



# SERVICE MANUAL



FOR MODELS:
BREEZE SERIES / SIERA SERIES / TERRAIN SERIES

#### **SAFETY DETAILS**

Read carefully all the safety statements before attempting any procedure.

This service manual must be thoroughly read before attempting any vehicle maintenance. Not following the instructions in this manual could lead to property damage, serious injury, or even death.







This manual and the safety decals on the vehicle use specific signal words: **DANGER, WARNING, CAUTION, and NOTICE**. These terms indicate important safety messages that must be read, understood, and followed before operating the vehicle. Adhering to these precautions is essential for safe operation.

Ensure all safety decals remain visible and intact. If any safety decals are missing, damaged, or unreadable, they must be replaced immediately to prevent potential injury, property damage, or fatal accidents. Replacement decals are available from your authorized dealer or distributor.

Familiarize yourself with all local, state, and federal regulations regarding vehicle operation. Compliance with these laws ensures both safety and legal operation.

For any questions regarding the content of this manual or the vehicle itself, contact your authorized dealer or distributor for assistance.

- Slow down whenever driving on rough terrain or in challenging conditions.
- Use the brakes to manage speed on steep hills and slopes.
- Keep a safe distance from nearby vehicles.
- Reduce speed on wet or icy roads.
- Be cautious when approaching sharp or blind turns.
- Exercise extra care in areas where pedestrians are present.

#### **SAFETY DETAILS**

Read carefully all the safety statements before attempting any procedure.

#### **HOW TO MAKE A WARRANTY CLAIM**

To make a warranty claim under this limited warranty, you must present the vehicle or defective component with evidence of proof of purchase date to an authorized Breezy EV LLC dealer. For warranty-related communication, contact your sales.

#### **CONTACT INFORMATION**

Website: https://breezyev.com

Email: info@breezyev.com

Address: Carrollton, TX

#### **VEHICLE SAFETY LABELS**





Take the time to grasp the principles of safety. This understanding could be crucial for your well-being.



## VEHICLE PREP

Battery On/Off
Electric Motor Replacement
BRAKES
Electric Brake Disc Replacement
ELECTRICAL
Panel Replacement
Hazard Light Switch Replacement
Cigarette lighter Switch Replacement
Controller Replacement



### SUSPENSION

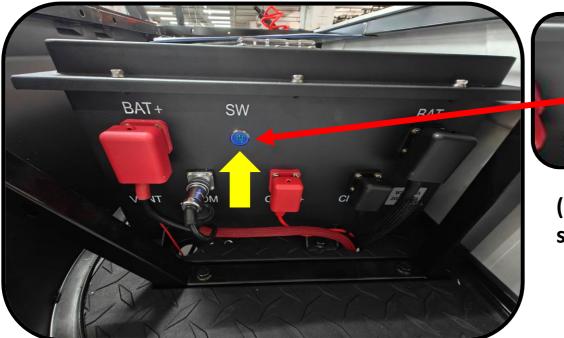
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Rear Bumper ReplacementHeadlight ReplacementTaillight ReplacementRoof ReplacementWindshield ReplacementSoundbar Replacement	

## **Battery On/Off**

- Ensure the vehicle's power is turned off when replacing parts or performing repairs that do not require power.
- 1. Turn the key counterclockwise to the battery off state.



2. Check whether the battery switch is off.





(No LED light will show when off)

The picture above shows the battery turned on.

#### **VEHICLE PRE**

Read carefully all the safety statements before attempting any procedure.

### **Wheel Chocks**

To prevent the vehicle from rolling while under maintenance, wheel chocks should be placed in front of the front wheels and behind the rear wheels.

#### **TOOL NEEDED**

2 Wheel Chocks Torque Wrench

- 1. Ensure that your vehicle is parked on level ground and the parking brake is engaged.
- 2. When lifting the rear of the vehicle, place wheel chocks in front of the front wheels. If lifting the front, position wheel chocks behind the rear wheels. This helps keep the vehicle steady and prevents it from rolling.



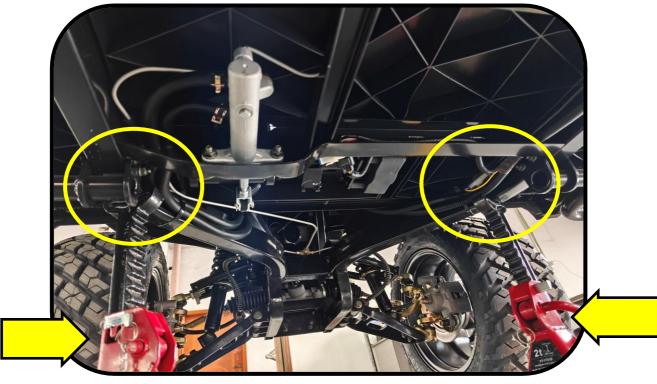
## **Lifting Front Body**

- 1. Place the floor jack beneath the metal frame and lift the vehicle.
- 2. Position the jack stands beneath the metal frame for added support.

### **TOOL NEEDED**

Floor Jack Jack Stands







### **VEHICLE PRE**

Read carefully all the safety statements before attempting any procedure.

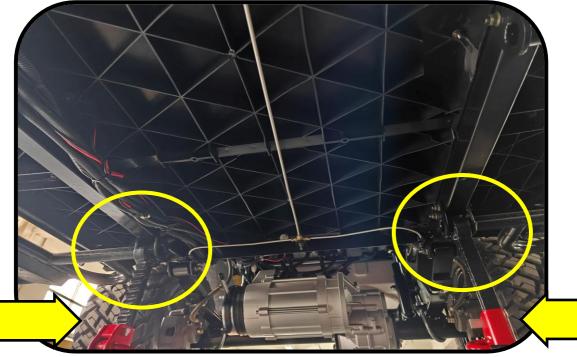
## **Lifting Rear Body**

- 1. Place the floor jack beneath the metal frame and lift the vehicle.
- 2. Place the jack stands at the rear, positioning them under both the metal frame and the axle for secure support.

### **TOOL NEEDED**

Floor Jack Jack Stands







### **Dash Removal**

• As shown in the picture, remove the 4 screws by turning them counterclockwise.

#### **TOOL NEEDED**

Phillips screwdriver



### Removal and installation of cup holder

 Clamp the jaws tightly and pull upwards to remove.





 Install the cup holder following the numbers shows in the picture





### VEHICLE PRE

Read carefully all the safety statements before attempting any procedure.

## **Torque Tightening Guide**

Maximum Tightening Torque (Nm)					
Size(mm)	Grade Level 8.8	Grade Level 10.9			
M5	1.6	2.1			
M6	3	4			
M8	6	8			
M10	10.5	14			
M12	15.5	21			
M14	24	31			
M16	32	42			
M24	80	106			
M30	108	140			



### **Electric Motor Replacement**

#### **⚠** WARNING:

Disconnect the battery before servicing the motor to prevent electric shock. Handle motor components with care, as improper installation may lead to performance issues or damage.

Open the rear cushion (pull the belt in the direction of the arrow)



• Lift the seat cushion in the direction of the arrow to remove it for easy maintenance.



### **MOTOR**

Read carefully all the safety statements before attempting any procedure.

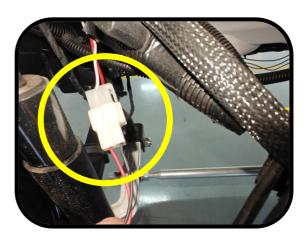
### **Electric Motor Replacement**

- Unplug these plugs :
- 1. waterproof plug connected to encoder
- 2. waterproof plug connected to motor temperature sensor
- 3. plug connected to electric brake disc)

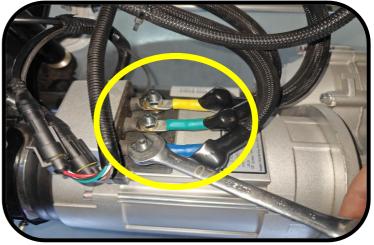
#### **TOOL NEEDED**

14mm wrench 10mm wrench





- Remove the motor wires (u, v, w)
- (use 14mm wrench)



- Remove the motor fixing screws.
- (use 10mm wrench)





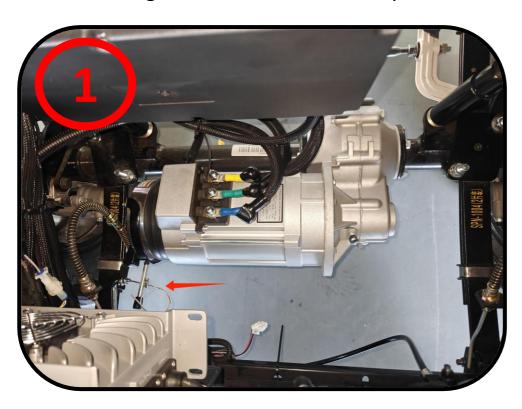
### **Electric Motor Replacement**

• Use a Phillips screwdriver to loosen the fastening screws as shown in the picture.

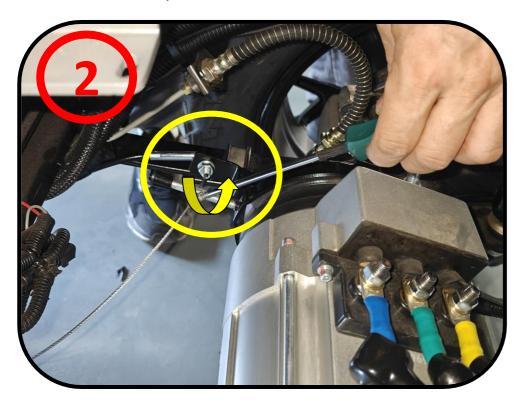
TOOL NEEDED

13mm wrench

Phillips screwdriver



Use a 13 open-end wrench to loosen the wire fixing screw

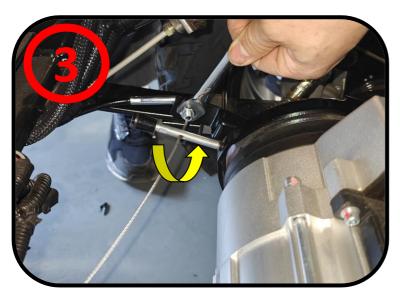


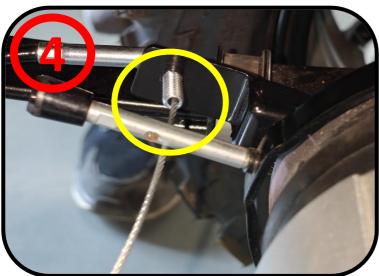
## **MOTOR**

Read carefully all the safety statements before attempting any procedure.

