



E-MERGE™

OPERATOR'S MANUAL

Columbia ParCar Custom Carts, Inc.



COLUMBIA



TOMBERLIN



PARCAR



ELITE

⚠ WARNING

- THE TOMBERLIN E-MERGE IS EQUIPPED TO OPERATE AT A TOP SPEED OF 25 MPH (40 KPH) AND IS INTENDED FOR USE AS A LOW-SPEED-VEHICLE. OR AS A PTV AT 19 MPH. NEVER OPERATE THE VEHICLE ON ANY ROAD PUBLIC OR PRIVATE WITH A POSTED SPEED LIMIT ABOVE 35 MPH.

⚠ WARNING

WHEN OPERATING VEHICLE ON PUBLIC ROADS

THIS VEHICLE OFFERS MUCH LESS CRASH PROTECTION THAN A REGULAR CAR, VAN, OR TRUCK. THIS MEANS A HIGHER RISK OF INJURY OR DEATH IN COLLISIONS, EVEN AT LOW SPEEDS. THE HIGHER THE SPEED OF THE TRAFFIC AROUND YOU, THE HIGHER THE RISK OF INJURY.

To reduce these risks:

- Obey all traffic regulations.
- Avoid roads with regular traffic, even if the speed limit is low.
- Whenever possible, stay on roads and lanes limited to low speed vehicles.
- Wear your safety belts at all times.
- Avoid operating vehicle at night, because your vehicle may be hard for others to see.
- To reduce the chance of the vehicle tipping over, reduce speed when turning and maneuvering thru curves and hills.
- Never drink and drive. Not only is drinking and driving unsafe, but doing so may violate state and local laws.

⚠ WARNING

THIS PRODUCT CONTAINS OR EMITS CHEMICALS OR SUBSTANCES THAT HAVE BEEN DETERMINED BY THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

⚠ WARNING

- This vehicle is not designed to be used in conjunction with child safety seat.
- Do not use or install child safety seat in any seat or position in the vehicle.
- 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 vehicle.



FOREWARD

Thank you for the purchase of your Tomberlin E-Merge. Your satisfaction with your new vehicle is important to all of us at Tomberlin.

Please take the time to review this Operator's Manual and abide by all safety and operation warnings before allowing anyone to operate your new E-Merge. Familiarizing yourself with the Operator's Manual and warnings will help avoid possible personal injury and property loss.

We hope that you will consider this manual as an indispensable part of the vehicle.

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

Tomberlin reserves the right to make design changes to vehicles without obligation to make these changes on units previously sold.

IMPORTANT OPERATING NOTES:

- **ALWAYS OPERATE YOUR E-MERGE IN COMPLIANCE WITH YOUR STATE AND LOCAL VEHICLE REGULATIONS INCLUDING REGISTRATION, TITLING, INSURANCE, SEAT BELT USAGE, AND OPERATOR'S LICENSING.**
- **SWITCH VEHICLE TO OFF POSITION, REMOVE KEY AND SET PARKING BRAKE PRIOR TO EXITING DRIVER'S SEAT.**
- **OBEY ALL TRAFFIC LAWS.**
- **ALWAYS FASTEN YOUR SEAT BELTS!**
- **TO EXTEND THE LIFE OF YOUR BATTERIES:**
 - **KEEP BATTERIES FULLY CHARGED WHENEVER POSSIBLE.**
 - **AVOID DEEP DISCHARGING OF BATTERIES WHENEVER POSSIBLE.**
 - **CHECK BATTERY ELECTROLYTE LEVELS OFTEN, ADD DISTILLED WATER AS NECESSARY.**
 - **FOLLOW ALL BATTERY MANUFACTURE SAFETY , CARE AND MAINTENANCE GUIDENCE .**

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PRECAUTIONS

The E-Merge is designed and manufactured as a PTV or an LSV. It is important that every Operator become familiar with safe operation of the vehicle as described in this Operating Manual and also with all applicable State, Local, and Community regulations governing the use of an LSV, Golf Car or PTV.



Safety warning signs may appear shocking at first glance. Safety Warnings are there to remind you to avoid serious accidents and personal injury.

SAFETY REGULATIONS

It is required to read the Owner's manual completely before operating the vehicle or attempting repair 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 distributor to obtain new decals.

DANGER

- DANGER indicates an immediate hazard that if ignored, will 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.

GENERAL WARNINGS

Any reference to Battery Care or maintenance is intended as general safety guidelines. Always consult and follow the recommendations of your battery manufacturer if contrary to those expressed herein. Never exceed your skill level by performing services you are not trained to accomplish. When in doubt, Stop and call a professional.

DANGER

- The E-Merge contains batteries which can emit quantities of explosive gases. Keep the vehicle in a well ventilated area and away from sparks and open flames.
- Ventilate when charging or operating the vehicle in enclosed areas.
- Do not perform service or maintenance on batteries while vehicle is charging.
- The E-Merge does not offer protection from lightning, flying debris, or other storm hazards. Upon indication of severe weather conditions, seek appropriate shelter immediately.

WARNING

- 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, unplug the charger and place the run/tow switch to the tow position before inspecting or performing any type of service on the vehicle.
- Connections should be tight and free of corrosion.
- Utilize 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 vehicle in a safe location, place the ignition in the off position, move yourself and passengers away quickly to a safe distance from the vehicle and contact your dealer for assistance and repair. If fire or smoke

is detected contact your local fire department immediately. Do not store your vehicle inside if any of these conditions exist.

- Only use recommended batteries of the correct size.

⚠ WARNING

1. Only authorized mechanics should perform maintenance or repair on the E-Merge. It is required to abide by all regulations and safety decals on the vehicle while performing any type of maintenance or repairs.
2. To carry out repair work: turn the run/tow switch to the middle position (see Figure 1). Turn the vehicle off, remove the key and check tires.



Figure 1, Run/Tow switch in middle position

3. Use only insulated tools to handle the battery pack and electrical components. Remove all jewelry and loose items before performing maintenance procedures.
4. Improper application or maintenance will lead to deterioration of vehicle performance and reduce the overall life of the vehicle.
5. Do not attempt to alter the vehicle 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.

