MARK	REV. NO.	REVISE RECORD	DATE	REVISER

A 左刹把Left brake crank

Cavity	To	Color	Gauge	From contact PN
1	Q2	yellow/green	22 AWG	22-20 AWG pin crimp
2	A1,A3	sky blue	22 AWG	22-20 AWG pin crimp

B 右刹把Right brake crank

Cavity	To	Color	Gauge	From contact PN
1	Q2	yellow/green	22 AWG	22-20 AWG pin crimp
2	A1,A3	sky blue	22 AWG	22-20 AWG pin crimp

C 喇叭开关Horn switch

Cavity	To	Color	Gauge	From contact PN
1	S4	Green	20 AWG	22-20 AWG pin crimp
2	L2	Pink	20 AWG	22-20 AWG pin crimp

D 前左转向灯Front left turn signal

Cavity	To	Color	Gauge	From contact PN
1	M1,S4,O6	Green	22 AWG	22-20 AWG pin crimp
2	N1,O5	White	22 AWG	22-20 AWG pin crimp

E 前右转向灯Front right turn signal

Cavity	To	Color	Gauge	From contact PN
1	S4	Green	22 AWG	22-20 AWG pin crimp
2	M1	blue	22 AWG	22-20 AWG pin crimp

F 龙头锁Steering column lock

Cavity	To	Color	Gauge	From contact PN
1	U7	Red/blue	22 AWG	22-20 AWG pin crimp
2	U4	Blue/yellow	22 AWG	22-20 AWG pin crimp

G 坐垫锁开关Seat lock switch

Cavity	To	Color	Gauge	From contact PN
1	Z2	Red/black	22 AWG	22-20 AWG pin crimp
2	P2	orange/green	22 AWG	22-20 AWG pin crimp

H 转向开关Change-over switch

Cavity	To	Color	Gauge	From contact PN
1	M1,O6	Blue	22 AWG	22-20 AWG pin crimp
2	U	yellow/black	22 AWG	22-20 AWG pin crimp
3	N1,O5	White	22 AWG	22-20 AWG pin crimp

I 闪光器Flasher

Cavity	To	Color	Gauge	From contact PN
1	Q2	yellow/green	22 AWG	22-20 AWG pin crimp
2	H2,AG5	yellow/black	22 AWG	22-20 AWG pin crimp
3	S4	green	22 AWG	22-20 AWG pin crimp

J 转把Throttle

Cavity	To	Color	Gauge	From contact PN
1	W3	green/white	22 AWG	22-20 AWG pin crimp
2	W1	black/white	22 AWG	22-20 AWG pin crimp
3	W2	red/white	22 AWG	22-20 AWG pin crimp

K 前大灯Head light

Cavity	To	Color	Gauge	From contact PN
1	S4	green	20 AWG	22-20 AWG pin crimp
2	S4	green	20 AWG	22-20 AWG pin crimp
3	Q2	yellow/green	20 AWG	22-20 AWG pin crimp
4	Q2	yellow/green	20 AWG	22-20 AWG pin crimp

L 喇叭Horn

Cavity	To	Color	Gauge	From contact PN
1	Q2	yellow/green	20 AWG	22-20 AWG pin crimp
2	C2	pink	20 AWG	22-20 AWG pin crimp

M 控制右转向灯right turning signal relay

Cavity	To	Color	Gauge	From contact PN
1	D1,E2,H1,O6	Blue	22 AWG	22-20 AWG pin crimp
2	AG3	purple/white	22 AWG	22-20 AWG pin crimp
3	S4	green	22 AWG	22-20 AWG pin crimp
4	S4	green	22 AWG	22-20 AWG pin crimp

N 控制左转向Left turning signal relay

Cavity	To	Color	Gauge	From contact PN
1	D2,H3,O5	White	22 AWG	22-20 AWG pin crimp
2	AG2	pink/yellow	22 AWG	22-20 AWG pin crimp
3	S4	green	22 AWG	22-20 AWG pin crimp
4	S4	green	22 AWG	22-20 AWG pin crimp

O 仪表Meter

Cavity	To	Color	Gauge	From contact PN
1	AB3,AA2,S3	red	22 AWG	22-20 AWG pin crimp
2	Q2	yellow/green	22 AWG	22-20 AWG pin crimp
3	AB1,AB1,S1	black	22 AWG	22-20 AWG pin crimp
4	V1,X2,B1	yellow/white	22 AWG	22-20 AWG pin crimp
5	D2,H3,N1	White	22 AWG	22-20 AWG pin crimp
6	D1,H1,M1	Blue	22 AWG	22-20 AWG pin crimp
7	S4	green	22 AWG	22-20 AWG pin crimp
8		empty		
9	V2,X4,R3	grey/green	22 AWG	22-20 AWG pin crimp

