



ARIES EV



Classic Series Operation and Maintenance Manual

CE Certification

Compliant with ANSI / LTVA Z130.1

Before operating this vehicle, please read and fully understand the contents of this manual.

Note: This manual applies to the A817 / B817 series models.

Preface

Dear User,

Thank you for purchasing this Aries EV/ LvTong product!

Welcome to your new golf car. This vehicle is engineered in strict accordance with the ANSI/ILTV Z13.01-2012 Golf Car Safety and Performance Specifications. By integrating advanced technologies from Europe and the United States, it delivers exceptional performance, reliability, and a modern design.

Built with premium components from industry-leading manufacturers, your vehicle features a durable automotive-grade baked enamel finish and a high-strength welded chassis. The Classic/817 Series is designed to be highly cost-effective and efficient.

About This Manual

To ensure safe operation, peak performance, and an extended service life for your vehicle, we have prepared this Operation and Maintenance Manual. It contains essential information regarding:

Vehicle structure and components

Standard operating procedures

Routine maintenance schedules

Critical safety precautions

Please read this manual thoroughly before your first use and retain it for future reference. If you have any questions during operation or maintenance, please consult this guide or contact our authorized Dealers for assistance.

Important Notices

Continuous Improvement: Due to ongoing product development, minor variations may exist between the descriptions in this manual and your actual vehicle. In all such cases, the physical vehicle supersedes the manual.

Copyright: Reproduction, transmission, or duplication of this manual, in whole or in part, is strictly prohibited without the express written consent of Aries EV Corporation.

Intended Use: This vehicle is strictly intended for off-road use. It is not designed, equipped, or licensed for operation on public roads or highways unless it has undergone an official Low-Speed Vehicle (LSV) conversion and has been issued a corresponding Manufacturer's Certificate of Origin (MCO) permitting street-legal use in accordance with local, state, and federal regulations.

Important Manual Information

Particularly important information will be highlighted using the following markings.



Safety Warning: Caution! Stay Alert!
Concerning Your Safety!



WARNING

Failure to follow the warnings and instructions may result in severe injury or even death to the operator, passengers, bystanders, or personnel performing maintenance and inspection on the vehicle.

CAUTION

This message contains special information intended to prevent unnecessary damage to the vehicle.

Description: _____

This message provides additional important information. Our company will periodically update and improve the related models or components. Should this manual be revised, we will not issue a separate notification. We appreciate your understanding.

Description: _____

This manual strives to provide complete and detailed text, images, and specifications based on all available information. Our company reserves the right to make changes to this manual without prior notice. If you have any questions regarding this manual, please contact our authorized distributor.

This manual should be regarded as an integral part of the vehicle and shall remain with the vehicle at the time of sale.



WARNING

Before operating the vehicle, please read and fully understand the contents of this manual.

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Important Labels



! Safety and Instruction Labels

! WARNING

Before operating the vehicle, please carefully read the labels below and promptly replace any labels that are damaged or missing.

①

Operating Essentials



Brake Pedal



Accelerator Pedal

- Before driving, please read the label information and the user manual.
- Ensure all passengers are properly seated and have fastened their seat belts.
- Select the appropriate forward or reverse gear.
- When starting the vehicle, gently press the accelerator pedal; when stopping, gently press the brake pedal.
- Adjust your speed appropriately according to terrain and visibility, and avoid driving too fast.
- Exercise extra caution in crowded areas, when reversing, or when road surfaces are slippery.
- Always shift between forward and reverse only after the vehicle has come to a complete stop for two seconds.
- Do not press the brake pedal and the accelerator pedal simultaneously while driving!

②



WARNING

 EXPLOSIVE GASES are released when batteries are charged or discharged. Keep well ventilated. Keep sparks, flames and cigarettes away. Shield eyes when working near batteries	Explosive Gases When the battery is being charged or discharged, explosive gases may be released. Keep the area well ventilated and stay away from open flames.	 SULFURIC ACID in batteries will burn skin, eyes, and clothing. Do not tip batteries. Keep vent caps tight and level. In event of injury, flush with physician immediately.	Sulfuric Acid When working near the battery, protect your eyes. The sulfuric acid inside the battery can cause burns to the skin and eyes. Ensure the battery caps are securely closed. If injury occurs, rinse with clean water immediately and contact a doctor.	 ELECTRICAL SHORTS can result in burns. Do not make connection between positive and negative battery terminals.	Battery Short Circuit A battery short circuit may cause a fire. Do not attempt to connect the positive and negative terminals of the battery.
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③



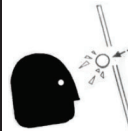
Warning

- Before driving, be sure to read the operating instructions located near the steering wheel.
- Do not exceed the rated passenger capacity.
- Do not start the vehicle before all passengers are seated securely.
- When turning, drive slowly or fully depress the parking pedal.
- When driving on hills, slopes, or inclined surfaces, proceed slowly and travel straight up or straight down.
- When leaving the vehicle, pull the hand brake lever upward firmly.
- When not in use, turn off the main switch and remove the key.
- Passengers shall remain seated and hold the grab handle or handrail securely.
- Do not extend hands or feet outside the vehicle while driving.

④



WARNING



Windshields do not provide protection from other flying objects.

The windshield cannot provide protection against other flying objects.

Operational Safety

Precautions Before Operating This Vehicle:

1. Carefully read this manual and the vehicle's safety guidelines before operating.
2. Only authorized personnel may operate this vehicle in designated areas.
3. The number of occupants, including the driver, shall not exceed the rated capacity.
4. Do not operate the vehicle under the influence of alcohol or medication that impairs vision or judgment.



Precautions During Vehicle Operation:

1. Individuals without driving qualifications may not operate this vehicle.
2. Keep your body inside the vehicle, and do not start driving until all passengers are properly seated.
3. Keep both hands on the steering wheel and your eyes focused on the road ahead.
4. Avoid sudden acceleration or abrupt braking.
5. Do not overload the vehicle, as this may reduce braking performance and cause damage to electrical components, creating potential safety hazards.
6. Do not turn the steering wheel abruptly while driving at high speed.
7. Operate the vehicle only within the approved slope range.

Unauthorized modification of any parts of this vehicle is strictly prohibited.

Operational Safety

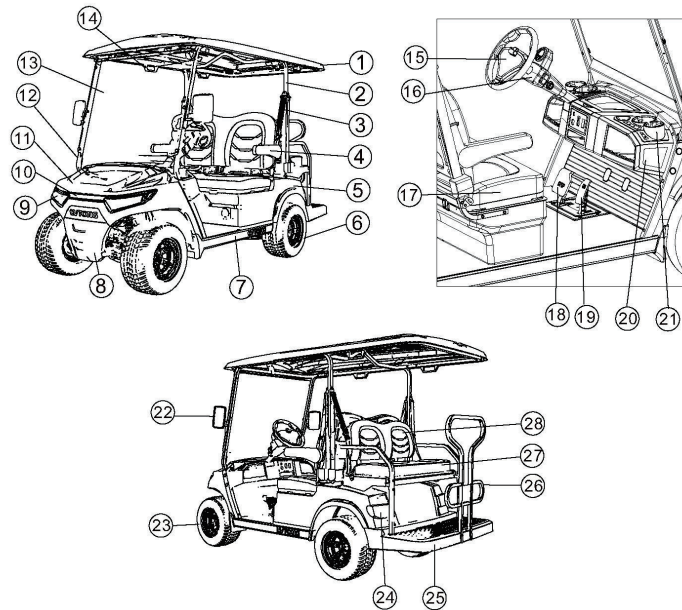


- Keep both hands on the steering wheel and your eyes focused on the road ahead.
- Use extreme caution when reversing in busy areas; check your surroundings carefully and move backward slowly.
- Avoid sudden starts or abrupt stops.
- Accelerate or decelerate according to road conditions.
- Do not turn the steering wheel sharply while driving at high speeds.



- Do not modify or increase the vehicle's safety mechanisms or passenger capacity, nor make any changes not specified in this manual.

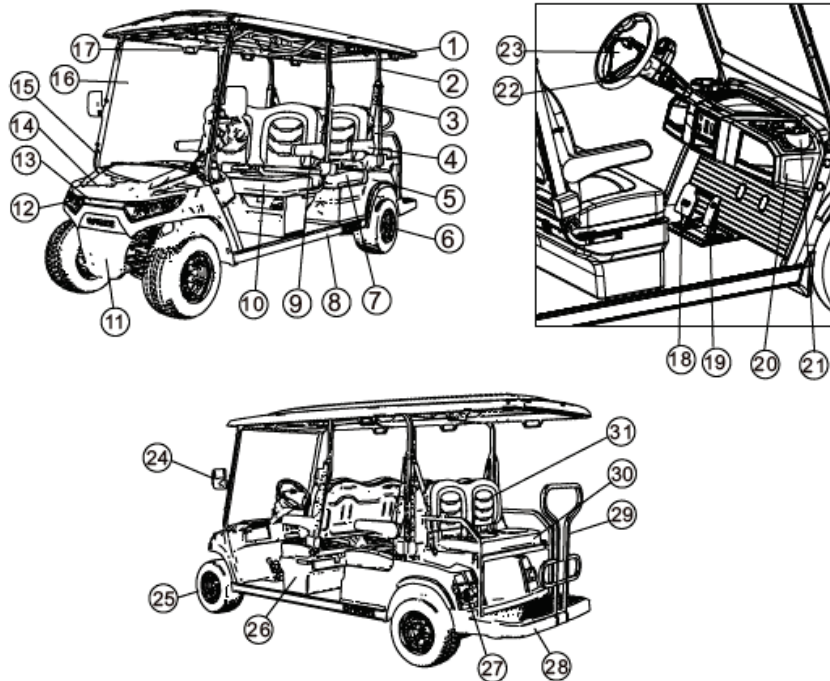
Vehicle Structure and Specifications



C4 (A817.2+2) Vehicle Structure:

- | | | |
|----------------------------|------------------------|---------------------------------------|
| 1. Roof | 11. Front cowl | 21. Cup holder |
| 2. Rear roof support frame | 12. Windshield bracket | 22. Rearview mirror |
| 3. Three-point safety belt | 13. Windshield | 23. Front wheel |
| 4. Seat backrest | 14. Roof handle | 24. Tail light |
| 5. Rear cowl | 15. Steering wheel | 25. Caddie footboard |
| 6. Rear wheel | 16. Combination switch | 26. Rear handrail for additional seat |
| 7. Aluminum edge trim | 17. Seat cushion | 27. Foldable rear seat cushion |
| 8. Front bumper | 18. Brake pedal | 28. Rear seat backrest |
| 9. Headlamp | 19. Accelerator pedal | |
| 10. Daytime running light | 20. Instrument panel | |

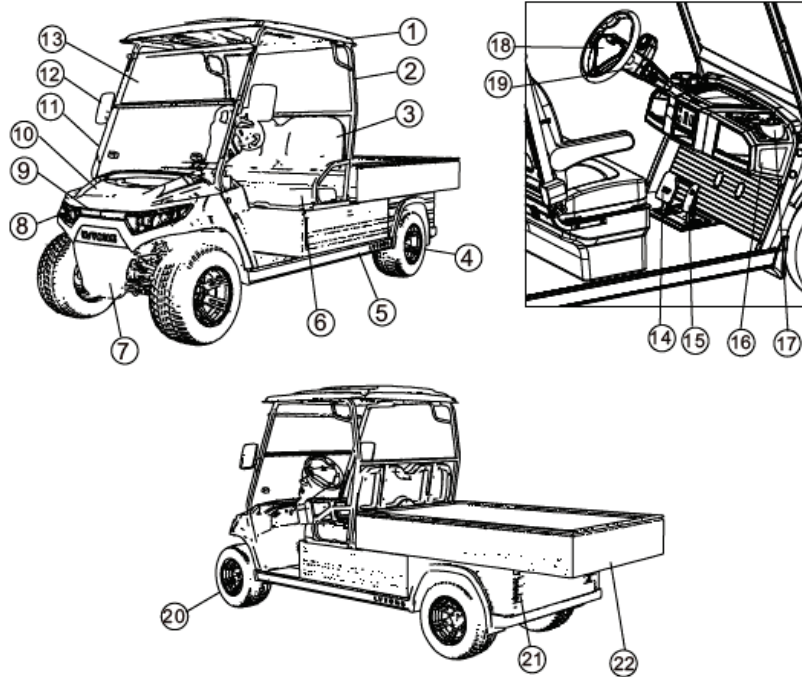
Vehicle Structure and Specifications



C6 (A817.4+2) Vehicle structure:

- | | | |
|----------------------------|---------------------------|---------------------------------------|
| 1. Roof | 11. Front bumper | 21. Cup holder |
| 2. Rear roof support frame | 12. Headlamp | 22. Combination switch |
| 3. Three-point safety belt | 13. Daytime running light | 23. Steering wheel |
| 4. Seat backrest | 14. Front cowl | 24. Rearview mirror |
| 5. Rear cowl | 15. Windshield bracket | 25. Front wheel |
| 6. Rear wheel | 16. Windshield | 26. Center seat bucket |
| 7. Seat cushion | 17. Roof handle | 27. Tail light |
| 8. Edge trim | 18. Brake pedal | 28. Caddie footboard |
| 9. Front seat backrest | 19. Accelerator pedal | 29. Rear handrail for additional seat |
| 10. Front seat cushion | 20. Instrument panel | 30. Foldable rear seat cushion |
| | | 31. Rear seat backrest |

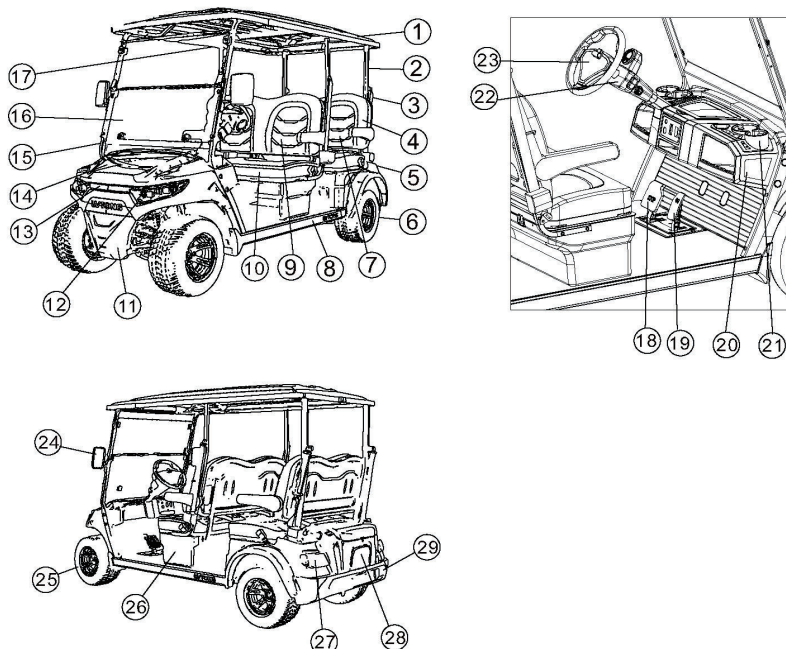
Vehicle Structure and Specifications



C2H8 (A817.H8) vehicle structure:

- | | | |
|----------------------------|------------------------|----------------|
| 1. Roof | 11. Windshield bracket | 21. Tail light |
| 2. Rear roof support frame | 12. Rearview mirror | 22. Cargo box |
| 3. Seat backrest | 13. Windshield | |
| 4. Rear wheel | 14. Brake pedal | |
| 5. Edge trim | 15. Accelerator pedal | |
| 6. Seat cushion | 16. Instrument panel | |
| 7. Front bumper | 17. Cup holder | |
| 8. Headlamp | 18. Steering wheel | |
| 9. Daytime running light | 19. Combination switch | |
| 10. Front cowl | 20. Front wheel | |

Vehicle Structure and Specifications



C4F (B817.4) Vehicle structure:

1. Roof	11. Front bumper	21. Cup holder
2. Rear roof support frame	12. Headlamp	22. Combination switch
3. Three-point safety belt	13. Daytime running light	23. Steering wheel
4. Seat backrest	14. Front cowl	24. Rearview mirror
5. Rear cowl	15. Windshield bracket	25. Front wheel
6. Rear wheel	16. Windshield	26. Center seat bucket
7. Seat cushion	17. Roof handle	27. Tail light
8. Edge trim	18. Brake pedal	28. Trunk
9. Front seat backrest	19. Accelerator pedal	29. Rear bumper
10. Front seat cushion	20. Instrument panel	

C2 (LT-A817.2) Configuration and Specifications (Standard Version)

Standard Vehicle Configuration and Specification Sheet: (Actual configuration
subject to contract)