APPEARANCE OF THE E-MERGE CONTROLS

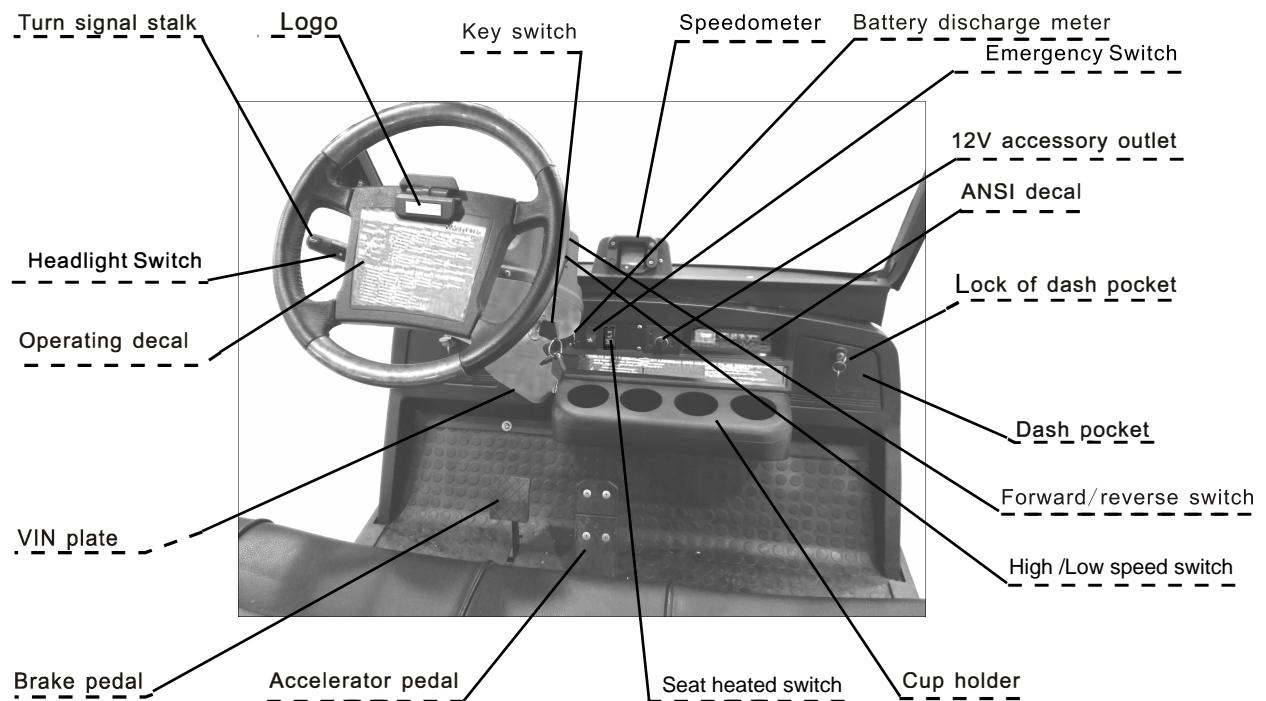


Figure 2

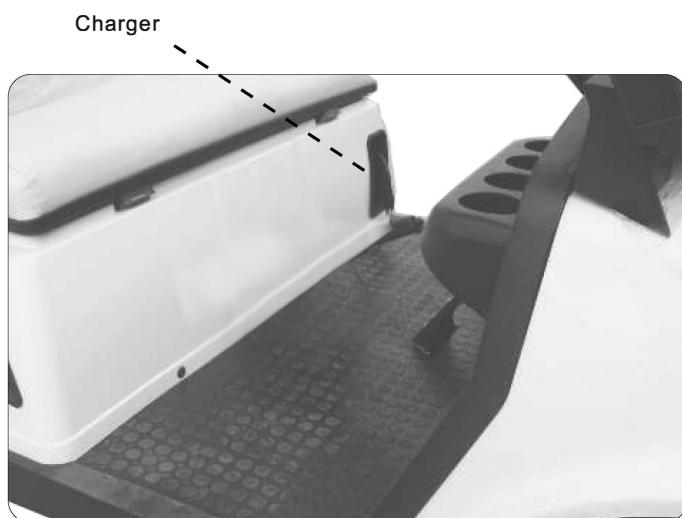


Figure 3

CONTROLS

1. It is imperative that all operators of the E-Merge be familiar with the controls prior to operation.
2. To avoid unintentional acceleration and vehicle damage, do not turn the direction selector switch (forward/reverse) until the vehicle has come to a complete stop.

Key switch

The key switch is located on the right side cover of steering stem and has two positions OFF/ON. The key can only be removed in the OFF Position.



OFF



ON

Figure 5

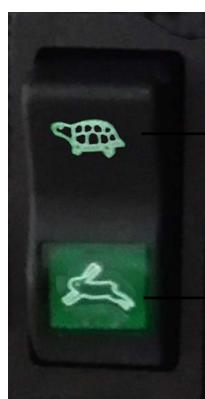
Figure 6

High/low speed switch (Please see figure 7)

The high/low speed switch is located on the right side cover of steering stem.

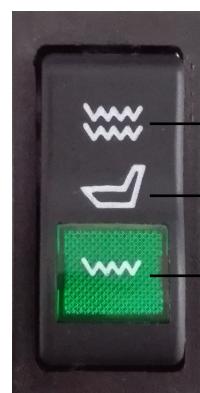
Seat heated switch (According to the actual vehicle configuration)

The seat heated Switch is located on the third position from right side of Dashboard.(Please see figure 8)



Low speed button

High speed button



Driver+Passenger

OFF

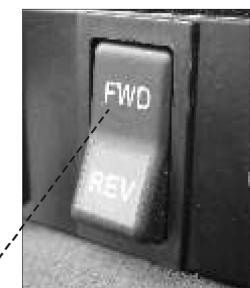
Driver

Figure 7

Figure 8

Direction Selector

The direction selector is located on the right side of steering stem. It has three selections FWD for Forward, REV for Reverse and a Neutral toggle position located halfway between the forward and reverse positions.



Forward



Neutral



Reverse

Figure 9

Figure 10

Figure 11

Headlight Switch

The Headlight Switch is located on the left side of steering stem.
(Please see figure 12)

Emergency Switch

The Emergency Switch is located on the forth position from right side of Dashboard.(Please see figure 13)

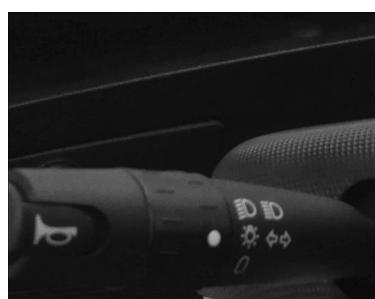


Figure 12

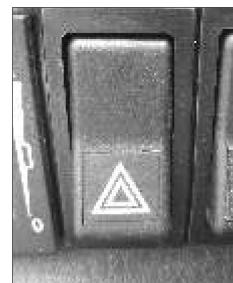


Figure 13

Light switch of Inner Mirror

The switch is located above the Inner Mirror. (Please see figure 14)

Lock of Dash Pocket:

Is located on the Dash Pocket Door. Insert the key into the key hole, turn the key to right, then press the key in, and then clasp under the key with middle finger, and pull to outside.(Please see figure 15)



Figure 14



Figure 15

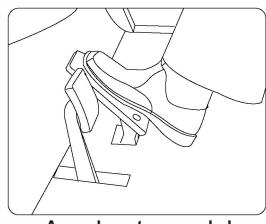
Brake Pedal

The brake pedal is the larger foot pedal located to the left of the accelerator pedal. The brake pedal engages all four of the E-Merge wheels for shorter stopping distances. To slow the vehicle down, the operator should depress the brake pedal.

Accelerator Pedal

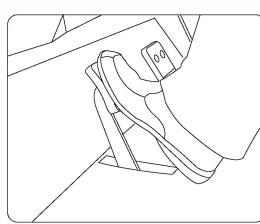
The accelerator pedal is the smaller pedal to the right of the brake pedal. When depressed, the accelerator pedal will engage the drive motor in the direction the FWD/REV switch is set.

- The vehicle will accelerate up to its top speed of just under 25 mph at which time power will be reduced to the motor.
- If the vehicle speed begins to exceed 25 mph, automatic motor braking will occur.
- When the reverse position is selected, vehicle top speed is reduced.
- Smooth, slow acceleration will substantially increase the vehicle range.



Accelerator pedal operation

Figure 16



Brake pedal operation

Figure 17

Battery Discharge Meter

The E-Merge is equipped with a Battery Discharge Meter. It functions similarly to a fuel gage in an automobile. The Battery Discharge Meter is an indicator of the remaining power in the battery pack.

The Battery Discharge Meter has 10 indicator lights:

- When the light bar is at the top of indicator, the battery pack contains a full charge.
- When the battery discharge is down by 70%, the two remaining lights will flicker as a warning.
- When the vehicle is at 80% discharge, reduced performance will occur indicating the immediate need to recharge the batteries. Continued operation beyond this discharge state will result in reduced battery life and possible damage to the batteries.

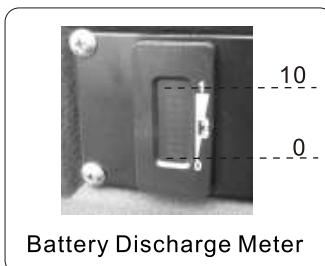


Figure 18

MultiFunction Stalk -----Turn Signals/Horn/High Beam/Low Beam

The Multi-Function Stalk is a multi-feature control. It is located on the left side of the steering wheel and functions similar to an automobile for turn signaling but also includes the high beam and horn control.

