

*Villager*  
*TransPorter*

**Electric  
Vehicles**

# 2000 Owner's Manual





## NOTICE

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The Club Car Limited Warranties for 2000 Transportation and Utility Vehicles, 2000 PowerDrive 8-Volt Batteries, 2000 PowerDrive Battery Charger, and the 2000 Onboard Computers and Solid State Speed Controllers, appear on the last pages of this manual. No other warranties, express or implied, are contained herein. Please complete and return the warranty registration card included in this manual.

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

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

These vehicles do not conform to Federal Motor Vehicle Safety Standards for automobiles or to FMVSS 500 for low-speed vehicles, and are not equipped for operation on public streets, roads, or highways.



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This manual effective December 20, 1999.

## FOREWORD

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Thank you for choosing Club Car. You have chosen the finest transportation vehicle on the market; the vehicle most widely recognized as the industry leader in vehicle efficiency and long-lasting value. Please protect your investment and ensure that your Club Car transportation vehicle provides years of reliable, superior performance by filling out and returning your Warranty Registration Card (located between the last page and back cover of this manual), and by reading and following the maintenance instructions in this manual.

Your comfort and safety are important to us as well, so we urge you to read and follow the step-by-step operating instructions and safety procedures in this manual. These instructions must be followed in order to avoid the risk of severe personal injury. If you rent or loan your vehicle to others, we recommend that you ask them to read this manual before they operate the vehicle.

Club Car products are backed by a customer support system designed to offer you fast, courteous service. In the event that your vehicle needs repairs or service, we recommend that your local authorized Club Car representative perform them. For the name and address of the Club Car representative nearest you, logon to our web site at [www.clubcar.com](http://www.clubcar.com) or call 1-800-ClubCar (258-2227). If you would prefer to write to us, direct your letter to: Club Car, Attention: Marketing Services, P.O. Box 204658, Augusta, Ga. 30917-4658 USA. Your local authorized Club Car representative can also provide technical advice, parts, and service manuals.

We hope you will consider this owner's manual a permanent part of your vehicle. If you sell the vehicle, please include the manual so that the next owner will have the important operating, safety, and maintenance information it contains.

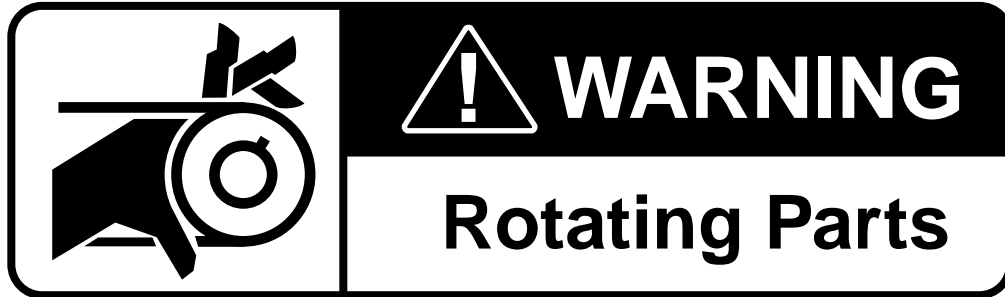
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# Practice Safety



Safety signs like you see above may at first seem shocking, but their impact is mild compared with the reality of severe personal injury.

Your safety and satisfaction are of the utmost importance to Club Car. That is why before operating the vehicle, we urge you to review the information in this manual. Understand and become familiar with the DANGER, WARNING and CAUTION statements and procedures it contains, along with the safety decals that are affixed to your vehicle.

Take time to understand the language of safety. It is a language that can save your life.

## SAFETY DETAILS

### **⚠ WARNING**

- THIS OWNER'S MANUAL SHOULD BE READ COMPLETELY BEFORE ATTEMPTING TO DRIVE OR SERVICE THE VEHICLE. FAILURE TO FOLLOW THE INSTRUCTIONS IN THIS MANUAL COULD RESULT IN PROPERTY DAMAGE, SEVERE PERSONAL INJURY, OR DEATH.

It is important to note that some vital statements throughout this manual and on the decals affixed to the vehicle are preceded by the words **DANGER, WARNING, CAUTION, or NOTE**. For your protection, we recommend that you take special notice of these safety procedures. Safety procedures are essential and must be followed. Any operating or warning decals on the vehicle that are damaged, have been removed or cannot be easily read should be replaced immediately to avoid possible personal injury, property damage, or death. Contact your Club Car distributor/dealer.

### **⚠ DANGER**

- A DANGER INDICATES AN IMMEDIATE HAZARD WHICH WILL RESULT IN SEVERE PERSONAL INJURY OR DEATH.

### **⚠ WARNING**

- A WARNING INDICATES AN IMMEDIATE HAZARD WHICH COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.

### **⚠ CAUTION**

- A CAUTION INDICATES HAZARDS OR UNSAFE PRACTICES WHICH COULD RESULT IN MINOR PERSONAL INJURY OR PRODUCT OR PROPERTY DAMAGE.

### **NOTE**

- A NOTE PROVIDES KEY INFORMATION TO MAKE PROCEDURES MORE EASILY UNDERSTOOD.

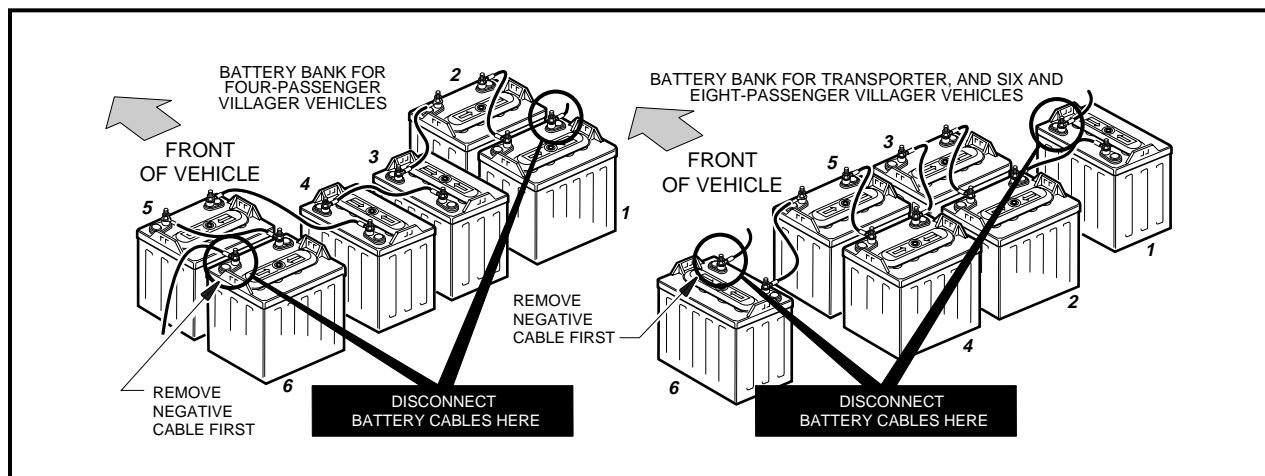


Figure 1 Battery Configurations



## GENERAL WARNINGS

The safety procedures listed must be followed whenever the vehicle is being operated, repaired, or serviced. Other specific warnings appear throughout this manual and on the vehicle.

### DANGER

- **BATTERY VAPORS—FLAMMABLE! EXPLOSIVE! DO NOT SMOKE. KEEP SPARKS AND FLAMES AWAY FROM THE AREA OF THE VEHICLE. SERVICE ONLY IN WELL-VENTILATED AREAS.**
- **A TRANSPORTATION VEHICLE WILL *NOT* PROVIDE PROTECTION FROM LIGHTNING, FLYING OBJECTS, OR OTHER STORM RELATED HAZARDS. IF CAUGHT IN A STORM WHILE DRIVING A TRANSPORTATION VEHICLE, EXIT THE VEHICLE AND SEEK SHELTER IN ACCORDANCE WITH APPLICABLE SAFETY GUIDELINES FOR YOUR LOCATION.**

### WARNING

- DO NOT LEAVE CHILDREN UNATTENDED ON VEHICLE AT ANY TIME.
- WHEN STOPPING AND LEAVING THE VEHICLE, ALWAYS:
  - TURN THE KEY SWITCH TO **OFF** AND REMOVE THE KEY.
  - PLACE THE FORWARD/REVERSE HANDLE IN **NEUTRAL**.
  - ENGAGE THE PARK BRAKE.
- ONLY TRAINED TECHNICIANS SHOULD REPAIR OR SERVICE THE VEHICLE. ANYONE DOING EVEN SIMPLE REPAIRS OR SERVICE SHOULD FOLLOW THE PROCEDURES EXACTLY AS STATED IN THIS MANUAL, AND OBEY ALL **DANGER**, **WARNING** AND **CAUTION** STATEMENTS LISTED IN THIS MANUAL AS WELL AS THOSE AFFIXED TO THE VEHICLE.
- WEAR SAFETY GLASSES OR APPROVED EYE PROTECTION WHEN SERVICING THE VEHICLE. WEAR A FULL FACE SHIELD WHEN WORKING WITH BATTERIES.
- USE INSULATED TOOLS WHEN WORKING AROUND BATTERIES OR ELECTRICAL CONNECTIONS.
- IMPROPER MAINTENANCE OR USE OF THE VEHICLE COULD RESULT IN DECREASED VEHICLE PERFORMANCE OR SEVERE PERSONAL INJURY.
- ANY MODIFICATION OR CHANGE TO THE VEHICLE WHICH AFFECTS THE STABILITY OR HANDLING OF THE VEHICLE, OR INCREASES MAXIMUM VEHICLE SPEED BEYOND FACTORY SPECIFICATIONS COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH.
- FOLLOW ALL PROCEDURES LISTED IN THIS MANUAL FOR LOADING AND UNLOADING THE VEHICLE. DO NOT EXCEED VEHICLE RATED WEIGHT CAPACITY.
- PRIOR TO SERVICING THE VEHICLE:
  - CHOCK THE WHEELS.
  - TURN THE KEY SWITCH **OFF** AND REMOVE THE KEY.
  - PLACE THE FORWARD/REVERSE HANDLE IN **NEUTRAL**.
  - DISCONNECT THE BATTERY CABLES, NEGATIVE (–) CABLE FIRST.
- TO AVOID UNINTENTIONALLY STARTING THE VEHICLE, DISCONNECT THE BATTERIES AS SHOWN (**SEE FIGURE 1, PAGE 2**) AND DISCHARGE THE CONTROLLER AS FOLLOWS:
  - TURN THE KEY SWITCH TO **ON** AND PLACE THE FORWARD/REVERSE HANDLE IN THE **REVERSE** POSITION.
  - DEPRESS THE ACCELERATOR PEDAL AND KEEP IT DEPRESSED UNTIL THE REVERSE WARNING BUZZER CAN NO LONGER BE HEARD. WHEN THE BUZZER STOPS SOUNDING, THE CONTROLLER IS DISCHARGED.

# FOUR-PASSENGER VILLAGER ELECTRIC VEHICLE

**OPERATING INSTRUCTIONS**

- Read Owner's Manual and safety warnings located on dash panel prior to driving.
  - Study and understand controls.
  - Make sure wheels are turned in desired direction.
- Turn key to "ON" position and be sure nothing is in your path.
  - While vehicle is stopped, select direction by placing shift lever or switch in desired position:  
F - Forward N - Neutral R - Reverse (Buzzer will sound)
- Vehicle will start moving when accelerator pedal is depressed.
- Slowly depress accelerator pedal to increase speed. Park brake will release when accelerator pedal is depressed.
- To stop, release accelerator pedal and depress brake pedal.
- After stopping, firmly depress park brake until it locks.
- Place forward and reverse switch in neutral position. Turn key "OFF" and remove key when not in use.

CCI 1016216-01

**⚠ WARNING**

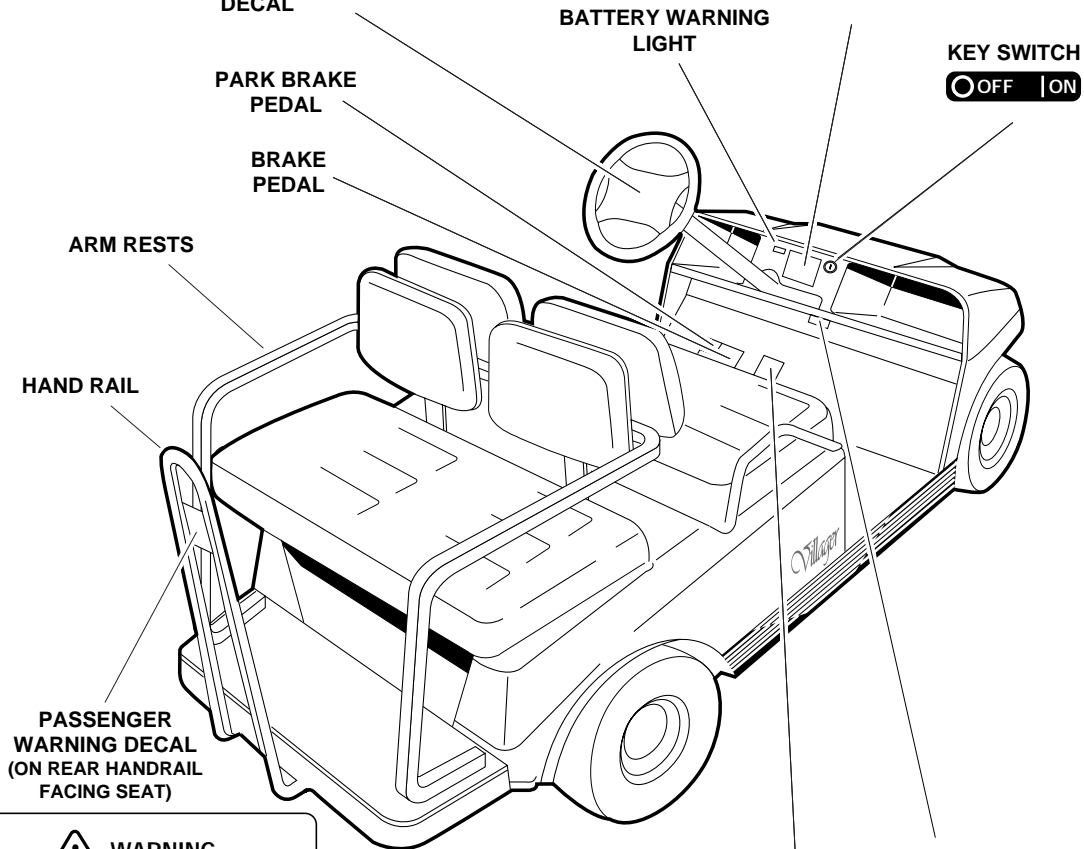
READ AND FOLLOW THESE WARNINGS AND THE OPERATING INSTRUCTIONS BEFORE USING VEHICLE. FAILURE TO DO SO CAN CAUSE SEVERE INJURY OR DEATH.

- Operation from driver side by authorized persons only and only in designated areas - not on public roads.
- DO NOT start vehicle until all occupants (two (2) per seat maximum) are seated.
- Remain seated with entire body inside vehicle and hold on to seat handle or handrail at all times.
- Drive slowly in turns and straight up and down slopes.
- Never stand in front of or behind vehicle.
- DO NOT operate while under the influence of alcohol or drugs.
- DO NOT leave children unattended on vehicle at any time.

CCI 1019606-01

**OPERATING INSTRUCTIONS  
DECAL**

**DRIVER/PASSENGER  
WARNING DECAL**



**⚠ WARNING**

Failure to follow these instructions can cause severe injury or death.

