USERS MANUAL

S9 Venus

HEARTWAY

Bluesky Mobility Pty Ltd

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CONTENTS

TECHNICAL SPECIFICATIONS

VENUS

MODEL	機型	S9
WEIGHT CAPACITY	載重	135kgs(300 lbs)
SEAT: TYPE/SIZE	坐寬	18" A2
DRIVE WHEEL	驅動輪	270mmx100mm(10.6"x4")
FRONT CASTER (WHEEL)	前輪	270mmx100mm(10.6"x4")
REAR CASTER (ANTI-TIPPER)	防傾輪	None
MAX SPEED	速度	6MPH
BATTERY SPECIFICATIONS	電池	12V 34Ah x 2pcs or 12V 50Ah x 2pcs(Optional)
BATTERY RANGE	行程	30km/45km
CHARGER TYPE	充電器	5Amp,Off Board120/240 Volt,50/60Hz
CONTROLLER TYPE	控制器類型	Dynamic Rhino 110Amp
MOTOR TYPE	馬達	4000rpm 500W
WEIGHT: W/ BATTERY	含電池重	105kgs(231 lbs)
WEIGHT: W/O BATTERY	不含電池重	77kgs(170 lbs)
TURNING RADIUS	迴轉半徑	980mm
SUSPENSION	避震器	FULL
LENGTH	長	1270mm
WIDE	寬	670mm
HEIGHT	高	1030mm
SEAT WIDTH	座寬	460mm
SEAT HEIGHT	座高	460mm
SEAT DEPTH	座深	460mm
BACK HEIGHT	椅背高	440mm
WHEEL BASE	軸距	880mm
GROUND CLEARANCE		100mm
FOOTRESTS		340mm

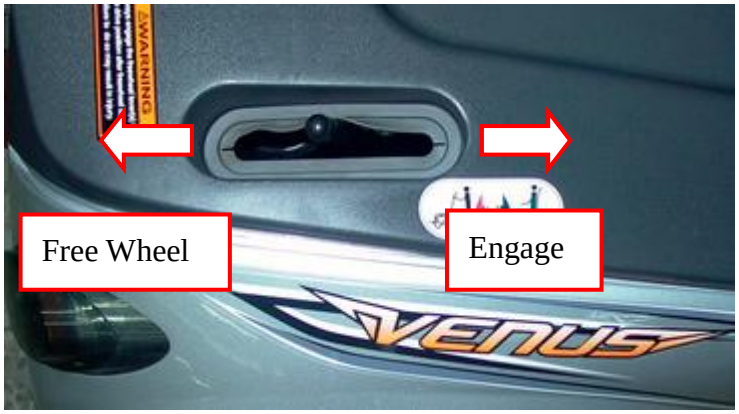
製造廠名稱：台灣維順工業股份有限公司
製造廠地址：台中市南屯區工業區25路6號

HEARTWAY

SAFETY INSTRUCTION

◆ OPERATION OF SCOOTER

1. To prevent injury to yourself or others, always ensure that the power is switched off when getting on or off of the scooter.
2. Always check that the drive wheels are engaged (drive mode) before driving.



(Fig.1)

3. Do not switch off the power when the scooter is still moving forward. This will bring the chair to an extremely abrupt stop.

(Fig.2)

(Fig.3)

4. Emergency Brake (Optional)

◆ General

1. Always use a seat belt, and keep your feet on the scooter all the time.
2. Do not over load the scooter with it's maximum weight capacity of 135kg (300 lbs)
3. Do not attempt to lift or move a power scooter by any of its removable parts. Personal injury and damage to the power chair may result.
4. Never try to use your scooter beyond its limitations as described in this manual.
5. Do not operate your vehicle if it is not functioning properly.
6. Do not connect any electrical or mechanical device to the scooter. Failure to obey this instruction may result in injury and will void the warranty.
7. Never use electronic radio transmitters such as CB, walkie-talkies, portable computers or cellular phones while using the vehicle without first turning the scooter off.

◆ Usage When Under The Influence Of Medication Or Alcohol

1. Check with your physician if you are taking any medication that may affect your ability to operate your power scooter safely.
2. Do not operate your scooter while you are under the influence of alcohol, as this may impair your ability to operate your power scooter in a safe manner.

◆ Electromagnetic interference (EMI) from Radio Wave Sources

The rapid development of electronics, especially in the area of communications, has saturated our environment with electromagnetic (EM) radio waves that are emitted by television, radio and communication signals. These EM wave are invisible and their strength increases as one approach the source. All electrical conductors act as antennas to the EM signals and, to varying degrees, all power wheelchairs and scooters are susceptible to electromagnetic interference (EMI). The

interference could result in abnormal, unintentional movement and/or erratic control of the vehicle. The United States Food and drug Administration (FDA) suggests that the following statement be incorporated to the user's manual for all power scooter like the S9. Power wheelchairs and motorized scooters (in this section, both will be referred to as powered wheelchairs) may as susceptible to electromagnetic interference (EMI), which is interfering electromagnetic energy emitted from sources such as radio stations, TV stations, amateur radio (HAN) transmitter, two-way radios and cellular phones. The interference (from radio wave sources) can cause the powered wheelchair to release its brakes, move by itself or move in unintended directions. It can also permanently damage the powered scooter's control system. The intensity of the EM energy can be measured in volts per meter (V/m).Each powered scooter can resist EMI up to a certain intensity. This is called "immunity level". The higher the immunity level the greater the protection. At this time, current technology is capable of providing at least 20 V/m of immunity level, which would provide useful protection against common sources of radiated EMI.

