





# **OWNERS MANUAL**



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#### Foreword:

Thank you for purchasing an MEV cart for your golf and community transportation needs. MEV would like to welcome you to this revolution of transportation. Your business is important to everyone within MEV and the MEV Dealer network.

Your safety is important to us, so please make sure that prior to operating the cart you have read the following instructions and warnings. If you rent or loan your cart to others, please make sure they have studied this manual before operating the cart.

Please consider this manual to be a permanent part of this cart and if it is sold, please make sure that the new owner receives the manual so that they can view all operating information also.

Insurance Notice: Your insurance may not provide coverage for accidents involving the use of this cart. To determine if coverage is provided you should contact your insurance company or agent.

#### Notice:

The My Electric Vehicle (herein known as MEV) warranty for owners appears at the end of this manual. No other warranties, expressed or implied, are contained herein. This cart was fully checked by MEV and/or an MEV Dealer before it was delivered to you.

Throughout this manual the words "golf car" and "electric cart" are used interchangeably. Please exercise caution when using the cart as it is capable of speeds in excess of 15mph.

Familiarizing yourself with the Owner's Manual and warnings will help avoid possible personal injury and property loss.

The information contained in this document is subject to change without notice.

MEV reserves the right to make design changes to cart without obligation to make these changes on units previously sold.

#### **Safety Regulations:**

It is required to read the Owner's manual completely before operating the cart or attempting any repair/maintenance work. Any violations of instructions in the manual may lead to property loss, serious injury, or even death.

Pay special attention to important statements with the words such as "Danger", "Warning", "Caution", "Attention" etc.

If any of the operation/warning decals are damaged, defaced, destroyed, or illegible it is important that they be replaced with new decals. Please contact the manufacturer or your dealer to obtain new decals.



## **⚠** DANGER

DANGER indicates an immediate hazard that if ignored, could result in severe personal injury or death.



## WARNING

WARNING indicates an immediate hazard that if ignored, could result in severe personal injury or death.



## **CAUTION**

CAUTION indicates a hazard or unsafe practice that if ignored, could result in minor personal injury or product or property damage.



## ⚠ WARNING

- This cart is not designed to be used in conjunction with child safety seats
- △ Do not use or install child safety seat in any seat or position in the cart
- Always obey and follow laws and regulations regarding the transportation of children
- △ Children that require the use of a child safety seat in a regular type automobile should not be transported in this cart



## **General Warnings:**

The following safety procedures should be followed during cart operation, maintenance or repair. Other special warning signs are described in this manual.



The cart contains batteries which can emit quantities of explosive gases. Keep the cart in a well-ventilated area and away from sparks and open flames.

Do not cover the cart while charging as an accumulation of hydrogen gas could result in explosion.

When charging the cart be sure that the ignition is switched to the OFF position. If the key is left in the ON position damage may be caused to the charger or the car.

The cart is equipped with an on board UL listed charger. When charging your car please be sure to use a proper grounded charging cable to provide power to the charger. Ventilate when charging or operating the cart in enclosed areas.

Do not perform service or maintenance on batteries while cart is charging.

The cart does not offer protection from lightning, flying debris, or other storm hazards. Upon indication of severe weather condition, seek appropriate shelter immediately.

Always obey all traffic and course regulations when operating the cart.



Inspect battery terminals, cables and batteries before each use.

Always wear a full face shield, rubber gloves and rubber apron when working with or in close proximity to batteries.

Turn the ignition switch to the OFF position, remove the key, place the drive into park, set the park brake and unplug the charger before inspecting or performing any type of service on the cart.

Connections should be tight and free of corrosion.

Use insulated tools only when working with electrical connections.

The tightness of the battery terminal nut should be between 95-105 inch pounds of torque. Do not over tighten. Loose and/or over tightened connections can cause battery failure, explosion and or fire.

Do not overfill the batteries and keep batteries clean and free of moisture.

If any high heat condition or burning smell is noticed immediately park the cart in a safe location, place the ignition in the OFF position, move yourself and passengers away quickly to a safe distance from the cart and contact your dealer for assistance and repair. If fire or smoke is detected contact your local fire department immediately.

Do not store your cart inside if any of the above noted conditions exist.

Only use recommended batteries of the correct size.

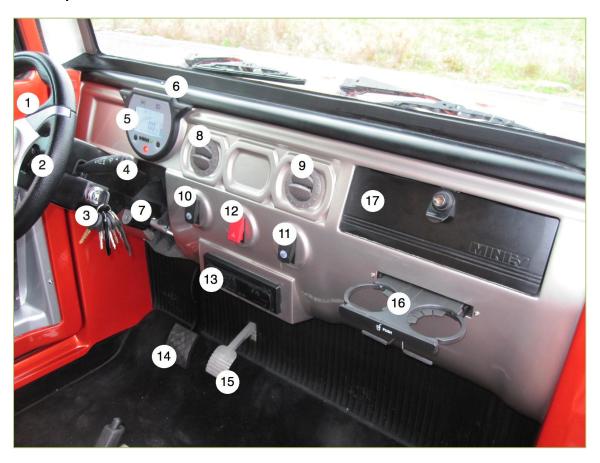
Only authorized technicians should perform maintenance or repair on the cart. It is required to abide by all regulations and safety decals on the cart while performing any type of maintenance or repairs.