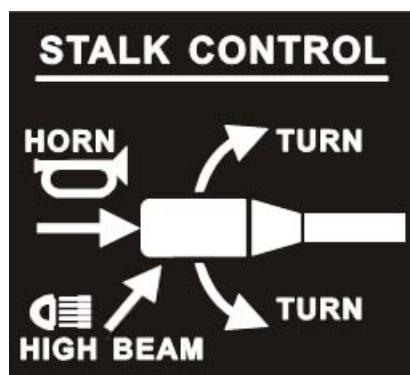


Figure 19

Turn Signal -- Pushing down on the stalk indicates a left turn, pushing up a right turn. *Note: the turn signal stalk will not automatically return to the off position after a turn, the operator should manually move the stalk to the center position upon completing each turn.*

Horn

To activate the horn, the operator should press the end of the stalk.

Headlamps

Turn on the headlamp switch(figure 11)to activate the headlamps. Pulling the multi-function stalk up will initiate the low beam, while pushing the multi-function stalk down will initiate the high beam; at the same time, the blue indicator on speedometer will light to show that the headlamp is on.

Windshield wiper

The windshield wiper switch is on the wiper motor which located at the left corner of windshied frame. When the power switch is "ON" position, pull out the wiper switch then the wiper motor starts to work, push it forward then it stops.



Figure 20

Speedometer/Odometer

The speedometer is located on top of the vehicle dash and will read vehicle speeds from 0 to 25 mph. The gauge will also record the total distance traveled. Within the speedometer is a trip odometer which can be set by depressing the set buttons. This feature is especially useful in measuring the distance between each charge cycle.

The reading of the speedometer can be programmed to read out in either miles or kilometers. To change the display simply press and hold the small button on the left.



Figure 21

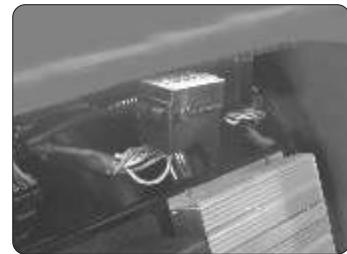


Figure 22

Fuse box

For your convenience , all the fuses have been consolidated in a central location under the seat. All fuses in the fuse box are marked with their names and their functions.

Safety Belts

The two passenger E-Merge(E2) has one bench seat and is equipped with two safety belts, one for the driver and one for the passenger. The 4-Passenger E-Merge(E4) has a second, forward facing bench seat with two additional passenger seat belts. The safety belts should be used at all times while operating the vehicle.

The E-Merge is not equipped for child safety seats or infant carrying seats. Children under 12 years of age should not be transported in the E-Merge. 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 E-Merge.

To properly secure the seatbelts, pull the metal tab out away from the retractor and insert into one of the two the buckles located near the center of the seat. A click will be heard when the tab is securely latched. Position the lap belt as low as possible on the hips not the waist. 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 retract, check for kinks or twist.

WARNING

- Always operate the vehicle 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. 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 recommended number of occupants for the vehicle;
 - Maximum occupants on the single bench E-Merge: Two (E2)
 - Maximum occupants on the two bench E-Merge: Four (E4)

CAUTION

- 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-OPERATING INSPECTION

Each vehicle has been thoroughly inspected by both the manufacturer and dealer. Before the initial operation, it is important that the user inspect the vehicle using the following guidelines:

- General all parts are securely fastened to the vehicle, no parts are missing, and all screws or nuts are properly tightened.
- Review all warning decals and placement on the vehicle.
- Safety Belts visually inspect and test for safe operation.
- Tires check for proper inflation as identified on the vehicle Certification Label.
- Batteries check electrolyte level in all cells of each battery. If any cell is low, add distilled water as described in the Battery Care section of this manual. All wires should be free of corrosion. Batteries should be fully charged before first use of vehicle.
- Brakes - check hydraulic fluid level. If it is low, immediately call a qualified mechanic for service.
- Charger cord, plug, and receptacle inspect for cracks, loose connections, or frays.

OPERATION INSPECTION

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

- **Forward/Reverse Switch** - ensure proper operation
- **Brakes** - make sure the brake pedal is operating smoothly. It should not go more than half way to the floor when depressed. The vehicle 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 vehicle serviced immediately.
- **Reverse Buzzer** - the reverse buzzer should sound when the key is in the on position and the direction is set to reverse.
- **Steering** - steering should be smooth and consistent with no excessive play in the steering wheel.
- **General** - listen for any unusual noises such as squeaks or rattles. Check the vehicle's ride and performance. Have a certified Tomberlin Dealer or authorized technician investigate anything unusual.

General Operation

- **Zero Speed Detect** with the run/tow switch in the run position, the E-Merge's motor will inhibit the vehicle from rolling until the accelerator is depressed. When pushed, motor braking should only allow the vehicle to travel 1 to 3 mph. When such motion is detected, a buzzer will sound.
- **Motor Braking** the top speed of the E-merge is limited even while going down an incline, The motor will engage to limit the top speed of the vehicle. The motor acts as a generator, transferring some of the excess energy into recharging the batteries.
- **Pedal-Up Braking** the E-Merge will also apply some slight motor braking while stopping. A slight extra force may be felt while coming to a complete stop. This indicates a transfer of some of the excess energy back into the batteries.

DRIVING INSTRUCTIONS

WARNING

- All drivers must have a valid driver's license.
- Always wear seat belts.
- No more than two occupants at one time on a 2-Passenger (one single bench seat) E-Merge and four occupants on 4-Passenger (two forward facing bench seats) E-Merge.
- Do not carry children on your lap or between the seats.
- Do not allow anyone to hang onto any part of the vehicle while operating.
- Obey all traffic regulations.
- Ensure all persons have read the operator's manual and can properly operate the vehicle.
- Ensure the passengers can properly operate the safety belts before allowing them to ride.
- Avoid operating at night because the vehicle may be difficult to see by others. If the vehicle must be operated at night, make sure you use headlamps and tail lamps.
- Bring the vehicle to a complete stop prior to shifting between FWD/REV. Failure to do so may injure an unsuspecting passenger and/or damage the vehicle.
- Operate the vehicle from the driver's seat only.
- To help prevent the risk of serious injury, driver and passenger should keep all body parts inside the vehicle at all times.
- Avoid sudden and sharp turns.
- To reduce the chance of the vehicle 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 and local laws.

Starting the Vehicle

1. Study and understand the controls.
2. Remove the battery charger cable if connected.
3. Make sure everyone is seated with seat belts properly fastened.
4. Adjust rear view mirrors.
5. Read the safety decals on the steering wheel and dash areas.
6. Place the key in the on position and turn the wheels in the desired direction of motion.

7. Select direction of motion with the FWD/REV switch.
8. Slowly apply the accelerator.
9. Use the brake to stop and limit vehicle 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.

 CAUTION

- 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 motor.

TOWING

 WARNING

- Do not tow behind an automobile or truck on any public roads. To tow the vehicle on public roads, use a trailer with a minimum load rating of 1,500 lbs.
- To tow the vehicle, turn the ignition switch to the off position and place the FWD/REV switch in neutral.
- Place the Run/Tow switch located under the seat to the Tow position.
- Do not exceed 5 mph(8 kph).

- Use extreme caution while turning.
- Do not allow persons in the vehicle while being towed.
- Avoid stopping on a hill when towing. Do not allow to roll backwards as this may cause the vehicle to overturn.
- Do not tow the vehicle behind any type of automobile on public roads unless it is on an approved trailer with a minimum load rating of 3,000 lbs.