Following the warnings listed below should reduce the chance of unintended brake release or powered scooter movement that could result in serious injury:

1. Do not turn on hand-held personal communication devices such as citizens band (CB) radios and cellular phones while the powered scooter is turned on.
2. Be aware of nearby transmitters such as radio or TV stations and try to avoid coming close to them.
3. If unintended movement or brake release occurs, turn the powered scooter off as soon as it is safe.
4. Be aware that adding accessories or components, or modifying the powered scooter, may make it more susceptible to interference from radio wave sources
   (Note: It is difficult to evaluate the effect on the overall immunity of the powered scooter).
5. Report all incidents of unintended movement or brake release to the powered scooter manufacturer, and note whether there is a radio wave source nearby.

TURN OFF YOUR POWERED SCOOTER AS SOON AS POSSIBLE WHEN EXPERIENCING THE FOLLOWING:

- Unintentional scooter movements
- Unintended or uncontrollable direction.
- Unexpected brake release

The FDA has written to the manufacturers of power scooters asking them to test new products to be sure they provide a reasonable degree of immunity against EMI. The FDA requires that a powered wheelchair should have an immunity level at least 20 V/m, which provides a reasonable degree of protection against more common sources of EMI. The higher the immunity level, the greater the protection. Your powered scooter has an immunity level of 20 V/m which should protect against common sources of EMI.

ENVIRONMENTAL CONDITIONS

Environmental conditions may affect the safety and performance of your power scooter. Water and extreme temperatures are the main elements that can cause damage and affect performance.

A) Rain, Sleet and Snow

If exposed to water, your power scooter is susceptible to damage to electronic or mechanical components. Water can cause electronic malfunction or promote premature corrosion of electrical components and frame.

B) Temperature

Some of the parts of the power scooter are susceptible to change in temperature. The controller can only operate in temperature that ranges between 18℉(-8℃) and 122℉ (50℃).

At extreme low temperatures, the batteries may freeze, and your power scooter may not be able to operate. In extreme high temperatures, it may operate at slower speeds due to a safety feature of the controller that prevents damage to the motors and other electrical components.

ASSEMBLY INSTRUCTION

It is very easy to assemble your S9 scooter. Please follow the procedure below.

1. Tiller Positioning

Press down the lever, fold the tiller up to vertical position and let it lock into your preferred position. (See Fig 4 & 5)

(Fig.4)

(Fig.5)

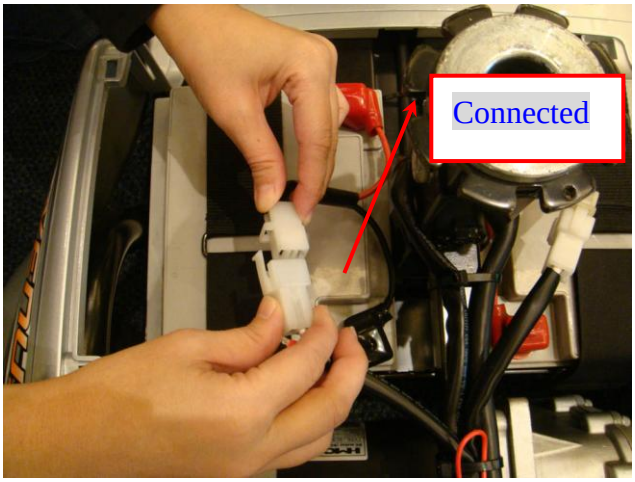
2. Installing the Seat

(Fig.6)

3. Installing the Batteries

Remove three screws as shown on Fig.7 and take off the cover. Connect both battery cables probably (+ / − pole ,Red is positive, black is negative)

(Fig.7)



(Fig.8)

ADJUSTMENTS FOR SEATING COMFORT

A. Armrest Position Adjustment

(Fig.9)

Turn the round plate and adjust to your position. Anticlockwise will move the armrest upward and clockwise will be downward

B. Seat Rotation and Position Adjustment

B-1: Seat Rotation Adjustment

→ Press the seat swivel lever downward.

→ Rotate your seat by clockwise or counter-clockwise direction.

(Fig.10)

(Fig.11)

B-2: Seat Position Adjustment

→ Push the seat adjust lever upwards.

→ slide your seat backward or forward to your desired position

→ let the lever lock into your preferred position.(See Fig 12)

Note: The distance of adjustment from backward to forward is 150mm.

(Fig 12)