		Electrical system	Controller	Lvtong dedicated AC controller LEVD0-05M35F4 / 450A	
			Battery	105 AH Sisway LifePo4 Lithium Battery	
			Electric motor	Lvtong dedicated AC asynchronous motor 48V / 5KW	
			Charger	Intelligent on-board charger 48V / 25A, charging time < 8 hours (at 80% discharge rate)	
			DC converter	High-power non-isolated DC-DC converter 48V / 12V-300W	
Body configuration	Front windshield and wiper	Acrylic AS4-DOT: optional laminated glass with wiper	Roof	ABS vacuum-formed roof	
	Seats	Ergonomic seats with leather upholstery and foldable armrests	Floor	Embossed aluminum anti-slip floor, high-strength structure, corrosion-resistant and anti-aging	
	Rearview mirrors	One manually adjustable, foldable exterior mirror on each side			
	Lighting and warning signals	LED front combination lamp (low beam, high beam, turn signal, daytime running light, position lamp) LED rear tail lamp (brake light, position lamp, turn signal); snail horn; reverse buzzer			
	Body	Front cowl, seat bucket, and body panels are made of automotive-grade PP injection molding; matte black aluminum roof pillars			
	Instrument panel	Injection-molded dashboard with ignition switch, single-lever combination switch, gear selector, and cup holder USB + Type-C, LCD electric vehicle combination instrument (includes fault diagnostic display), optional multimedia console, one-button start			
	Steering system	Bidirectional rack-and-pinion steering system with automatic clearance compensation; optional EPS electronic power steering			
	Brake system	Dual-circuit four-wheel hydraulic brakes, four-wheel disc brakes + EPB electronic parking brake			
	Front suspension system	Double wishbone independent front suspension + coil springs + hydraulic tube shock absorbers			
	Rear suspension system	Integral rear axle, gear ratio 12.31:1, coil-spring damping + hydraulic tube shock absorbers + rear stabilizer bar			
	Tire specification	205/65-10 (tire diameter 520 mm) 10-inch steel rims, optional aluminum alloy rims			
Rated passengers	2 persons (including driver)				
Main Technical Specifications of the Vehicle					
1.	Overall dimensions: Length × width × height	2740*1210*1820mm			
2.	Wheelbase	1670mm			
3.	Curb weight (including batteries)	560kg			
4.	Maximum speed at full load	25km/h			
5.	Driving range	80-100 km (on level ground)			
6.	Minimum turning radius	3.2m			
7.	Maximum grade ability	30%			
8.	Parking performance on inclines	30%			
9.	Minimum ground clearance	120mm			
10.	Braking distance	<6m			
11.	Wheel track	Front 905 mm / rear 1000 mm			
12.	Braking stability	1.6m			
13.	Rated occupants	2			
14.	Energy consumption per 100 km	8kwh			

C2XL (LT-A817.2G) Configuration and Specifications (Lifted Version)

Standard Vehicle Configuration and Specification Sheet: (Actual configuration subject to contract)

		Electrical system	Controller	Lvtong dedicated AC controller LEVD0-05M35F4 / 450A		
			Battery	105 AH Siewau LifePod Lithium Battery		
			Electric motor	Lvtong dedicated AC asynchronous motor 48V / 5KW		
			Charger	Intelligent on-board charger 48V / 25A, charging time < 8 hours (at 80% discharge rate)		
			DC converter	High-power non-isolated DC-DC converter 48V / 12V-300W		
Body configuration	Front windshield and wiper	Acrylic AS4-DOT:optional laminated glass with wiper	Roof	ABS vacuum-formed roof		
	Seats	Ergonomic seats with leather upholstery and foldable armrests	Floor	Embossed aluminum anti-slip floor, high-strength structure, corrosion-resistant and anti-aging		
	Rearview mirrors	One manually adjustable, foldable exterior mirror on each side				
	Lighting and warning signals	LED front combination lamp (low beam, high beam, turn signal, daytime running light, position lamp) LED rear tail lamp (brake light, position lamp, turn signal); snail horn; reverse buzzer				
	Body	Front cowl, seat bucket, and body panels are made of automotive-grade PP injection molding; matte black aluminum roof pillars				
	Instrument panel	Injection-molded dashboard with ignition switch, single-lever combination switch, gear selector, and cup holder USB + Type-C, LCD electric vehicle combination instrument (includes fault diagnostic display), optional multimedia console, one-button start				
	Steering system	Bidirectional rack-and-pinion steering system with automatic clearance compensation; optional EPS electronic power steering				
	Brake system	Dual-circuit four-wheel hydraulic brakes, four-wheel disc brakes + EPB electronic parking brake				
	Front suspension system	Double wishbone independent front suspension + coil springs + hydraulic tube shock absorbers				
	Rear suspension system	Integral rear axle, gear ratio 16:1, coil-spring damping + hydraulic tube shock absorbers + rear stabilizer bar				
Tire specification	Dedicated beach tires 23×10.5-12 with 12-inch aluminum rims, wheel diameter 580 mm					
Rated passengers	2 persons (including driver)					
Main Technical Specifications of the Vehicle						
1.	Overall dimensions: Length × width × height		2590*1370*2060mm			
2.	Wheelbase		1708mm			
3.	Curb weight (including batteries)		578kg			
4.	Maximum speed at full load		25km/h			
5.	Driving range		75-95 km (on level ground)			
6.	Minimum turning radius		3.45m			
7.	Maximum grade ability		22%			
8.	Parking performance on inclines		20%			
9.	Minimum ground clearance		185mm			
10.	Braking distance		<6m			
11.	Wheel track		Front 1020 mm / rear 1070 mm			
12.	Braking stability		1.8m			
13.	Rated occupants		2			
14.	Energy consumption per 100 km		8kwh			

C4 (LT-A817.2+2) Configuration and Specifications (Standard Version)

Standard Vehicle Configuration and Specification Sheet: (Actual configuration
subject to contract)

		Electrical system	Controller		Lvtong dedicated AC controller LEVD0-05M35F4 / 450A		
			Battery		105 AH Sisway LifePo4 Lithium Battery		
			Electric motor		Lvtong dedicated AC asynchronous motor 48V / 5KW		
			Charger		Intelligent on-board charger 48V / 25A, charging time < 8 hours (at 80% discharge rate)		
			DC converter		High-power non-isolated DC-DC converter 48V / 12V-300W		
Body configuration	Front windshield and wiper		Acrylic AS4-DOT; optional laminated glass with wiper		Roof	ABS vacuum-formed roof	
	Seats		Ergonomic seats with leather upholstery and foldable armrests		Floor	Embossed aluminum anti-slip floor, high-strength structure, corrosion-resistant and anti-aging	
	Rearview mirrors		One manually adjustable, foldable exterior mirror on each side				
	Lighting and warning signals		LED front combination lamp (low beam, high beam, turn signal, daytime running light, position lamp) LED rear tail lamp (brake light, position lamp, turn signal); snail horn; reverse buzzer				
	Body		Front cowl, seat bucket, and body panels are made of automotive-grade PP injection molding; matte black aluminum roof pillars				
	Instrument panel		Injection-molded dashboard with ignition switch, single-lever combination switch, gear selector, and cup holder USB + Type-C, LCD electric vehicle combination instrument (includes fault diagnostic display), optional multimedia console, one-button start				
	Steering system		Bidirectional rack-and-pinion steering system with automatic clearance compensation; optional EPS electronic power steering				
	Brake system		Dual-circuit four-wheel hydraulic brakes, four-wheel disc brakes + EPB electronic parking brake				
	Front suspension system		Double wishbone independent front suspension + coil springs + hydraulic tube shock absorbers				
	Rear suspension system		Integral rear axle, gear ratio 12.31:1, coil-spring damping + hydraulic tube shock absorbers + rear stabilizer bar				
	Tire specification		205/65-10 (tire diameter 520 mm) 10-inch steel rims, optional aluminum alloy rims				
	Rated passengers		4 persons (including driver)				
Main Technical Specifications of the Vehicle							
1. Overall dimensions: Length × width × height			2785*1210*1910mm				
2. Wheelbase			1670mm				
3. Curb weight (including batteries)			585kg				
4. Maximum speed at full load			25km/h				
5. Driving range			80–100 km (on level ground)				
6. Minimum turning radius			3.2m				
7. Maximum grade ability			25%				
8. Parking performance on inclines			25%				
9. Minimum ground clearance			120mm				
10. Braking distance			<6m				
11. Wheel track			Front 905 mm / rear 1000 mm				
12. Braking stability			1.6m				
13. Rated occupants			4				
14. Energy consumption per 100 km			8kwh				

C4XL (LT-A817.2+2G) Configuration and Specifications (Lifted Version)

Standard Vehicle Configuration and Specification Sheet: (Actual configuration subject to contract)

		Electrical system	Controller	Lvtong dedicated AC controller LEVD0-05M35F4 / 450A		
			Battery	105 AH Sisway LifePo4 Lithium Battery		
			Electric motor	Lvtong dedicated AC asynchronous motor 48V / 5KW		
			Charger	Intelligent on-board charger 48V / 25A, charging time < 8 hours (at 80% discharge rate)		
			DC converter	High-power non-isolated DC-DC converter 48V / 12V-300W		
Body configuration	Front windshield and wiper	Acrylic-AS4-DOT optional laminated glass with wiper	Roof	ABS vacuum-formed roof		
	Seats	Ergonomic seats with leather upholstery and foldable armrests	Floor	Embossed aluminum anti-slip floor, high-strength structure, corrosion-resistant and anti-aging		
	Rearview mirrors	One manually adjustable, foldable exterior mirror on each side				
	Lighting and warning signals	LED front combination lamp (low beam, high beam, turn signal, daytime running light, position lamp) LED rear tail lamp (brake light, position lamp, turn signal); snail horn; reverse buzzer				
	Body	Front cowl, seat bucket, and body panels are made of automotive-grade PP injection molding; matte black aluminum roof pillars				
	Instrument panel	Injection-molded dashboard with ignition switch, single-lever combination switch, gear selector, and cup holder USB + Type-C, LCD electric vehicle combination instrument (includes fault diagnostic display), optional multimedia console, one-button start				
	Steering system	Bidirectional rack-and-pinion steering system with automatic clearance compensation; optional EPS electronic power steering				
	Brake system	Dual-circuit four-wheel hydraulic brakes, four-wheel disc brakes + EPB electronic parking brake				
	Front suspension system	Double wishbone independent front suspension + coil springs + hydraulic tube shock absorbers				
	Rear suspension system	Integral rear axle, gear ratio 16:1, coil-spring damping + hydraulic tube shock absorbers + rear stabilizer bar				
	Tire specification	Dedicated beach tires 23×10.5-12 with 12-inch aluminum rims, wheel diameter 580 mm				
Rated passengers	4 persons (including driver)					
Main Technical Specifications of the Vehicle						
1. Overall dimensions: Length × width × height			2930*1370*2060mm			
2. Wheelbase			1708mm			
3. Curb weight (including batteries)			610kg			
4. Maximum speed at full load			25km/h			
5. Driving range			70-90 km (on level ground)			
6. Minimum turning radius			3.45m			
7. Maximum grade ability			20%			
8. Parking performance on inclines			20%			
9. Minimum ground clearance			185mm			
10. Braking distance			<6m			
11. Wheel track			Front 1020 mm / rear 1070 mm			
12. Braking stability			1.8m			
13. Rated occupants			4			
14. Energy consumption per 100 km			9kwh			

C4FE (LT-A817.4) Configuration and Specifications (Standard Version)

Standard Vehicle Configuration and Specification Sheet: (Actual configuration
subject to contract)

		Electrical system	Controller	Lvtong dedicated AC controller LEVD0-05M35F4 / 450A		
			Battery	105 AH Sisway LifePo4 Lithium Battery,		
			Electric motor	Lvtong dedicated AC asynchronous motor 48V / 5KW		
			Charger	Intelligent on-board charger 48V / 25A, charging time < 8 hours (at 80% discharge rate)		
			DC converter	High-power non-isolated DC-DC converter 48V / 12V-300W		
Body configuration	Front windshield and wiper	Acrylic,AS4-DOT; optional laminated glass with wiper	Roof	ABS vacuum-formed roof		
	Seats	Ergonomic seats with leather upholstery and foldable armrests	Floor	Embossed aluminum anti-slip floor, high-strength structure, corrosion-resistant and anti-aging		
	Rearview mirrors	One manually adjustable, foldable exterior mirror on each side				
	Lighting and warning signals	LED front combination lamp (low beam, high beam, turn signal, daytime running light, position lamp) LED rear tail lamp (brake light, position lamp, turn signal); snail horn; reverse buzzer				
	Body	Front cowl, seat bucket, and body panels are made of automotive-grade PP injection molding; matte black aluminum roof pillars				
	Instrument panel	Injection-molded dashboard with ignition switch, single-lever combination switch, gear selector, and cup holder USB + Type-C, LCD electric vehicle combination instrument (includes fault diagnostic display), optional multimedia console, one-button start				
	Steering system	Bidirectional rack-and-pinion steering system with automatic clearance compensation; optional EPS electronic power steering				
	Brake system	Dual-circuit four-wheel hydraulic brakes, four-wheel disc brakes + EPB electronic parking brake				
	Front suspension system	Double wishbone independent front suspension + coil springs + hydraulic tube shock absorbers				
	Rear suspension system	Integral rear axle, gear ratio 12.31:1, coil-spring damping + hydraulic tube shock absorbers + rear stabilizer bar				
	Tire specification	205/65-10 (tire diameter 520 mm) 10-inch steel rims, optional aluminum alloy rims				
	Rated passengers	4 persons (including driver)				
Main Technical Specifications of the Vehicle						
1.	Overall dimensions: Length × width × height	3360*1210*1900mm				
2.	Wheelbase	2485mm				
3.	Curb weight (including batteries)	590kg				
4.	Maximum speed at full load	25km/h				
5.	Driving range	75-90 km (on level ground)				
6.	Minimum turning radius	4.45m				
7.	Maximum grade ability	18%				
8.	Parking performance on inclines	25%				
9.	Minimum ground clearance	120mm				
10.	Braking distance	<6m				
11.	Wheel track	Front 905 mm / rear 1000 mm				
12.	Braking Stability	1.6m				
13.	Rated occupants	4				
14.	Energy consumption per 100 km	8.5kwh				

C4FXLE (LT-A817.4G) Configuration and Specifications (Standard Version)

Standard Vehicle Configuration and Specification Sheet: (Actual configuration
subject to contract)

		Electrical system	Controller	Lvtong dedicated AC controller LEVD0-05M35F4 / 450A		
			Battery	105 AH Sisway LifePo4 Lithium Battery		
			Electric motor	Lvtong dedicated AC asynchronous motor 48V / 5KW		
			Charger	Intelligent on-board charger 48V / 25A, charging time < 8 hours (at 80% discharge rate)		
			DC converter	High-power non-isolated DC-DC converter 48V / 12V-300W		
Body configuration	Front windshield and wiper	Acrylic,AS4-DOT; optional laminated glass with wiper	Roof	ABS vacuum-formed roof		
	Seats	Ergonomic seats with leather upholstery and foldable armrests	Floor	Embossed aluminum anti-slip floor, high-strength structure, corrosion-resistant and anti-aging		
	Rearview mirrors	One manually adjustable, foldable exterior mirror on each side				
	Lighting and warning signals	LED front combination lamp (low beam, high beam, turn signal, daytime running light, position lamp) LED rear tail lamp (brake light, position lamp, turn signal); snail horn; reverse buzzer				
	Body	Front cowl, seat bucket, and body panels are made of automotive-grade PP injection molding; matte black aluminum roof pillars				
	Instrument panel	Injection-molded dashboard with ignition switch, single-lever combination switch, gear selector, and cup holder USB + Type-C, LCD electric vehicle combination instrument (includes fault diagnostic display), optional multimedia console, one-button start				
	Steering system	Bidirectional rack-and-pinion steering system with automatic clearance compensation; optional EPS electronic power steering				
	Brake system	Dual-circuit four-wheel hydraulic brakes, four-wheel disc brakes + EPB electronic parking brake				
	Front suspension system	Double wishbone independent front suspension + coil springs + hydraulic tube shock absorbers				
	Rear suspension system	Integral rear axle, gear ratio 16:1, coil-spring damping + hydraulic tube shock absorbers + rear stabilizer bar				
	Tire specification	Dedicated beach tires 23×10.5-12		with 12-inch aluminum rims	, wheel diameter 580 mm	
	Rated passengers	4 persons (including driver)				
Main Technical Specifications of the Vehicle						
1.	Overall dimensions: Length × width × height		33360*1320*2030mm			
2.	Wheelbase		2510mm			
3.	Curb weight (including batteries)		646kg			
4.	Maximum speed at full load		25km/h			
5.	Driving range		70–85 km (on level ground)			
6.	Minimum turning radius		4.65m			
7.	Maximum grade ability		12%			
8.	Parking performance on inclines		15%			
9.	Minimum ground clearance		170mm			
10.	Braking distance		<6m			
11.	Wheel track		Front 1024 mm / rear 1074 mm			
12.	Braking stability		1.7m			
13.	Rated occupants		4			
14.	Energy consumption per 100 km		8.5kwh			

C6 (LT-A817.4+2) Configuration and Specifications (Standard Version)

Standard Vehicle Configuration and Specification Sheet: (Actual configuration
subject to contract)

		Electrical system	Controller	Lvtong dedicated AC controller LEVD0-05M35F4 / 450A		
			Battery	105 AH Sisway LifePo4 Lithium Battery		
			Electric motor	Lvtong dedicated AC asynchronous motor 48V / 45W		
			Charger	Intelligent on-board charger 48V / 25A, charging time < 8 hours (at 80% discharge rate)		
			DC converter	High-power non-isolated DC-DC converter 48V / 12V-300W		
Body configuration	Front windshield and wiper	Acrylic,AS4-DOT;optional laminated glass with wiper	Roof	ABS vacuum-formed roof		
	Seats	Ergonomic seats with leather upholstery and foldable armrests	Floor	Embossed aluminum anti-slip floor, high-strength structure, corrosion-resistant and anti-aging		
	Rearview mirrors	One manually adjustable, foldable exterior mirror on each side				
	Lighting and warning signals	LED front combination lamp (low beam, high beam, turn signal, daytime running light, position lamp) LED rear tail lamp (brake light, position lamp, turn signal); snail horn; reverse buzzer				
	Body	Front cowl, seat bucket, and body panels are made of automotive-grade PP injection molding; matte black aluminum roof pillars				
	Instrument panel	Injection-molded dashboard with ignition switch, single-lever combination switch, gear selector, and cup holder USB + Type-C, LCD electric vehicle combination instrument (includes fault diagnostic display), optional multimedia console, one-button start				
	Steering system	Bidirectional rack-and-pinion steering system with automatic clearance compensation; optional EPS electronic power steering				
	Brake system	Dual-circuit four-wheel hydraulic brakes, four-wheel disc brakes + EPB electronic parking brake				
	Front suspension system	Double wishbone independent front suspension + coil springs + hydraulic tube shock absorbers				
	Rear suspension system	Integral rear axle, gear ratio 16:1, coil-spring damping + hydraulic tube shock absorbers + rear stabilizer bar				
	Tire specification	205/65-10 (tire diameter 520 mm) 10-inch steel rims, optional aluminum alloy rims				
Rated passengers	6 persons (including driver)					
Main Technical Specifications of the Vehicle						
1.	Overall dimensions: Length × width × height		3615*1210*1905mm			
2.	Wheelbase		2485mm			
3.	Curb weight (including batteries)		585kg			
4.	Maximum speed at full load		25km/h			
5.	Driving range		75-90 km (on level ground)			
6.	Minimum turning radius		4.45m			
7.	Maximum gradeability		18%			
8.	Parking performance on inclines		20%			
9.	Minimum ground clearance		120mm			
10.	Braking distance		<6m			
11.	Wheel track		Front 905 mm / rear 1000 mm			
12.	Braking stability		1.6m			
13.	Rated occupants		6			
14.	Energy consumption per 100 km		8.5kwh			

