

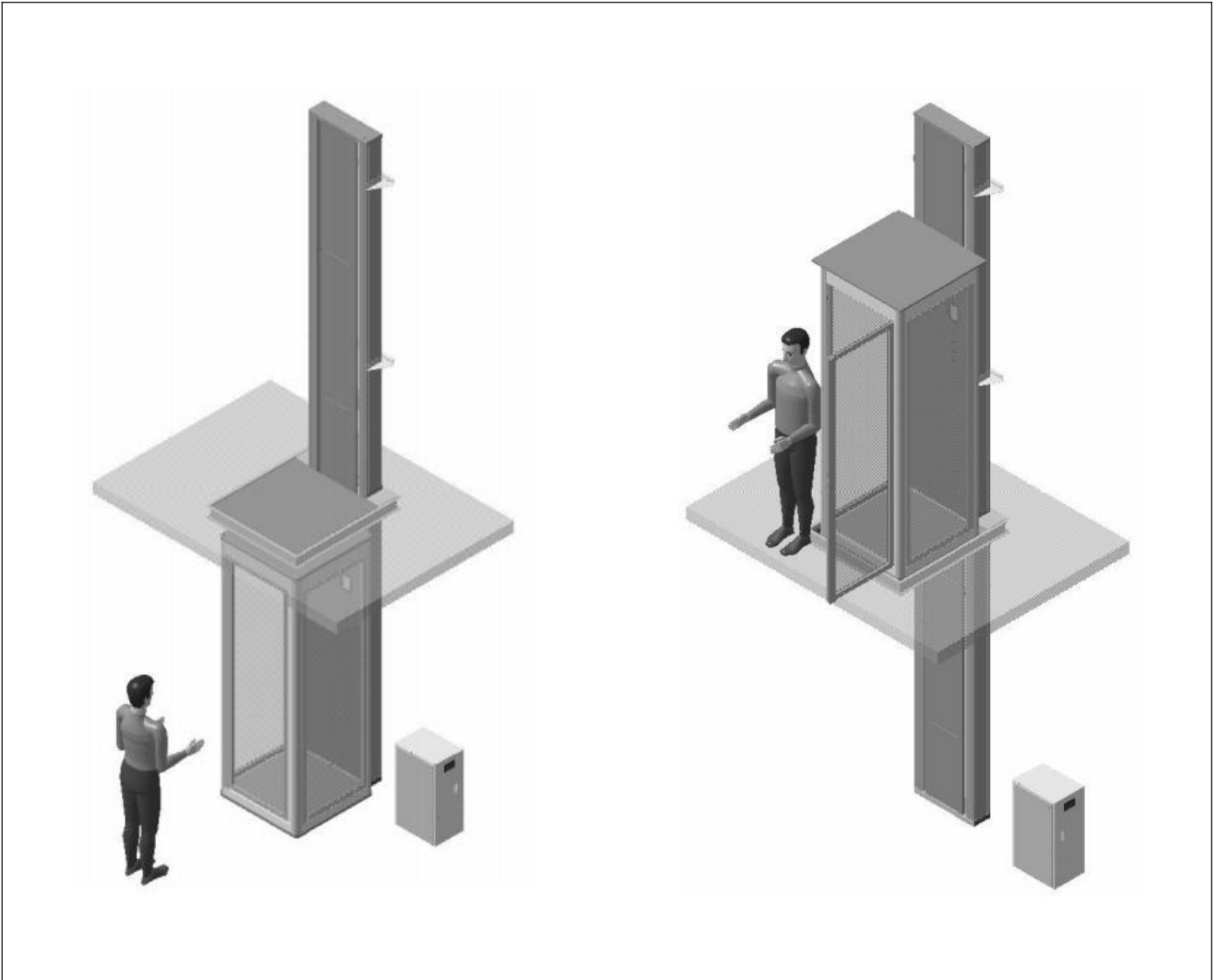
复式楼升降机

Duplex building lift

HERG-PJ-B150

设备安装及使用说明书

Equipment installation and operation instructions



武汉昊尔瑞刚科技有限公司

Wuhan HaoErRuiGang Technology Co., Ltd

目 录

catalogue

第一章 产品使用说明 Chapter I Product Use Instructions

1.1 产品特点及用途 Product characteristics and uses	4
1.2 工作原理 operational principle	5
1.3 设备结构与安装步骤 Equipment structure and installation steps	6-14
1.3.1 整机结构与出入方式示意 Structure and access mode of the whole machine indicate	6
1.3.2 设备安装要求及导轨安装示意 Equipment installation requirements and guide rail installation indication	7
1.3.3 液压驱动部分 Hydraulic drive part	8
1.3.4 轿厢框架拼接--Sedan frame splicing	9
1.3.5 轿厢侧板安装 Sedan side plate installation	10
1.3.6 轿厢主护板及安全门安装 Car main guard plate and safety door installation	11
1.3.7 轿厢装饰弧形条 Car decoration arc bar	12
1.3.8 顶底触板部分 Top bottom touch plate part	13
1.3.9 前后封板安装 (附图页-1/2) Installation of front and rear seal plate (attached drawing page-1 / 2)	14
1.4 设备调试与检验事项 Installation of front and rear seal plate (attached drawing page-1 / 2)	15-16
1.5 电气线路与技术参数 lectrical lines and technical parameters	17-21
1.5.1 整机电气布线说明 (附图页-3) Description of wiring of electrical machine (attached page-3)	17
1.5.2 主板线路说明 (附图页-4) Main board line description (attached page-4)	18
1.5.3 主板电路图 Main board circuit diagrams	19
1.5.4 技术参数(标准) Technical parameters (standard)	20
1.6 安全注意事项-Safety precautions	21
1.6.1 安全标识图标 Security Identity icon	21
1.6.2 安全保护措施 safety precautions	22
1.7 操作指南 operation manual	22
1.8 使用过程中注意事项 Notes during use	22

第二章 设备调试及维护手册

Equipment Commissioning and Maintenance Manual	23
2.1 设备调试 testing of equipment	23
2.2 保养及维护 Maintenance and maintenance	23-24
2.3 常见故障处理方法-Common fault handling methods	25-27
2.4 常用易损件清单 List of common vulnerable parts	28

第三章 附图页 Appendix Page 29

3.1 附图页 1 (前封板铝挂条安装)	
Attached drawing page 1 (Installation of front seal plate aluminum hanging strip)	29
3.2 附图页 2 (前后封板安装)	
3.2 Attached drawing page 2 (front and rear seal plate installation)	30
3.3 附图页 3 (轿厢总图参照)	
Drawing page 3 (Car general drawing reference)	31
3.4 附图页 4 (闭门器调节说明)	
Attached drawing page 4 (Closed er adjustment instructions)	32
3.5 附图页 5 (帝富阀板调试)	
Attached drawing page 5 (Debugging of Emfu valve plate)	33
3.6 附图页 6 (手机 APP 使用说明)	
Attached drawingg page 6 (Instructions for mobile APP)	34
3.7 附图页 7 (液压控制箱线路板)	
Attached drawing page 7 (Hydraulic Control Box Line Board)	35
3.8 附图页 8 (主板线路明细)	
Drawing page 8 (Motherboard line details)	36

☺ 售后服务 (after-sale service) 37

第一章 产品使用说明

Product Use Instructions

1.1 产品特点及用途 (Product characteristics and uses)

➤ HERG-PJ B150 型升降平台，是一款液压驱动的垂直升降平台。产品安装前先按尺寸要求开好楼板孔，固定楼板角钢框架，驱动塔与框架连接固定，施工简单，不需底坑和顶部机房。平台在设计制造中采用欧美标准，具有噪音小、运行平稳、多级安全保护等优点。可根据客户实际需要，选择除驱动塔外的另外三个方向开门。设备配备一体式轿厢，电子及机械双重保护的轿厢门，顶部安全触板，底部防撞触板等安全装置，提高设备的安全性及稳定性。驱动塔外观采用铝合金静电喷塑，具有防水防锈，外形美观等优点。轿厢部分采用铝合金静电喷塑配 5+5 夹胶钢化玻璃，外形美观，坚久耐用。该产品符合 JG50《城市道路和建筑物无障碍设计规范》和 GB24805-2009《行动不便人员使用的垂直升降平台》的标准。可在-30℃到 50℃的温度范围中正常工作。适用于提升 2 层的家庭，社区、医院、学校、酒店等、公共场所的无障碍通道设施。

➤ Type HERG-PJ B150 lifting platform, is a hydraulically driven vertical lifting platform. Before the product installation, open the floor hole according to the size requirements, fix the floor corner steel frame, and connect the drive tower and the frame to fix it, with simple construction, no bottom pit and top machine room. The platform adopts European and American standards in its design and manufacturing, and has the advantages of small noise, smooth operation and multi-level safety protection. Open the other three directions according to the customer in addition to the drive tower. The equipment is equipped with an integrated car, electronic and mechanical double protection car door, the top safety touch pad, the bottom anti-collision touch pad and other safety devices, to improve the safety and stability of the equipment determine the nature. The appearance of the drive tower adopts aluminum alloy electrostatic spray plastic, with the advantages of waterproof, rust prevention and beautiful appearance. The car part of aluminum alloy electrostatic spray plastic with 5 + 5 sandwich toughened glass, beautiful appearance, durable. The product meets the JG50 Code for Accessible Design of Urban Roads and Buildings and the GB24805-2009 Vertical Lift Platform for Persons with mobility difficulties. Works normally in the temperature range of -30℃ to 50℃. Suitable for families with 2 floors of promotion, communities, hospitals, schools, hotels, and other public places of barrier-free access facilities.

1.2 工作原理 (Working principle)

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E-mail : 1670587701@qq.com

➤ 无障碍升降机的工作原理：主要动力来源于液压的驱动机构，设备自带轿厢体，轿厢门，轿厢顶部安全触板，底部安全触板。

➤ The working principle of the barrier-free elevator: the main power comes from the hydraulic driving mechanism, the equipment comes with the car body, the car door, the car top safety touch plate, the bottom safety touch plate.

➤ 电气箱，液压系统安装于设备驱动塔附近合适位置，油缸上端安装支撑横梁，横梁内装有对称链条滚轮，链条分别固定在油缸的吊耳和导向板上，横梁两侧靠轮可沿着导轨中侧做轨道运动，能够使平台平稳升降。若遇到紧急情况，驱动塔的侧边装有手动下降装置，旋开螺母拉动钢索即可手动应急下降，也可利用蓄电池应急装置，电动下降。

➤ The electrical box and hydraulic system are installed near the equipment drive tower. The support beam at the upper end of the cylinder is equipped with a symmetrical chain roller. The chain is fixed to the lifting ear and the guide plate respectively. The wheels on both sides of the beam can move the rail along the middle side of the guide rail to make the platform rise and fall smoothly. In case of an emergency, the manual descent device is installed on the side of the drive tower. Unscrew the nut and pull the cable to manually emergency drop, and the battery emergency device can also be used to make the electric drop.

➤ 平台上升时，电机驱动液压泵从油箱经滤油器吸油，液压油经液压泵形成一定压力，经单向阀、溢流阀、防爆阀，进入油缸下端，使油缸的活塞向上运动，顶动横梁，带动平台上升。平台下降时，液压油经电磁换向阀、节流阀回到油箱，使油缸的活塞向下运动，带动平台下降。在下降油路上设置单向压力补偿阀保持流量恒定，可使下降速度不受重物变化而变化。节流阀可调节下降速度，溢流阀可调节液压系统压力，在平台超载时保护系统，在油压缸的进油口安装油路防爆阀。

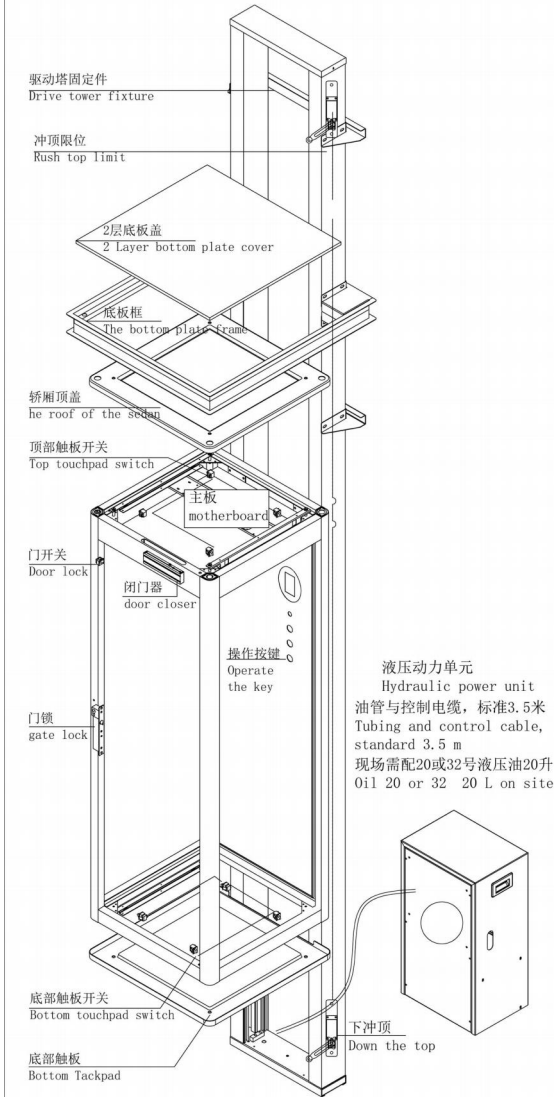
➤ When the platform rises, the motor drives the hydraulic pump from the oil tank through the oil filter, the hydraulic oil forms a certain pressure through the hydraulic pump, through the check valve, overflow valve, explosion-proof valve, into the lower end of the cylinder, make the piston of the cylinder upward movement, top the cross beam, drive the platform to rise. When the platform drops, the hydraulic oil returns to the fuel tank through the solenoid change valve and the throttle valve, moving the piston of the oil cylinder downward and driving the platform to fall. Set the one-way pressure compensation valve on the oil descent road to keep the flow constant, so that the descent speed without changing from heavy weight. The throttle valve can adjust the drop speed, and the overflow valve can adjust the pressure of the hydraulic system, and protect the system when the platform is overloaded, in the oil pressure cylinder Install the oil circuit explosion-proof valve at the oil inlet.