OPERATION AND CONTROL PANEL

1. Control Panel Layout

LCD（Liquid Crystal Display）Power Scooter Control Panel, TN Type

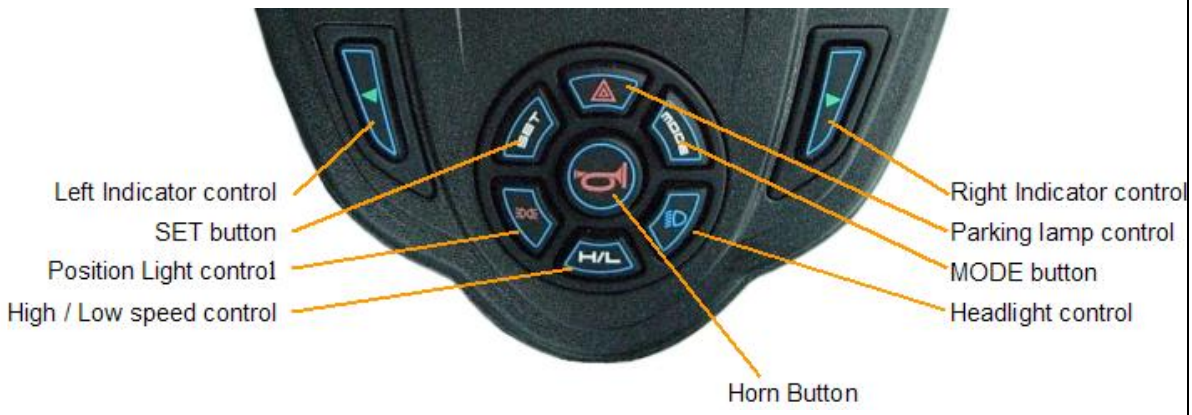
Function & Adjustment Buttons

2. Functions

2-1 Function Descriptions

FUNCTION		SPECIFICATION
1	**Temperature**	"°C" / "°F" modes
2	**Clock**	Hour / Minute display and setting
3	**Odometer** **Trip Meter**	**ODO** (99999 max), **TRIP** (999.9 max) Sum of distance and time
4	**Speedometer**	7 Segment display (2 1/2 digits +1 decimal) "**km/h**" and "**mph**" symbol
5	**High /Low Speed & Turn Status**	Indicated as icon  and 
6	**Power Indicator**	Battery remaining capacity and charging indicator (6 squares + Battery icon)
7	**Headlight**	Blue LED Including "Power-Saving" mode
8	**Position Light**	Orange LED Placed inside headlight, used while rainy or gloomy weather
9	**Brake Light**	Including "Brake-Mode" and "Parking Mode"
10	**Left-Right Direction Indicators**	Green LED Flash mode Auto switch-off after 30 seconds
11	**Parking Light**	Red LED Including "Parking Mode" Right/Left indicators flash simultaneously
12	**Malfunction Messages**	Red LED Malfunction code: 7 Segment display (1digit) + warning symbol 
13	**Power-On-Self-Test**	All LED illuminated

2-2 Buttons & Indicators

ITEM	DESCRIPTION
Function & Adjustment Buttons:  	
LED Indicators	Left-Indicator (Green) Right- Indicator (Green) Position Light (Amber) Headlight (Blue) Warning Indicator (Red) Parking Indicator (Red)
LCD Backlight	Illumination: 700 mcd min (Orange color)
Connecter	CON1: 20PIN

3. Usage Conditions

ITEM	SPECIFICATION
Voltage	DC 24 V
Operation Voltage	DC 16 ~32 V
Storage Temperature	-40°C ~ 90°C
Operation Temperature	-25°C ~ 55°C
Meter Angle at Handle Cover	30° of elevation while scooter assembly (LCD orientate to 6 o'clock)

4. Characteristics Test

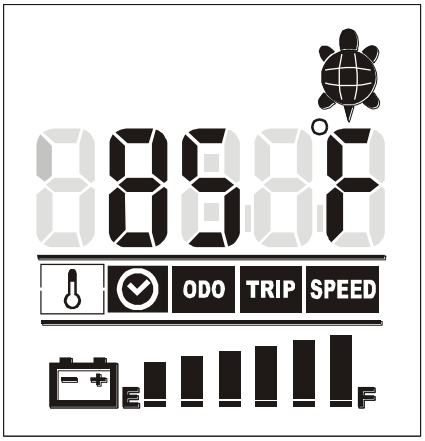
General Characteristic Performance Test (20 ± 5℃)

Hardware Circuit:

ITEM	SPECIFICATION	RESULT (n =)
Lowest Operation Voltage	16V max	____ V
Consuming Current (V_B = 24.0V)	Dynamic: 200 mA max (backlight and all of LED illuminated) Static: 5 mA max (Key Off status)	____ MA ____ mA

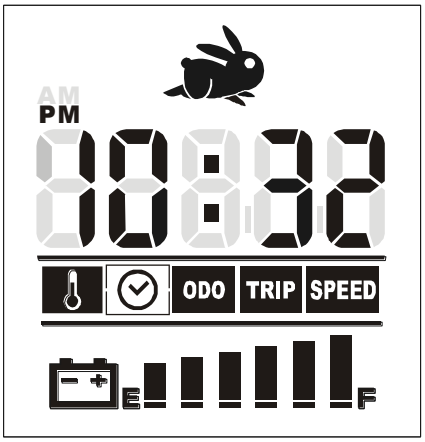
5. Operation of Control Panel

5-1. Temperature Meter

ITEM	DESCRIPTIONS
Operation Feature	Temperature sensor (NTC) detects and transfers the signal to a temperature value.
Tolerance	± 2°C
Working Mode	Press MODE to switch to TEMP-Mode:  ***** Display Range : -20°C ~50°C / -4°F ~122°F

ITEM	DESCRIPTIONS
Setting Mode (Unit Switch)	● Press MODE + SET for more than 2 seconds to enter Setting-Mode, and the backlight illuminates in the meantime. ● When "°C" or "°F" flashing, press SET to switch °C / °F.
Exit Setting Mode	Under Setting-Mode, when 1) idle for more than 20 seconds, 2) press MODE + SET for more than 2 seconds, the system will save the last setting value automatically and back to Working-Mode.

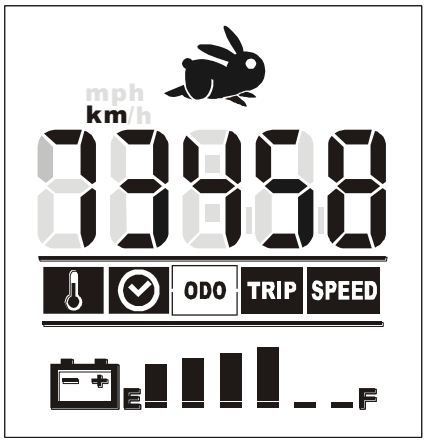
5-2. Clock

ITEM	**DESCRIPTIONS**
Tolerance	±2 sec. (per day)
Initial Setting Value	『**Hour：Min**』mode :『AM 12:00』
Working Mode	Press MODE to switch to CLOCK-Mode:  ● Display Range : AM12:00 ~ PM11:59 During 1 to 9 o'clock, "0" of tens on Hour digits won't show on LCD.