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 vehicle.
1. Turn the key off, place FWD/REV switch in Neutral, and chock the wheels to prevent rolling. Do not apply the parking brake.
 2. Fully Charge the batteries. **If possible, keep the battery charger hooked up to the vehicle 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 vehicle 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 of water for 1 cup of baking soda). Do not allow this solution to enter the batteries.
 4. Inspect and clean battery wires. Damaged or frayed wires should be replaced.
 5. Store the vehicle in a cool, dry location.
 6. Adjust the tire pressure to the recommended levels.
 7. Lubricate front suspension and all other periodic lubrication points.
 8. Use floor Jacks or hire cradles to Remove weight off of the tires.

Returning Car to Service

1. Check battery electrolyte levels, add distilled water if necessary.
2. Fully charge the batteries.
3. Adjust the tire pressure to the recommended levels.
4. Perform Pre-Operation Inspections before each use

MAINTENANCE

A. WARNING

- B. Only a qualified technician should repair or inspect the vehicle. It is important to abide by all procedures described in this manual and all safety signs such as "Danger", "Warning", or "Caution".
- C. If a problem is found during routine maintenance or inspection, do not operate the vehicle until the problem has been repaired.
- D. Wear proper safety apparel while repairing the vehicle. Proper safety apparel includes but is not limited to: safety goggles or approved eye protection, insulated gloves, and a face mask.
- E. Remove all jewelry and loose apparel items.
- F. Use insulated tools while working on any electrical components.
- G. Set the key switch to Off and the FWD/REV switch to Neutral. Use chocks to secure the tires.
- H. Components such as the motor, controller, and resistor may become hot during operation. To avoid burns, allow these components time to cool before performing service on the vehicle.

Scheduled Maintenance Procedures

Scheduled inspection procedures for electric vehicle		
Inspection		
Routine maintenance by owner	Accelerator pedal	Check if it is capable of normal operation (adjust it to be normal)
	Accelerator microswitch	Check if it is capable of normal operation (please refer to "Maintenance and adjustment" in page 14).
	Battery pack	Charge the battery pack
	Service brake system	Check if it is normal, if not, please contact your dealer for service.
	Charger and socket	Check if it is tough and normal, free of damage
	Reverse	Check if it is capable of normal operation
	Key switch and drive select	Check if it is capable of normal operation
	Tires	Check if abrasion or deterioration takes place
	Warning signs on electric golf car	Ensure that all signs are put on at good place
Weekly inspection by owner	Battery pack	Clean the ports and remove the dust thoroughly, and check electrolyte level.(Do not overfill)
	Wires and ports	Check if they are secure, and check if they are damaged
	Entire car	Check if the parts are loosened, and fasten them if yes.
		Check maximum speed of a vehicle($\leqslant 19.9\text{mph}$)
Check all items included in above-mentioned routine checks		
Monthly inspection items by owner or qualified mechanist	Battery pack	Clean the top of battery pack with soda water
	Service brake system	Check if it is capable of normal operation, check if the braking pedal movement is nimble, and adjust them when necessary
		Check if the brake wire is damaged, and replace it if necessary
	Tires	Check if any abrasion or damage takes place
		Check the air pressure, and moderately adjust the tire pressure to 30-35 PSI when necessary
	Accelerator microswitch	Check if there is any flaw or damage, and ensure that the switch is fixed to the framework
Check all of the above routine/weekly/monthly inspection items		
Quarterly inspection items by owner or qualified mechanist	Accelerator pedal	Check if it is capable of normal operation, and adjust it when necessary.
	Driving system	Carry out lubrication as per schematic diagram for lubrication of electric car
	Entire car	Carry out lubrication as per schematic diagram for lubrication of electric car
	Brake oil cup	Check the hydraulic fluid and fill the hydraulic fluid to the highest position
	Check all routine/weekly/monthly/inspection items	
Semi-annual inspection items to be carried out by qualified mechanist only (per 100 rounds or 50 workhours)	Battery pack	Check the exact weight, electrolyte level height and charging voltage
	Service brake system	Check if it is capable of normal operation, check if the service brake system is capable of nimble movement, and clean and adjust it when necessary
		Check the brake shoes, and replace them when necessary
	Wires	Check if there is any rapture, breakage or short circuit
	Direction selector	Check its contact and wire connection, and ensure secure connection
	Front wheel alignment	Check and adjust it when necessary
	Entire car	Carry out lubrication as per schematic diagram for lubrication of electric car
Check all of the above routine/weekly/monthly/quarterly inspection items		
Annual inspection items to be carried out by qualified mechanist only (per 200rounds or 100 workhours)	Battery pack	Carry out discharge test
	Motor	Check the motor brush, and replace it when necessary
	Front-wheel bearing	Check if it moves smoothly, and adjust or lubricate it with chassis lubricating oil when necessary
	Driving axle	Check the driving axle and fill oil to oil seal position
	Entire car	Carry out lubrication as per schematic diagram for lubrication of electric car
	Check all of the above routine/weekly/monthly/quarterly/semi-annual inspection items	

Scheduled oiling/lubrication procedures for electric vehicle			
Scheduled interval	Inspection	Position	Recommended lubricating oil
Quarterly inspection items by owner or qualified mechanist	Brake pedal mainshaft	1	General-purpose lithium base grease
	Shaft, accelerator pedal	2	General-purpose lithium base grease
	Reservoir	3	Brake fluid (DOT3000)
	Front suspension	4	General-purpose lithium base grease
Annual inspection items to be carried out by a Tomberlin qualified technician.	Check the driving axle and fill 37oz Gear lube	5	GL-5 Gear lube
	Check the front-wheel bearing	6	General-purpose lithium base grease

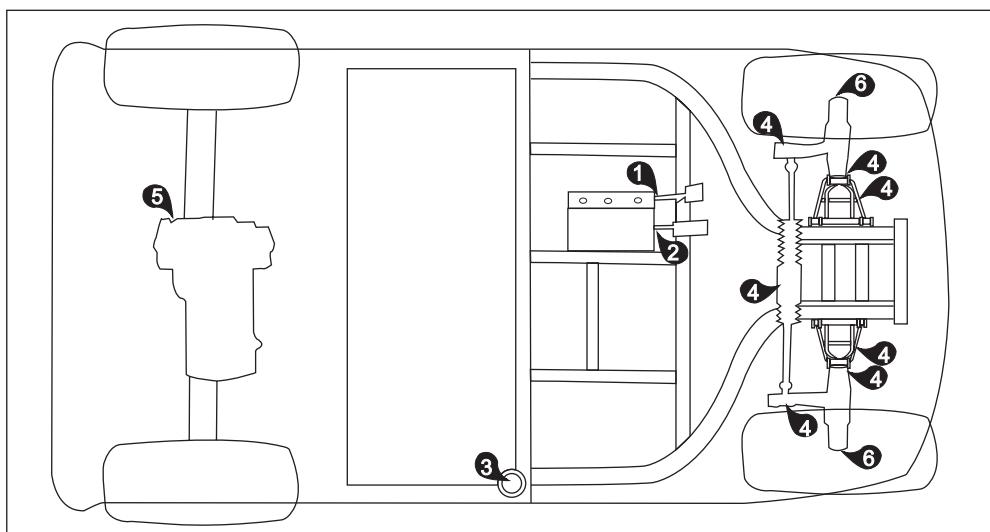


Figure 23

CHECKING HYDRAULIC BRAKE FLUID LEVELS

DANGER

- Never operate your E-Merge if the brake pedal does not feel firm or extends more than half way to the floor.
- Immediately stop operation if your vehicle pulls severely to one side while braking. Do not continue operation.



Figure 24

Your E-Merge is equipped with 4+Wheel Brakes.

- 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 your Tomberlin Dealer or qualified Technician if excess wear or if fluid loss is noted. Do not attempt to move the vehicle.