1.3 设备结构与安装步骤(Equipment structure and installation steps)

1.3.1 整机结构及出入方式示意

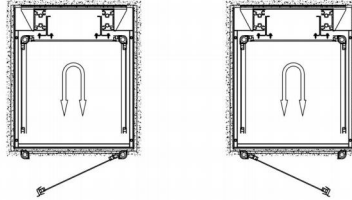
(Description of the structure and access mode of the whole machine)

复式楼升降机 《HERG-PJ- B150》
Duplex Building Lift 《HERG-PJ- B150》

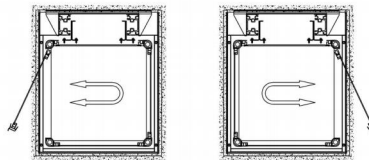


进出及开门方式
Entry and exit and door opening mode

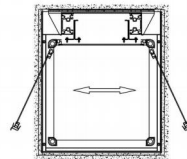
正面开门, 可选择左开门或右开门
Open the door front, open left or right



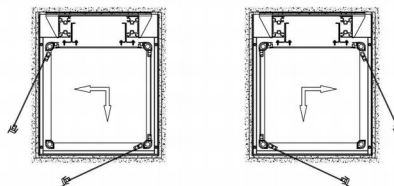
左侧或右侧开门, 可选择左开门或右开门
Open the left or right, either left or right



180° 开门, 可选择左开门或右开门
Open 180° with left open or right open



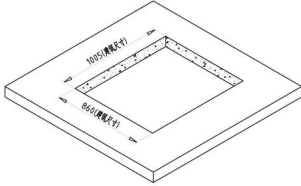
左侧或右侧90° 开门, 可选择左开门或右开门
Open the left or right 90°, either left or right



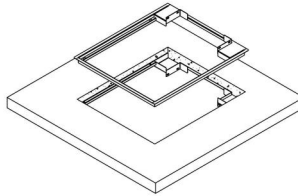
1.3.2 设备安装要求及导轨安装示意

(Equipment installation requirements and installation indication of guide rail)

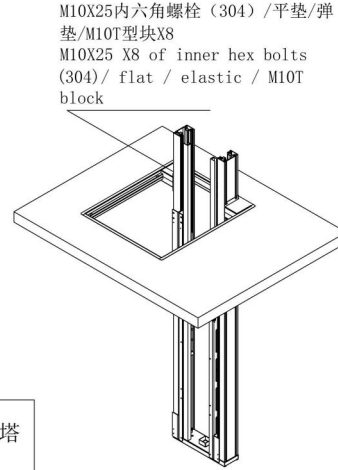
△1:设备安装前的准备工作
先按工厂要求提前,开楼板洞口
标准设备为: 860X1005MM
Preparation of equipment before
installation
Open floor openings in advance as
required by the factory
X1030MM 860 standard equipment



△2:设备安装前,先固定楼板钢框架
Fixed floor angle steel frame
before installation



△3:安装第一节驱动塔,并与
楼板角钢框架固定
Install the first section
drive tower and secure with
floor angle steel frame



M10X25内六角螺栓(304)/平垫/弹
垫/M10T型块X8
M10X25 X8 of inner hex bolts
(304)/ flat / elastic / M10T
block

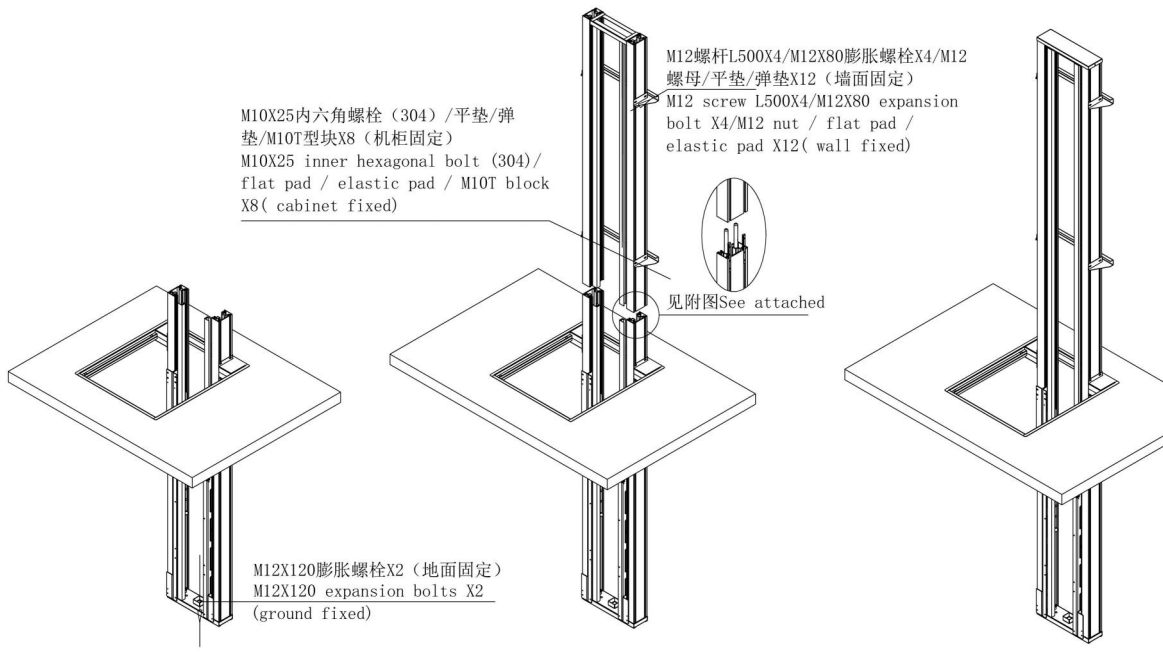


安装洞口与驱动塔位置,驱动塔与地面的垂直和水平,最后固定整体驱动塔
Install hole and drive tower position, drive tower and ground
vertical and horizontal, finally fix the whole drive tower

△4:调整驱动塔位置,若垂直,水平等,
符合安装要求。
Adjust the position of the drive
tower, if vertical, horizontal,
etc., meet the installation
requirements.

△5:按图纸要求,安装第2节驱动塔,
和以上驱动塔
Install 2nd junction drive
tower and above as per
drawing

△6:重新检查驱动塔位置,符合要
求后,驱动塔与建筑固定
Re-check the position of the
drive tower, meet the
requirements, the drive tower
and the building fixed



M10X25内六角螺栓(304)/平垫/弹
垫/M10T型块X8(机柜固定)
M10X25 inner hexagonal bolt (304)/
flat pad / elastic pad / M10T block
X8(cabinet fixed)

M12螺杆L500X4/M12X80膨胀螺栓X4/M12
螺母/平垫/弹垫X12(墙面固定)
M12 screw L500X4/M12X80 expansion
bolt X4/M12 nut / flat pad /
elastic pad X12(wall fixed)

见附图See attached

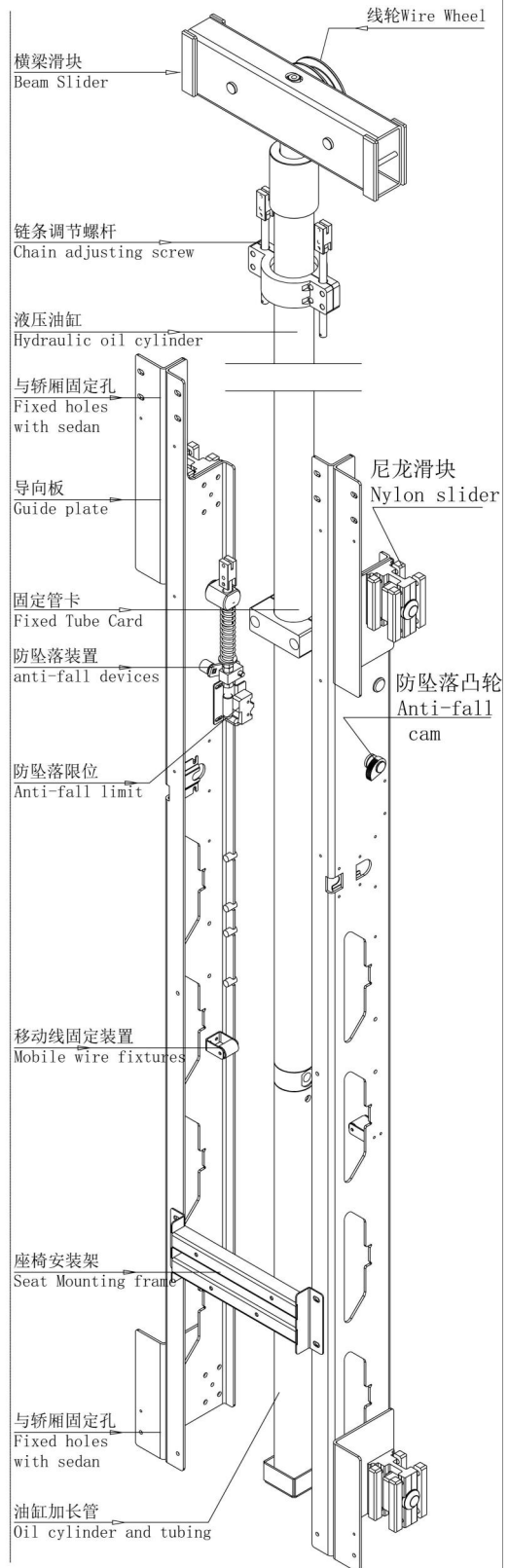
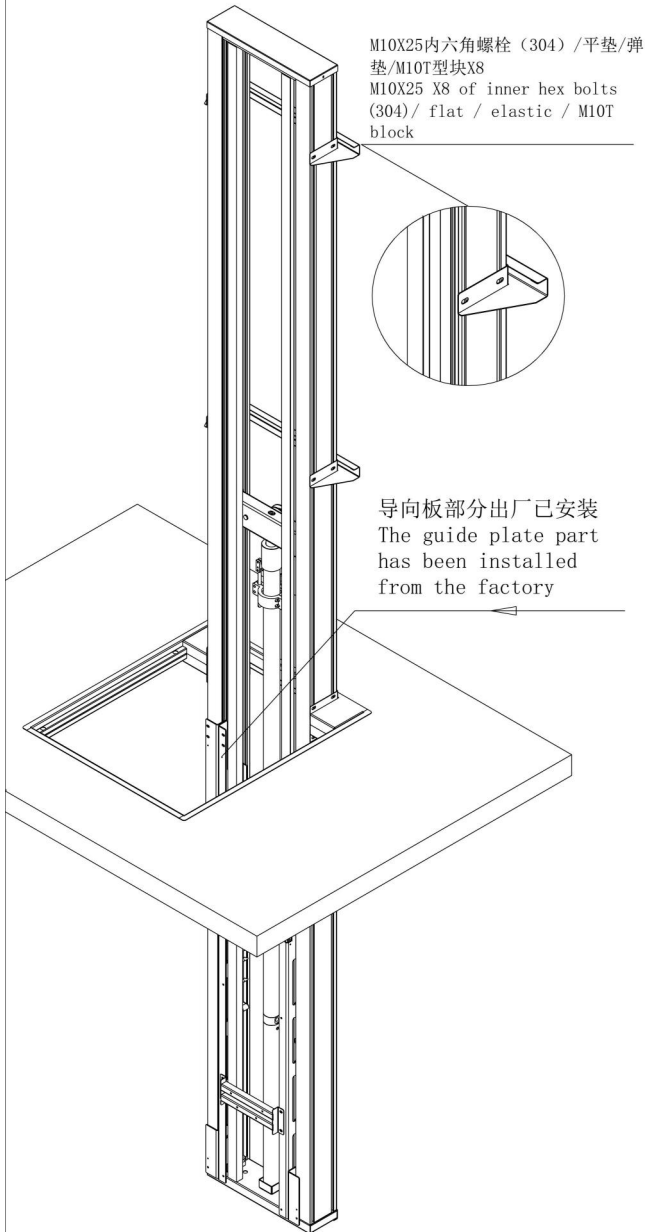
M12X120膨胀螺栓X2(地面固定)
M12X120 expansion bolts X2
(ground fixed)

1.3.3 液压驱动部分(Hydraulic drive part)

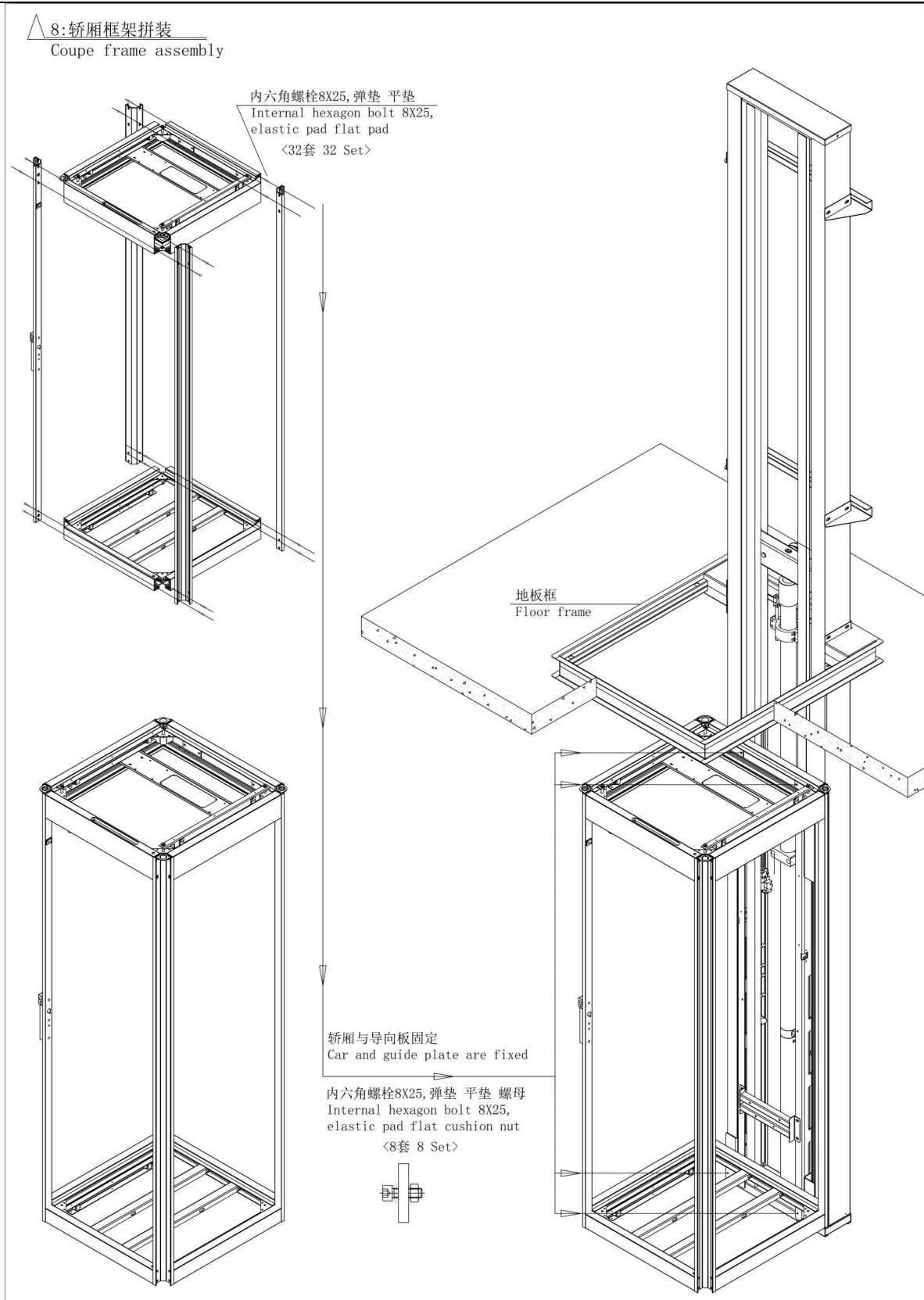
△ 7: 液压驱动部分安装
Installation of hydraulic actu