AJ 驱动模块接口Driver module interface

Cavity	To	Color	Gauge	From contact PN
1	AG4	yellow/green	22 AWG	22-20 AWG pin crimp
2	Q2	yellow	22 AWG	22-20 AWG pin crimp
3	AJ,B2,AA1	black	22 AWG	22-20 AWG pin crimp
4		—— empty		
5		—— empty		
6		—— empty		
7		—— empty		
8	S4	green	22 AWG	22-20 AWG pin crimp
9	S4	green	22 AWG	22-20 AWG pin crimp

AI 驱动模块Drive module

Cavity	To	Color	Gauge	From contact PN
1	AJ,B2,AJ3	sky blue	22 AWG	22-20 AWG pin crimp
2	Q2	yellow/green	22 AWG	22-20 AWG pin crimp
3	AG4	yellow	22 AWG	22-20 AWG pin crimp
4		—— empty		
5		—— empty		
6		—— empty		
7	S4	green	22 AWG	
8	S4	green	22 AWG	22-20 AWG pin crimp
9		—— empty		

刹车地 brake ground
刹车信号 brake signal
刹车驱动 Brake drive
尾灯12v+ Tail light 12v+
12v+
尾灯12v- Tail light 12v-
12v地 12v ground
刹车信号 brake signal
边支撑开关 Side stand switch

AK 边支撑开关Side stand switch

Cavity	To	Color	Gauge	From contact PN
1		—— empty		
2	U6	black/white	22 AWG	22-20 AWG pin crimp
3	U3	green/white	22 AWG	22-20 AWG pin crimp

AL 边支撑Side stand signal

Cavity	To	Color	Gauge	From contact PN
1		—— empty		
2	U6	brown/red	22 AWG	22-20 AWG pin crimp
3	U3	brown/green	22 AWG	22-20 AWG pin crimp

Fuse保险丝10a

R GPS

Cavity	To	Color	Gauge	From contact PN
1	O4,X2,V1	yellow/white	22 AWG	22-20 AWG pin crimp
2	P1	orange	22 AWG	22-20 AWG pin crimp
3	O9,V2,X4	grey/green	22 AWG	22-20 AWG pin crimp
4	P2	orange/green	22 AWG	22-20 AWG pin crimp

S 隔离12VDC(1) Isolated 12V DC(1)

Cavity	To	Color	Gauge	From contact PN
1	O3,A01,AB1	black	17 AWG	16-17 AWG pin crimp
2	AB4	orange	12 AWG	11-13 AWG pin crimp
3	O1,AB3,AA2	red	17 AWG	16-17 AWG pin crimp
4	Z1,Z2,Z3,Z4,Y1,X7,X3,X4,S3,S4,O3 Q1,V4,Y2,AG1,AF1,AF2,AF3,AB2,AJ4	black	12 AWG	11-13 AWG pin crimp

T 主电池输出信号控制Main battery output signal control

Cavity	To	Color	Gauge	From contact PN
1	U1,AA1,Z1,Z3	green/brown	20 AWG	22-20 AWG pin crimp
2	X1	green/black	20 AWG	22-20 AWG pin crimp
3	U9,AH3,AA3,Z1,P1	orange	20 AWG	22-20 AWG pin crimp
4	X3	grey	20 AWG	22-20 AWG pin crimp

P 备用电池充电Standby battery charging

Cavity	To	Color	Gauge	From contact PN
1	R2,U9,AA3,T3,AH3	orange	12 AWG	11-13 AWG pin crimp
2	G2,AC1,U2,P4	black	12 AWG	11-13 AWG pin crimp

Q 备用电池放电Standby battery discharge

Cavity	To	Color	Gauge	From contact PN
1	S4	black	12 AWG	11-13 AWG pin crimp
2	A1,B1,U1,X3,X4,Q2,AB2, Q2,Y1,AD1,AF2,AG2,AJ2	yellow	12 AWG	11-13 AWG pin crimp

AM 隔离12VDC(2) Isolated 12V DC(2)

Cavity	To	Color	Gauge	From contact PN
1	AN2	black	17 AWG	16-17 AWG pin crimp
2	AN1	orange	12 AWG	11-13 AWG pin crimp
3	AN4	red	17 AWG	16-17 AWG pin crimp
4	AN3	green	12 AWG	11-13 AWG pin crimp

AN 隔离DC转接线Isolated DC transfer line

Cavity	To	Color	Gauge	From contact PN
1	AM2,AO2	orange	17 AWG	16-17 AWG pin crimp
2	AM1	black	12 AWG	11-13 AWG pin crimp
3	AM4,AD1	green	17 AWG	16-17 AWG pin crimp
4	AM3	red	12 AWG	11-13 AWG pin crimp

AO GPS电源 GPS power

Cavity	To	Color	Gauge	From contact PN
1	AN3	green	17 AWG	16-17 AWG pin crimp
2	AN1	orange	12 AWG	11-13 AWG pin crimp