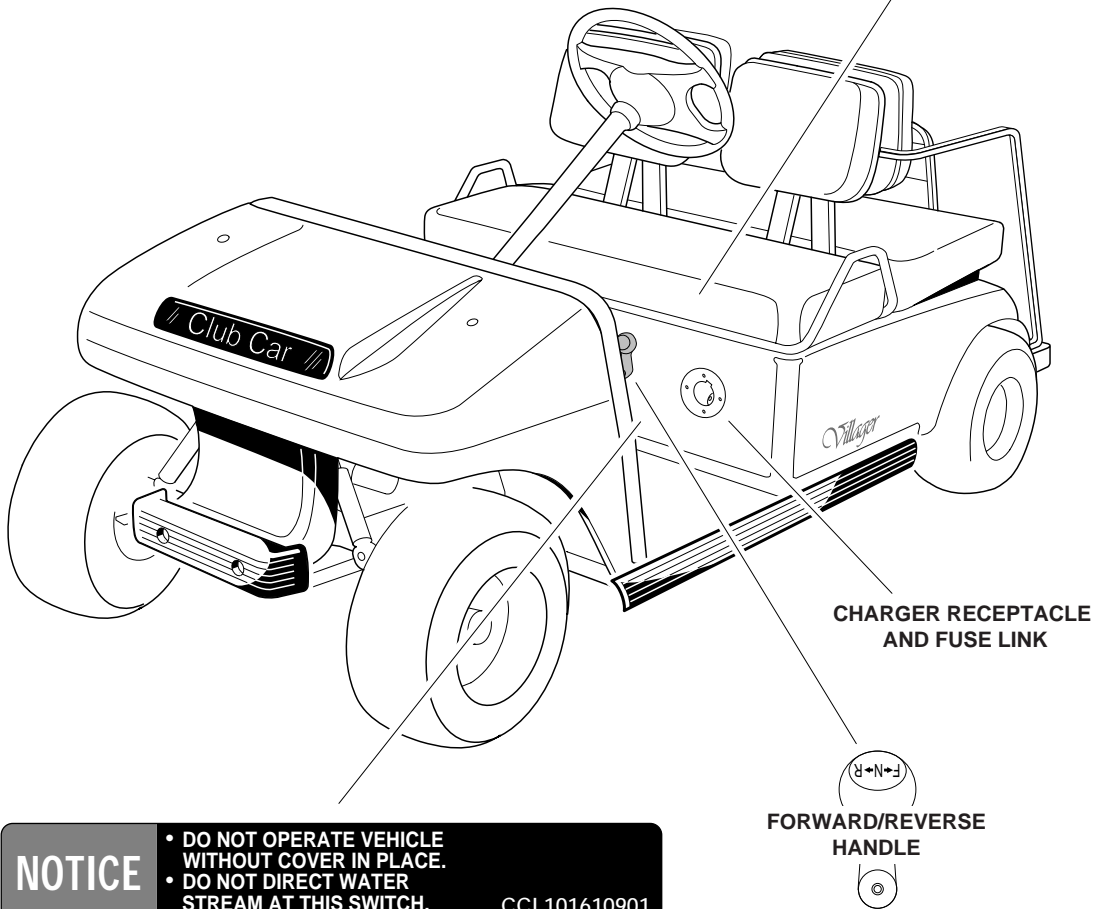
- Remain seated with entire body inside vehicle and hold on to seat handle or handrail at all times.
- No more than two persons per seat.
- Do not leave children unattended on vehicle at anytime.
- Never stand in front of or behind vehicle.

CCI 1017057-01

# FOUR-PASSENGER VILLAGER ELECTRIC VEHICLE



**BATTERY DANGER DECAL  
(ON BODY UNDER SEAT)**



**POTENTIOMETER CAUTION DECAL  
(ON WIPER SWITCH COVER INSIDE  
BATTERY COMPARTMENT)**

# SIX AND EIGHT-PASSENGER VILLAGER ELECTRIC VEHICLES (FRONT)

**⚠ WARNING**

READ AND FOLLOW THESE WARNINGS AND THE OPERATING INSTRUCTIONS BEFORE USING VEHICLE. FAILURE TO DO SO CAN CAUSE SEVERE INJURY OR DEATH.

- Operation from driver side by authorized persons only and only in designated areas - not on public roads.
- DO NOT start vehicle until all occupants (two (2) per seat maximum) are seated.
- Remain seated with entire body inside vehicle and hold on to seat handle or handrail at all times.
- Drive slowly in turns and straight up and down slopes.
- Never stand in front of or behind vehicle.
- DO NOT operate while under the influence of alcohol or drugs.
- DO NOT leave children unattended on vehicle at any time.

CCI 1019606-01

DRIVER/PASSENGER  
WARNING DECAL

**OPERATING INSTRUCTIONS**

- Read Owner's Manual and safety warnings located on dash panel prior to driving.
  - Study and understand controls.
  - Make sure wheels are turned in desired direction.
- Turn key to "ON" position and be sure nothing is in your path.
  - While vehicle is stopped, select direction by placing shift lever or switch in desired position:
    - F - Forward N - Neutral R - Reverse (Buzzer will sound)
- Vehicle will start moving when accelerator pedal is depressed.
- Slowly depress accelerator pedal to increase speed. Park brake will release when accelerator pedal is depressed.
- To stop, release accelerator pedal and depress brake pedal.
- After stopping, firmly depress park brake until it locks.
- Place forward and reverse switch in neutral position. Turn key "OFF" and remove key when not in use.

CCI 1016216-01

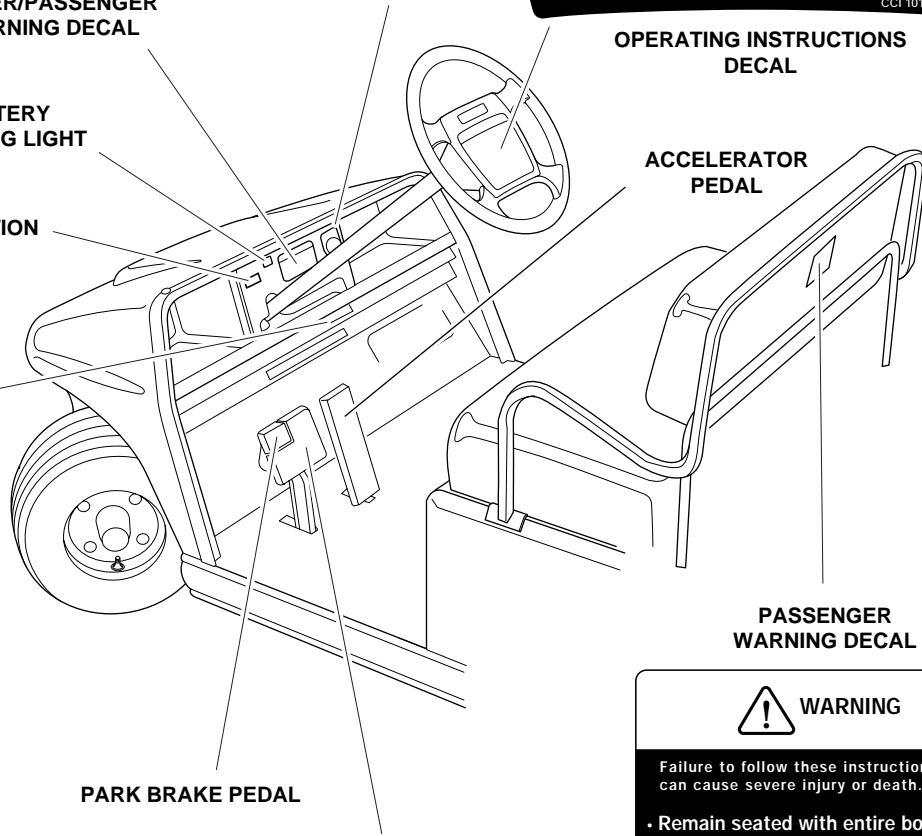
OPERATING INSTRUCTIONS  
DECAL



BATTERY  
WARNING LIGHT

BATTERY CONDITION  
INDICATOR

SERIAL  
NUMBER



**⚠ WARNING**

Failure to follow these instructions can cause severe injury or death.

- Remain seated with entire body inside vehicle and hold on to seat handle or handrail at all times.
- No more than two persons per seat.
- Do not leave children unattended on vehicle at anytime.
- Never stand in front of or behind vehicle.

CCI 1017057-01

# SIX-PASSENGER VILLAGER ELECTRIC VEHICLE (REAR)

 **WARNING**

Failure to follow these instructions can cause severe injury or death.

- Remain seated with entire body inside vehicle and hold on to seat handle or handrail at all times.
- No more than two persons per seat.
- Do not leave children unattended on vehicle at anytime.
- Never stand in front of or behind vehicle.

CCI 1017057-01

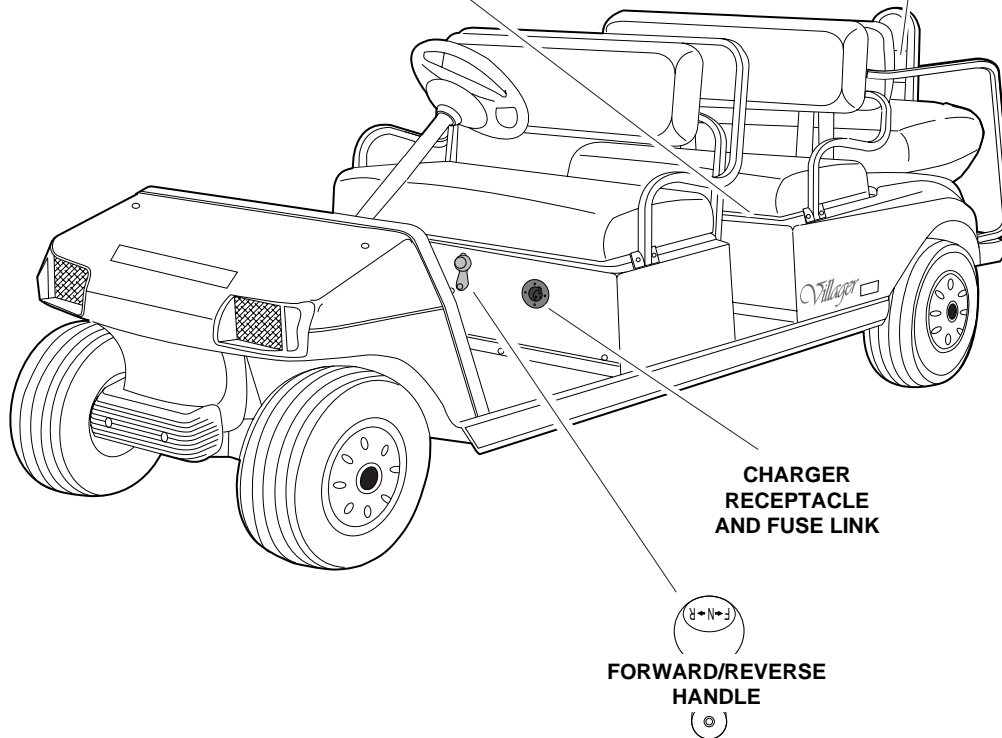
**PASSENGER WARNING DECAL**

 **DANGER / POISON**

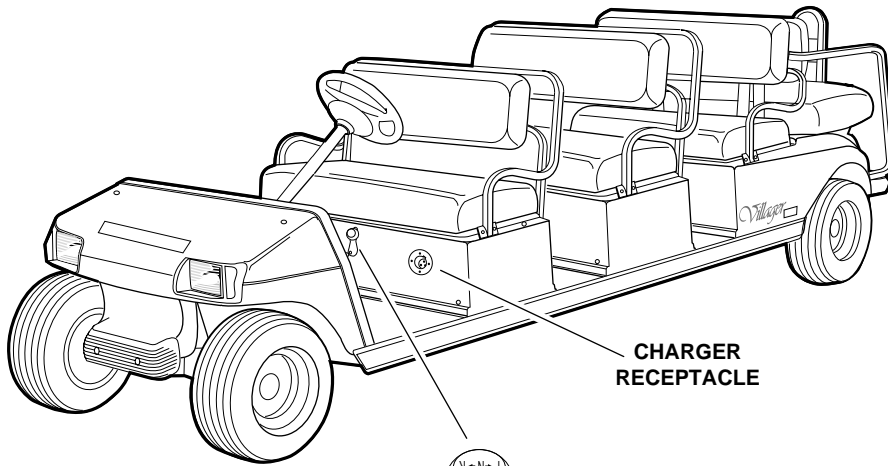
 EXPLOSIVE GASES CAN CAUSE BLINDNESS OR INJURY	 SHIELD EYES	 <b>NO</b> Σ SPARKS Σ FLAMES Σ SMOKING	 SULFURIC ACID CAN CAUSE BLINDNESS OR SEVERE BURNS	 FLUSH EYES IMMEDIATELY WITH WATER GET MEDICAL HELP FAST
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KEEP OUT OF THE REACH OF CHILDREN ± DO NOT TIP ± KEEP VENT CAPS TIGHT AND LEVEL

**BATTERY DANGER DECAL (ON BODY)**



# EIGHT-PASSENGER VILLAGER ELECTRIC VEHICLE (REAR)



**CHARGER RECEPTACLE**



**FORWARD / REVERSE HANDLE**

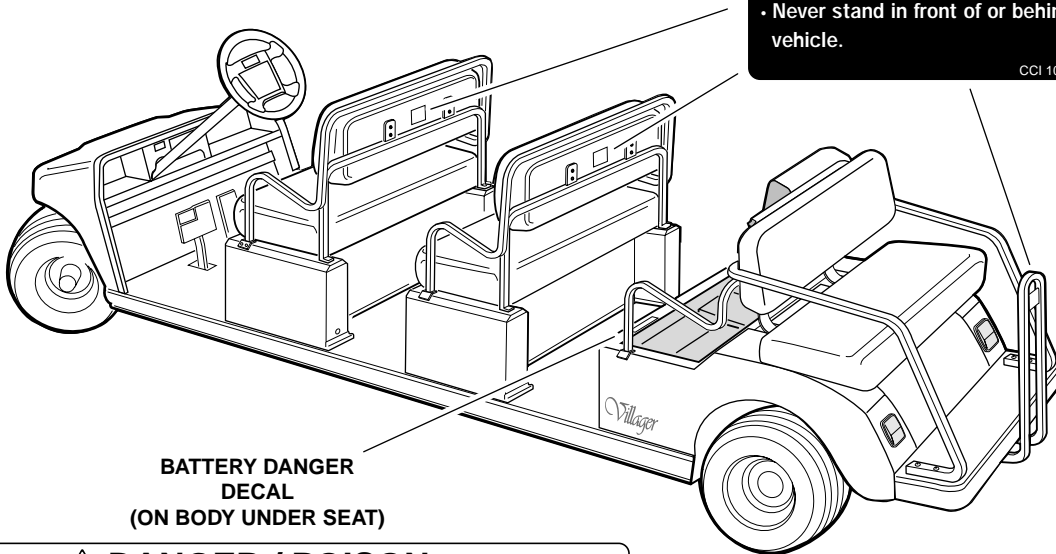
**PASSENGER WARNING DECAL**

 **WARNING**

Failure to follow these instructions can cause severe injury or death.

- Remain seated with entire body inside vehicle and hold on to seat handle or handrail at all times.
- No more than two persons per seat.
- Do not leave children unattended on vehicle at anytime.
- Never stand in front of or behind vehicle.

CCI 101705701



**BATTERY DANGER DECAL (ON BODY UNDER SEAT)**

 **DANGER / POISON**

 EXPLOSIVE GASES CAN CAUSE BLINDNESS OR INJURY	 SHIELD EYES	 NO • SPARKS • FLAMES • SMOKING	 SULFURIC ACID CAN CAUSE BLINDNESS OR SEVERE BURNS	 FLUSH EYES IMMEDIATELY WITH WATER GET MEDICAL HELP FAST
--	--	--	---	---

KEEP OUT OF THE REACH OF CHILDREN – DO NOT TIP – KEEP VENT CAPS TIGHT AND LEVEL

# TRANSPORTER ELECTRIC VEHICLES

**⚠ WARNING**

READ AND FOLLOW THESE WARNINGS AND THE OPERATING INSTRUCTIONS BEFORE USING VEHICLE. FAILURE TO DO SO CAN CAUSE SEVERE INJURY OR DEATH.

- Operation from driver side by authorized persons only and only in designated areas - not on public roads.
- DO NOT start vehicle until all occupants (two (2) per seat maximum) are seated.
- Remain seated with entire body inside vehicle and hold on to seat handle or handrail at all times.
- Drive slowly in turns and straight up and down slopes.
- Never stand in front of or behind vehicle.
- DO NOT operate while under the influence of alcohol or drugs.
- DO NOT leave children unattended on vehicle at any time.