注意：通过链条调节螺杆，当平台下降到一层时需要：油缸下降到极限（底部），并且链条克服防坠落弹簧，整体链条在受力状态
Note: Adjust the screw through the chain, When the platform falls to the first layer, it needs to: the cylinder drops to the limit (bottom), and the chain overcomes the fall spring, The whole chain is under stress



1.3.4 轿厢框架拼接(Sedan frame splicing)



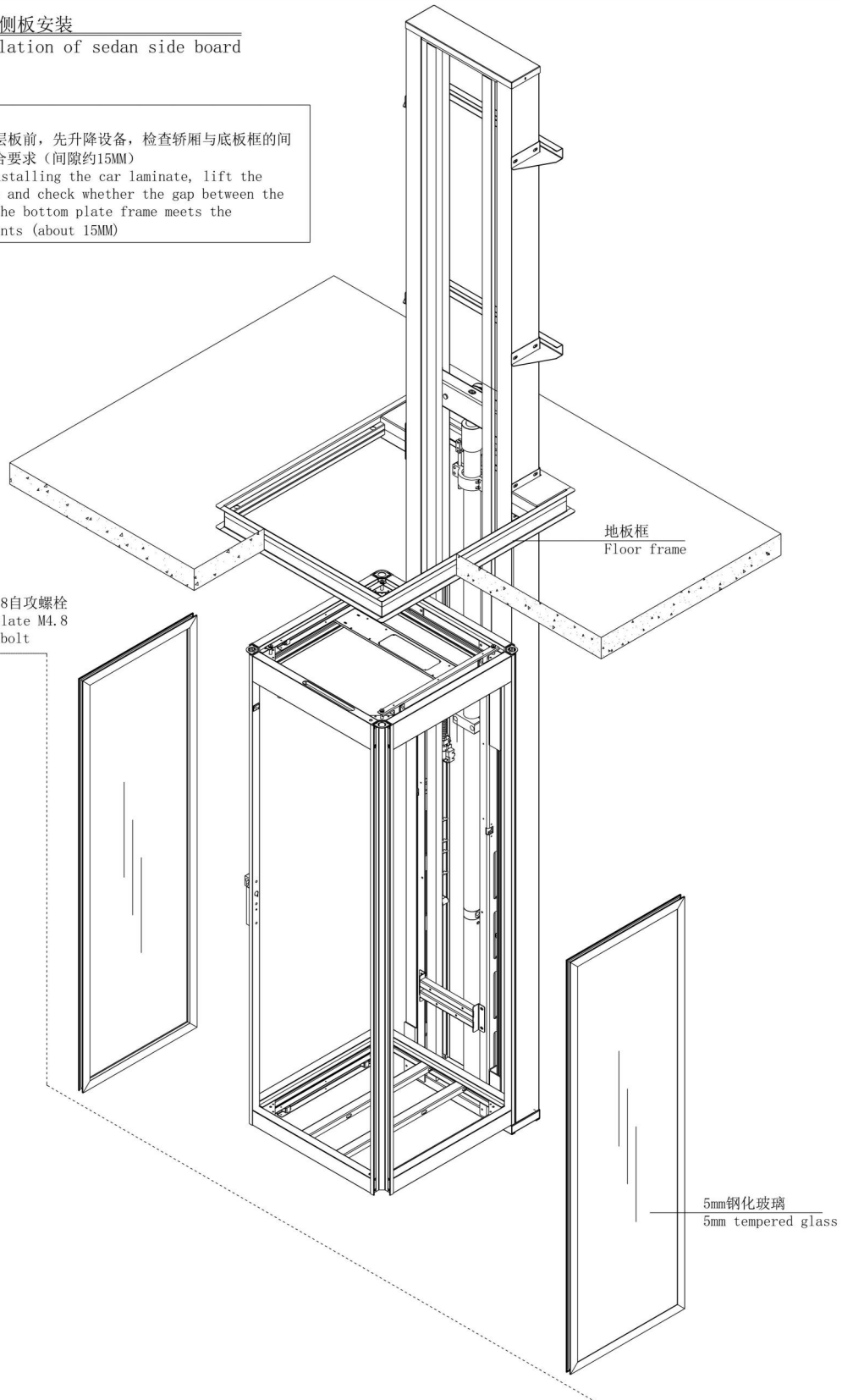
1.3.5 轿厢侧板安装(Sedan side plate installation)

△ 9:轿厢侧板安装 Installation of sedan side board



注意：
安装轿厢层板前，先升降设备，检查轿厢与底板框的间隙是否符合要求（间隙约15MM）
Before installing the car laminate, lift the equipment and check whether the gap between the car and the bottom plate frame meets the requirements (about 15MM)

2侧轿厢板M4.8自攻螺栓
2 Side car plate M4.8 self-attack bolt

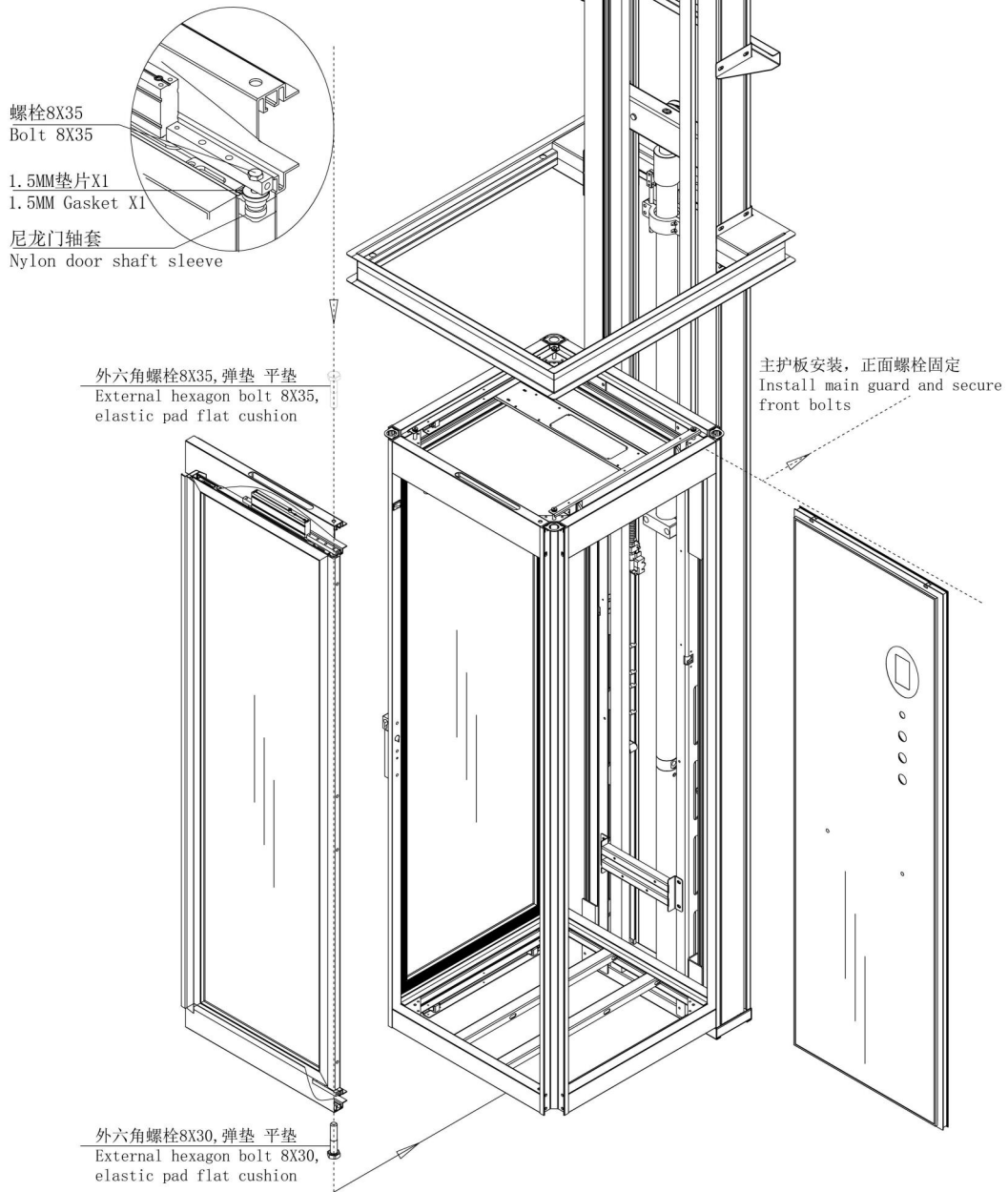


1.3.6 轿厢主护板及安全门安装(Car main guard plate and safety door installation)

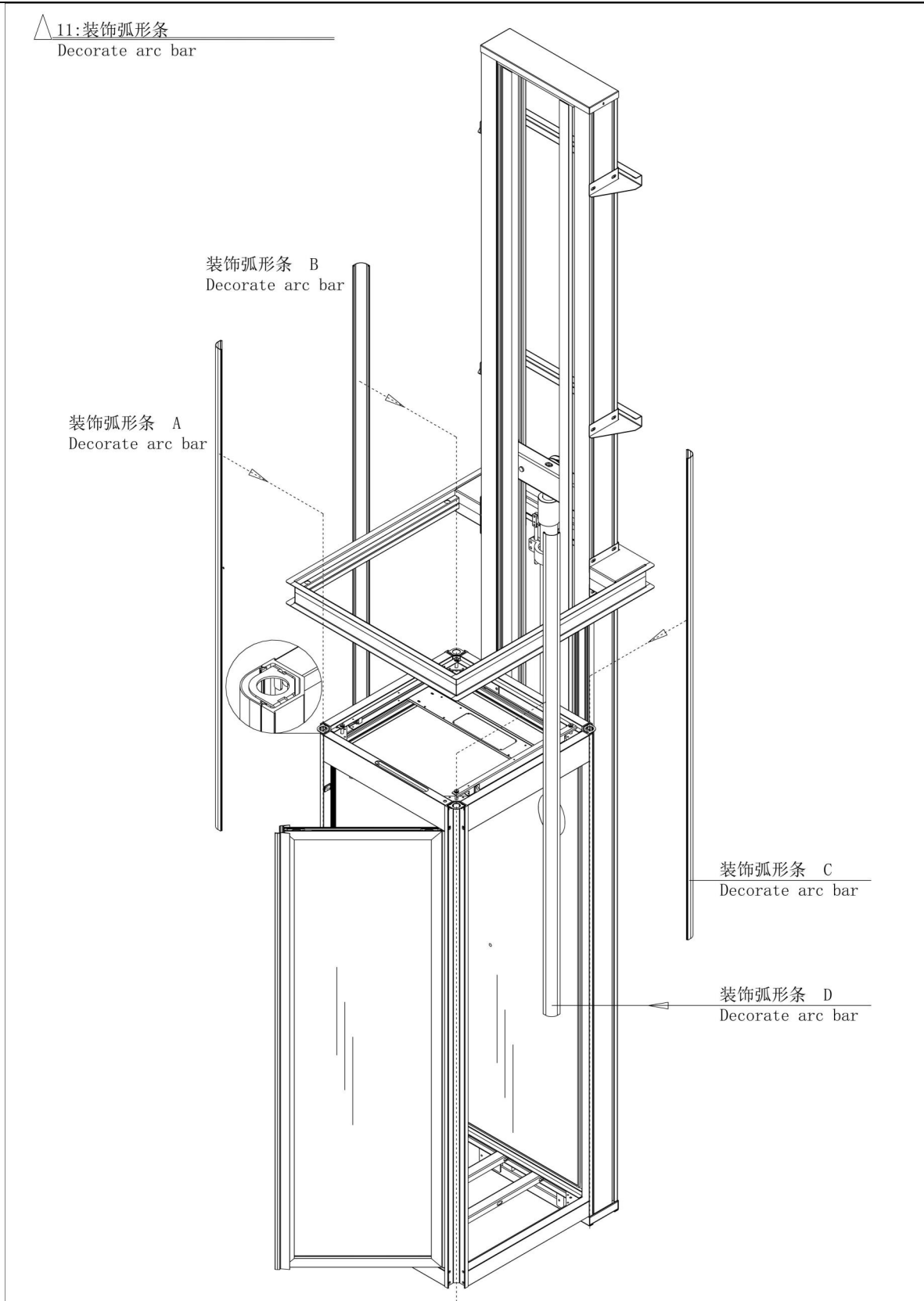
△ 10:轿厢主护板及门安装
Car main guard plate and door installation



注意:
轿厢主护板及门安装完成后, 应按按接线图接线, 调试设备
After the installation of the car main protective plate and door, make the wiring according to the wiring diagram and debug the equipment



1.3.7 轿厢装饰弧形条(Car decoration arc bar)