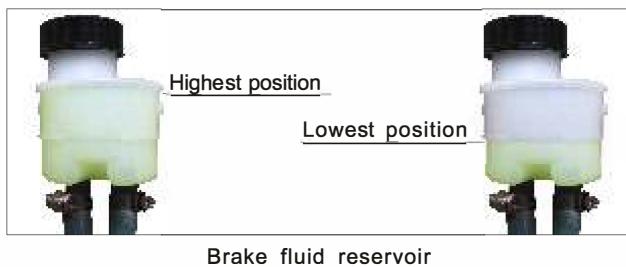


Figure 25

- The second braking system is an electronic motor brake that will activate when the E-Merge comes to a complete stop, the key is turned off or the batteries are below 24 volts.
- Additional braking utilizes the E-Merges electric motor. It will limit your top speed to while going downhill by transferring some of the excess energy back into the batteries. It will also engage to slow the vehicle if it starts to roll-away once stopped.

BATTERY PACK CARE AND MAINTENANCE

DANGER

1. While charging, batteries emit hydrogen which is an explosive gas. Keep the vehicle in well ventilated areas while charging.
2. Do not smoke or expose sparks or open flames near the vehicle.
3. The electrolyte in the batteries is highly acidic and poisonous. Avoid contact with skin, eyes, and clothing. Severe burning and scaring may result.
4. 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.

WARNING

- Wear safety glasses while working on the vehicle 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.

CAUTION

- Turn the vehicle and all accessories off while charging.

The batteries in this vehicle are specifically designed deep-cycle batteries. Automotive batteries should never be used in this vehicle. The same type and size lead-acid batteries should be used if replacements are necessary. Alternative batteries such as sealed batteries and glass mat batteries will require a different charging system and should not be used. Always consult your dealer or battery manufacturer for proper care and maintenance.

It is important to properly condition new batteries. New batteries will take numerous 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 vehicle, 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 Care

1. Keep batteries clean. Ensure the battery cell tops are secure. Wash the battery tops and terminals of batteries with a solution of 1 gallon water 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 removing the battery caps and visually inspecting the level as shown below.

⚠ WARNING

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.

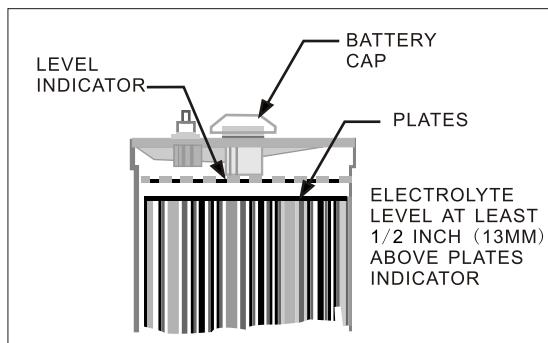


Figure 26
Use distilled water, do not use well water.

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.

3. Inspect the wires and terminal connections for corrosion, fraying, or damage. Replace wires if necessary. Ensure battery wire terminal connector nuts are tightened to 110 in-lbs.

⚠ CAUTION

- 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.
4. Torque battery hold down straps to 40 in-lbs to insure the batteries are held in place securely.
 5. After each use, the E-merge should be placed on charge. The batteries should never be left discharged longer than absolutely necessary.

Battery Charging

DANGER

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

Charger

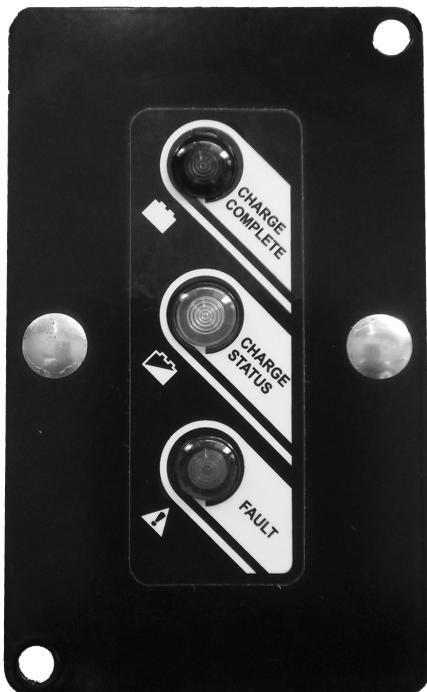
The charger is controlled through an internal computer. This vehicle is equipped with a charger interlock feature. This feature prevents vehicle from operating when the charger is connected to an AC power source.

WARNING

- Do not attempt to service the charger. If the charger requires service, take it to an authorized Tomberlin Dealer or approved technician.
- Do not overload the AC circuit. The voltage of the circuit should be between 100-240 volt and the current should be 18 Amp.
- The AC side of the charger uses a 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 electrical shock and/or fire.
- If an extension cord is used, it must also be a three prong extension cord with 12 AWG wires, no longer than 30-feet (10m).
- Inspect and replace the charger if it has been dropped or 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 vapors.
- Do not expose the charger to rain or liquids. Keep the charger dry.
- Do not place anything near the charger cooling vents. Severe electrical shock may occur.
- Do not cover or block the cooling slots on the charger as it could potentially overheat.

Operating 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, 12-AWG cord no longer than 30 feet (10m).
2. **Never connect a charger to the same outlet as any other device. Recommended circuits are 30 amps.**



CHARGE COMPLETE: the LED light is green, it means absorbtion phase complete or charger in Maintenance Mode.

CHARGE STATUS: the LED light is amber, it means in absorbtion phase .

FAULT: the LED light is red and flashing, it means charge error. Reset charge power and refer to Troubleshooting below.

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 level specified by battery manufacturer. 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 vehicle.

Troubleshooting Instructions

If a fault occurs, count the number of red flashes between pauses and refer to the table below:

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 temperature.	Ensure sufficient cooling air flow and reset charger (interrupt AC power for 15 seconds)
	Charger internal fault	Reset charger (interrupt AC power for 15 seconds). Return to qualified service depot if fault persists.

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 15 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, covered or present a tripping hazard.

Charging the E-Merge

DANGER

- 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 injury.
- Always utilize a charger cord sized for heavy power loads, consult an electrician in the event of any doubt.

WARNING

- Inspect cords and connections for cracks or fraying. Replace if any problems are found. Make sure all connectors are clean and dry.
- Use the yellow charger plug to connect to the vehicle receptacle. Do not pull on the charger wires.

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 indicative light will display one by one and then returns to charging state.



Figure 27

Note: The charger is built into the vehicle. Due to the heat caused when charging, the seat should be raised when charging in hot weather conditions.

The charger will automatically apply sufficient power to bring the E-Merge'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 E-Merge batteries.

Visit www.lesterelectrical.com, manufacturer of the charger for more details and maintenance tips.

CLEANING AND APPEARANCE

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 overspray 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 E-Merge, contact your local Tomberlin Dealer.