CCI 1019606-01

**DRIVER/PASSENGER WARNING DECAL**

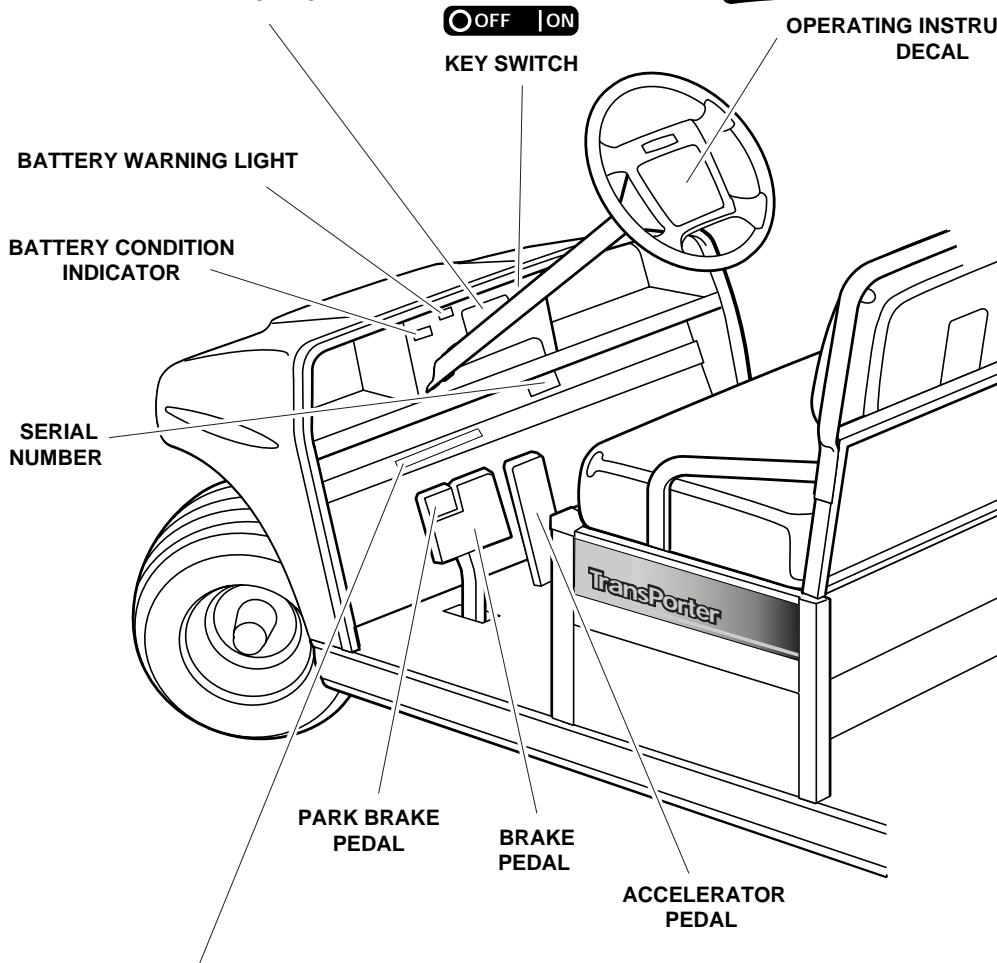
**OPERATING INSTRUCTIONS**

- Read Owner's Manual and safety warnings located on dash panel prior to driving.
  - Study and understand controls.
  - Make sure wheels are turned in desired direction.
- Turn key to "ON" position and be sure nothing is in your path.
  - While vehicle is stopped, select direction by placing shift lever or switch in desired position:  
F - Forward N - Neutral R - Reverse (Buzzer will sound)
  - Vehicle will start moving when accelerator pedal is depressed.
- Slowly depress accelerator pedal to increase speed. Park brake will release when accelerator pedal is depressed.
  - To stop, release accelerator pedal and depress brake pedal.
  - After stopping, firmly depress park brake until it locks.
  - Place forward and reverse switch in neutral position.

Turn key "OFF" and remove key when not in use.

CCI 1016216-01

**OPERATING INSTRUCTIONS DECAL**



**VEHICLE LOADING DECAL**

<p><b>VEHICLE LOADING</b></p> <p>Read Owner's Manual and warnings on dash.</p>	<ul style="list-style-type: none"> <li>• Vehicle rated capacity - 1500 lbs. on level surface only. Weight to include passengers, cargo bed load, and gross trailer weight. See Owner's Manual.</li> <li>• Maximum cargo load CARRYALL 6 and TURF 6 - 1000 lbs., TRANSPORTER - 300 LBS. Weight to include cargo bed load and gross trailer weight.</li> <li>• Maximum trailer hitch tongue weight - 150 lbs.</li> </ul>	<ul style="list-style-type: none"> <li>• Cargo should be evenly spread over the floor of the cargo bed as far forward as possible and secured.</li> <li>• For vehicle stability, when fully loaded, drive slowly and avoid stopping on or backing down steep hills.</li> <li>• Avoid top heavy loads. See Owner's Manual.</li> <li>• When driving on uneven terrain or down steep hills, reduce speed and load.</li> </ul> <p>CCI 101960001</p>
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# TRANSPORTER ELECTRIC VEHICLES

**NOTICE**  
Do not operate vehicle without this cover properly installed. See vehicle Maintenance and Service Manual before servicing.  
CCI 1019315-01

**ELECTRICAL COMPONENT COVER CAUTION (ON COVER)**

**NOTICE DO NOT USE AS GROUND**  
CCI 1019646-01

**ELECTRICAL COMPONENT MOUNTING PLATE NOTICE (ON PLATE)**

**⚠ DANGER / POISON**

EXPLOSIVE GASES CAN CAUSE BLINDNESS OR INJURY	SHIELD EYES	NO SPARKS, FLAMES, & SMOKING	SULFURIC ACID CAN CAUSE BLINDNESS OR SEVERE BURNS	FLUSH EYES IMMEDIATELY WITH WATER GET MEDICAL HELP FAST
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KEEP OUT OF THE REACH OF CHILDREN ± DO NOT TIP ± KEEP VENT CAPS TIGHT AND LEVEL

**FORWARD/REVERSE HANDLE**

**BATTERY DANGER DECAL (ON FRAME)**

**SIX-PASSENGER TRANSPORTER VEHICLE**

**PASSENGER WARNING DECAL**

**BED LOAD WARNING DECAL**

**⚠ WARNING**  
Riding in cargo bed can cause severe injury or death. Do not ride in cargo bed.  
CCI 1015539-01

**CHARGER AC CORD REEL**

**FOUR-PASSENGER TRANSPORTER VEHICLE**

**PASSENGER WARNING DECAL**

**⚠ WARNING**  
Failure to follow these instructions can cause severe injury or death.

- Remain seated with entire body inside vehicle and hold on to seat handle or handrail at all times.
- No more than two persons per seat.
- Do not leave children unattended on vehicle at anytime.
- Never stand in front of or behind vehicle.

CCI 1017057-01

**CRUSH AREA DECAL**

**⚠ WARNING CRUSH AREA**

**STAY CLEAR**  
CCI 101609401

**BED BOLT WARNING DECAL**

**⚠ WARNING**  
Bed can tip up unexpectedly. Can cause severe injury. Bed hold down bolts must be fastened.  
CCI 1017073-01



## GENERAL INFORMATION

There are two electric Transportation models: the Villager and the TransPorter. Throughout this manual, important features unique to each model are highlighted. We urge the owner/operator to read and understand this manual, and to pay special attention to the features specific to their vehicle(s).

## MODEL IDENTIFICATION

The serial number of your transportation vehicle is printed on a bar code decal mounted on the frame directly above the accelerator pedal (Example: J0001-123456) (**Figure 2, Page 11**). There is also a second serial number decal mounted on the front body frame behind the center dash panel. The center dash panel must be removed to access this serial number. **See following NOTE.**

### NOTE

- ALWAYS HAVE THE VEHICLE SERIAL NUMBER AT HAND WHEN ORDERING PARTS OR MAKING INQUIRIES (**FIGURE 2, PAGE 11**).

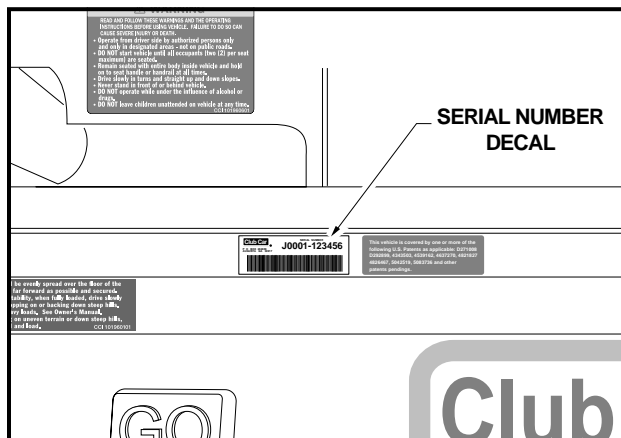


Figure 2 Serial Number Location

## PRE-OPERATION CHECKLIST

Your transportation vehicle has been thoroughly inspected and adjusted at the factory and by your Club Car distributor/dealer. However, upon receiving your new transportation vehicle(s), you should become familiar with its controls and operation. Carefully inspect each vehicle to be satisfied that it is in proper working condition before accepting delivery. Use the following checklist as a guide to inspect your new vehicle. This same checklist should also be used in conjunction with the Periodic Service Schedule on page 20. Any problems should be corrected by your Club Car distributor/dealer or a trained technician only.

- **General:** All the parts should be in place and properly installed. Be sure that all nuts, bolts, and screws are tight.
- **Warning Decals:** Check to ensure that all warning and operation decals are in place. **See Pages 4 through 10.**
- **Tires:** Check for proper tire pressure. **See Tire Capacities, Page 22.**
- **Batteries:** Before using vehicle for the first time check electrolyte to ensure it is at the proper level (**Figure 10, Page 24**). Check battery posts. Wires should be tight and free of corrosion and batteries should be fully charged.
- **Multi-Step Potentiometer (Four-Passenger Villager Vehicle Only):** Be sure potentiometer (wiper switch) cover is properly secured prior to operating the vehicle. **See following WARNING.**

**⚠ WARNING**

- BE SURE THE PLASTIC HAS BEEN REMOVED FROM THE SEAT BOTTOM BEFORE OPERATING THE VEHICLE. FAILURE TO DO SO MAY RESULT IN FIRE, PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH.

**PERFORMANCE INSPECTION**

After you have familiarized yourself with the vehicle controls and have read and understood the driving instructions, take the vehicle for a test drive. Use the following checklist as a guide to inspect your new vehicle. Any problems should be corrected only by your Club Car distributor/dealer or a trained technician.

**All vehicles**

- **Brakes:** Be sure the brakes function properly. When brake pedal is fully depressed under moderate pressure, it should *not* go more than halfway to the floor, and vehicle should come to a smooth, straight stop. If the brake pedal goes more than halfway to the floor or if the vehicle swerves or fails to stop, have the brake system checked and adjusted as required. Brake adjustment must be maintained so that the brake pedal *cannot* be depressed to the floor under any circumstance.
- **Park Brake:** When latched, the park brake should lock the wheels and hold the vehicle stationary (on incline of 20% or less). It should release when either the accelerator or brake pedal is depressed.
- **Reverse Buzzer:** The reverse buzzer will sound as a warning when vehicle is in REVERSE.
- **Steering:** The vehicle should be easy to steer and should not have any play in the steering wheel.
- **Accelerator:** As the accelerator pedal is depressed, the motor should start and the vehicle should accelerate smoothly to full speed. When the pedal is released it should return to the original position and the motor should stop. The vehicle will run at a reduced speed when in REVERSE.
- **General:** Listen for any unusual noises such as squeaks or rattles. Check the vehicle ride and performance. Have a Club Car distributor/dealer or a trained technician investigate anything unusual.

**CONTROLS**

Read **DANGER** and **WARNING** on page 3.

**⚠ WARNING**

- DO NOT MODIFY OR CHANGE THE VEHICLE IN ANY WAY WHICH MIGHT AFFECT ITS STABILITY OR HANDLING, OR INCREASE MAXIMUM VEHICLE SPEED BEYOND FACTORY SPECIFICATIONS. PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH COULD RESULT.
- DO NOT SHIFT THE FORWARD/REVERSE HANDLE WHILE THE VEHICLE IS MOVING. TO AVOID INJURY TO PASSENGER(S) OR DAMAGE TO THE VEHICLE, ALWAYS BRING THE VEHICLE TO A FULL STOP BEFORE SHIFTING THE HANDLE.
- RELEASE THE ACCELERATOR PEDAL AND THEN DEPRESS THE BRAKE PEDAL FIRMLY UNTIL THE VEHICLE STOPS. TO AVOID UNINTENTIONALLY STARTING OR ROLLING THE VEHICLE, SET THE PARK BRAKE, TURN THE KEY SWITCH TO **OFF**, AND REMOVE THE KEY WHEN LEAVING THE VEHICLE.

**KEY SWITCH**

The key switch is mounted on the dash to the right of the steering column (**Figure 3, Page 13**). It has two positions, OFF and ON, which are clearly labeled. **See following NOTE.**

**NOTE**

- THE KEY CAN BE REMOVED WHEN THE KEY SWITCH IS IN THE **OFF** POSITION ONLY.

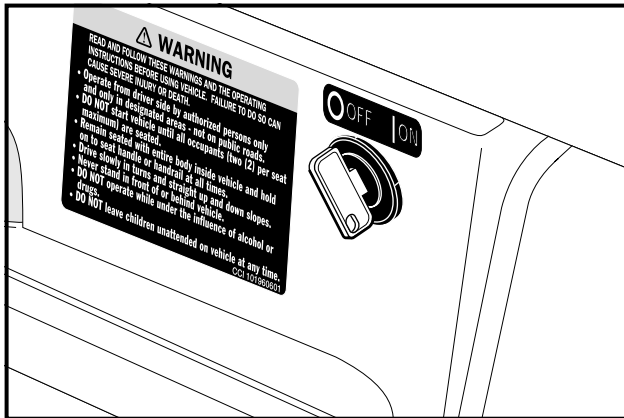


Figure 3 Key Switch

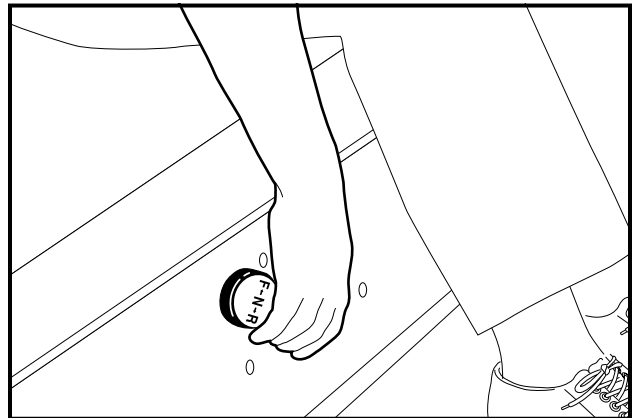


Figure 4 Forward/Reverse Handle

**FORWARD/REVERSE CONTROL**

The Forward/Reverse shift handle is located on the seat support panel (**Figure 4, Page 13**). The handle has three distinct positions: **F** (forward), **N** (neutral), and **R** (reverse). Rotate the handle towards the driver, **F** (forward), to operate the vehicle in the FORWARD direction, or towards the passenger, **R** (reverse), to operate the vehicle in REVERSE. When the handle is in the straight up, or **N** (neutral) position, the vehicle will not operate. Club Car transportation vehicles operate at reduced speed in REVERSE. **See following NOTE.**

**NOTE**

- THE REVERSE BUZZER(S) WILL SOUND AS A WARNING WHEN THE VEHICLE IS IN REVERSE.