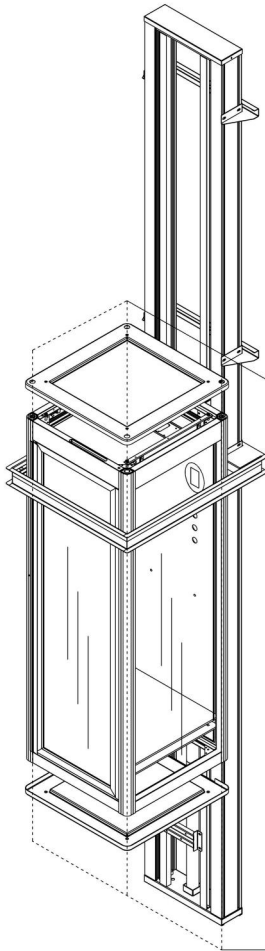


1.3.8 顶底触板部分(Top bottom touch plate part)

△ 12: 顶底触板安装
Top bottom contact plate installation

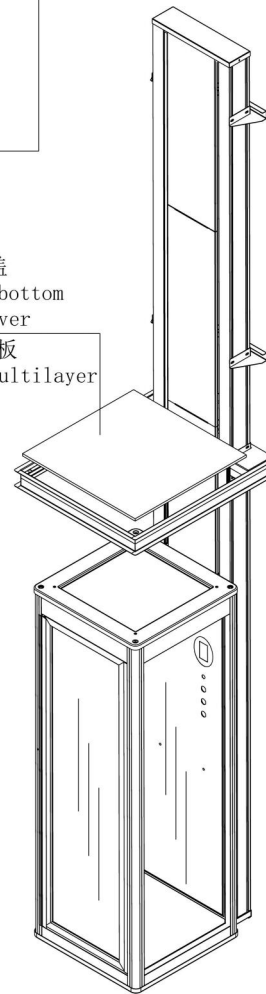


注意:
顶底触板及2层底板盖, 约10KG触发安全快关, 安装后需要升降设备检查间隙及调试安全开关
The top bottom touch plate and 2 bottom plate cover trigger the safety fast close for about 10KG. After installation, the lifting equipment is required to check the clearance and debug the safety switch



ABS顶触板
ABS top touchpad
M4X15 十字圆头螺栓 X6
M4X15 cross round head bolt X6
约10KG触发安全开关
About 10KG triggers the safety switch

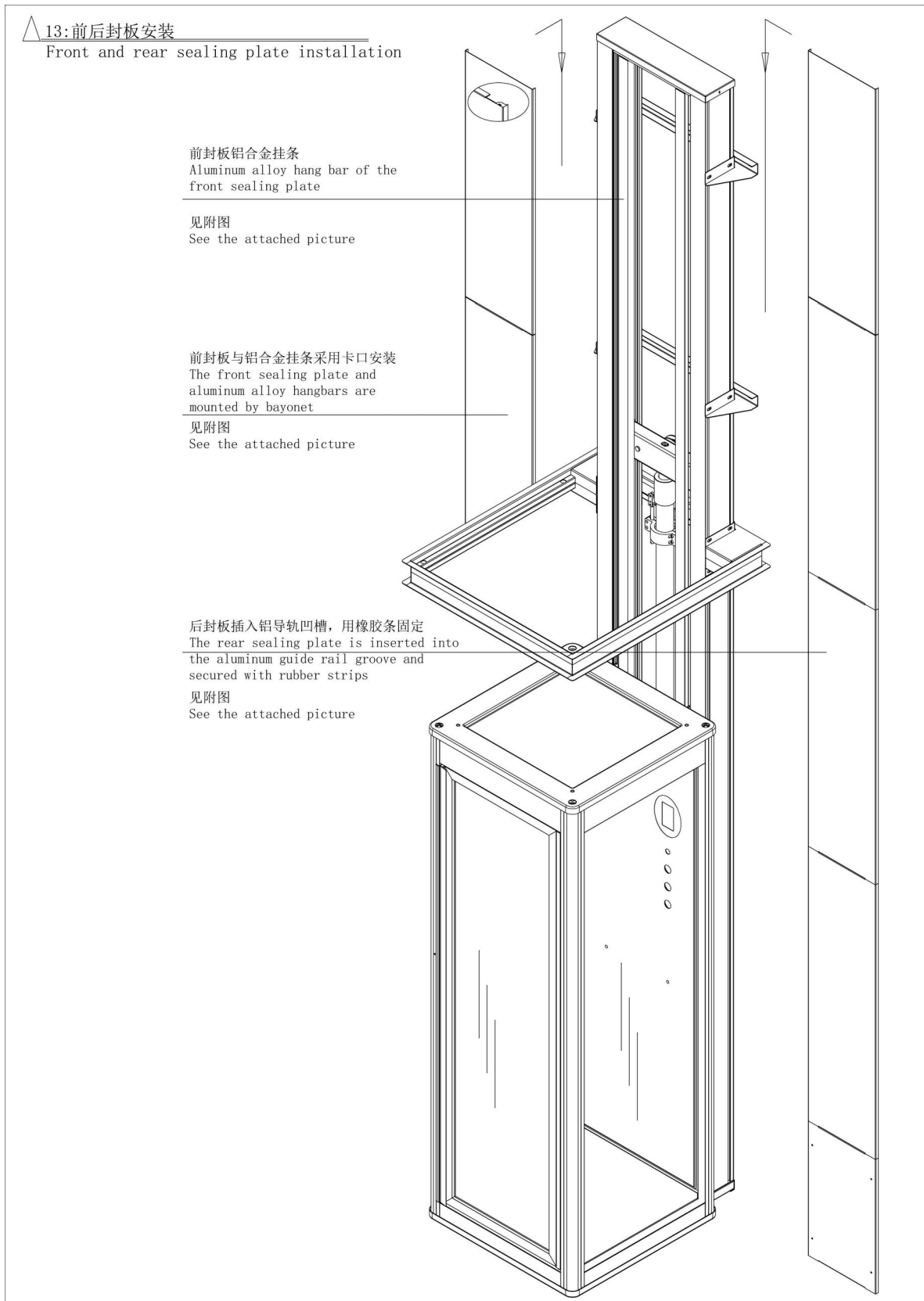
ABS底触板
ABS bottom touchpad
M4X15 十字圆头螺栓 X6
M4X15 cross round head bolt X6
约10KG触发安全开关
About 10KG triggers the safety switch



2层底板盖
2 Layer bottom plate cover
15MM多层板
A 15MM multilayer board

1.3.9 前后封板安装 (附图页-1/2)

Installation of front and rear seal plate (attached drawing page-1 / 2)



1.4 设备调试与检验事项 (附图) Equipment commissioning and inspection items (attached drawing)

- 1.校对设备基本参数;
Proofreading the basic parameters of the equipment;
- 2.调节轿厢平台平整度;
Adjust the flatness of the car platform;
- 3.调节设备最大载重量和下降速度;
Adjust the maximum load weight and drop speed of the equipment;
- 4.调节上下停层高度;
Adjust the height of the upper and lower stops;
- 5.上升或下降过程中检查安全触板灵敏度;
Check the safety touch pad sensitivity during up or down;
6. 安装门保护装置;
Install the door protection device;
- 7.检查设备运行过程中有无异常振动和异常声音;
Check for abnormal vibration and abnormal sound during the equipment operation;
- 8.试用急停按钮;
Trial emergency stop button;

☆整机检验

Complete machine inspection

基本参数

essential parameter

☑升降机速度: 80-100MM/S

Liter speed: 80-100 MM/S

☑最大载重: 250KG(液压)

Maximum payload: 250KG (Hydraulic pressure)

☑液压系统最大压力: 120兆帕

Hydraulic system maximum pressure: 120 MPa

☑控制方式: 按住运行

Control mode: press and hold the operation

☑设备电源: 220V/AC 1.5KW

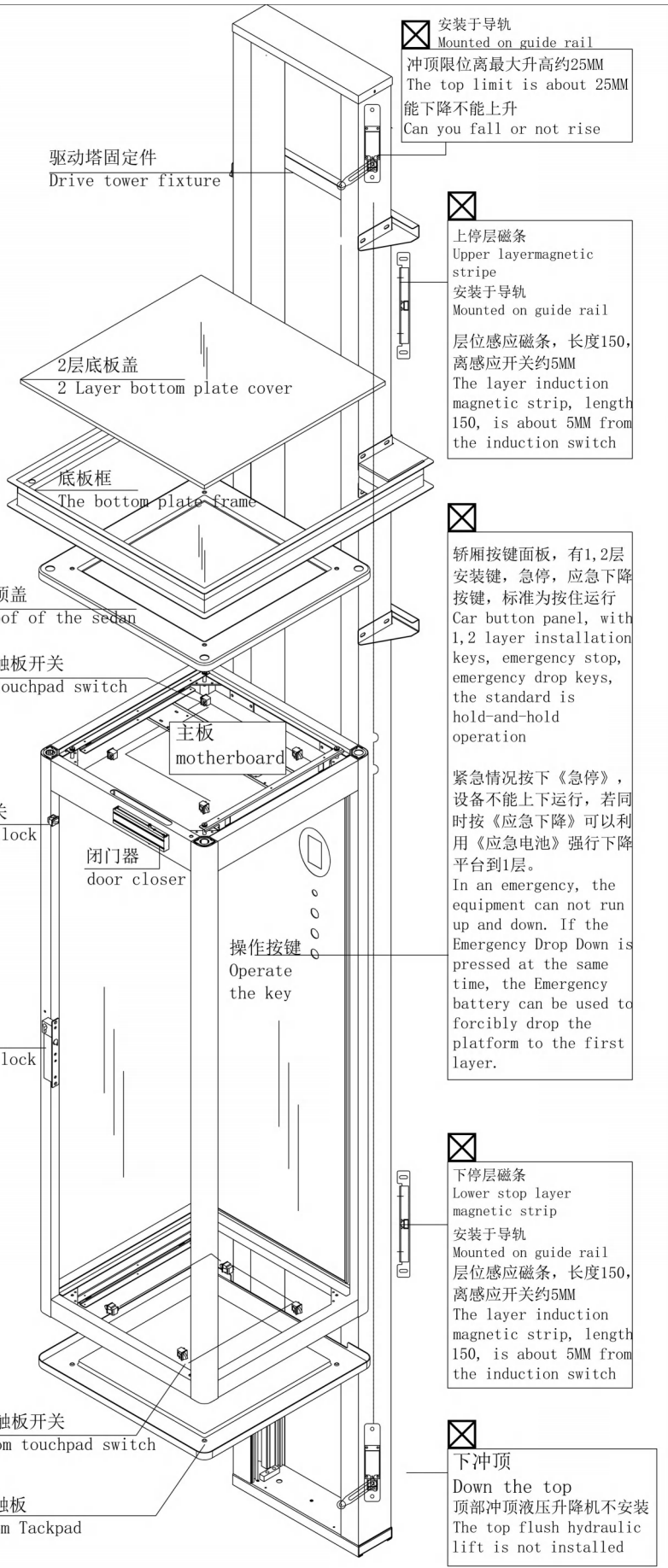
Equipment power supply: 220 V/AC 1.5KW

☑按附图检查各部件功能

Check the functions of each component according to the attached drawing

☑用手机调试上升最高速, 最慢速, 上升加速时间, 上升减速时间, 下降加速时间, 下降减速时间

Use the phone to debug the highest speed, slowest, up acceleration time, up deceleration time, down acceleration time, down deceleration time



☑ 安装于导轨
Mounted on guide rail
冲顶限位离最大升高约25MM
The top limit is about 25MM
能下降不能上升
Can you fall or not rise

☑ 上停层磁条
Upper layer magnetic stripe
安装于导轨
Mounted on guide rail
层位感应磁条, 长度150,
离感应开关约5MM
The layer induction magnetic strip, length 150, is about 5MM from the induction switch

☑ 轿厢按键面板, 有1,2层
安装键, 急停, 应急下降
按键, 标准为按住运行
Car button panel, with 1,2 layer installation keys, emergency stop, emergency drop keys, the standard is hold-and-hold operation

紧急情况按下《急停》,
设备不能上下运行, 若同
时按《应急下降》可以利
用《应急电池》强行下降
平台到1层。
In an emergency, the equipment can not run up and down. If the Emergency Drop Down is pressed at the same time, the Emergency battery can be used to forcibly drop the platform to the first layer.

☑ 下停层磁条
Lower stop layer magnetic strip
安装于导轨
Mounted on guide rail
层位感应磁条, 长度150,
离感应开关约5MM
The layer induction magnetic strip, length 150, is about 5MM from the induction switch

☑ 下冲顶
Down the top
顶部冲顶液压升降机不安装
The top flush hydraulic lift is not installed

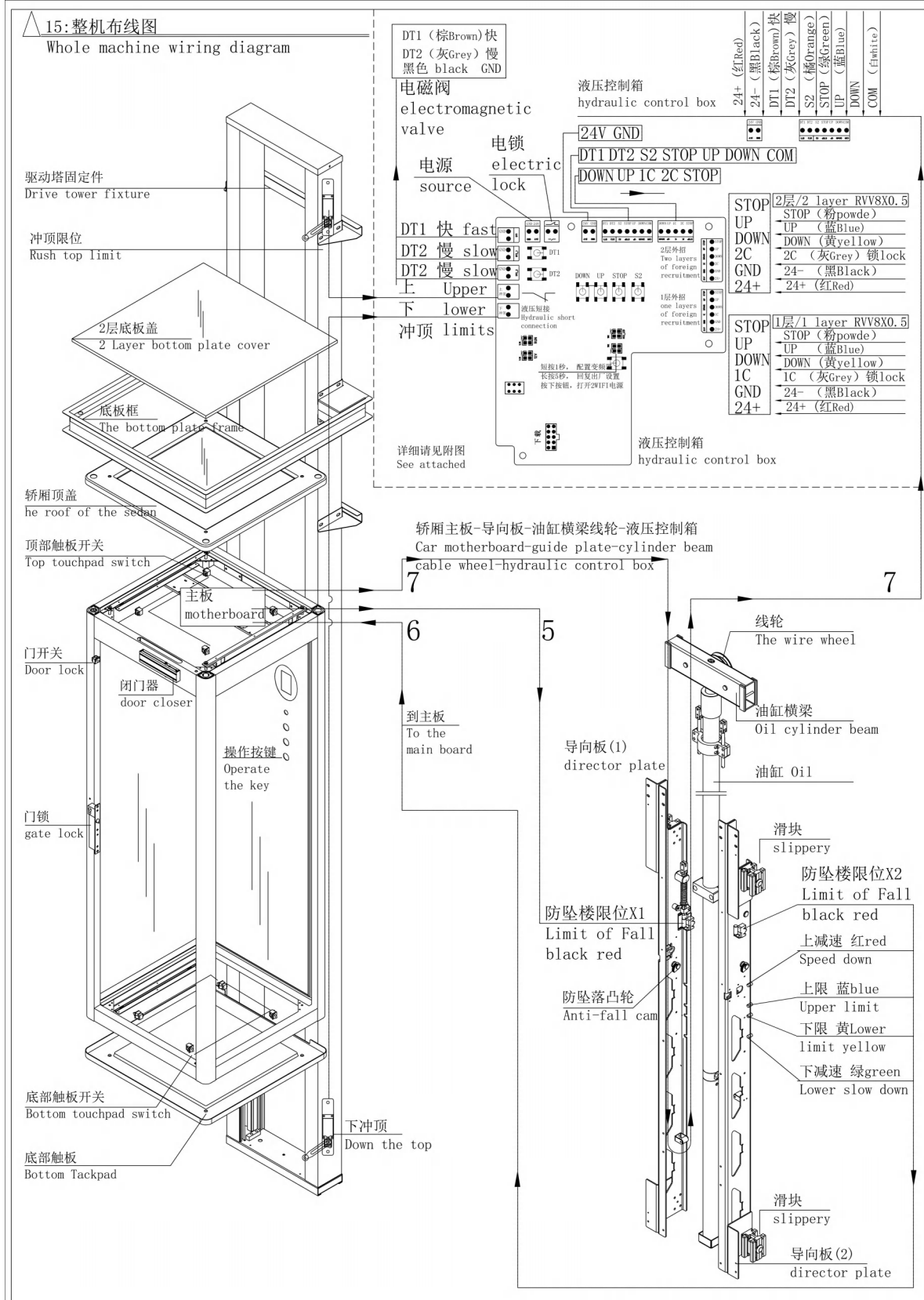
☑ 顶部触板约10KG触发安全
开关, 行程约10MM
The top touch pad
about 10KG triggers
the safety switch with
about 10MM
能下降不能上升
Can you fall or not rise