ITEM	DESCRIPTIONS
Setting Mode (Time Switch)	Press MODE + SET for longer than 2 seconds to enter Setting-Mode, the backlight illuminates in the meantime. 1) When "**Hour**" digit is flashing, press SET to increase the number, and then press MODE into "**Min**" setting mode. 2) When "**Min**" digit is flashing, press SET to increase the number, then press MODE back to "**Hour**" setting mode. ● If press SET for longer than 2 seconds, the number will increase continually till the button released. ● The setting value runs cyclically (only 2 sec. from 0 to 9)
Exit Setting Mode	Under Setting-Mode, when 1) idle for longer than 20 seconds 2) press MODE + SET for longer than 2 seconds, the system will save the last setting value automatically and back to Working-Mode.

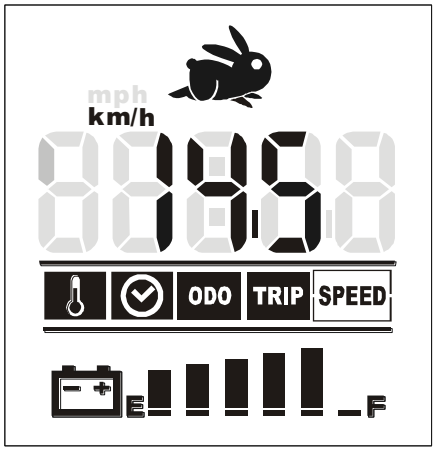
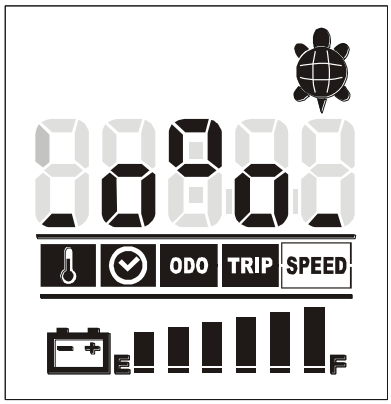
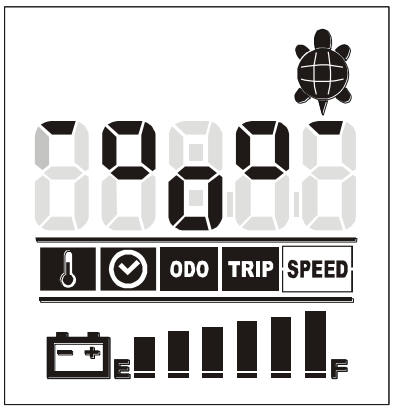
5-3. Odometer

ITEM	DESCRIPTIONS
Operation Features	OptoCoupler sensor detects the signal and then converts into a distance value.
Units Switch	When speedometer was set as 「**km/h**」, the odometer displays as kilometer. 「**mph**」, the odometer displays as mile. 「**/h**」, means the odometer is displaying as travel hours.

ITEM	DESCRIPTIONS
ODO Mode	Press MODE switching to『**ODO**』mode  ● Display Range:00000~99999 ● When the total distance ran to 99999km or 62149mile (99999÷1.609mile), the digits will be reset to zero “00000”.
TRIP Mode	Press MODE switching to『**TRIP**』mode  ● Display Range:0.0~999.9 ● When the distance goes to 999.9, the counter will stop, please press SET for 3 seconds to reset to zero “0.0”.

5-4. Speedometer

ITEM	DESCRIPTIONS
Operation Features	OptoCoupler sensor detects the signal and then converts into a speed value. When drive shaft runs at 2100 rpm, speedometer will display “60km/h”.
Tolerance	+15~20%
Digits range	0.0 ~ 30.0 Display Rate：0.5
Setting Mode (Units Switch)	● Press MODE + SET for longer than 2 seconds to enter Setting-Mode, backlight illuminates in the meantime. ● When 『**km/h**』 / 『**mph**』/ 『**/h**』are flashing, press SET to switch the unit.

ITEM	DESCRIPTIONS
Working Mode	Press MODE to enter 『**SPEED**』mode  ● 「**km/h**」means the speed is counted as kilometer. 「**mph**」means the speed is counted as mile. ● When SPEED was set on "**km/h"** or "**mph**", even the waiting screen is not SPEED mode, LCD will switch to SPEED mode when WIP (accelerator) is acting, and back to previous waiting screen automatically once WIP (accelerator) stopped. ● When SPEED was set on "**/h**", speedometer will be disabled (fit to non-speedometer model) and replaced by WIP (accelerator) operation screen. *Forward* *Backward*   ● When SPEED was set on "**/h**", LCD won't switch automatically to SPEED mode from another screen while WIP acted.
Exit Setting Mode	Under setting mode, when 1) idle for 20 seconds 2) press MODE + SET for longer than 2 seconds, the system will save the last setting value automatically and back to Working-Mode.

