

ClubCar

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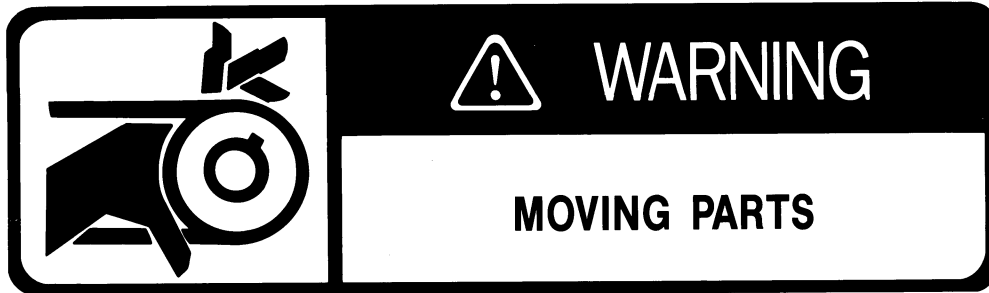
Owner's Manual

1993 DS Gasoline/Electric

Manual Number
1016964

Effective August 1992
0892A00000

Practice Safety



Safety signs like you see above may at first seem shocking. But compared to accidents they help prevent, they are not.

That's why Club Car urges you to always read and study the owner's manual before operating any vehicle. And pay close attention to the warnings in this manual and the safety signs on the vehicle you own.

At Club Car, we take your safety very seriously. Take time to understand the language of safety. It's a language that can save your life.

**CLUB CAR LIMITED THREE (3) YEAR WARRANTY FOR 1993 INDIVIDUAL GOLF CARS
IN THE UNITED STATES AND CANADA**

1. **WARRANTY:** CLUB CAR, INC. ("CLUB CAR") hereby warrants to the original individual retail purchaser that its new 1993 Model DS golf car purchased from CLUB CAR or an authorized distributor or 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 golf car for the periods stated below, subject to the provisions, limitations and exclusions contained in this limited warranty.

LIMITED THREE YEAR WARRANTY: The golf car frame (excluding the front and rear bumper mounts); rack and pinion steering gearbox unit; suspension system (defined as the shock absorbers, shock mounts, A-plates, leaf springs, shackles, and associated hardware); gasoline engine; transmission; torque converter (drive and driven); drive unit; starter generator; and electric motor are warranted with respect to parts and labor against defects in materials and workmanship for a period of three years from the date of purchase.

LIMITED TWO YEAR WARRANTY: All remaining components of the golf car not specified otherwise 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.

This limited warranty covers materials, workmanship and repair labor costs as to those items specifically listed above for the periods specified. Such repair labor shall be performed only by CLUB CAR, its authorized distributors or 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 optional equipment and accessories; fuses; filters; decals; spark plugs; lubricants; the body, cowl and trim pieces; seats; routine wear items such as the charger plug and receptacle, brake shoes, belts, brushes, bushings, engine mounts, mats and pads; maintenance adjustments; cosmetic deterioration; items which deteriorate or fail due to exposure or ordinary wear and tear; batteries; and the battery charger and tires (warranted by their respective manufacturers). The CLUB CAR battery charger is covered under a separate warranty. Also excluded from any CLUB CAR warranty is damage to a golf car 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 service are also excluded from this warranty.

3. **VOIDING OF WARRANTY:** THIS AND ANY OTHER WARRANTY SHALL BE VOID IF THE GOLF CAR 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, DRIVE UNIT OR OTHER OPERATING SYSTEMS OF THE CAR TO CAUSE IT TO PERFORM OUTSIDE CLUB CAR SPECIFICATIONS. THE WARRANTY IS LIKEWISE VOID IF THE CAR 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 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 golf car or component thereof that CLUB CAR deems to be defective. Replacement shall mean furnishing, during the applicable limited warranty period, a new golf car or component thereof which is identical or reasonably equivalent to the warranted product at no cost to the purchaser. Repair shall mean remedying a defect in the golf car or component thereof at no cost to the purchaser during the applicable limited warranty period. If CLUB CAR elects to repair the golf car, 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 golf car or defective component to an authorized CLUB CAR distributor or dealer or send the defective component, freight prepaid, to WARRANTY ADMINISTRATION, CLUB CAR, INC., 4152 Washington Road, P.O. Box 204658, Augusta, Georgia 30917-4658.

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 GOLF CAR OR COMPONENT 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.**

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 GOLF CAR, 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 ADMINISTRATION, 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 golf car beyond factory specifications, including those that affect the weight distribution, stability, or speed of the golf car, can cause serious personal injury or death.

Foreword

Congratulations for having chosen the finest golf car on the market today! Over 30 years of the most advanced development, engineering and field experience known to this industry has gone into the manufacture of your golf car. With your choice of the CLUB CAR Model DS Gasoline or Electric golf car as your personal or fleet vehicle, you have joined a select group of discriminating owners who look for the very best and who have shown their concern for safety, efficiency and long-term lasting value. This owner's manual is designed to instruct you, or anyone you may rent or loan the golf car to, in the safe operation of the CLUB CAR DS Gasoline or Electric golf car. In addition, this manual will acquaint you with the normal preventive maintenance required in order to provide you safe, optimum vehicle performance.

If any repairs or service need to be performed, except as specified in the Periodic Service Schedule, we recommend that they be performed by an authorized CLUB CAR Distributor/Dealer or representative using CLUB CAR OEM parts. Should you require further information, please contact your nearest CLUB CAR Distributor/Dealer who can provide you with technical advice, service, parts, or the CLUB CAR DS Gasoline or Electric Golf Car Maintenance and Service Manual. For the name and address of your nearest CLUB CAR Distributor/Dealer, contact CLUB CAR, INC., P. O. Box 204658, Augusta, Georgia 30917-4658, U.S.A., Telephone: 706-863-3000.

The Club Car Limited Warranty for both individual and fleet vehicles appears in the inside front and back covers of this manual. No other warranties express or implied are contained herein. Your Distributor/Dealer has checked your car(s) prior to delivery to you and will provide you with a completed warranty registration card.

CLUB CAR, INC., shall not be liable for errors contained herein or for incidental or consequential damages which result from the use of the material in this manual.

This manual should be considered a permanent part of this vehicle. It should stay with the vehicle when sold to provide the next owner with important operating, safety, and maintenance information.

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Safety Details:

It is important to note that some statements throughout this manual are preceded by the words **DANGER**, **WARNING**, **CAUTION** or **NOTE**. We recommend that you take special notice of these safety procedures for your protection. Safety procedures are essential and must be followed.

WARNING:

This instruction manual should be read completely and carefully before attempting to drive or service this car. Failure to follow the instructions in this manual could result in severe personal injury or death.

NOTE: If this vehicle is equipped as a Fairway Villager four-passenger vehicle, read special instructions on pages 40 and 41.

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 easier or clearer.

The safety procedures listed below must be followed whenever the car is being repaired or serviced. Other specific warnings appear throughout this manual.

WARNING:

Only trained people should repair or service this car. Everyone doing even simple repairs or service should follow the correct procedures and obey the warnings listed in this manual as well as the maintenance and service manual.

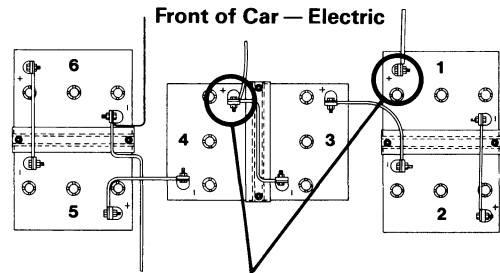
Always wear safety glasses or eye protection when servicing the car.

Remove key, place forward and reverse lever in neutral (straight up position) and disconnect the battery or batteries before working on car.

Always use insulated tools when working around batteries or electrical connections.

Improper use of this vehicle or the failure to maintain it could result in decreased vehicle performance or severe personal injury.

Any modification or change to the vehicle which affects the stability or increases the speed beyond the factory specifications could result in severe personal injury or death.



Remove these battery cables before working on electric car.

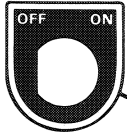
DANGER:

Gasoline/Battery Vapors — Flammable — Explosive — Do not smoke. Keep sparks and flames away from the area of the car. Only service in well-ventilated area.

Gasoline engines produce carbon monoxide which is an odorless, deadly poison. **DO NOT OPERATE IN AN ENCLOSED AREA WITHOUT PROPER VENTILATION.**

If any of the warning labels become damaged, have been removed or cannot be easily read, they should be replaced immediately. Contact your CLUB CAR Distributor/Dealer.