☑ 设备到层站开该层门, 如
门没关上, 设备不能工
作, 并报警
Open the floor door at
the floor station. If
the door is not
closed, the equipment
will not work and call
the alarm

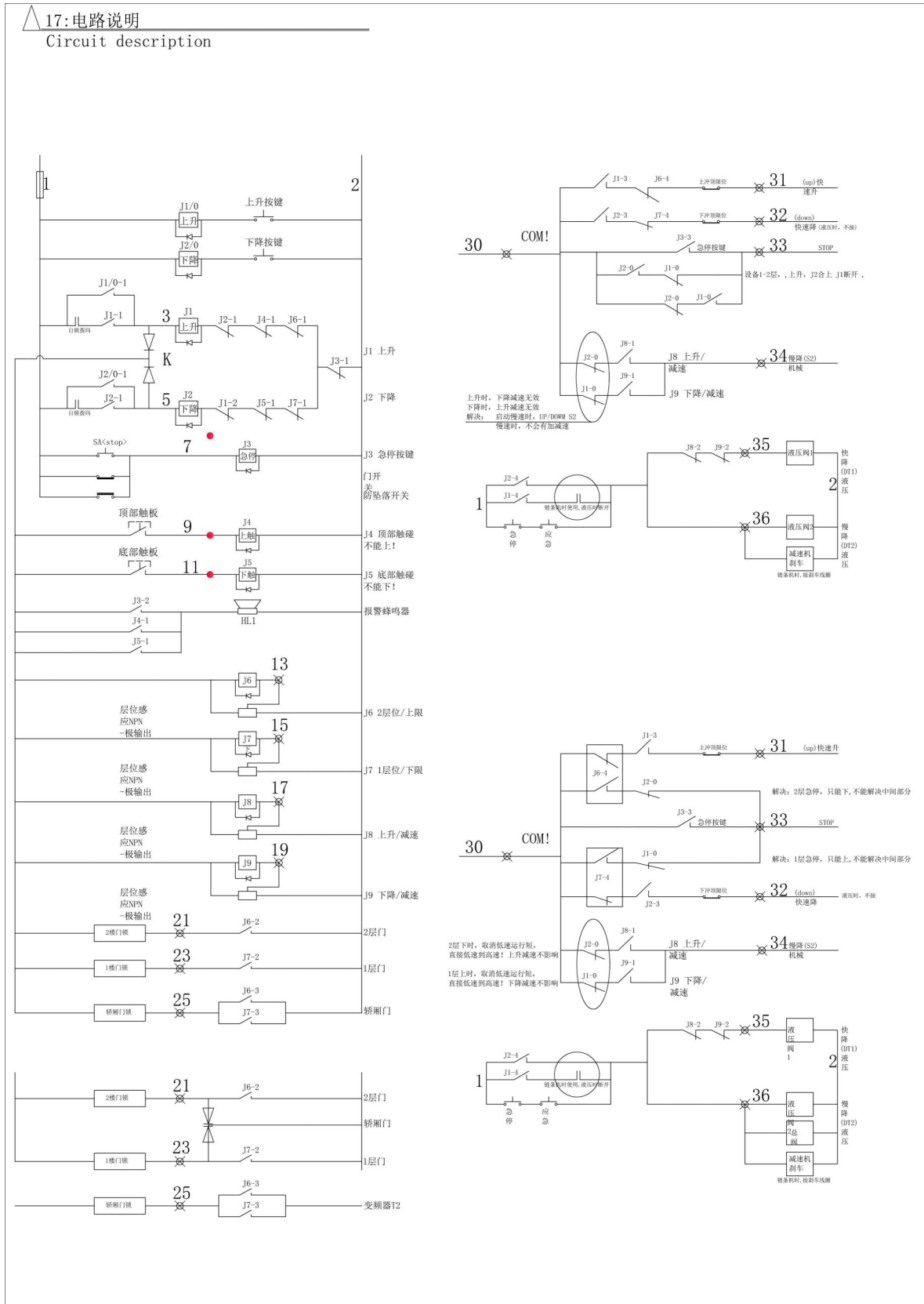
☑ 底部触板约10KG触发安全
开关, 行程约10MM
The bottom touchpad
about 10KG triggers
the safety switch with
about 10MM
能上升不能下降
Can rise up can not
fall down

1.5 电气线路与技术参数 Electrical lines and technical parameters

1.5.1 整机电气布线说明 (附图页-3) Description of wiring of electrical machine (attached page-3)



1.5.3 主板电路图 Main board circuit diagram



1.5.4 技术参数(标准) 1.5.4 Technical parameters (standard)

安装环境 Installation environment	室内 Indoor
安装方式 Installation	无基坑安装, 高 80MM No foundation pit installation, high 80MM
运行空间 Running space	1105X960MM
洞口尺寸 洞口尺寸 dimension of opening	1005X860MM
平台尺寸 Platform size	700X700MM
顶层高度 Top level	≤2300MM
停层站 Stop Station	最大 2 层站 Maximum 2-storey station
最大高度 maximum altitude	最大 12 米 Maximum 12m
标准层高 Standard level	标准层高 3.5 米/每层 Standard layer 3.5 m high/per layer
出入方向 Access directions	180 ° 贯通/ 90 ° /或原进原出 180 ° through /90 ° / or original in / out
电源 power	1.5KW/AC220V/50HZ 家用 (domestic)
驱动方式 Driving mode	液压驱动 hydraulic pressure
运行速度 running speed	80-120MM/秒 100MM/sec
层门控制 gate control	手动+闭门器 Manual door closers
控制方式 control method	点动 按住运行/自动 Click Hold down run / auto
轿厢侧板 Car side	5MM 钢化夹胶玻璃或铝板喷塑 5MM toughened with glue glass or aluminum
轿厢门 Car door	5MM 钢化玻璃 5MM tempered glass
控制电压 control voltage	24V/DC
整机颜色 Machine color	标准色: 白色 (可选) Standard Color: White (optional)
最大承重 Maximum load bearing	250KG
设备噪音 noise	小于 60dB Less than 60 dB
作温度 working temperature	-30C ° / +50C °
安全装置 safety device	<ul style="list-style-type: none"> * 手动应急下降及开门装置 Manual emergency drop and door opening device * 平台主控面板优先 Platform master panel preferred * 紧急停止按钮 Emergency stop button * 轿门与设备联动控制 Car door and equipment linkage control * 轿厢底部防撞 Car bottom collision * 轿厢顶部防撞 Car roof collision * 防坠落机械装置 anti-fall mechanical device * 电控系统防过流过载保护 Electronic control system to prevent overcurrent overload protection * 平台超重保护 Platform Overweight Protection * 液压油路防爆阀 Hydraulic oil circuit explosion-proof valve

1.6 安全注意事项 Safety precautions

1.6.1 安全标识 safety signs



1.6.2 安全保护措施(Safety protection measures)

1.5.2.1 轿厢底部安全触板及轿厢顶部安全触板

当轿厢平台上升或下降时,平台顶部及平台底部的安全网触碰到异物时,安全开关起作用,断开上升或下降的闭合回路,电磁阀停止工作,液压缸停止进油或回油,台面停止上升或下降。

The bottom of the car and the top of the car

When the car platform rises or falling, the safety net at the top of the platform and the bottom touches the foreign body, the safety switch acts, disconnect the closed circuit rising or down, the solenoid valve stops working, the hydraulic cylinder stops oil entering or returning oil, and the table stops rising or falling.

1.6.2.2 高位开关和冲顶开关(High-level switch and roof-jacking switch)

在设定的高度位置装有两个限位开关,下方的限位起到平台上升到指定高度后碰到触碰开关平台即不再上升.上方的限位为冲顶开关,防止设备电控故障时平台继续上升撞击机架产生事故,起应急保护作用。

The two limit switches are installed at the set height position, and the lower limit reaches the touch touching the switch platform after the specified height. The upper limit is the top rush switch to prevent the platform from continuing to rise and hit the frame when the electric control fault of the equipment fails, and play an emergency protection function.

1.6.2.3 紧急停止(emergency stop)

控制面板上有主,辅控切换开关可以根据使用者需求选择主控或辅控操作.当设备出现故障不受控制时,按下紧急按钮开关可控制平台停止运行。

There are main operators on the control panel, and the auxiliary control switch switch can choose the main control or auxiliary control operation according to the user needs. When the equipment fault is uncontrolled, pressing the emergency button switch to control the platform to stop operation.

1.6.2.4 轿厢门的连锁功能(Linkage function of the sedan doors)

平台使用过程中,在轿厢门未完全关闭的情况下,设备不能运行,超过预设关门时间,设备报警,防止平台运行中因门未关好而失去保护作用发生事故。

During the use of the platform, when the car door is not completely closed, the equipment can not run, beyond the preset shutdown time, the equipment alarm, to prevent the operation of the platform due to the door is not closed without protection and accident.

1.6.2.5 防坠落机构(Fall prevention mechanism)

在导向板上装有防坠落装置,在链条断裂时,阻止平台自由坠落,起安全保护作用。

A fall-proof device is installed on the guide plate, when the chain breaks, prevent the platform from falling freely and play a safety protection role.

1.6.2.6 手动下降装置(Manual descent device)

无电或者故障时,可使用手动下降装置,实现平台应急下降., 也可利用蓄电池电动应急下降。

When there is no power or failure, the manual descent device can be used to realize the emergency decline of the platform. , can also be used battery electric emergency drop.

1.6.2.7 安全连锁(Security chain)

任何非正常操作,升降平台不能运行,并报警.

Any abnormal operation, the lifting platform cannot operate, and the alarm.

1.6.2.8 下降减速开关(Drop the deceleration switch)

在平台下降时,使平台平稳下降,提高设备舒适性也起到一定的保护作用。

When the platform drops, the platform is reduced smoothly, and improving the comfort of the equipment also plays a certain protection role.

1.7 操作指南(operation manual)

1.7.1 儿童及行动不便人员应在监护人员陪同下进行操作。

Children and persons with mobility difficulties shall be operated, accompanied by guardians.

1.7.2 打开控制面板上的电源控制开关, 电源指示灯亮。(可选择主控或辅控)

Turn on the power control switch on the control panel, and the power indicator light is on.(Select a primary or secondary control)

1.7.3 请关闭轿厢门后,再使用平台。

Please close the car door before using the platform.

1.7.4 按所需到达楼层按键, 设备上行或下降。

Press the required to reach the floor button, the equipment up or down.

1.7.5 电气控制为点动控制(按住运行),确保升降安全.设定高度,设备自动停层。

Electrical control is point control (hold down) to ensure lifting and lifting safety. Set the height, the device automatically.

1.7.6 如遇到突发事件紧急状态需要停止操作,可按下红色按钮“急停开关”。

1.7.6 If an emergency state needs to stop the operation, press the red button "emergency stop switch".

1.8 使用过程中注意事项

1.8.1 严禁非专业人员拆卸设备!

Non-professional personnel are strictly prohibited to remove the equipment!

1.8.2 严禁设备运行过程中,大范围晃动平台!

It is strictly prohibited to shake the platform in a large range during the equipment operation!

1.8.3 严禁设备有故障时,带故障使用!

It is strictly prohibited to use the equipment with a fault!

1.8.4 设备使用过程中,发现有异常现象应立即停止使用并报修!

During the use of the equipment, any abnormal phenomena should be stopped immediately and reported for repair!

1.8.5 设备在工作前, 应确保外围层门处于关闭状态!

Before the equipment works, ensure that the peripheral layer doors are closed!

1.8.6 设备工作时, 应及时提醒周边人员注意间隙安全且勿入平台上方或下方!

When the equipment works, remind surrounding personnel to clearance safety and not enter the above or below the platform!

第二章 设备调试及维护手册 Equipment Commissioning and Maintenance Manual

2.1 设备调试(testing of equipment)

2.1.1 调节轿厢平台平整度(Adjust the car platform flatness)

测量轿厢平台两侧距离地面高度，通过调节低的一侧驱动导向板上的滑块顶紧螺栓即可将另一侧升高到需要的位置，使得轿厢平台与地面平行。

Measure the height of the two sides of the car platform from the ground, and raise the other side to the required position by adjusting the low side of the drive guide plate top bolt, so that the car platform is parallel to the ground.

2.1.2 调节最大载重量和下降速度(Adjust the maximum load weight and drop speed)

将与额定最大重量同等的重物放置在平台中央（重物下放置保护垫），通过调节液压溢流阀及节流阀使最大载重和下降速度达到需要的值,调试完成后移开重物。

Place the same weight as the rated maximum weight in the center of the platform (place the protective pad under the heavy weight), bring the maximum load and drop speed to the required value by adjusting the hydraulic overflow valve and throttle valve to the required value, and remove the weight after commissioning.