C6XL (LT-A817.4+2G) Configuration and Specifications (Lifted Version)

Standard Vehicle Configuration and Specification Sheet: (Actual configuration subject to contract)

		Electrical system	Controller	Lvtong dedicated AC controller LEVD0-05M35F4 / 450A		
			Battery	105 AH Sisway LifePo4 Lithium Battery		
			Electric motor	Lvtong dedicated AC asynchronous motor 48V / 5KW		
			Charger	Intelligent on-board charger 48V / 25A, charging time < 8 hours (at 80% discharge rate)		
			DC converter	High-power non-isolated DC-DC converter 48V / 12V-300W		
Body configuration	Front windshield and wiper	Acrylic,AS4-DOT; optional laminated glass with wiper	Roof	ABS vacuum-formed roof		
	Seats	Ergonomic seats with leather upholstery and foldable armrests	Floor	Embossed aluminum anti-slip floor, high-strength structure, corrosion-resistant and anti-aging		
	Rearview mirrors	One manually adjustable, foldable exterior mirror on each side				
	Lighting and warning signals	LED front combination lamp (low beam, high beam, turn signal, daytime running light, position lamp) LED rear tail lamp (brake light, position lamp, turn signal); snail horn; reverse buzzer				
	Body	Front cowl, seat bucket, and body panels are made of automotive-grade PP injection molding; matte black aluminum roof pillars				
	Instrument panel	Injection-molded dashboard with ignition switch, single-lever combination switch, gear selector, and cup holder USB + Type-C, LCD electric vehicle combination instrument (includes fault diagnostic display), optional multimedia console, one-button start				
	Steering system	Bidirectional rack-and-pinion steering system with automatic clearance compensation; optional EPS electronic power steering				
	Brake system	Dual-circuit four-wheel hydraulic brakes, four-wheel disc brakes + EPB electronic parking brake				
	Front suspension system	Double wishbone independent front suspension + coil springs + hydraulic tube shock absorbers				
	Rear suspension system	Integral rear axle, gear ratio 16:1, coil-spring damping + hydraulic tube shock absorbers + rear stabilizer bar				
Tire specification	Dedicated beach tires 23×10.5-12 with 12-inch aluminum rims, wheel diameter 580 mm					
Rated passengers	6 persons (including driver)					
Main Technical Specifications of the Vehicle						
1. Overall dimensions: Length × width × height			3700*1320*2030			
2. Wheelbase			2510mm			
3. Curb weight (including batteries)			683kg			
4. Maximum speed at full load			25km/h			
5. Driving range			65-80 km (on level ground)			
6. Minimum turning radius			4.65m			
7. Maximum grade ability			10%			
8. Parking performance on inclines			15%			
9. Minimum ground clearance			170mm			
10. Braking distance			<6m			
11. Wheel track			Front 1024 mm / rear 1074 mm			
12. Braking stability			1.7m			
13. Rated occupants			6			
14. Energy consumption per 100 km			8.5kwh			

C6F (LT-A817.6) Configuration and Specifications (Standard Version)

Standard Vehicle Configuration and Specification Sheet: (Actual configuration
subject to contract)

		Electrical system	Controller	Lvtong dedicated AC controller LEVD0-05M35F4 / 450A		
			Battery	105 AH Sisway LifePo4 Lithium Battery		
			Electric motor	Lvtong dedicated AC asynchronous motor 48V / 5KW		
			Charger	Intelligent on-board charger 48V / 25A, charging time < 8 hours (at 80% discharge rate)		
			DC converter	High-power non-isolated DC-DC converter 48V / 12V-300W		
Body configuration	Front windshield and wiper	Acrylic,AS4-DOT; optional laminated glass with wiper	Roof	ABS vacuum-formed roof		
	Seats	Ergonomic seats with leather upholstery and foldable armrests	Floor	Embossed aluminum anti-slip floor, high-strength structure, corrosion-resistant and anti-aging		
	Rearview mirrors	One manually adjustable, foldable exterior mirror on each side				
	Lighting and warning signals	LED front combination lamp (low beam, high beam, turn signal, daytime running light, position lamp) LED rear tail lamp (brake light, position lamp, turn signal); snail horn; reverse buzzer				
	Body	Front cowl, seat bucket, and body panels are made of automotive-grade PP injection molding; matte black aluminum roof pillars				
	Instrument panel	Injection-molded dashboard with ignition switch, single-lever combination switch, gear selector, and cup holder USB + Type-C, LCD electric vehicle combination instrument (includes fault diagnostic display), optional multimedia console, one-button start				
	Steering system	Bidirectional rack-and-pinion steering system with automatic clearance compensation; optional EPS electronic power steering				
	Brake system	Dual-circuit four-wheel hydraulic brakes, four-wheel disc brakes + EPB electronic parking brake				
	Front suspension system	Double wishbone independent front suspension + coil springs + hydraulic tube shock absorbers				
	Rear suspension system	Integral rear axle, gear ratio 12.31:1, coil-spring damping + hydraulic tube shock absorbers + rear stabilizer bar				
	Tire specification	205/65-10 (tire diameter 520 mm) 10-inch steel rims, optional aluminum alloy rims				
	Rated passengers	6 persons (including driver)				
Main Technical Specifications of the Vehicle						
1. Overall dimensions: Length × width × height			4150*1210*1900mm			
2. Wheelbase			3260mm			
3. Curb weight (including batteries)			590kg			
4. Maximum speed at full load			25km/h			
5. Driving range			70-85 km (on level ground)			
6. Minimum turning radius			5.8m			
7. Maximum grade ability			10%			
8. Parking performance on inclines			20%			
9. Minimum ground clearance			120mm			
10. Braking distance			<6m			
11. Wheel track			Front 895 mm / rear 1000 mm			
12. Braking stability			1.6m			
13. Rated occupants			6			
14. Energy consumption per 100 km			9kwh			

C8 (LT-A817.6+2) Configuration and Specifications (Standard Version)

Standard Vehicle Configuration and Specification Sheet: (Actual configuration
subject to contract)

		Electrical system	Controller	Lvtong dedicated AC controller LEVD0-05M35F4 / 450A		
			Battery	105 AH Sisway LifePo4 Lithium Battery		
			Electric motor	Lvtong dedicated AC asynchronous motor 48V / 5KW		
			Charger	Intelligent on-board charger 48V / 25A, charging time < 8 hours (at 80% discharge rate)		
			DC converter	High-power non-isolated DC-DC converter 48V / 12V-300W		
Body configuration	Front windshield and wiper	Acrylic,AS4-DOT; optional laminated glass with wiper	Roof	ABS vacuum-formed roof		
	Seats	Ergonomic seats with leather upholstery and foldable armrests	Floor	Embossed aluminum anti-slip floor, high-strength structure, corrosion-resistant and anti-aging		
	Rearview mirrors	One manually adjustable, foldable exterior mirror on each side				
	Lighting and warning signals	LED front combination lamp (low beam, high beam, turn signal, daytime running light, position lamp) LED rear tail lamp (brake light, position lamp, turn signal); snail horn; reverse buzzer				
	Body	Front cowl, seat bucket, and body panels are made of automotive-grade PP injection molding; matte black aluminum roof pillars				
	Instrument panel	Injection-molded dashboard with ignition switch, single-lever combination switch, gear selector, and cup holder USB + Type-C, LCD electric vehicle combination instrument (includes fault diagnostic display), optional multimedia console, one-button start				
	Steering system	Bidirectional rack-and-pinion steering system with automatic clearance compensation; optional EPS electronic power steering				
	Brake system	Dual-circuit four-wheel hydraulic brakes, four-wheel disc brakes + EPB electronic parking brake				
	Front suspension system	Double wishbone independent front suspension + coil springs + hydraulic tube shock absorbers				
	Rear suspension system	Integral rear axle, gear ratio 16:1, coil-spring damping + hydraulic tube shock absorbers + rear stabilizer bar				
Tire specification	205/65-10 (tire diameter 520 mm) 10-inch steel rims, optional aluminum alloy rims					
Rated passengers	8 persons (including driver)					
Main Technical Specifications of the Vehicle						
1.	Overall dimensions: Length × width × height		4405*1210*1915mm			
2.	Wheelbase		3260mm			
3.	Curb weight (including batteries)		695kg			
4.	Maximum speed at full load		25km/h			
5.	Driving range		70-80 km (on level ground)			
6.	Minimum turning radius		5.8m			
7.	Maximum grade ability		10%			
8.	Parking performance on inclines		15%			
9.	Minimum ground clearance		120mm			
10.	Braking distance		<6m			
11.	Wheel track		Front 895 mm / rear 1000 mm			
12.	Braking stability		1.6m			
13.	Rated occupants		8			
14.	Energy consumption per 100 km		9kwh			

C2H8 (LT-A817.H8) Configuration and Specifications (Standard Version)

Standard Vehicle Configuration and Specification Sheet: (Actual configuration
subject to contract)

		Electrical system	Controller		Lvtong dedicated AC controller LEVD0-05M35F4 / 450A	
			Battery		105 AH Sisway LifePo4 Lithium Battery	
			Electric motor		Lvtong dedicated AC asynchronous motor 48V / 5KW	
			Charger		Intelligent on-board charger 48V / 25A, charging time < 8 hours (at 80% discharge rate)	
			DC converter		High-power non-isolated DC-DC converter 48V / 12V-300W	
Body configuration	Front windshield and wiper	Acrylic,AS4-DOT, optional laminated glass with wiper	Roof	ABS vacuum-formed roof		
	Seats	Ergonomic seats with leather upholstery and foldable armrests	Floor	Embossed aluminum anti-slip floor, high-strength structure, corrosion-resistant and anti-aging		
	Rearview mirrors	One manually adjustable, foldable exterior mirror on each side				
	Lighting and warning signals	LED front combination lamp (low beam, high beam, turn signal, daytime running light, position lamp) LED rear tail lamp (brake light, position lamp, turn signal); snail horn; reverse buzzer				
	Body	Front cowl, seat bucket, and body panels made of automotive-grade PP injection molding; matte black aluminum roof pillars; high-strength aluminum cargo box				
	Instrument panel	Injection-molded dashboard with ignition switch, single-lever combination switch, gear selector, and cup holder USB + Type-C, LCD electric vehicle combination instrument (includes fault diagnostic display), optional multimedia console, one-button start				
	Steering system	Bidirectional rack-and-pinion steering system with automatic clearance compensation; optional EPS electronic power steering				
	Brake system	Dual-circuit four-wheel hydraulic brakes, four-wheel disc brakes + EPB electronic parking brake				
	Front suspension system	Double wishbone independent front suspension + coil springs + hydraulic tube shock absorbers				
	Rear suspension system	Integral rear axle, gear ratio 16:1, leaf-spring damping + hydraulic tube shock absorbers				
Tire specification	205/65-10 (tire diameter 520 mm) 10-inch steel rims, optional aluminum alloy rims					
Rated passengers	2 persons (including driver)					
Main Technical Specifications of the Vehicle						
1.	Overall dimensions: Length × width × height		3630*1210*1840mm			
2.	Wheelbase		2425mm			
3.	Curb weight (including batteries)		605kg			
4.	Maximum speed at full load		25km/h			
5.	Driving range		70-85 km (on level ground)			
6.	Minimum turning radius		4.5m			
7.	Maximum grade ability		10%			
8.	Parking performance on inclines		20%			
9.	Minimum ground clearance		150mm			
10.	Braking distance		<6m			
11.	Wheel track		Front 905 mm / rear 1000 mm			
12.	Braking stability		1.6m			
13.	Rated occupants		2			
14.	Energy consumption per 100 km		9.5kwh			
15.	Cargo box dimensions		1800*1100*265mm			
16.	Cargo box load capacity		500kg			

C2H8XL (LT-A817.H8G) Configuration and Specifications (Lifted Version)

Standard Vehicle Configuration and Specification Sheet: (Actual configuration subject to contract)

		Electrical system	Controller	Lvtong dedicated AC controller LEVD0-05M35F4 / 450A		
			Battery	105 AH Sisway LifePo4 Lithium Battery		
			Electric motor	Lvtong dedicated AC asynchronous motor 48V / 5KW		
			Charger	Intelligent on-board charger 48V / 25A, charging time < 8 hours (at 80% discharge rate)		
			DC converter	High-power non-isolated DC-DC converter 48V / 12V-300W		
Body configuration	Front windshield and wiper	Acrylic,AS4-DOT; optional laminated glass with wiper	Roof	ABS vacuum-formed roof		
	Seats	Ergonomic seats with leather upholstery and foldable armrests	Floor	Embossed aluminum anti-slip floor, high-strength structure, corrosion-resistant and anti-aging		
	Rearview mirrors	One manually adjustable, foldable exterior mirror on each side				
	Lighting and warning signals	LED front combination lamp (low beam, high beam, turn signal, daytime running light, position lamp) LED rear tail lamp (brake light, position lamp, turn signal); snail horn; reverse buzzer				
	Body	Front cowl, seat bucket, and body panels made of automotive-grade PP injection molding; matte black aluminum roof pillars; high-strength aluminum cargo box				
	Instrument panel	Injection-molded dashboard with ignition switch, single-lever combination switch, gear selector, and cup holder USB + Type-C, LCD electric vehicle combination instrument (includes fault diagnostic display), optional multimedia console, one-button start				
	Steering system	Bidirectional rack-and-pinion steering system with automatic clearance compensation; optional EPS electronic power steering				
	Brake system	Dual-circuit four-wheel hydraulic brakes, four-wheel disc brakes + EPB electronic parking brake				
	Front suspension system	Double wishbone independent front suspension + coil springs + hydraulic tube shock absorbers				
	Rear suspension system	Integral rear axle, gear ratio 16:1, leaf-spring damping + hydraulic tube shock absorbers				
	Tire specification	Dedicated beach tires 23×10.5-12 with 12-inch aluminum rims, wheel diameter 580 mm				
	Rated passengers	2 persons (including driver)				
Main Technical Specifications of the Vehicle						
1. Overall dimensions: Length × width × height			3715*1210*1840mm			
2. Wheelbase			2455mm			
3. Curb weight (including batteries)			620kg			
4. Maximum speed at full load			25km/h			
5. Driving range			70–85 km (on level ground)			
6. Minimum turning radius			4.6m			
7. Maximum grade ability			10%			
8. Parking performance on inclines			15%			
9. Minimum ground clearance			150mm			
10. Braking distance			<6m			
11. Wheel track			Front 1024 mm / rear 1074 mm			
12. Braking stability			1.6m			
13. Rated occupants			2			
14. Energy consumption per 100 km			9.5kwh			
15. Cargo box dimensions			1800*1100*265mm			
16. Cargo box load capacity			500kg			

C2H8CX (LT-A817.GC) Configuration and Specifications (Standard Version)

Standard Vehicle Configuration and Specification Sheet: (Actual configuration subject to contract)

		Electrical system	Controller	Lvtong dedicated AC controller LEVD0-05M35F4 / 450A		
			Battery	105 AH Sisway LifePo4 Lithium Battery		
			Electric motor	Lvtong dedicated AC asynchronous motor 48V / 5KW		
			Charger	Intelligent on-board charger 48V / 25A, charging time < 8 hours (at 80% discharge rate)		
			DC converter	High-power non-isolated DC-DC converter 48V / 12V-300W		
Body configuration	Front windshield and wiper	Acrylic,AS4-DOT;optional laminated glass with wiper	Roof	ABS vacuum-formed roof		
	Seats	Ergonomic seats with leather upholstery and foldable armrests	Floor	Embossed aluminum anti-slip floor, high-strength structure, corrosion-resistant and anti-aging		
	Rearview mirrors	One manually adjustable, foldable exterior mirror on each side				
	Lighting and warning signals	LED front combination lamp (low beam, high beam, turn signal, daytime running light, position lamp) LED rear tail lamp (brake light, position lamp, turn signal); snail horn; reverse buzzer				
	Body	Front cowl, seat bucket, and body panels are made of automotive-grade PP injection molding; matte black aluminum roof pillars				
	Instrument panel	Injection-molded dashboard with ignition switch, single-lever combination switch, gear selector, and cup holder USB + Type-C, LCD electric vehicle combination instrument (includes fault diagnostic display), optional multimedia console, one-button start				
	Steering system	Bidirectional rack-and-pinion steering system with automatic clearance compensation; optional EPS electronic power steering				
	Brake system	Dual-circuit four-wheel hydraulic brakes, four-wheel disc brakes + EPB electronic parking brake				
	Front suspension system	Double wishbone independent front suspension + coil springs + hydraulic tube shock absorbers				
	Rear suspension system	Integral rear axle, gear ratio 16:1, leaf-spring damping + hydraulic tube shock absorbers				
Tire specification		205/65-10 (tire diameter 520 mm) 10-inch steel rims, optional aluminum alloy rims				
Rated passengers		2 persons (including driver)				
Main Technical Specifications of the Vehicle						
1. Overall dimensions: Length × width × height		3700*1210*1950mm				
2. Wheelbase		2425mm				
3. Curb weight (including batteries)		650kg				
4. Maximum speed at full load		25km/h				
5. Driving range		70-90 km (on level ground)				
6. Minimum turning radius		4.5m				
7. Maximum grade ability		10%				
8. Parking performance on inclines		15%				
9. Minimum ground clearance		150mm				
10. Braking distance		<6m				
11. Wheel track		Front 905 mm / rear 1000 mm				
12. Braking stability		1.6m				
13. Rated occupants		2				
14. Energy consumption per 100 km		9kwh				
15. Cargo box dimensions		1800*1150*1200mm				
16. Cargo box load capacity		400kg				