**ACCELERATOR PEDAL**

The accelerator pedal is the pedal on the right, with the word **GO** molded into it (**Figure 5, Page 13**). The operation of the accelerator pedal differs from that of an automobile. When the key switch is ON, and the Forward/Reverse handle is in either FORWARD or REVERSE, depressing the accelerator pedal will automatically release the park brake and start the vehicle moving in the direction selected (FORWARD or REVERSE). As the accelerator pedal is depressed, speed will increase until full speed is reached. When the accelerator pedal is released, power will be cut off and the motor will stop running.

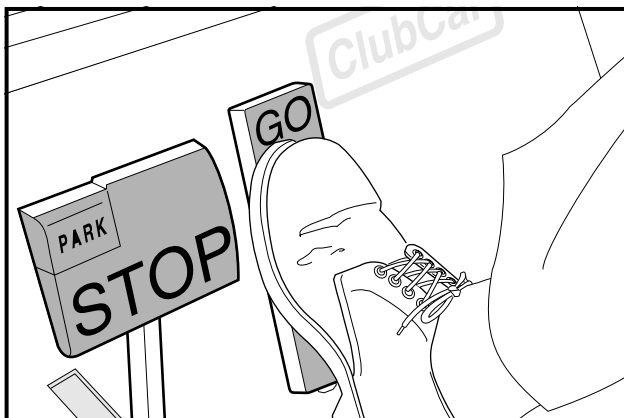


Figure 5 Accelerator and Brake Pedals

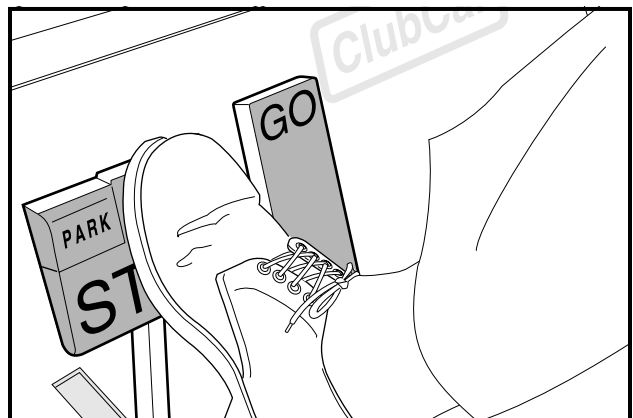


Figure 6 Brake Pedal

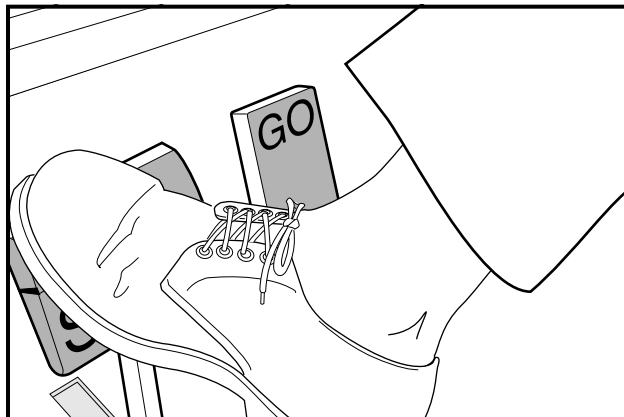


Figure 7 Park Brake Pedal

## BRAKE PEDAL

The brake pedal is the large pedal on the left with the word **STOP** molded into it (Figure 5, Page 13). To slow or stop the vehicle, depress the brake pedal with your foot.

## PARK BRAKE PEDAL

The park brake pedal is the small raised portion in the upper left corner of the brake pedal. It has the word **PARK** molded into it and the words **PARK BRAKE** marked on top (Figure 6, Page 13). To set the park brake, depress the brake pedal firmly and tilt the park brake portion of the pedal forward (Figure 7, Page 14). See following **WARNING**.

### **⚠ WARNING**

- THE PARK BRAKE WILL RELEASE AUTOMATICALLY WHEN EITHER THE ACCELERATOR OR BRAKE PEDAL IS DEPRESSED. THE PARK BRAKE HAS MULTIPLE LOCKING POSITIONS AND SHOULD BE FIRMLY PRESSED AND LOCKED TO PREVENT THE VEHICLE FROM ROLLING.

## BATTERY WARNING LIGHT

PowerDrive System 48 vehicles feature a dash mounted warning light (above steering column) that, when the vehicle is in operation, indicates low battery voltage, or, when the vehicle is being charged, indicates a charging problem. The battery warning light is controlled by the PowerDrive onboard computer.

When the vehicle is in operation, the warning light will illuminate and remain illuminated if:

- Batteries voltage drops below 48 volts when there is no load on the batteries (the vehicle is stopped and there are no accessories on).
- Batteries have discharged to less than 25% of rated capacity.

If the warning light comes on when the vehicle is operating, there will be enough power remaining to drive the vehicle for approximately 30 minutes. However, the vehicle should be charged at the first opportunity. If the warning light comes on and the vehicle is unable to operate for 30 minutes, have your Club Car distributor/dealer check the vehicle for a possible battery or electrical system problem.

When the batteries receive an incomplete charge because 1) the DC power cord is disconnected, 2) AC power to the charger is interrupted, 3) automatic charger shut-off occurs after 16 hours of operation, or 4) the charger malfunctions, the warning light will indicate as follows:

- The warning light will not come on if the charge is 90% or more complete. The onboard computer will retain in memory the amount of charge needed to fully replenish the batteries and will complete the charge during the next charge cycle.

- When the charger is unplugged, the warning light will illuminate and remain illuminated for 10 seconds if the charge is less than 90% complete but the vehicle has enough power for approximately 30 minutes of operation. This will alert the operator that the vehicle may be used, but that it must be charged to completion as soon as possible.
- The warning light will repeatedly illuminate for 10 seconds, with 4 second intervals if the charger times out at 16 hours and the batteries are not sufficiently charged (**see PowerDrive Charger Owner's Manual**). This indicates an abnormal charge cycle. The charger and batteries should be checked by your Club Car distributor/dealer.
- The warning light will repeatedly illuminate for 10 seconds, with 4 second intervals during a charge cycle (DC plug is still connected) if AC power to the charger is interrupted. The light will go out when AC power is restored.

**LED Light:** In addition to the warning light, there is an infrared LED in the dash light assembly which transmits an infrared signal from the OBC. This signal is received by the optional Communication Display Module which provides information on the condition of the vehicle and batteries.

## DRIVING INSTRUCTIONS

No one should drive the vehicle without first being instructed in the proper operation and use of the vehicle's controls. An experienced operator should accompany each first-time driver on a test drive before allowing him/her to operate the vehicle alone.

To ensure safe operation of the vehicle, follow all procedures exactly as written. Read and understand all instructions prior to driving the vehicle. **See following WARNING.**

### **WARNING**

- ONLY LICENSED DRIVERS SHOULD BE ALLOWED TO DRIVE THIS VEHICLE.
- MAKE SURE THE DRIVER IS FAMILIAR WITH ALL CONTROLS AND OPERATING PROCEDURES BEFORE ALLOWING THE VEHICLE TO BE DRIVEN.
- NO MORE THAN TWO PEOPLE PER SEAT AT ONE TIME.
- DO NOT ALLOW RIDERS IN THE CARGO BED.
- THE VEHICLE IS NOT SPECIALLY EQUIPPED FOR HANDICAPPED PERSONS:
  - MAKE SURE ALL PASSENGERS ARE CAPABLE OF SECURING THEMSELVES IN A MOVING TRANSPORTATION VEHICLE.
  - MAKE SURE ALL PERSONS CAN PROPERLY OPERATE THE VEHICLE PRIOR TO ALLOWING THEM TO DRIVE THE VEHICLE.
- FOR NIGHT USE, VEHICLE MUST BE EQUIPPED WITH HEADLIGHTS, TAILLIGHTS, AND REFLECTORS.
- STOP VEHICLE BEFORE SHIFTING FORWARD/REVERSE HANDLE. FAILURE TO DO SO MAY RESULT IN INJURY TO INATTENTIVE PASSENGERS AND (OR) DAMAGE TO THE VEHICLE.
- TO AVOID BEING STRUCK, DO NOT STAND IN FRONT OF OR BEHIND THE VEHICLE.
- DO NOT LEAVE CHILDREN UNATTENDED ON VEHICLE AT ANY TIME.

#### **WHEN DRIVING THE VEHICLE:**

- OPERATE THE VEHICLE FROM THE DRIVER SEAT ONLY.
- TO PREVENT FALLS FROM THE VEHICLE, REMAIN SEATED AND HOLD ON TO SEAT HANDLES OR HANDRAILS AT ALL TIMES. DRIVER SHOULD KEEP BOTH HANDS ON THE STEERING WHEEL WHEN THE VEHICLE IS IN MOTION.
- TO PREVENT THE POSSIBILITY OF SERIOUS INJURY, KEEP ENTIRE BODY INSIDE VEHICLE.

**WARNING CONTINUED ON FOLLOWING PAGE...**

**⚠ WARNING**

- TO PREVENT VEHICLE FROM OVERTURNING, DRIVE SLOWLY IN TURNS.
- TO PREVENT VEHICLE FROM OVERTURNING, DRIVE SLOWLY STRAIGHT UP AND DOWN SLOPES. **AVOID DRIVING THE VEHICLE ON SLOPES EXCEEDING 20% INCLINE.**
- AVOID STOPPING A LOADED VEHICLE ON A HILL. IF A LOADED VEHICLE MUST BE STOPPED ON A HILL, AVOID SUDDEN STARTS OR ROLLING BACKWARDS AND STOPPING SUDDENLY. FAILURE TO HEED THIS WARNING COULD RESULT IN THE VEHICLE OVERTURNING.
- TO AVOID POSSIBLE INJURY TO INATTENTIVE PASSENGERS AND (OR) DAMAGE TO THE VEHICLE, AVOID SUDDEN STARTS, SUDDEN STOPS AND ABRUPT TURNS.
- TO AVOID THE POSSIBILITY OF LOSING CONTROL OF OR OVERTURNING THE VEHICLE, REDUCE SPEED FOR ADVERSE DRIVING CONDITIONS SUCH AS WET GRASS OR ROUGH TERRAIN.
- DO NOT USE THE VEHICLE ON PUBLIC ROADS. IT IS NEITHER DESIGNED NOR INTENDED FOR STREET USE AND SHOULD NOT BE LICENSED FOR USE ON PUBLIC ROADS.
- THE VEHICLE SHOULD BE DRIVEN IN ONLY SPECIFIED AREAS BY TRAINED OPERATORS.
- DO NOT DRIVE WHILE UNDER THE INFLUENCE OF ALCOHOL, DRUGS OR MEDICATIONS.

**STARTING THE VEHICLE**

1. Make sure load is secure.
2. Make sure everyone is seated and holding onto seat handles or handrails. Driver should have both hands on the steering wheel.
3. Read safety warnings located on dash and (or) above pedals.
4. Make sure wheels are turned in desired direction.
5. Turn key to the ON position and make sure nothing is in your path.
6. Select direction by placing Forward/Reverse handle in desired position (F = forward or R = reverse). A buzzer will sound as a warning when the vehicle is in REVERSE.
7. Slowly depress accelerator pedal. The park brake will release automatically and the vehicle will start to move. As the accelerator pedal is depressed, speed will increase until full speed is reached.

**⚠ WARNING**

- VEHICLE OPERATOR MUST CONTROL SPEED WHEN GOING DOWNHILL.

**STOPPING THE VEHICLE****⚠ WARNING**

- DRIVING THROUGH WATER MAY AFFECT THE BRAKES. AFTER DRIVING THROUGH WATER, CHECK EFFECTIVENESS OF THE BRAKES BY GENTLY DEPRESSING THE BRAKE PEDAL. IF THE VEHICLE DOES NOT SLOW DOWN AT THE NORMAL RATE, CONTINUE TO DEPRESS THE BRAKE PEDAL UNTIL THE BRAKES DRY OUT AND NORMAL PERFORMANCE RETURNS.

**⚠ CAUTION**

- WHEN STOPPED ON A HILL, USE THE BRAKE PEDAL TO HOLD YOUR POSITION. DO NOT USE THE ACCELERATOR PEDAL.

To stop the vehicle, release the accelerator pedal and depress the brake pedal until the vehicle comes to a complete stop.

## PARKING AND LEAVING THE VEHICLE

1. After coming to a complete stop, firmly depress the park brake pedal until it locks. This will prevent the vehicle from rolling.
2. Turn the key switch to OFF and place the Forward/Reverse handle in the NEUTRAL position. Remove the key when the vehicle is not in use.

## LOADING AND UNLOADING

Center and secure cargo as far forward as possible in the cargo bed (four-passenger TransPorter only). Do not exceed the rated capacity of the vehicle. This includes all passengers and the load in the cargo bed. Maximum rated capacity for TransPorter and six and eight-passenger Villager vehicles is 1500 lb. (680 kg). Maximum rated capacity for the four-passenger Villager is 800 lb. (363 kg). Overloading can affect vehicle handling or cause component failure, resulting in loss of control of vehicle and possible severe personal injury or death. **See following WARNING.**

### WARNING

- FIRMLY ENGAGE THE PARK BRAKE BEFORE LOADING THE VEHICLE.
- DO NOT ALLOW RIDERS IN THE CARGO BED.
- VEHICLE LOAD AND SPEED MUST BE REDUCED WHEN DRIVING UP OR DOWN SLOPES OR ON UNEVEN TERRAIN. RATED CAPACITY IS FOR LEVEL SURFACES ONLY.
- REDUCE SPEED AND AVOID SUDDEN STOPS WHEN BACKING UP. FAILURE TO DO SO MAY CAUSE THE VEHICLE TO OVERTURN OR FLIP OVER BACKWARDS.
- DO NOT LOAD THE TAILGATE. THE TAILGATE SHOULD BE IN THE UPRIGHT POSITION AND LATCHED SECURELY WHILE THE VEHICLE IS IN MOTION.
- TO AVOID SHIFTING THE VEHICLE LOAD AND POSSIBLY OVERTURNING THE VEHICLE, AVOID SUDDEN STARTS, SUDDEN STOPS, AND ABRUPT TURNS. THE CARGO'S CENTER OF GRAVITY MAY AFFECT THE HANDLING, STEERING, AND BRAKING OF THE VEHICLE.
- TO PREVENT CARGO FROM SHIFTING AND POSSIBLY INJURING A PASSENGER OR AFFECTING THE VEHICLE'S HANDLING, MAKE SURE CARGO IS WELL SECURED.
- AVOID TOP-HEAVY LOADS. THE CENTER OF GRAVITY OF A LOAD SHOULD NEVER EXCEED 15 INCHES (38 CM) ABOVE THE BOTTOM OF THE CARGO BED.
- ALWAYS UNLOAD CARGO BED BEFORE RAISING VEHICLE WITH HOIST, JACK OR OTHER LIFTING DEVICE.

## TRANSPORTING ON A TRAILER

If the vehicle must be transported over long distances or on public highways, it should be transported on an approved trailer. Always use an approved trailer that has the proper load rating for the vehicle(s) to be towed: 800 lb. (363 kg) per four-passenger Villager, 1600 lb. (726 kg) per six-passenger Villager, and 2000 lb. (909 kg) per eight-passenger Villager and TransPorter. (Example: a trailer to carry two six-passenger Villager vehicles should be rated at  $2 \times 1600 = 3200$  lb. ( $2 \times 727 = 1454$  kg)).

### WARNING

- DO NOT ALLOW RIDERS IN THE TRAILER BEING TOWED.
- AVOID SUDDEN STARTS, SUDDEN STOPS, AND TIGHT TURNS WHEN TOWING.
- AVOID STOPPING ON A HILL WHEN TOWING. IF YOU MUST STOP ON A HILL, AVOID SUDDEN STARTS, OR ROLLING BACKWARDS AND STOPPING SUDDENLY. FAILURE TO HEED THIS WARNING COULD CAUSE THE VEHICLE TO OVERTURN, POSSIBLY RESULTING IN SEVERE PERSONAL INJURY.