Remove all jewellery and loosen items before performing maintenance procedures.

Improper application or maintenance will lead to deterioration of cart performance and reduce the overall life of the cart.

Do not attempt to alter the cart in any manner which would affect stability, control, or top speed. Such alterations may lead to serious injury or death, violate state and local laws, and will void the manufacturer's warranty.

## **Controls Layout:**





- 1. Lights & Indicator Signal Stalk
- 2. Steering Wheel
- 3. Key Switch
- 4. Windshield Wiper Control
- 5. LCD Instrument Display
- 6. Charge Indicator
- 7. Steering Column Lock
- 8. Heater Vent Driver
- 9. Heater Vent Passenger
- 10. Drivers Heated Seat Switch
- 11. Passengers Heated Seat Switch
- 12. Hazard Warning Lights
- 13. Pioneer™ CD/Radio/MP3 Aux (reference stereo manual)
- 14. Break Pedal
- 15. Accelerator Pedal
- 16. Dual Retractable Cup Holder
- 17. Lockable Glove Box (12v 5 Amp Power Outlet Inside)
- 18. Excel Switch
- 19. Heater De-mister Switch
- 20. Horn
- 21. Interior Light
- 22. Rear View Mirror
- 23. Door Grab Handle (HX™ Models Only)
- 24. Door Release Handles (HX™ Models Only)
- 25. Storage Net (HX™ Models Only)
- 26. Forward & Reverse Stick
- 27. Park Break Handle
- 28. Seat Position Adjuster
- 29. Seat Upright Adjuster

#### **Key Switch**

The key switch is located on the right side of steering wheel. The key can only be removed in the OFF Position.

When you turn the key to this position, all the electrical power will be turned off.



Do not take out the key while driving your car as it will result in sudden power loss and braking may occur.

Do not leave the key in the cart or leave children in the cart unattended.

### **LCD Instrument Display**



- 1. Left Indicator Signal
- 2. Right Indicator Signal
- 3. Side & Driving Lights Signal
- 4. High Beam Driving Light Signal
- 5. Forward & Reverse Position Signal
- 6. Outside Temperature
- 7. Clock (24hour)
- 8. Amperage Display
- 9. Speed (Kph or Mph)
- 10. Battery Power (Volts)
- 11. Distance (Total & Trip)
- 12. Clock Set (Keep pressed to Edit)
- 13. Reset trip (One Touch to Reset) / Switch from Km/h to Mph (Keep Pressed to Switch)
- 14. Park Brake On Signal

#### **Controls & Operation:**



- It is imperative that all operators of the MEV cart be familiar with the controls prior to operation.
- To avoid unintentional acceleration and cart damage, do not position the direction selector switch (forward/reverse) until the cart has come to a complete stop.
- Always set the parking brake and remove the key when parking or leaving the cart unattended.

#### **Direction Selector Stick**

The direction selector stick is located in between the two front seats. It has three selections, 'D' for Drive (Forward), 'P' for Park and 'R' for Reverse.

IMPORTANT NOTE: For Safety, the cart must be placed in the 'P' position before the ignition switch is turned on.



#### **Multifunction Column Stalk**

The Multi-Function Stalk is a multi-feature control. It is located on both sides of the steering wheel and functions similar to an automobile for turn signalling and headlight.

### **Turn Signal**



Left Side Stalk

Pushing downward on the stalk indicates a left turn, pushing upward a right turn. Note: the turn signal is self-cancelling. It will automatically return to the off position after a turn, if it does not the operator should manually move the stalk to the centre position upon completing each turn.

### Horn

To activate the horn, depress the button on end of the left turn signal stalk.

#### **Trip Odometer**

To reset the trip odometer depress the right reset button and hold for five (5) seconds. To change the reading from miles to kilometres depress and hold the left reset button for five (5) seconds.

#### **Headlights**

Turn the left multi-function stalk point one click forward to activate the side LED light and one further click forward to activate the main light. The headlamps will illuminate and the stalk will continue to operate the same applies for turn signalling and horn.

#### Windshield Wiper



Right Side Stalk

Pull the right side stalk down to "LO" or "HI" position, the wiper will work at low speed or high speed respectively.

#### **Heated Seat Switches**



On the dash you will find a switch for the driver's seat and a second switch for the passenger seat. Turn the seat heaters on by pushing the switch downwards.

### **Parking Brake**



The cart is equipped with a hand operated parking brake positioned on the cockpit floor between the seats. Pull the handle upward to engage the parking brake. The longer distance it is pulled, the stronger the parking. In order to release the brake, pull the handle upward slightly, and press the button which is located in the front of handle at the same time, and then place the handle to the original position.

IMPORTANT NOTE: Be careful not to try and drive the cart with the Parking Brake engaged – this could cause motor and brake damage.

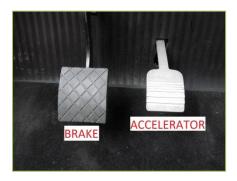
To prevent the cart from rolling, this brake should be applied whenever the cart is parked or left unattended.

If the Parking Brake is engaged while the key switch is in the on position, a red (P) light will illuminate on the LCD instrument display, indicating the parking brake is engaged.