C4F (LT-B817.4) Configuration and Specifications (Standard Version)

Standard Vehicle Configuration and Specification Sheet: (Actual configuration
subject to contract)

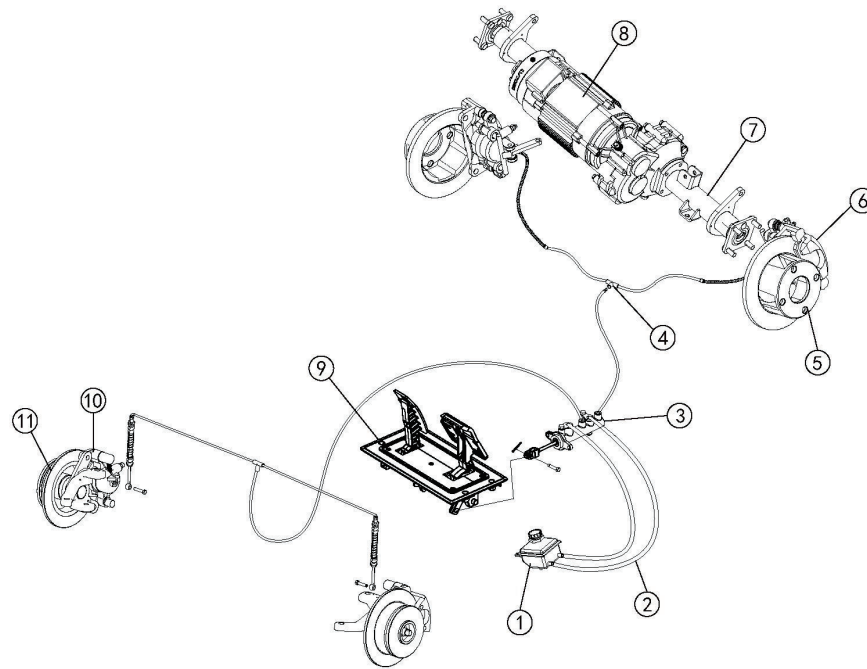
		Electrical system	Controller	Lvtong Dedicated AC Controller JEVD1-72M450L / 450A	
			Battery	105 AH Sisway LifePo4 Lithium Battery	
			Electric motor	Lvtong dedicated AC asynchronous motor 48V / 5KW	
			Charger	Intelligent on-board charger 48V / 30A, charging time < 5 hours	
			DC converter	High-power non-isolated DC-DC converter 48V / 12V-300W	
Body configuration	Front windshield and wiper	Acrylic,AS4-DOT;optional laminated glass with wiper		Roof	ABS vacuum-formed roof
	Seats	Ergonomic seats with leather upholstery and foldable armrests		Floor	Embossed aluminum anti-slip floor, high-strength structure, corrosion-resistant and anti-aging
	Rearview mirrors	One manually adjustable, foldable exterior mirror on each side			
	Lighting and warning signals	LED front combination lamp (low beam, high beam, turn signal, daytime running light, position lamp) LED rear tail lamp (brake light, position lamp, turn signal); snail horn; reverse buzzer			
	Body	Front cowl, seat bucket, and body panels are made of automotive-grade PP injection molding; matte black aluminum roof pillars			
	Instrument panel	Injection-molded dashboard with ignition switch, single-lever combination switch, gear selector, and cup holder USB + Type-C, LCD electric vehicle combination instrument (includes fault diagnostic display), optional multimedia console, one-button start			
	Steering system	Bidirectional rack-and-pinion steering system with automatic clearance compensation; optional EPS electronic power steering			
	Brake system	Dual-circuit four-wheel hydraulic brakes, four-wheel disc brakes + EPB electronic parking brake			
	Front suspension system	Double wishbone independent front suspension + coil springs + hydraulic tube shock absorbers			
	Rear suspension system	Integral rear axle, gear ratio 14:1, coil-spring damping + hydraulic tube shock absorbers + rear stabilizer bar			
	Tire specification	205/65-10 (tire diameter 520 mm) 10-inch steel rims, optional aluminum alloy rims			
	Rated passengers	4 persons (including driver)			
Main Technical Specifications of the Vehicle					
1.	Overall dimensions: Length × width × height		2990*1230*1920mm		
2.	Wheelbase		2180mm		
3.	Curb weight (including batteries)		415kg		
4.	Maximum speed at full load		25km/h		
5.	Driving range		95–110 km (on level ground)		
6.	Minimum turning radius		4.05m		
7.	Maximum grade ability		15%		
8.	Parking performance on inclines		25%		
9.	Minimum ground clearance		120mm		
10.	Braking distance		<6m		
11.	Wheel track		Front 910 mm / rear 1010 mm		
12.	Braking stability		1.6m		
13.	Rated occupants		4		
14.	Energy consumption per 100 km		7kwh		
15.	Cargo box dimensions		--		
16.	Cargo box load capacity		30kg		

C4FXL (LT-B817.4G) Configuration and Specifications (Lifted Version)

Standard Vehicle Configuration and Specification Sheet: (Actual configuration
subject to contract)

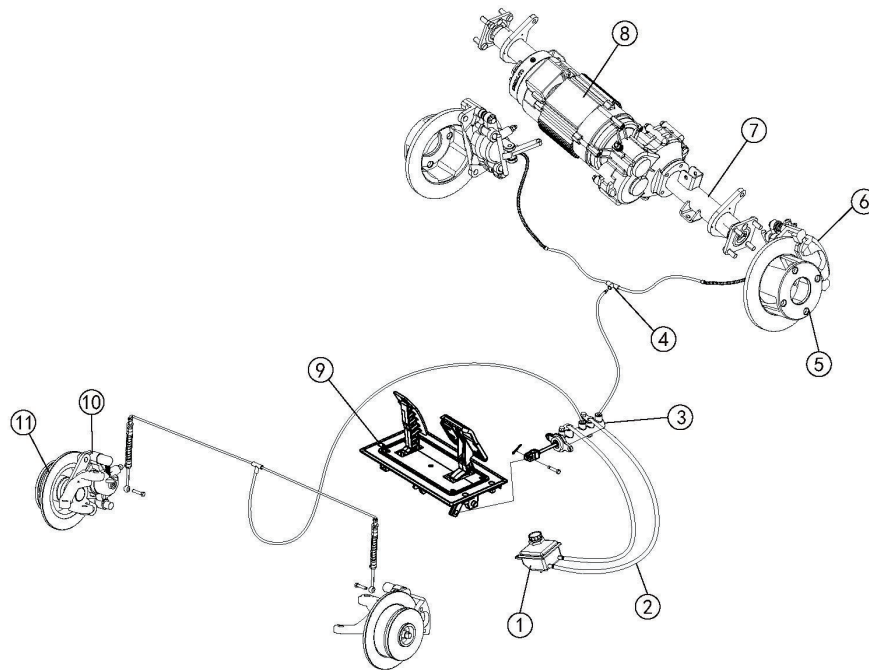
		Electrical system	Controller		Lvtong Dedicated AC Controller JEVD1-72M450L / 450A	
			Battery		105 AH Sisway LifePo4 Lithium Battery	
			Electric motor		Lvtong dedicated AC asynchronous motor 48V / 5KW	
			Charger		Intelligent on-board charger 48V / 30A, charging time < 5 hours	
			DC converter		High-power non-isolated DC-DC converter 48V / 12V-300W	
Body configuration	Front windshield and wiper	Acrylic,AS4-DOT;optional laminated glass with wiper	Roof	ABS vacuum-formed roof		
	Seats	Ergonomic seats with leather upholstery and foldable armrests	Floor	Embossed aluminum anti-slip floor, high-strength structure, corrosion-resistant and anti-aging		
	Rearview mirrors	One manually adjustable, foldable exterior mirror on each side				
	Lighting and warning signals	LED front combination lamp (low beam, high beam, turn signal, daytime running light, position lamp) LED rear tail lamp (brake light, position lamp, turn signal); snail horn; reverse buzzer				
	Body	Front cowl, seat bucket, and body panels are made of automotive-grade PP injection molding; matte black aluminum roof pillars				
	Instrument panel	Injection-molded dashboard with ignition switch, single-lever combination switch, gear selector, and cup holder USB + Type-C, LCD electric vehicle combination instrument (includes fault diagnostic display), optional multimedia console, one-button start				
	Steering system	Bidirectional rack-and-pinion steering system with automatic clearance compensation; optional EPS electronic power steering				
	Brake system	Dual-circuit four-wheel hydraulic brakes, four-wheel disc brakes + EPB electronic parking brake				
	Front suspension system	Double wishbone independent front suspension + coil springs + hydraulic tube shock absorbers				
	Rear suspension system	Integral rear axle, gear ratio 14:1, coil-spring damping + hydraulic tube shock absorbers + rear stabilizer bar				
	Tire specification	Dedicated beach tires 23×10.5-12 with 12-inch aluminum rims, wheel diameter 580 mm				
	Rated passengers	4 persons (including driver)				
Main Technical Specifications of the Vehicle						
1.	Overall dimensions: Length × width × height		3090*1330*1980mm			
2.	Wheelbase		2210mm			
3.	Curb weight (including batteries)		465kg			
4.	Maximum speed at full load		25km/h			
5.	Driving range		95-110 km (on level ground)			
6.	Minimum turning radius		4.25m			
7.	Maximum grade ability		15%			
8.	Parking performance on inclines		25%			
9.	Minimum ground clearance		170mm			
10.	Braking distance		<6m			
11.	Wheel track		Front 1024 mm / rear 1074 mm			
12.	Braking stability		1.6m			
13.	Rated occupants		4			
14.	Energy consumption per 100 km		7kwh			
15.	Cargo box dimensions		--			
16.	Cargo box load capacity		30kg			

LT-A817 Brake System Schematic



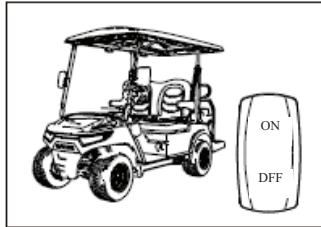
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|-----------------------------------|---|
| 1. Disc brake fluid reservoir | 7. Rear axle |
| 2. Reservoir hose | 8. High-efficiency three-phase asynchronous motor |
| 3. Master brake cylinder | 9. A827 hydraulic brake pedal assembly |
| 4. Disc brake three-way connector | 10. Front brake caliper |
| 5. Brake disc | 11. Type-A disc brake hub bearing assembly |
| 6. Rear brake caliper | |

LT-B817 Brake System Schematic



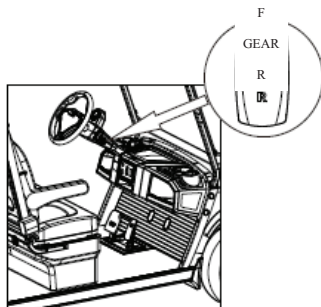
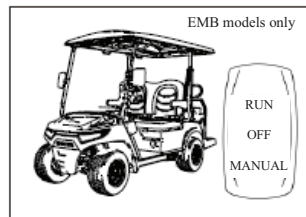
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|-------------------------------------|---|
| 1. Disc brake fluid reservoir | 7. Rear axle |
| 2. Reservoir hose | 8. High-efficiency three-phase asynchronous motor |
| 3. Master brake cylinder | 9. A827 hydraulic brake pedal assembly |
| 4. Disc brake three-way connector | 10. Front brake caliper |
| 5. Brake disc | 11. Type-A disc brake hub bearing assembly |
| 6. Electronic parking brake caliper | |

Operation and Control



Power switch operation:

1. Press the rocker power switch upward to the “RUN” or “ON” position to turn on the vehicle’s power.
2. Press the rocker switch to the center “OFF” position to turn off the vehicle’s power.
3. Press the rocker switch downward to the “MANUAL” position to unlock the electronic parking brake (EMB models only).



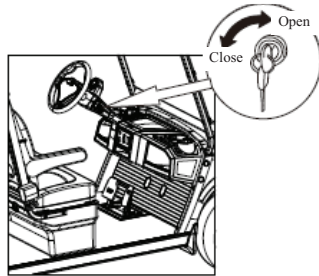
Forward / Reverse Switch:

Operate the forward/reverse switch according to the vehicle’s need to move forward or backward. Push the switch upward for the forward gear, downward for the reverse gear, and the middle position is the parking gear. When the reverse gear is selected, a reverse beeping alarm will sound.

WARNING

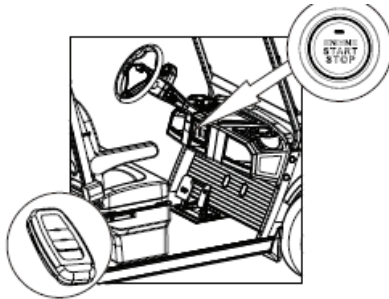
When switching between forward and reverse, the vehicle shall be brought to a complete stop before changing gears. First move the gear switch to the middle parking position, pause for 2 seconds, and then select the forward or reverse gear. Do not switch gears abruptly, as this may endanger personal safety and cause damage to the vehicle.

Operation and Control



Ignition Switch:

1. Insert the ignition key vertically into the keyhole and turn it forward to start the vehicle (ensure the forward/reverse switch is in the middle position before turning on the ignition).
2. Turn the key backward to shut off the vehicle; only then can the key be removed.



One-Button Start System:

Instructions Before Use

1. Before use, ensure that the host unit and the key are correctly paired. If pairing fails or the wrong key is used, the vehicle cannot be unlocked. Complete pairing before operating this product.
2. If the key does not automatically trigger PKE (Passive Keyless Entry) unlocking within the sensing area, press the Unlock / [Search] button on the key to activate it.

Possible reasons for this situation include:

- The key has not been used for 3 days and has entered sleep mode
- The automatic sensing function of the current key has not been activated.
- When the vehicle was last shut down, the user manually locked it using the Lock button on the key.

3) Before using this product, ensure that the vehicle's power battery voltage is within the normal range. Low or insufficient battery power may affect proper operation. When the battery pack voltage drops below 40V, pressing the start button will not start the vehicle; instead, the start button indicator will flash slowly three times to indicate low battery power.

No.	Battery type	Normal operating input voltage
1	12V battery pack	9.5-20V
2	48V battery pack	40-63V
3	72V battery pack	60-100V

Operation and Control

Operating Instructions

1) Vehicle Unlocking

Carry the key and approach the vehicle to automatically trigger PKE sensing unlock, or manually press the [Unlock] button on the key. After the operation, the start button indicator flashes twice to confirm successful unlocking.

2) Vehicle Locking

After leaving the vehicle sensing area with the key for 6 seconds, the system will automatically lock the vehicle, or you may manually press the [Lock] button on the key. The start button indicator flashes once to confirm successful locking.

Special Note: When manually locked, automatic PKE unlocking is disabled. The next time, the vehicle shall be unlocked manually. The vehicle cannot be locked while driving.

3) Vehicle Search

Press the [Search] button on the key. When successful, the start button indicator and the vehicle's turn signals will flash six times to help locate the vehicle.

4) Vehicle Start and Shutdown

When the vehicle is unlocked, press the start button on the dashboard to activate the ACC and the controller. The button light will illuminate to indicate that the vehicle has started. Press the start button again to shut down the vehicle; the button light will turn off. When the vehicle is locked, pressing the start button has no effect.

Special Note: The vehicle cannot be shut down while it is in motion.

Function Descriptions

1) Automatic Shutdown

If the vehicle remains in the started state without being driven for 2 hours, the system will automatically shut down the vehicle, turning off the ACC and the controller. After shutdown, if the key is within the sensing area, the vehicle can still be used; if the key is not within the sensing area, the system will automatically lock the vehicle.

2) Main Unit Low-Voltage Sleep Mode

When the vehicle battery voltage falls below the sleep threshold, the main unit enters sleep mode. In this state, pressing the start button will not activate the system; the start button indicator will flash slowly three times to indicate low battery voltage. Once the battery voltage returns above the threshold, the system exits sleep mode. When the main unit is connected to the battery for the first time, it automatically determines the [Battery Type] according to the [Input Voltage Range].

No.	Battery type	Input voltage range	Sleep threshold
1	12V battery pack	5-20V	9V±0.5V
2	48V battery pack	20-63V	39V±1V
3	72V battery pack	63-100V	59V±1V

Operation and Control

- a) When the vehicle is in the started state, the system does not perform low-voltage monitoring and will not enter sleep mode.
- b) When the vehicle is shut down, low-voltage monitoring begins. If the voltage drops below the sleep threshold, the system enters sleep mode.



Key Description:

- ①. Lock button
- ②. [Search] button
- ③. Unlock button

1.

1. The key can control the vehicle in the following two ways:

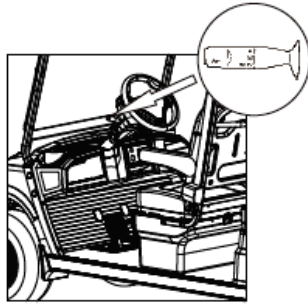
1) Automatic Sensing (PKE): When carrying the key and approaching the vehicle, the system automatically unlocks as the key enters the sensing range. When the key moves out of the sensing range, the system automatically locks the vehicle. Each main unit is paired with two keys, but only one key can use the PKE function at any given time. Only the key with PKE activated can automatically unlock or lock the vehicle. If the non-activated key is within the sensing range, pressing the [Search] / [Unlock] button will activate PKE for that key, and the PKE function on the other key will automatically deactivate.

2) Remote Control Mode (RKE): The user manually operates the key to unlock, lock, or locate the vehicle. After unlocking the vehicle using the [Unlock] button, if the system does not detect the key within 6 seconds, the vehicle will automatically re-lock. Both keys can operate the vehicle simultaneously via RKE.