5-5. High/Low Speed & Turn Indicators

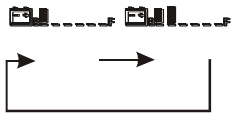
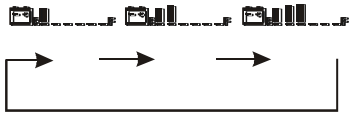
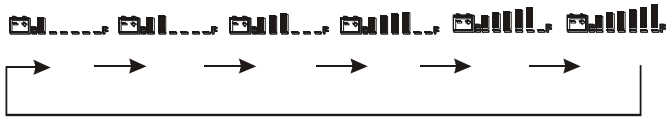
ITEM	DESCRIPTIONS
Operation Features	● Press H/L to switch High / Low speed. (*Control signals: TRN, with memory storage) ● Take exterior turn-switch as determinant signal (*Control signals: TRN)
Symbols of Status	High Speed:  Low Speed:  Turn Status:  (Flashing)
Flicker Frequency	1 second

5-6. Power Indication

<table>
<tr><th>ITEM</th><th><u>DESCRIPTIONS</u></th></tr>
<tr><td>Battery Remaining Capacity</td><td>
<table>
<tr><th>Remaining Capacity (%)</th><th>Scale Bar</th></tr>
<tr><td>100
(6)</td><td>  </td></tr>
<tr><td>85
(5)</td><td>  </td></tr>
<tr><td>70
(4)</td><td>  </td></tr>
<tr><td>55
(3)</td><td>  </td></tr>
<tr><td>40
(2)</td><td>  </td></tr>
<tr><td>30
(1)</td><td> 
and icon  is flashing</td></tr>
<tr><td>20</td><td>Warning LED  is flashing</td></tr>
</table>
</td></tr>
<tr><td>Flicker Frequency</td><td>2 seconds</td></tr>
<tr><td>Operation Characters</td><td>

The scale status only decrease, won’t increase.
When the remaining capacity was less than 30%, warning sound (“Bi-Bi” - two short sounds) act at 1 second intervals.
While (1) Key OFF (2) Charging-Mode (3) Sleep-Mode, the warning sound will be released.

</td></tr>
</table>

<table>
<tr><th>ITEM</th><th><u>DESCRIPTIONS</u></th></tr>
<tr><td>Charge Indication</td><td>
<table>
<tr><th>Remaining Capacity (%)</th><th>Scale Bar</th></tr>
<tr><td>40
(2)</td><td>  </td></tr>
<tr><td>55
(3)</td><td>  </td></tr>
<tr><td>70
(4)</td><td>  </td></tr>
<tr><td>80
(5)</td><td>  </td></tr>
<tr><td>90
(6)</td><td>  </td></tr>
<tr><td>100
(7)</td><td>  </td></tr>
</table>
</td></tr>
<tr><td>Increase Frequency</td><td>0.5 second</td></tr>
<tr><td>Operation Character</td><td>

Scale status only decrease, won’t increase.
Take the PIN3(CH3) of charger as the determinant signal, when CH3 is grounded (L), LCD will enter Charging-Mode, not limited by “KEY ON” or “KEY OFF”.
Any pressing of button will illuminate LCD backlight, and switch off automatically if no more pressing after 5 seconds.

</td></tr>
<tr><td>Remarks</td><td>Above scale bar status only for reference, the accurate diagnosis is still subject to the indicator of charger.</td></tr>
</table>

5-7. Headlight

ITEM	DESCRIPTIONS
Operation Feature	Take exterior headlight switch as determinant signal. ● Press button  to switch on/off LED  . ● LCD backlights will be turned on/off when headlight switching on/off.
Power Saving Mode	● When motor is resting, power modulate down to 30% (Headlight) ● When motor acts, power modulate up to 100% (Headlight)
Usage Condition	While (1) KEY OFF (2) Power-Saving Mode (3) Sleep-Mode, the function will be disabled.
Determinant Condition	● Power-Saving ⇨ Full-Power : React immediately ● Full-Power ⇨ Power-Saving : 5 sec delay
Remarks	(1) Loop Load: 24V/50W max (2) With “short circuit” and “overload” protection

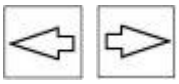
5-8. Position Light

ITEM	DESCRIPTIONS
Operation Feature	Take exterior position-light switch as determinant signal. ● Press button  to switch on/off LED  . ● LCD backlights will be turned on/off when back-up lamp switching on/off.
Usage Condition	While (1) KEY OFF (2) Power-Saving Mode (3) Sleep-Mode , the function will be disabled.
Remarks	(1) Loop Load: 24V/50W max (2) With “short circuit” and “overload” protection

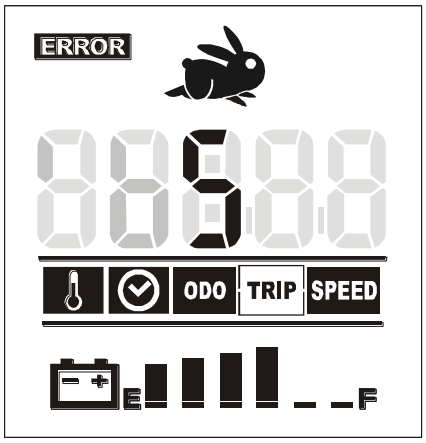
5-9. Brake and Reversing Light

ITEM	DESCRIPTIONS
Operation Feature	Take exterior WIP / RBK / Headlight / Back-up lamps switch as determinant signal.
Control Mode	● Judge to be “Brake” or “Handbrake” state, when WIP (accelerator) signal changed from actuated to neural position, and will recover automatically after 3 seconds (Brake-Light Mode). ● Judge to be “Reverse” state, the brake light flashes (Reversing-light Mode) ● When the headlight and position light was turned on/off, and the brake light will be turn on/off simultaneously.
Usage Condition	While (1) controller closed (2) Charging-Mode, the function will be disabled.
Determinant Condition	● Parking status is adjusted by “motor direction” and “controller” ● Warning sound of parking was managed by controller
Remarks	(1) Loop Load: 24V/50W max (2) With “short circuit” and “overload” protection (electric type)
Flicker Frequency	1 second

