

SOLANA

MODEL F 6P

Owner's Manual



SolanaEV.com

INTRODUCTION

Dear Customer,

Thank you for choosing the Solana Model F 6-Passenger electric golf cart. We are committed to delivering high-quality products that combine safety, comfort, performance, and efficiency — along with attentive and reliable service — all to enhance your mobility, lifestyle, and daily convenience.

To help you fully understand and enjoy the outstanding performance of this vehicle, we sincerely recommend reading this manual carefully before operation. It contains important information regarding safe driving, daily use, and maintenance that will enable you to operate the vehicle correctly and safely, and extend its service life.

Please note that due to configuration variations, the content in this manual may differ slightly from your actual vehicle. Kindly refer to the specifications of your own unit. All illustrations are for reference purposes only.

This manual forms an integral part of the vehicle. If the vehicle is sold or leased, please ensure this manual is transferred to the new owner. Contents are based on the latest information available at the time of publication.

We wish you an enjoyable and smooth driving experience!

© Copyright Notice: The copyright and interpretation rights of this manual are owned by Solana EV. No part of this manual may be reproduced, copied, translated, or extracted in any form without prior written permission.

TABLE OF CONTENTS

01	Important Safety Labels	3
02	Safety Operation	4
03	Vehicle Overview & Specifications	6
04	Operation and Controls	7
05	Pre-Operation Inspection	8
06	Maintenance and Care	10
07	Vehicle Storage	14
08	Warranty and After-Sales Service	15

01

IMPORTANT SAFETY LABELS

■ DANGER

Read all labels attached to the vehicle carefully before driving. Replace any labels that are damaged or missing immediately.

① Operating Instructions

Before driving, read this manual and all safety instruction labels on the vehicle. The following steps apply every time you operate the cart:

- Ensure all passengers are seated securely before starting.
- Select Forward (D) or Reverse (R) gear.
- Press the accelerator pedal to move; press the brake pedal to stop.
- Drive safely according to terrain, visibility, and your experience level.
- Use extra caution in crowded or slippery areas.
- When parking, press the parking pedal — the vehicle will automatically engage parking mode.

② Battery Warning Labels

The following hazard labels are affixed to the battery area. Understand each one before operating the vehicle.

EXPLOSIVE GASES	SULFURIC ACID	ELECTRICAL SHORT CIRCUIT
Keep all ignition sources away from the battery. Presence near the battery may cause an explosion.	Battery acid burns skin and eyes. Do not tilt the battery. Keep vent caps secure. Flush with water immediately if contact occurs; seek medical attention.	Never bridge the positive and negative battery terminals. Doing so may cause an explosion or fire.

■ CAUTION

The windshield does not protect against flying objects. Passengers must keep hands and feet inside the vehicle at all times.

02 SAFETY OPERATION

Special Notes

Strict Compliance With This Manual

Please follow all operating instructions and guidelines in this manual. Solana EV shall not be held responsible for malfunctions, damage, or losses resulting from improper operation, use of non-certified parts, or service performed by unauthorized personnel. Warranty coverage will not apply under such circumstances.

Vehicle Labels

Important operational labels are affixed to the vehicle body. Do not remove or tamper with any labels. Loss or removal of safety labels may lead to unforeseen risks including vehicle damage or personal injury.

Seat Belts

Seat belts are the most fundamental safety device for the driver and passengers. Ensure all seat belts are worn correctly before starting the vehicle.

Safety Symbol Reference

Symbol	Meaning
■ CAUTION	Failure to follow instructions may result in vehicle damage.
■ WARNING	Failure to follow instructions may result in minor accidents or personal injury.
■ DANGER	Failure to follow instructions may lead to serious accidents, severe injury, or death.
■ ENV	Operation poses minimal environmental risk; supports recycling and reuse.

Before Operation

1. Read this manual and all operational labels on the vehicle before driving.
2. Only authorized personnel may operate the vehicle in designated areas.
3. Do not overload the vehicle. Respect the rated passenger and cargo capacity.
4. Do not operate the vehicle if you are under the influence of alcohol or any medication that may impair your vision or judgment.

During Operation

1. Remain seated with your body inside the vehicle when it begins to move.
2. Do not start the vehicle until all passengers are properly and securely seated.
3. Keep both hands on the steering wheel and your eyes on the road ahead at all times.
4. Use extra caution when reversing in crowded areas. Always look behind you and reverse slowly.
5. Avoid sudden starts, stops, or severe jolts. Adjust your speed to road conditions.
6. Do not make sudden or excessive turns of the steering wheel at high speeds.