DS Gas Vehicle Feature



**ON-OFF LABEL
(UNDER KEY SWITCH)**

**GOLF ETIQUETTE LABEL
(ON CENTER DASH)**

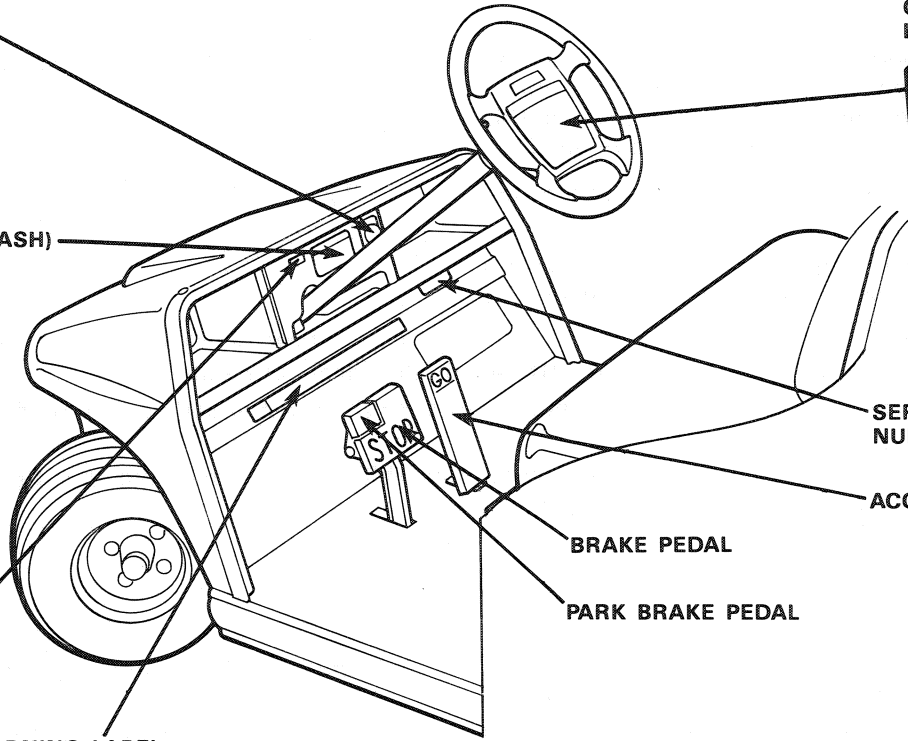
- PRACTICE GOLF ETIQUETTE**
- Observe club rules.
 - Do not go off cart paths when possible.
 - Keep proper distance from greens.
 - Retrace divots.
 - Repair ball marks on greens.
 - Rake sand traps.
 - Allow faster players to play through.
 - Help speed up play.
 - Dispose of litter properly.

OIL WARNING LIGHT

SAFETY WARNING LABEL

OPERATING INSTRUCTIONS LABEL (ON STEERING WHEEL)

- OPERATING INSTRUCTIONS**
- Read owner's manual prior to operation.
 - Study and understand controls. Be sure everyone is seated.
 - Before driving, read safety warnings located above pedals.
 - Make sure wheels are turned in desired direction.
 - Turn key to ON position and be sure nothing is in your path.
 - Select direction by placing shift lever in desired position:
F - Forward N - Neutral R - Reverse
 - Vehicle will start moving when accelerator is pushed.
 - Slowly push accelerator pedal to increase speed. Park brake will release when accelerator pedal is pushed.
 - To stop, release accelerator pedal and push brake pedal.
 - After stopping, firmly push park brake until it locks.
 - Remove key and place shift lever in the straight up neutral position when not in use.



SERIAL NUMBER

ACCELERATOR PEDAL

BRAKE PEDAL

PARK BRAKE PEDAL

- | | | | | |
|---|---|--|---|---|
| <p>WARNING</p> <p>Failure To Follow These Instructions Can Cause Severe Injury Or Death.</p> | <ul style="list-style-type: none"> • Read Operating Instructions Before Using Vehicle. • Never Stand In Front Of Or Behind Vehicle. • Vehicle Should Be Driven Only In Specified Areas By Trained Persons. | <ul style="list-style-type: none"> • Do Not Use On Public Roads. • Only Two Persons Per Seat. • Operate Vehicle From Drivers Side Only • Do Not Start Vehicle Until All People Are Seated. | <ul style="list-style-type: none"> • Remain Seated & Hold On In Moving Vehicle. • Keep Arms, Legs, Feet & Body Inside Vehicle. • Stop Vehicle Before Changing Direction. Buzzer Will Sound In Reverse. • Drive Slowly In Turns. | <ul style="list-style-type: none"> • Drive Slowly Straight Up & Down Slopes. • Set Park Brake Before Leaving Vehicle. • Remove Key When Vehicle Is Not In Use. • Place Shift Lever In Neutral When Vehicle Is Not In Use. |
|---|---|--|---|---|

Identification

HOT MANIFOLD AND MUFFLER LABEL (ON BODY)

GASOLINE TANK DANGER LABEL (ON BODY)

WARNING HOT manifold and muffler can cause severe burns.

PERIODIC SERVICE SCHEDULE (ON INTAKE BOX)

DANGER

- Gasoline — Extremely Flammable.
- Keep Heat, Sparks And Open Flame Away From Fuel Tank And Fuel Lines
- Do Not Add Fuel While Engine Is Running Or Hot.
- Service By Trained Personnel.

WARNING

MOVING PARTS

MOVING PARTS DECAL (ON FRAME AND UNDER ACCESS DOOR ON BODY)

ClubCar

Periodic Service Schedule:

Service	Regular Interval
1. Check Oil Level	Every 100 Hours
2. Check Fuel Filter	Every 100 Hours
3. Check Spark Plugs	Every 100 Hours
4. Change Air Filter	Every 100 Hours
5. Check Tire Pressure	Every 100 Hours
6. Replace Fuel Filter	Every 100 Hours
7. Check Brake Shoes	Every 100 Hours
8. Check Fluid Levels	Every 100 Hours

WARNING

Customer In Factory Adjusted For 12-14 mph. Do not tamper with adjustment. To do so will void the warranty. If any change in engine or component, it could result in severe personal injury.

FORWARD-REVERSE LEVER



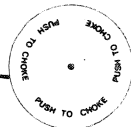
FRAME GROUND WARNING LABEL (ON FRAME)

WARNING

Negative Frame Ground. Do Not Contact Positive (+) Battery Post Or Cable To Frame As This Can Cause Battery Explosion, Electrical Shocks, And Burns.

OIL FILL

CHOKE



NEUTRAL LOCK-OUT CAM

DANGER LABEL (ON BODY)

DANGER/POISON

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

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

DS Electric Vehicle Feature

GOLF ETIQUETTE LABEL (ON CENTER DASH)

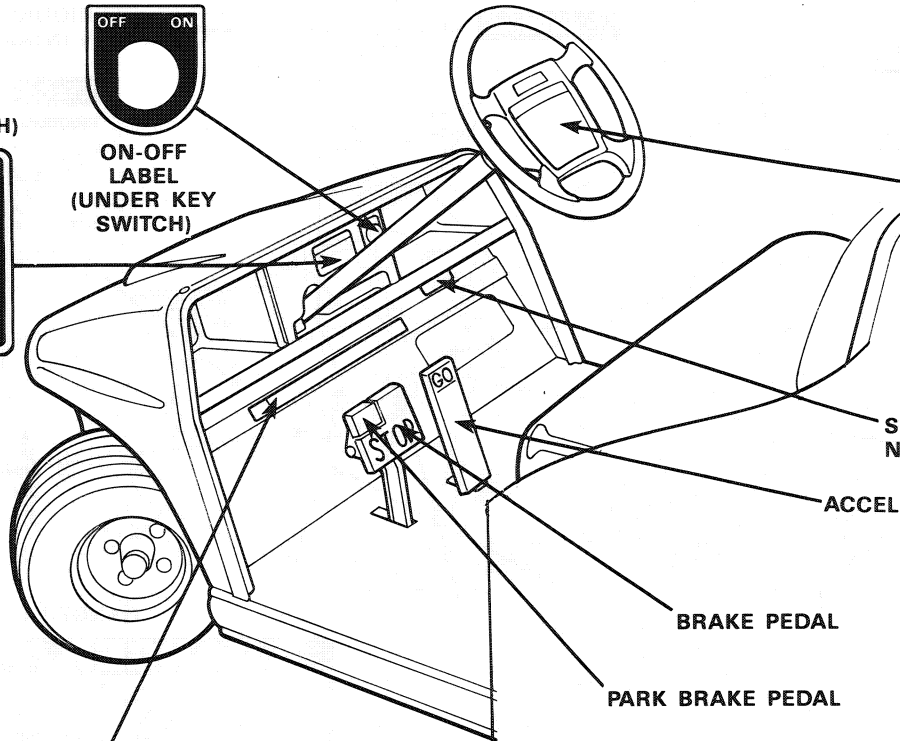
- PRACTICE GOLF ETIQUETTE**
- Observe club rules.
 - Drive on golf car paths when possible.
 - Keep proper distance from greens.
 - Replace divots.
 - Repair ball marks on greens.
 - Rake sand traps.
 - Allow faster players to play through.
 - Help speed up play.
 - Dispose of litter properly.



ON-OFF LABEL (UNDER KEY SWITCH)

OPERATING INSTRUCTIONS LABEL (ON STEERING WHEEL)

- OPERATING INSTRUCTIONS**
- Read owner's manual prior to operation.
 - Study and understand controls. Be sure everyone is seated.
 - Before driving, read safety warnings located above pedals.
 - Make sure wheels are turned in desired direction.
 - Turn key to ON position and be sure nothing is in your path.
 - Select direction by placing shift lever in desired position:
F - Forward N - Neutral R - Reverse
 - Vehicle will start moving when accelerator is pushed.
 - Slowly push accelerator pedal to increase speed. Park brake will release when accelerator pedal is pushed.
 - To stop, release accelerator pedal and push brake pedal.
 - After stopping, firmly push park brake until it locks.
 - Remove key and place shift lever in the straight up neutral position when not in use.