2. If the key is not operated for 3 days, the automatic sensing (PKE) function will turn off and enter low-power sleep mode. RKE remote control is not affected and can still be used normally. Pressing [Lock] / [Search] / [Unlock] will immediately wake the key, reactivate the PKE function, and exit sleep mode.

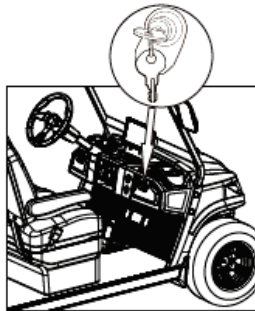
3. The key contains one CR2032 battery. Under normal use, the battery life is about 12 months. If pressing any button does not light up the indicator or the sensing distance becomes shorter, please replace it with the same battery model.

Operation and Control



Combination Switch:

1. Turn Signals: Push the lever down to activate the left turn signal. The left indicator on the dashboard will illuminate. Push the lever upward to activate the right turn signal.
2. Lights: The front half of the lever can be rotated. After the vehicle is started, rotate the lever forward by two positions to turn on the low beam. Turn the lever backward to turn off the lights.
3. High Beam: Pull the lever upward (toward the driver) to flash the high beam. When pushed back, the high beams turn off. To keep the high beam on continuously, first switch on the low beam, pull the lever towards you; it will stay in position without returning automatically.
4. Horn: The button at the tip of the lever operates the horn; press lightly to sound it.



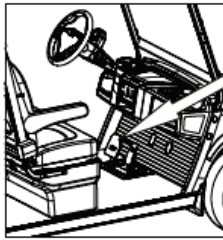
Glove box lock:

The dashboard has a storage pocket on both the left and right sides that can be used to hold small items. When the pocket lid is not locked, press down on the lock cylinder to pull the lid open.

Unlocking: Insert the key into the lock cylinder and turn it clockwise to unlock, then remove the key.

Locking: Close the pocket lid, insert the key, and turn it counterclockwise to lock the lid; the key can then be removed.

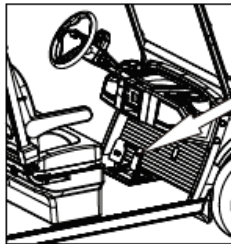
Operation and Control



Brake pedal:

When the vehicle needs to slow down during travel, move your right foot to the brake pedal and press it down gently and smoothly. This will reduce the vehicle's speed until it comes to a stop.

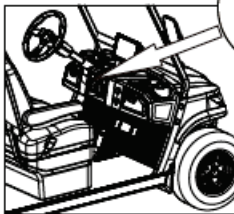
Note: Avoid emergency braking!



Accelerator pedal:

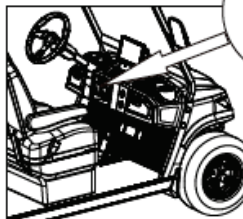
After turning on the ignition to start the vehicle, select a gear. Then release the brake pedal, place your right foot on the accelerator pedal, and press down slowly to set the vehicle in motion.

Note: Do not slam the accelerator pedal!



Charging port:

The dashboard is equipped with an in-vehicle charger, either USB + Type-C or USB + Communication Port, providing a 5V/2A DC power supply for electronic devices or communication access for the vehicle's multimedia system.



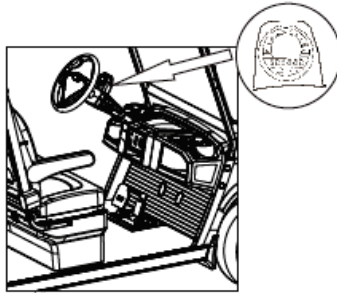
Electronic parking brake:

1. To engage the parking brake, first bring the vehicle to a stop. Then press the "P" parking switch installed on the dashboard. The electronic parking caliper will operate to hold the vehicle in place.

2. To release the parking brake, lightly press the accelerator pedal.

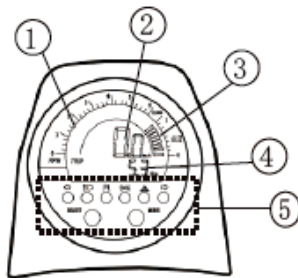
(Do not press the accelerator pedal deeply.)

Operation and Control



Instrument Panel:

It displays the current vehicle status information, including RPM, speed, battery level, mileage, lighting signals, and more. While driving, you can determine whether the vehicle is being operated correctly by observing the indicator lights on the instrument panel.



Instrument Panel Display — Figure 1:

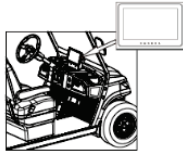
1. RPM
2. Speed
3. Battery level
4. Mileage
5. Indicator lights



Instrument Panel Display — Figure 2 (High-end Version):

1. Indicator lights
2. Speed
3. Battery level
4. Mileage
5. Charging indicator
6. Reverse indicator
7. Parking indicator
8. Driving time

Operation and Control



Instrument Cluster & Vehicle Infotainment System:

The digital instrument panel and intelligent infotainment unit integrate audio-visual entertainment, video monitoring display, and multimedia functions, featuring a minimalist and modern design with a full-screen touch interface.

Its basic functions and system specifications are as follows:

Bluetooth Phone & Music: Equipped with a built-in Bluetooth module supporting call dialing, answering, hanging up, audio channel switching, and call log synchronization. Supports Bluetooth music playback from mobile phones.

Radio: Supports FM/AM bands.

Music Playback: Supports MP3, WAV, FLAC, AAC, and other audio formats.

Video Playback: Supports AVI, MP4, FLV, MOV, M4V, MKV, and other video formats.

Gallery: Supports image browsing.

Microphone: Supports Bluetooth phone audio input.

System Settings: Supports configuration of Bluetooth, Wi-Fi, audio, display, date and time, and other system functions.

Mobile Phone Connectivity: Supports smartphone connectivity via Bluetooth and Wi-Fi hotspot, compatible with both Apple and Android devices; enables phone navigation, music playback, call functions, and more.

Vehicle Information: Supports vehicle information display with built-in CAN protocol and diagnostics.

USB Drive: Supports USB 2.0 for multimedia playback; maximum output current $\leq 1.5\text{A}$.

Reverse View: Supports reverse camera view and reversing guide lines.

Wi-Fi Network: Built-in Wi-Fi functionality.

Power Amplifier: Rated power: $4 \times 18\text{W}$.

System: RK3326S (dual-core) Cortex-A35 processor.

Operating System: Android 11.

Display: 10.1-inch, 1280×720 resolution.

Capacitive Touchscreen: 10.1-inch capacitive touch panel.

Operation and Control

Multimedia Infotainment Main Interface — Primary Menu Description:



No.	Name	Operation	Description
1	Back	Short press	Return to the previous interface
2	Home	Short press	Tap to return to the main interface
3	Recent Apps	Short press	Tap to enter the recent apps interface
4	App Menu	Short press	Tap to enter the secondary app interface
5	Volume –	Short press	Tap to decrease volume by one level
6	Volume +	Short press	Tap to increase volume by one level
7			Left turn indicator — green high-brightness display
8	SPR/LOW		High-Speed Mode / Low-Speed Mode

Operation and Control

9			Low beam indicator — green high-brightness display
10			Front illumination indicator — green high-brightness display
11			Brake system fault warning light
12			Electronic parking status indicator
13			High beam indicator — blue high-brightness display
14			Steering system fault indicator; when a fault occurs, the yellow light remains on
15			Power battery fault warning light
16			Vehicle fault information indicator; tap the icon to enter the vehicle fault warning information screen
17			Right turn indicator — green high-brightness display
18			Battery charge level
19			Reverse gear / Neutral / Forward gear mode
20			Battery voltage
21	TRIP		Trip odometer. Description: 1. Records short-distance travel, i.e., the accumulated mileage from point A to point B (usually for a single trip). 2. When the main unit power is disconnected and restarted, the trip odometer automatically resets to zero.
22	ODO		Total mileage

Preparations Before Operation

Check the vehicle before each use.
Please develop and maintain a good habit.



WARNING

Before performing any operational checks, make sure the ignition key has been removed to avoid accidental activation, and ensure the parking function is engaged to prevent movement.

Pre-Operation Checklist:

Before each use, please check the following items:

- √ Battery
- √ Tires
- √ Steering system
- √ Reverse warning buzzer
- √ Pedal operation
- √ Body and chassis

Seat

Lift the seat to perform inspection and maintenance.

Body and Chassis

Before each use, carefully inspect the body and chassis for any damage or missing parts.

Preparations Before Operation

Seat

Lift the seat to perform inspection and maintenance

Body and Chassis

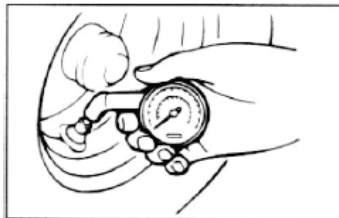
Before each use, carefully inspect the body and chassis for any damage or missing parts.

Battery

For detailed charging procedures, please refer to Chapter 8: Maintenance.

Please check whether the batteries are placed securely to prevent damage caused by vibration. Also check for missing battery covers to avoid leakage of acidic battery fluid.

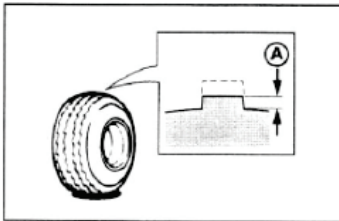
Inspect the terminals to ensure they are not corroded.



Tire condition

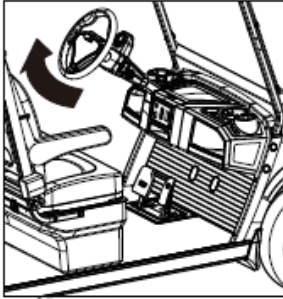
Tire pressure

Check the tire pressure before use.



Tire pressure range:
Standard models: 36–40 PSI
Lifted models: 16–20 PSI

Preparations Before Operation



Steering system

Check whether the steering system has excessive free play:

- Move the steering wheel up and down, forward and backward.
- Gently turn the steering wheel left and right.

If excessive free play or abnormal noises are detected, it indicates potential component issues. Please contact your dealer immediately.

Reverse warning

Shift the direction selector switch to Reverse and check the reverse warning buzzer.

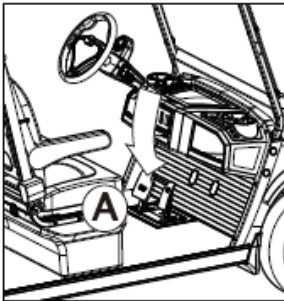
Pedal operation

Check whether the following pedal operations are functioning properly; if not, please contact your dealer.

Brake Pedal

Ensure that the brake pedal feels firm when pressed and returns smoothly when released.

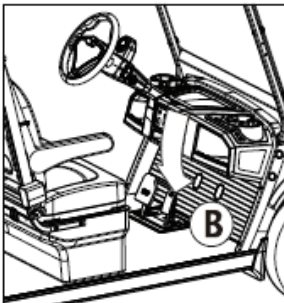
Ⓐ . Brake pedal



Accelerator Pedal

Check that the accelerator pedal operates smoothly and reliably, and that it returns to its original position after being pressed.

Ⓑ . Accelerator pedal



WARNING

Before checking the accelerator pedal, make sure the vehicle's power is switched off.

Servicing

Battery maintenance (maintenance-free lead-acid batteries), If Equipped

The service life of the battery is influenced not only by product quality and the system configuration of the electric golf cart, but also greatly by the user's operating and maintenance habits. Therefore, understanding and mastering basic knowledge regarding battery usage and maintenance is essential for extending battery life.

Maintenance-free lead-acid battery care, If Equipped, is as follows:

1. Never store the battery in a discharged state. If the battery is depleted and then left unused for several days before recharging, its capacity will be difficult to fully recover, resulting in reduced overall capacity. This severely affects service life—the longer the idle period, the more serious the battery damage.
2. Perform regular inspections. If the driving range of the vehicle decreases noticeably during the warranty period, check whether the battery has any abnormalities, including visual defects or a single underperforming battery. For batteries with no visible issues, use a multimeter to check for any cell lag. If one cell's voltage is significantly lower than the others, contact service personnel for further inspection. After ruling out battery issues, further check the vehicle's electrical system, charger, and other related components for abnormalities.
3. When starting the electric sightseeing vehicle, gently press the accelerator pedal and use a small current to start the vehicle until it reaches a steady cruising speed. If the accelerator is fully depressed at startup, the current will increase rapidly, causing a certain degree of damage to the battery. Avoid deep discharge, as this also helps extend battery life. Therefore, reducing high-current discharge and preventing over-discharge are both beneficial for prolonging battery service life.
4. The operating temperature range of the battery is -20°C to 50°C . All technical data are measured at the rated temperature of 25°C . The ideal operating temperature range is 15°C to 35°C . Excessively high temperatures will shorten battery life, while excessively low temperatures will reduce available capacity. In winter, it is normal for battery capacity to decrease as ambient temperature drops. Using 20°C as a reference, the capacity is typically about 80% at -10°C .
5. Wipe the terminals and connection points with a dry cloth. Keeping them clean helps reduce self-discharge.
6. When the vehicle is to be stored for a long period, the battery shall be fully charged beforehand, and a supplementary charge should be applied once every month. If the vehicle will not be used for an extended period, disconnect the battery from the load and store the vehicle in a cool, ventilated, and dry location.
7. The charger shall match the specific battery model. Avoid high temperatures and humidity during charging, and never allow water to enter the charger to prevent short-circuit accidents.

Servicing

8. After parking, check whether the battery casing temperature and terminal temperature are normal, and keep proper tracking records.
9. Regularly inspect the battery's appearance and measure the total pack voltage, individual battery voltages, starting current, normal operating current, full-load current, and driving range. Keeping detailed records and establishing a vehicle file is highly beneficial for vehicle management.
10. Ensure that no water accumulates inside the battery compartment and that the compartment maintains proper rainproof and waterproof performance to prevent the battery pack from becoming immersed.



WARNING

Batteries from different manufacturers shall not be mixed.

Battery Maintenance (Lithium Iron Phosphate Batteries)

1. When using a lithium-powered vehicle for the first time, perform a deep charge. Charging may be stopped once the charger indicator turns green.
2. Recharge only after the battery pack has been partially discharged through driving, but avoid deep discharges (greater than 90% of capacity), as this will damage the lithium battery.
3. If the undervoltage indicator illuminates while the vehicle is stationary, the battery should be charged promptly.
4. Because lithium batteries have no memory effect, the battery pack should be charged regularly and in a timely manner after each drive or each day.
5. If a lithium-battery vehicle is left unused for more than two months, the battery pack shall receive a full, thorough charge; if it is left unused for more than five months, a full charge-discharge cycle is required.
6. Follow the correct charging procedure: first connect the charger to the battery pack, and only then plug the charger's power cord into the 220V AC outlet. Following this order prevents electrical arcing when connecting or disconnecting the charger. Once power is supplied, the charger will display a red indicator.
7. When the lithium-battery vehicle is not in use, the power should be switched off promptly, because the motor and controller will continue to draw power even under no-load conditions.

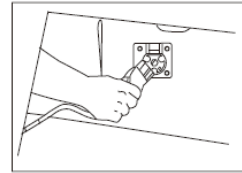
Servicing

8. To ensure that the lithium battery pack is fully charged, perform charging at normal ambient temperatures. This helps achieve the best possible charging results.
9. Because lithium batteries exhibit slight self-discharge, supplemental charging should be performed regularly to keep the battery voltage in a stable condition.

Charging precautions

- Turn off the one-touch start button before charging.
- Choose a relatively safe environment for charging (e.g., avoid areas with liquids or open flames).
- Avoid charging under direct sunlight.
- Ensure that necessary fire-extinguishing equipment is available near the charging device so emergency fire response can be carried out in extreme situations.
- Before charging, ensure that the charging gun and charging socket are free of dust, water, or any foreign matter. If any debris is present, clean it thoroughly before charging; otherwise, poor contact may occur, causing heat buildup and even fire.
- Do not modify or disassemble the charging port or charging equipment, as this may lead to charging failures and could cause a fire.
- After charging is completed, do not disconnect the charging equipment with wet hands or while standing in water, as this may result in electric shock and personal injury.
- If charging shall be stopped during the process, first press the stop button. When the current drops to 0A, then disconnect the charging plug. Disconnecting under load may damage the relay and burn the connector terminals.
- When the battery level drops below 15%, recharge promptly. Over-discharging is strictly prohibited (charging is recommended at around 30% remaining capacity).
- The battery should be recharged promptly after use; in particular, ensure it is fully charged when used in low-temperature environments.

Battery charging



WARNING

- Keep out of reach of children.

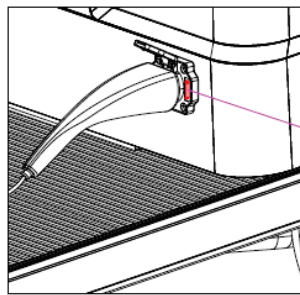
Servicing

Charging method:

1. Check the lithium battery connections to ensure they are correct and that all wiring is firmly secured.
2. Connect the charger's battery-side connector to the battery pack first; if the charger indicator light illuminates normally, the connection is correct.
3. Connect the charger's power-side connector to a 220V AC power supply.
4. When disconnecting the charger after a full charge, first check whether the charger's charging indicator shows a fully charged status. If the indicator is normal, the charger may be unplugged (disconnect the power side first). If the indicator is abnormal, determine the cause before unplugging.

Charging indicator light diagnostics and fault handling

As shown in the diagram below, the red part is the charging socket indicator light. During charging, the indicator light is solid red. When the indicator light turns yellow, it indicates that the battery charge is greater than 80%. Once the battery is fully charged, the indicator light turns green.



Steady on —
when the battery's state of charge is below 80%;
flashing — fault indication

Steady on —
when the battery's state of charge exceeds 80%.

Steady on —
when the battery is fully charged; the green light
remains steadily on.