The drive stick should be placed in the park position and the parking brake applied with the key removed *whenever* the operator exits the cart.

#### **Pedals**



#### **Brake Pedal**

The brake pedal is the larger foot pedal to the left of the accelerator pedal. The brake pedal engages all four of the hydraulic brakes for shorter stopping distances. To slow the cart down, the operator should depress the brake pedal.

#### **Accelerator Pedal**

The accelerator pedal is the smaller pedal to the right of the brake pedal. When depressed, the accelerator pedal will engage the drive motor in the direction the drive stick is set in the 'D' or 'R' position.

The cart will accelerate up to its top speed, at which time power will be reduced to the motor.

When the reverse position is selected, cart speed is reduced.

Smooth, slow acceleration will substantially increase the cart range.

Always remember to disengage the parking brake prior to operating the cart.

#### **Power Outlet**

You will find the power outlet in the glove box compartment in front of the passenger seat; the power output is DC12V and rated for a Maximum Amp draw of 5A.

#### **Safety Belts**

The MEV Cart has two front seats which are installed with 3-point safety belts; the safety belts should be used at all times while operating the cart.

The cart is *not* equipped for child safety seats or infant carrying seats. Children under 12 years of age should be transported in a full size car with appropriate child restraints.

Pregnant, disabled, or injured persons should consult their doctor for specific recommendations before operating the cart.

To correctly secure the seatbelts, pull the metal tab out away from the retractor and insert into one of the two the buckles located in the centre of the seats. When the belt is securely connected a 'click' will be heard. Properly adjust and ensure a snug fit by pulling the shoulder portion upward. The retractor will lock the belt during sudden stops. It may also lock if the person leans forward too quickly. Slow, easy motions will allow for free travel. To release the safety belt, press the buckle release button and allow the belt to retract. If the belt does not fully retract you must check for kinks or twists in the belt.



- Always operate the cart with seat belts properly fastened.
- Make sure the seat belts are latched securely and are free from twists or kinks.
- Position the shoulder belt across the top of the shoulder and over the chest. Do not place the shoulder belt under an arm.
- Loose fitting safety belts significantly reduce protection. Keep belts snug and positioned low on the hips.
- Do not exceed the recommend number of occupants for the cart.
- Maximum occupants rating is two persons.



- Inspect the safety belt webbing and hardware periodically. Check for cuts, frays or loose parts. Replace components if excessive wear or damage is noticed.
- Keep safety belts clean and dry. To clean, use mild soap and warm water. Do not use bleach, dye or abrasive cleaners as this will weaken the belt webbing material.
- Do not insert any foreign objects into the retractor mechanism. Periodically check for smooth operation and replace if the mechanism is not operating properly.

#### **Pre-operation Checklist:**

Every MEV cart has been thoroughly inspected by both the manufacturer and dealer prior to delivery.

Before the initial operation, it is important that the user inspect the cart using the following guidelines;

The following items should be checked on a daily basis prior to cart operation:

- **General** check that all parts are securely fastened to the cart, no parts are missing, and all screws or nuts are properly tightened.
- Review all warning decals and placement on the cart.
- Safety Belts visually inspect and test for safe operation.
- **Tires/Tyres** check for proper inflation, visually check for damage and wear on a daily basis. The correct pressure is 30 psi / 2.75 bar.
- **Batteries** Fill electrolyte level in all cells of each battery. Add distilled water as described in the Battery Care section of this manual. All wires should be free from corrosion. Batteries should be fully charged before first use of cart.
- Brakes check hydraulic fluid level. If it is low, immediately call a qualified technician for service.
- Charger Charger cord, plug, and receptacle inspect for cracks, loose connections, or frays.
- Forward/Reverse Switch ensure proper operation
- Brakes make sure the brake pedal is operating smoothly. The cart should come to a smooth stop when operating. If excessive or low pedal pressure, pulling to one side or unusual noise is noticed while braking, have the cart serviced immediately.
- Parking Brake make sure the hand operated parking brake is functioning properly.
- The parking brake should engage the rear wheels when in the up position and allow the cart to roll smoothly when in the released position.
- **Reverse Buzzer** the reverse buzzer should sound when the key is in the on position and the direction stick is set to reverse 'R'.
- Steering steering should be smooth and consistent.
- **General** listen for any unusual noises such as squeaks or rattles. Check the cart's ride and performance. Have a certified technician investigate anything unusual.

#### **Driving Instructions:**



## **⚠** WARNING

- Always wear seat belts.
- No more than two (2) occupants at one time.
- Do not carry children on your lap or between the seats.
- Do not allow anyone to hang onto any part of the cart while operating.
- Obey all traffic and course regulations.
- Ensure all persons have read the operator's manual and can properly operate the cart.
- Ensure the passengers can properly operate the safety belts before allowing them to
- Avoid operating at night because the cart may be difficult to see by others. If the cart must be operated at night, make sure you use headlamps and tail lamps.
- Bring the cart to a complete stop prior to shifting between the Drive ('D') and Reverse ('R') settings. Failure to do so may injure an unsuspecting passenger and/or damage the cart.
- Operate the cart from the driver's seat only.
- To help prevent from the risk of serious injury, driver and passenger should keep all body parts inside the cart at all times.
- Avoid sudden and sharp turns.
- To reduce the chance of the cart tipping over, reduce speed while making sharp turns.
- Never drink and drive. Not only is drinking and driving unsafe, but it may also violate state, local and national laws.