SERIAL NUMBER

ACCELERATOR PEDAL

BRAKE PEDAL

PARK BRAKE PEDAL

SAFETY WARNING LABEL

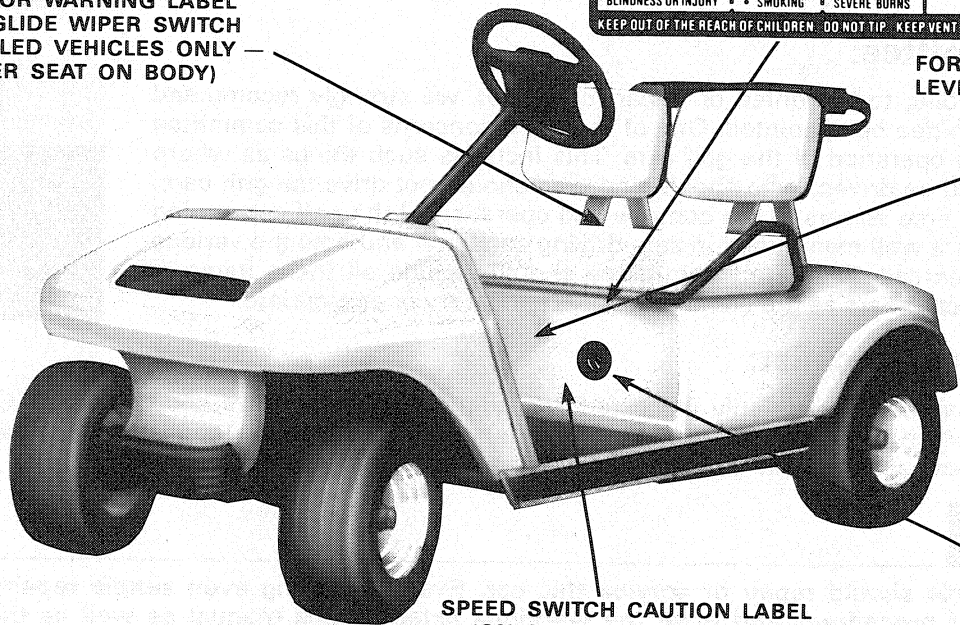
<p>WARNING</p> <p>Failure to Follow These Instructions Can Cause Severe Injury Or Death</p>	<ul style="list-style-type: none"> • Read Operating Instructions Before Using Vehicle. • Never Stand in Front Of Or Behind Vehicle. • Vehicle Should Be Driven Only in Specified Areas By Trained Persons. 	<ul style="list-style-type: none"> • Do Not Use On Public Roads. • Only Two Persons Per Seat. • Operate Vehicle From Drivers Side Only • Do Not Start Vehicle Until All People Are Seated. 	<ul style="list-style-type: none"> • Remain Seated & Hold On in Moving Vehicle. • Keep Arms, Legs, Feet & Body Inside Vehicle. • Stop Vehicle Before Changing Direction. Buzzer Will Sound in Reverse. • Drive Slowly in Turns. 	<ul style="list-style-type: none"> • Drive Slowly Straight Up & Down Slopes. • Set Park Brake Before Leaving Vehicle. • Remove Key When Vehicle is Not In Use. • Place Shift Lever in Neutral When Vehicle is Not In Use.
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Identification

WARNING HOT RESISTORS CAN CAUSE SEVERE BURNS.

RESISTOR WARNING LABEL
(ON V-GLIDE WIPER SWITCH
CONTROLLED VEHICLES ONLY
UNDER SEAT ON BODY)

DANGER LABEL (ON BODY)



FORWARD-REVERSE
LEVER

FUSE LINK

SPEED SWITCH CAUTION LABEL
(ON SPEED SWITCH CASE)

CAUTION

- DO NOT OPERATE VEHICLE WITHOUT COVER IN PLACE.
- DO NOT DIRECT WATER STREAM AT THIS SWITCH.

CHARGER
RECEPTACLE

Model Identification:

The serial number of your CLUB CAR is stamped on a data plate mounted on the frame directly under the right dash (Example: A9301-123456 for Electric or AG9301-123456 for Gas).

NOTE: Always mention this number when ordering parts or making inquiries (See Figure 1).

Safety Committee:

If the golf car is going to be rented or is part of a fleet, we strongly recommend that a safety committee be appointed. One of the main concerns of this committee should be the safe operation of the golf cars. This includes such things as where the golf cars should be driven, who should and who should not drive the golf cars, instructing all first time drivers in the controls and operation of the golf car, seeing that the golf cars are well maintained in safe driving condition and how the various rules are to be enforced. The safety committee should include all these items at a minimum and such others as the committee feels necessary or appropriate.

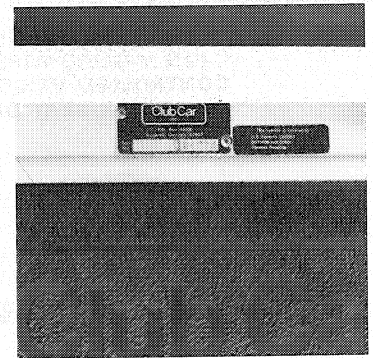


Figure 1

Pre-Operation Checklist:

Your CLUB CAR has been thoroughly inspected and adjusted at the factory and by your CLUB CAR Distributor/Dealer. However, when receiving your new CLUB CAR(s) you should become familiar with its controls and operation and carefully inspect each car to be satisfied with its condition before accepting delivery.

WARNING:

Only trained people should repair or service this car. Everyone doing even simple repairs or service should follow the correct procedures and obey the warnings listed in this manual as well as the maintenance and service manual.

Always wear safety glasses or eye protection when servicing the car.

Use this checklist as a guide to inspect your car. Any problems must be corrected by your Distributor/ Dealer or a trained mechanic.

Visual Inspection - Look for the following on your vehicle:

General:

All the parts should be in place and properly installed. Be sure that all nuts, bolts and screws are tight. On gas car, check all hose clamps for tight fit as well as starter belt tightness.

Warning Labels:

Check that all warning and operation labels are in place (See Pages 4 thru 7).

Tires:

Check tire pressure. It should be 18-20 psi for DS Electric and 12-14 psi for DS Gas.

DS Electric Batteries:

Check the electrolyte level to insure it is at its proper level (See Page 32). Check the battery posts for corrosion. All wire connectors should be held firmly in place.

DS Electric Speed Switch:

Be sure speed switch cover is in place prior to operating vehicle.

DS Gas Engine:

Check for proper engine oil level (See Page 25).

DS Gas Fuel:

Check fuel level (See Fueling Instructions, Page 38).

CAUTION:

Be sure the plastic has been removed from the bottom of the seat before operating vehicle. Failure to do so may result in a fire or property damage.

Performance Inspection - After you have familiarized yourself with the car's controls (See Page 10) and have read and understood the driving instructions (See Page 15), take the car for a short test drive. Check the following:

Brakes:

Be sure that the brakes work properly. Both rear wheels should brake properly and the pedal should not go more than halfway to the floor. If it does, have brakes adjusted.

Park Brake:

The park brake should lock the wheels when latched and should release when the accelerator or brake pedal is pushed.

Steering:

The car should be easy to steer and should not have free play in the steering wheel.

Accelerator Pedal:

As the accelerator pedal is pushed, the engine or electric motor should start and the car should come smoothly up to full speed. When the pedal is released it should return to the original position and the engine or motor should stop gradually.

Governor:

Check the speed of the car. It should run 12-14 MPH on a level surface. The DS Electric runs half speed in reverse.

General:

Listen for any unusual noises such as squeaks or rattles. Check the car's ride and performance. Have a trained mechanic investigate anything unusual.

WARNING:

Any modification or change to the vehicle which affects the stability or increases the speed beyond the factory specifications could result in severe personal injury or death.

Controls:

WARNING:

If renting or loaning this car, make sure that the driver is familiar with all controls and operating instructions before allowing the car to be driven.

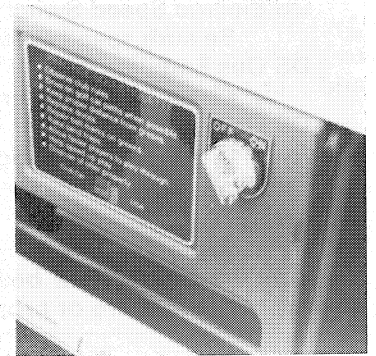


Figure 2

Key Switch - The key switch is mounted on the dash to the right of the steering column (See Figure 2). It has two (2) positions, "On" and "Off" which are clearly labeled. Remove key in the "Off" position only.

WARNING:

Turn key switch to "Off" and remove key when car is not in use to avoid unintentional starting of the car.

Forward-Reverse Control - The forward-reverse shift lever is located below and to the right of the driver's right knee on the seat support panel (See Figure 3). The lever has three (3) distinct positions: F (forward), N (neutral), and R (reverse). Rotate the lever toward the driver (F) to run the car in forward and toward the passenger (R) to run the car in reverse. When the lever is in the straight up or neutral (N) position, the car will not run and the engine will stop if shifted to this position while running. The DS Electric runs at half speed in reverse.

WARNING:

Do not shift forward and reverse lever while car is in motion. Always bring car to a full stop before shifting lever to avoid injury to an unsuspecting passenger and damage to the car.

Turn key switch to "Off" and place shift lever in neutral when leaving car to avoid unintentional starting of the car.

Buzzer will sound as a warning when car is in reverse.