## **Electric Motor Replacement**

Take out the pull wire







### **TOOL NEEDED**

13mm wrench Phillips screwdriver

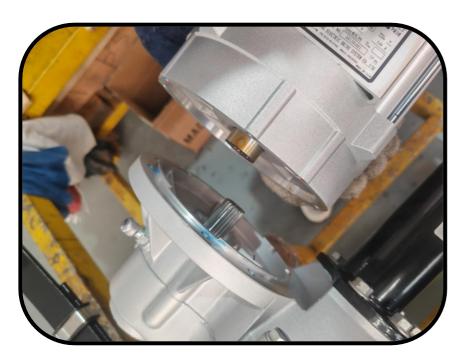


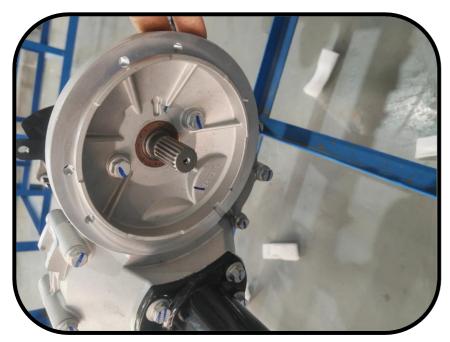


### **Electric Motor Replacement**

Lift out the motor

CAUTION: The motor is heavy; handle with care when removing it.





 Follow the steps in reverse to install the replacement motor. For securing any hardware, refer to the torque tightening guide on page 10.

### **MOTOR**

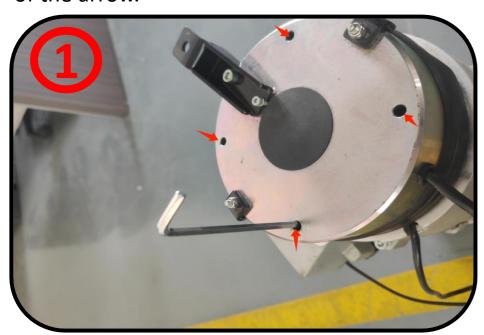
Read carefully all the safety statements before attempting any procedure.

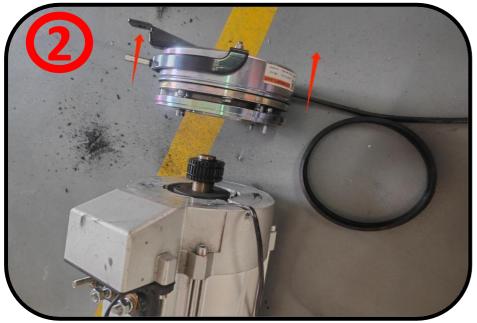
## **Encoder Replacement**

#### **⚠ WARNING:**

Disconnect the battery before servicing the motor to prevent electric shock. Handle motor components with care, as improper installation may lead to performance issues or damage.

- 1.Remove the electric brake disc fixing screws (use Hexagon wrench)
- 2. Remove the electric brake disc in the direction of the arrow.





#### **TOOL NEEDED**

Hexagon wrench
External circlip pliers
Rubber Mallet Hammer



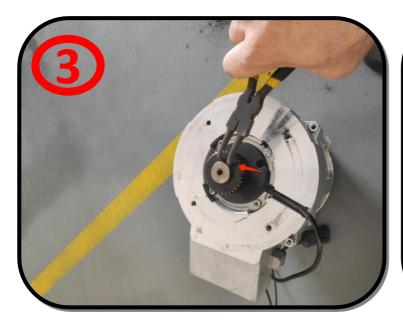
### **Encoder Replacement**

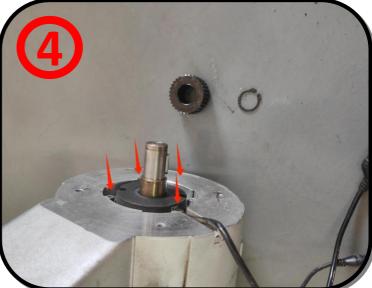
3.Use external circlip pliers to remove the circlip.

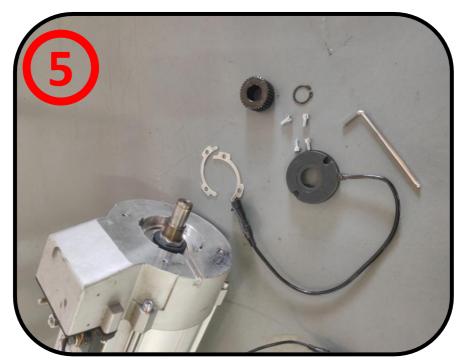
4.Use a rubber hammer to knock out the gear and use a hexagon socket to remove the encoder fixing screw (as shown in the picture), and the encoder can be removed.

#### **TOOL NEEDED**

Hexagon wrench
External circlip pliers
Rubber Mallet Hammer







Reverse these steps to install the replacement encoder.



#### **MOTOR**

Read carefully all the safety statements before attempting any procedure.

### **Run/Tow Switch**

#### **⚠** WARNING:

Disconnect the battery before servicing the motor to prevent electric shock. Handle motor components with care, as improper installation may lead to performance issues or damage.

#### **TOOL NEEDED**

Hexagon wrench
Utility knife
Insulation tape
Phillips screwdriver

- Loosen the switch fixing nut
- (Use Hexagon wrench)



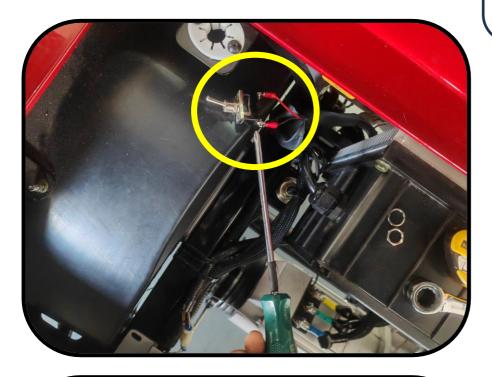
Use a utility knife to break the heat shrink tube

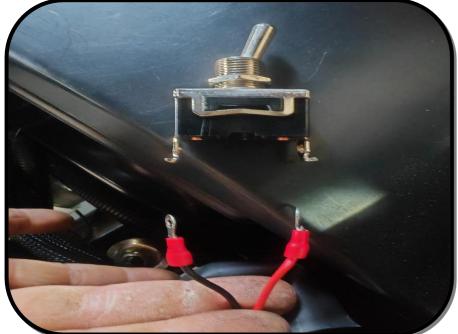




## **Run/Tow Switch**

 Remove the switch wire with a Phillips screwdriver and replace it.





Reverse these steps to install new Run/Tow switch.

#### **TOOL NEEDED**

Hexagon wrench
Utility knife
Insulation tape
Phillips screwdriver



### **BRAKES**

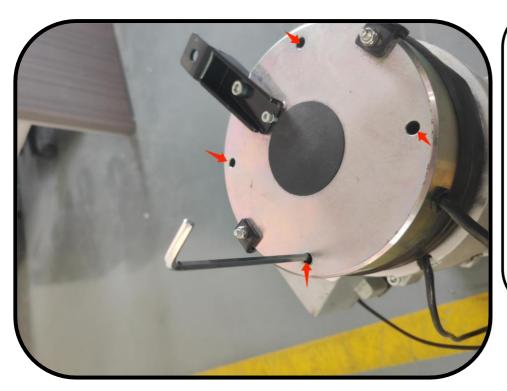
Read carefully all the safety statements before attempting any procedure.

### **Electric Brake Disc Replacement**

- Remove fixing screws
- Remove the electric brake disc in the direction of the arrow.

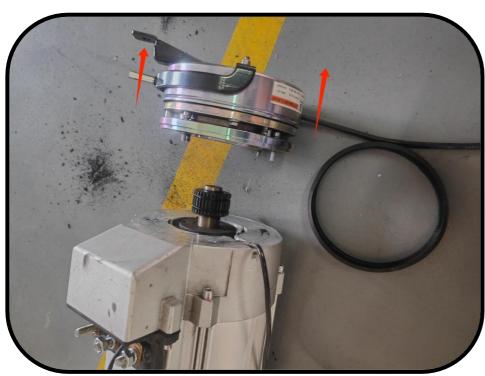
#### **TOOL NEEDED**

Hexagon wrench



#### **CAUTION:**

Brake components are critical for vehicle safety. Always use manufacturerapproved parts and follow the correct bleeding procedure to avoid brake failure.



Reverse these steps to install the replacement brake disc.



### **Brake Pad and brake caliper Replacement**

Lift the front wheel with a jack



#### **TOOL NEEDED**

19mm Impact Wrench 18mm Open End Wrench Slotted Screwdriver

#### **ACAUTION:**

Brake components are critical for vehicle safety. Always use manufacturerapproved parts and follow the correct bleeding procedure to avoid brake failure.

• Use an Impact Wrench to remove the wheel nut and take out the wheel hub.



### Brake Pad and brake caliper Replacement

 Use an 18mm open-end wrench to remove the slave caliper fixing screws to separate it from the slave caliper lock plate.

#### **TOOL NEEDED**

19mm Impact Wrench 18mm Open End Wrench Slotted Screwdriver





Use your thumb to press the spring plate and remove the brake pad.





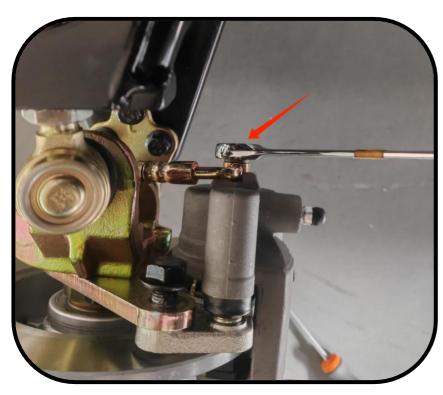


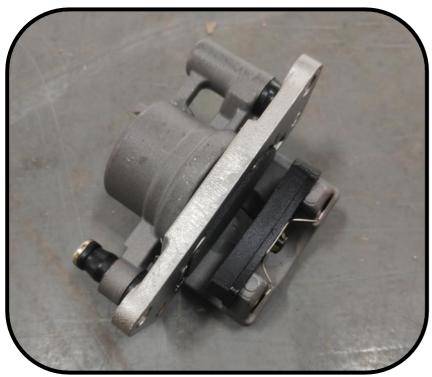
## **Brake Pad and brake caliper Replacement**

 Use a 14mm open-end wrench to remove the oil screw connecting the oil pipe to the slave caliper.

