

GLONASS资料

GLONASS data

1. 设备拆装

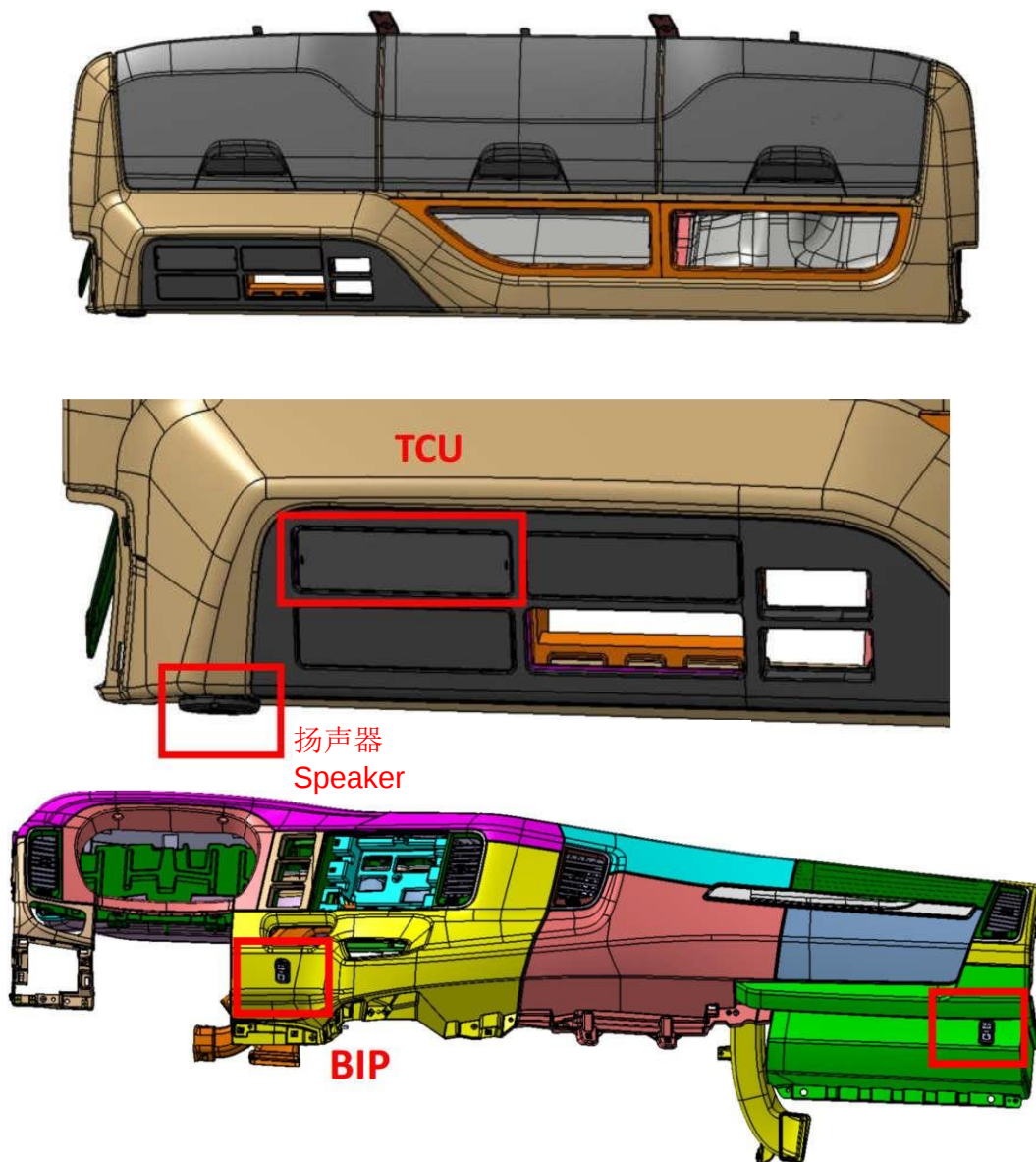
1. Equipment disassembly and assembly

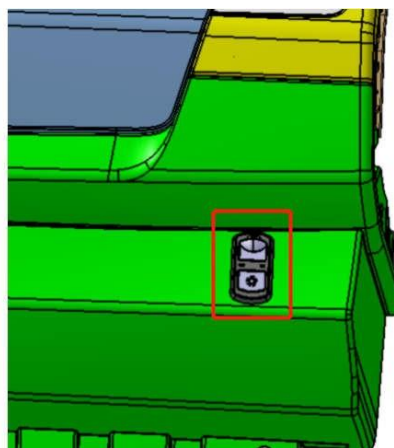
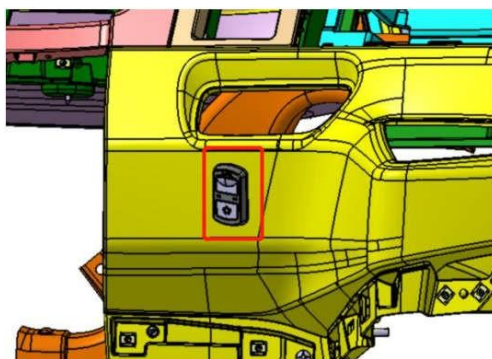
紧急呼叫救援系统由TCU主机、BIP按键、扬声器三个子件组成。

The emergency call and rescue system consist of three components: TCU host, BIP key, and speaker.

TCU主机、扬声器安装于高架箱，BIP按键安装于仪表台。安装位置，如下所示：

The TCU host and speaker are installed on the overhead box, and the BIP key is installed on the dashboard. The installation location is as follows:





2. 设备使用

2. Equipment use

1.1. 设备的开启

1.1. Turn on the device

设备在外部电源供电时可以开启。

The device can be turned on with external power supply.

当设备第一次通电时，无论点火状态如何，产品都会开启并进入自诊断状态。

When the device is first powered on, the product turns on and enters a self-diagnosis state, regardless of ignition state.

BIP 第一次上电指示按以下顺序：

The first power-on instructions of the BIP are in the following order:

红灯亮 3~10s;

The red light is on for 3~10 s;

绿灯亮 40~45s;

The green light is on for 40~45 s;

红灯闪烁 2 次.

The red light flashes 2 times.

如果点火开关处于关闭状态，设备将在一段时间后关闭。如果点火开关处于开启状态，则设备将保持工作状态。

If that ignition switch is in the off state, the device will turn off after a certain period of time. If that ignition switch is in the on state, the device will remain in working status.