Accelerator Pedal - The accelerator pedal is the pedal on the right with the word "GO" molded in it (See Figure 4). When the key switch is "On," the shift lever is in either forward or reverse and the accelerator pedal is pushed, the parking brake will be automatically released and the car will begin moving in the preselected direction (forward or reverse). As the accelerator pedal is pushed further, the speed will increase.

The accelerator pedal differs from that of an automobile in the following way: Depressing the accelerator will release the parking brake if engaged. Depressing the accelerator automatically starts the vehicle moving. Each time the accelerator pedal is released, power to the motor will be cut off or engine will stop running.

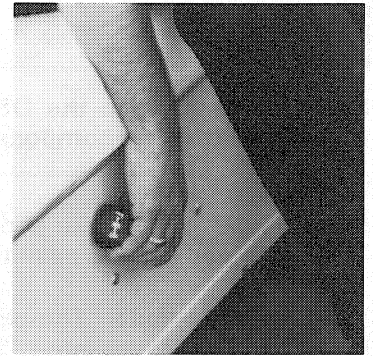


Figure 3

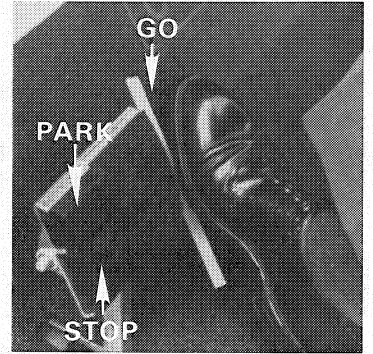


Figure 4

WARNING:

Do not tamper with the DS Gas car's governor. To do so will void the limited warranty, result in damage to engine and other components and could result in severe personal injury due to unsafe speeds.

Brake Pedal - The brake pedal is the large pedal on the left with the word "STOP" molded in it (See Figure 5). To slow or stop the car, push the brake pedal with your right foot.

Parking Brake Pedal- The parking or park brake pedal is the small raised portion in the upper left corner of the brake pedal with the word "PARK" molded in it (See Figure 5). The words "Park Brake" are marked above this pedal. To set the park brake, push the brake pedal firmly and tilt the park brake portion of the pedal forward with foot (See Figure 6).

The park brake pedal will release when the accelerator or brake pedal is pushed. The parking brake has multiple locking positions and should be firmly pressed to prevent vehicle from rolling.

WARNING:

The park brake should be firmly depressed before leaving the golf car to prevent the car from rolling.

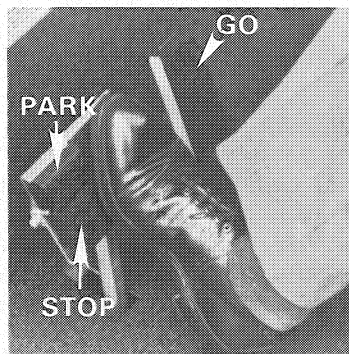


Figure 5

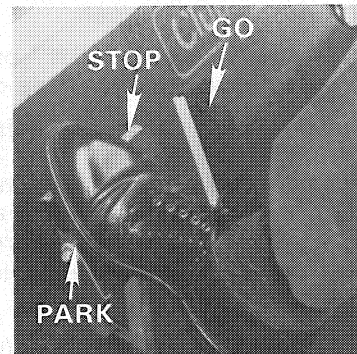


Figure 6

Controls — DS Gas:

Choke - The choke is located below and to the left of the driver's left knee on the seat support panel (See Figure 7). If on a cool morning the car is hard to start, simply push in the choke cover with your left hand to activate the choke. Release the choke after the engine starts and runs smoothly.

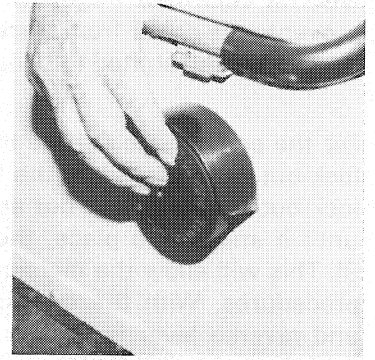


Figure 7

Oil Light - The DS Gasoline golf car is equipped with a dash mounted oil light above the steering column (See Figure 8). When the oil light is on, it indicates low engine oil. Oil should be added before further use. The car should never be driven if the oil light comes on and stays on. If the oil light goes on and off, you may proceed, but add oil at the first opportunity. If the oil level is correct and light stays on, have a trained and experienced mechanic check the car.

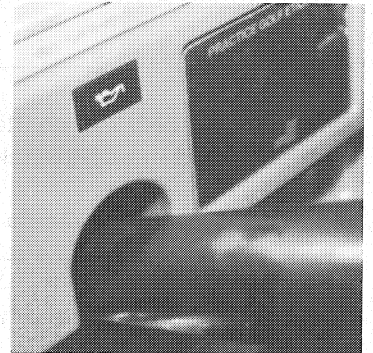


Figure 8

Neutral Lock-Out - The DS Gasoline golf car has a neutral lock-out circuit that prevents the driver from starting the car in neutral. If the car is started in forward or reverse and shifted to neutral the engine stops running.

For the convenience of the trained and experienced mechanic, there is a neutral lock-out cam located on the back of the forward and reverse lever. If the neutral lock-out cam is pulled out approximately $\frac{3}{8}$ of an inch and rotated one half turn until it snaps into place, the cam will be in the SERVICE position (See Figure 9). This will allow the mechanic to run the car in neutral for certain maintenance procedures. With the cam in this position the car will not run if the forward and reverse lever is placed in the forward or reverse positions. To put the car back into the OPERATE position, pull the cam out approximately $\frac{3}{8}$ of an inch and rotate it one half turn until it snaps back into place (See Figure 10).

WARNING:

With cam in SERVICE position, car may move suddenly if forward and reverse lever is shifted or accidentally bumped while engine is running.

Block front and rear wheels to prevent vehicle movement.

NOTE: If car will not run, check to be sure neutral lock-out cam is in OPERATE position.

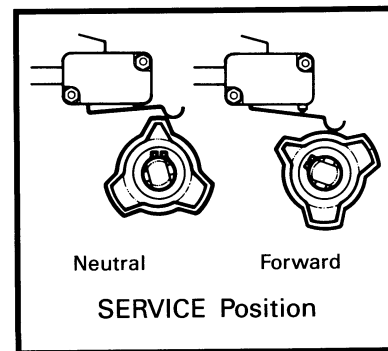


Figure 9

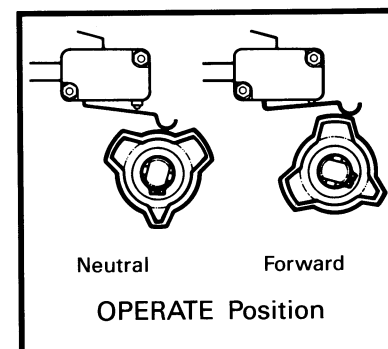


Figure 10

Driving Instructions:

No one should drive the golf car without first being instructed in the proper operation and use of the golf car controls. An experienced operator should accompany each first time driver on a test drive before they operate the golf car alone. Only licensed drivers should be allowed to drive this vehicle. Do not drive under the influence of alcohol, drugs or medications.

WARNING:

If renting or loaning this golf car, make sure the driver is familiar with all controls and operating procedures before allowing the car to be driven.

This car is not specially equipped for handicapped persons. Be sure all persons can properly operate the car prior to allowing them to drive.

To insure safe operation of the DS golf car, follow all of the procedures listed below exactly and in order. Read and understand all instructions prior to driving the car.

Starting the Car:

1. Enter the car.
2. Be sure everyone is seated.
3. Study and understand controls.
4. Read safety warnings located above pedals.
5. Make sure wheels are turned in desired direction.
6. Be sure nothing is in your path.
7. Turn key to "On" position.
8. Select direction by placing shift lever in desired position F = forward or R = reverse.
9. Slowly push accelerator pedal. The park brake pedal will release and the engine or electric motor will start. Push accelerator further and the car will move and the speed will increase as the accelerator is depressed until governed speed is reached. Electric vehicle has no governed speed. Operator must control speed when going down hill.

WARNING:

No more than two people should be on the vehicle at one time.

Stop car before shifting forward and reverse lever. Failure to do so could result in injury to an unsuspecting passenger and damage to the golf car.

A buzzer will sound as a warning when the car is in reverse.

When Driving The Car:

- **Operate the car from the driver's seat only.**
 - **Remain seated in moving car and hold on to prevent falls.**
 - **Keep arms, legs, feet and entire body inside car to prevent getting them caught between the golf car and the ground or other objects.**
 - **Drive slowly in turns and drive slowly straight up and down slopes to prevent turning the vehicle over.**
 - **Reduce speed for poor driving conditions such as wet grass or rough terrain to avoid losing control of the car.**
 - **Do not use on public roads. This car is not designed or intended for street use and should not be licensed for use on public roads.**
 - **Obey all local rules concerning golf cars.**
 - **Cars should be driven only in specified areas by trained people.**
-

Stopping the Car:

1. To stop the car, release the accelerator pedal and push the brake pedal with your right foot.

CAUTION:

When stopped on a hill, use the brake pedal to hold your position, not the accelerator pedal.

WARNING:

Driving through deep water may affect the brakes. Check their effectiveness by pressing the brake pedal gently. If the car does not slow down at the normal rate, continue to apply the brakes gently until they dry out and normal performance returns.