5-10. Direction Indicators and Parking Light

ITEM	**DESCRIPTIONS**
Operation Feature	Take exterior left-right direction indicators and parking lamp switch as the determinant signal.
(Control Mode) **Left-direction lamp**	Press button  once, the left-indicator  start to flash, and the warning sound act simultaneously, then press button again to switch off the indicator.
Right-direction lamp	Press button  once, the right-indicator  start to flash, and the warning sound act simultaneously, then press button again to switch off the indicator.
Parking lamp	Press button  once, the right /left/ park indicators  start to flash, warning sound act, then press button again to turn off above indicators.
Usage Condition	While (1) KEY OFF (2) Charging-Mode (3) Sleep-Mode, the function will be disabled.
Flicker Frequency	1 second
Warning Sound Frequency	One short "**Bi**" sound per second
Determinant Condition	Left-Right indicators have priority to Parking lamp. <*Ex.*> *If "Parking lamp" turned on already, now you start "Right indicator" function, the flashing indicator lamps will change from both side (left & right) to right side, and the "Parking lamp" function will be closed.*
Remarks	(1) Load circuit for left-direction light: 24V/50W max (2) Load circuit for right-direction light: 24V/50W max (3) With "short circuit" and "overload" protection

5-11. Malfunction Messages

ITEM	DESCRIPTIONS
Operation Feature	Take the connector pin (KEY) of controller as determinant signal, then converts it into digital code.
Usage Condition	When the controller send out an error message, warning indicator  start flashing with controller signal at same time, the "Error message code" will show on LCD screen. 
Flicker Frequency	1 second

Controller message (Flicker)	Message code	ERROR symbol	Status
1	--	--	Battery needs charge soon.
2	2	On	Low-voltage, needs charge now
3	3	On	Over-voltage
4	4	On	Over-current
5	5	On	Park Brake lost or faulted
6	6	On	Accelerator not align center
7	7	On	Accelerator broken or faulted
8	8	On	Motor broken or faulted
9	9	On	Others

5-12. Power-On-Self-Test

ITEM	DESCRIPTIONS
Initial Status	When scooter power on, the control panel will take a self-test first; the backlight and all LCD segments will be tuned on for 3 seconds, then switch automatically to the default working mode.
LCD Backlight	When press MODE + SET buttons, the LCD backlight will illuminate and turn off automatically if the button doesn't be operated for longer than 5 seconds.

6. MAINTENANCE & REPAIR

Your power scooter is designed for minimal maintenance. However, like any motorized vehicle it requires routine maintenance.

To keep your S9 for years of trouble-free operation, we recommend you follow the following maintenance checks as scheduled.

DAILY CHECKS

1. Visual check on the conditions of tyres.
2. Inspect the battery condition meter on the controller to determine if batteries need to be charged.

WEEKLY CHECKS

1. Your power scooter comes with standard pneumatic tyres. If your power scooter comes with optional air tires, make sure to maintain the pressure of the tires between 30-35 psi.

MONTHLY CHECKS

1. Visually inspect the controller harnesses. Make sure that they are not frayed, cut or have any exposed wires.

SEMI-ANNUAL CHECKS

1. Check the motor brushes. We recommended that your authorized dealer inspect the brushes every six months or sooner if your power scooter is not operating smoothly. If inspection determines excessive wear on the brushes, they must be replaced or motor damage will result.

Warning! Failure to maintain the brushes could void the power scooter warranty.

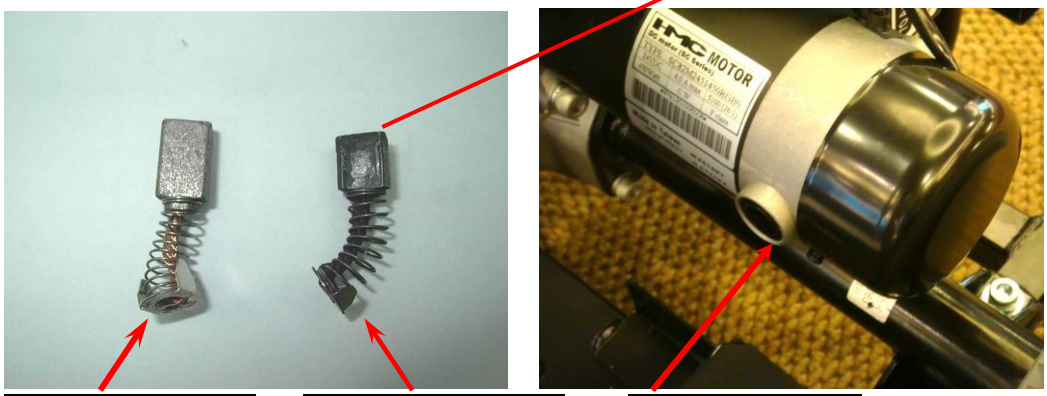
To inspect or replace the motor brushes:

Unscrew the motor brush caps.

Remove the brushes.

Inspect the brushes for wear.

Replace the brushes if necessary.



New Motor Brush | Worn Motor Brush | Motor Brush caps

Inspect the state of the battery terminals every six months. Make sure that they are not corroded and the connections are tight. Periodically apply a thin film of petroleum jelly on the surface of terminals to guard against corrosion.