7. When driving on slopes, maintain a slow, steady speed. Drive straight up or straight down — never at an angle across a slope.
8. Do not overload the vehicle or install unauthorized accessories.
9. Do not modify the vehicle or deviate from the safety instructions or load capacities in this manual.

Prohibited Actions

- Transporting flammable, explosive, or hazardous materials.
- Driving under the influence of alcohol, drugs, or impairing medication.
- Allowing passengers to ride outside the designated seating area.
- Using a phone, reading, or performing any activity that diverts attention from driving.

03

VEHICLE OVERVIEW & SPECIFICATIONS

Component Identification

The table below identifies key components of the Solana Model F 6P. Refer to these numbers when reading maintenance and operation instructions throughout this manual.

#	Component	#	Component	#	Component
①	Roof	⑨	Rear Body Cover	■	Armrest
②	Rear Fender	⑩	Steering Wheel	■	Front Wheel
③	Rearview Mirror	■	Steering Column	■	Rear Wheel
④	Windshield	■	Dashboard	■	Taillight
⑤	Windshield Frame	■	One-Button Start	■	Horn
⑥	Headlight	■	Gear Selector (D-N-R)	■	High Beam
⑦	Front Bumper Cover	■	Brake Pedal	■	Low Beam
⑧	Front Body Cover	■	Accelerator Pedal		

Key Specifications

Specification	Value
Model	Solana Model F 6P
Seating Capacity	6 Passengers
Drive System	Electric (AC)
Top Speed	Per local regulations
Tire Pressure	32 PSI (all tires)
Lug Nut Torque	105 – 120 Nm
Differential Oil	74W/90 GL-4 Gear Oil
Differential Oil Capacity	0.65 L
Charging Temperature Range	-5°C to 40°C
Battery Storage Humidity	5% – 85% RH
Battery Storage Temperature	Below 40°C

04 OPERATION AND CONTROLS

① Main Battery Switch

The main battery switch is located inside the seat compartment of the driver's area.

- **Power ON:** Press the switch. The power indicator light will illuminate when the system is active.
- **Power OFF:** After parking, press the switch again until the power indicator light turns off to cut the main power supply.

② One-Button Start

1. Ensure the DNR switch is in the center (Neutral) position.
2. Press the **UNLOCK** button on the start switch to power on the vehicle.
3. Press the **LOCK** button on the start switch to power off the vehicle.

③ Forward / Neutral / Reverse (DNR) Switch

The DNR switch sets the vehicle's direction of travel:

- Turn right to **"D"** — Forward drive
- **Center position** — Neutral
- Turn left to **"R"** — Reverse (reverse buzzer will sound)

■ WARNING

The vehicle must come to a COMPLETE STOP before shifting the DNR switch. When changing direction, first move the switch to the center (Neutral) position and hold for 2 seconds, then select Forward or Reverse. Shifting hastily may damage the sensor or cause switch malfunction.

④ Battery Voltage Indicator

- Full display segments — Battery fully charged.
- Decreasing segments — Normal power consumption during operation.
- Indicator moving between first and second segments — Low battery warning. Recharge soon.
- First segment flashing — Critical low voltage. Stop and recharge immediately.

⑤ Accelerator and Brake Pedals

With the key switched on and a direction selected, release the brake pedal, place your right foot on the accelerator pedal, and gently press down to begin moving.

■ CAUTION

Do not press the accelerator pedal all the way down suddenly. Gradual acceleration extends battery life and protects drivetrain components.

05 PRE-OPERATION INSPECTION

Before each use, perform a complete pre-operation inspection. Develop the habit of conducting these checks in the same sequence every time to ensure safe, reliable operation.

■ WARNING

Before performing the pre-operation inspection, remove the main switch key to prevent accidental startup and press the parking brake to prevent unintended movement.

Battery

- Charge the battery before each use (see Section 06 — Battery Charging).
- Verify the battery is securely fastened to prevent vibration damage.
- Inspect the battery for any electrolyte leakage.
- Check battery terminals for signs of corrosion. Clean if necessary.

Tires

- Check tire pressure — correct pressure is **32 PSI** for all four tires.
- Inspect tires for damage, cuts, cracks, or embedded objects.
- Replace tires when tread depth wears down to 0.12 inches (3 mm) or less.