#### **TOOL NEEDED**

14mm open-end wrench





 Follow brake bleeding instructions to bleed the air from the brake line(s).



### **BRAKES**

Read carefully all the safety statements before attempting any procedure.

### **Brake Master Cylinder Removal**

 Use needle-nose pliers to loosen and remove the oil pipe clamp on the oilresistant hose.





#### TOOL NEEDED

Needle Nose Pliers 10mm Open End Wrench 13mm Elbow Wrench 13mm Impact Wrench

#### **CAUTION:**

Brake components are critical for vehicle safety. Always use manufacturerapproved parts and follow the correct bleeding procedure to avoid brake failure.

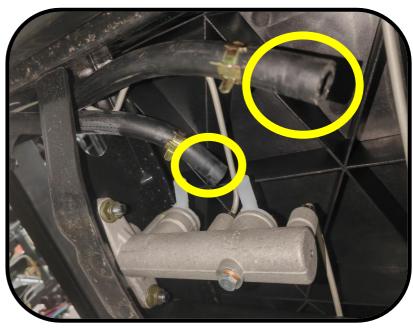




### **Brake Master Cylinder Removal**

• Pull out the oil-resistant hose and separate it from the master caliper.





 Use a 10mm open-end wrench to loosen the locking nut connecting the steel oil pipe to the master caliper and then separate the steel oil pipe from the master caliper.





### **BRAKES**

Read carefully all the safety statements before attempting any procedure.

### **Brake Master Cylinder Removal**

 Use a 13mm Elbow wrench and a 13inch impact wrench to loosen and remove the screws and nuts securing the master caliper, then remove the master caliper.

#### **TOOL NEEDED**

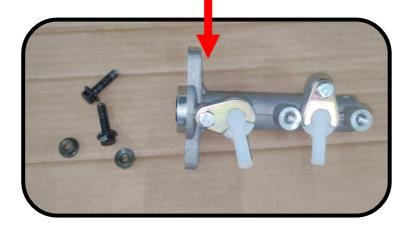
Needle Nose Pliers

10mm Open End Wrench

13mm Elbow Wrench

13mm Impact Wrench





 Brake Master Cylinder Replacement (See Removal and Air Bleeding procedures.).

### **Brake Bleeding Instructions**

 Repeatedly press the brake pedal, then press and hold it. Do not release the pedal until the bleeder screw on the brake caliper has been opened, air has been expelled, and the screw has been tightened again. Otherwise, air may be drawn back into the system.



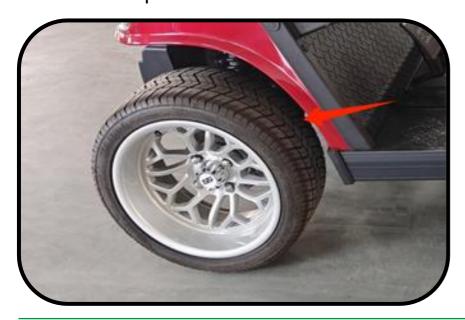
#### **TOOL NEEDED**

M10 open-end wrench

#### **CAUTION:**

Brake components are critical for vehicle safety. Always use manufacturerapproved parts and follow the correct bleeding procedure to avoid brake failure.

 Front caliper bleeder screw is at the position indicated. Remove the screw cap.



### **BRAKES**

Read carefully all the safety statements before attempting any procedure.

## **Brake Bleeding Instructions**



#### **TOOL NEEDED**

M10 open-end wrench

 Pump the brake pedal repeatedly. When the pedal is held down firmly, loosen the bleeder screw. Air and brake fluid will be released. Tighten the bleeder screw after bleeding.





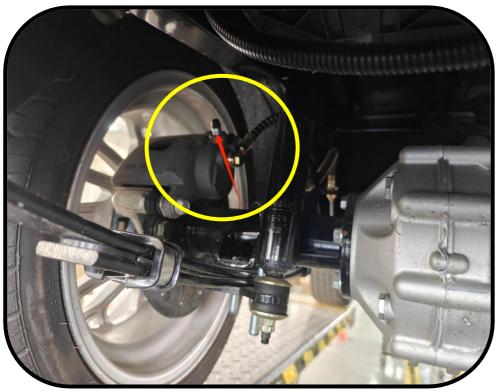
## **Brake Bleeding Instructions**

 Rear wheel bleeder screw is located as shown in the image (same procedure as front wheel).

#### **TOOL NEEDED**

M10 open-end wrench







### BRAKES

Read carefully all the safety statements before attempting any procedure.

### **Brake switch and accelerator Replacement**

 Pry open the screw cover on the accelerator pedal and use a 6mm hex wrench to loosen and remove the screw.

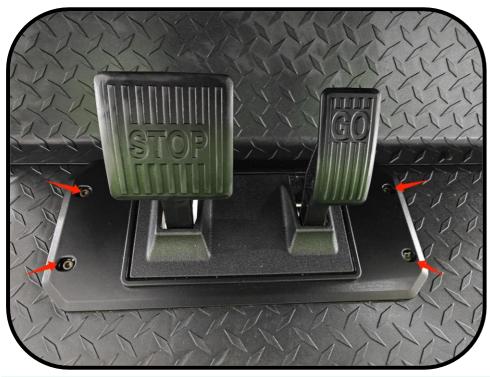


#### **TOOL NEEDED**

6mm Hexagon wrench Utility knife Phillips screwdriver 4mm Hexagon wrench

#### **CAUTION:**

Brake components are critical for vehicle safety. Always use manufacturerapproved parts and follow the correct bleeding procedure to avoid brake failure.



### **Brake switch and accelerator Replacement**

• Pull out the 6-pin waterproof connector (connected to the accelerator) and the 2-pin waterproof connector (connected to the brake switch).



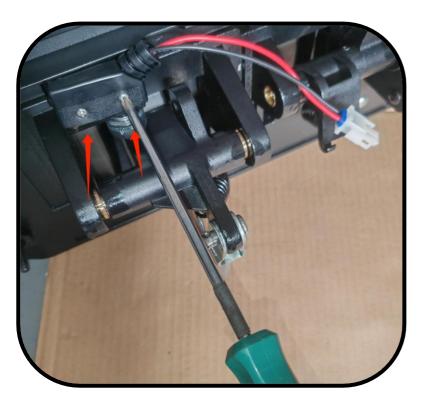


Take it out in the direction of the arrow.



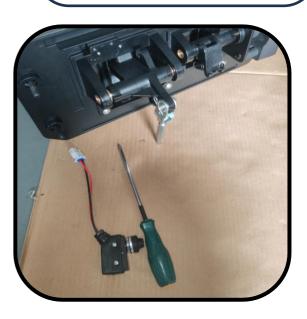
## **Brake switch and accelerator Replacement**

 Use a Phillips screwdriver to loosen and remove the screws securing the brake switch, then remove the brake switch.

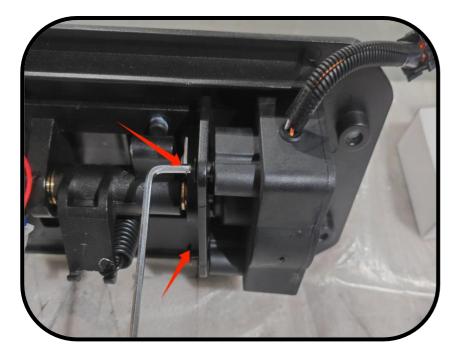


#### TOOL NEEDED

6mm Hexagon wrench
Utility knife
Phillips screwdriver
4mm Hexagon wrench



• Use a 4mm hex wrench to loosen and remove the screws securing the accelerator, then replace the accelerator.







### **Panel Replacement**

Remove the four screws on the panel.



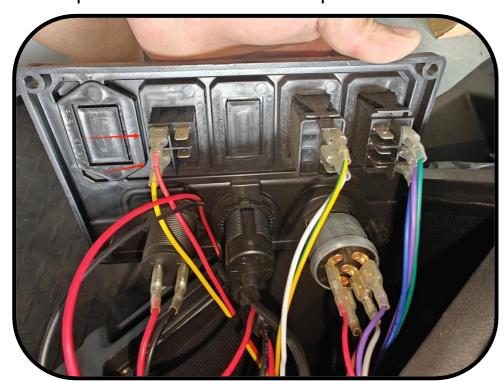
#### **TOOL NEEDED**

Phillips screwdriver

#### **⚠ WARNING:**

Before working on electrical components, always disconnect the battery to prevent electric shock or short circuits.

 Disconnect the wires from each switch. Remove the switches to replace the center console panel.



Reverse these steps to install the replacement.

### **ELECTRICAL**

Read carefully all the safety statements before attempting any procedure.

## Forward/Reverse Switch Replacement

 Unscrew and detach the four cross screws from the control panel, as show in the picture. And remove the panel.

#### **TOOL NEEDED**

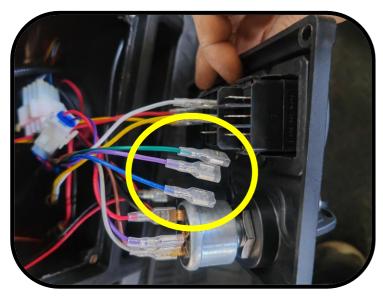
Phillips screwdriver



#### **MARNING:**

Before working on electrical components, always disconnect the battery to prevent electric shock or short circuits.

 Disconnect the wires from the gear switch in sequence: green, purple, and blue.





- Press the arrow direction to release the gear switch, ensuring to press the four tabs to push it out.
- Reverse these steps to install the replacement.



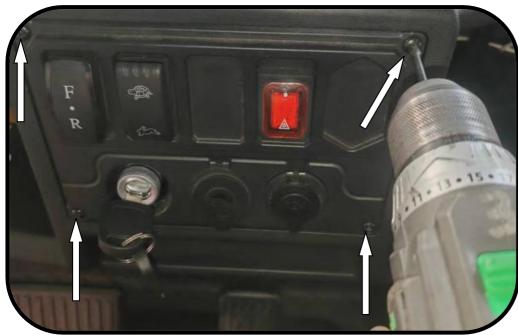


# **Key Switch Replacement**

 Use a Phillips screwdriver to loosen and remove the four screws securing the control panel.