VEHICLE SPECIFICATIONS

Specifications		2-passenger	4-passenger
Dimensions length*width*height(mm)	No load	2500*1200*1860	3280*1200*1870
	Full load	2500*1200*1840	3280*1200*1850
Dimensions length*width*height(in)	No load	98.5*47.28*73.28	129.23*47.28*73.68
	Full load	98.5*47.28*72.50	129.23*47.28*72.89
Wheelbase(mm)		1630	2450
Wheelbase(in)		64.2	96.5
Wheel tread(mm)	Front wheel/rear wheel	980 / 1060	980 / 1060
Wheel tread(in)	Front wheel/rear wheel	38.61 / 41.76	38.61 / 41.76
Weight without batteries and load(kg)		360	480
Weight without batteries and load(lb)		793.8	1058.4
Weight of load(kg)	Weight of passengers(kg)	2X90=180	4X80=320
	Weight of batteries(kg)	240	240
Weight of load(lb)	Weight of passengers(lb)	2X198.45=396.9	4X176.4=705.6
	Weight of batteries(lb)	529.2	529.2
Overall weight(kg)		780	1040
Overall weight(lb)		1719.9	2293.2
Weight on the axles for no load(kg)	Front axle/rear axle	200/340	270/450
Weight on the axles for no load(lb)	Front axle/rear axle	441/749.7	595.35/992.25
Weight on the axles for full load(kg)	Front axle/rear axle	265/455	400/640
Weight on the axles for full load(lb)	Front axle/rear axle	584.33/1003.28	882/1411.2
AC motor(kw/R.min)		5.0/5000	5.0/5000
AC motor(hp/R.min)		6.803/5000	6.803/5000
Controller(A/V)		450/48	450/48
Batteries	Batteries	6V 8	6V/8
	Capacity(AH@20Hrs)	1800	1800
Maximum speed(km/h)		≤ 32	≤ 32
Maximum speed(mile/h)		≤19.9	≤19.9
Approximate drive distance(km)		55~70	55~70
Approximate drive distance(mile)		28~37.26	34~43.47
Minimum turning radius(m)		≤3	≤5
Minimum turning radius(ft)		≤9.84	≤16.41
Minimum ground clearance(mm)		≥80	≥80
Minimum ground clearance(in)		≥3.15	≥3.15
Angle of approach for no load(°)		≥35	≥35
Front wheel alignment (no load)	Camber angle(°)	1	1
	Steering axis inclination angle(°)	12	12
	Caster angle(°)	5	5
	Toe in(mm)	3~5	5~8
	Toe in(in)	0.12~0.20	0.20~0.32
The maximum noise(db)		≤70	≤70

Limited Electric Vehicle Master Warranty Consumer & Approved Commercial Applications

Detailed Explanation for all warranty periods

Tomberlin provides a consumer oriented warranty plan supported by leading distributors, community based dealers and authorized service centers around the world. The warranty below is written in an effort to assure consumer clarity as it relates to the warranty of certain Tomberlin™ Products. Your satisfaction is our primary goal, and a significant ingredient of the ownership experience is realizing what is and is not covered by Tomberlin along with the recognition of the role the owner has in assuring the correct use, maintenance and care required for uninterrupted operation. In fact, incorrect care, improper use or neglect of maintenance can void this warranty. Very specific procedures must be followed to activate and utilize the limited warranty coverage's explained below. Failure to comply will result in the voiding of the limited warranty or default to a shorter term and parts only coverage. The terms and conditions of this limited warranty are as follows.

Issued By: Columbia ParCar Custom Carts, Inc. *Note that some components are covered under different limited warranties provided by their manufacturer such as but not limited to batteries, tires etc. Please visit your Dealer, the manufacturer of the component in question or www.tomberlin.net and www.parcar.com for additional information. Consumer information regarding warranty is in the disclaimer tab at www.tomberlin.net.*

Issued To: The original purchaser, as reflected on the warranty registration. This warranty is not transferable and begins at time of sale or initial use whichever occurs first subject to registration compliance with the guidelines and procedures herein which may be very time specific and if not followed will terminate or alter the coverages hereunder.

Coverage: Authorized Tomberlin parts plus limited labor reimbursement for defective components whose failure is solely attributable to a manufacturing defect or workmanship. Failure must occur and be properly reported by an authorized Tomberlin dealer during the limited warranty period while the vehicle is under normal use. The approved warranty repairs must be provided by a Tomberlin authorized service center or dealer. In the absence of a full service dealer, Tomberlin's limit of liability is restricted to a parts only warranty as detailed within this limited warranty period and only on a pre-approval basis. Procedures may require, at the sole discretion of Tomberlin, that certain parts are returned at shippers cost to Tomberlin for inspection and testing before a credit is issued.

Warranty Period: This Limited Warranty, as it pertains to specific covered components, will range from zero to 60 months as detailed below subject to the restrictions mentioned throughout this document. First and foremost, this is a 100% consumer use limited warranty. Any approved commercial use will void the consumer limited warranty. Tomberlin commercial limited warranty coverage is between zero and six months.

Product Covered: All 2016 Tomberlin™ electric vehicle models sold new by an authorized Tomberlin dealer in compliance with the sales procedures in place at the time of sale. Other models have restricted limited warranty coverage explained below.

Warranty Registration at the Time of Sale: If the vehicle warranty registration form (submitted by the dealer) is not received within ten days of the retail transaction, this warranty will be considered void after a five day grace period. Customers should make certain they maintain a legible copy for their own records of the following Warranty registration form with Proof of payment and a Customer signed Dealer Pre-Delivery Inspection Form.

Pre-Purchase Test Ride and Warranty Review

Tomberlin recommends that every consumer take a Test Drive and familiarize themselves with warranty coverage and the Safety & Operational specific to each Tomberlin vehicle. This includes Tire Maintenance & Care, Charging, Extension Charge Cord use and size, Long Term Storage Procedures and Tomberlin's sports car like ride. Note the E-Merge may look like a golf car but its' ride is anything but with class leading lateral stability, automotive style pedal group and enhanced performance.

Consumers Responsibility is to assure they understand the vehicle, its' speed settings, braking, restraint and ride character. Tomberlin vehicles do not ride like a traditional golf car. Some Tomberlin vehicles may look similar to a traditional golf car but are more automotive engineered with an automotive style pedal group. They have a firmer coil over shock suspension with a ride similar to a sports car. The feel the road drive character offers superior handling and stability in most situations when used as intended and well maintained. Your Dealer will respond to any questions to aid a superb owner experience.

Activation: Warranty coverage begins at time of purchase and first use which must be evidenced by a customer signed Pre-Delivery Inspection form and subsequent Dealer warranty registration being received by Tomberlin within ten days of purchase. Purchasers should retain all paperwork from time of sale to include the forms required for warranty activation in the event questions, relocation, Dealer transitions or any other issue that may require proof of purchase and warranty activation. Visit the Owners section at www.tomberlin.net for additional updates and information.

Selling Dealer: Warranty can only be registered and activated by purchasing the vehicle as new from an active and authorized Tomberlin dealer. Units sold from person to person, auctions and all other non-dealer transactions are not covered under any Tomberlin warranty and should be considered an "Asd Is" purchase.

Servicing Dealer: Only Approved Tomberlin Dealers are authorized to service the vehicle. It is strongly recommended to support your local dealer. Some consumers have driven long distances to make their purchase and this often results in burdensome travel without local dealer support. Only Tomberlin dealers will be reimbursed for approved warranty charges.

No Servicing Dealer: In the absence of a Dealer. Tomberlin, upon pre-approval and subject to the guidelines herein , may provide a parts only coverage without labor reimbursement for covered parts in strict compliance with the following guidelines. Service Center must complete a Parts Only Service Center form and upon approval ship at their expense, any part desired to be replaced due to a manufacturing defect to Tomberlin at the address as specified within the Service Center procedures. Other procedures must be in compliance such as maintenance, proof of registration etc. All parts seeking to be replaced must be received by Tomberlin while under an active warranty period as specified herein for the specific component being replaced. All other terms and conditions apply.

Tomberlin Parts: Any part determined solely by Tomberlin to be defective due to faulty manufacturing workmanship may be repaired or replaced at the sole option of Tomberlin with new, remanufactured and/or certified replacement parts and will also be warranted for the remaining balance of the vehicles warranty period as it relates to that particular component. Strict compliance with Tomberlin's part removal procedures must be followed to avoid warranty being denied, especially as it relates to any electrical component.

Maintenance Cost: All routine maintenance and care (see routine maintenance and care instruction in the Owner's Manual or www.tomberlin.net) is at the expense of the owner and should be conducted only by authorized Tomberlin Dealers. Visit www.tomberlin.net for the latest recommendations in maintenance and proper care to include safe driving habits. Tip! The Emerge is not a golf car. Some Tomberlin vehicles have as many as 26 grease fittings that should be inspected and greased on a regular basis.