**WARNING CONTINUED ON FOLLOWING PAGE...**

**⚠ WARNING**

- REDUCE NORMAL DRIVING SPEED WHEN TOWING A CLUB CAR VEHICLE ON A TRAILER.
- FOR USE ON PUBLIC ROADS, THE TRAILER MUST MEET ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS SUCH AS TAILLIGHTS, BRAKELIGHTS, ETC.
- NEVER TOW A CLUB CAR VEHICLE BEHIND A PASSENGER VEHICLE OR TRUCK ON A PUBLIC ROAD UNLESS IT IS ON AN APPROVED TRAILER.
- THE VEHICLE TO BE TOWED SHOULD BE TIED SECURELY TO THE TRAILER, WITH THE FORWARD/REVERSE HANDLE IN **NEUTRAL**, THE KEY SWITCH **OFF**, AND THE PARK BRAKE FIRMLY DEPRESSED AND LOCKED.
- BECAUSE OF THE ADDED LENGTH OF THE TRAILER, USE CAUTION WHEN MAKING TURNS.
- NEVER TRANSPORT THE VEHICLE ON A TRAILER WITH A LOAD IN THE VEHICLE CARGO BED.
- IF VEHICLE IS EQUIPPED WITH A WINDSHIELD, REMOVE THE WINDSHIELD BEFORE TRANSPORTING ON A TRAILER.

**STORAGE****⚠ WARNING**

- TURN THE KEY SWITCH **OFF**, REMOVE THE KEY, AND LEAVE THE FORWARD/REVERSE HANDLE IN THE **NEUTRAL** POSITION DURING STORAGE. THIS IS TO PREVENT UNINTENTIONALLY STARTING THE VEHICLE OR A FIRE HAZARD.
- DO NOT ATTEMPT TO CHARGE FROZEN BATTERIES OR BATTERIES WITH BULGED CASES. DISCARD THE BATTERY. FROZEN BATTERIES CAN EXPLODE.

**⚠ CAUTION**

- BATTERIES IN LOW STATE OF CHARGE WILL FREEZE AT LOW TEMPERATURES.
- WHEN WASHING THE VEHICLE, DO NOT DIRECT WATER STREAM AT THE SPEED SWITCH, FORWARD/REVERSE HANDLE, OR OTHER ELECTRONIC COMPONENT.
- IF BATTERY WIRE TERMINALS ARE DAMAGED OR CORRODED, THEY SHOULD BE REPLACED OR CLEANED AS NECESSARY. FAILURE TO DO SO MAY CAUSE THEM TO OVERHEAT DURING OPERATION.

1. Unload the vehicle completely so that only minimum vehicle weight will be on the tires.
2. Fully charge batteries. **See Batteries, Page 23.**
3. Wash off any corrosion around the terminals with a solution of baking soda and water, then rinse the baking soda solution from the batteries. Do not allow this solution to enter the batteries. Let the terminals dry and coat them with Club Car battery terminal spray, Part No. 1014305. **See following CAUTION.**

**⚠ CAUTION**

- DO NOT ALLOW BAKING SODA SOLUTION TO ENTER THE BATTERIES.

4. Store in a cool, dry place. This will prevent self-discharge of the batteries.
5. Inflate tires to rated capacities. **See Tire Capacities, Page 22.**
6. Grease front suspension and do all other semiannual periodic lubrication. **See Periodic Lubrication Schedule, Page 21.**



7. Thoroughly clean front body, rear body, seats, cargo bed, battery compartment, and underside of the vehicle.
8. Do not latch the park brake. Block tires to prevent the vehicle from rolling.
9. Leave PowerDrive System 48 vehicles with PowerDrive chargers plugged in during storage. The PowerDrive storage charge feature will automatically charge the batteries as needed. **See Batteries, Page 23.**

## NOTE

- A POWERDRIVE SYSTEM 48 VEHICLE WILL NOT OPERATE WHILE PLUGGED TO A CHARGER.
- IF CHARGER CANNOT REMAIN PLUGGED IN DURING LONGTERM STORAGE, DISCONNECT BATTERY CABLES AS SHOWN IN **FIGURE 1, PAGE 2.**

## TO RETURN THE STORED VEHICLE TO SERVICE

1. Fully charge batteries. **See Batteries, Page 23.**
2. Readjust tire pressure to rated capacities. **See Tire Capacities, Page 22.**
3. Perform the Pre-Operation Checklist. **See page 11.**

## MAINTENANCE

See **DANGER** and **WARNING** on page 3.

### GENERAL INFORMATION

To ensure trouble-free vehicle performance, it is very important to follow an established preventive maintenance program. Regular and consistent vehicle maintenance can prevent vehicle downtime and expensive repairs that result from neglect. Any vehicle not functioning correctly should be removed from use until it is properly repaired. This will prevent further damage to the vehicle and avoid the possibility of injury due to unsafe conditions. **See following WARNING.**

Contact your local Club Car distributor/dealer to perform all repairs and semiannual and annual periodic service.

## WARNING

- IF ANY PROBLEMS ARE FOUND DURING SCHEDULED INSPECTION OR SERVICE, DO NOT OPERATE VEHICLE UNTIL REPAIRS ARE MADE. FAILURE TO MAKE NECESSARY REPAIRS COULD RESULT IN FIRE, PROPERTY DAMAGE, SEVERE PERSONAL INJURY, OR DEATH.
- DO NOT WORK ON VEHICLE POWERTRAIN OR UNDER CARGO BED WHEN IT IS LOADED.
- HOT! DO NOT ATTEMPT TO SERVICE HOT MOTOR. ATTEMPTING TO DO SO CAN CAUSE SEVERE BURNS.

## DAILY PRE-OPERATION SAFETY CHECKLIST

Inspect and drive the vehicle, using the Pre-Operation Checklist (**Page 11**) and Performance Inspection (**Page 12**) as a guide to check the following items:

- Vehicle warning decals
- Brake system
- Park brake
- Reverse warning buzzer
- Steering and linkages
- Proper acceleration and maximum speed
- Batteries
- Accelerator Switch

In addition, check the items listed below:

- Tires: Visually inspect for wear, damage and proper inflation.
- Forward/Reverse switch: Check for proper operation. **See Controls, Page 12.**

## PERIODIC SERVICE SCHEDULE

### WARNING

- SERVICE, REPAIRS, AND ADJUSTMENTS MUST BE MADE PER INSTRUCTIONS IN THE 2000 TRANSPORTATION MAINTENANCE & SERVICE MANUAL.

### NOTE

- IF THE VEHICLE IS CONSTANTLY SUBJECTED TO HEAVY USE OR SEVERE OPERATING CONDITIONS, THE PREVENTATIVE MAINTENANCE PROCEDURES SHOULD BE PERFORMED MORE OFTEN THAN RECOMMENDED IN THE SERVICE AND LUBRICATION SCHEDULES.
- BOTH THE PERIODIC SERVICE SCHEDULE AND PERIODIC LUBRICATION SCHEDULE MUST BE FOLLOWED TO KEEP VEHICLE IN OPTIMUM OPERATING CONDITION.

## PERIODIC SERVICE SCHEDULE

REGULAR INTERVAL	SERVICE	
<b>Daily Service by Owner</b>	Batteries	Charge batteries (after each use only).
<b>Weekly Service by Owner</b>	Batteries	Check electrolyte level. Add water as necessary per Transportation Maintenance and Service Manual.
<b>Monthly Service by Owner or Trained Technician</b>	Batteries	Wash battery tops and clean terminals with baking soda/water solution. <b>Dispose of waste water properly.</b>
	Tires	Check air pressure and adjust as necessary. See Vehicle Capacities Chart on Page 22.
	Wiper Switch (Four-Passenger Villager only)	Check for cracks or other damage; make sure switch is securely fastened to frame. Check movable contact for correct operation.
	General Vehicle	Wash battery compartment and underside of vehicle. <b>Dispose of waste water properly.</b>
<b>Semiannual Service by Trained Technician Only (Every 50 hours of operation)</b>	Brake System	Check brake shoes; replace if necessary. See Transportation Maintenance and Service Manual.
		Lubricate brake slides per Lubrication Schedule. See Transportation Maintenance and Service Manual.
		Check brake cables for damage; replace as required.
	Electrical Wiring and connections	Check for tightness and damage.
	Forward and Reverse Switch	Check condition of contacts and wire connections; Make sure connections are tight.
Front Wheel Alignment and Camber	Check and adjust as required. See Transportation Maintenance & Service Manual, Section 7.	
<b>Annual Service by Trained Technician Only (Every 100 hours of operation)</b>	Batteries	If batteries are not performing as expected, refer to the PowerDrive System 48 Maintenance & Service Supplement, Section 13–Batteries.

**⚠ WARNING**

- IF ANY PROBLEMS ARE FOUND, DO NOT OPERATE THE VEHICLE UNTIL REPAIRS ARE MADE. FAILURE TO MAKE NECESSARY REPAIRS COULD RESULT IN FIRE, PROPERTY DAMAGE, SEVERE PERSONAL INJURY, OR DEATH.

**PERIODIC LUBRICATION SCHEDULE**

PERIODIC LUBRICATION SCHEDULE			
REGULAR INTERVAL	SERVICE	PLACE*	RECOMMENDED LUBRICANT
<b>Semiannually by Owner or Trained Technician (Every 50 hours of operation)</b>	Brake pedal shaft bearings	1.	Dry Moly Lube - Club Car Part No. 1012151
	Brake Linkage and Pivots	2.	Dry Moly Lube - Club Car Part No. 1012151
	Accelerator push rod pivots and mounts	3.	Dry Moly Lube - Club Car Part No. 1012151
	Forward/Reverse Switch Contacts and charger receptacle	4.	WD 40
	Brake Slides	5.	Dry Moly Lube - Club Car Part No. 1012151
	Front Suspension (5 fittings)	6.	Chassis Lube - EP NLGI Grade 2
<b>Annually by Trained Technician Only (Every 100 hours of operation)</b>	Check/fill transaxle to plug level	7.	22 oz. (.67 liter) SAE 30 WT. API Class SE, SF, or SG Oil (or higher)
	Inspect front wheel bearings (Repack as necessary)	8.	Chassis Lube - EP NLGI Grade 2

\*See Figure 8, Page 21 for four-passenger Villager electric vehicle. See Figure 9, Page 22 for six and eight-passenger Villager, and TransPorter vehicles.

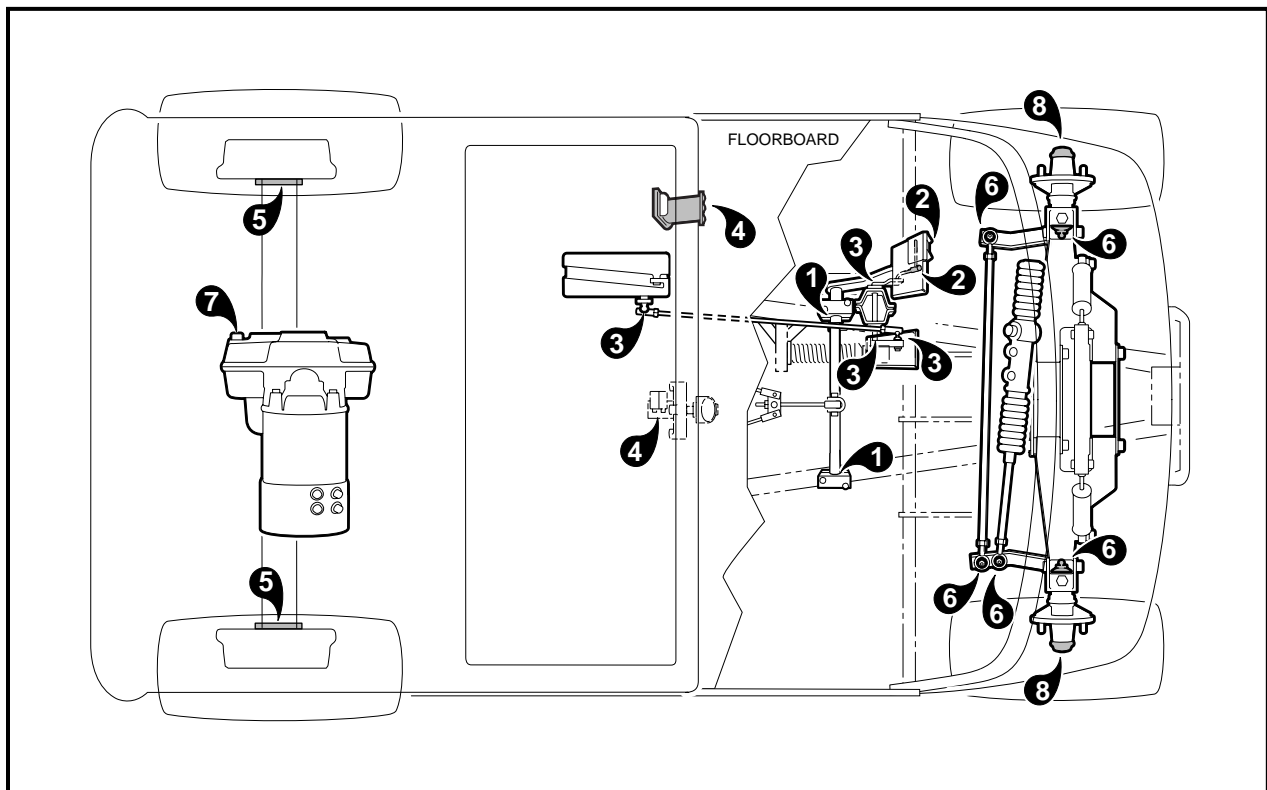


Figure 8 Four-Passenger Villager Electric Vehicle Lubrication Points

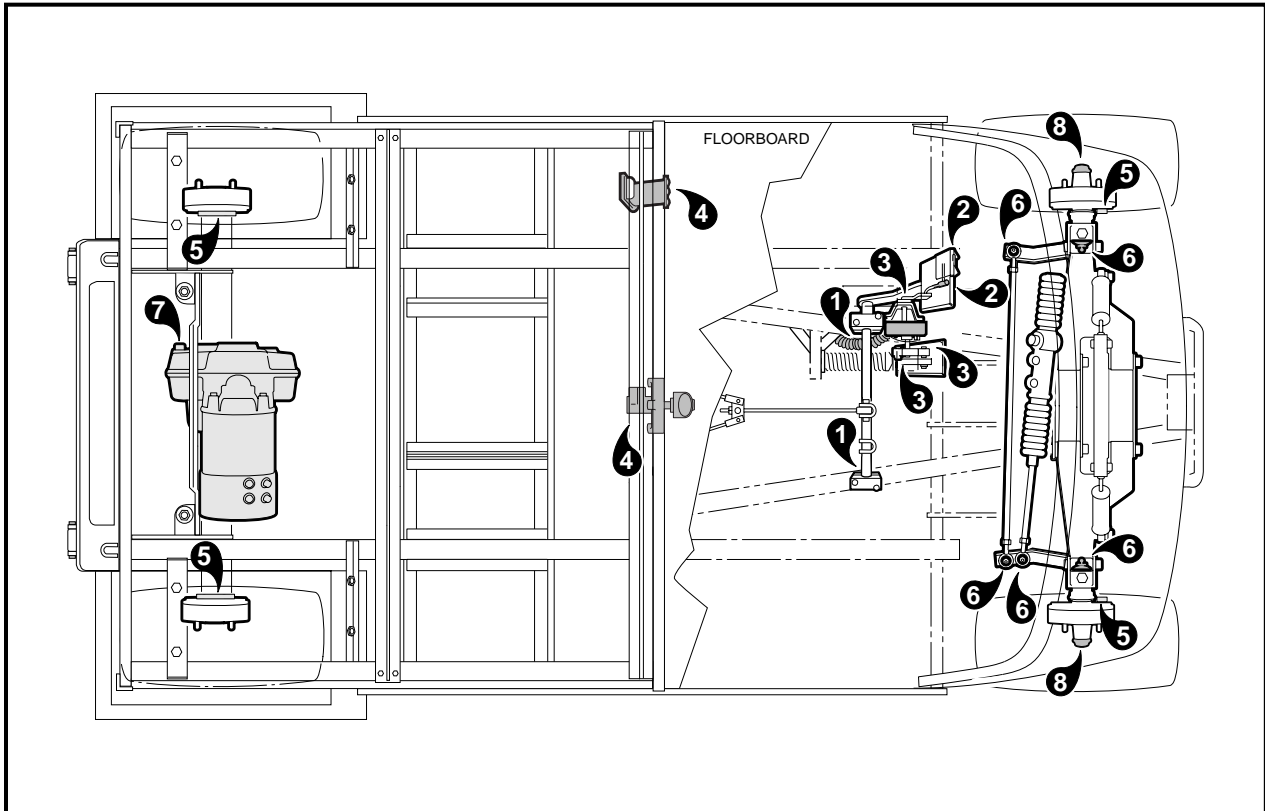


Figure 9 Six and Eight-Passenger Villager and TransPorter Electric Vehicle Lubrication Points

## VEHICLE CAPACITIES

### LIQUID CAPACITIES

Transaxle	22 oz. (.67 liters)

### TIRE CAPACITIES

Four-Passenger Villager	18-20 psi. (124-138 kPa)
Six and Eight-Passenger Villager	30-34 psi. (207-234 kPa)
TransPorter	30-34 psi. (207-234 kPa)

## VEHICLE CONTROLLER

Electric vehicles are equipped with Solid State Speed Controllers. In order to properly service and maintain the Solid State Speed Controller vehicle, it is necessary to understand the electrical circuitry and the functions of all components in the system. Therefore, if any repair or service is required, Club Car recommends that it be performed by an authorized Club Car distributor/dealer using Club Car OEM parts.