后续开机时，如果外部电源未关闭，产品将切换到“ERA”模式，指示如表 2 所示。

If the external power supply is not turned off during subsequent startup, the product will switch to "ERA" mode, and the instructions are shown in Table 2.

重要提示：如果您断开设备与外部电源的连接，则产品的下一次开机将同第一次 BIP 上电顺序。

Important: if you disconnect the device from the external power supply, the next power-on of the product will be the same as the first power-on sequence of the BIP.

1.2. 设备的工作模式

1.2. Working mode of the device

本设备有如下工作模式：

This device has the following working modes:

- a) “关闭”模式;
- a) "Off" mode;
- b) “ERA”模式;
- b) "ERA" mode;
- c) “紧急呼叫”模式;
- c) "Emergency call" mode;
- d) “测试”模式;
- d) "Test" mode;
- e) “维修”模式.
- e) "Maintenance" mode.

1) “关闭”模式

1) "Off" mode

产品处于“关闭”模式，点火开关关闭。当点火开关打开时，产品退出“关闭”模式。当点火开关打开且无电时，备用电池放电后进行从其他模式转换到“关闭”模式。

The product is in "Off" mode, and the ignition switch is turned off. When the ignition switch is turned on, the product exits the "Off" mode. When the ignition switch is turned on and there is no electricity, the backup battery is discharged and the switch from other modes to the "Off" mode is performed.