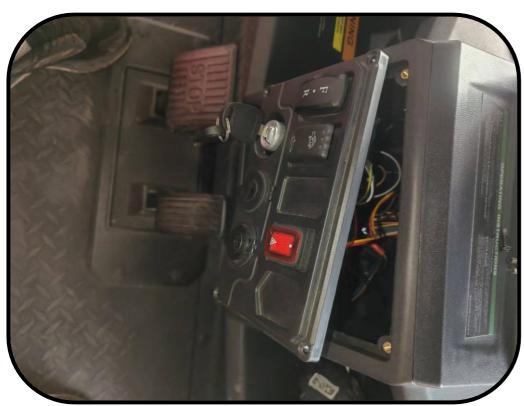


Phillips screwdriver needle-nose pliers



#### **⚠ WARNING:**

Before working on electrical components, always disconnect the battery to prevent electric shock or short circuits.





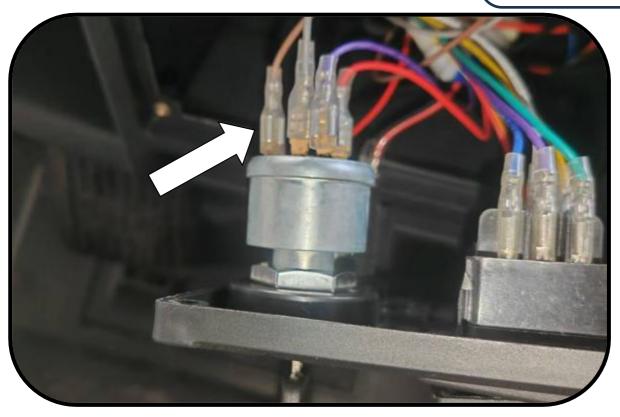
Read carefully all the safety statements before attempting any procedure.

# **Key Switch Replacement**

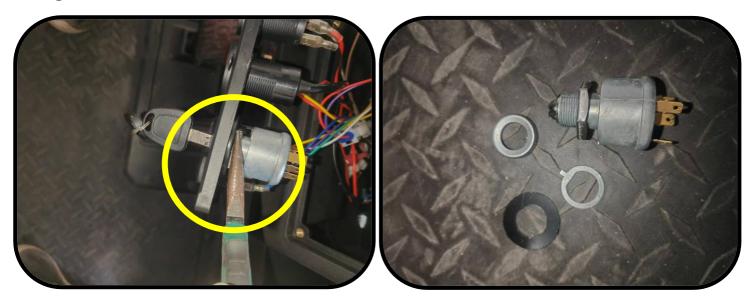
• Disconnect the two sets of wires connected to the ignition switch.

### **TOOL NEEDED**

Phillips screwdriver needle-nose pliers



 Use needle-nose pliers to loosen the mounting base at the bottom of the ignition switch, then unscrew the front locking nut by hand. The ignition switch can then be removed.



• Reverse these steps to install the replacement.





# **Turtle/Rabbit Switch Replacement**

 Unscrew and detach the four cross screws from the control panel, as show in the picture. Then remove the panel.

### **TOOL NEEDED**

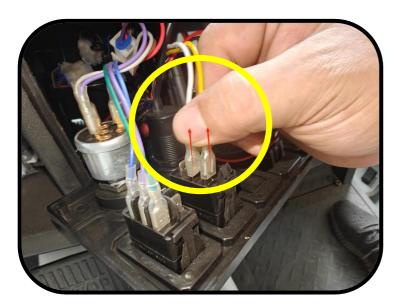
Phillips screwdriver



### **⚠ WARNING:**

Before working on electrical components, always disconnect the battery to prevent electric shock or short circuits.

• Disconnect the wires from the switch in sequence: Yellow, Green and White.





- Press the switch in the direction of the arrow and push it outwards to remove the switch.
- Reverse these steps to install the replacement.



Read carefully all the safety statements before attempting any procedure.

# **Hazard Light Switch Replacement**

• Unscrew and detach the four cross screws from the control panel, as show in the picture. Then remove the panel.

### **TOOL NEEDED**

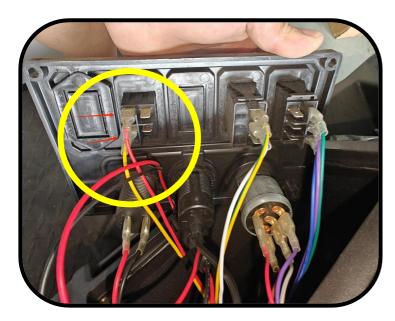
Phillips screwdriver



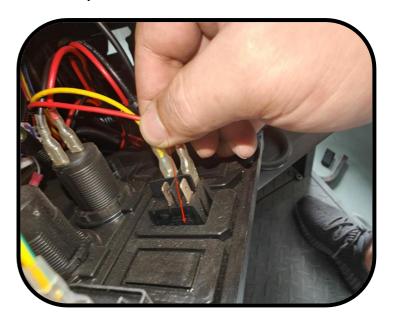
#### **⚠ WARNING:**

Before working on electrical components, always disconnect the battery to prevent electric shock or short circuits.

Disconnect the wires from the switch in sequence: Red, Yellow



Push the switch out to replace it.





## **USB Switch Replacement**

 Unscrew and detach the four cross screws from the control panel, as show in the picture. Then remove the panel.

### **TOOL NEEDED**

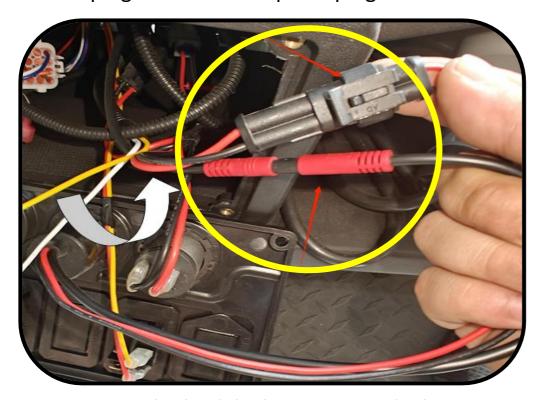
Phillips screwdriver



#### **⚠ WARNING:**

Before working on electrical components, always disconnect the battery to prevent electric shock or short circuits.

Unplug the 12V waterproof plug and the communication plug.



Unscrew the back locking counterclockwise to remove the USB switch



Read carefully all the safety statements before attempting any procedure.

# Cigarette lighter Switch Replacement

 Unscrew and detach the four cross screws from the control panel, as show in the picture. Then remove the panel.

### **TOOL NEEDED**

Phillips screwdriver



#### **⚠ WARNING:**

Before working on electrical components, always disconnect the battery to prevent electric shock or short circuits.

Unplug the 12V waterproof plug (Red and Black)



 Unscrew the locking ring on the back counterclockwise to remove the cigarette lighter.



# **Lithium Battery Replacement**

- Open the battery compartment.
- Turn off the battery power.
- Remove the protective caps from the battery discharge port and charging port.



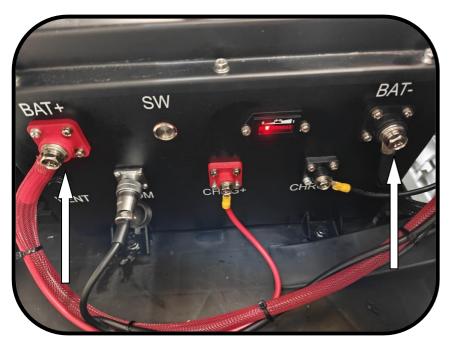
### **TOOL NEEDED**

13 mm open-end wrench 10 mm open-end wrench 10 mm socket wrench

#### **⚠ WARNING:**

Before working on electrical components, always disconnect the battery to prevent electric shock or short circuits.

• Use a 13 mm open-end wrench to loosen and remove the screws on the battery discharge port, then disconnect the positive (+) and negative (–) terminals.



Read carefully all the safety statements before attempting any procedure.

# **Lithium Battery Replacement**

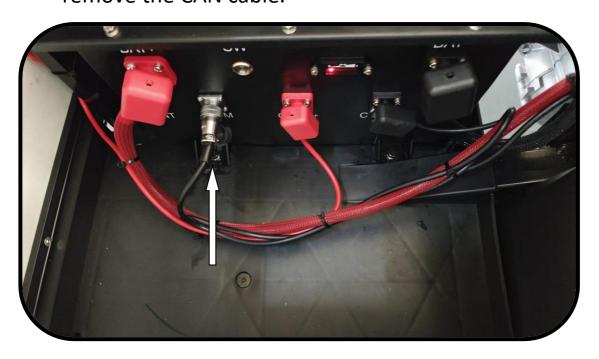
 Use a 10 mm open-end wrench to loosen and remove the mounting screws on the charging port, then remove the charging cable.



### **TOOL NEEDED**

13 mm open-end wrench10 mm open-end wrench10 mm socket wrench

 Turn the CAN communication cable connector counterclockwise and remove the CAN cable.





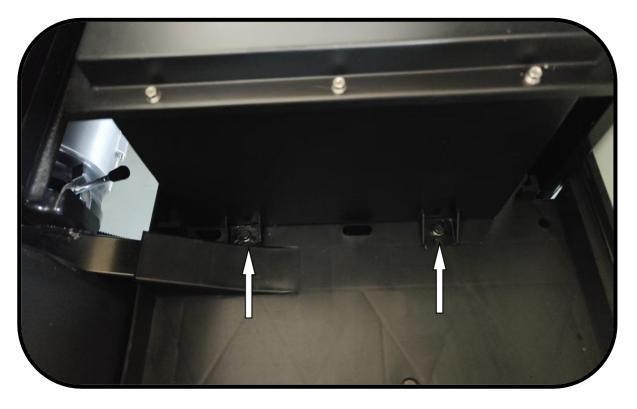
# **Lithium Battery Replacement**

 Use a 10 mm open-end wrench and a 10 mm socket wrench to loosen and remove the screws securing the battery.



### **TOOL NEEDED**

13 mm open-end wrench10 mm open-end wrench10 mm socket wrench





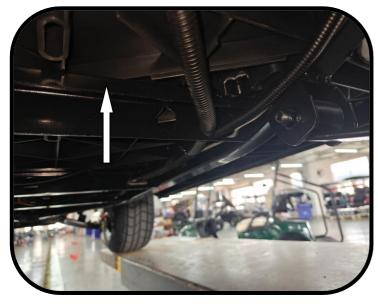
Read carefully all the safety statements before attempting any procedure.