## BATTERIES

### DANGER

- **BATTERY—EXPLOSIVE GASES! DO NOT SMOKE! KEEP SPARKS AND FLAMES AWAY FROM AREA OF VEHICLE. TOOLS, WIRES, AND METAL OBJECTS CAN CAUSE SPARKS WHEN SHORTED ACROSS A BATTERY. FOLLOW ALL INSTRUCTIONS CAREFULLY WHEN DEALING WITH BATTERIES.**
- **CHARGE BATTERIES IN A WELL-VENTILATED AREA ONLY. BATTERIES EMIT HYDROGEN WHILE BEING CHARGED. HYDROGEN IS AN EXPLOSIVE GAS AND MUST NEVER EXCEED A LEVEL OF 2% OF THE AIR.**
- **POISON! CONTAINS ACID! CAUSES SEVERE BURNS—AVOID CONTACT WITH SKIN, EYES, OR CLOTHING. ANTIDOTES:**
  - **EXTERNAL: FLUSH WITH WATER FOR 15 MINUTES. CALL A PHYSICIAN IMMEDIATELY.**
  - **INTERNAL: DRINK LARGE QUANTITIES OF MILK OR WATER FOLLOWED WITH MILK OF MAGNESIA OR VEGETABLE OIL. CALL A PHYSICIAN IMMEDIATELY.**
  - **EYES: FLUSH WITH WATER FOR 15 MINUTES. CALL A PHYSICIAN IMMEDIATELY.**

### WARNING

- WEAR SAFETY GLASSES OR APPROVED EYE PROTECTION WHEN SERVICING THE VEHICLE. WEAR A FULL FACE SHIELD WHEN WORKING WITH BATTERIES.
- USE INSULATED TOOLS WHEN WORKING AROUND BATTERIES OR ELECTRICAL CONNECTIONS.

### CAUTION

- ON ALL VEHICLES, TURN OFF ALL ACCESSORIES BEFORE CHARGING BATTERIES.

### NOTE

- RECYCLE OR DISPOSE OF DISCARDED BATTERIES IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.

The batteries in PowerDrive System 48 electric vehicles are 8-volt, deep cycle batteries, specially built for electric vehicle application. Automotive batteries should never be used.

New batteries will not deliver their full capabilities until they have been discharged and recharged 20 to 50 times. To obtain the maximum service life from new batteries, restrict vehicles with new batteries to one hour of operation between charges for the first two months the vehicle is in service. Batteries should be fully charged before first use of new vehicle, before first use of vehicle after storage, and before releasing vehicle for use each day.

## BATTERY CARE

To keep batteries in good working condition, follow this maintenance program on a regular basis:

1. The batteries should be kept clean and free of corrosion. Wash tops and terminals of batteries with a solution of baking soda and water (1 cup baking soda per gallon of water). Rinse solution off batteries.

### NOTE

- DO NOT ALLOW THIS SOLUTION TO ENTER THE BATTERIES.
- DISPOSE OF WASTE WATER PROPERLY.

- The electrolyte level in the batteries should be checked weekly (**see Figure 10, Page 24, for proper level**). Add water only after charging unless the electrolyte level is below the top of the plates. In this case, add just enough water to cover the plates, charge and then check the level again. Never charge batteries if plates are exposed above electrolyte level. For best battery life, use only distilled water.

## NOTE

- A BATTERY WATERING GUN OR BOTTLE IS AVAILABLE AT MANY AUTO PARTS DEALERS.

- The hold-down straps should be tight enough so that the batteries do not move while the vehicle is in motion, but not so tight as to crack or buckle the battery case. Tighten hold-down retaining nuts to 40 in.lb (4.5 N-m). The terminal connections should be clean and tight, and any worn insulation or frayed wires should be replaced. Tighten battery terminals to 110 in.lb (12.4 N-m). **See following CAUTION.**

## ⚠ CAUTION

- IF BATTERY WIRE TERMINALS ARE DAMAGED OR CORRODED, THEY SHOULD BE REPLACED OR CLEANED AS NECESSARY. FAILURE TO DO SO MAY CAUSE THEM TO OVERHEAT DURING OPERATION.

- After use, the batteries should be placed on charge. The batteries should never be left discharged any longer than absolutely necessary (do not leave batteries discharged overnight).

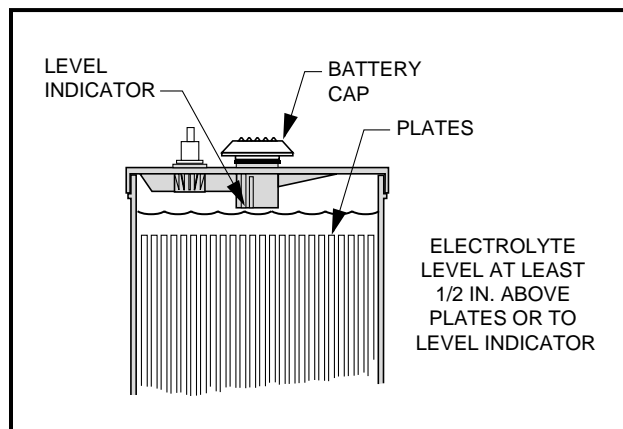


Figure 10 Battery Electrolyte Level

## BATTERY CHARGER

## ⚠ DANGER

- BATTERIES EMIT HYDROGEN WHILE BEING CHARGED. HYDROGEN IS AN EXPLOSIVE GAS. IF THE VEHICLE IS EQUIPPED WITH A WEATHERPROOF ENCLOSURE, IT SHOULD BE UNZIPPED AND PULLED BACK WHILE BATTERIES ARE BEING CHARGED. THIS IS TO AVOID THE ACCUMULATION OF HYDROGEN GAS INSIDE THE ENCLOSURE.**
- THE CHARGING AREA MUST BE VENTILATED. TO PREVENT A BUILDUP OF EXPLOSIVE GAS, HYDROGEN LEVEL IN THE AIR MUST NEVER EXCEED 2%. THE TOTAL VOLUME OF AIR IN THE BUILDING MUST BE CHANGED FIVE TIMES PER HOUR. EXHAUST FANS SHOULD BE LOCATED AT THE HIGHEST POINT OF THE ROOF. CONTACT A LOCAL HVAC ENGINEER.**

**⚠ WARNING**

- ONLY TRAINED TECHNICIANS SHOULD REPAIR OR SERVICE THE CHARGER. CONTACT YOUR NEAREST CLUB CAR DISTRIBUTOR/DEALER.
- EACH CHARGER SHOULD HAVE ITS OWN DEDICATED 15 OR 20 AMPERE SEPARATELY PROTECTED (CIRCUIT BREAKER OR FUSE) SINGLE PHASE BRANCH CIRCUIT, IN ACCORDANCE WITH ALL APPLICABLE ELECTRICAL CODES FOR THE LOCATION.
- HAVE WORN, CUT, OR DAMAGED POWER CORDS OR WIRES REPLACED IMMEDIATELY.
- BE SURE THAT ALL WIRE CONNECTIONS AT THE RECEPTACLE AND FUSE LINK ARE CLEAN AND TIGHT.
- DO NOT EXPOSE TO RAIN OR ANY LIQUID. KEEP THE CHARGER DRY.
- DO NOT USE NEAR FUELS, GRAIN DUST, SOLVENTS, THINNERS, OR OTHER FLAMMABLES. CHARGERS CAN IGNITE FLAMMABLE MATERIALS AND VAPORS.
- CONNECT THE CHARGER AC SUPPLY CORD TO A PROPERLY GROUNDED, THREE-WIRE OUTLET OF THE PROPER VOLTAGE AND FREQUENCY AS SHOWN ON THE CHARGER.
- DO NOT USE AN ADAPTER TO PLUG THE CHARGER WITH A THREE-PRONG PLUG INTO A TWO-PRONG OUTLET. IMPROPER CONNECTION OF THE EQUIPMENT-GROUNDING CONDUCTOR CAN RESULT IN A FIRE OR AN ELECTRICAL SHOCK.
- USE ONLY AN EXTENSION CORD OR ELECTRICAL OUTLET THAT WILL ACCEPT A THREE-PRONG PLUG. EXTENSION CORD SHOULD BE THREE-WIRE NO. 12 AWG, AND BE AS SHORT AS POSSIBLE. THE USE OF AN IMPROPER EXTENSION CORD COULD RESULT IN FIRE OR AN ELECTRICAL SHOCK.
- DO NOT OPERATE THE CHARGER IF IT HAS RECEIVED A SHARP BLOW, WAS DROPPED, OR OTHERWISE DAMAGED IN ANY WAY.
- NEVER PUSH OBJECTS OF ANY KIND INTO THE CHARGER THROUGH CABINET SLOTS. THEY MAY TOUCH DANGEROUS VOLTAGE POINTS OR CAUSE AN ELECTRICAL SHORT CIRCUIT THAT COULD RESULT IN FIRE OR ELECTRICAL SHOCK.
- DO NOT CONNECT A STATIONARY CHARGER TO THE RECEPTACLE IF THE CHARGER CORD, PLUG, OR THE VEHICLE RECEPTACLE IS BROKEN, DAMAGED, OR DOES NOT MAKE A GOOD ELECTRICAL CONNECTION. FIRE OR PERSONAL INJURY CAN RESULT. HAVE A QUALIFIED TECHNICIAN REPAIR OR REPLACE DEFECTIVE PARTS IMMEDIATELY.
- WHEN THE CHARGER IS ON, THE CHARGER DC CORD MAY BE DISCONNECTED FROM THE VEHICLE RECEPTACLE **SLOWLY**. JERKING OR PULLING THE DC CORD OUT QUICKLY COULD CAUSE ARCING AND BURNING WHICH COULD DAMAGE THE PLUG AND RECEPTACLE AND COULD CAUSE BATTERIES TO EXPLODE.
- **DO NOT USE A CHARGER IF:**
  - THE PLUG IS TOO LOOSE OR DOES NOT MAKE A GOOD CONNECTION.
  - THE PLUG AND RECEPTACLE FEEL HOTTER THAN NORMAL DURING CHARGE.
  - THE PLUG PINS OR CONTACTS ARE BENT OR CORRODED.
  - THE PLUG, RECEPTACLE OR CORDS ARE CUT, WORN, HAVE ANY EXPOSED WIRES, OR ARE DAMAGED IN ANY WAY.

**USING A CHARGER WITH ANY OF THE ABOVE SYMPTOMS COULD RESULT IN FIRE, PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH.**

**⚠ CAUTION**

- DO NOT BLOCK OR COVER SLOTS AND OPENINGS IN THE BACK AND BOTTOM OF CHARGER CABINET. THEY PROVIDE VENTILATION AND PROTECT THE CHARGER FROM OVERHEATING.
- DO NOT ALLOW CLOTHING, BLANKETS, OR OTHER MATERIAL TO COVER THE CHARGER.
- PROVIDE ADEQUATE VENTILATION FOR THE CHARGER.
- INSTALL SURGE ARRESTORS ON INCOMING AC POWER LINES. SURGE ARRESTORS WILL HELP PROTECT ELECTRICAL/ELECTRONIC COMPONENTS IN THE CHARGER AND ON THE VEHICLE FROM ALL BUT DIRECT OR VERY CLOSE LIGHTNING STRIKES.

Each electric vehicle is supplied with either a fully automatic, stationary, battery charger (Villager vehicles) or fully automatic onboard charger (TransPorter) as standard equipment. The AC cord from the charger should be connected to a source capable of supplying 10 amperes minimum per charger.

The battery charger must be grounded to reduce the risk of electrical shock. The charger is equipped with an AC electric cord having an equipment-grounding conductor and a grounding type plug. The plug must be grounded to an appropriate dedicated receptacle that is properly installed and grounded in accordance with the National Electrical Code, ANSI/NFPA 70, and all local codes and ordinances. See the owner's manual supplied with the battery charger for specific operating instructions before using the charger.

**NOTE**

- BECAUSE THE POWERDRIVE CHARGER HAS A STORAGE CHARGE FEATURE THAT AUTOMATICALLY CHECKS AND RECHARGES THE BATTERIES AS NECESSARY EVERY 15 DAYS, IT CAN REMAIN PLUGGED TO A POWERDRIVE VEHICLE THROUGHOUT THE STORAGE PERIOD.
- SHORTLY AFTER CHARGING HAS BEGUN, THE POWERDRIVE CHARGER WILL SHUT OFF IN ORDER TO RUN A SELF-DIAGNOSTIC PROGRAM (AMMETER WILL DROP TO 0). CHARGING WILL RESUME IN A FEW MOMENTS (AMMETER WILL RETURN TO CURRENT STATE OF CHARGE).

The use of an extension cord with the charger should be avoided. If an extension cord must be used, then only use a three conductor No. 12 AWG heavy duty cord with a ground conductor in good electrical condition. Keep cord as short as possible (no more than twelve feet). Position all cords so they will not be stepped on, tripped over, or otherwise subject to damage or stress.

The charging area must be well-ventilated. To prevent a buildup of explosive gas, the hydrogen level in the air must never exceed 2%. The total volume of air in an enclosed charging area must be changed at least five times per hour. Consult a local HVAC engineer. **See DANGER in Battery Charger Section, Page 24.**

**TO CHARGE BATTERIES****NOTE**

- WHEN TEMPERATURES FALL BELOW 65° F (18.3 C), BATTERIES CHARGED IN UNHEATED AREAS SHOULD BE PLACED ON CHARGE AS SOON AS POSSIBLE AFTER USE. BATTERIES ARE WARMEST IMMEDIATELY AFTER USE, WHILE COLD BATTERIES REQUIRE MORE TIME TO FULLY CHARGE.

- **Villager (Stationary Charger)**

Insert the charger AC plug into a dedicated AC receptacle that is properly grounded and wired in accordance with the National Electric Code, ANSI/NFPA 70, and all local codes and ordinances. Then insert the charger DC plug into the vehicle receptacle. The charger will activate two to ten seconds later (**Figure 11, Page 27**).



- **TransPorter (Onboard Charger)**

Insert the onboard charger AC plug into a dedicated AC receptacle that is properly grounded and wired in accordance with the National Electric Code, ANSI/NFPA 70, and all local codes and ordinances. The charger will activate two to ten seconds later.

The PowerDrive Charger interacts with an onboard computer on the PowerDrive System 48 vehicle. The computer records the amount of energy consumed during vehicle use. While the charger is plugged in the vehicle's control circuit is locked out, preventing operation, as well as, subsequent damage to the charger and the vehicle.

Once the lockout is actuated, the charger turns on. The onboard computer then records the amount of energy being returned to the batteries. When the amount of energy required to replenish the batteries is returned, the charger will shut off. The control circuit lockout remains activated until the charger plug is disconnected from the vehicle.