Red light flashing continuously (1-second interval): input voltage is low or unstable; check whether the charging plug is firmly inserted. For input voltage values, refer to "Charging Plug".

Red light flashing twice repeatedly: battery not connected; battery reversed polarity; or charger and battery are incompatible.

1. Check whether the charger's output cable is firmly connected to the battery and whether polarity is reversed at the battery end.
2. Check whether the charger matches the battery. If it matches, the battery may be over-discharged and its voltage too low.

Servicing

Red light flashing three times repeatedly: communication fault.

1. Check whether any charging-plug pins are loose.
2. Check whether the positive and negative terminals of the charging plug are reversed.
3. Check whether the charging plug pins are reversed.

Red light flashing four times repeatedly: charger internal over-temperature protection.

1. Check whether the charger's fan is working properly and whether it is placed as required.
2. Wait for the charger to cool down before restarting.

Red light flashing rapidly: short-circuit protection.

1. Check whether the charger output side is short-circuited.
2. Check whether there is a short circuit at the battery end.
3. Check whether the battery is functioning properly.
4. Confirm that none of the above issues are present. Power off, shut down, and restart the charging process.

Servicing

Battery Installation

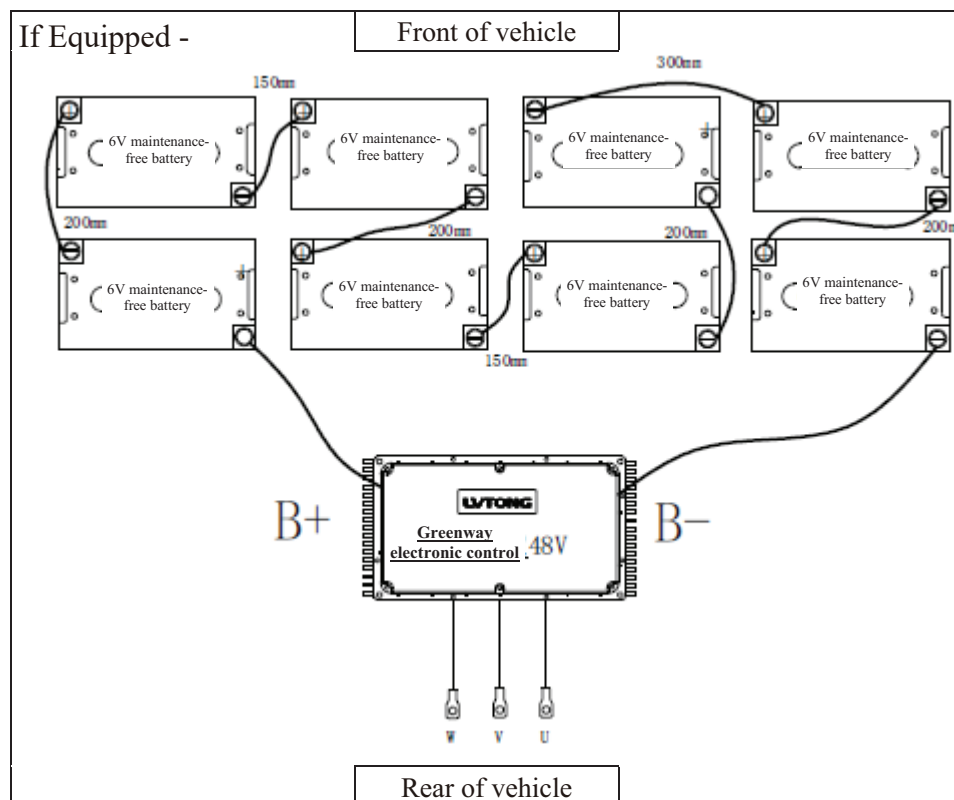
1. Handling: avoid inverting the battery or subjecting it to impact or shock; do not allow external force to strike the terminals to prevent seal damage.
2. Inspection: ensure the battery has no external damage, all accessories are complete, and refer to the instruction manual and precautions.
3. Placement: place the battery in the designated area (such as a battery room), keeping it well-ventilated and dry, and away from heat sources or open flames.
4. Installation: the battery shall be installed upright in an insulated battery box; do not place it sideways or upside down. The battery box shall have good ventilation and heat dissipation. Battery installation spacing shall be ≥ 10 mm.
5. Battery securing (securing pressure): excessive pressure from the battery hold-down bar (retaining rod) can crack and damage the battery housing, causing leakage, short circuits, or even hazards. Therefore, the hold-down pressure shall be appropriate, and the nuts on both sides should be tightened evenly—secure, but without applying excessive stress to the battery case.
6. Wrap metal installation tools (such as wrenches) with insulating tape for insulation. Before making connections, inspect all cables and batteries to ensure they are clean and free of hardware damage. The red terminal of the battery is the positive pole, and the black terminal is the negative pole.
7. Before connecting, clean the battery terminals. The cables used shall be flexible, sheathed cables that comply with national standards. During installation and use, prevent any potential short-circuit hazards.
8. Ensure the charging equipment is in the “power off” state and not connected to any load. After completing the interconnections between the batteries, then connect the battery pack to the charger or load. Make sure the battery pack’s positive terminal is connected to the charger or load’s positive terminal, and the negative terminal to the negative terminal. Incorrect polarity between the battery and the charger or load motor may result in damage to the charger or motor.
9. Terminal connections: bolts, spring washers, and flat washers shall be stainless steel; cable lugs shall be copper. Installation sequence (lug $\rightarrow$ flat washer $\rightarrow$ spring washer $\rightarrow$ bolt). Refer to the connection diagram.
10. Then connecting the cables, tighten the cables so that the torque reaches the specified value, without applying torque stress to the terminals. Recommended torque values (N·m) are shown in the table below.



No.	Application scope	Recommended torque value (N·m)
1	M6	8~10
2	M8	10~12

Servicing

For the A817 model, please connect the wires as shown in the diagram.



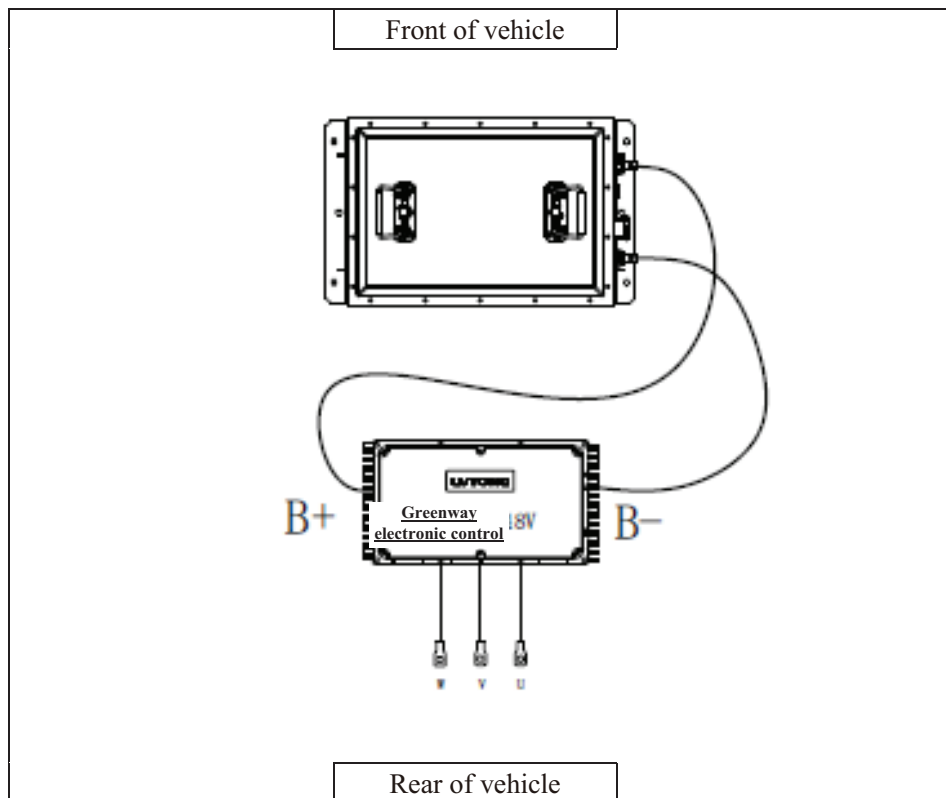
WARNING

When installing the battery:

Carefully route the cables and let them hang downward, ensuring they do not touch both battery terminals at the same time. When removing the battery, always disconnect the negative terminal (–) first; when installing, connect it last. Do not overtighten the battery screws (<10 N·m), as excessive force may damage the battery casing.

Servicing

For the B817 model, please connect the wires according to the diagram



WARNING

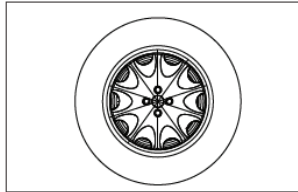
When installing the battery:

Carefully route the cables and let them hang downward, ensuring they do not touch both battery terminals at the same time. When removing the battery, always disconnect the negative terminal (–) first; when installing, connect it last. Do not overtighten the battery screws ($<10 \text{ N}\cdot\text{m}$), as excessive force may damage the battery casing.

Servicing

CAUTION

Before performing any tire or brake system maintenance, ensure the power switch is turned off.



Replacing a tire

1. Preparation before replacement:

Park the vehicle on level ground where it does not obstruct traffic and allows for a safe wheel replacement. Before replacing the tire, switch on the vehicle's hazard warning lights and place a triangular warning sign at an appropriate distance to prevent traffic accidents.

! WARNING

Do not place the jack anywhere other than the designated jacking points. If the jacking point is incorrect, the vehicle body may deform or accidents may occur when the vehicle is lowered.

2. Lifting the vehicle:

Before lifting the vehicle, place suitable wheel chocks in front of and behind the wheel diagonally opposite the one being replaced. Then use a wrench to loosen the lug nuts of the wheel to be replaced by half a turn. Position the jack at the designated jacking point next to the wheel to be replaced, and lift the vehicle.

! WARNING

Regularly check the spare tire pressure and keep it within the specified range to ensure it is ready for emergency use at any time. If the spare tire has not been used for many years, please contact our company to confirm that it is still safe to use.

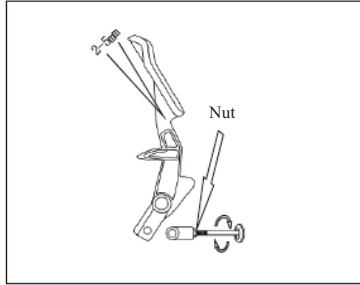
3. Replacing the spare tire:

Use the wheel-nut wrench to remove the lug nuts, then take off the tire. Clean any dirt from the hub surface, then install the spare tire. Tighten the wheel nuts in a crisscross pattern until the wheel is seated firmly against the brake hub. Lower the vehicle to the ground and remove the jack. Using the same crisscross pattern, fully tighten the wheel nuts. The specified torque shall be used when tightening the wheel nuts.

Wheel-nut tightening torque:

105NM-120NM.

Servicing



Brake system adjustment

CAUTION

Before adjusting the brakes, press the brake pedal several times with your foot to allow the brake system to self-adjust.

Free adjustment of brake pedal free play:

1. First loosen the locknut on the master cylinder pushrod, then turn the pushrod counterclockwise to change its length, thereby increasing the pedal free play.

After adjusting the brake pedal free play to an appropriate range, tighten the locknut promptly to prevent it from loosening.

WARNING

If you suspect any brake malfunction, please contact the dealer before using the vehicle. Brake failure may lead to serious accidents.

2. The brake pedal free play can be adjusted freely, but it should not be changed frequently. It is recommended to adjust it to between 2–5 mm; increasing the pushrod length by 1–2 mm is sufficient.

CAUTION

When the brake fluid level in the reservoir becomes too low, air may enter the brake lines. Even if brake fluid is added afterward, braking performance will not improve. At this point, all air within the brake system shall be completely purged.

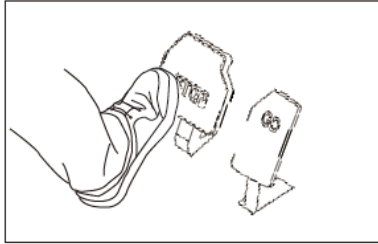
Determining whether air has entered the brake system lines:

On the first press of the brake pedal, if it feels soft and spongy, and after several consecutive presses the pedal gradually rises, eventually becoming firm and unable to be pressed down, this indicates that air is present in the brake system. Air entrapment may occur easily, so the hydraulic actuating mechanism shall be bled.

Brake line bleeding method:

1. For manual bleeding, two people shall work together. The order of expelling air should be from the farthest wheel to the nearest: typically right rear wheel → left rear wheel → right front wheel → left front wheel.
2. Remove the dust cap from the bleeder valve on the wheel cylinder. Install a transparent hose of appropriate length onto the bleeder valve, placing the other end into a container. The end of the hose shall remain submerged below the fluid surface.
3. One person should press the brake pedal several times, then press and hold it firmly. The other person loosens the bleeder screw on the wheel cylinder by about half a turn. At this moment, the air will be expelled together with the brake fluid. When the brake pedal drops to the end of its travel, immediately tighten the bleeder screw. Accurate coordination between the two operators is essential.

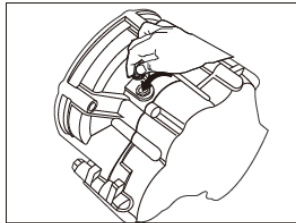
Servicing



4. Repeat the above procedure to expel all air from the brake system until brake fluid flows out without bubbles. Then tighten the bleeder screw and reinstall the dust cap.
5. During the bleeding process, frequently check the brake-fluid level in the reservoir and replenish it in a timely manner if it becomes low.

WARNING

The discharged brake fluid shall not be reused, as it may have been exposed to air for an extended period and absorbed moisture, which would reduce braking efficiency.



Checking the gearbox gear oil:

1. Park the vehicle on a level surface.
2. Remove the gearbox oil cap.
3. If the oil level is found to be insufficient, slowly add (GL-4) 75W/90 gear oil until it reaches approximately two-thirds of the gearbox capacity.
4. Do not add filtered or reused gear oil.
5. Reinstall the gearbox oil cap.

Recommended:

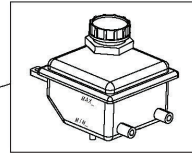
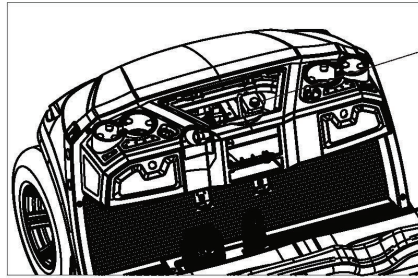
(GL-4) 75W/90 gear oil

Gearbox capacity: 0.85 L

CAUTION

Do not allow any foreign material to enter the gearbox

Servicing



Brake fluid reservoir:

1. The fluid level in the reservoir should be checked once per month. Ensure that the brake-fluid level is between the MAX and MIN marks. The brake-fluid reservoir is located beneath the front hood; lift the hood to inspect it. If the fluid level is at or below the MIN mark, the brake system shall be checked for leaks, and the brake pads should be examined for excessive wear.
2. Brake fluid absorbs moisture from the air. Excessive water content can cause corrosion damage within the brake system, and the boiling point of the brake fluid will drop significantly. The brake fluid shall be replaced in accordance with the periodic maintenance schedule.

WARNING

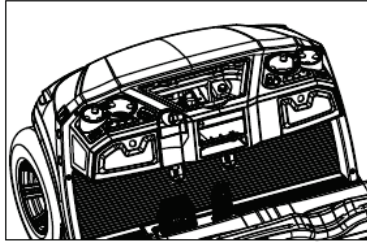
1. Always use the brake fluid specified by our company or a DOT3 synthetic product of the same grade that is packaged in a sealed container approved by our company. Different types of brake fluid shall not be mixed.
2. Do not mix brake fluid with liquids containing mineral oil (such as engine oil or gasoline). Mineral oil will damage the seals and rubber components of the brake system.
3. Brake fluid is toxic and shall be kept out of reach of children. If accidentally ingested, seek medical attention immediately.
4. Brake fluid is corrosive and shall not come into contact with painted surfaces. If it spills onto paint, rinse immediately with plenty of water.
5. Brake fluid can harm the skin. If it splashes onto the skin or into the eyes, rinse thoroughly with plenty of water. If discomfort occurs, seek medical attention immediately.

Servicing

Replacing fuses

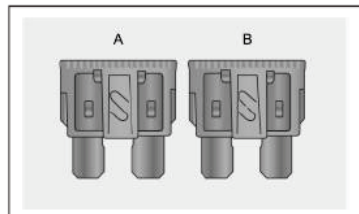
1. Fuse box location

The fuse box is located beneath the front hood. Release the clips on both sides of the fuse box cover, open the cover, and the fuses can be inspected.



2. Inspecting the fuses

Fuses protect the vehicle's electrical equipment by preventing overloads in the circuit. A blown fuse indicates that a fault has occurred in the circuit it protects, causing that circuit to stop functioning. If you suspect a fuse problem, pull out the fuse and check whether it has blown.

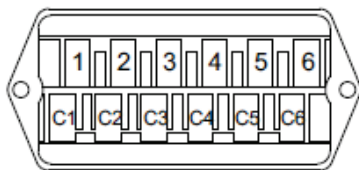


A: Normal
B: Fuse blown

3. Replacing the fuse

Locate the blown metal element inside the fuse. If the fuse is blown, replace it with a spare fuse of the same or lower amperage rating. If you use a lower-rated spare fuse and it blows again, replace it with a fuse of the correct rating.

If a fuse of the correct rating blows again in a short period of time, this indicates the vehicle may have a serious electrical fault. Please contact our company as soon as possible.



