钳子压好。

Put communication line 1C of the ECU and CAN_L lead of c-box into one parallel buckle, press them with pliers.



7: 把装好的C-BOX控制盒贴在车身合适位置，螺孔固定。

Place c-box control BOX to a concealed place on vehicle, the BOX will be attracted by the magnet.



8: 把-BOX的GPS天线装在车身上，不易滑落，类似这个地方。

Install c-box's GPS antenna on vehicle body,i.e. place as shown in the picture.