#### **Starting the Cart**

- Study and understand the controls.
- Remove the battery charger cable if connected.
- Make sure everyone is seated with seat belts properly fastened.
- Adjust rear view mirrors.
- Place the key in the ON position and turn the wheels in the desired direction of motion.
- Release Parking Brake this MUST be done prior to gear selection.
- Select direction of motion with the Drive/Park/Reverse driving stick.
- Slowly apply the accelerator.
- Use the brake to stop and limit cart speed.



## 🗥 WARNING

 Avoid driving through water as doing so may damage the drive motor and also reduce braking performance. If driving through water cannot be avoided, check the brake operation by gently applying pressure to ensure normal operation occurs.



When stationary on a hill, use the footbrake or parking brake to hold position. Do not
use the accelerator pedal. Holding the accelerator pedal will reduce the life of the
batteries and the motor.

#### **Parking**

- After stopping the electric cart, engage the parking brake by pulling up on the hand lever.
- Turn the key switch OFF, remove the key, and place the drive stick switch in the Park Position ('P').

### **Towing**



## WARNING

- Do not tow behind an automobile or truck on any public roads. To tow the cart on public roads, use a trailer with a minimum load rating of 2,000 lbs.
- To tow the cart, turn the ignition switch to the off position and place the drive stick into park position.
- Use extreme caution while turning.
- Do not allow persons in the cart while being towed.
- Avoid stopping on a hill when towing and do not allow to roll backwards as this may cause the cart to overturn.

### **Storage**



## **⚠** DANGER

- Do not attempt to charge frozen batteries or batteries with bulged cases. Discard the battery. Frozen batteries can explode.
- Batteries in a low state of charge are more likely to freeze. Charge batteries fully before storing the cart.
- 1. Turn the ignition key OFF, place the drive stick switch in Park ('P'), and chock the wheels to prevent any rolling. Apply the parking brake.
- 2. Fully charge the batteries. If possible, keep the battery charger connected so that the batteries will not discharge. A computer on the charger will automatically monitor and charge the batteries. If a reliable AC power supply is not available, disconnect the charger from the AC supply and disconnect the batteries.
- 3. Dirty battery tops can conduct small amounts of electricity and hasten the discharging of the batteries. Clean battery tops and terminals with a solution of water and baking soda (1 gallon / 3.78 litres of water for 1 cup of baking soda). Do not allow this solution to enter the batteries.

- 4. Inspect and clean battery wires. Damage or frayed wires should be replaced by a qualified technician.
- 5. Store the cart in a cool, dry location.
- 6. Adjust the tire/tyre pressure to the recommended levels 30 psi / 2.75 bar.
- 7. Lubricate front and rear suspension lubrication points the lubrication nipples can be found on the suspension arms.

#### **Returning Cart to Service**

- 1. Fully charge the batteries.
- 2. Check battery electrolyte levels, add distilled water if necessary after charging.
- 3. Adjust the tire/tyre pressure to the recommended levels.
- 4. Perform Pre-operation Checklist (see page 15).

#### Maintenance:



## **N** WARNING

- Only a certified technician should repair the cart. It is important to abide by all procedures described in this manual and all safety signs such as "Danger", "Warning", or "Caution".
- If a problem is found during routine maintenance or inspection, do not operate the cart until the problem has been repaired.
- Wear proper safety apparel while repairing the cart. Proper safety apparel includes but is not limited to: safety goggles or approved eye protection, insulated gloves, and a face mask.
- Remove all jewellery and loose apparel items.
- Use insulated tools while working on any electrical components.
- Set the key switch to OFF and the drive stick to Park ('P'). Use chocks to secure the
- Components such as the motor, controller, and resistor may become hot during operation. To avoid burns, allow these components time to cool before a certified technician performs service or inspects the cart.

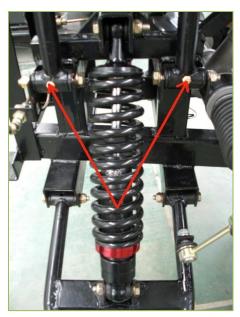
### **Scheduled Maintenance Procedures**