2.1.3 停层高度调节(Stop layer height adjustment)

根据平台高度调整上限位开关上升至所需位置，并检查上下限位开关的灵活性及可靠性。

Adjust the upper limit switch up to the desired position according to the platform height, and check the flexibility and reliability of the upper and lower level switch.

2.1.4 上升或下降过程中检查安全触板(Check the safety touchpad during up or down)

轿厢平台上升或下降时，可用手分别阻挡轿厢顶部及底部的安全触板，从而检查阻挡开关的灵动性。

When the car platform rises or falls, you can manually block the safety touch pad at the top and bottom of the car respectively, so as to check the flexibility of the block switch.

2.1.5 安装门保护装置(Install the door protection device)

门上装有电锁及门限位开关，门与平台连锁控制，当平台到达层位后，门才可以打开，若强行打开,平台停止运行并报警.任何与平台连锁的门未关上,平台均不能运行。

The door is equipped with electric lock and door limit switch. The door and the platform have chain control. When the platform reaches the layer level, the door can be opened. If forced to open, the platform will stop running and alarm. No door linked to the platform is closed, and the platform cannot run.

2.1.6 检查设备运行过程中有无异常振动和异常声音。

Check for abnormal vibration and abnormal sound during the equipment operation

2.1.7 试用急停按钮。(Trial emergency stop button)

2.2 保养及维护(Maintenance and maintenance)

定期保养是通过对运行中的产品某些部位进行详尽的检查、修理、更换、调整，从而使受检部位达到必要的标准，从根本上保证产品的质量（建议使用方半年进行一次）。

Regular maintenance is through the detailed inspection, repair, replacement and adjustment of some parts of the product in operation, so that the inspected parts reach the necessary standards, and fundamentally ensure the quality of the product (it is recommended to use it once in half a year).

2.2.1 产品保护措施做到设施完好无误，各活动部位润滑正常。

Product protection measures for intact facilities and normal lubrication of all active parts.

2.2.2 产品上下试运行一次，运行过程台面有无抖动，各部分是否有异常响声和振动。

The product is trial run up and down once, whether the operation process table is shaking, whether each part has abnormal noise and vibration.

2.2.3 各按钮及指示灯外观正常，触点接触良好，按钮动作灵活，指示灯全能亮，按钮安装牢固无缺损。

Each button and indicator light has normal appearance, good contact points, flexible button action, full-around indicator lights, and the button is firmly installed without defect.

2.2.4 电机外部清洁无积尘、无油污，运转无异常声响及火花，温升正常，无异味。

The outside of the motor is clean without dust accumulation and oil pollution, no abnormal sound and sparks, normal temperature rise and no odor.

2.2.5 主接触器、继电器、运行正常，无异声、异味，无过热现象。

Main contactor, relay and operation have normal sound, odor and no overheating.

2.2.6 检查各部位螺栓是否拧紧。

Check whether the bolts in each part are tightened.

2.2.7 上下限位开关动作正常，滚轮转动灵活，位置正确。

The upper and lower limit switch operates normally, the roller is flexible and correct position.

2.2.8 检查产品连接轴及轴承，油缸、销轴及轴承，等完好无损。

Check the product connection shaft and bearings, cylinder, pin shaft and bearings, etc. intact.

2.2.9 液压油无污染并且油位到合适高度，升降机到最大高度时，液压油面应高出箱底 40~50 毫米。如发现液压油变暗、发粘或有砂砾等异物，应及时更换（32 # 液压油）。

The hydraulic oil is pollution-free and the oil level is to the appropriate height. When the lift reaches the maximum height, the hydraulic oil surface shall be 40~50 mm higher than the bottom of the tank. If the hydraulic oil is dark, sticky or gravel and other foreign bodies, replace (32 # hydraulic oil).

2.2.10 零件拆装时，应作对装记号，装配接触面应光洁，各螺钉、螺帽应拧紧，否则会破坏平台升降稳定性，引起震动。

During disassembly and assembly, mounting marks shall be made. The assembly contact surface shall be clean and the screws and caps shall be tightened, otherwise the lifting stability of the platform will be damaged and cause vibration.

2.2.11 检查液压管道和接头。管道不能有破损，接头不能有松动，必须将所有接头拧紧，防止漏油。

Check the hydraulic piping and joints. The pipes cannot be damaged and the joints not loose. All joints must be tightened to prevent oil leakage.

2.2.12 换液压油时，把原液压油放尽弃掉，拧紧接头取出油过滤器，洗净后，用压缩空气清理干净，然后放回油箱，并连接好管路（换上新油，不要继续使用旧油，否则液压升降机系统中的运动部件会加速磨损）。

When replacing the hydraulic oil, abandon the original hydraulic oil, tighten the joint to remove the oil filter, wash it, clean it with compressed air, and then put it back to the fuel tank, and connect the pipeline (replace the new oil, do not continue to use the old oil, otherwise the moving parts in the hydraulic lift system will accelerate wear).

2.2.13 清理各内部构件积垢，只能用毛刷、干布擦拭，不能用液体洗涤剂冲刷。

Clean up the dirt of the internal components, can only wipe with hair brush, dry cloth, can not be washed with liquid detergent.

2.3 常见故障处理方法

故障种类 Failure mode	故障现象 Fault phenomenon	故障原因 Failure cause	排除方法 Exclusion method
电控部分常见故障 Electric control part is a common fault	打开电锁，指示灯不亮，平台不能升降 Turn on the electric lock, the indicator light is not on, the	①总控箱 220VAC-24VDC 开关电源损坏 The power supply of the master control box 220VAC-24VDC switch is damaged	更换开关电源 Replace the switch power supply
		②总控箱 220VAC-24VDC 电源保险丝烧坏 The master control box 220VAC-24VDC power supply fuse was burned out	更换保险丝 Replace the fuse

platform can not lift	③总控箱 24VDC 电源保险丝烧坏 The 24VDC power supply fuse in the master control box was burned out	更换保险丝 Replace the fuse
打开电锁, 指示灯亮。平台不能升降, 蜂鸣报警! Turn on the electrical lock, with the indicator light on. The platform can not lift and fall, beep to call the alarm!	①平台控制面板急停开关锁定 Platform control panel emergency stop switch lock	打开急停按钮 Turn on the emergency stop button
	②平台顶部及底部安全网开关不能复位 The top and the bottom of the platform cannot be reset	检查安全触板开关工作是否正常, 或更换或应急拔开连线 Check whether the safety touchpad switch works properly, or replace or emergency unplug the connection
	③轿厢门未关闭, 限位开关未工作 Car door is not closed, limit switch is not working	检查门开关工作是否正常, 更换或应急断开连线 Check whether the door switch is working properly, replace or emergency disconnect the connections
平台不能下降 The platform cannot fall	①平台底部安全网开关不能复位 The safety switch at the bottom of the platform cannot be reset	检查安全网开关工作是否正常, 或更换或应急拔开连线 Check whether the safety net switch is working properly, or replace or emergency unplug the connection
电控部分正常, 设备不能上升 The electric control part is normal, and the equipment can not rise	①电机旋转方向不对 The motor rotates in the wrong direction	电机进线从新连接 Motor incoming line is from the new connection
升降平台不能上升 The lifting platform cannot rise	①溢流阀压力不够. Insufficient overflow valve pressure.	在电机功率允许范围内重设定. Reset within the motor power allowable range.
	②油箱无油或油量不足. The fuel tank has no oil or has an insufficient oil quantity.	添加液压油. Add hydraulic oil.
	③应急下降控制阀没有关死. The emergency drop control valve was not related dead.	关闭应急下降阀. Close the emergency drop valve.
	④油泵安装螺钉松动. The oil pump mounting screw is loose.	拧紧 Screw home.
	⑤吸油管与油泵连接处松动、漏气. Loose and air leakage between the oil absorber and the oil pump.	拧紧吸油管. Tighten the suction pipe.

液压驱动部分常见故障 Common faults in the hydraulic drive part		⑥吸油滤芯严重堵塞. The oil absorption filter element is severely blocked.	清洗或更换. Cleaning or replacement.
		⑦油泵老化磨损或损坏. The oil pump is aging, worn or damaged.	更换油泵. Replace the oil pump.
	升降平台不能下降 The lifting platform cannot be lowered	①电磁线圈烧毁. The solenoid coil is burned down.	更换电磁线圈体. Replace the solenoid coil body.
		②下降调速阀关死或损坏. The drop regulator valve is closed or damaged.	打开下降调速阀或更换它. Open the drop regulator valve or replace it.
		③电磁线圈电压不稳定. The electromagnetic coil voltage is unstable.	检查电器线路, 进线电压 DC24V. Check the electrical lines, the incoming line voltage DC24V.
	升降平台上升后自落 The lifting platform rises and falls itself	①单向阀因杂质卡死没有复位. The check valve is not reset due to impurities.	清洗或者更换单向阀. Clean or replace the one-check valve.
		②下降电磁阀不能复位 The drop solenoid valve cannot be reset	清洗或更换下降电磁阀 Clean or replace the drop solenoid valve
		③应急下降控制阀没有关死. The emergency drop control valve was not related dead.	关闭应急下降阀. Close the emergency drop valve.
		④油路漏油或油缸内泄. Oil road oil leakage or oil cylinder leakage.	检查油路及油缸. Check the oil road and the oil cylinder.
	升降平台上升时速度异常及油缸爬行 Abnormal speed and cylinder crawling	①吸油滤芯堵塞或吸油管松动. The oil suction filter element is blocked or the oil suction pipe is loose.	清洗或更换吸油滤芯. Clean or replace the oil absorption filter element.
		②液压油变质或油量不足. Hydraulic oil deterioration or insufficient oil quantity.	更换或添加液压油. Replace or add the hydraulic oil.
		③应急下降控制阀没有关死. The emergency drop control valve was not related dead.	关闭应急下降控制阀. Close the emergency drop control valve.
		④油管两端管芯扣压时变形. Deformation when pressing core at both ends of oil pipe.	检查油管并更换. Check and replace the oil pipe.
		⑤油缸变形或活塞处密封过紧致使油缸爬行. The cylinder deformation or piston.	更换油缸. Replace the cylinder.
机械部分常见故障 Common mechanical part faults	机器剧烈震动 The machine shook violently	①导向板滑块磨损 Guide plate slider wear	更换尼龙滑块 Replace the nylon slider
		②油缸横梁尼龙导向 Cylinder beam nylon guide	更换尼龙导向 Replace the nylon guide
		③油缸横梁链轮轴, 轴承 Cylinder crossbeam sprocket shaft, bearing	更换轴和轴承 Replace shaft and bearing

	④连接部位螺钉松动或脱落. Connect site screws are loose or fall off.	检查和紧固各连接部位螺钉. Check and fastening the screws for each connection site.
	⑤修理后未按原标记装配. Not assembled according to the original mark after repair.	拆卸时应做好标记. Marking shall be made during disassembly.
	⑥负载过大, 油箱油量不足. Excessive load and insufficient oil quantity in the fuel tank.	载重不超标准, 油量应充足. The load shall not exceed the standard, and the oil quantity shall be sufficient.
*注意: 在检修设备时, 先检查进入设备驱动塔接线盒的电源 220V/AC. 是否正常! Note: When repairing the equipment, check the power supply 220 V/AC into the equipment drive tower junction box first. Is normal!		

2.4 常用易损件清单 (List of commonly used vulnerable parts)

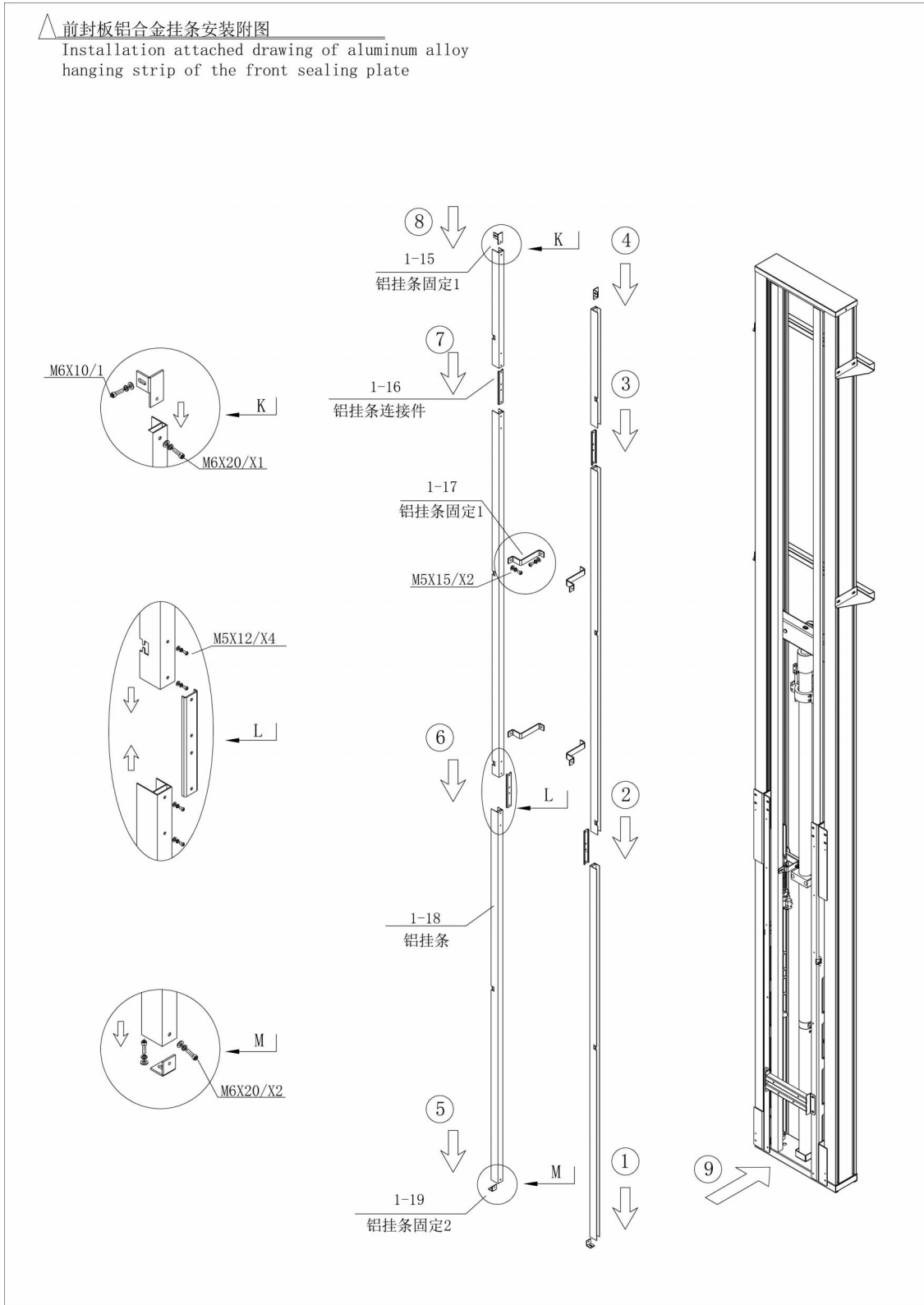
所属部件名称 Name of the part	名称 Name	数量 Quantity	更换周期 Replacement cycle	备注 Remarks
轿厢门 The sedan door	门限位开关 Gate limit switch	1		
	电磁锁 Electromagnetic lock	1		
轿厢顶底部安全触板 Top and bottom of the car	阻挡安全开关 Block the safety switch	4		
动力单元 Power unit	驱动电机 Drive motor	1		
	阀板 Valve plate	1		
	节流阀 Throttle	1		
	调压阀 Pressure regulating valve	1		