Because of these unique features, only PowerDrive System 48 vehicles are compatible with the PowerDrive Charger (neither vehicles made by other manufacturers, nor other Club Car models are compatible).

As long as the charger is allowed to shut off by itself, the batteries will be fully charged. Overcharging and undercharging will normally be prevented.

Batteries should be put on charge even if they have been used for only a short period (10 minutes). The charger is automatic and will turn off when batteries are fully charged. If the charger does not seem to be operating properly, or if the batteries seem weak, contact your local Club Car distributor/dealer.

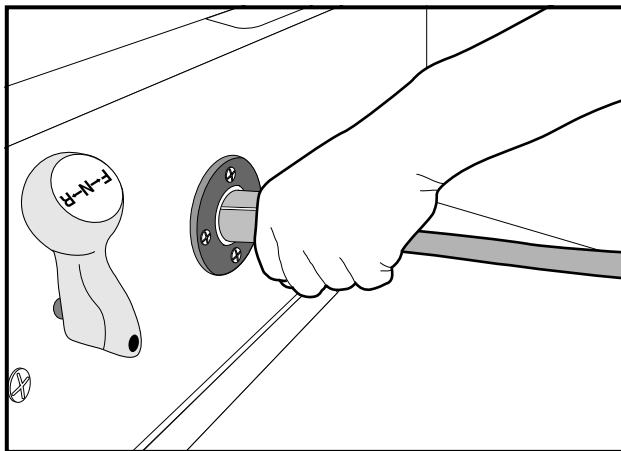


Figure 11 Correct Insertion of Charger DC Plug

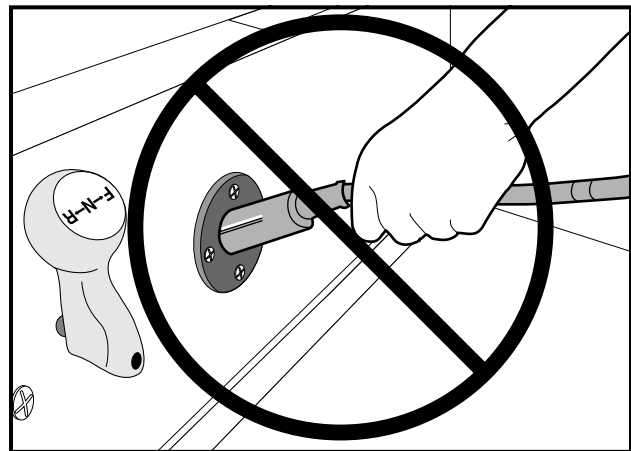


Figure 12 Incorrect Insertion of Charger DC Plug

## PLUG AND RECEPTACLE

**Villager vehicles:** If the charger plug becomes difficult to insert or disconnect, the receptacle contacts should be lightly sprayed with WD-40<sup>®</sup> brand spray lubricant. The plug should then be inserted and removed several times to ensure ease of insertion, ease of removal, and good electrical contact. **See following NOTE.**

### NOTE

- IF THE WARNING TAG HAS BEEN DAMAGED OR REMOVED FROM THE DC CORD, HAVE IT REPLACED IMMEDIATELY.

## RECEPTACLE FUSE LINK

**Villager vehicles:** As an additional feature to protect the batteries and charging circuit from an overload, the electric vehicle is equipped with a receptacle fuse link (**Figure 13, Page 28**). If the charger does not come on when the vehicle is placed on charge, visually inspect the fuse link. **See following WARNING.**

**⚠ WARNING**

- IF THE RECEPTACLE FUSE LINK IS BLOWN, DETERMINE THE SOURCE OF THE PROBLEM AND CORRECT IT BEFORE REPLACING THE FUSE.
- NEVER MODIFY WIRING TO BYPASS THE GRAY SENSE LEAD FUSE (**FIGURE 13, PAGE 28**).

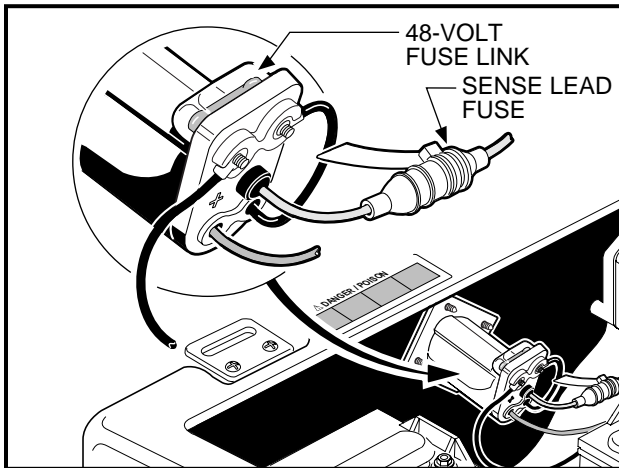


Figure 13 Receptacle Fuse Link

**CLEANING THE VEHICLE**

Transportation vehicles are equipped with Armorflex® front bodies and either Amorflex or all-aluminum rear bodies. Some models also have aluminum cargo beds (TransPorter only). Use only commercially available automotive cleaners with a sponge or soft cloth for normal cleaning. A garden hose at normal residential water pressure is adequate. To remove oxidation or discoloration from aluminum, use a commercially available aluminum cleaner paste and fine grade (No. 00) steel wool.

Club Car does not recommend any type of pressure washing or steam cleaning. Such a process (especially if the vehicle has a soft rear body that has been removed) will expose electrical components to moisture. Moisture entering electrical components can result in water damage and subsequent component failure.

Use non-abrasive wax products. Battery acid, fertilizers, tars, asphalt, creosote, paint, or chewing gum should be removed immediately to prevent possible stains.

The seats of the vehicle will last longer with proper cleaning. Use a solution of 10% liquid soap and warm water applied with a soft cloth. For imbedded dirt, a soft bristle brush may be used. For heavy soiling, difficult stains or scratches, blemishes, or other body damage, see Section 4 of the Maintenance and Service Manual.

**NOTE**

- DISPOSE OF WASTE WATER PROPERLY.

**ACCESSORIES**

There is a complete line of accessory equipment available from Club Car and our Distributors/Dealers. Contact your distributor/dealer for an Optional Equipment book. Care should be taken that these accessories are properly installed by trained technicians and they are used in the manner for which they were designed.

**⚠ WARNING**

- CUSTOM CAB ASSEMBLIES, WEATHERPROOF ENCLOSURES, DOOR KITS, AND TINTED WINDSHIELDS WILL **NOT** PROTECT OCCUPANTS FROM FLYING OBJECTS (GOLF BALLS, ETC.).

## SUBSEQUENT OWNER REGISTRATION

In the event a vehicle is bought used from another individual or from a distributor/dealer, we strongly urge the new owner to reregister the vehicle with Club Car. This will enable us to contact you if the need arises. Please send your name, address, and serial number(s) of the vehicle(s) to Club Car, Inc., P.O. Box 204658, Augusta, GA 30917-4658, Attn: Vehicle Registration. **See following NOTE.**

### NOTE

- CLUB CAR, INC. RESERVES THE RIGHT TO CHANGE SPECIFICATIONS AND DESIGN OF GASOLINE OR ELECTRIC VEHICLES AT ANY TIME WITHOUT NOTICE AND WITHOUT OBLIGATION TO MAKE THESE CHANGES ON UNITS PREVIOUSLY SOLD.

## VEHICLE SPECIFICATIONS

SPECIFICATIONS	Villager			TransPorter	
	Four-Passenger	Six-Passenger	Eight-Passenger	Four-Passenger	Six-Passenger
<b>POWER SOURCE</b>	PowerDrive System 48 Electric				
<b>Drive Motor:</b> Direct drive, 48 volt DC, series wound, 3.1 hp.	•	•	•	•	•
<b>Transaxle:</b> Double reduction helical gear with 12.28:1 direct drive axle.	•	•	•	•	•
<b>Electrical System:</b> 48 volts DC, reduced speed reverse.	•	•	•	•	•
<b>Batteries:</b> High capacity, deep cycle, Trojan Power-Drive 8-Volt, 117 min. capacity.	•	•	•	•	•
<b>Charger:</b> Automatic, 17 amp PowerDrive; UL and CSA listed.	•	•	•	•	•
<b>STEERING/SUSPENSION/BRAKES</b>					
<b>Steering:</b> Self-adjusting rack and pinion.	•	•	•	•	•
<b>Suspension:</b> Front mono-leaf and rear multi-leaf springs with dual hydraulic shocks.	•	•	•	•	•
<b>Brakes:</b> Mechanical brake cable system to self-adjusting drum brakes on each rear wheel. Self-adjusting multi-latch ratchet and pawl.	•				
<b>Brakes:</b> Mechanical brake cable system to manually adjusted drum brakes on all four wheels. Self-adjusting multi-latch ratchet and pawl.		•	•	•	•
<b>BODY/CHASSIS</b>					
<b>Frame/Chassis:</b> Twin I-Beam welded aluminum.	•	•	•	•	•
<b>Side and Rear Body:</b> All aluminum.				•	•
<b>Front Body:</b> Armorflex®.	•	•	•	•	•
<b>Front Body Finish:</b> Matched paint finish over molded-in color.	•	•	•	•	•
<b>Tires:</b> 18 x 8.50 - 8 tubeless, 4-ply rated load range front and rear.	•				
<b>Tires:</b> 18 x 8.50 - 8 tubeless, 6-ply rated load range front and rear.		•	•	•	•

SPECIFICATIONS	Villager			TransPorter	
	Four-Passenger	Six-Passenger	Eight-Passenger	Four-Passenger	Six-Passenger
<b>SEATING CAPACITY/FUEL CAPACITY</b>					
<b>Standard Seating Capacity (persons):</b>	4	6	8	4	6
<b>DIMENSIONS/WEIGHT</b>					
<b>Overall Length:</b>	100 in. (254 cm)	124 in. (315 cm)	157 in. (398 cm)	134 in. (340 cm)	133 in. (338 cm)
<b>Overall Width</b>	47.3 in. (120 cm)	47.3 in. (120 cm)	47.3 in. (120 cm)	49.3 in. (125 cm)	49.3 in. (125 cm)
<b>Overall Height: At Steering Wheel.</b>	48 in. (122 cm)	48 in. (122 cm)	48 in. (122 cm)	48 in. (122 cm)	48 in. (122 cm)
<b>Wheelbase</b>	65.5 in. (166 cm)	98.5 in. (250 cm)	131.5 in. (334 cm)	98.5 in. (250 cm)	98.5 in. (250 cm)
<b>Ground Clearance</b>	4.5 in. (11 cm)	4.5 in. (11 cm)	4.5 in. (11 cm)	4.5 in. (11 cm)	4.5 in. (11 cm)
<b>Front Wheel Tread</b>	34.5 in. (88 cm)	34.5 in. (88 cm)	34.5 in. (88 cm)	34.5 in. (88 cm)	34.5 in. (88 cm)
<b>Rear Wheel Tread</b>	38.5 in. (98 cm)	38.5 in. (98 cm)	38.5 in. (98 cm)	38.5 in. (98 cm)	38.5 in. (98 cm)
<b>Weight: Standard electric vehicle (without batteries).</b>	495 lb. (225 kg)	590 lb. (268 kg)	704 lb. (328 kg)	700 lb. (317 kg)	717 lb. (325 kg)
<b>Forward Speed</b>	12 - 15 mph (19 - 24 kph)	12 - 15 mph (19 - 24 kph)	12 - 15 mph (19 - 24 kph)	12 - 15 mph (19 - 24 kph)	12 - 15 mph (19 - 24 kph)
<b>Curb Clearance Circle (diameter)</b>	17 ft.-6 in. (533 cm)	24 ft.-8 in. (752 cm)	32 ft.-7 in. (993 cm)	24 ft.-8 in. (752 cm)	24 ft.-8 in. (752 cm)
<b>Turning Radius per SAE J 695</b>	68 in. (173 cm)	129 in. (328 cm)	191 in. (485 cm)	129 in. (328 cm)	129 in. (328 cm)
<b>Intersecting Aisle Clearance:</b>	72 in. (183 cm)	89.8 in. (228 cm)	108 in. (274 cm)	89.8 in. (228 cm)	89.8 in. (228 cm)
<b>Floorboard Height:</b>	11.8 in. (30 cm)	11.8 in. (30 cm)	11.8 in. (30 cm)	11.8 in. (30 cm)	11.8 in. (30 cm)
<b>Seat Height:</b>	29.5 in. (75 cm)	30 in. (76 cm)	30 in. (76 cm)	30 in. (76 cm)	30 in. (76 cm)
<b>Load Bed Height:</b>				27 in. (69 cm)	
<b>Load Bed Size: Flat bed dimensions.</b>				35.8 in. x 44.3 in. (91 x 112 cm)	
<b>Vehicle rated capacity: Level surface only.</b>	800 lb. (363 kg)	1500 lb. (680 kg)	1500 lb. (680 kg)	1500 lb. (680 kg)	1500 lb. (680 kg)

# **CLUB CAR LIMITED TWO YEAR WARRANTY FOR 2000 TRANSPORTATION AND UTILITY VEHICLES**

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## **1. WARRANTY**

CLUB CAR, INC., ("CLUB CAR") hereby warrants to the original retail purchaser that its new 2000 Model Transportation and Utility vehicles purchased from CLUB CAR or an authorized dealer for use in the United States or Canada shall be free from defects in materials and workmanship under normal use and service as a utility vehicle for the periods stated below, subject to the provisions, limitations and exclusions contained in this limited warranty.

### **LIMITED TWO YEAR / 2000 HOUR WARRANTY**

The engine assembly, unitized transaxle assembly (gasoline vehicle), motor, transaxle assembly (electric vehicle), main frame assembly, hydraulic dump kit, Custom Cab assembly and doors, and Driving Range Protective Enclosure are warranted with respect to parts and labor against defects in materials and workmanship for a period of two years from the date of purchase, or for 2000 hours of operation; whichever occurs first.

### **LIMITED ONE YEAR / 1000 HOUR WARRANTY**

All remaining components of the vehicle not specified otherwise, the Portable Refreshment Center, and all other optional equipment and accessories are warranted with respect to parts and labor against defects in materials and workmanship for a period of one year from the date of purchase, or for 1000 hours of operation; whichever occurs first.

This limited warranty covers materials, workmanship and repair labor cost as to those items specifically listed above for the periods specified. Such repair labor shall be performed only by CLUB CAR, its authorized dealers, or a service agency approved by CLUB CAR.

IF THE WARRANTY REGISTRATION FORM IS NOT COMPLETED AND RETURNED TO CLUB CAR AT THE TIME OF THE ORIGINAL RETAIL SALE, PURCHASER MUST PROVIDE PROOF OF DATE OF PURCHASE WITH ANY WARRANTY CLAIM.

## **2. EXCLUSIONS:**

Excluded from any CLUB CAR warranty are all fuses, filters, decals (except safety decals), spark plugs, light bulbs, lubricants, trim pieces, seats, routine wear items such as the charger plug and receptacle, brake shoes, belts, brushes, bushings, light bulbs, mats and pads, maintenance adjustments, cosmetic deterioration, and items which deteriorate or fail due to exposure or ordinary wear and tear. Batteries, the battery charger, onboard computer, and solid-state speed controller are covered under separate CLUB CAR warranties. Tires are warranted by their manufacturer. Also excluded from any CLUB CAR warranty is damage to a vehicle 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.

Transportation expenses for warranty services are also excluded from this warranty.

## **3. VOIDING OF WARRANTY**

THIS AND ANY OTHER WARRANTY SHALL BE VOID IF THE VEHICLE 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, BRAKING SYSTEM, STEERING, TRANSAXLE, OR OTHER OPERATING SYSTEMS OF THE VEHICLE TO CAUSE IT TO PERFORM OUTSIDE CLUB CAR SPECIFICATIONS. THE WARRANTY IS LIKEWISE VOID IF THE VEHICLE SHOWS INDICATIONS THAT REASONABLE OR NECESSARY MAINTENANCE AS OUTLINED IN THE OWNER'S MANUAL AND MAINTENANCE AND SERVICE MANUAL WAS NOT PERFORMED AT THE TIME AND IN THE MANNER SPECIFIED IN SUCH MANUALS.