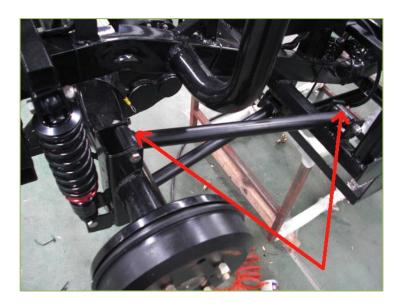
Daily Inspection By Owner	Accelerator Pedal	Check for normal operation	
,	Battery Pack	Check the batteries as per page 15 of this manual and fill them to the proper levels as described on page 15 of this manual	
	Brake System	Check for normal operation – have your dealer service if required	
	Parking Brake	Check for normal operation – have your dealer service if required	
	Reverse	Check for normal operation – have your dealer service if required	
	Key Switch & Drive Selection	Check for normal operation – have your dealer service if required	
	Tires/Tyres	Check the tire/tyre pressures and look for any damage or wear – replace if required	
Weekly Inspection By Owner	Battery Pack	Check the batteries as per page 15 of this manual	
,	Wiring	Check all wiring is secure and consult a technician to replace any damaged wires	
	Entire Cart	Check for any damaged, loose or missing parts	
	Check all items incl	uded in the above mentioned daily checks	
Monthly Inspection By The Owner or a Qualified	Battery Pack	Clean the top areas of the battery pack with soda water (WARNING - do not allow this into the battery)	
Technician	Service the Brake System	Check the brake fluid level, if required use DOT 3 rated fluid to replenish	
		Check the brake lines and park brake lines for any damage – have your dealer service if required	
	Check all the items included in the above mentioned daily/weekly checks		
Quarterly Inspection	Rear Axle	Check and fill if required with hypoid gear oil	
Items By The Owner or a	Entire Cart	Lubricate as per the chart on page 20 of this manual	
Qualified Technician	Check all the items included in the above mentioned daily, weekly and monthly checks		
Semi – Annual Inspection Items To Be Carried Out By a Qualified Technician Only	Battery Pack	Check the specific gravity level, the electrolyte level and general state of the battery pack after performing an equalization charge	
	Service Brake	Inspect the fluid reservoir as required (DOT 3)	
	System	Check the brake pads, discs, shoes and drums – replace them if necessary	
	Wires	Inspect all wiring and connections	
	Switches	Inspect all switches for full operation	
	Front Wheel Alignment	Check and adjust if needed	
	Entire Cart	Lubricate as per the chart on page 17 of this manual	
	Check all the items included in the above mentioned daily, weekly, monthly and quarterly checks		
Annual Inspection Items to	Battery Pack Carry out discharge, test and full recharge		
be Carried Out By a Qualified	Motor	Check the motor brushes and replace if necessary	
Technician Only	Front Wheel	Adjust and repack bearings if required	

Driving Axles	Check the driving axle and fill
Entire Cart	Lubricate as per the chart on page 17 of this manual
Check all the items included in the above mentioned daily, weekly, monthly,	
quarterly and semi - annual checks	

## Schedule for Oiling & Lubrication Application

Schedule Interval	Inspection	Location	Recommended Application
	Brake Fluid	Remove passenger	DOT 3 Shell Brake Fluid
Quarterly Inspection	Reservoir	side inner wheel	
By The Owner or a		fender	
Qualified Technician	Front Suspension	Α	General lithium based
			grease
	Rear Suspension	В	General lithium based
			grease
Annual Inspection	Check the rear	С	Great Wall gear oil 85W/90
Items To Be Carried	axle and fill		GL-5
Out by a Qualified	Gearbox		
Technician Only			





A B



C

#### **Checking the Hydraulic Brake Fluid Levels**

To check the brake fluid level remove the reservoir cap located on the right hand side of the dash.

- How to add brake fluid:
- 1. Open the cap of the oil reservoir and take out the oil seal.
- 2. Add the brake fluid to the position 5mm below the top of the reservoir.
- 3. Put the oil seal in the reservoir and tighten the cap of the reservoir.



• When adding the brake fluid, do not spill the fluid on the cart especially the surface with paint – this can cause damage.



- Never operate your cart if the brake pedal does not feel firm.
- Immediately stop operation if your cart pulls severely to one side while braking. Do not continue operation.
- Your cart is equipped with all round wheel Brakes, designed to limit your speed.
- The main pedal braking is done on all four wheels with a hydraulic brake system which
  includes front wheel disc brakes and rear wheel drum brakes. This system requires
  periodic inspection for brake pad wear, drum / rotor wear and hydraulic fluid loss.
  Consult a qualified Technician if excess wear or if fluid loss is noted. Do not attempt to
  move the cart if any of these conditions are present.
- The second braking system is a hand operated parking brake. This hand lever technically
  engages the rear brakes to keep the car stationary when parked or left unattended.
   Always engage the parking brake when parking the cart or before leaving it unattended.

#### **Battery Pack Maintenance:**



- While charging, batteries emit hydrogen which is an explosive gas. Keep the cart in well ventilated areas while charging.
- Do not smoke or expose sparks or open flames near the cart.
- The electrolyte in the batteries is highly acidic and poisonous. Avoid contact with skin, eyes, and clothing. Severe burning and scaring may result.
- Remedial measures in case of contact with battery acid:
  - External: Flush with water for 15 minutes. Call physician immediately.

- Internal: Drink large quantities of milk or water followed with milk of magnesia or vegetable oil. Call physician immediately.
- Eyes: Flush with water for 15 minutes. Call physician immediately.



- Wear safety glasses while working on the cart or charger. Wear a full face shield and rubber gloves while working on or near the batteries.
- Use insulated tools while working on any electrical components.



Turn the cart and all accessories off while charging.

The nine 8-volt batteries in this cart are specifically designed deep-cycle batteries. Automotive batteries should never be used in this cart. The same type and size lead-acid batteries should be used if replacement is necessary. Alternative batteries such as sealed batteries and glass mat batteries will require a different charging system and should not be used.