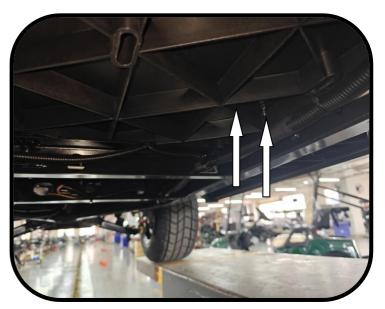
# **Lithium Battery Replacement**



### **TOOL NEEDED**

13 mm open-end wrench10 mm open-end wrench10 mm socket wrench



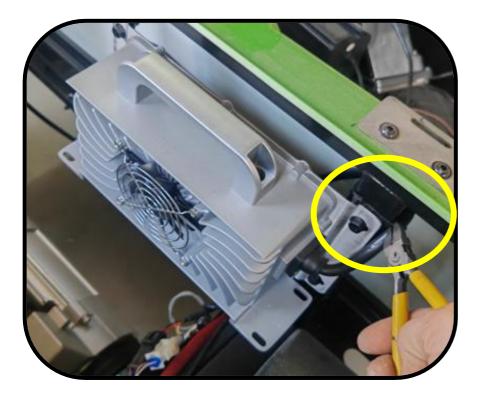


- The last four images show the locations of the screws securing the battery.
- Loosen all screws to remove the battery.
- Reverse the steps above to install the new battery.



# **Charger Replacement**

• First, cut off the cable tie that secures the charger cable with wire cutters.



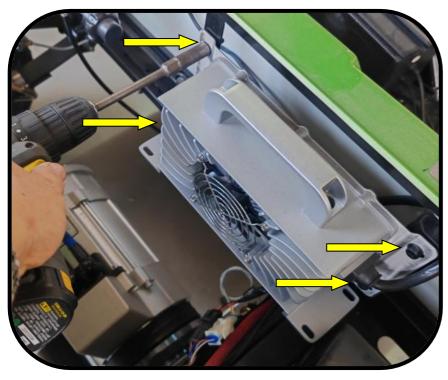
### **TOOL NEEDED**

10mm Hexagon socket Wire cutters

#### **⚠** WARNING:

Before working on electrical components, always disconnect the battery to prevent electric shock or short circuits.

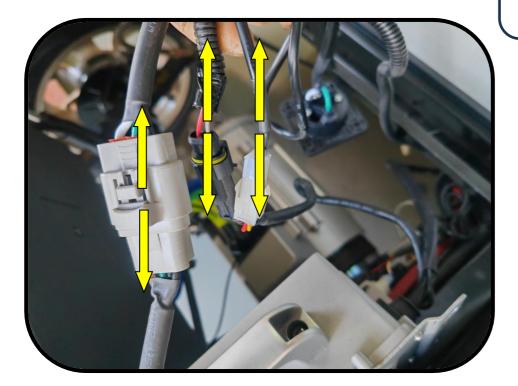
Use a 10mm hexagon socket to loosen and remove the four screws that secure the charger.



Read carefully all the safety statements before attempting any procedure.

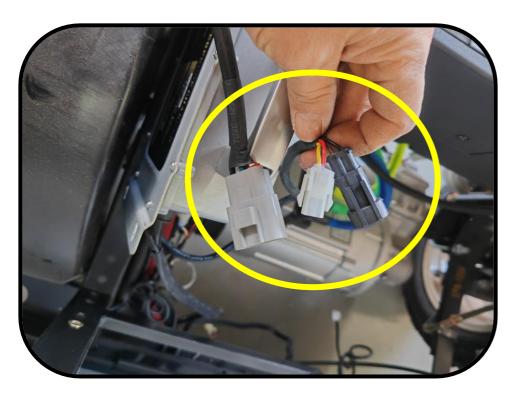
# **Charger Replacement**

Unplug the charger.



### **TOOL NEEDED**

10mm Hexagon socket Wire cutters



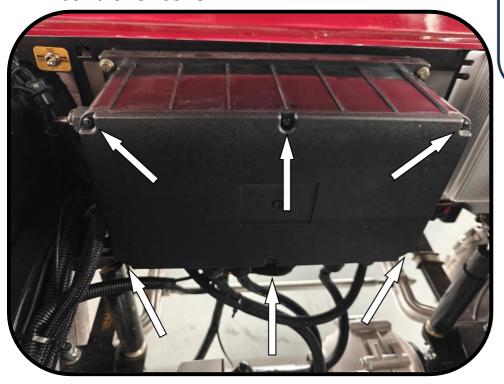
Reverse these steps to install the replacement.





# **Controller Replacement**

 Use a Phillips screwdriver to remove the controller cover.



### **TOOL NEEDED**

Phillips screwdriver
Flathead screwdriver
10 mm open-end wrench
13 mm open-end wrench

#### **⚠** WARNING:

Before working on electrical components, always disconnect the battery to prevent electric shock or short circuits.

Use a flathead screwdriver to pry open and remove the controller plug.





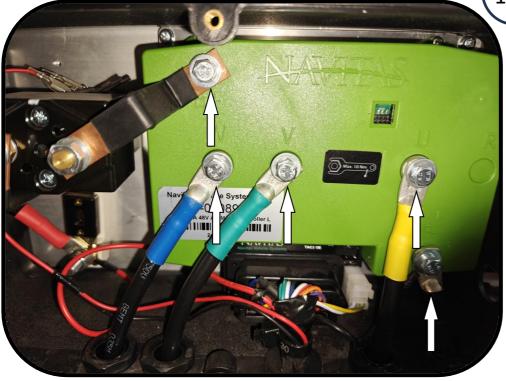
Read carefully all the safety statements before attempting any procedure.

# **Controller Replacement**

 Use a 10 mm open-end wrench to loosen and remove the U/V/W motor wires, copper connector, negative terminal, and screws.

### **TOOL NEEDED**

Phillips screwdriver
Flathead screwdriver
10 mm open-end wrench
13 mm open-end wrench



 Use a 13 mm open-end wrench to loosen and remove the nut on the fuse holder copper connector, then remove the connector.



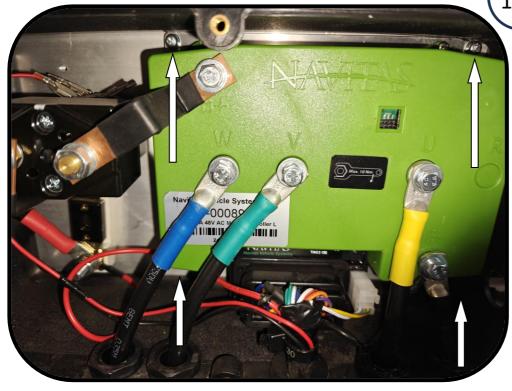


# **Controller Replacement**

 Use a Phillips screwdriver to loosen and remove the four screws securing the controller, then remove the controller.

### **TOOL NEEDED**

Phillips screwdriver
Flathead screwdriver
10 mm open-end wrench
13 mm open-end wrench



Read carefully all the safety statements before attempting any procedure.

## **Voltage Converter Replacement**

 Use a dikes to cut off the cable tie that secures the DC circuit.



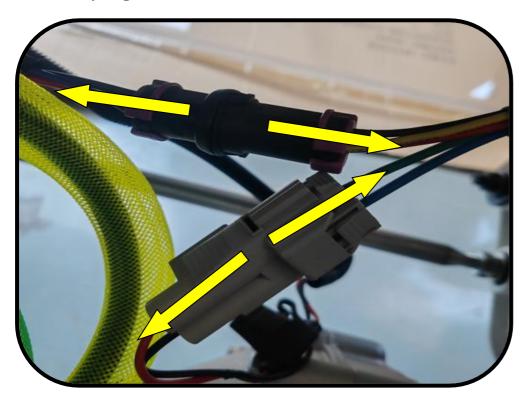
### **TOOL NEEDED**

Phillips screwdriver Dikes

#### **⚠** WARNING:

Before working on electrical components, always disconnect the battery to prevent electric shock or short circuits.

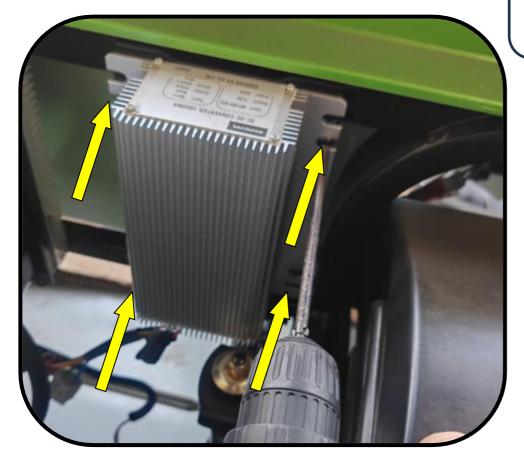
Unplug the DC connector.





# **Voltage Converter Replacement**

 Use a screwdriver to loosen the 4 screws that secure the DC and remove it.



### **TOOL NEEDED**

Phillips screwdriver Dikes

• Reverse these steps to install the replacement.





Read carefully all the safety statements before attempting any procedure.

# **Front Shock replacement**

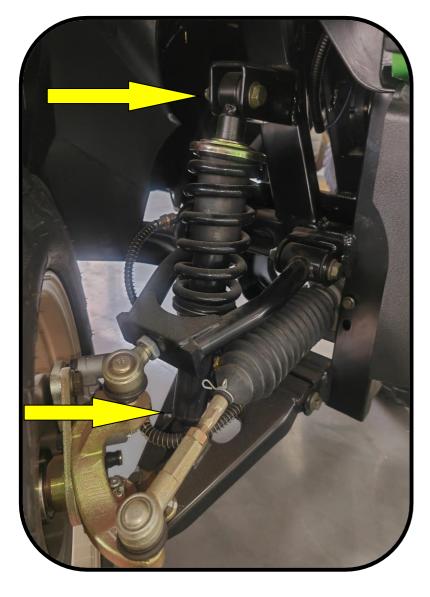
### **CAUTION:**

Always support the vehicle with jack stands before servicing suspension components. Use proper torque specifications when tightening fasteners and be cautious of spring tension to avoid injury.

 Use a 15mm open-end wrench and a 15mm impact wrench to loosen and remove the bolts at the fastening points between the shock absorber and the frame.