## **4. SOLE REMEDY**

CLUB CAR's only liability under this limited warranty, or in any action whether based upon warranty, contract, negligence, strict product liability or otherwise, is limited to the repair or replacement, at CLUB CAR's option, of a VEHICLE or component thereof that CLUB CAR deems to be defective. Replacement shall mean furnishing, during the applicable limited warranty period, a new VEHICLE or factory reconditioned vehicle or component thereof which is identical or reasonably equivalent to the warranted product or component at no cost to the purchaser. Repair shall mean remedying a defect in the VEHICLE or component thereof at no cost to the purchaser during the applicable limited warranty period. If CLUB CAR elects to repair the VEHICLE, it may provide factory reconditioned parts or components. All parts and components replaced under warranty shall become the property of CLUB CAR.

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

To make a warranty claim under this limited warranty, you must present the vehicle or defective component to an authorized Club Car dealer to send the defective component, freight prepaid, to WARRANTY SERVICES, CLUB CAR, INC., 4125 Washington Road, Evans, Georgia 30809, U.S.A., 706/863-3000.

## **6. DISCLAIMER**

**THIS LIMITED WARRANTY IS EXCLUSIVE. CLUB CAR MAKES NO OTHER WARRANTY OF ANY KIND, EXPRESS 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 CLUB CAR AND EXCLUDED FROM THIS WARRANTY. THE PURCHASER AND CLUB CAR EXPRESSLY AGREE THAT THE REMEDY OF REPAIR OR REPLACEMENT OF THE DEFECTIVE VEHICLE OR COMPONENT THEREOF IS THE EXCLUSIVE AND SOLE REMEDY OF THE PURCHASER. CLUB CAR MAKES NO OTHER REPRESENTATION OR WARRANTY OF ANY KIND, AND NO REPRESENTATIVE, EMPLOYEE, OR DEALER OF CLUB CAR 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 CLUB CAR BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS RELATED TO PROPERTY OTHER THAN THE VEHICLE, LOSS OF USE, LOSS OF TIME, INCONVENIENCE, OR ANY OTHER ECONOMIC LOSS.**

Some states allow neither limitation on the duration of an implied warranty nor exclusions or limitation of incidental or 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 state to state.

## **8. INFORMATION:**

For further information, contact WARRANTY SERVICES, CLUB CAR, INC., P.O. Box 204658, Augusta, Georgia, 30917-4658, U.S.A., 706/863-3000.

## **9. WARNING**

Any modification or alteration of any vehicle beyond factory specifications, including those that affect the weight distribution, stability, or speed of the vehicle, can cause serious personal injury or death.

# **CLUB CAR FOUR YEAR LIMITED WARRANTY FOR 2000 POWERDRIVE® 8-VOLT BATTERIES**

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CLUB CAR, Inc., ("CLUB CAR") hereby warrants to the Original Retail Purchaser that the new PowerDrive, 8-volt Battery installed in its new electric vehicle equipped with the PowerDrive® System 48™ purchased from CLUB CAR or an authorized distributor or dealer will be free from defects in materials and workmanship and

will provide 36-hole performance (60 minute discharge capacity) for a period of four years or 800 rounds from the date of purchase, whichever event first occurs, subject to the terms and conditions contained herein.

This limited warranty only covers defects in materials and workmanship for a period of four years or 800 golf car rounds from date of purchase, whichever event first occurs. The terms of this four year or 800 round limited warranty shall be as follows:

Free replacement within four years or 800 rounds, whichever event first occurs, from date of purchase. No transportation expenses are included in this limited warranty.

The battery should be returned to CLUB CAR or an authorized distributor or dealer with evidence of proof of purchase date and number of rounds, freight prepaid. CLUB CAR reserves the right to test and recharge any battery returned for adjustment, and to verify number of rounds played by accessing information contained in the PowerDrive® System 48™ Onboard Computer. In the event the vehicles are used for purposes other than golf, the warranty will be four years or 16,000 energy units as recorded on the Onboard Computer, whichever event first occurs.

**ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL BE VOID AND EXCLUDED SUBSEQUENT TO ONE YEAR FROM THE DATE OF PURCHASE. THE REPLACEMENT OF THE BATTERY IS THE EXCLUSIVE REMEDY UNDER THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY. CLUB CAR MAKES NO OTHER REPRESENTATION OR WARRANTY OF ANY KIND, AND NO REPRESENTATIVE, EMPLOYEE, DISTRIBUTOR OR DEALER OF CLUB CAR HAS THE AUTHORITY TO MAKE OR IMPLY ANY REPRESENTATION, PROMISE OR AGREEMENT WHICH IN ANY WAY VARIES THE TERMS OF THIS LIMITED WARRANTY.**

#### **LIMITED WARRANTY EXCLUSIONS**

Without limiting the generality of the foregoing in any way, and as part of its limited warranty exclusion, CLUB CAR does not warrant that its battery is suitable for use in any application other than in its golf car. As in the use of any battery, a prudent owner will read and study the charger owner's manual, the electric car owner's manual, the operator instructions, and the battery warning labels; and will exercise due care in working on or around batteries.

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

Abuse or neglect such as improper fluid levels, loose wiring, or rusted or corroded hardware; Lack of proper maintenance as outlined in the electric vehicle owner's manual; Damage caused by improper installation of the battery; Neglect, breakage, freezing, fire, explosion, wreckage, the addition of any chemical, or the operation of the battery in an uncharged condition (below half-charge - 1.200 specific gravity); and a battery charged by systems other than the CLUB CAR PowerDrive Charger.

THIS BATTERY IS INTENDED TO BE USED BY PERSONS WITH TRAINING AND EXPERIENCE WITH BATTERIES AND ONLY IN CLUB CAR ELECTRIC VEHICLES. ANY OTHER USE RENDERS THE LIMITED WARRANTIES EXPRESSED HEREIN AND ALL IMPLIED WARRANTIES NULL AND VOID AND SAME ARE HEREBY EXCLUDED.

ALSO EXCLUDED FROM THIS LIMITED WARRANTY ARE ANY AND ALL INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF USE OR REVENUE, LOSS OF TIME, INCONVENIENCE OR ANY OTHER ECONOMIC LOSS.

Some states allow neither limitation on the duration of an implied warranty nor exclusions or limitations of incidental or consequential damages. Therefore, the above limitations or exclusions may not apply to you.

#### **WARRANTY LIMITATIONS**

CLUB CAR's liability shall be to replace a defective battery. Replacement shall mean furnishing a new battery or used battery with sufficient life to complete the remainder of the warranty term, which is identical or reasonably equivalent to the warranted product at no cost to the purchaser during the four year or 800 round limited warranty period, whichever event first occurs, except for transportation expenses.

Damage not resulting from a defect in materials or workmanship or which occurs due to abuse or neglect (including failure to provide reasonable and necessary maintenance), accident or alteration is excluded from this limited warranty.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For further information contact Warranty Services, CLUB CAR, INC., P.O. Box 204658, Augusta, Georgia 30917-4658, U.S.A., 706/863-3000.

## **CLUB CAR LIMITED FOUR YEAR WARRANTY FOR 2000 POWERDRIVE® BATTERY CHARGERS**

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CLUB CAR, INC., ("CLUB CAR") warrants to the original retail purchaser that its new PowerDrive Charger purchased from CLUB CAR or an authorized distributor/dealer for use in the United States or Canada will be free from defects in materials and workmanship under normal use and service for a period of four years from the date of purchase, subject to the terms, provisions, limitations, and exclusions contained herein.

The limited warranty covers defects in materials and workmanship for a period of four years from the date of purchase and repair labor costs for a period of one year from the date of purchase. Such repair labor shall be performed only by CLUB CAR at its facility in Augusta, Georgia, or by an authorized distributor/dealer. Purchaser shall be responsible for all freight costs to and from CLUB CAR's facility. For further information contact: Warranty Services, CLUB CAR, INC., P.O. Box 204658, Augusta, Georgia 30917-4658, U.S.A., 706/863-3000.

### **WARRANTY EXCLUSIONS: THE PROVISIONS OF THIS LIMITED WARRANTY SHALL NOT APPLY TO:**

- a) Normal maintenance services such as preventive maintenance checks and tightening loose wire connections;
- b) Parts such as diodes and fuses which are vulnerable to electrical overloads (including lightning) beyond the control of CLUB CAR; and
- c) Charger DC cord set with plug which is a wear item and subject to user abuse.

Any warranty service which includes labor must be performed by CLUB CAR or by an authorized distributor/dealer. FOR REPAIRS MADE BY QUALIFIED TECHNICIANS OTHER THAN CLUB CAR'S FACTORY TECHNICIANS OR AN AUTHORIZED DISTRIBUTOR/DEALER, CLUB CAR WILL PROVIDE ONLY THE REPLACEMENT PARTS OR COMPONENTS.

**THIS POWERDRIVE CHARGER IS INTENDED TO BE USED BY PERSONS KNOWLEDGEABLE WITH THE CHARGER AND PROPER CHARGING PRACTICES AND ONLY ON CLUB CAR POWERDRIVE® SYSTEM 48™ VEHICLES. ANY OTHER USE RENDERS THE LIMITED WARRANTIES EXPRESSED HEREIN AND ANY IMPLIED WARRANTIES NULL AND VOID AND SAME ARE HEREBY EXCLUDED.**

**WARRANTY LIMITATIONS:** CLUB CAR'S only liability under this limited warranty, or in any action whether based upon warranty, contract, negligence, strict product liability or otherwise, is limited to the replacement or repair, at CLUB CAR'S option, of a charger or component thereof that CLUB CAR deems to be defective. Replacement shall mean furnishing, during the applicable limited warranty period, except for repair labor costs after the first year, a new charger or component thereof which is identical or reasonably equivalent to the warranted product or defective component at no cost to the purchaser. Repair shall mean remedying a defect in the charger or component thereof at no cost to the purchaser during the applicable limited warranty period, except for repair labor costs after the first year. If CLUB CAR elects to repair the charger, it may provide factory reconditioned parts or components. All parts and components replaced under warranty shall become the property of CLUB CAR.

Damage not resulting from a defect of which occurs due to unreasonable use, abuse or neglect (including failure to provide reasonable or necessary maintenance), accident or alteration, is excluded from the limited warranty.

**THIS LIMITED WARRANTY IS EXCLUSIVE. CLUB CAR MAKES NO OTHER WARRANTY OF ANY KIND, EXPRESS 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 CLUB CAR AND EXCLUDED FROM THIS WARRANTY. THE PURCHASER AND CLUB CAR EXPRESSLY AGREE THAT THE REMEDY OF REPAIR OR REPLACEMENT OF THE DEFECTIVE CHARGER OR COMPONENT THEREOF IS THE EXCLUSIVE AND SOLE REMEDY OF THE PURCHASER. CLUB CAR MAKES NO OTHER REPRESENTATION OR**



**WARRANTY OF ANY KIND AND NO REPRESENTATIVE, EMPLOYEE, DISTRIBUTOR OR DEALER OF CLUB CAR HAS THE AUTHORITY TO MAKE OR IMPLY ANY REPRESENTATION, PROMISE OR AGREEMENT WHICH IN ANY WAY VARIES THE TERMS OF THIS WARRANTY. IN NO EVENT SHALL CLUB CAR BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS RELATED TO PROPERTY OTHER THAN THE BATTERY CHARGER, LOSS OF USE, LOSS OF TIME, INCONVENIENCE, OR ANY OTHER ECONOMIC LOSS.**

Some states allow neither limitation on the duration of an implied warranty nor exclusions or limitations of incidental or 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 state to state.

## **CLUB CAR FOUR YEAR LIMITED WARRANTY FOR 2000 ONBOARD COMPUTERS AND SOLID STATE SPEED CONTROLLERS**

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CLUB CAR, INC., ("CLUB CAR") warrants to the original retail purchaser that the new Onboard Computer and the Solid State Speed Controller, hereinafter called "Computer" and "Controller" respectively, installed in its new electric vehicle equipped with the PowerDrive® System 48™ purchased from CLUB CAR or an authorized distributor or dealer will be free from defects in materials and workmanship for a period of four years or 800 rounds from the date of purchase, whichever event first occurs, subject to the terms and conditions contained herein.

This limited warranty only covers defects in materials and workmanship for a period of four years or 800 rounds from the date of purchase, whichever event first occurs. The terms of this four year or 800 round limited warranty shall be as follows:

Free replacement with respect to parts and labor within four years or 800 rounds from date of purchase, whichever event first occurs.

The Computer or Controller should be returned to CLUB CAR or an authorized distributor or dealer with evidence of proof of purchase date, and number of rounds, freight prepaid. CLUB CAR reserves the right to test any Computer returned for warranty and to verify number of rounds played by accessing information contained in the Computer. In the event the vehicles are used for purposes other than golf, the warranty will be four years or 16,000 energy units as recorded by the Computer, whichever event first occurs.

### **For further information contact:**

WARRANTY SERVICES, CLUB CAR, INC., P.O. Box 204658, Augusta, Georgia 30917-4658, U.S.A., 706/863-3000.

**ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL BE VOID AND EXCLUDED SUBSEQUENT TO ONE YEAR FROM THE DATE OF PURCHASE. THE REPLACEMENT OF THE COMPUTER OR CONTROLLER IS THE EXCLUSIVE REMEDY UNDER THIS WRITTEN WARRANTY TO ANY IMPLIED WARRANTY. CLUB CAR MAKES NO OTHER REPRESENTATION OR WARRANTY OF ANY KIND, AND NO REPRESENTATIVE, EMPLOYEE, DISTRIBUTOR OR DEALER OF CLUB CAR HAS THE AUTHORITY TO MAKE OR IMPLY ANY REPRESENTATION, PROMISE OR AGREEMENT WHICH IN ANY WAY VARIES THE TERMS OF THIS LIMITED WARRANTY.**

### **LIMITED WARRANTY EXCLUSIONS**

Without limiting the generality of the foregoing in any way, and as part of its limited warranty exclusion, CLUB CAR does not warrant that the Computer or Controller is suitable for use in any application other than its PowerDrive System 48 golf car or utility vehicle. As in the use of any battery operated device, a prudent owner will read and study the charger owner's manual, the electric vehicle owner's manual, the operator instructions, and the battery warning labels; and will exercise due care in working on or around batteries.

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

Abuse or neglect, such as improper battery fluid levels, loose wiring, or rusted or corroded hardware; Lack of proper maintenance as outlined in the electric vehicle owner's manual; Damage caused by improper installation of the Computer or Controller; and Vehicles charged by systems other than the CLUB CAR PowerDrive Charger.

THIS COMPUTER OR CONTROLLER IS INTENDED TO BE USED ONLY IN CLUB CAR POWERDRIVE SYSTEM 48 ELECTRIC VEHICLES. ANY OTHER USE RENDERS THE LIMITED WARRANTIES EXPRESSED HEREIN AND ALL IMPLIED WARRANTIES NULL AND VOID AND SAME ARE HEREBY EXCLUDED.

ALSO EXCLUDED FROM THIS LIMITED WARRANTY ARE ANY AND ALL INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF USE OR REVENUE, LOSS OF TIME, INCONVENIENCE OR ANY OTHER ECONOMIC LOSS. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS NOR THE EXCLUSIONS OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

### **WARRANTY LIMITATIONS**

CLUB CAR's only liability under this limited warranty shall be to replace a defective Computer or Controller. Replacement shall mean furnishing a new or reconditioned Computer or Controller, which is identical or reasonably equivalent to the warranted product at no cost to the purchaser during the four year or 800 round limited warranty period, whichever event first occurs, except for transportation expenses. All parts and components replaced under warranty shall become the property of CLUB CAR.

Damage not resulting from a defect in materials or workmanship or which occurs due to abuse or neglect (including failure to provide reasonable and necessary maintenance), accident or alteration is excluded from this limited warranty.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



**Manual No. 102067317**  
**Edition Code 1299A00000**

**Transportation and Utility Vehicles/Electric**  
Club Car, Inc., P.O. Box 204658  
Augusta, GA 30917-4658