2) “ERA”模式

2) "ERA" mode

在“ERA”模式下，设备会监控和记录车辆参数，以自动模式检测事故事件，并对用户的控制动作做出响应。首次打开车辆点火装置时，以及“测试”模式或“紧急呼叫”模式结束后，设备将处于“ERA”模式。

In "ERA" mode, the device monitors and records vehicle parameters, detects accident events in auto mode, and responds to user control actions. When the vehicle ignition is turned on for the first time, and after the "Test" mode or "Emergency call" mode, the device will be in "ERA" mode.

如果产品已准备好运行，BIP 按钮上的指示灯将呈红色闪烁 2 次。

If the product is ready to run, the indicator lamp on the BIP button will flash 2 times in red.

3) “紧急呼叫”模式

3) "Emergency call" mode

“紧急呼叫”模式用于传输最小数据集，并建立车主与呼叫中心工作人员的语音连接。该模式在车辆点火状态下识别到交通事故模块的信号时自动开启，或是在手动模式下长按 SOS 按钮至少 3 秒开启。

The "Emergency call" mode is used to transmit a minimum data set and establish a voice connection between the car owner and the call center staff. This mode is automatically turned on when the signal of the traffic accident module is recognized in the ignition state of the vehicle, or it is turned on by pressing and holding the SOS button for at least 3 s in the manual mode.

交通事故识别模块在以下情况下确定事故时刻:

The traffic accident recognition module determines the moment of the accident under the following circumstances:

- a) 正面碰撞;
- a) Frontal collision;
- b) 侧面碰撞;
- b) Side collision;

- c) 车辆后部撞击;
- c) Impact from the rear of the vehicle;
- d) 翻转.
- d) Tilt.

退出“紧急呼叫”模式，在手动模式下发起，在建立连接阶段（如果与系统操作员的连接尚未建立），按一次“SOS”按钮，紧急呼叫将被终止。

Exit the "Emergency call" mode and initiate it in manual mode. During the connection establishment phase (if the connection with the system operator has not been established), pressing the "SOS" button once, the emergency call will be terminated.

当“紧急呼叫”模式自动启动时，设备将在紧急呼叫中心接线员终止呼叫后进入“ERA”模式。

When the "Emergency call" mode is automatically started, the device will enter "ERA" mode after the emergency call center operator terminates the call.

4) “测试”模式

4) "Test" mode

“测试”模式旨在由“ERA GLONASS”系统的运营商检查汽车电信系统的功能。

The "Test" mode is intended to be checked by the operator of the "ERA GLONASS" system for the functionality of the vehicle's telecommunications system.

可通过在 5 秒内连续按下“SOS”按钮 5 次进入“测试”模式。进入服务模式选择状态后，等待 10 秒，不按其它按钮。

"Test" mode can be entered by pressing the "SOS" button continuously 5 times within 5 s. After entering the service mode selection state, wait for 10 s without pressing other buttons.

在“测试”模式下，BIP 状态指示灯呈绿色亮起，每 2 秒呈红色闪烁 3 次。

In "Test" mode, the BIP state indicator lamp lights up in green and flashes in red 3 times every 2 s.

要完成测试，您需要按照语音提示进行操作。

To complete the test, you will need to follow the voice prompts.

退出“测试”模式：

Exit "Test" mode:

将带有设备测试结果的最小数据集传输给呼叫系统操作员后；

After transmitting a minimum data set with equipment test results to the call system operator;

当外部电源断开时。

When the external power supply is disconnected.

5) “维修”模式

5) "Maintenance" mode

“维修”模式旨在在车辆在服务中心和/或维修工作期间禁用产品的所有功能。

"Maintenance" mode is designed to disable all functions of the product while the vehicle is in the service center and/or repair work.

要进入“维修”模式需在 5 秒内按 5 次“SOS”按钮，然后按照语音提示按下“SOS”按钮。如果在 5 秒内未按“SOS”按钮，产品将切换到“测试”模式。

To enter the "Maintenance" mode, press the "SOS" button 5 times within 5 s, and then press the "SOS" button according to the voice prompt. If the "SOS" button is not pressed within 5 s, the product will switch to "Test" mode.