### **TOOL NEEDED**

15mm open-end wrench 15mm impact wrench







# **Rear Shock Replacement**

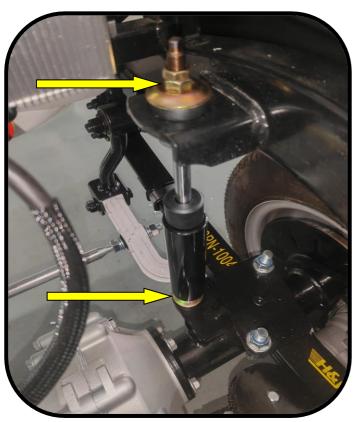
#### **CAUTION:**

Always support the vehicle with jack stands before servicing suspension components. Use proper torque specifications when tightening fasteners and be cautious of spring tension to avoid injury.

### **TOOL NEEDED**

14mm open-end wrenches X2

 Use two 14mm open-end wrenches to loosen and remove the fastening nuts connecting the rear shock absorber to the frame and rear axle.





At the connection point between the rear shock absorber and the frame:

- Use the lower wrench to hold the bolt in place.
- Use the upper wrench to turn counterclockwise and loosen the upper nut.
- After removing the upper nut, turn the lower nut counterclockwise to loosen and remove it as well.

At the connection point between the rear shock absorber and the rear axle:

- Use the upper wrench to hold the bolt in place.
- Use the lower wrench to turn clockwise and loosen the lower nut.
- After removing the lower nut, turn the upper nut clockwise to loosen and remove it as well.

Read carefully all the safety statements before attempting any procedure.

Rear spring/bushing replacement

#### **CAUTION:**

Always support the vehicle with jack stands before servicing suspension components. Use proper torque specifications when tightening fasteners and be cautious of spring tension to avoid injury.

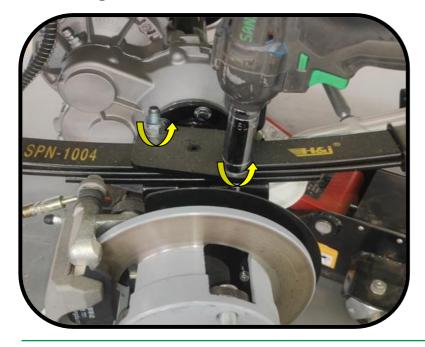
Use a jack to lift the rear end of the cart.



### TOOL NEEDED

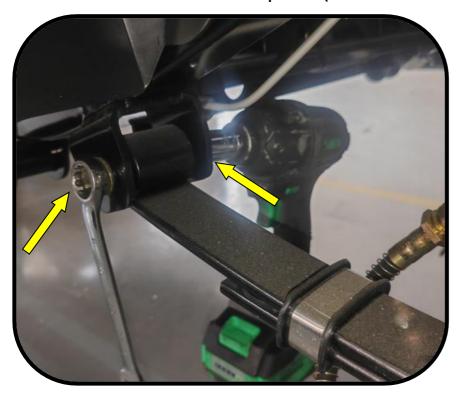
15mm Hexagon socket
19mm Hexagon socket
15mm Hexagon wrench
Lubricant
Rubber Mallet Hammer
Floor Jack
Electric Wrench

 Use a 19mm hexagon socket to loosen and remove the steel plate locking screws.



# Rear spring/bushing replacement

 Use a 15 hex socket and a 15mm open-end wrench to loosen the fixing screws at the front end of the steel plate (the frame side).



### TOOL NEEDED

15mm Hexagon socket
19mm Hexagon socket
15mm Hexagon wrench
Lubricant
Rubber Mallet Hammer
Floor Jack
Electric Wrench

 Use a 15mm hex socket and a 15mm open-end wrench to loosen the fixing screws at the rear end of the steel plate (the side of the movable lock plate).



Read carefully all the safety statements before attempting any procedure.

# Rear spring/bushing replacement

 Remove the screws at the front end of the steel plate (frame side) and the rear end of the steel plate (movable lock plate side) to take out the steel plate.



### TOOL NEEDED

15mm Hexagon socket
19mm Hexagon socket
15mm Hexagon wrench
Lubricant
Rubber Mallet Hammer
Floor Jack
Electric Wrench

 Before installing the steel plate bushing, apply lubricating wax to the surface of the bushing to facilitate its insertion into the steel plate.

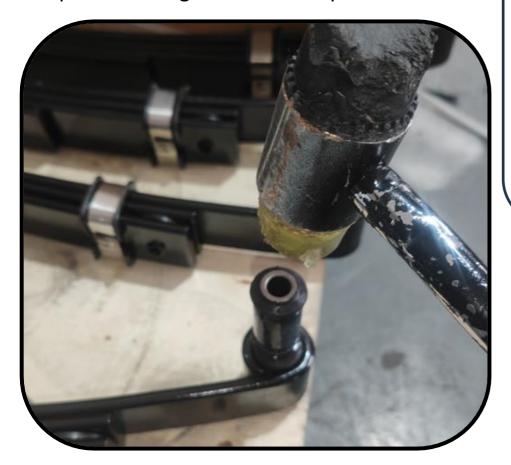






# Rear spring/bushing replacement

• Use a rubber hammer to gently tap the steel plate bushing into the steel plate.



### **TOOL NEEDED**

15mm Hexagon socket
19mm Hexagon socket
15mm Hexagon wrench
Lubricant
Rubber Mallet Hammer
Floor Jack
Electric Wrench

Reverse these steps to install the replacement.



Read carefully all the safety statements before attempting any procedure.

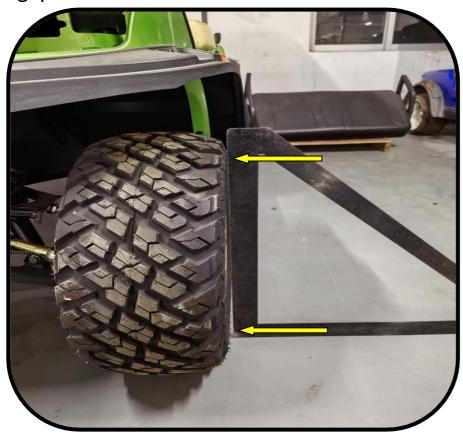
**Front Suspension Alignment** 

### **CAUTION:**

Always support the vehicle with jack stands before servicing suspension components. Use proper torque specifications when tightening fasteners and be cautious of spring tension to avoid injury.

# To adjust the front tilt angle, ensure you are on a flat surface.

- Place a triangle square with one side flat against the ground and the other side positioned against the area indicated by the arrow above the tire.
- Observe the gap (between the tire and the triangle square) as shown by the arrow.
   Adjust the front wheel camber to achieve a gap of 5-10mm.



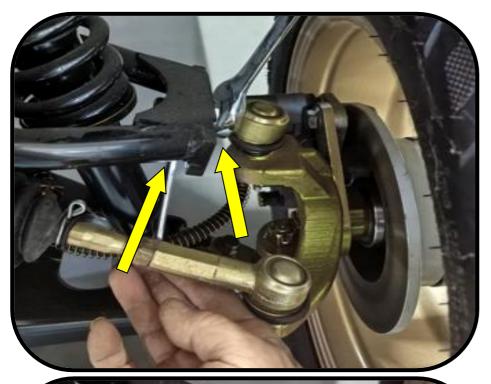
#### **TOOL NEEDED**

Large Triangle Square
Tape Measure
17mm Hexagon Wrench
13mm Hexagon Wrench
15/16 Wrenches x2



## **Front Suspension Alignment**

Use a 15/16 wrench to adjust the two
adjustment nuts as shown in the picture to
achieve the desired tilt angle. Tighten both
end nuts to complete the camber
adjustment.





### **TOOL NEEDED**

Large Triangle Square
Tape Measure
17mm Hexagon Wrench
13mm Hexagon Wrench
15/16 Wrenches x2



Read carefully all the safety statements before attempting any procedure.

## **Front Suspension Alignment**

 Before adjusting the toe, mark the same height on both the left and right front tires using a marker.



### **TOOL NEEDED**

Large Triangle Square
Tape Measure
17mm Hexagon Wrench
13mm Hexagon Wrench
15/16 Wrenches x2

• Measure the distance between the marks at the front of the front tires.



# **Front Suspension Alignment**

 Move the vehicle backward until the marks made on the front tires are visible at the rear of the front wheels. Then, measure the distance between the two marks at the rear of the front tires.

#### **TOOL NEEDED**

Large Triangle Square
Tape Measure
17mm Hexagon Wrench
13mm Hexagon Wrench
15/16 Wrenches x2





- Use a 13mm open-end hex wrench to adjust the protrusion length of the inner ball joint on the steering gear.
- Use a 17mm open-end hex wrench to hold the outer ball joint of the steering gear in place.
- By adjusting the protrusion length of the inner ball joints at both ends
  of the steering gear, ensure that the distance between the rear and
  front marks on the front tires is 3-5mm greater at the rear.
- Once the adjustment is complete, tighten the fixed nut on the inner ball joint.

Read carefully all the safety statements before attempting any procedure.

# **Lower Control Arm Rod End Replacement**

#### **CAUTION:**

Always support the vehicle with jack stands before servicing suspension components. Use proper torque specifications when tightening fasteners and be cautious of spring tension to avoid injury.

 Use a jack to lift the front end of the vehicle, ensuring the front wheels are off the ground.

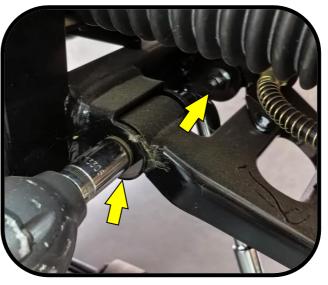
### TOOL NEEDED

10mm socket wrench 10mm open-end wrench 15mm open-end wrench 15mm socket wrench 15mm impact wrench jack



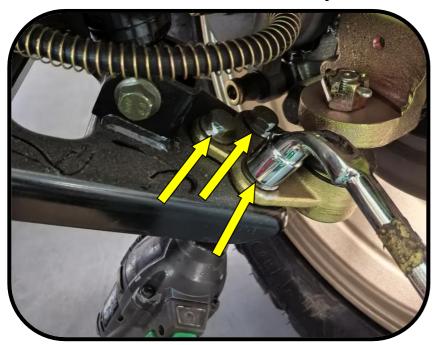
 Use a 15mm socket wrench and a 15mm impact wrench to loosen and remove the fastening bolts connecting the lower control arm to the frame.





# **Lower Control Arm Rod End Replacement**

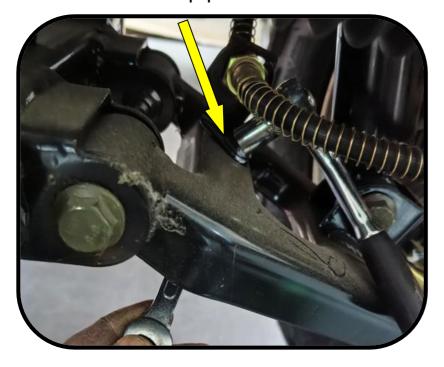
 Use a 15mm socket wrench and a 15mm impact wrench to loosen and remove the fastening bolts connecting the lower control arm to the lower ball joint.