Owners Responsibility: Owners are responsible to always operate and maintain their Tomberlin product properly by following the guidelines, instructions and recommended maintenance programs & schedules in the Owner's manual, including those detailed in this communication and available online. Any malfunction should be immediately reported to your dealer. We know our limited warranty period is dependent upon proper care, use and maintenance being followed. We have experienced examples when most fall under three categories, Lack of maintenance, vehicles modified and/or accessories that are improper or poorly installed. The consequence could have resulted in significant safety risks such as fire, loss of control or accidents both directly and indirectly. Others may alter the vehicle handling, raise the center of gravity, stress components and cause this warranty to be voided or worse, they could place the operator & occupants at serious risk, injury or death.

The examples below are intended to enhance consumer awareness and understanding. They are not intended to list all situations that can severely harm the operator, create a dangerous outcome or damage the vehicle. Common sense and precaution should always play a role.

Never

Use the wrong size and type of batteries

Manipulate or alter the controllers for more speed or torque

Use or install the wrong size tires & wheels

Install a lift kit

Install aftermarket light kits, trailer hitches, cargo beds or similar accessories

Install electronics by guessing which wire to splice

Allow any wiring to take place without first disconnecting the batteries and using a voltmeter

Store the vehicle without first removing the weight from the tires during periods of in-frequent use

Use extension cords that are undersized or allow cords to be routing under rugs or similar floor coverings

Over fill the batteries allowing acid to overflow during recharge causing metal corrosion or floor damage

Drive or use without absolute awareness that the electrical and battery connections are properly torqued

Allow terminal corrosion to develop

Perform any maintenance procedure without first disconnecting the battery pack

Leave the key in a parked vehicle

Allow underage drivers, child safety seats or children too small to have their feet firmly on the floorboard

Drive or ride without your seatbelt

Weld on an accessory or allow welding anywhere on the vehicle with a connected battery pack

Operate with dry batteries or with any internal lead plate in the battery exposed

Open or break the seal of any component to include On-Board chargers

Operate or navigate through water. Never pressure wash a vehicle

Allow others to operate, drive or service the vehicle without proper training and credentials

Drink and Drive

Safety: Make yourself fully aware of how to operate and care for your vehicle. Always wear your seat belt, know your vehicle and make certain that those you allow to drive have read the owner's manual, are of the lawful age and have a clear understanding of its' operation. Remove your keys and engage your brake before exiting. Staying alert and using common sense saves lives and aids in assuring a safe driving and ownership experience. Be alert to your surroundings. Visit www.tomberlin.net and safe driving web sites like AAA and others to assure your skill set and knowledge are always being improved.

Consumer Warranty Term and Components:

Tomberlin Parcar Custom Carts Inc. offers a base limited warranty of one year for the E-Merge and Anvil a shorter warranty on vehicles typically used off road like the Vanish. All are limited and subject to certain procedures however some components are offered a warranty period of up to five years based upon the vehicle and specific model.

WARRANTY PERIOD & MODELS: Subject to the exclusions the following warranty periods will apply • Warranty Period Below Applies to the Specific Components in the corresponding Right Side Column.	Properly Maintained Components Specifically Listed below are covered under this Limited Warranty for the period in the corresponding left column. Unless the component is specifically listed below, the default limited warranty coverage is as follows. 1 Year for the E-Merge Anvil and Vanish
Five Years E-Merge Models	Steering wheel, steering column, front and rear body non-heat related deformation (excludes paint, cracks, spills & contact damage), Upper structure welds, *A-arms, *tie rods, *front spindles, rear swing arms, axle breakage, Brake Fluid Reservoir, brake caliper deformation, stainless steel hardware, *wheels, Steel upper frame brace component welds. Hip restraint
Three Years E-Merge Models	Properly maintained battery cables (no corrosion), shocks & coil springs breakage, front wheel hub, steering gear rack, Grease Zerk Fittings
Two Years E-Merge Models	Switch housing, seat hinges, master cylinder, DC to DC converter, steel brake line, rear drum, transaxle assembly, accelerator pedal, brake pedal, headlight assembly (not the bulb), bushings, primary wire harness breakage (not due to water), switches including turn signal stalk.
One Year Primary Consumer Coverage for the E-Merge, Vanish and Anvil for a Period of One Year Unless Components Are Otherwise Listed Products: E-Merge, All Models excluding components listed below. Anvil and Vanish excluding components listed below * LSV evidenced by a current tag for on-road use.	Motor, Controller, On-Board Smart Charger and all other items and components not mentioned above or specifically excluded as noted below. Excluded items include front and rear bumpers, dash, windshields and any damage due to impact from foreign objects, vandalism or accidents to include shipping damage which is covered by the carrier subject to certain notification requirements. .
Six Months E-Merge, Anvil and Vanish Vanish Series and Anvil All other Tomberlin branded vehicles Any Commercial use to include rental is covered by a maximum period of six months from time of use (not necessarily retail) in the event Dealer utilizes the vehicle prior to retail period. Maximum mileage prior to retail is 100 miles.	Seat coverings, body finishes to include paint, Front & Rear Body component damage to include non-impact related cracks (Not Deformation) Tomberlin accessories properly installed by a Tomberlin authorized Dealer. Canopies, floor mats, Electrical connections, components, Hall Effect Sensor, Motor Speed Sensor, Solenoid, trim coverings, decals and switch connections.

Batteries & Tires E-Merge All Editions, Vanish LSV, Vanish ORV and Anvil *No Coverage is available for wear items like wiper blades, fuses, bulbs, brake pads, rubber boots, tires etc.	No Warranty provided by Tomberlin. Coverage provided by the particular brand of battery or tire manufacturer if any and offered direct to consumer are not the responsibility of Tomberlin. Batteries installed by Tomberlin have limited coverage as provided by the battery manufacturer.
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Exclusions, No Coverage: This warranty does not cover or specifically excludes wear items, components damaged as a result of abuse, alteration, neglect, accidental damage, misuse, or malfunction resulting from a collision, accident, impact, unapproved commercial applications or use outside of the intended use of the vehicle, its duty cycle or beyond its specifications to include speed, payload and environment.

Any promises, statements or service agreements with a particular Tomberlin Dealer or service center are between the consumer and the Dealer. Dealer promises, statements, written or otherwise are not the responsibility of Tomberlin to execute, fulfill or perform. Secondary or consequential damages of any kind or nature are not covered. Examples of what is not covered are damages caused by overfilling the batteries that may result in rust, corrosion and/or floor damage. Any and all damage or liability caused by improper care, heat conditions due to improper torque & corrosion, improper vehicle use or storage is assumed by the operator and excluded by any coverage related to manufacturer or Tomberlin. This exclusion includes not following service and maintenance guidelines to include Do It Yourself efforts. Verbal statements are governed solely by the written limited warranty herein. No associate, dealer, employee, vendor, executive, supplier or any other person or entity can alter, change, lengthen or otherwise influence the terms and conditions of this warranty.

**In some cases there may be surface rust on various metal parts like the frame and/or other steel components, which will not affect the functionality of the component and not covered under this limited warranty.*

Wear items are excluded, this includes tires, brake pads and brake shoes, motor brushes, wiper blades, bulbs/fuses, etc. Additionally: warranty will be denied and does not include the failure of any part or accessory due to: Abuse, misuse, or acts of nature or acts of God, Improper installation or maintenance, low fluid levels or the use of a fluid other than specified by Tomberlin™. The installation of any part that is not provided by Tomberlin™ will void this warranty or using this vehicle in competition or racing events.