在“维修”模式下，BIP 状态指示灯呈绿色亮起，每 2 秒闪烁 3 次红色，每 7 秒从扬声器发出声音信号。

In "Maintenance" mode, the BIP state indicator lamp lights up in green, flashes red 3 times every 2 s, and an audible signal is emitted from the speaker every 7 s.

退出“维修”模式：

Exit "Maintenance" mode:

- a) 按下“SOS”按钮后;
- a) After pressing the "SOS" button;
- b) 当外部电源断开时;
- b) When the external power supply is disconnected;
- c) 车速超过 5 公里/小时;
- c) The vehicle speed exceeds 5 km/h;

备注：

Note:

- 1.当设备处于“维修”模式时，不进行临界翻转角的确定。
- 1. When the equipment is in "maintenance" mode, the critical tilt angle is not determined.
- 2. 对重型汽车进行维修或保养需要倾斜车辆驾驶室时，必须将设备切换到“维修”模式。
- 2. When it is necessary to tilt the cab of a heavy-duty vehicle for maintenance or maintenance, the device must be switched to "maintenance" mode.
- 3. 车辆维修或保养完成后，必须将设备恢复正常状态。
- 3. After vehicle maintenance or maintenance is completed, the device must be restored to normal state.

1.3. 设备不同工作模式的标志

1.3. Signs of different working modes of the device

设备通电后，状态指示灯呈红色亮起 3-10 秒。如果自检成功，进入“ERA”模式。

The state indicator lamp lights up in red for 3-10 s after the device is powered on. If the BIT is successful, enter "ERA" mode.

如果在自检过程中检测到内置组件故障，则设备进入“紧急呼叫系统故障”状态。

If a built-in component failure is detected during the BIT, the device enters the "Emergency call system fault" state.

可能的设备状态如表 2 所示。

The possible device state is shown in Table 2.

表 2 – 设备状态指示

Table 2 – Device State Indications

工作模式 Working mode	指示 Indication
点火后紧急呼叫系统启动 Emergency call system is started after ignition	红灯亮起3-10秒 The red lamp lights up for 3-10 s
“ERA”模式 "ERA" mode	内检正常则亮绿灯，不正常亮红灯 If the internal inspection is normal, the green lamp will be on; if it is abnormal, the red lamp will be on
紧急呼叫系统故障 Emergency call system fault	红灯常亮 The red lamp is constantly on 故障码可通过CAN接口或者USB接口读取

	The DTC can be read through CAN ports or USB ports
移动运营商网络暂不可用 Mobile operator network is temporarily unavailable	五次短暂的红灯闪烁 (5 Hz) 和可选语音提示“移动运营商的网络暂时不可用。” Five short flashes of red lamp (5 Hz) and an optional voice prompt "The mobile operator's network is temporarily unavailable."
“紧急呼叫”模式下建立连接 Establishing a connection in "Emergency call" mode	红灯/绿灯缓慢闪烁 (1 Hz) Red lamp/green lamp flashes slowly (1 Hz)
“紧急呼叫”模式下最小数据量的传输 Transmission of minimum data volume in "Emergency call" mode	可选的语音提示: Optional voice prompts: «建立连接»; Connection Establishment; «向系统传输数据». Data Transmission to the System.
“紧急呼叫”模式的语音连接 Voice connection in "Emergency call" mode	绿灯常亮 The green lamp is constantly on 可选的语音提示: Optional voice prompts: «已连接»; Connected;
“测试”模式 "Test" mode	绿灯亮, 红灯闪3次 (5 Hz), 2s停顿, 重复 The green lamp is on, the red lamp flashes 3 times (5 Hz), and there is a 2 s pause, and repeats
“维修”模式 "Maintenance" mode	绿灯亮, 红灯闪3次 (5 Hz), 2s停顿, 重复声音信号每 7 秒响一次。 The green lamp is on, the red lamp flashes 3 times (5 Hz), there is a 2 s pause, and the repeating sound signal sounds every 7 s.

设备拆装

Equipment disassembly and assembly