	电磁阀 Electromagnetic valve	2		
	油泵 Oil pump	1		
层位开关 Level switch	层位感应器 Level sensor	4		
油缸 Hydro-cylinder	防尘密封圈 Dust sealing ring	1		
	O 型密封圈 O-type sealing ring	2		
	Y 型密封圈 Y-type seal ring	1		
驱动导向板 Drive guide board	黑色滑块 Black slider	2		
横梁架 The beam frame	滑块 Slider	2		
	链条滚轮 Chain roller	4		
	链条滚轮轴承 Chain roller bearing	8		
主护板 Main guard plate	楼层按键 Floor keys	3		
	急停按键 Urgent stop button	1		
电气箱 Electric box	开关电源开关电源 Switching Mode Power Supply	2		
	蓄电池蓄电池 Storage battery	2		
	继电器 Electric relay			
	保险丝 Fuse			

第三章 附图页 Appendix Page

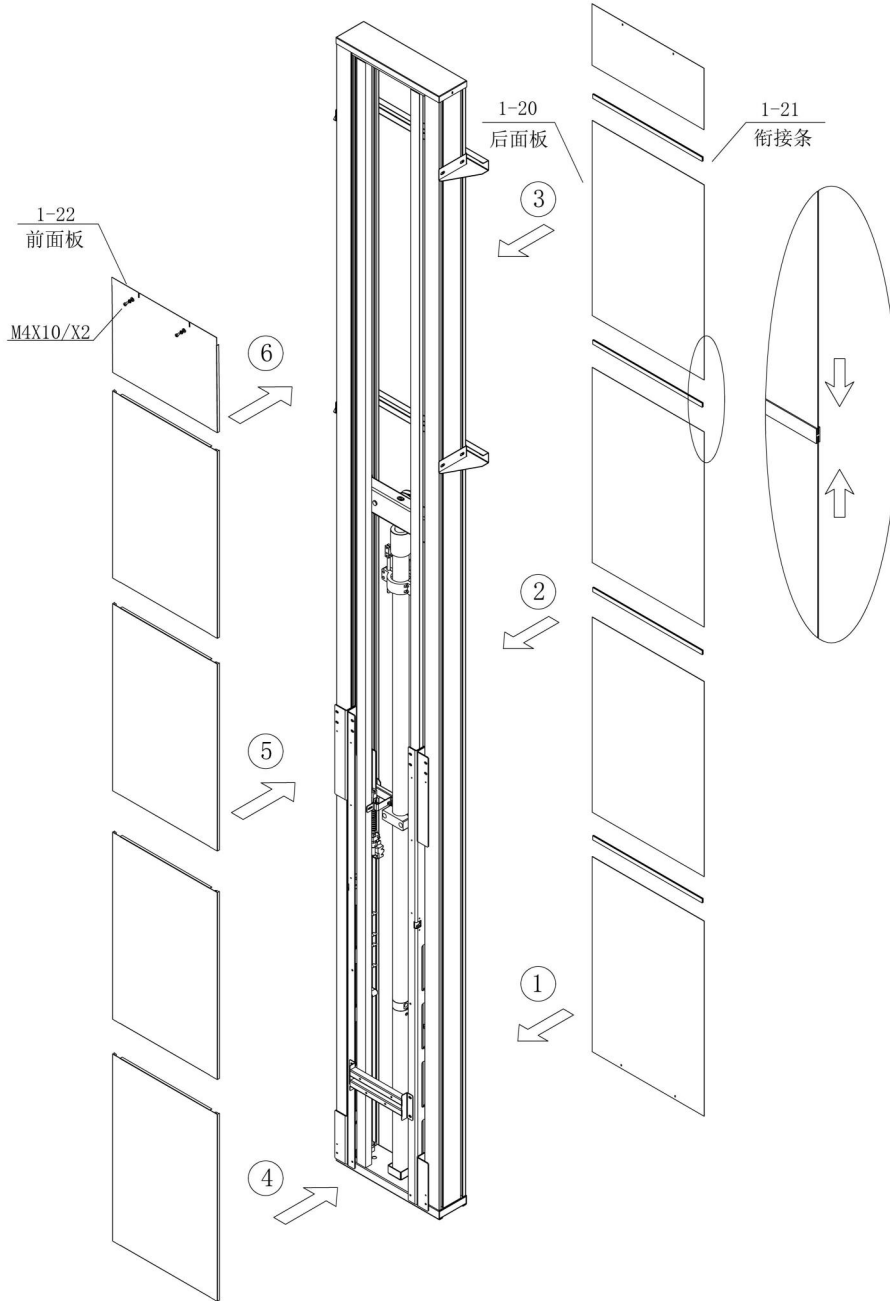
3.1 附图页 1 (前封板铝挂条安装)

Attached drawing page 1 (installation of front seal plate aluminum hanging strip)

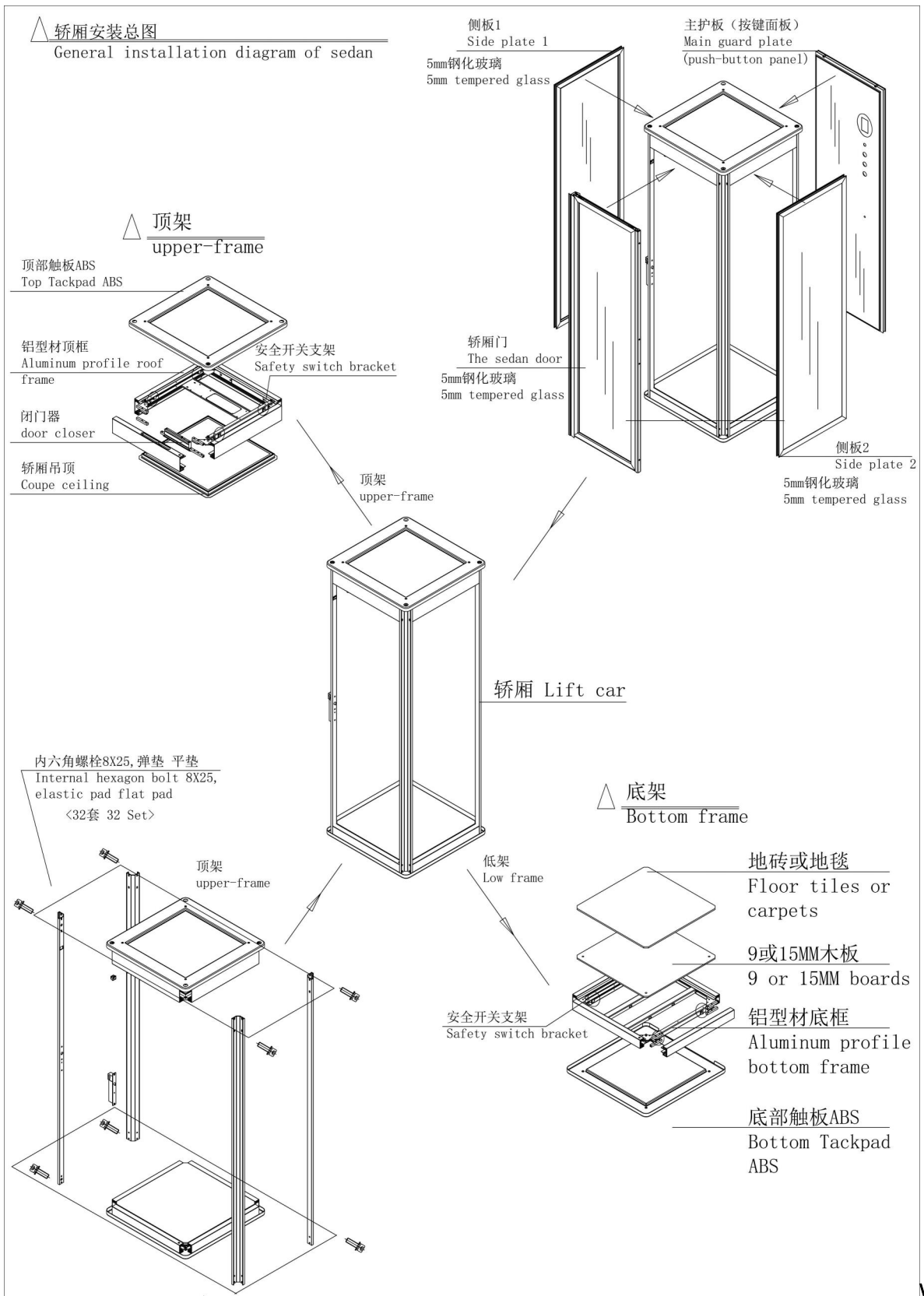


3.2 附图页 2 (前后封板安装) Attached drawing page 2 (front and rear seal plate installation)

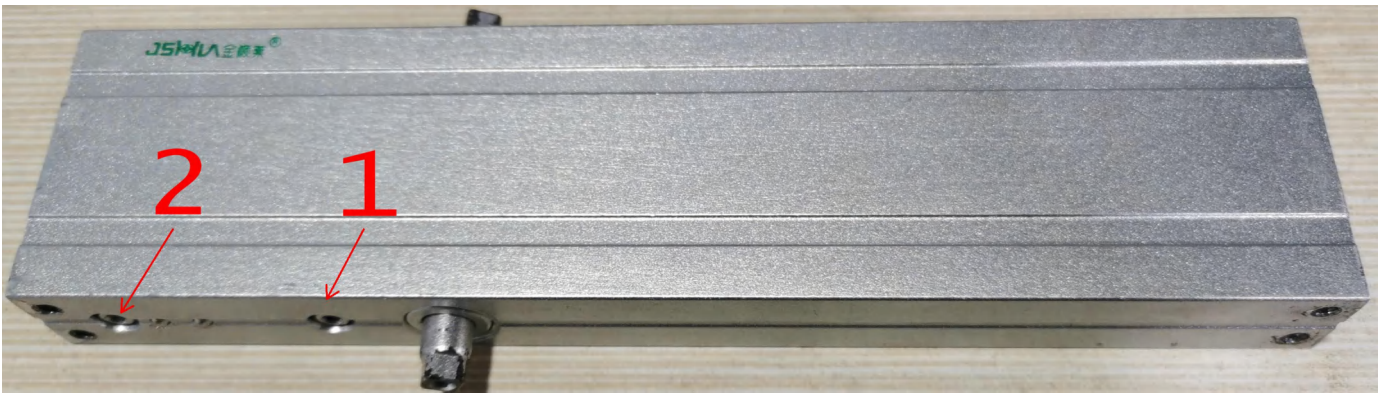
△ 前后封板安装附图
Installation attached drawing of front and rear sealing plate



3.3 附图页 3 (轿厢总图参照) Drawing page 3 (car general drawing reference)



3.4 附图页 4 (闭门器调节说明) Drawing page 4 (Closed er adjustment instructions)



Please check all the notices carefully before installation in order to avoid the damage from usage.

NOTICE:

1. Not allow to turn the gear axis before installation the door closer body well.
2. Not allow to knock the gear axis with too strong power when install the connecting arm.
3. To check and tight the screws from all the parts after a time of usage.
4. Not allow to turn the screws out of the body
5. For a right hand door application, door closer surface with "R" should be on the top. And ensure that the bottom screws are fully closed.
6. To adjust the door opening angle by different installation way.
7. To install the assembly screws, need to add the washer in order to avoid to destroy the connecting arm by turning.

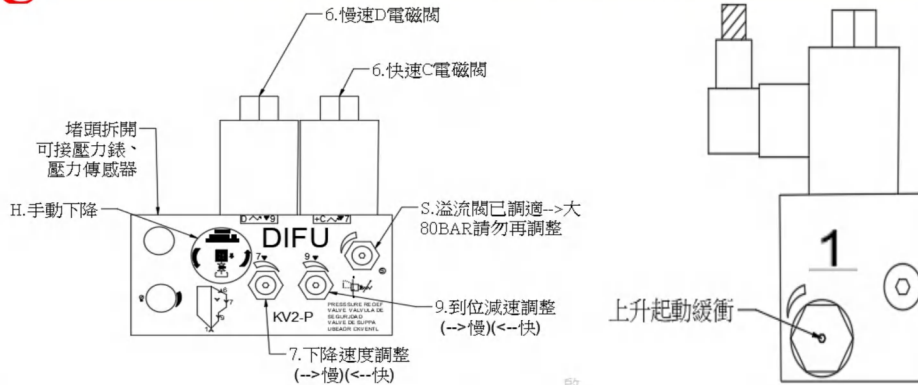
Installation Process

1. To drill the holes at the door frame, fix the body and fixing plate according to the shown picture. Insert the whole fixed part into the ready slot of door. The slot size should be suitable for the door closer.