AH 坐垫锁Seat lock

Cavity	To	Color	Gauge	From contact PN
1	U8,AO2,Z4	purple	22 AWG	22-20 AWG pin crimp
2		—— empty		
3	P1,T3,Z1	orange	22 AWG	22-20 AWG pin crimp
4		—— empty		

AG 尾灯Tail light

Cavity	To	Color	Gauge	From contact PN
1	S4	green	22 AWG	22-20 AWG pin crimp
2	N2	pink/yellow	22 AWG	22-20 AWG pin crimp
3	N2	purple/white	22 AWG	22-20 AWG pin crimp
4	AJ1,AI3	yellow	22 AWG	22-20 AWG pin crimp
5	I2	yellow/black	22 AWG	22-20 AWG pin crimp
6		—— empty		

AF 牌照灯(带保护胶套)License Plate Light （with plastic cover)

Cavity	To	Color	Gauge	From contact PN
1	S4	green	22 AWG	22-20 AWG pin crimp
2	Q2	yellow/green	22 AWG	22-20 AWG pin crimp

L负极L negative
N正极N positive

AE 电源Power

Cavity	To	Color	Gauge	From contact PN
1	O3,AB1,S1	black	12 AWG	11-13 AWG pin crimp
2	AA4	red	12 AWG	11-13 AWG pin crimp

AD 应急开坐垫所12V Emergency open seat lock

Cavity	To	Color	Gauge	From contact PN
1	Q2	orange	22 AWG	22-20 AWG pin crimp
2	U8,Z4,AH1	purple	22 AWG	22-20 AWG pin crimp

废弃（黑色绝缘胶布缠绕）
Discard (wrapped with black insulating tape)

AC 沾锡Dip with tin

Cavity	To	Color	Gauge	From contact PN
1	P2,U2	orange/green	22 AWG	22-20 AWG pin crimp

代替AD2 应急开坐垫所12V(需车主认证)
Instead of AD2 emergency seat cushion switching station 12V (owner certification required)

AB 控制48V电器开关Control 48v electrical switch

Cavity	To	Color	Gauge	From contact PN
1	O3,A01,S1	Blue	17 AWG	16-17 AWG pin crimp
2	Q2	yellow/black	17 AWG	16-17 AWG pin crimp
3	O1,AA2,AA3,S3	red	17 AWG	16-17 AWG pin crimp
4	S2	orange	12 AWG	11-13 AWG pin crimp

AA 控制48V电池输入Control 48V battery input

Cavity	To	Color	Gauge	From contact PN
1	U1,Z1,T1,Z3	Green/red	20 AWG	22-20 AWG pin crimp
2	O1,A03,S3	red	12 AWG	11-13 AWG pin crimp
3	P1,T3,U9,AB3	orange	20 AWG	22-20 AWG pin crimp
4	AE2	red	12 AWG	11-13 AWG pin crimp

Z 控制座垫锁Seat lock relay

Cavity	To	Color	Gauge	From contact PN
1	U9,AA3,AA1,AH3,T1,T3,U1	orange	22 AWG	22-20 AWG pin crimp
2	G1	red/black	22 AWG	22-20 AWG pin crimp
3	U1,AA1,T1	green/red	22 AWG	22-20 AWG pin crimp
4	U8,AO2, AH1	purple	22 AWG	22-20 AWG pin crimp

Y 控制器12V Controller12V

Cavity	To	Color	Gauge	From contact PN
1	G2	yellow/green	22 AWG	22-20 AWG pin crimp
2	S4	green	22 AWG	22-20 AWG pin crimp
3		—— empty		

X 主电源输入信号Main power Signal input

Cavity	To	Color	Gauge	From contact PN
1	Y2	Blue	22 AWG	22-20 AWG pin crimp
2	O4,V1,B1	yellow/black	22 AWG	22-20 AWG pin crimp
3	Y4	White	22 AWG	22-20 AWG pin crimp
4	O9,V2,R3	White	22 AWG	22-20 AWG pin crimp

W 转把Throttle signal

Cavity	To	Color	Gauge	From contact PN
1	J2	black/White	22 AWG	22-20 AWG pin crimp
2	J3	red/White	22 AWG	22-20 AWG pin crimp
3	J1	green/White	22 AWG	22-20 AWG pin crimp

V 控制器数据Controller signal

Cavity	To	Color	Gauge	From contact PN
1	O4,X2,R1	yellow/White	22 AWG	22-20 AWG pin crimp
2	O9,X4,R3	grey/green	22 AWG	22-20 AWG pin crimp
3		—— empty		
4	S4	green	22 AWG	22-20 AWG pin crimp