### **TOOL NEEDED**

10mm socket wrench
10mm open-end wrench
15mm open-end wrench
15mm socket wrench
15mm impact wrench
jack

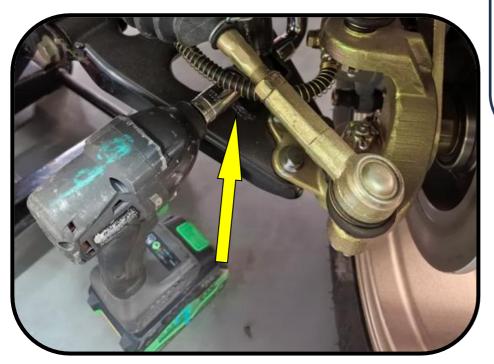
 Use a 10mm open-end wrench and a 10mm socket wrench to loosen and remove the fastening bolts securing the lower control arm to the oil pipe bracket.



Read carefully all the safety statements before attempting any procedure.

# **Lower Control Arm Rod End Replacement**

 Use a 15mm socket wrench and a 15mm impact wrench to loosen and remove the fastening bolts connecting the lower control arm to the front shock absorber.



### TOOL NEEDED

10mm socket wrench
10mm open-end wrench
15mm open-end wrench
15mm socket wrench
15mm impact wrench
jack



Reverse these steps to install the replacement.

# **Upper Control Arm Rod End Replacement**

#### **CAUTION:**

Always support the vehicle with jack stands before servicing suspension components. Use proper torque specifications when tightening fasteners and be cautious of spring tension to avoid injury.

 Use a jack to lift the front end of the vehicle, ensuring the front wheels are off the ground.



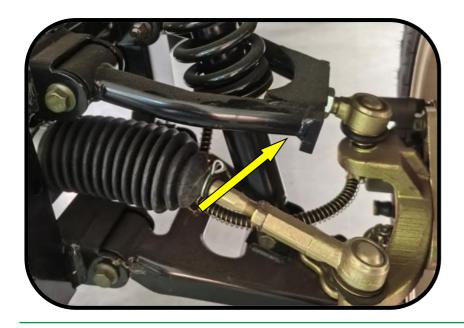
## **TOOL NEEDED**

Jack

Rubber mallet
needle-nose pliers
15mm impact wrench
15mm offset socket
wrench
15mm open-end
wrench
18mm open-end
wrench
15/16 open-end

wrench ×2

Use two 15/16" open-end wrenches to loosen and remove the fastening nut connecting the upper control arm to the upper ball joint.





Read carefully all the safety statements before attempting any procedure.

# **Upper Control Arm Rod End Replacement**

 As shown in the image, use the right-side wrench to hold the bolt in place while applying upward force on the left-side wrench to loosen the nut.



### **TOOL NEEDED**

Jack

Rubber mallet

needle-nose pliers

15mm impact wrench

15mm offset socket wrench

15mm open-end wrench

18mm open-end wrench

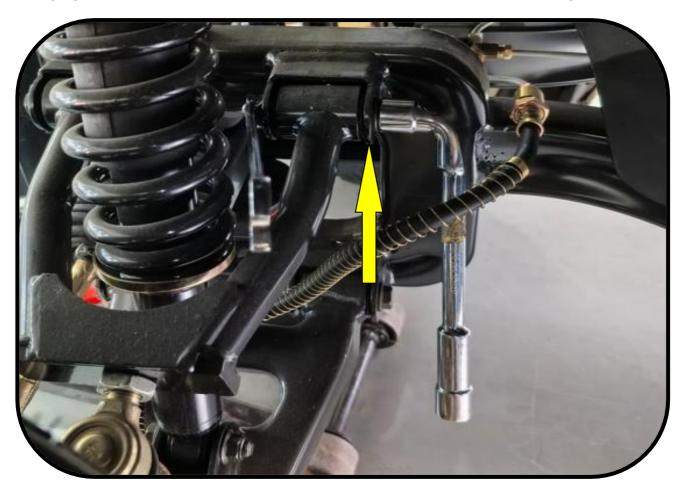
15/16 open-end wrench ×2

 Use a 15mm open-end wrench and a 15mm impact wrench to loosen and remove the fastening bolts connecting the upper control arm to the frame.





# **Upper Control Arm Rod End Replacement**





Reverse these steps to install the replacement.



Read carefully all the safety statements before attempting any procedure.

# **Steering Rack Replacement**

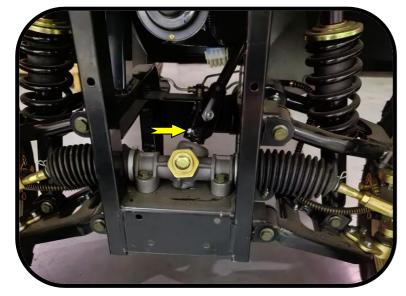
#### **CAUTION:**

Always support the vehicle with jack stands before servicing suspension components. Use proper torque specifications when tightening fasteners and be cautious of spring tension to avoid injury.

 Use a 13 mm socket to loosen and remove the fastening bolt at the connection point between the universal joint and the steering gear.

### **TOOL NEEDED**

13mm sockets
13mm Elbow Wrench
17 mm Open-End Wrench
Needle-Nose Pliers
Rubber Mallet



 Use needle-nose pliers to remove the R-clip pin from the nut securing the outer tie rod of the steering gear to the steering knuckle.



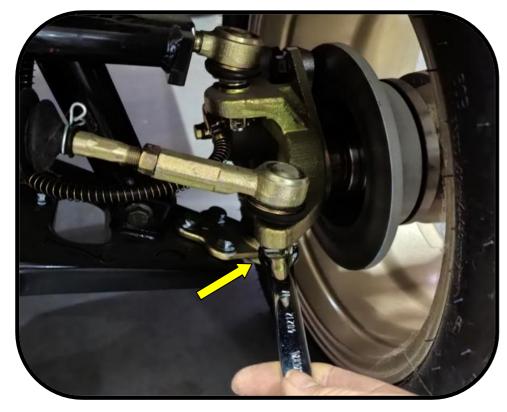
# **Steering Rack Replacement**

 Use a 17 mm open-end wrench to loosen and remove the slotted nut securing the outer tie rod of the steering gear to the steering knuckle.



### **TOOL NEEDED**

13mm sockets
13mm Elbow Wrench
17 mm Open-End Wrench
Needle-Nose Pliers
Rubber Mallet



Read carefully all the safety statements before attempting any procedure.

## **Steering Rack Replacement**

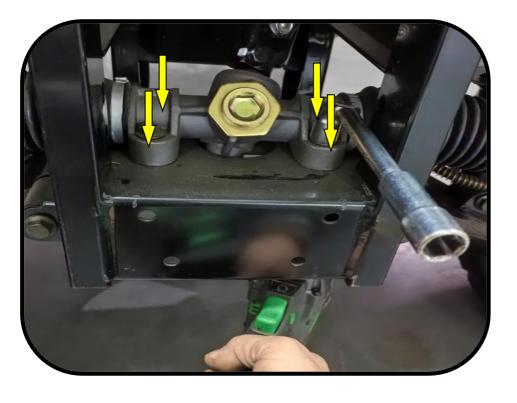
 Use a rubber mallet to tap the connection point between the steering knuckle and the outer tie rod of the steering gear to loosen the linkage.



### **TOOL NEEDED**

13mm sockets
13mm Elbow Wrench
17 mm Open-End Wrench
Needle-Nose Pliers
Rubber Mallet

 Use a 13 mm socket to loosen and remove the bolts and nuts securing the steering gear, then take out the steering gear.





Read carefully all the safety statements before attempting any procedure.

# Front Bumper Replacement

#### **CAUTION:**

Use the correct tools when handling body components to avoid damage. Ensure all electrical connections are secure when installing accessories to prevent malfunctions.

#### **TOOL NEEDED**

10mm socket wrench

As shown by the arrows in the image, there are four screw fastening points.



 Use a 10mm socket wrench to loosen and remove the fastening bolts securing the front bumper to the frame.







Read carefully all the safety statements before attempting any procedure.

Rear Bumper Replacement

#### **CAUTION:**

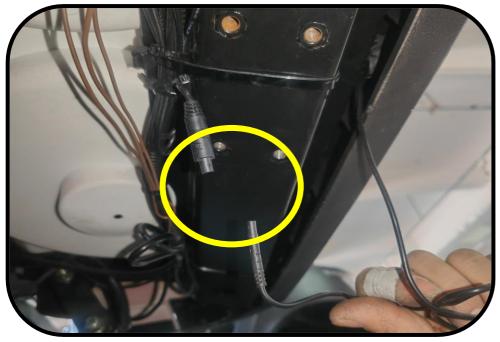
Use the correct tools when handling body components to avoid damage. Ensure all electrical connections are secure when installing accessories to prevent malfunctions.

#### **TOOL NEEDED**

4mm hex wrench
13mm socket wrench

 Disconnect the camera communication cable at the location shown in the image.





Read carefully all the safety statements before attempting any procedure.

# Rear Bumper Replacement

 Use a 13mm impact wrench to loosen and remove the fastening bolts securing the rear bumper to the frame at the locations shown in the image.

#### **TOOL NEEDED**

4mm hex wrench
13mm socket wrench









Read carefully all the safety statements before attempting any procedure.

# Rear Bumper Replacement

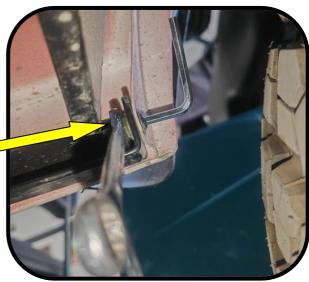
 Use a 4mm hex wrench to loosen and remove the fastening screws securing the rear bumper to the rear cover at the locations shown in the image.

#### **TOOL NEEDED**

4mm hex wrench
13mm socket wrench







- Once removed, the bumper can be taken off.
- Reverse these steps to install the replacement.

Read carefully all the safety statements before attempting any procedure.