CHECKS

- Make sure to keep the controller clean while protecting it from rain or water. Never hose off your power scooter or place it in direct contact with water.
- Keep wheels free from lint, hair, sand and carpet fibers.
- Visually inspect the tire tread. If less than 1mm(1/32”), please have your tyres replaced by your local dealer.
- All upholstery can be washed with warm water and mild soap. Occasionally check the seat and back for sagging, cuts and tears. Replace if necessary. Do not store your scooter in damp or humid conditions as this will lead to mildew and rapid deterioration of the upholstery parts.
- All moving mechanism will benefit from simple lubrication and inspection. Lubricate using petroleum jelly or light oil. Do not use too much oil, otherwise small drips could stain and damage carpets and furnishings etc. Always perform a general inspection of the tightness of all nuts and bolts.
- RHINO controller: Your scooter is fitted with a Rhino controller, which continuously monitors the operating conditions of your scooter. If it detects a problem it will indicate with error message by flashing light on the power ON/ OFF light. You must count the number of the flash, and see the list to check what kind of error has happened according to the number)

Number of Flashes	Fault	Impact on Scooter	Notes
1	Battery needs recharging	Will drive	Battery charge is running low. Recharge the batteries as soon as possible.
2	Battery voltage too low	Drive inhibited	Battery charge is empty. Recharge the batteries. If the scooter is left off for a few minutes, battery charge may recover sufficiently to allow driving for a short period of time.
3	Battery voltage too high	Drive inhibited	Battery charge is too high. If a charger is plugged in, unplug it or turn the Charge/Run switch to Run. Scooters powered by RHINO will charge the batteries when traveling down slopes or decelerating. Excessive charging in this manner may cause this fault. Turn the scooter power off and then back on again.
4	Current limit time out	Drive inhibited	The scooter has drawn too much current for too long, possibly because the motor has been over worked, jammed or stalled. Turn the scooter power off, leave for a few minutes, and then turn the power back on again. The controller has detected a shorted motor. Check the

			loom for shorts and check the motor. Contact your service agent.
5	Brake fault	Drive inhibited	Check that the park brake release lever is in the engaged position . The park brake coil or wiring is faulty. Check the park brake and wiring for open or short circuits. Contact your service agent.
6	Out of Neutral at Power Up	Drive inhibited	Throttle is not in neutral position when tuning switch key on. Return throttle to neutral, turn power off and back on again. Throttle may need to be re-calibrated Check throttle wiring.
7	Speed Pot Error	Drive inhibited	The throttle or its wiring is faulty. Check for open or short circuits. Throttle may not be correctly set up. Contact your service agent.
8	Motor Volts Error	Drive inhibited	The motor or its wiring is faulty. Check for open or short circuits. Contact your service agent.
9	Other Internal Errors	Drive inhibited	Contact your service agent.

Note:

If you experience any technical problems, it is recommended that you check with your local dealer before attempting to troubleshoot on your own.

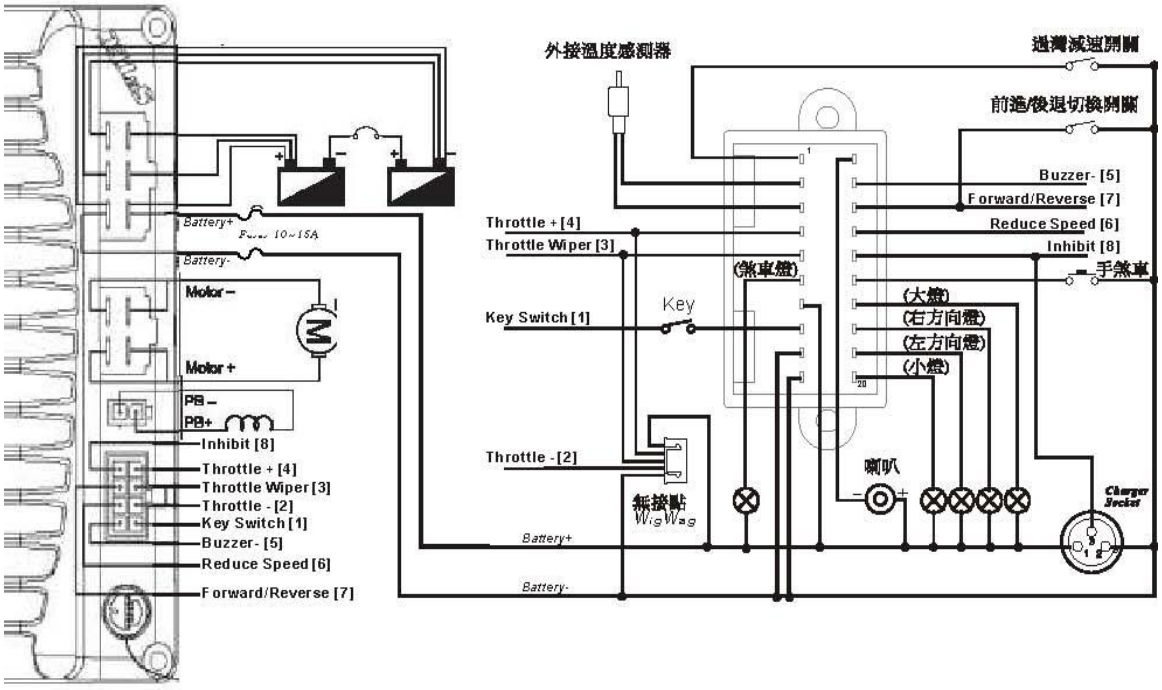
The following symptoms could indicate a serious problem with your power scooter. Contact your local dealer if any of the following arises:

1. Motor noise
2. Frayed harnesses
3. Cracked or broken connectors
4. Uneven wear on any of tires
5. Jerky motion
6. Pulling to one side
7. Bent or broken wheel assemblies
8. Does not power up
9. Powers up, but does not move