It is important to properly condition new batteries. New batteries will take 50 to 100 charges to reach their full potential. During this period it is important not to exceed a 50% discharge level. Batteries should be fully charged before first use of cart, before removal from storage, and before use each day.

Charge batteries whenever possible; avoid deep discharging of batteries as it will shorten their life.

#### Battery Watering System (If you have this Optional Accessory fitted to your cart)

The cart is equipped with a battery watering system to make maintenance of the battery electrolyte level easy. The system has two watering points. One is located in the battery compartment beneath the passenger seat, the other is located under the drivers' seat. Note: Both points must be accessed and used when watering the batteries as the system does not connect the left and right battery banks.

For proper operation and maintenance please refer to the separate on-board Battery Watering System Manual included with your cart documentation.

It is also highly recommended that you have your dealer demonstrate the proper operation of the watering system.

#### **Battery Care**

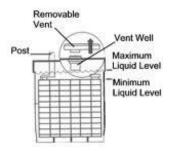
The following maintenance is required:

- 1. Keep batteries clean (see page 17). Ensure the battery cell tops are secure. Wash the battery tops and terminals of batteries with a solution of 1 gallon water / 3.78 litres and 1 cup baking soda. Do not allow solution to enter the batteries. Rinse off residual solution.

  2. The electrolyte level in the batteries should be checked weekly by filling them using the
- 2. The electrolyte level in the batteries should be checked weekly by filling them using the battery watering system.



Batteries contain high current. Do not overfill or allow water to stand on top of the batteries. Doing so could result in personal injury and or property damage.





#### Use distilled water, do not use tap water

Add water only after charging unless the electrolyte level is below the top of the battery plates. Add water to cover plates then check electrolyte levels again once charged. Note: a battery watering gun or bottle is available at many auto parts dealers. Inspect the wires and terminal connections for corrosion, fraying, or damage. Replace wires if necessary. Ensure battery wire terminal connector nuts are tightened to 95-105 inch pounds – always use a torque wrench and do not over tighten.



- If the battery wires or terminals are damaged or corroded, they should be replaced or cleaned. Failure to do so may cause them to overheat during operation.
- Torque battery hold down straps to 40 in-lbs to ensure the batteries are held in place securely.
- After each use, the cart should be placed on charge. The batteries should never be left discharged longer than absolutely necessary.

#### **Battery Charging**



- Batteries emit hydrogen which is an explosive gas. While charging, keep cart in well ventilated areas.
- Do not cover the cart while charging as an accumulation of hydrogen gas could result in an explosion.

#### **Charger:**

#### **On-board Charger**

The charger is located beneath the front body, mounted on the rear outer wall of the front trunk section. It begins the charge cycle after connecting the power plug to the charging receptacle inside the 'fuel' cap on the driver's side of the cart. At the same time the LED indicator located on the driver's side of the dash will flash to show the charger is charging the battery pack, when fully charged the LED will stop blinking and remain lit until the charger is disconnected.



#### **Troubleshooting Instructions**

If a fault occurs, count the number of red flashes on LED indicator, located on the side of the charger, between pauses and refer to the table below and instructions:

Red Flashes	Cause	Solution
*	Battery high voltage.	Check battery size and condition and reset charger (interrupt AC power for 15 seconds).
**	Battery low voltage.	Check battery size and condition and reset charger (interrupt AC power for 15 seconds).
***	Charge timeout caused by battery pack not reaching required voltage. Charger output was reduced to high temperatures.	Check connections:  Operate charger at a lower ambient temperature.
***	Check battery: battery could not be trickle charged up to minimum voltage.	Check for shorted or damaged cells.

****	Over-temperature: charger shut down due to high internal	Ensure sufficient cooling air flow and reset charger (interrupt AC
	temperature.	power for 15 seconds).
****	Charger internal fault.	Reset charger (interrupt AC power for 15 seconds). Return to qualified
		service depot if fault persists.

Please see additional instructions to the rear of this Owner's Manual.

If the charger is left connected to AC power supply, a refresh charge will occur after 10 days if the battery voltage has dropped below a pre-programmed level. If a refresh charge tries to start, but the AC power is disconnected, the charger will wait 8 days for AC to be restored.

At this point, the charger will go into sleep mode and a DC disconnect will be required to reset the charger.

The charger can be connected to any three prong 110-240 volt home outlet with an available minimum 12 amps of current. To avoid the risk of electrical shorting, the battery charger must be grounded through a properly installed three prong outlet. Do not use a two prong adapter.

Locate all cords and wires in locations that will not be driven over or present a tripping hazard.

Note: The cart and charger are equipped with an interlock device; the cart will not start if AC Power is pressed. The AC power source must be disconnected first at the cart connector located on the front bumper prior to operation.