U 报警器Alarm

Cavity	To	Color	Gauge	From contact PN
1	Z1,AA1,T1,Z3	green/brown	22 AWG	22-20 AWG pin crimp
2	P2,AC1	orange/green	22 AWG	22-20 AWG pin crimp
3	AL3,AK3	brown/green	22 AWG	22-20 AWG pin crimp
4	F2	blue/yellow	22 AWG	22-20 AWG pin crimp
5		—— empty		
6	AL2,AK2	brown/red	22 AWG	22-20 AWG pin crimp
7	F1	red/purple	22 AWG	22-20 AWG pin crimp
8	Z4,AO2,AH1	purple	22 AWG	22-20 AWG pin crimp
9	P1,T3,Z1	orange	22 AWG	22-20 AWG pin crimp
10		—— empty		

说明Explain
线长200mm line length 200mm
PVC套管 PVC casing
绝缘胶布 Insulation tape
PP套管+绝缘胶布 pp casing+insulation tape
需要打热熔胶 Plug-in ports require hot glue

技术要求:
1、导线结构性能应符合JB/T8139《公路车辆低压电缆(电线)》的规定;
2、主干线总长1700 ，图中所标支线长度均为露出于线外长度；
3、电线规格:粗红线，粗黑线等过大电流的线采用QVR1*3.0mm²，电门锁线，充电回路线，
照明干线采用QVR1*0.75mm² ，大灯回路采用QVR1*0.5mm ，其余颜色线均为QVR1-0.3mm²。
4、电线应排列整齐，不得有交错，缠绕现象，除引出部分不得有露线现象；
5、线束主体用黑色软塑管加以保护，各管口处用绝缘PVC耐油胶布相邻重叠缠绕，
其重叠缠绕部分应大于/胶带宽;
6、所有插簧的材料均为磷青铜(或提锡磷青铜)，插片允许用黄铜，但2.8端子厚度不小于0.5;
7、干线内相同代号的导线，无论线径是否相同，都要直接连通或通过保险管或二极管连通，
线束内导线阀采用DJ451U型接头冷压接，各接头间距距离不小于20mm，
电线于接插件的连接导线于接插件间拉脱力≥235N(QVR1*2.5)和>90N(QVR1*0.75)
和>70N(QVR1*0.5)和>50N(QVR1*0.3)。
8、未注技术要求应符合QC/T29106《汽车用低压电线束技术条件》；
9、除防水插件以外，所有插件尾部需要打热缩胶。

Technical requirement:
1. The structural performance of the conductor shall comply with the provisions of JB/T8139 (low-voltage cables (wires) for road vehicles);
2. The total length of the main trunk line is 1700, +20/ -5. The length of the branch lines marked in the figure are the lengths outside the trunk line;
3. Wire specifications: the wires with excessive current such as thick red wires and thick black wires use QVR1*3.0mm² , switch iron wires, and charging circuit wires.
The lighting line adopts QVR1*0.75mm² , the headlight circuit adopts QVR1*0. 5mm² , and the other color lines are QVR1-0. 3mm².
4. The wires should be arranged neatly, and there should be no staggered or continuous winding, except for the lead-out part, there should be no exposed wire;
5. The wire harness is protected by a black soft plastic tube, and each nozzle is wrapped with a brush edge PVC oil-resistant tape adjacent to each other,
and its overlapping winding part should be larger than / glue width;
6. The material of all insert springs is phosphor bronze (or tin phosphor bronze), and brass is allowed for inserts, but the thickness of 2.8 terminals is not less than 0.5;
No matter whether the wire diameter is the same, the wires with the same code in the trunk should be connected directly or through a fuse or diode.
The DJ451U type connectors are used for cold crimping between the wires, and the distance between the connectors is not less than 20mm. The connecting wires
between the wires and the connectors are pulled between the connectors.Release force ≥235V (QVR1*2.5) and >90N (QVR1*0.75) and >70N (QVR1*0.5) and >50N (QVR1*0.3):
8. The unmarked technical requirements shall comply with QE/T29108 "Technical Conditions for Low Voltage Wire Harness for Automobiles".
9、Except for the waterproof plug-in, all plug-in tails need to be hot-melt glued.

NO.	PART NO.	PART NAME	QTY	MATERIAL / DIMENSION

MATERIAL		APPROVED	MODEL	PROJECTION METHOD / SCALE	MASS / PART Q'TY
			XXXX	1:1	1
HEAT & SURFACE TREATMENT		STANDARD	PART NAME	Assembly drawing 总成图	
GENERAL TOLERANCE		CHECK			
GENERAL GEOMETRIC TOLERANCE		DESIGNED	PART NO.	UnU-LC-P0-A-00000005-04	
SURFACE TEXTURE	COLOR INS. / DEV. STAGE / SHEET NO.	DRAWING	Free		
		STAFF CODE	IF TECHNOLOGY CO., LTD.		