Steering System

- Move the steering wheel up and down, forward and backward, and left and right to check for excessive play.
- If you notice excessive shaking or unusual noises, contact your dealer before operating the vehicle.

Pedals

- **Brake pedal:** When pressed, it should feel firm. When released, it should return to its original position.
- **Accelerator pedal:** Check for smooth flexibility. When released, it should return to its resting position.

■ CAUTION

Ensure the main switch is turned OFF before inspecting the accelerator pedal.

Reverse Alarm

- Turn the DNR switch to “R” (Reverse) and confirm the reverse buzzer sounds.
- If the buzzer does not sound or sounds abnormally, contact your dealer immediately.

Body and Chassis

- Inspect body panels and chassis for visible damage, cracks, or loose fasteners.
- Check that the seat is properly secured.
- Lift the seat to access the battery compartment for inspection and maintenance.

06 MAINTENANCE AND CARE

Battery Usage Guidelines

1. Use only the charger provided by the manufacturer. Using an incompatible charger may damage the battery or pose a fire hazard.
2. Lithium battery charging must occur at temperatures between -5°C and 40°C in a well-ventilated area with no flammable materials nearby.
3. Keep the battery pack away from heat sources, open flames, flammable or explosive gases and liquids, and hazardous chemicals.
4. Avoid exposing the battery to rain, submersion in water, or contact with corrosive liquids.
5. During winter charging, if the temperature drops below -5°C, the battery will enter low-temperature protection mode and charging will stop automatically.

Battery Storage

1. For extended storage, charge the battery to approximately 50% and turn off the battery management system (for batteries with a power button: press and hold for 5 seconds, then release).
2. Check the battery level monthly during storage and recharge as needed. Storing with a low charge may cause complete discharge and permanent damage.
3. Store lithium batteries in a well-ventilated, cool, dry location. Storage temperature must remain below 40°C with humidity between 5% and 85% RH.

Battery Charging Procedure

■ WARNING

Before charging, read and understand the user manual provided with the vehicle's lithium battery charger.

■ DANGER

Charging the battery generates explosive hydrogen gas. ALWAYS charge in a well-ventilated area. Ventilate the area at least 5 times per hour during charging.

Connecting the Charger

1. Use the DC output plug provided with the charger. Align the plug according to the markings and insert it into the lithium battery charging port until it clicks securely into place.
2. Insert the charger's AC input plug into a properly rated power outlet. Ensure the plug is fully inserted.

Disconnecting the Charger

1. After charging is complete, **FIRST** unplug the charger's AC input plug from the wall outlet.
2. **THEN** disconnect the DC output plug from the lithium battery charging port.

■ CAUTION

This sequence prevents reverse current surges. Never disconnect the DC cable from the battery socket while charging is in progress — doing so may cause an explosion. The charger will shut off automatically when the battery is fully charged.

Owner Responsibility — Battery Care

To preserve lithium battery life and maintain warranty eligibility, the following practices are required:

- Keep the battery above 20% state of charge during storage and regular use.
- Avoid repeatedly discharging the battery below 10%.
- Do not leave the vehicle unplugged for extended periods with a low battery charge.

Battery capacity loss resulting from the following conditions is NOT covered under warranty:

- Storage exceeding 14 days with battery charge below 20%.
- Frequent deep discharges below 10%.
- Overcharging or leaving the battery at 100% for extended periods without use.
- Improper storage or neglect of battery care guidelines.

Lithium Battery Fire Response

1. Firefighting

If a fire is in its early stage, use a suitable dry powder fire extinguisher. Maintain a safe distance of 1–2 meters, aim at the base of the flames, and press the handle to extinguish. Do **NOT** use water or water-based extinguishers as this may worsen the fire.

2. Evacuation

Immediately stop surrounding operations. Cover your nose and mouth with a wet towel, stay low, and quickly evacuate along a designated safe escape route. If in an enclosed space, do not attempt to fight the fire. Evacuate to an open, ventilated area and call emergency services.

Differential Oil

The differential uses **74W/90 GL-4 gear oil** with a capacity of **0.65 L**.

Oil Level Check Procedure

1. Park the vehicle on a level surface.
2. Lift the seat.
3. Remove the gear oil filler cap.
4. Slowly add gear oil until it reaches the opening (maximum 0.65 L). Stop immediately when oil reaches the fill mark.
5. Be careful not to allow foreign objects into the differential oil tank.