Parking and Leaving the Car:

1. After stopping the car, firmly push park brake pedal until it locks. This will prevent the car from rolling.
2. Turn the key to "Off" and place shift lever in the straight up "neutral" position when leaving the car. This avoids unintentional starting of car. Remove key when car is not in use.

WARNING:

To avoid being struck by vehicle, do not stand in front of or behind vehicle.

Towing and Transporting:

Towing - All CLUB CARS are equipped with tow bar attaching points both front and rear. For breakdown towing and single-car towing, a light-duty tow bar is available. For multi-car towing, a heavy-duty tow bar is available. Observe all of the following warnings and precautions when towing.

WARNING:

Never tow a golf car on public streets or highways.

Use only approved CLUB CAR tow bars.

Turn key switch to "Off" and place shift lever in neutral when car is in tow.

Extreme caution should be used when towing any golf car.

Do not exceed five (5) miles per hour towing speed.

Do not tow more than one (1) car with another CLUB CAR.

If more than one car must be towed, a properly fitted vehicle with tow hitch height of 11 inches should be used. Only heavy-duty tow bars should be used for multi-car towing. Never tow more than five (5) cars at one time.

Do not allow people in cars being towed.

Avoid sudden starts, stops and tight turns.

Transporting On A Trailer - If your golf car must be transported over long distances or on public highways, it should be done on an approved trailer observing all the following warnings and precautions.

WARNING:

For use on public roads the trailer must meet all federal, state and local requirements such as taillights, brake lights, etc.

WARNING:

Always use an approved trailer that has a load rating of 1200 lbs. per golf car. (Example: A 2-car trailer should be rated at $2 \times 1200 = 2400$ lbs.).

The golf car should be securely tied down to the trailer. The golf car's key switch should be off, the shift lever in "neutral" and the park brake firmly applied and locked.

When towing a trailer, normal speeds should be reduced and care should be used when turning a corner due to the added length of the trailer.

Never tow a golf car behind a passenger vehicle or truck unless it is on an approved trailer.

Remove the windshield before transporting a golf car on a trailer.

Storage — DS Gas:

To prepare your golf car for extended off season storage:

WARNING:

Turn key switch to "Off", remove key and place forward and reverse lever in neutral position to avoid unintentional starting of the vehicle.

1. Store in a cool place. This will prevent self discharge of the battery. If the battery appears to be weak, have it charged by a trained mechanic.

WARNING:

Batteries in low state of charge will freeze at low temperatures.

Do not attempt to charge a battery if it is frozen or the case is bulged. Discard battery. Frozen batteries can explode.

- Using a siphon with a suction device (See Figure 11), drain all of the gas out of the tank into an approved gasoline container.

WARNING:

Never attempt to siphon gasoline using a hose without a built-in suction device.
Never attempt to siphon gasoline using your mouth.

DANGER:

Gasoline - Flammable - Explosive - Do Not Smoke. Keep sparks and flames away from area of cars.

Do not attempt to drain gasoline while engine is running or hot.

Store gasoline only in an approved gasoline container in a well-ventilated area. Keep out of reach of children. Keep sparks, fire and flames away from area of gasoline.

Engines produce carbon monoxide which is an odorless, deadly poison. **DO NOT OPERATE IN AN ENCLOSED AREA WITHOUT PROPER VENTILATION.**

- Be sure the tank has been drained and the stored gasoline has been removed from the area. Place the forward and reverse lever in "neutral". Place neutral lock-out cam in the SERVICE position. Turn key to "On". Run the engine until all of the gasoline has been drawn out of the fuel lines and carburetor and engine stalls. Return neutral lock-out cam to the OPERATE position. Turn the key switch to the "Off" position and remove key.
- To protect the engine, remove the spark plug and pour ½ ounce of SAE 10 weight oil into the engine through the spark plug hole. Rotate the engine several times and then reinstall the spark plug.

NOTE: When restarting engine, it may smoke excessively due to the oil added in step 4.

- Increase the tire pressure to 20 psi.
- Grease front suspension and do all quarterly periodic lubrication shown in lubrication chart (See Page 26).

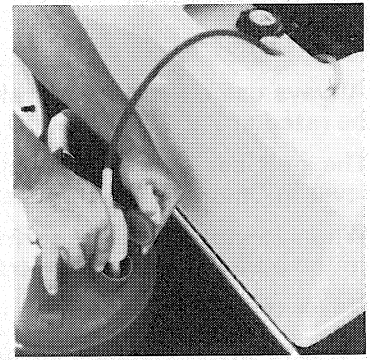


Figure 11

7. Thoroughly clean body, seats and underside of car.
8. Do not latch the park brake. Block the wheels to prevent the car from rolling.

To Return Stored Cars To Service:

1. Fill the gas tank with regular or unleaded gasoline (See Fueling Instructions - Page 38).
2. Readjust tire pressure to 12-14 psi.
3. Perform the pre-operation checks (See Page 8).

Storage — DS Electric:

WARNING:

Turn key switch to "Off", remove key and place forward and reverse lever in neutral position to avoid unintentional starting of the vehicle.

1. Fully charge golf car batteries.

CAUTION:

Batteries in low state of charge will freeze at low temperatures.

WARNING:

Do not attempt to charge a battery if it is frozen or the case is bulged. Discard battery. Frozen batteries can explode.

2. Wash off any corrosion around the terminals with a solution of baking soda and water. Rinse. (NOTE: Do not allow this solution to enter the battery.) Let the terminals dry and coat them with grease or protective spray.
3. Store in cool, dry place. This will prevent self discharge of the batteries.
4. Recharge batteries every 6-8 weeks, as necessary (See Page 36).
5. Increase the tire pressure to 20 psi.
6. Grease front suspension and do all quarterly periodic lubrication shown in lubrication chart (See Page 28).

CAUTION:

When washing the vehicle, do not direct water stream at speed switch.

7. Thoroughly clean body, seats and underside of car.
8. Do not latch the park brake. Block the wheels to prevent the car from rolling.

To Return Stored Cars To Service:

1. Fully charge golf car batteries (See Page 36).
2. Readjust tire pressure to 18 psi.
3. Perform the pre-operation checks (See Page 8) before returning the car to service.

Maintenance:

General Information - To be sure you have a trouble-free car, it is very important to follow an established preventive maintenance program. This is the least expensive maintenance requirement. Preventive maintenance means regularly scheduled services which include certain maintenance procedures that are performed on the cars even though the cars are functional. A good preventive maintenance program can prevent more expensive repairs from being required. Any car that is not functioning correctly should be removed from use until it is properly repaired.

Contact your local CLUB CAR Distributor/Dealer to perform all repairs and the semi-annual and annual periodic service.

WARNING:

Only trained people should repair or service this car. Everyone doing even simple repairs or service should follow the correct procedures and obey the warnings listed in this manual as well as the maintenance and service manual.

Turn key switch to "Off", remove key, and place forward and reverse lever in neutral position prior to servicing.

Disconnect batteries as described on Page 3.

Always wear safety glasses or eye protection when servicing this car.

Do not wear loose clothing and remove jewelry, such as rings, watches, chains, etc., before servicing vehicle.

Always use insulated tools when working around batteries or electrical connections.

WARNING:

Moving parts - Do not attempt to service the car with engine running.

Hot - Do not attempt to service hot motor, engine, resistors or exhaust system. Can cause severe burns.

Remove spark plug wire to avoid unintentional starting of engine when servicing car.

Periodic Service Schedule:

Regular Interval	Service	Vehicle		
		Gas	Elec.	
Daily Service by Owner	Check steering and linkages	●	●	
	Check brake operation	●	●	
	Check to be sure all warning labels are in place (see Pages 4 thru 7)	●	●	
	Check tires for wear and damage	●	●	
	Check engine for proper operation	●		
	Check accelerator/governor linkage for free movement and return	●	●	
	Check reverse warning buzzer for proper operation	●	●	
	Check engine air intake screen to be sure it is not clogged	●		
	Check to be sure park brake latches and releases properly	●	●	
	Charge batteries after each use		●	
	Check charger plug and receptacle for damage and fit		●	
	Weekly Service by Owner	Check speed of vehicle	●	●
		Clean battery terminals and wash dirt off battery case	●	●
Wash engine and underside of car		●	●	
Check all electrical wires and ground wires for tightness or damage		●	●	
Inspect car for loose hardware and tighten as required		●	●	
Check battery electrolyte level			●	
	Check all daily items listed above	●	●	

Regular Interval	Service	Vehicle	
		Gas	Elec.
Monthly Service by Owner	Check exhaust system for leaks	●	
	Check brake pedal play	●	●
	Check tire pressure and adjust to 18 psi for DS Electric, 12-14 psi for DS Gas	●	●
	Check air intake expansion chamber for leaks	●	
	Check engine oil level	●	
	Check fuel tank, lines, cap, pump and carburetor for fuel leakage	●	
	Check brake cables for damage and replace as required	●	●
	Check all daily and weekly items listed above	●	●
Quarterly Service by Owner or Trained Personnel	Check resistor assembly for broken coils or loose connections (V-Glide Wiper Switch Controlled Vehicles Only)		●
	Do quarterly lubrication as shown in lubrication chart on Pages 27 or 29	●	●
	Check all daily, weekly and monthly items listed above	●	●
Semi-Annual Service by Trained Personnel Only (Every 100 Rounds or every 50 hours of operation)	Test batteries		●
	Check, clean and adjust brakes	●	●
	Check front wheel alignment	●	●
	Check spark plug wire and boot for damage and proper routing	●	
	Check head and exhaust header/pipe flange connection gaskets for leaks	●	
	Check starter/generator belt tension	●	
	Check condition of muffler	●	
	Inspect drive belt	●	
	Check all wire insulation for cracks and worn spots	●	●
	Check all daily, weekly, monthly and quarterly items listed above	●	●
Annual Service by Trained Personnel Only (Every 200 Rounds or every 100 hours of operation)	Check air filter (six months under dusty conditions)	●	
	Inspect starter/generator brush length	●	
	Inspect, clean and regap spark plug	●	
	Do annual lubrication as shown in lubrication chart on Pages 27 or 29	●	●
	Check accelerator switch adjustment		●
	Check motor brushes and commutator		●
	Check all items listed above	●	●
By Trained Personnel Only (Two Years or 300 Hours)	Replace fuel filters	●	
	Change air filter	●	
	Change oil and oil filter	●	
	Inspect starter/generator brush length (blow air under pressure to remove carbon)	●	

WARNING:

If your periodic service inspection reveals any problems, do not operate until repairs are made. Failure to make necessary repairs could result in fire, severe personal injury or death.