## **⚠** WARNING

- Do not attempt to service the charger. If the charger requires service, take it to an authorized MEV dealer or an approved technician.
- Do not overload the AC circuit. The input voltage of the charger should be between 110-240 volt and supply a current at least 12 Amps.
- The AC side of the charger uses a grounded three prong plug. While charging, use a three prong wall receptacle with a proper ground. Do not attempt to alter the charger plug in any way.
- Do not use an adapter plug to go from three prongs to a two prong outlet. This will result in an ungrounded condition and increase the risk of electric shock and/or fire.
- If an extension cord is used, it must also be a three pronged extension cord with 14 AWG (American Wire Gauge) wires. No longer than 15m (50 feet). The longer the cable used means the less effective the charge rate will be.
- Inspect and replace the charger if it has been damaged in any way. Inspect the cords and connectors for cracks and fraying. If cracks or frays are detected, replace immediately.
- Do not use the charger near volatile liquids such as gasoline, paints, thinners, and other flammables. The charger can ignite flammable materials and vapours.
- Do not cover or block the cooling slots on the charger as it could potentially overheat.

#### **Charger Operation instructions**

- 1. Always connect the charger to a **GROUNDED** outlet. When using an extension cord, avoid excessive voltage drops by using a grounded, 3-wire, 14-AWG cord no longer than 15m (50 feet).
- 2. AVOID connecting Delta-Q charger and another device to a single 15A20A circuit or the circuit may become overloaded.

#### **Maintenance Instructions**

- 1. For flooded lead-acid batteries, regularly check water levels of each battery cell after charging and add distilled water as required to follow the maintenance and safety instructions recommended by the battery manufacturer.
- 2. Make sure charger connections to battery terminals are tight and clean.
- 3. Do not expose charger to oil, dirt, mud or direct heavy water spray when cleaning cart.



- Do not use the charger if:
- The plug is loose or does not make good contact
- The plug or wires get hot.
- The connector pins are bent or corroded.
- The plug, receptacle, or connector is damaged in any way.
- Using the charger with any of the above issues could result in a fire or personal inquiry.



Inspect cords and connections for cracks or fraying. Replace if any problems are found.
 Make sure all connectors are clean and dry.

With the charger properly plugged into the AC outlet, the charger will read the battery condition and activate within two to ten seconds. The charger indicator light will display one by one and then returns to charging state.

The charger will automatically apply sufficient power to bring the cart's batteries to full charge. It will also automatically shut itself off when they are fully charged. If left connected, the charger will occasionally check the batteries' condition and apply enough power to maintain a full charge.

It is recommended to plug the charger in even after short trips (10 minutes). This will assist in getting the maximum life from your batteries.

#### **Cleaning:**

It is recommended to use automobile car wash soaps and mild household cleaners. Use a garden hose with a sponge or towel. Do not use a pressure washer as the excessive pressure may damage some of the electrical components.

Use non-abrasive automotive type wax products. Battery acid, bugs, asphalt, and tar should be washed away with mild non-reactive solvents to prevent possible staining.

### **Questions:**

Should you have any questions regarding the care, maintenance, repair or operation of your MEV cart, contact your local MEV Dealer.

### **Cart Specifications:**

Motor	4 kW
Motor Cooling System	Air Vented Brushless Motor
Battery	9 x 8v Lead Acid
Single Battery Weight	29 Kilograms
Charger System	72v Delta Q™
Charging Time	8 Hours (Full Charge)
Body Material	Fibre Glass
Cart Dimensions	L: 3000mm/118" W: 1450mm/57" H: 1460mm/57"
Front / Rear Wheel Track	1363mm / 54"
Wheelbase	2128mm / 84"
Curb Weight (without batteries)	350 Kilograms
Carrying Capacity	200 Kilograms
Front / Rear Tire/Tyre	Kumho
Minimum Ground Clearance	132mm / 5 Inches
Minimum Turning Radius (full circle)	4.6 Meters
Max Travel Distance	55 Miles / 88 Kilometres
Drive Type	AC
Braking Distance	8ft at 15mph
Towing Capacity Limit	150 Kilograms
Towing Nose Weight Limit	50 Kilograms
Hill Climb Capacity	18 Degrees
Steering System	Double Sided Rack and Pinion
Brake System	Front: Disc Brakes / Rear: Drum Brakes
Seating Capacity	2 Persons (Standard Set Up Non Limo)

#### **MEV Limited Warranty:**

#### 1. WARRANTY

MEV hereby warrants to the original purchaser of a new model that it shall be free from defects in material and workmanship under normal use and service for the periods stated below, subject to the provisions, limitations, and exclusions contained in this limited warranty.

#### LIMITED:

All non-wear cart components including the Batteries, Solid State, Controller, Cart frame, chassis, suspension (a-arms, shock absorbers, shock mounts and associated hardware), rack and pinion steering, gearbox, transaxle, motor, and charger are warranted for one year or 5,000 miles whichever occurs first, with respect to parts against defects in material and workmanship from date of delivery.

IF THE CART WARRANTY REGISTRATION FORM IS NOT COMPLETED AND RETURNED TO MEV AT THE TIME OF THE ORIGINAL RETAIL TRANSACTION OR WITHIN 14 DAYS, THIS WARRANTY MAY BE CONSIDERED VOID. PLEASE INSURE THAT YOU OR YOUR DEALER HAS WARRANTY REGISTERED YOUR MEV CART – WWW.MINIELECTRICCARTS.COM

#### 2. LIMITED WARRANTY EXCLUSIONS

THE PROVISIONS OF THIS LIMITED WARRANTY SHALL NOT APPLY TO FAILURE DUE TO:

- a. Abuse or neglect such as overcharging, undercharging, improper battery fluid level maintenance, loose wiring or rusted or corroded hardware;
- b. Lack of proper maintenance as described in the cart's Owner's Manual;
- c. Damages caused by improper installation of a component;
- d. Carts charged by systems other than the MEV charger provided with the cart;
- e. Neglect, breakage, freezing, fire, explosion, wreckage, flooding, the addition of any chemical, or excessive operation of the battery in an undercharged condition (below half charge 1,200 specific gravity);
- f. Semiconductor parts such as diodes and fuses which are vulnerable to electrical overloads (including lightning strikes).