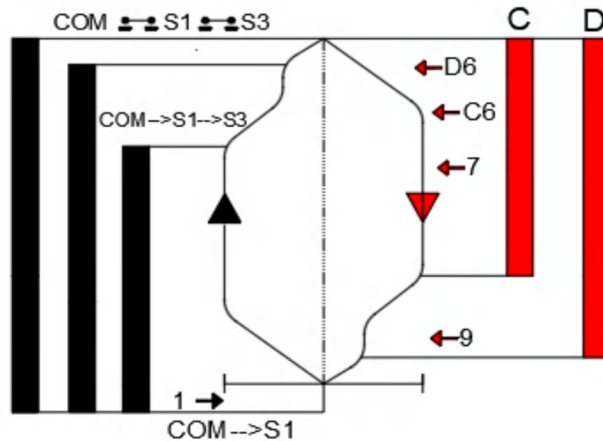
★ Notice: The speed adjustment valves are tightly fixed before dispatch from factory and need to turn 1 circle by counter clockwise direction. When confirm the usage opening direction, please tight the bottom adjustment screws which is opposite to the opening direction.
2. Fix the connecting arm and gear axis
3. Door closer has a preload angle shown in the picture
4. The assembly way for the track
5. Fix connecting arm and slide guide

3.5 附图页 5 (帝富阀板调试) Drawing page 5 (Debugging of Emfu valve plate)

FU KV2P-上升下降使用調整說明



警告：只有合格的人員才能調整或維修閥門。未經授權的操縱可能導致傷害、危險，損壞設備。在維修內部零件之前，請確保關閉電源，油缸管線關閉，閥門中的殘餘壓力降至零



KV2P 上升
 上升：當泵啟動時，卸載的電梯樓應在地面上保持靜止約1秒在開始之前的第二個。此延遲的長度取決於調整設置1.'In'（順時針）縮短延遲，'out'（順時針方向）延長延遲。上止：二樓地面，變頻器調整，取決於負載和速度，做法。變頻器調整。S安全閥：'In'（順時針）產生較高的'out'（順時針方向）較低的最大壓力設置。轉身後'out'，打開手動降低H瞬間。重要提示：測試安全閥時，請逐漸關閉球閥。

KV2P 下降
 向下加速：當電磁閥C和D通電時，電梯將根據設置向下加速調整6.'In'（順時針）提供更柔和的向下加速，'向外'（順時針方向）提供更快的加速度。預調整：6應該完全旋轉，然後電磁閥C和D通電。緩慢地向後轉6，直到電梯向下加速。7.下降速度：如上所述，如果電磁閥C和D通電，則電梯的下降速度根據調整設置7。In'（順時針）提供較慢的下降速度，'out'（順時針方向）提供更快的下降速度。向下減速：當電磁閥C斷電而電磁閥D保持通電時，電梯將根據減速器減速內置阻尼。無需進一步調整。9.向下調平：當電磁閥C斷電且電磁閥D保持通電時，電梯將以其向下調平速度行駛根據調整設置9.'In'（順時針）提供較慢的“向外”（順時針方向）以較快的向下調平速度。向下停止：在地板高度，電磁閥D斷電，導致電梯停止。無需調整。H手動降低：“向外”（順時針方向）允許用手降低電梯。在發佈時自動關閉。KS Slack Rope Valve：電磁閥D必須斷電！通過旋轉螺釘6進入，用3 mm Allan Key調節KS壓力越高，壓力越低。隨著K'一路轉向'，然後半轉回來，卸載的電梯應該下降當手動降低H打開時。下降電梯，6必須退回，直到電梯剛開始下降，然後再往後轉半圈以確保用冷油可以根據需要降低車速。

3.6 附图页 6 (手机 APP 使用说明) Drawing page 6 (Instructions for mobile APP)

● 手机要求：带有蓝牙功能的安卓系统手机要求安卓版本号：android 5.0 以上 android 7.0 以下
 Mobile phone requirements: Android phones with Bluetooth require Android version number: android 5.0 above android 7.0 the following

● 需下载 APP, 请与我司联系 < To download the app, please contact our company>


● 打开手机 WIFI, 查找设备 WIFI (X8888888) ,输入密码 UPSAFE66, 链接。注意大写!

Open the phone WIFI, find the device WIFI (X8888888), enter the password UPSAFE66, pay attention to uppercase!

● 打开 APP,输入密码 123456, 链接设备。

Open APP, enter password 123456, link device.

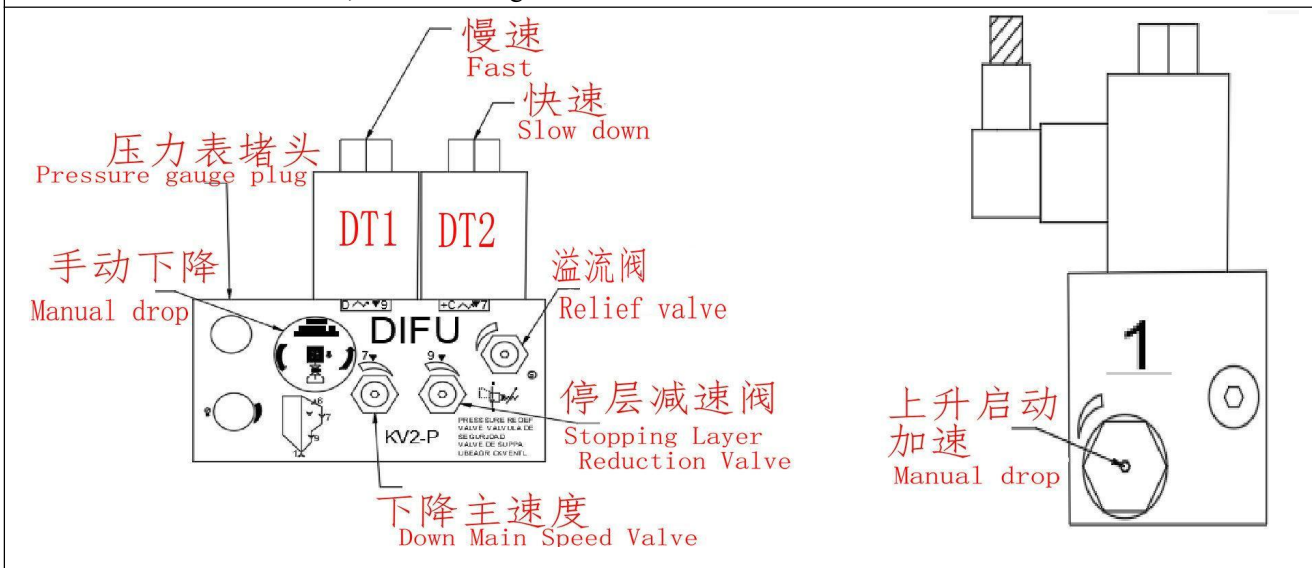
《手机页面 Mobile Page 》

	名称	设置
运行速度	快速 Fast	35HZ
缓速设置	慢速 Slow down	15HZ
启动加速度时间	加速时间 Acceleration time	3 秒/S
停止减速度时间	减速时间 Reduction time	3 秒/S

● 液压系统调节说明 《Hydraulic system regulation instructions》：

备注：液压阀调节方向，《顺时针-大》《逆时针-小》

Note: Valve control direction, clockwise large reverse - small

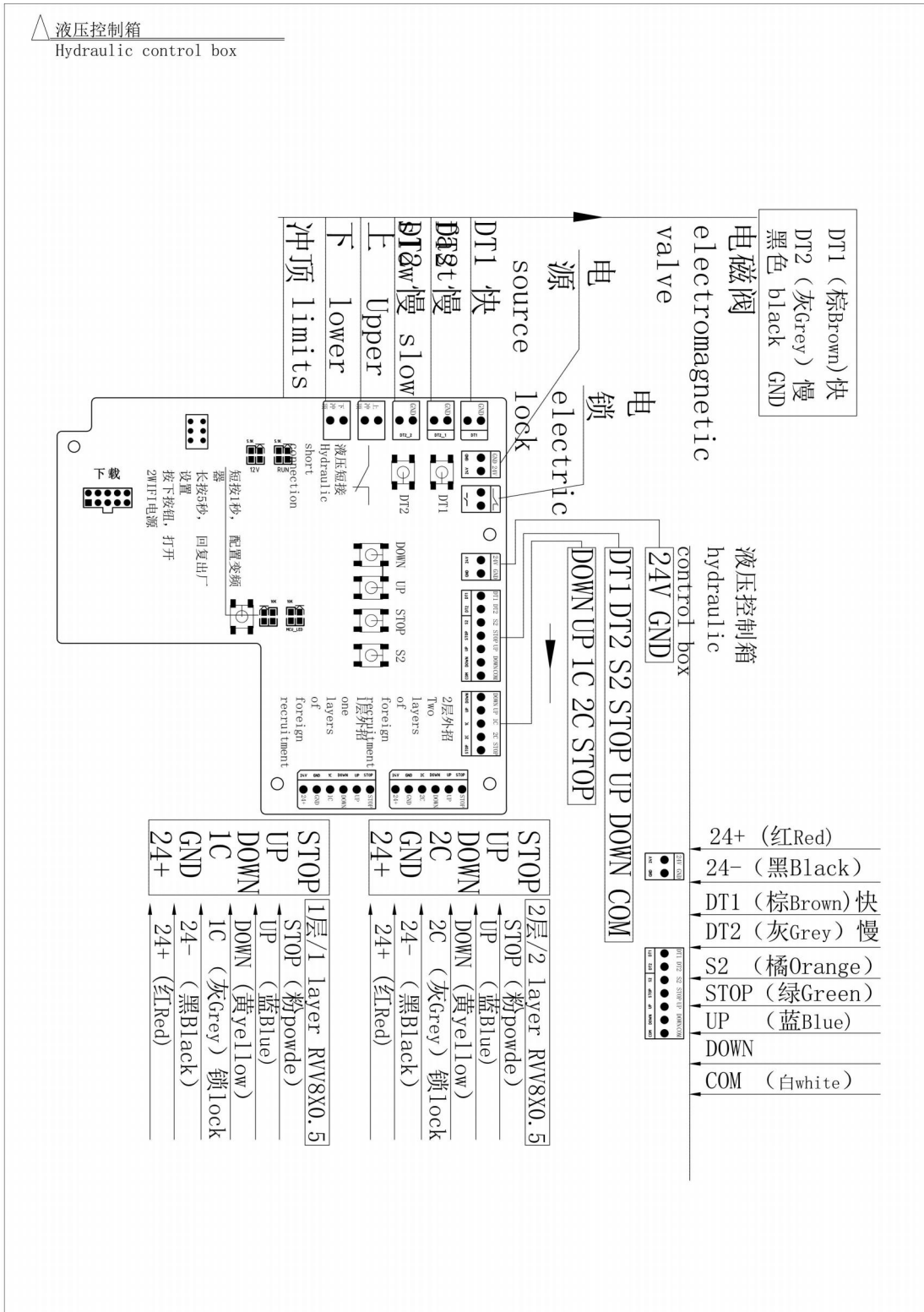


3.7 附图页 7 (液压控制箱线路板) Attached drawing page 7 (Hydraulic Control Box Line Board)

公司地址：武汉市江岸区岱家山科技创业城 11 栋 3 单元 602 室

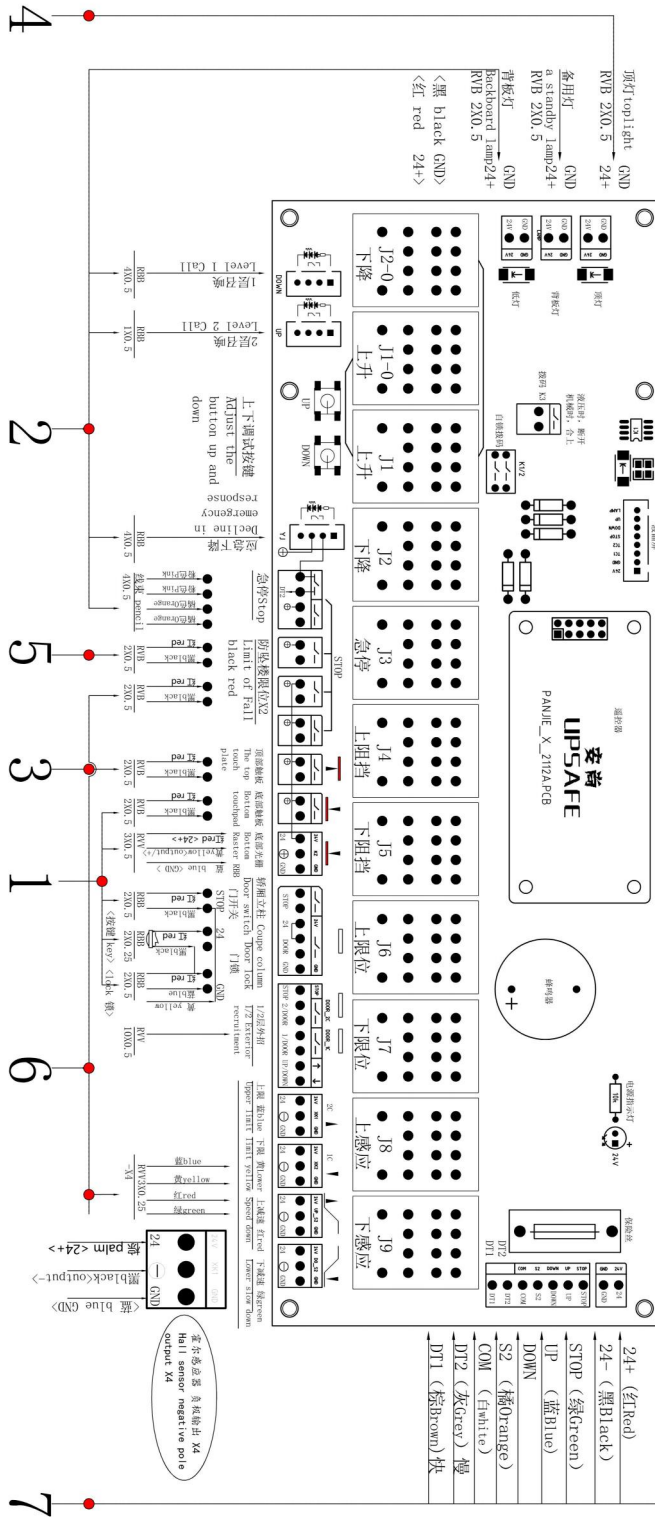
电话：13908631829

E-mail：1670587701@qq.com



3.8 附图页 8 (主板线路明细) Drawing page 8 (motherboard line details)

主板线路明细
Mainboard circuit details



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High-quality and fast after-sales service depends on the professional after-sales service team, and the timely supply of vulnerable parts and accessories.If you are not satisfied with the work of our mechanical after-sales service department, please call the complaint phone number, fax this customer opinion feedback form or send an e-mail. We will timely solve your complaints and suggestions within 24 hours.

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