Engine Oil — DS Gas:

Engine oil level should be checked at least monthly. (See Figure 12.) The oil light on the dash should warn you if your oil is getting low (See Figure 12).

CAUTION:

Engine must be in level position. Remove oil level dipstick by pulling from crankcase and clean. Check oil by inserting the dipstick and fully seating gauge into oil filler hole. If oil level is at or below "Add" mark on gauge, add oil until level is between "Add" and "Full" (safe level). Do not overfill with oil. When oil is at proper level, reinsert dipstick.

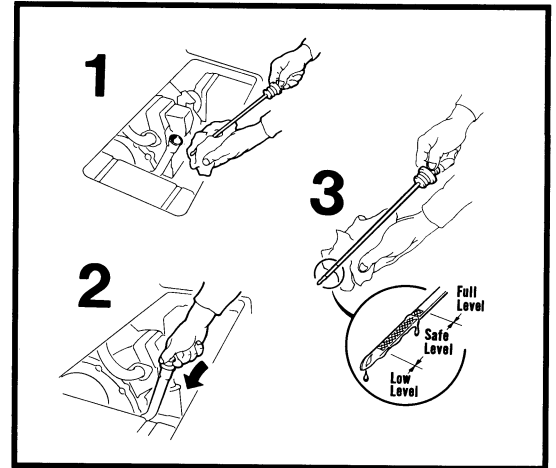


Figure 12

Capacities:

	<u>DS Gas</u>	<u>DS Electric</u>
Engine Crankcase without Filter	32 oz.	
*Engine Crankcase with Filter	38 oz.	
Transmission	20 oz.	
Drive Unit	22 oz.	22 oz.
Gasoline Tank	7 U.S. Gal.	
Tire Pressure	12-14 psi	18-20 psi

*NOTE: Actual total capacity of engine crankcase is 44 oz. Amount to be added is reduced to compensate for residual oil.

Periodic Lubrication Schedule — DS Gas:

Regular Interval	Service	Recommended Lubricant
Quarterly by Owner or Trained Personnel	1. Brake shaft bearing	Dry Moly Lube CLUB CAR part #1012151
	2. Brake linkage and pivots	Dry Moly Lube CLUB CAR part #1012151
	3. Accelerator push rod pivots and shifter cable pivots	Dry Moly Lube CLUB CAR part #1012151
	4. Front suspension (5 fittings)	Chassis Lube
Annually by Trained Personnel Only	5. Check/fill drive unit to plug level	22 oz. SAE 30 API Class SE, SF or SD Oil
	6. Check/fill transmission to plug level	80-90 WT. API Class GL-3 or 80-90 WT. AGMA Class 5 EP Gear Lube
	7. Inspect front wheel bearings and repack as necessary	Chassis Lube
First Change — 100 Hours Additional Change — 2 years or 300 Hours of Operation by Trained Personnel Only	8. Change engine oil and oil filter	32 oz. without filter, 38 oz. with filter SAE 30 above 32° F (0° C) or SAE 5W20 below 32° F (0° C) Classification SF, SE or SD

Periodic Lubrication Chart — DS Gas:

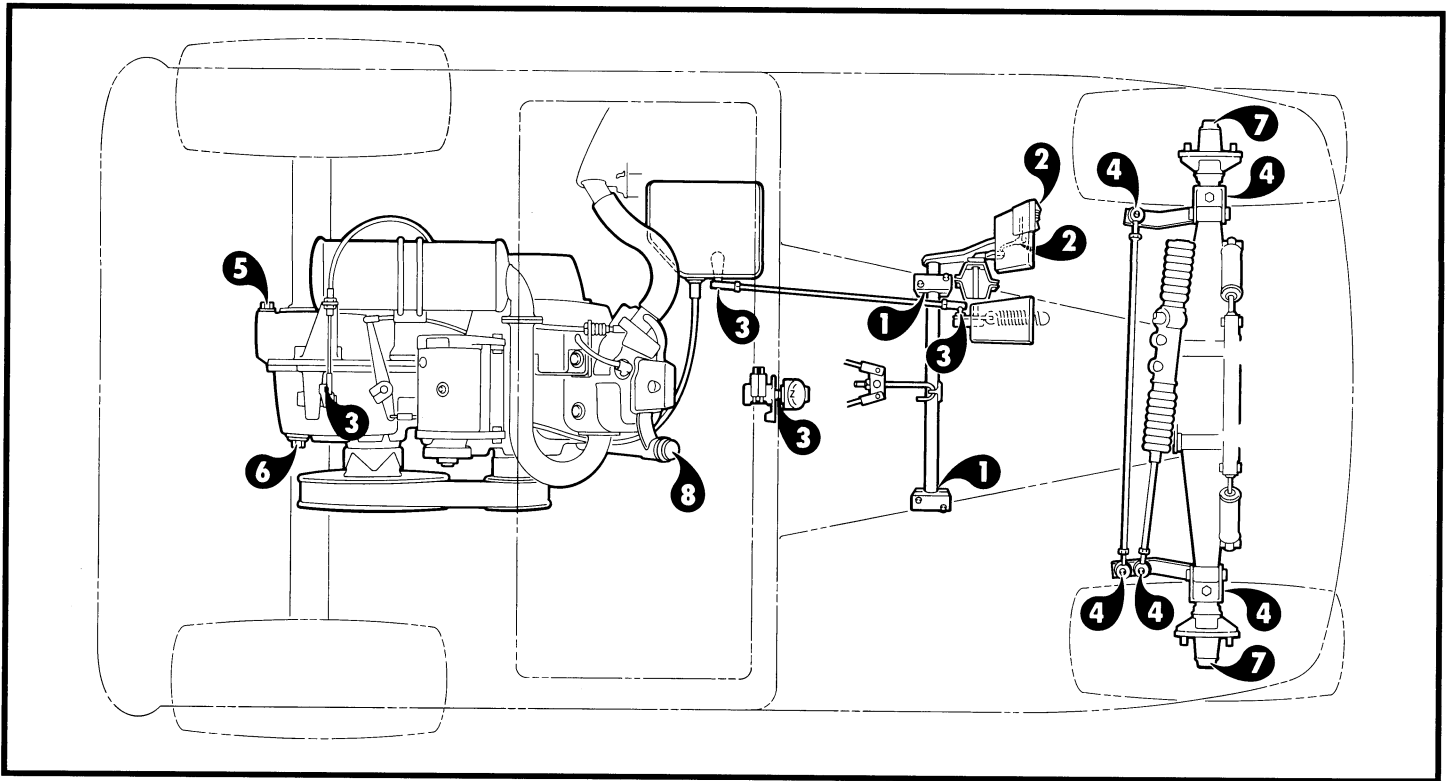


Figure 13

Periodic Lubrication Schedule — DS Electric:

Regular Interval	Service	Recommended Lubricant
Quarterly by Owner or Trained Personnel	1. Brake shaft bearing	Dry Moly Lube CLUB CAR part #1012151
	2. Brake linkage and pivots	Dry Moly Lube CLUB CAR part #1012151
	3. Accelerator push rod pivots	Dry Moly Lube CLUB CAR part #1012151
	4. Front suspension (5 fittings)	Chassis Lube
Annually by Trained Personnel Only	5. Check/fill drive unit to the level plug	22 oz. SAE 30 API Class SE, SF or SD Oil
	6. Inspect front wheel bearings and repack as necessary	Chassis Lube

Periodic Lubrication Chart — DS Electric:

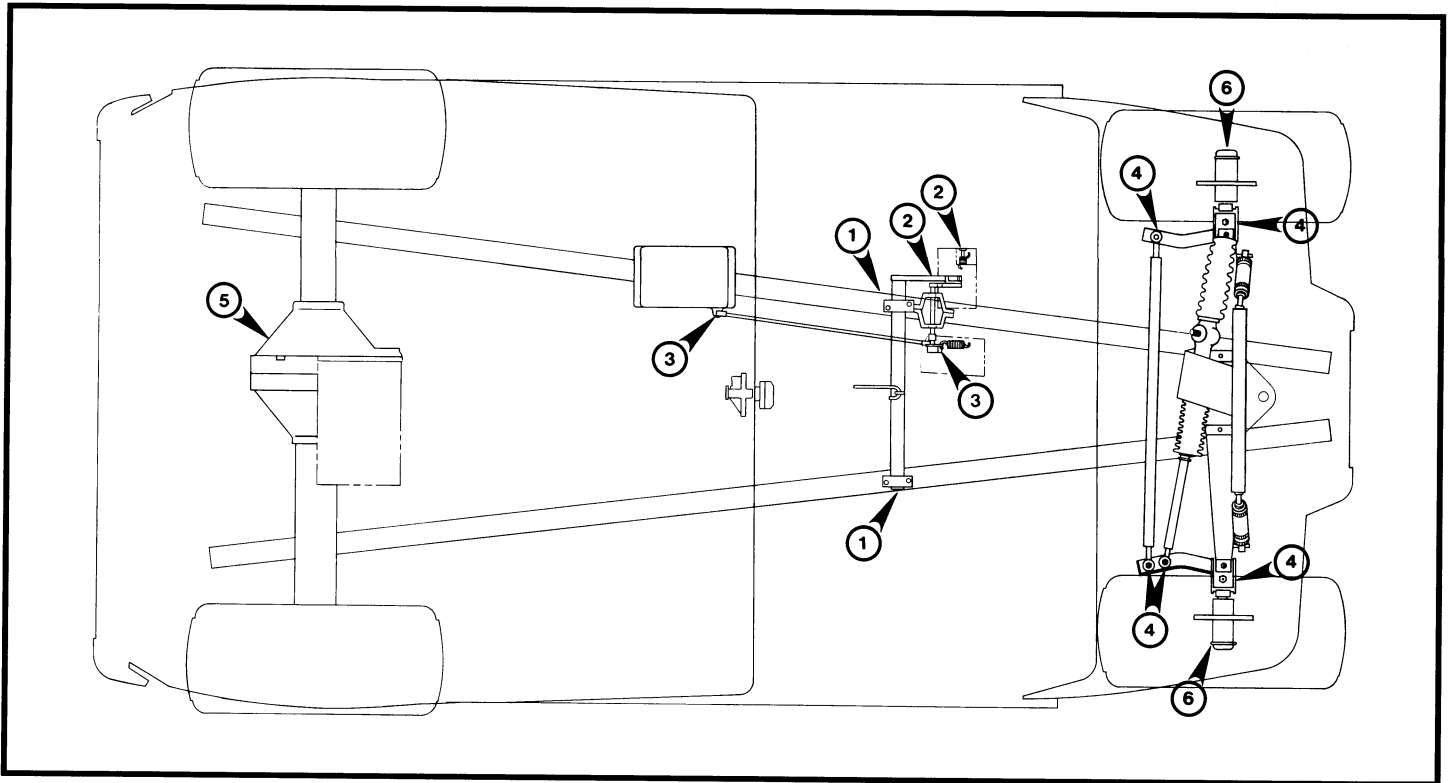


Figure 14

Battery — DS Gas:

WARNING:

Always wear safety glasses or eye protection when servicing the car.

Always use insulated tools when working around batteries or electrical connections.

DANGER:

Battery - Explosive Gases. Keep sparks, flames, cigarettes away. Ventilate when charging in an enclosed space.

Poison - Contains acid - Causes severe burns - Avoid contact with skin, eyes or clothing.

Antidotes:

External - Flush with water. Call physician immediately.

Internal - Drink large quantities of milk or water, follow with milk of magnesia or vegetable oil. Call physician immediately.

Eyes - Flush with water for 15 minutes. Call physician immediately.

The battery in the DS Gasoline is a 12 volt, maintenance free battery that does not require periodic watering of the battery (See Figure 15).

Any corrosion around the positive (+) or negative (-) terminals should be washed off with a solution of baking soda and water. Rinse solution from batteries. Be sure terminals are tight. Let the terminals dry and then spray them with CLUB CAR battery protector spray, part #1014305.

Be sure battery holddowns are properly tightened. Torque to 9-14 in.-lbs. A loose holddown may allow the battery to become damaged from vibration or jarring. A holddown that is too tight may buckle or crack the battery case.

If battery appears weak, have it charged by a trained mechanic.

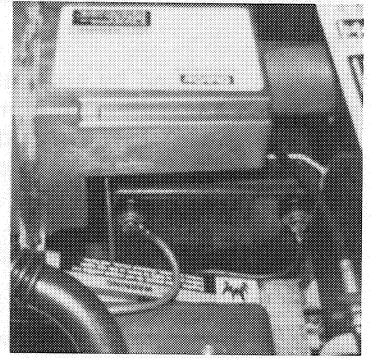


Figure 15

WARNING:

Do not jump start a vehicle with a "dead" battery using another battery and jumper cables.

This vehicle is equipped with a starter/generator. It is not designed to charge a "dead" battery. If vehicle battery has become completely discharged, it must be charged using a properly rated automotive type charger.

Batteries — DS Electric:

General

Power is supplied by six batteries of 6 volts each. Golf car batteries are deep cycle batteries, especially built for a golf car application. Automotive batteries should never be used. New batteries will not deliver their full range until they have been run and recharged from 20-50 times. To obtain the maximum service life from new batteries, you should restrict your golf car operation to 18 holes between charges in the first two months of use.

WARNING:

Always wear safety glasses or eye protection when servicing the car.

Always use insulated tools when working around batteries or electrical connections.

DANGER:

EXPLOSIVE GASES - Batteries emit hydrogen while being charged. Hydrogen is an **EXPLOSIVE GAS**. Keep sparks, flames, cigarettes away. Tools, wires and metal objects can cause sparks when "shorted" across a battery or batteries. Do not use without proper instructions.

POISON - CONTAINS ACID - Causes severe burns - Avoid contact with skin, eyes or clothing.

Antidotes:

External - Flush with water. Call physician immediately.

Internal - Drink large quantities of milk or water, follow with milk of magnesia or vegetable oil. Call physician immediately.

Eyes - Flush with water for 15 minutes. Call physician immediately.

Battery Care:

To keep your batteries in good 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. (NOTE: Do not allow this solution to enter the battery.) Rinse. Be sure terminals are tight. Let the terminals dry and then coat them with CLUB CAR battery protector spray, part #1014305.
2. The water level in the batteries should be checked weekly (See Figure 16 for proper level). Add water only after charging unless the water 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. For maximum battery life, add only distilled water to the batteries.
3. The holddown bars should be tight enough so the batteries do not move while the car is in motion, but not so tight as to crack or buckle the battery case. Torque to 9-14 in.-lbs. The terminal connections should be clean and tight, and any worn or frayed wires should be replaced.
4. After use, the batteries should be placed on charge. The batteries should never be left discharged for any length of time.

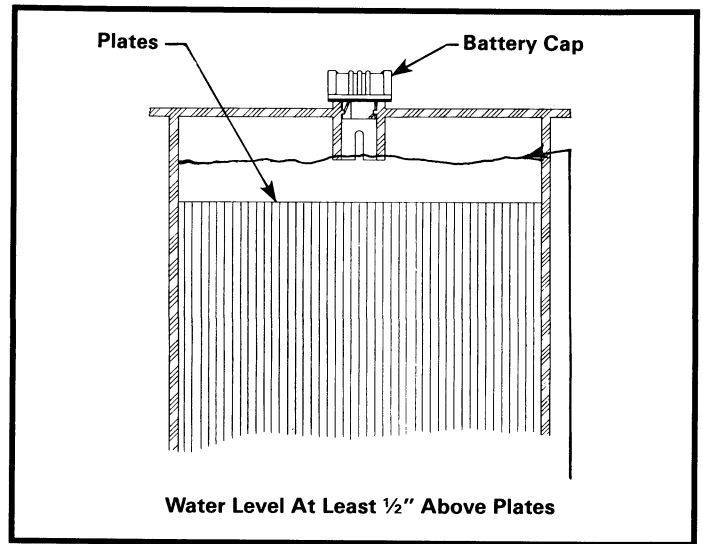


Figure 16

Battery Charger:

General

Each CLUB CAR DS Electric is supplied with a fully automatic battery charger as standard equipment. The AC line to which the charger is to be connected must be capable of supplying 10 amperes to each charger.

WARNING:

Each charger should have its own 20 ampere (maximum) branch circuit protection (circuit breaker or fuse), in accordance with the National Electrical Code, ANSI/NFPA 70, and local codes and ordinances.

This battery charger must be grounded to reduce the risk of electric shock. This charger is equipped with an AC electric cord having an equipment-grounding conductor and a grounding type plug and is for use on a nominal 115 Volt, 60 Hertz circuit. This plug must be connected to an appropriate receptacle that is properly installed and grounded in accordance with the National Electrical Code, ANSI/NFPA 70, and all local codes and ordinances.

WARNING:

Improper connection of the equipment-grounding conductor can result in a risk of an electric shock.

Do not use an adaptor to plug this charger into a two-prong outlet. Extension cord or electrical outlet must have a three-prong outlet.

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

WARNING:

The use of an improper extension cord could result in a fire or an electric shock. Do not operate the charger if it has received a sharp blow, was dropped or otherwise damaged in any way; contact your nearest CLUB CAR Distributor/Dealer. Only trained people should repair or service the charger.

Replace worn, cut or damaged power cords or wires immediately.