Wheel and Brake Service

Lug Nut Torque

Wheel lug nut torque specification: **105 – 120 Nm**.

Tire Replacement

1. After the vehicle is completely stopped and secured, remove the lug nuts.

2. Use a jack to lift the vehicle, then remove the tire and bolts.
3. To install, reverse the above steps and torque lug nuts to 105–120 Nm.

Brake Adjustment

This vehicle is equipped with self-adjusting brakes. Press the brake pedal with your foot to confirm proper operation at each pre-operation inspection.

WARNING

If you notice any issues with the brakes, consult your dealer before operating the vehicle. Brake failure can cause serious accidents.

Routine Maintenance Schedule

The table below summarizes recommended maintenance intervals. Items marked “C” should be checked at the indicated frequency.

Inspection Item	Pre-Op	Monthly	4 Mo.	6 Mo.	Annual
Charge battery	C				
Clean battery cover; check screws & ports	C				
Brake pedal travel	C				C
Steering operation	C				
Tire pressure, tread & surface condition	C				
Body and chassis condition	C				
All bolts, nuts & screws — check tightness	C				
Reverse buzzer function	C				
Electrolyte levels		C			
Electrical connections (loose/broken)		C			
Pedal control area — clean & lubricate			C		
Transmission oil — replace				C	
Transmission — check for oil leaks				C	
Wire insulation (cracks/wear)					C
Shock absorbers & springs					C
Battery discharge test					C
Rear axle leaf spring & swing clearance					C
Steering knuckle bushing & wheel alignment					C
Front wheel bearing clearance					C
Transmission oil level check					C
Brake operation & pedal adjustment					C

■ CAUTION

Items without page references should be serviced by an authorized dealer or qualified technician. These procedures are covered in the separate Service Manual.

07**VEHICLE STORAGE**

If the vehicle will not be used for an extended period, follow all steps below to protect the vehicle and battery.

■ CAUTION

Press the one-button start switch to lock the vehicle. Remove and store the key fob in a secure location to prevent loss or unauthorized use.

Chassis Preparation

1. Ensure tire pressure is 32 PSI (2.25 kg/cm²).
2. Wipe down the exterior of the vehicle with anti-rust oil.
3. Cover the vehicle and store it in a dry, well-ventilated area.

Battery Preparation

1. Charge and inspect the battery at least once a month during storage.
2. Disconnect the lithium battery power switch when storing the vehicle long-term.

Cleaning Notes

- Do not place cleaning products inside the battery compartment.
- Clean the top of the battery with a mixture of baking soda and water to prevent corrosion buildup.

08**WARRANTY AND AFTER-SALES SERVICE****1. Authorized Service**

For all after-sales support, please visit an official Solana EV dealer or designated service center. All product quality issues within the warranty period will be properly handled at these locations. Do not attempt to repair faults on your own — unauthorized or improper handling may void your warranty.

2. General Exclusions (All Components)

This warranty does not cover:

- Regular maintenance items: brake pads, bulbs, tires, fluids, etc.
- Cosmetic wear, fading, or discoloration.
- Damage from improper maintenance or neglect.
- Unauthorized repairs or modifications.
- Racing, commercial use, or overloading.
- Use of non-approved parts or fluids.
- Natural disasters, fire, collision, or theft.
- Improper storage or transportation.
- Incidental costs such as towing, lodging, or communication expenses.
- Damage resulting from continued use after a known issue arises.

3. Warranty Voiding Conditions

This warranty is void if:

- The vehicle is used in any competitive event.
- The vehicle is declared a total loss or sold as salvage.
- The VIN is altered or unreadable.
- Non-approved performance accessories are installed that affect vehicle function.

4. Warranty Transfer

This limited warranty may be transferred to a second owner within the warranty period provided:

- A \$50 transfer fee is paid.
- A completed transfer form is submitted to Solana EV, LLC prior to the transfer.

5. Owner Responsibilities

To maintain warranty coverage, the vehicle owner must:

- Operate, maintain, and service the vehicle in accordance with this Owner's Manual.
- Retain a complete Service Schedule and Record Sheet.

- Provide proof of maintenance when submitting warranty claims.
- Ensure all warranty repairs are performed by an authorized Solana EV dealer.

■ CAUTION

Use of non-genuine parts, improper maintenance, or unauthorized modifications will void this warranty.

Ride Bright. Ride Solana.

solanaev.com • support@solanaev.com

© Solana EV, LLC. All rights reserved.