Transportation and labour expenses for warranty services are excluded from this warranty.

Also excluded from any MEV warranty are all fuses, decals (except safety decals), light bulbs, lubricants, trim pieces, seats, and routine wear items such as the charger cord, plug, and receptacle, brake pads/shoes, brushes, bushings, mats and pads, maintenance adjustments, cosmetic deterioration, and items which deteriorate or fail due to exposure or ordinary wear and tear. Also excluded from warranty is damage to a cart or component resulting from a cause other than a defect including unreasonable or unintended strain or use, improper installation of accessories, installation of parts or accessories that are not original equipment, overloading, accident, alteration, abuse or neglect.

Without limiting the generality of the foregoing in any way, and as part of its limited warranty exclusion, MEV does not warrant that the original cart components are suitable for use in any application. As is the use of any electrical device, a prudent owner will read and study the cart's Owner's Manual, the charger's owner's manual, the operating instructions, and all warning labels; and will exercise due care in working on or around electrical devises.

#### 3. VOIDING OF WARRANTY

THIS AND ANY OTHER WARRANTY SHALL BE VOID IF THE CART IS ABUSED OR USED IN AN UNINTENDED MANNER OR SHOWS INDICATIONS THAT IT HAS BEEN ALTERED IN ANY WAY, INCLUDING, BUT NOT LIMITED TO, MODIFICATION OF THE SPEED GOVERNOR, TYRE DIAMETERS, BRAKING SYSTEMS, STEERING, TRANSAXLE, OR OTHER OPERATING SYSTEMS OF THE CAR THAT MAY CAUSE IT TO PERFORM OUTSIDE OF MEV SPECIFICATIONS. THE WARRANTY IS LIKEWISE VOID IF THE CART INVOLVED SHOWS INDICATIONS THAT REASONABLE OR NECESSARY MAINTENANCE AS OUTLINED IN THE OWNER'S MANUAL WAS NOT PERFORMED AT THE TIME AND IN THE MANNER SPECIFIED IN SUCH MANUALS.

WARNING: any modification or alteration of any cart beyond factory specifications, including those affecting weight distribution, stability, or speed of the cart, can cause serious personal injury or death.

#### 4. SOLE REMEDY

MEV's liability under this limited warranty or in any action whether based upon warranty, contract, negligence, strict product liability, or otherwise, shall be the repair or replacement, at MEV's option, of the cart or component thereof that is deemed to be defective. Replacement shall mean furnishing/repair, during the applicable limited warranty period, a new cart or factory-reconditioned cart or component thereof that is identical of the reasonable equivalent to the warranted product or component at no cost to the purchaser.

Repair shall mean remedying a defect component thereof at no cost to the purchaser during the applicable limited warranty period. If MEV selects to repair the cart, it may provide factory-reconditioned parts or components. All parts and components replaced under warranty shall become the property of MEV and MEV reserves the right to test any component returned for warranty.

#### 5. HOW TO MAKE A WARRANTY CLAIM

To make a warranty claim under this limited warranty, contact your local MEV authorized dealer or MEV directly online.

#### 6. DISCLAIMER

THIS LIMITED WARRANTY IS EXCLUSIVE. MEV MAKES NO OTHER WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED. ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED THE OBLIGATIONS OR TIME LIMITS STATED IN THIS WARRANTY ARE HEREBY DISCLAIMED BY MEV AND EXCLUDED FROM THIS

WARRANTY. THE MEV USER EXPRESSLY AGREES THAT THE REMEDY OF THE REPLACEMENT OR REPAIR OF THE DEFECTIVE CART OR COMPONENT THEREOF IS THE SOLE REMEDY OF THE USER. MEV MAKES NO OTHER REPRESENTATION OR WARRANTY OF ANY KIND, AND NO REPRESENTATIVE, EMPLOYEE, DISTRIBUTOR OR DEALER OF MEV HAS THE AUTHORITY TO MAKE OR IMPLY ANY REPRESENTATION, PROMISE, OR AGREEMENT, WHICH IN ANY WAY VARIES THE TERMS OF THIS WARRANTY.

#### 7. NO CONSEQUENTIAL DAMAGES

IN NO EVENT SHALL MEV OR AN MEV DEALER BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS RELATING TO PROPERTY OTHER THAN THE CART, LOSS OF USE OR TIME, INCONVENIENCE, OR ANY OTHER ECONOMIC LOSS.

Some countries/states allow neither limitation on the duration of an implied warranty nor exclusions or limitation of incidental of consequential damages. Therefore, the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from country to country and state to state.

#### 8. INFORMATION

For further information contact MEV or a MEV Dealer.



# www.myelectricvehicle.org