Bx2061 fuse box

4. Fuse locations and corresponding electrical components

C1~C6 red #14 interconnected with chain terminals

- | | |
|------------------------|-------------------|
| 1. Red/White 10A fuse | 2. Pink 10A fuse |
| 3. Red/Black 10A fuse | 4. Orange 5A fuse |
| 5. Light blue 10A fuse | 6. Spare 10A fuse |

1. Red/White low beam / high beam
2. Pink daytime running light, brake light
3. Red/Black hazard lights
4. Orange horn
5. Light blue USB

Servicing

C = Inspect CA = Inspect and adjust R = Replace S = Repair CL = Clean and lubricate L = Lubricate

	Remarks	Before operation	Monthly 20 laps 20 hours 100mi 160km	Half year 125 laps 125 hours 600mi 1000km	Annually 250 laps 1200mi 2000km	Every 2 years 500 laps 500 hours 2500mi 4000km	Every 4 years 1000 laps 1000 hours 5000mi 8000km	Number of pages
Before operation	Charging	S	S	S	S	S	S	8-5
	Clean around the battery and check the tightness of the screws	S	S	S	S	S	S	8-3/6-2
	Inspect the brakes	C	CA	CA	CA	CA	CA	8-9/8-10
	Inspect the steering system	C	C	C	C	C	C	6-3
	Check tire pressure, tread depth, and surface damage	C	CA	CA	CA	CA	CA	6-2
	Inspect the body and chassis	C	C	C	C	C	C	6-4
	Check the tightness of the screws	C	C	C	C	C	C	*
	Check the reverse warning buzzer	C	C	C	C	C	C	6-3
Monthly	Check the electrolyte level		C	C	C	C	C	8-3/8-4
	Check whether the contact points are damaged		C	C	C	C	C	*
	Clean and lubricate the pedal control area		CL					*
Every 6 months	Check for cracks or damage in the insulation			C	C	C	C	*
	Inspect shock absorbers for oil leakage and spring damage			C	C	C	C	*
Annually	Perform a discharge test				S	S	S	*
	Apply electrode protectant				S	S	S	*
	Check brake pad thickness and rear axle				C	C	C	*
	Check steering free play and adjust the wheels				CA	CA	CA	*
	Check wheel nut tightness and front wheel bearings				C	C	C	8-9/*
	Check the transmission oil level and for any leakage				C	C	C	8-8
	Inspect and adjust the brakes				CA	CA	CA	*
Every four years	Replace the transmission gear oil						R	*
	Inspect for lubricant leakage and adjust the gearbox if necessary						CA	8-8

If no page reference is available, the work shall be performed by an authorized dealer or qualified technician.

These steps are not included in this manual. They are provided in the service manual.

Transportation and Storage

Transportation



Loading and unloading instructions:

1. During shipping, drive the complete vehicle onto the transport truck's platform or cargo box using the factory's lifting-type loading platform, then disconnect the vehicle power, apply the hand brake, place wheel chocks at the front and rear of the wheels, and secure the vehicle with straps to ensure safe transport.
2. When unloading, lower the entire vehicle. If the main beam is lower than the side edges of the vehicle body, use two wooden blocks sized 100 mm × 100 mm and over 1 meter long to prevent forklift damage, or drive the vehicle down a ramp directly to the ground. A licensed operator shall perform this operation.
3. For short distances, the vehicle may be towed with the front wheels on the ground. Towing with the rear wheels on the ground is strictly prohibited, as it may damage the motor and gearbox during transport.

Storage

If the vehicle shall be parked for an extended period, the following measures should be taken. Proper measures will prevent deterioration of the vehicle's condition and make it easier to restart later. It is recommended to store the vehicle indoors.

Note:

Press down the emergency stop switch, remove the key, and store it in a safe place.

Vehicle body preparation:

1. Check whether the tire pressure has reached 65 psi.
2. Clean the vehicle body; anti-rust oil may be applied.
3. Cover the vehicle with a cloth and store it in a dry, well-ventilated place.

Battery preparation:

1. Charge the battery and check the battery water at least once a month.
2. Disconnect the emergency stop switch for long-term storage.
3. Use baking soda water to clean stains on the battery surface to prevent corrosion.

CAUTION

Do not allow cleaning agents to enter the interior of the battery.

Vehicle Maintenance and After-Sales Service

Warranty Summary and Activation

To ensure you receive the highest quality after-sales support, please review the complete ARIES EV Parts Limited Warranty document available at www.AriesEV.com.

The information below serves strictly as a brief overview of your coverage; please refer to the official warranty document for all binding terms, conditions, and limitations.

Warranty Coverage and Period

When operated correctly and in accordance with this manual, your vehicle is protected against defects in materials, assembly, and workmanship:

- General Vehicle: New products purchased from an Authorized Dealer are covered for two (2) years from the date of purchase. This applies to major and additional components such as the electric motor, controller, chassis, suspension, and body panels.
- Lithium Battery: The battery is covered for five (5) years (3/2 prorated), or the direct manufacturer's warranty, whichever is greater.

Key Exclusions

In order to maintain your warranty, the vehicle must be operated and maintained as outlined in this manual. The following situations are not covered:

- Routine maintenance items, normal wear and tear, or cosmetic degradation.
- Damage resulting from improper charging practices, inadequate maintenance, neglect, abuse, or collisions.
- Damage caused by the installation of unauthorized parts or repairs attempted by unapproved technicians.
- Damage from acts of nature (such as floods or earthquakes), extreme weather, theft, or vandalism.

WARNING — Unauthorized Modifications

Do not make any modifications to the vehicle that alter its weight distribution, stability, speed, acceleration curve, or the output of the battery charger. Doing so compromises the safe operation of the vehicle, can result in severe property damage or personal injury, and will immediately void the limited warranty.

Warranty Activation

To officially activate your coverage, please ensure the warranty registration card is completed fully and accurately at the time of purchase. Domestic purchasers should mail the finalized document directly to our company, while overseas users should submit it to their authorized distributor. Your warranty is considered active once receipt of the registration is confirmed by our system.

Aries EV / Lvtong electronic controller fault diagnosis and fault codes

Diagnostics and Troubleshooting

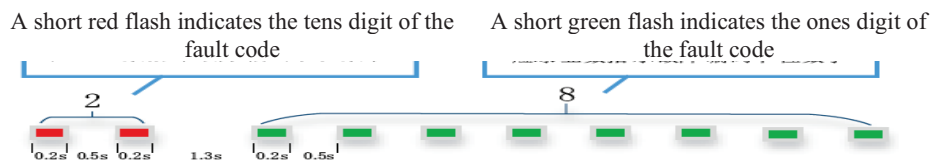
The controller can detect and display fault and warning states, and can store a list of the most recent nine faults and warnings.

Fault Display Mode

The LT Live upper-computer application software can read all faults, including current fault information and historical fault information.

LEVD1/LEVD2 can display current faults via the dual-color LED on the controller.

Example: Fault 28 — Motor overtemperature derating fault



Troubleshooting

The most common fault phenomena of the vehicle include:

- ① The vehicle cannot drive
- ② The vehicle has insufficient power

When a fault occurs, if it is confirmed that there is no wiring error or mechanical malfunction, you may attempt to restart the vehicle using the key switch. If the fault persists, turn off the key switch and check whether the 35-pin connector is properly connected or contaminated. After repairing and cleaning it, reconnect and proceed to check according to the troubleshooting methods below.

Inspection procedure for a vehicle that will not drive:

1. Check whether the traction battery has charge; identify and resolve any battery voltage issues.
2. Inspect the DC/DC output power supply and connector connection problems.
3. If the controller is already powered normally, check the LED fault code or use the TercelLive diagnostic interface to read the fault code.
4. If a fault code (FAULT) is present, the motor controller is in protection mode. Refer to the fault list in Section 6.3 and eliminate the fault.
5. If no fault code is present but only a warning code (ALARM), the vehicle does not yet meet the conditions for driving. Refer to the code or check according to the following steps.
 - √ Check whether the key switch signal is normal; identify and resolve wiring or connector problems.
 - √ Check whether the contactor is engaging; identify and resolve contactor issues.
 - √ Check whether the accelerator pedal signal is normal; identify and resolve accelerator pedal issues.

Aries EV/ Lvtong electronic controller fault diagnosis and fault codes

- ✓ Check whether the gear-selection signal is normal; identify and resolve gear-selection issues.
- ✓ Check whether the brake pedal signal is normal; identify and resolve brake pedal issues.
- ✓ Check whether the charge-interlock logic signal is normal; identify and resolve charge-interlock logic issues.
- ✓ Check whether the motor encoder signal and temperature information are normal; eliminate encoder and temperature-connector issues.
- ✓ Check whether the motor U / V / W three-phase wiring is normal.

Troubleshooting procedure for insufficient power while driving:

1. Check the traction battery SOC status and whether the voltage is low; if so, charge the battery.
2. Check the bus current status while driving to determine whether it has reached the upper current limit. If it is at the limit, inspect the brake system and mechanical components for drag or resistance.
3. Check via the TercelLive fault interface whether the drive system is in a derated-power state. The causes of derating include:
 - ✓ Traction battery voltage too low or too high
 - ✓ Traction battery discharge-current limitation
 - ✓ Controller undervoltage or overvoltage protection
 - ✓ Controller overtemperature or low-temperature protection
 - ✓ High-altitude derating protection
 - ✓ Motor overtemperature protection

Aries EV/ Lvtong electronic controller fault diagnosis and fault codes

4. Lvtong controller fault list

Note: Fault codes marked with * indicate shutdown faults; all others indicate derated-power alarms or warnings.

Fault code (BCD)	Fault name Fault handling mechanism	Cause	Fault trigger mechanism Clearing conditions
1* (0x01)	BMS Error BMS Fault <i>Cut off motor drive</i> <i>Disable accelerator response</i>	BMS Fault	Trigger mechanism: A BMS fault occurs. Fault clearing: Turn the KSI switch OFF/ON.
2* (0x2)	KSI Voltage High Error — Key switch voltage high fault <i>Cut off motor drive</i> <i>Disable accelerator response</i>	Key switch voltage high fault	Trigger mechanism: Key switch voltage detected as excessively high. Fault clearing: Turn the KSI switch OFF/ON.
11* (0x0B)	Motor Encoder Error Motor Encoder Fault <i>Cut off motor drive</i> <i>Disable accelerator response</i>	Motor Encoder Fault	Trigger mechanism: Motor encoder error. Fault clearing: Turn the KSI switch OFF/ON.
12* (0x0C)	Over current Controller overcurrent <i>Cut off motor drive</i> <i>Disable accelerator response</i>	1. External U / V / W motor phase short circuit. 2. Motor parameters do not match. 3. Controller failure; current sensor out of range. 4. Encoder signal abnormal.	Trigger mechanism: Phase current exceeds the controller's maximum allowable current. Fault clearing: Turn the KSI switch OFF/ON.
13* (0x0D)	ADC Calib Fault — Sampling Calibration Fault <i>Cut off motor drive</i> <i>Disable accelerator response</i>	1. Short circuit between U / V / W phases, or short to chassis. 2. Controller current sensor failure, or controller malfunction. 3. Poor current-sensor harness condition.	Trigger mechanism: Sampling-loop calibration fault occurs after power-up. Fault clearing: Turn the KSI switch OFF/ON.
14* (0x0E)	Precharge Failed Pre-charge Fault <i>Cut off motor drive</i> <i>Disable accelerator response</i>	1. An external load is connected to the positive terminal of the controller capacitor, preventing proper capacitor charging. 2. External B- shorted to B+ or leakage present. 3. Fault in the high-voltage charging path. 4. Pre-charge relay damaged.	Trigger mechanism: Controller capacitor voltage fails to reach KSI voltage within the specified time. Fault clearing: Turn the KSI switch OFF/ON.
15* (0x0F)	Under Temperature Low-temperature fault <i>Cut off motor drive</i> <i>Disable accelerator response</i>	1. Controller operating environment excessively harsh. 2. Controller temperature sensor failure.	Trigger mechanism: Controller heat-sink temperature drops below -40°C . Fault clearing: Raise the controller heat-sink temperature above -40°C , then cycle the KSI switch.
16* (0x10)	Over Temperature Overtemperature Fault <i>Cut off motor drive</i> <i>Disable accelerator response</i>	1. Controller operating environment excessively harsh. 2. Vehicle overloaded or continuously in electronic hill-hold state. 3. Improper controller installation. 4. Controller temperature sensor failure.	Trigger mechanism: Controller heat-sink temperature exceeds 95°C . Fault clearing: Reduce controller temperature below 95°C , then cycle the KSI switch.
17* (0x11)	Under Voltage Undervoltage Fault <i>Cut off motor drive</i> <i>Disable accelerator response</i>	1. Incorrect battery parameters or bus rated-voltage settings. 2. Non-controller system power consumption. 3. Battery impedance excessively high. 4. Battery connection becomes disconnected during driving. 5. Fuse blown, or main contactor not closed. 6. Severe overloading.	Trigger mechanism: With the controller in the on-state, capacitor voltage falls below the undervoltage threshold. Fault clearing: Raise the controller capacitor voltage above the undervoltage threshold, then cycle the KSI switch.

Aries EV/ Lvtong electronic controller fault diagnosis and fault codes

18* (0x12)	Over Voltage Overvoltage Fault	1. Battery voltage reaches the overvoltage cut-off point.	Trigger mechanism: With the controller in the on-state, capacitor voltage exceeds the overvoltage threshold.
	<i>Cut off motor drive</i> <i>Disable accelerator response</i>	2. Battery connection disconnected or loosened during regenerative braking. 3. Incorrect battery-parameter settings. 4. Battery impedance excessively high.	Fault clearing: Reduce the controller capacitor voltage below the overvoltage threshold, then cycle the KSI switch.
19* (0x13)	DC Link Voltage Sensor Fault Bus Voltage Sensor Fault	Bus-voltage sensor sampling fault.	Trigger mechanism: Bus-voltage sensor malfunction.
	<i>Cut off motor drive</i> <i>Disable accelerator response</i>		Fault clearing: Turn the KSI switch OFF/ON.
21 (0x15)	Under Voltage Undervoltage	1. Controller performance restricted. 2. Incorrect battery-parameter settings. 3. Non-controller system power consumption. 4. Battery impedance excessively high.	Trigger mechanism: With the controller in the on-state, capacitor voltage falls below the low-voltage threshold.
	<i>Battery output stopped</i>	5. Battery connection becomes disconnected during driving. 6. Fuse blown, or main contactor not closed.	Fault clearing: Raise the controller capacitor voltage above the low-voltage threshold.
22 (0x16)	Over Temp Cutback Controller overtemperature power derating	1. Controller performance restricted. 2. Controller operating environment excessively harsh.	Trigger mechanism: The controller heatsink temperature exceeds 85° C or the set threshold.
	<i>Output derating</i>	3. Vehicle overloaded or continuously in electronic hill-hold state. 4. The controller is improperly installed.	Fault clearing: Reduce the controller heatsink temperature below 85° C or the set threshold.
23 (0x17)	Under Voltage Cutback Undervoltage derating	1. Controller performance restricted. 2. Incorrect battery-parameter settings. 3. Non-controller system power consumption. 4. Battery impedance excessively high.	Trigger mechanism: With the controller in the on-state, capacitor voltage falls below the low-voltage threshold.
	<i>Battery-output derating</i>	5. Battery connection becomes disconnected during driving. 6. Fuse blown, or main contactor not closed.	Fault clearing: Raise the controller capacitor voltage above the low-voltage threshold.
24 (0x18)	Over Voltage Cutback Overvoltage derating	1. Controller performance restricted. 2. Incorrect battery-parameter settings. 3. Battery impedance excessively high.	Trigger mechanism: With the controller in the on-state, capacitor voltage exceeds the high-voltage threshold.
	<i>Battery-input derating</i>	4. Battery connection becomes disconnected during regenerative-braking operation.	Fault clearing: Reduce the controller capacitor voltage below the high-voltage threshold.
25* (0x19)	BCH Driver Fault Brake-resistor drive fault	Brake-resistor drive fault	Trigger mechanism:
	<i>Brake-resistor control disabled</i>		Fault clearing: Turn the KSI switch OFF/ON.
26* (0x1A)	Motor Stall Motor stalled	1. Motor stall.	Trigger mechanism: Excessive load, incorrect motor phase sequence, or incorrect encoder wiring.
	<i>Cut off motor drive</i> <i>Disable accelerator response</i>	2. Incorrect motor phase sequence. 3. Encoder wiring incorrectly connected.	Fault clearing: After clearing the fault, cycle the KSI switch.
27 (0x1B)	Motor Over Load Alarm Motor overload alarm	Motor load exceeds the set value.	Trigger mechanism: Motor load exceeds the set value.
	<i>Disable accelerator response</i>		Fault clearing: Self-recovery.