# **Headlight Replacement**

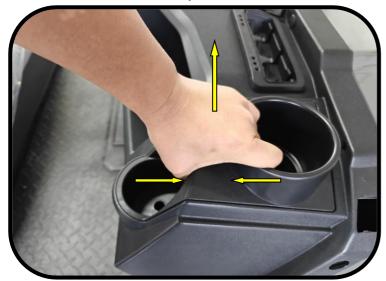
#### **CAUTION:**

Use the correct tools when handling body components to avoid damage. Ensure all electrical connections are secure when installing accessories to prevent malfunctions.

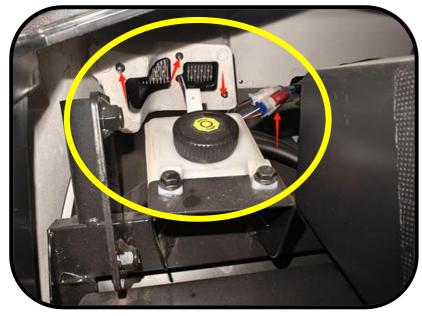
#### **TOOL NEEDED**

8mm open-end wrench

Remove the cup holder.



 Use an 8mm wrench to loosen and remove the screws connecting the headlight to the front cover. Then unplug the headlight connector to take the light out.





Read carefully all the safety statements before attempting any procedure.

# **Taillight Replacement**

#### **CAUTION:**

Use the correct tools when handling body components to avoid damage. Ensure all electrical connections are secure when installing accessories to prevent malfunctions.

#### **TOOL NEEDED**

8mm open-end wrench

As shown in the picture, at the spot pointed by the arrow.



 Use an 8mm open-end wrench to loosen and remove the screws connecting the taillight to the rear cover. Then unplug the taillight connector to remove the light.





Read carefully all the safety statements before attempting any procedure.

# **Roof Replacement**

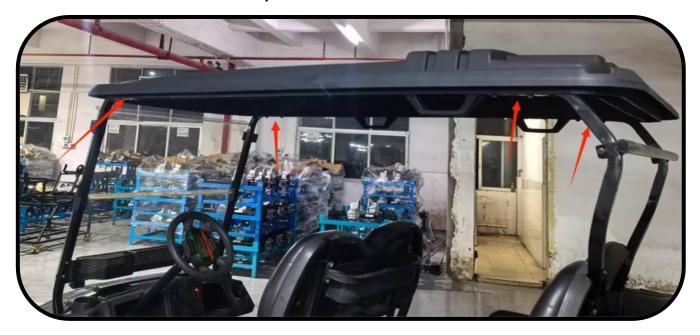
#### **CAUTION:**

Use the correct tools when handling body components to avoid damage. Ensure all electrical connections are secure when installing accessories to prevent malfunctions.

#### **TOOL NEEDED**

13mm Open-End Wrench
13mm Electric Wrench

 Loosen and remove the 8 sets of screws securing the roof to the roof brackets as indicated by the arrows. And remove it.









Read carefully all the safety statements before attempting any procedure.

# Windshield Replacement

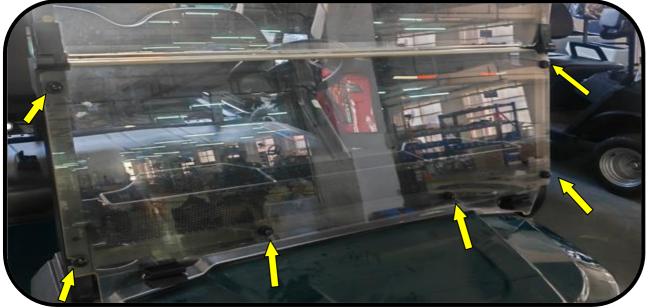
#### **CAUTION:**

Use the correct tools when handling body components to avoid damage. Ensure all electrical connections are secure when installing accessories to prevent malfunctions.

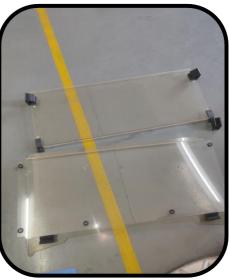
#### **TOOL NEEDED**

15mm Hexagon socket 19mm Hexagon socket

- Use a 4mm hex impact wrench to loosen and remove the screws at the locations shown in the image.
- Push forward on the vehicle to disengage the glass clips from the front roof support bar.









Read carefully all the safety statements before attempting any procedure.

# **Soundbar Replacement**

#### **CAUTION:**

Use the correct tools when handling body components to avoid damage. Ensure all electrical connections are secure when installing accessories to prevent malfunctions.

#### TOOL NEEDED

4mm Hex Key

 Use a 4mm Hex Key to loosen and remove the four screws as shown in the image.







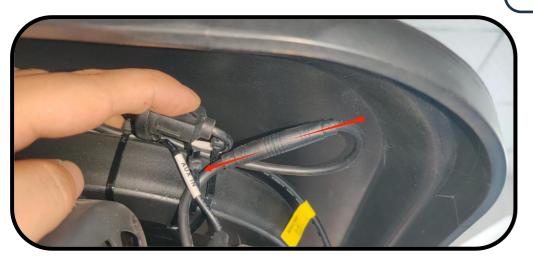
Read carefully all the safety statements before attempting any procedure.

# **Soundbar Replacement**

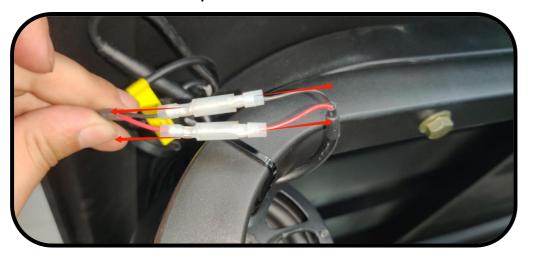
Unplug the 5-pin lighting control connector.

#### **TOOL NEEDED**

4mm Hex Key



Disconnect the power cable.



• Unplug the audio cable. Once disconnected, the speaker can be removed.





Read carefully all the safety statements before attempting any procedure.

# **Display Screen Replacement**

#### **CAUTION:**

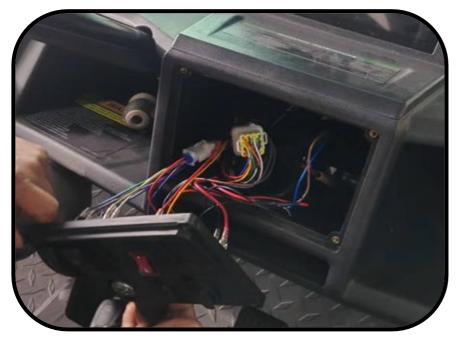
Use the correct tools when handling body components to avoid damage. Ensure all electrical connections are secure when installing accessories to prevent malfunctions.

#### **TOOL NEEDED**

Phillips screwdriver

 Loosen and remove the 4 screws on the center control panel and remove it.







Read carefully all the safety statements before attempting any procedure.

# **Display Screen Replacement**

 Use a Phillips screwdriver to loosen and remove the 4 screws connecting the dashboard and the screen.
 Unplug the screen connector to remove the screen.

#### **TOOL NEEDED**

Phillips screwdriver





Read carefully all the safety statements before attempting any procedure.

# Light/Brake Handle Switch Replacement

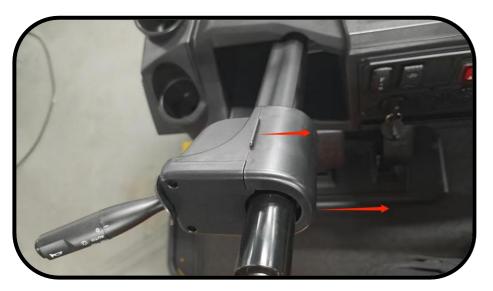
#### **CAUTION:**

Use the correct tools when handling body components to avoid damage. Ensure all electrical connections are secure when installing accessories to prevent malfunctions.

#### **TOOL NEEDED**

Phillips screwdriver

Push in the direction of the arrow to open the switch mount cover.







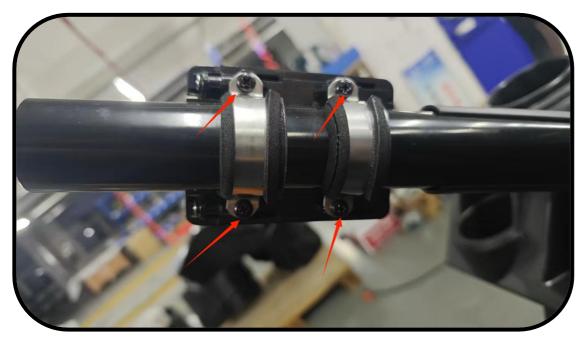
Read carefully all the safety statements before attempting any procedure.

# Light/Brake Handle Switch Replacement

 Use a Phillips screwdriver to loosen and remove the screw connecting the switch mount to the handlebar.

# **TOOL NEEDED**

Phillips screwdriver



 Use a Phillips screwdriver to loosen and remove the top cover screw of the brake switch.





Read carefully all the safety statements before attempting any procedure.

# Light/Brake Handle Switch Replacement



#### **TOOL NEEDED**

Phillips screwdriver

• Pull the wire cover along the handlebar in the direction of the arrow and push the switch mount in the arrow direction to separate the switch from the mount.



Read carefully all the safety statements before attempting any procedure.

# Light/Brake Handle Switch Replacement

• Unplug the brake handle connector to replace the switch.





Read carefully all the safety statements before attempting any procedure.

# **Headlight Controller Replacement**

#### **CAUTION:**

Use the correct tools when handling body components to avoid damage. Ensure all electrical connections are secure when installing accessories to prevent malfunctions.

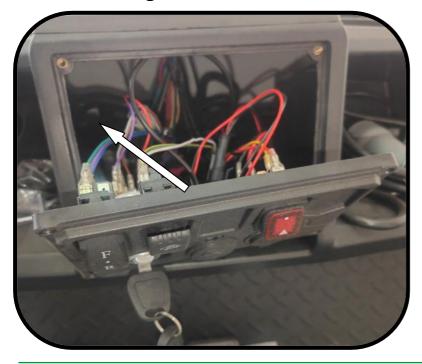
#### **TOOL NEEDED**

Phillips screwdriver Diagonal cutters

Use a Phillips screwdriver to open the central control panel.



The headlight controller is located at the position indicated by the arrow.





Read carefully all the safety statements before attempting any procedure.

# **Headlight Controller Replacement**

• Disconnect the plug from the headlight controller



 Use diagonal cutters to cut off the zip ties securing the headlight controller wiring.



**TOOL NEEDED** 

Phillips screwdriver

Diagonal cutters







# NOTE



# NOTE