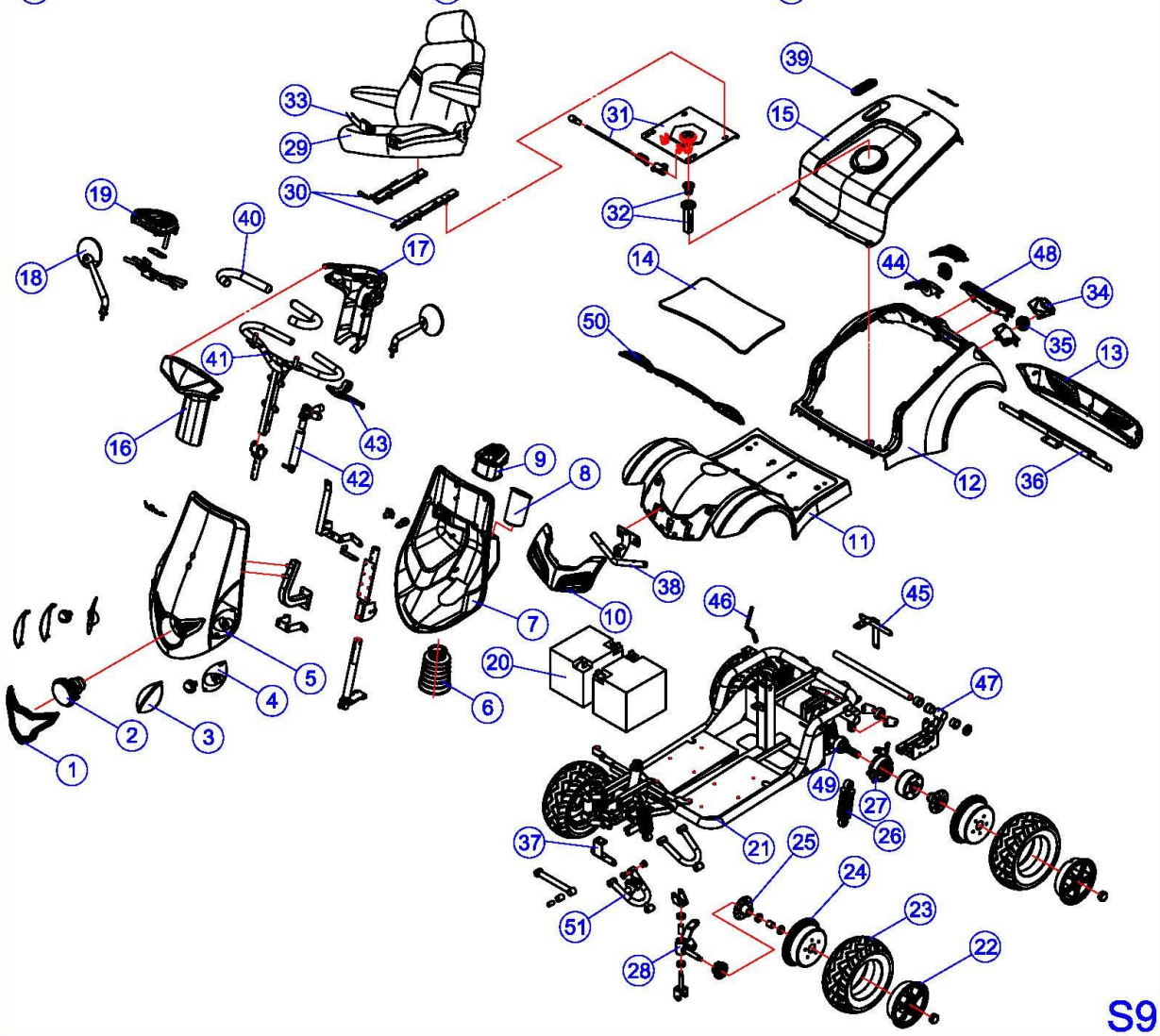
7. System Configuration

ITEM	SPECIFICATION
Controller	RHINO Series
Wig-Wag	CTE NCW-K001
Bulbs	24V / 50W max

7. Circuit Diagram



1 CP SHIELD
2 HEAD LIGHT
3 LIGHT COVER
4 LIGHT SEAT
5 FF COVER
6 RUBBER DUST COVER
7 FR COVER
8 DRINK BRACKET
9 RUBBER DUST COVER
10 FRONT BUMPER
11 MAIN FRONT SHROUD
12 REAR COVER
13 LAMP CAP
14 CARPET
15 MAIN REAR SHROUD
16 FRONT TILLER COVER
17 REAR TILLER COVER
18 REAR VIEW MIRROR
19 CONTROL PANEL
20 BATTERY
21 BADY FRAME
22 ALIALUMINUM RIM
23 TYRE
24 INNER RIM
25 FIXING BOLT WITH HUB
26 SUSPENTION
27 BRAKE
28 FRONT AXLE
29 CAPTAIN SEAT ASM
30 SEAT SLIDING RAIL
31 SEAT BASE
32 SEAT SLIDING POST
33 SAFETY BELT
34 LAMP COVER
35 REAR LIGHT
36 REAT BUMPER BRACKET
37 FF COVER BRACKET
38 FRONT BUMPER BRACKET
39 PLUG
40 SPACER FOR POETNTIAL METER
41 TILLER FRAME
42 TILLER RAM MECHANISM
43 BRAKE LEVER
44 LIGHT SEAT
45 SUPPORT BRACKET
46 RELEASE LEVER
47 SUSPENTION BRACKET
48 REAR LAMP
49 TRANSAXLE
50 FRONT FLOOR
51 DOUBLE A ARM



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