Aries EV/ Lvtong electronic controller fault diagnosis and fault codes

28 (0x1C)	Motor Over Temp Cutback Motor overtemperature derating	1. Motor operating environment excessively harsh. 2. Vehicle overloaded or continuously in electronic hill-hold state. 3. Incorrect motor-temperature parameter settings. 4. Motor temperature sensor failure.	Trigger mechanism: Motor temperature exceeds the overtemperature threshold. Fault clearing: Reduce the motor temperature to within the specified range.
	Motor-output derating		
29* (0x1D)	Motor Temp Sensor Fault Motor temperature sensor fault	1. Incorrect motor temperature-sensor connection. 2. Incorrect motor temperature-sensor model used. 3. Motor temperature sensor failure. 4. Motor-controller temperature-sampling circuit failure.	Trigger mechanism: Motor temperature-sensor sampled value is outside the valid range. Fault clearing: Turn the KSI switch OFF/ON.
	Motor output shutdown		
31* (0x1F)	Coil1 Driver Open/Short Main Open / Short Main contactor drive fault Main contactor open-circuit/short-circuit	1. Drive load open-circuit or short-circuit. 2. Connection points oxidized, melted, or unstable. 3. Improper crimping or incorrect wiring.	Trigger mechanism: Main contactor drive-circuit fault or contactor failure. Fault clearing: Turn the KSI switch OFF/ON.
	Cut off motor drive Disable accelerator response		
32* (0x20)	Coil12Driver Open/Short EMBrake Open / Short Electromagnetic brake drive fault Electromagnetic brake open-circuit/short-circuit	1. Drive load open-circuit or short-circuit. 2. Connection points oxidized, melted, or unstable. 3. Improper crimping or incorrect wiring.	Trigger mechanism: Electromagnetic brake drive-circuit fault or brake failure. Fault clearing: Turn the KSI switch OFF/ON.
	Cut off motor drive Disable accelerator response		
33* (0x21)	DC Link Current Sensor DC bus current-sensor fault	DC bus current-sensor fault	Trigger mechanism: DC bus current-sensor failure. Fault clearing: Turn the KSI switch OFF/ON.
	Cut off motor drive Disable accelerator response		
34* (0x22)	KSI Voltage Fault KSI voltage fault	KSI key-switch voltage below the set threshold (default setting: 30 V)	Trigger mechanism: KSI key-switch voltage falls below 30 V or the configured threshold. Fault clearing: Turn the KSI switch OFF/ON.
	Cut off motor drive Disable accelerator response		
35* (0x23)	UVW Temp Diff Fault UVW three-phase temperature-difference fault	MOSFET U/V/W three-phase temperature difference exceeds the threshold (default 35° C).	Trigger mechanism: MOSFET U/V/W three-phase temperature difference exceeds the threshold. Fault clearing: Toggle KSI.
	Cut off motor drive Disable accelerator response		
36 (0x24)	Resolver Encoder Fault Resolver fault	1. Resolver encoder failure. 2. Resolver connector failure. 3. Resolver circuit failure in the controller.	Trigger mechanism: Resolver signal acquisition error. Fault clearing: Turn the KSI switch OFF/ON.
	Cut off motor drive Disable accelerator response		
37* (0x25)	Motor Open Motor phase loss	1. Motor wiring open-circuit. 2. Motor three-phase current imbalance.	Trigger mechanism: Loss of U/V/W motor phase; three-phase current imbalance exceeds 50% of the rated value. Fault clearing: Turn the KSI switch OFF/ON.
	Cut off motor drive Disable accelerator response		
38* (0x26)	Main Contactor Welded Main contactor sticking	1. Main contactor contacts sticking. 2. Motor U-phase or V-phase not connected or open-circuit. 3. Another external path charges the controller capacitor.	Trigger mechanism: Before the main contactor closes, the controller capacitor already holds voltage and is not discharged. Fault clearing: Turn the KSI switch OFF/ON.
	Cut off motor drive Disable accelerator response		

Aries EV/ Lvtong electronic controller fault diagnosis and fault codes

39* (0x27)	MainContactorDidNotClose Main contactor not closed	1. Main contactor not closed. 2. Main contactor contacts oxidized, melted, or unstable.	Trigger mechanism: After the main contactor closes, the voltage difference between the controller capacitor and the KSI voltage exceeds the threshold. Fault clearing: Turn the KSI switch OFF/ON.
	Cut off motor drive Disable accelerator response	3. External load preventing the controller capacitor from charging. 4. Fuse blown open.	
40 (0x28)	Hand Brake Fault Hand brake fault	Hand brake signal and throttle signal are active simultaneously.	Trigger mechanism: Hand brake signal and throttle signal active at the same time. Fault clearing: Release either the throttle signal or the hand brake signal.
	Disable accelerator response		
41 (0x29)	Throttle Paddle High Fault Throttle pedal high fault	1. Throttle-pedal input wiring shorted to “+”.	Trigger mechanism: Throttle pedal high-level fault. Fault clearing: Clears automatically after the fault condition is removed.
	Disable accelerator response	2. Throttle-pedal potentiometer fault; high-level short. 3. Incorrect throttle-pedal type setting.	
42 (0x2A)	Throttle Paddle Low Fault Throttle pedal low fault	1. Throttle-pedal input wiring open-circuit. 2. Throttle-pedal input wiring shorted to “-”.	Trigger mechanism: Throttle-pedal low fault. Fault clearing: Clears automatically after the fault condition is removed.
	Disable accelerator response	3. Throttle-pedal potentiometer fault; shorted to ground. 4. Incorrect throttle-pedal type setting.	
43 (0x2B)	Brake Paddle Fault Brake fault	Brake signal and throttle signal active simultaneously.	Trigger mechanism: Brake signal and throttle signal simultaneously active. Fault clearing: Release either the brake signal or the throttle signal.
	Disable accelerator response		
44* (0x2C)	Motor Over Temp Fault Motor over-temperature fault	Motor temperature exceeds the over-temperature threshold (default 150 ° C).	Trigger mechanism: Motor temperature exceeds the over-temperature threshold. Fault clearing: Turn the KSI switch OFF/ON.
	Cut off motor drive Disable accelerator response		
45 (0x2D)	Throttle Not Match Fault Throttle-pedal signal mismatch fault	Two throttle-pedal channels do not match.	Trigger mechanism: Mismatch between the two throttle-pedal channels. Fault clearing: Release either the brake signal or the throttle signal.
	Disable accelerator response		
46* (0x2E)	EEPROM Failure EEPROM failure	1. EEPROM storage write failure. 2. Parameter-change failure.	Trigger mechanism: Parameter-saving failure. Fault clearing: Turn the KSI switch OFF/ON.
	Cut off motor drive Disable accelerator response	3. For safety, certain parameter changes only take effect after a key-switch restart.	
47 (0x2F)	HPD/S RO Fault High-pedal protection operation-sequence failure	1. Incorrect sequencing of key-on, interlock, direction, and throttle-pedal inputs. 2. Wiring, key-switch, interlock, direction, or throttle-pedal input fault. 3. When the key is turned on while the accelerator pedal is depressed, the accelerator pedal outputs a signal. 4. Poor contact or incorrect wiring at the accelerator-pedal connector. 5. Accelerator-pedal signal incompatible with the controller. 6. Incorrect sequence of KSI interlock and accelerator-pedal inputs. 7. Incorrect HPD type selected. 8. Accelerator-pedal potentiometer out of calibration. 9. Sequence delay too short.	Trigger mechanism: Accelerator-pedal signal present when KSI is switched on. Fault clearing: Release the accelerator pedal; return the gear selector to neutral.
	Disable accelerator response		

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49* (0x31)	Parameter Change	1. For safety reasons, rewriting certain parameters disables vehicle operation until KSI is cycled. 2. Parameter rewrite failure.	Trigger mechanism: Modification of specific parameters. Fault clearing: Turn the KSI switch OFF/ON.
	Parameter Change <i>Cut off motor drive</i> <i>Disable accelerator response</i>		
50 (0x32)	CanbinDoor Fault Cabin door-not-closed fault	Cabin door signal and accelerator signal active simultaneously.	Trigger mechanism: Cabin door signal and accelerator signal active simultaneously. Fault clearing: Release either the accelerator signal or the cabin door signal.
	<i>Disable accelerator response</i>		
51* (0x33)	MOS V Temp Sensor Fault MOS V-phase temperature-sensor fault	MOSFET V-phase temperature-sensor sampling fault.	Trigger mechanism: MOSFET V-phase temperature-sensor sampling fault. Fault clearing: Turn the KSI switch OFF/ON.
	<i>Cut off motor drive</i> <i>Disable accelerator response</i>		
52 (0x34)	RC Thermal Protection Controller inverse-time current-limit	Controller has operated under overload beyond the allowable duration.	Trigger mechanism: Controller overload duration exceeds allowable time. Fault clearing: Self-recovery.
	<i>Controller current-limit operation</i>		
53* (0x35)	Motor Short Motor short circuit	1. Poor motor insulation. 2. Controller malfunction.	Trigger mechanism: Motor UVW phase load imbalance. Fault clearing: Turn the KSI switch OFF/ON.
	<i>Cut off motor drive</i> <i>Disable accelerator response</i>		
54* (0x36)	+12V Supply Low Failure +12V Supply Voltage Low Fault	12V supply drops below 9.5 V and persists for 3 seconds.	Trigger mechanism: 12V supply below 9.5 V for 3 seconds. Fault clearing: Turn the KSI switch OFF/ON.
	<i>Cut off motor drive</i> <i>Disable accelerator response</i>		
55* (0x37)	+12V Supply High Failure +12V Supply Voltage High Fault	12V supply exceeds 16 V and persists for 3 seconds.	Trigger mechanism: 12V supply exceeds 16 V for 3 seconds. Fault clearing: Turn the KSI switch OFF/ON.
	<i>Cut off motor drive</i> <i>Disable accelerator response</i>		
56* (0x38)	Board Over Temperature Control-board Overtemperature	Control-board temperature exceeds 100 ° C.	Trigger mechanism: Control-board temperature exceeds 100 ° C. Fault clearing: Turn the KSI switch OFF/ON.
	<i>Cut off motor drive</i> <i>Disable accelerator response</i>		
57 (0x39)	BCH Temper Sensor Fault Brake-resistor temperature-sampling fault	Brake-resistor temperature-sampling fault	Trigger mechanism: Fault clearing: Turn the KSI switch OFF/ON.
	<i>Brake-resistor control disabled</i>		
58* (0x3A)	MOS U Temp Sensor Fault MOS U-phase temperature-sensor fault	MOSFET U-phase temperature-sensor sampling fault	Trigger mechanism: MOSFET U-phase temperature-sensor sampling fault. Fault clearing: Turn the KSI switch OFF/ON.
	<i>Cut off motor drive</i> <i>Disable accelerator response</i>		
59* (0x3B)	MOS WTemp Sensor Fault MOS W-phase temperature-sensor fault	MOSFET W-phase temperature-sensor sampling fault	Trigger mechanism: MOSFET W-phase temperature-sensor sampling fault. Fault clearing: Turn the KSI switch OFF/ON.
	<i>Cut off motor drive</i> <i>Disable accelerator response</i>		

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61 (0x3D)	Motor Under-Load Alarm ----- <i>Disable accelerator response</i>	Motor load below the set value.	Trigger mechanism: Motor load below the set value. Fault clearing: Self-recovery.
62 (0x3E)	Motor Overspeed Alarm ----- <i>Disable accelerator response</i>	Motor speed exceeds the set value.	Trigger mechanism: Motor speed exceeds the set value. Fault clearing: Self-recovery.
63 (0x3F)	CAN Communication Alarm CAN Communication Alarm ----- <i>Cut off motor drive</i> <i>Disable accelerator response</i>	In VCU control mode, a CAN communication fault exceeding 300 ms results in no control command being received.	Trigger mechanism: CAN communication alarm. Fault clearing: Self-recovery.
64* (0x40)	W Current Sensor W-phase current-sensor fault ----- <i>Cut off motor drive</i> <i>Disable accelerator response</i>	W-phase current-sensor fault	Trigger mechanism: W-phase current-sensor fault. Fault clearing: Turn the KSI switch OFF/ON.
65* (0x41)	V Current Sensor V-phase current-sensor fault ----- <i>Cut off motor drive</i> <i>Disable accelerator response</i>	V-phase current-sensor fault	Trigger mechanism: V-phase current-sensor fault. Fault clearing: Turn the KSI switch OFF/ON.
66* (0x42)	U Current Sensor U-phase current-sensor fault ----- <i>Cut off motor drive</i> <i>Disable accelerator response</i>	U-phase current-sensor fault	Trigger mechanism: U-phase current-sensor fault. Fault clearing: Turn the KSI switch OFF/ON.
67* (0x43)	Control Board 5V Fault Internal 5V supply fault of control board ----- <i>Cut off motor drive</i> <i>Disable accelerator response</i>	Abnormal operation of the control board's internal 5V supply IC.	Trigger mechanism: Internal 5V supply IC abnormal operation. Fault clearing: Turn the KSI switch OFF/ON.
68 (0x44)	Gear Fault ----- <i>Disable accelerator response</i>	D/R gear signals active simultaneously.	Trigger mechanism: D/R gear signals active simultaneously. Fault clearance: Only one of D/R gear signals becomes valid.
69 (0x45)	Charging Interlock Fault Charging interlock logic fault ----- <i>Disable accelerator response</i>	Throttle signal present during charging.	Trigger mechanism: Throttle signal present during charging. Fault clearance: Remove throttle signal or charging signal.
71* (0x47)	Motor Fly Fault Motor runaway fault ----- <i>Cut off motor drive</i> <i>Disable accelerator response</i>	1. Incorrect motor phase sequence. 2. Encoder wiring incorrectly connected. 3. Resolver initial angle incorrect.	Trigger mechanism: Motor phase sequence or encoder wiring misconnected. Fault clearing: After clearing the fault, cycle the KSI switch.
72* (0x48)	CAN Communication Fault CAN communication fault ----- <i>Cut off motor drive</i> <i>Disable accelerator response</i>	In VCU control mode, CAN communication fault exceeding 1 s results in no control command being received.	Trigger mechanism: CAN communication fault. Fault clearing: Turn the KSI switch OFF/ON.

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73 (0x49)	Stall detected Motor stall alarm	1. Motor stall. 2. Improper crimping or incorrect wiring.	Trigger mechanism: Within the set time, the drive current is very high but the vehicle does not move. Fault clearing: Turn the KSI switch OFF/ON.
	<i>Cut off the electromagnetic brake response.</i>		
74 (0x4A)	Under Temperature Cutback Controller low-temperature derating	Controller low-temperature derating	Trigger mechanism: Controller low-temperature derating. Fault clearing: Self-recovery.
	<i>Disable accelerator response</i>		
75 (0x4B)	EMBrake Fail Set Electromagnetic brake configuration fault	1. Electromagnetic brake fault	Trigger mechanism: Electromagnetic brake configuration fault. Fault clearing: Turn the KSI switch OFF/ON.
	<i>Cut off the electromagnetic brake response.</i>		
87* (0x57)	Motor Identification Fault Auto-identification fault	Motor parameter settings incorrect.	Trigger mechanism: Motor auto-identification error. Fault clearing: Turn the KSI switch OFF/ON.
	<i>Cut off motor drive</i> <i>Disable accelerator response</i>		
88* (0x58)	Motor Over Speed Fault Motor overspeed fault	Motor speed exceeds the set value (default: 1.2 times the motor rated maximum speed).	Trigger mechanism: Motor speed exceeds the set value. Fault clearing: Turn the KSI switch OFF/ON.
	<i>Disable accelerator response</i>		
89* (0x59)	Motor Type Error Motor type error	Motor type error	Trigger mechanism: Motor type error. Fault clearance: Reset the parameters and cycle the KSI switch.
	<i>Cut off motor drive</i> <i>Disable accelerator response</i>		
91* (0x5B)	Heat sink Over Temp Fault Heat-sink over-temperature fault	Heat-sink temperature exceeds the over-temperature setting (default 65 ° C for water-cooled, 85 ° C for air-cooled).	Trigger mechanism: Heat-sink temperature exceeds the over-temperature setting. Fault clearing: Turn the KSI switch OFF/ON.
	<i>Cut off motor drive</i> <i>Disable accelerator response</i>		
92 (0x5C)	Battery SOC Low Battery SOC low	Battery charge low	Trigger mechanism: Battery charge below the set value (default SOC < 10%). Fault clearance: Recharge fully.
	<i>Pump control not responding</i>		
93 (0x5D)	Safety Lock Lost Safety interlock wiring disconnected	Safety interlock wiring disconnected	Trigger mechanism: Safety interlock wiring disconnected. Fault clearance: Inspect the safety interlock wiring.
94* (0x 5E)	Cover Open Fault Cover-open interlock fault	1. Wiring cover opened 2. Micro-switch at the wiring cover is disconnected	Trigger mechanism: Wiring cover opened. Fault clearance: Close the wiring cover and cycle the KSI switch.
	<i>Cut off motor drive</i> <i>Disable accelerator response</i> <i>Cut off the main contactor</i>		
95 (0x5F)	DO High Volt Protection DO Output Short-to-High	The brake resistor or fan control output port is shorted to high voltage.	Trigger mechanism: Output port shorted to high voltage. Fault clearance: Inspect the wiring.
99* (0x63)	Illegal Model Number Mismatched product model	1. The product model does not match the downloaded parameters or program. 2. Controller failure.	Trigger mechanism: During program or parameter download, the program or parameters are detected as mismatched with the controller type, or the program does not match the downloaded parameters. Fault clearance: Download the corresponding controller program and parameters.
	<i>Cut off motor drive</i> <i>Disable accelerator response</i>		

Contents and methods of self-inspection and comprehensive inspection

No.	Inspection item	Inspection method	Self-inspection	Comprehensive inspection
1	Inspection item	Whole-vehicle appearance	✓	✓
2		Primary load-bearing structural components	-	✓
3		Major components	✓	✓
4		Nameplates and markings	-	✓
5		Power system	✓	✓
6		Driving system	✓	✓
7		Steering and operating system	✓	✓
8		Brake system	✓	✓
9		Electrical and control system	✓	✓
10		Safety protection and protective devices	✓	✓

Contents and methods of self-inspection and comprehensive inspection

No.	Inspection item		Inspection method	Self-inspection	Comprehensive inspection
11	Test items	Steering performance	With the vehicle in an unladen condition, turn the steering wheel to the maximum angle and hold it; operate the vehicle at the minimum stable speed; trace the outermost trajectory of the vehicle body and measure the minimum outer turning radius. Measure twice for front-left, front-right, rear-left, and rear-right, and average the values for each side. Verify whether the vehicle's turning radius meets performance requirements.	-	√
12		Braking performance	With the golf cart in an unladen condition, perform an emergency stop at maximum vehicle speed and use a tape measure to record the braking distance to verify whether the braking distance is abnormal. On a road section with the maximum gradient allowed on the route, apply the parking brake in both uphill and downhill directions under full load, and visually check whether the vehicle slips within 5 minutes.	-	√
13		Electrical safety	Use a 500 V insulation resistance tester to measure the insulation resistance between the battery terminals and the vehicle frame. The insulation resistance shall not be less than 50 kΩ. Operate the emergency power-off device to verify whether it can disconnect the main power supply and reset normally.	-	√
Note: “√” indicates “required,” and “-” indicates “not required”.					



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