Other exclusions include failures associated with modifying the vehicle or installing accessories not specifically authorized by Tomberlin™, any incidental expenses or inconvenience you may suffer due to the loss of use of your vehicle for any reason, any vehicle that has ever been declared a total loss or sold for salvage, adjustments or repairs made due to normal wear such as brake pads, tire wear, etc are not covered. Routine maintenance items or service procedures recommended by Tomberlin™, Electrical components damaged by loose connections, power surges or poor care. Driving through water deep enough to cause electrical system damage. Corrosion of battery terminals or damages related to spikes in electrical power. Altering the vehicle's performance or use beyond its original intended use and performance envelope. Fading, blemishes, scratches or surface deterioration due to exposure and normal wear and tear.

All freight damages are the responsibility of the carrier and must be reported upon Dealer delivery.

Replacement Parts: Parts replaced under this warranty become the property of Tomberlin and Tomberlin will make the final decision whether to repair or replace any existing part or assembly. Factory remanufactured or certified replacement parts may be utilized for some warranty repairs if provided by Tomberlin.

Tomberlin GolfCars and PTV's are only capable of operating up to 19 mph.

Tomberlin LSV's Operate between 20 & 25 with the average being 22d 23.

Improperly inflated tires, brakes adjustments, weak batteries & alignment restrict speeds

Battery Care & Maintenance: As a reminder and in addition to other guidelines, owners are advised to perform the following minimum amount of care and maintenance to maximize battery life.

While vehicles are being stored, the battery system must be maintained. The minimum maintenance requirements are as follows:

- Fully Charge at least every 30 days
- Check water level weekly and after fully charging. Use only distilled water if required
- If plates are exposed to air, add enough water to bring level to the top of the plates before charging
- DO NOT charge battery when plates are exposed to air
- Inspect battery connections when charging
- Ensure that the key switch is set to the OFF position when the vehicle is not in use
- Always keep batteries fully charged
- Lead acid batteries do not have memory and should be fully charged at every opportunity
- Always charge batteries with the charger provided with the vehicle
- The charger provided is specifically matched to the battery pack in the vehicle
- Avoid charging batteries when ambient temperature is above 120F

- Never discharge batteries when battery charge levels are below 20% of their capacity.

Tomberlin's Battery Select Program offers flexibility at the point of purchase. The Dealer will assist in selecting the best battery pack based on a particular use, terrain and model. Sometimes a "One Size Fits All" approach just doesn't work. See an Authorized Tomberlin Dealer for more details.

Pick Up, Rental & Delivery: This limited warranty does not cover any pickup and delivery reimbursement.

Remedy: The only remedy (Sole Remedy) under this limited warranty is for Tomberlin to repair or replace any parts determined to be defective at the sole discretion of Tomberlin. Tomberlin makes no other warranty of any kind, expressed or implied.

Merchantability: Any expressed or implied warranty of merchantability and fitness for a particular use or purpose that in anyway exceed the limits of time or obligations as stated in this limited warranty are hereby disclaimed.

Tire Care: Tomberlin vehicles have a firm sports car like ride that tracks well with an emphasis on lateral stability. We engineer a feel the road sensation complete with rack and pinion steering and a much flatter ride than a traditional golf car. Proper Tire care is critical to aid in enhancing a safe and improved ride. Proper storage habits, inflated properly and keeping the vehicle correctly aligned will offer a much longer tire life as well as improved ride.

Flat Spots. Flat spotting or wheel bounce can occur in virtually any tire but even more pronounced in shorter tires with larger width common to golf car type tires and wheels. It will often occur when the vehicle is parked for several days. You can visit www.tirerack.com or others to learn more on proper tire care and detailed descriptions on improved care & storage tips. The following site offers direct information on ways to reduce a flat spotting which can produce a bouncy ride <http://www.tirerack.com/tires/tiretech/techpage.jsp?techid=42>

Tire Cradles. Tomberlin recommends removing the weight of the vehicle from the tires when in storage or not used for more than several days but certainly more than a week. Tire cradles may offer a simpler method to aid in the reduction of tires getting out of round. Visit <http://www.griotsgarage.com> and type in flat spot stopper or www.tirecradles.com to learn more. *Tomberlin provides these tips as an aid to our consumer's own research and knowledge. Tomberlin has no affiliation with any of these companies and makes no recommendation, warranty, results or value associated with their offerings.*

Design: Tomberlin does not assume any responsibility to modify components or vehicles existing in the market due to new or on going designs, modification or technology previously unknown to Tomberlin. Tomberlin reserves the right to make design changes to product without notice.

State Law: Some states and international markets do not allow implied warranty limitations and may not be applicable to certain owners.

Commercial Applications

Rentals, Commercial, Industrial or Institutional Use: E-Merge and Anvil Vehicles used for approved Rental and/or in Industrial, Commercial and Fleet type applications are warranted for up to a six month period with the Vanish Utility series having a three month limited warranty period. Other applicable terms as to care, maintenance and procedures as detailed herein will apply.

Additional Limitations: In no case shall Tomberlin be liable for Indirect, Incidental, Punitive or Consequential damages, including but not limited to death, personal injury or property damage arising from or related any alleged failure in a vehicle or battery charger , or any damage or loss to the purchaser or any third party for lost time, inconvenience or any economic loss, whether or not company was appraised of the foreseeability of such damages or losses. The right of purchaser to recover damages within the limitations set forth in this section is purchaser's exclusive alternative remedy of if the limited remedy of repair or replacement of the vehicle fails of its essential purpose. The parties agree that this alternative remedy will be enforceable even if the limited remedy of repair or replacement fails of its essential purpose. Any legal claim or action arising that alleges breach of warranty must be brought within three (3) months from the date the warranty claim arises. This limited warranty gives you specific legal rights and you may have other rights which vary from state to state. Some states do not allow the exclusion of incidental damages or limitations on how long an implied warranty may last, so the above exclusions and limitations may not apply to you.

Tomberlin is a registered trademark of Columbia ParCar Custom Carts, Inc.

OTHER COMPANY RIGHTS & WARRANTY EXCLUSIONS:

1. Tomberlin reserves all rights to improve, modify or change the design or operation of any Tomberlin vehicle or component without being responsible to modify previously manufactured vehicles. This Limited Warranty cannot be changed without written approval of Company CEO and no other person, employee, agent, dealer, distributor has any authority to bind the company beyond the terms herein.
2. All Parts that are warranted shall be stored for up to three months then shipped to Tomberlin with proper documents, failure codes, VIN, Original owner. And various explanations of what took place. All parts are invoiced when shipped and due in accordance with procedures and policies on file, typically 15 to 30 days, and warranty credits will be applied as approved and in compliance with Tomberlin procedures.
3. Dealer modifications to product will void any warranty on the vehicle. Examples are modifications that alter the vehicle height, weight, spring rates, lateral stability, pedal groups, speeds, acceleration or any other modification that reduces safety or durability.
4. Components that are not designed to be entered for inspection such as the controller, sealed electrical components or on board chargers will void any warranty associated with those components. Any component that has the protective covering damaged or removed such as drilling out rivets, prying open protective covers or similar acts will void any warranty and its subsequent damages.
5. This document more fully explains the coverage's, time line of coverage periods and term to include the restrictions associated with all Tomberlin Limited Warranties. In the event of conflicting written statements or lack of clarity, the shorter coverage period and/or more restrictive language shall apply but in no case shall go beyond those explained herein.
6. A warranty period if less than five years will be honored for a period up to the time specified for the particular year and model purchased. The exclusions and language as explained within this document will more fully explain the details and limited coverage's by components available.
7. Tomberlin does not cover, govern, support or participate in any service warranty, extended service plan or after market coverage.
8. Some Dealers offer superb service and support programs that are not the responsibility of Tomberlin.
9. Tomberlin is a registered trademark of Columbia ParCar Custom Carts, Inc. and the provider of this warranty.

The Columbia Vehicle Group



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