Do not disconnect the DC output plug from the battery receptacle when the charger is on. The resulting arcing between the plug and receptacle could cause an explosion. If the charger must be stopped, disconnect the AC supply plug from the wall outlet before disconnecting the charger DC output plug.

Provide adequate ventilation for the charger. Keep all charger ventilation openings at least two (2) inches away from walls and other objects.

CAUTION:

Do not allow clothing, blankets or other materials to cover the charger.

WARNING:

Chargers can ignite flammable materials and vapors. Do not use near fuels, grain dust, solvents, thinners or other flammables.

Keep dry - do not expose to rain.

Charging Guidelines

DANGER:

Batteries emit hydrogen while being charged. Hydrogen is an **EXPLOSIVE GAS**. Charging areas must be ventilated so the **TOTAL** volume of air in the building is changed five (5) times per hour. Exhaust fans should be located at the highest point of the roof.

If vehicle is equipped with a weatherproof enclosure, it should be unzipped and pulled back while being charged, to avoid accumulation of hydrogen gas in cab.

CAUTION:

Do not leave DC plug plugged in while unattended for more than two consecutive days.

Ventilating fans should be located at the highest point in the room and must be capable of changing the total volume of air in the room five times per hour. Consult local HVAC engineer.

To charge batteries, insert DC plug into receptacle and the charger will turn on two to five seconds later (See Figure 17). As long as the charger is allowed to shut off by itself, the batteries will be fully charged and overcharging or undercharging should be prevented. Batteries should be put on charge even if only used for 9 holes of golf or 10 minutes. If charger does not seem to be operating properly or the batteries seem weak, contact your nearest CLUB CAR Distributor/Dealer.

NOTE: When night air temperatures fall below 65°F, batteries charged in unheated areas should be placed on charge as soon after use as possible. Batteries are warmest immediately after use and cold batteries require more time to fully charge.

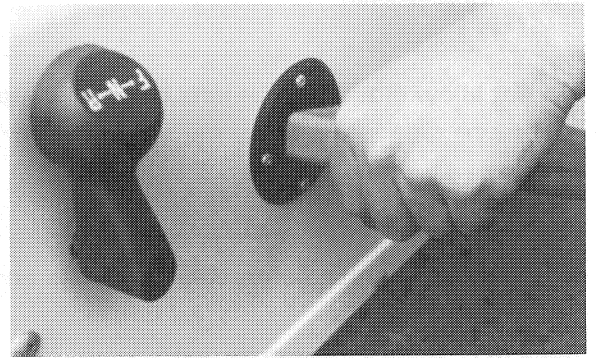


Figure 17

Plug and Receptacle

If the charger plug becomes difficult to insert or remove, the receptacle contacts should be lightly sprayed with WD-40 brand spray lubricant. Then the plug should be inserted and removed several times to ensure ease of insertion and removal and good firm electrical contact.

WARNING:

Be sure all wire connections at the receptacle and fuse link are clean and tight.

To connect the charger plug to the vehicle receptacle, grasp the plug handle and push the plug straight into the receptacle. Do not rock or bend the plug (See Figure 17).

To disconnect the charger plug from the vehicle receptacle, grasp the plug by the handle and pull the plug straight out of the receptacle. Do not pull on the cord (See Figure 18). Do not twist, rock or bend the plug.

Failure to follow these instructions could result in damage to the charger cord, plug or vehicle receptacle.

Do not use this 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 blades or contacts are bent or corroded.
- The plug, receptacle or cords are cut, worn or have any exposed wires.
- The plug, cords, charger or receptacle are damaged in any way.

Using this charger with any of the above symptoms could result in a fire, property damage or personal injury.

The DC charger cord and plug are wear items and must be replaced when worn or damaged.

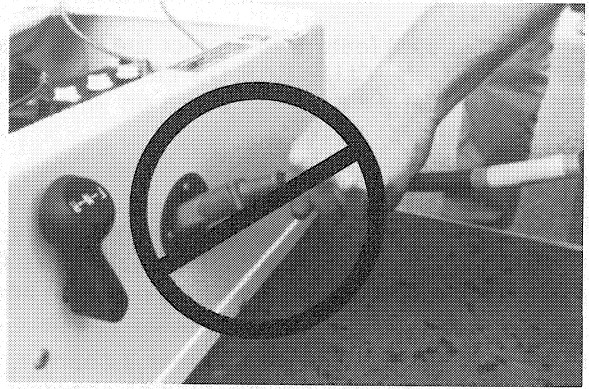


Figure 18

If warning tag has been removed from DC cord, have it replaced.

Fuse Link

As an additional feature to protect the batteries and golf car charging circuit from an overload, the CLUB CAR DS Electric is equipped with a fuse link (See Figure 19). If the charger does not come on when the car is placed on charge, visually inspect the fuse link.



Figure 19

WARNING:

If fuse link is blown, contact your nearest CLUB CAR Distributor/Dealer to determine source of the electrical problem and correct it before replacing fuse.

NOTE: On the optional Ultra-Power II charger, the red charge-on indicator should light when the car is placed on charge.

Fueling Instructions — DS Gas:

DANGER:

GASOLINE - FLAMMABLE - EXPLOSIVE - NO SMOKING

Keep sparks and flames from the area of the car. Only service or repair in well-ventilated area. Never pour gasoline into tank while engine is hot or running.

To avoid electric arc caused by static electricity, the fuel storage/pumping device must be grounded. If pump is not grounded, the vehicle must be grounded to the pump before and during the fueling operation.

If vehicle has an all weather enclosure installed, the gas tank must be properly vented as shown in Figure 20.

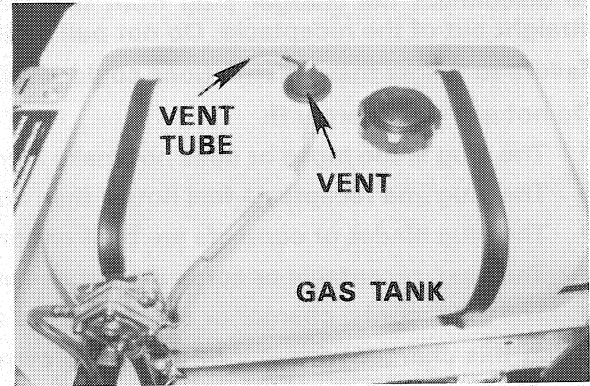


Figure 20

1. Lift and remove seat bottom.
2. Fuel tank is located on passenger side of car. Remove fuel cap and fill the fuel tank with regular or unleaded gasoline. Do not use gasohol or gasolines with methyl alcohol blends.

CAUTION:

To allow for expansion, do not fill higher than one (1) inch from top of tank.

DANGER:

Be sure to clean up any spilled gas before operating vehicle.

3. Replace fuel cap on tank, being sure cap is tightly sealed to tank.
4. Replace seat bottom.

Cleaning:

Both the CLUB CAR Gas and Electric golf cars are equipped with an injection molded thermoplastic olefin (TPO) cowl and body.

Use only mild dishwashing liquid soap with a sponge or soft cloth for normal cleaning.

Minor scratches or blemishes in the body can be buffed out using most commercially available polishing compounds and polishes.

Your golf car seat will last longer with proper cleaning. Mild soap or detergent with a sponge or soft cloth for normal cleaning is recommended. For stubborn or imbedded dirt, a soft bristle brush may be used.

Do not use any harsh detergents or cleaning solvents on the body, cowl or seat.

Battery acid, fertilizers, tars, asphalt, creosote, paint or chewing gum should be removed immediately to prevent possible stains.

Subsequent Owner Registration:

In the event that this vehicle has been bought as a used car from another individual or from a distributor/dealer, re-registration is necessary. This will enable us to contact you if the need arises. Please send your name, address and serial number(s) of the car(s) to CLUB CAR, INC., P.O. Box 204658, Augusta, GA 30917-4658, ATTN: Vehicle Registration.

FAIRWAY VILLAGER

The Fairway Villager is offered as an electric or gasoline powered vehicle and has been designed to provide a smooth, comfortable ride for four passengers. If the vehicle is going to be used for golf, a four bag attachment is also available. Contact your nearest CLUB CAR Distributor/Dealer. The owner's manual should be read thoroughly prior to operating this vehicle. Throughout the DS golf car owner's manual, "Fairway Villager" should be substituted for "golf car."

The Fairway Villager should be driven and maintained as stated in the owner's manual with a few exceptions as noted.



WARNING:

Avoid sudden starts and stops and tight turns to avoid injury to an unsuspecting passenger and damage to the vehicle.

Slower speeds should be observed with four passengers.

Passengers should hold on to seat handles or hand rails at all times (See Figure 21).

No more than four passengers should be on the vehicle at one time.

All passengers should keep feet, arms, legs, and entire body inside the vehicle to prevent getting them caught between the vehicle and the ground or other objects.

Figure 21

Maintenance:

Refer to Pages 22-29 for periodic service chart, lubrication schedule, and lubrication chart.

NOTE: If vehicle is constantly hauling heavy loads, the preventive maintenance procedures should be performed more often than recommended in the service schedules and lubrication chart.

Storage Compartment:

There is an enclosed storage compartment underneath the rear seat with 2 cu. ft. of storage area. The rear seat can be lifted and fastened in place with the rubber cord to gain access to the storage compartment (Figure 22).

Electric Fairway Villager:

An optional on-board charger is available for the Fairway Villager electric; it should be plugged into a properly grounded nominal 115 Volt, 60 Hertz outlet. The AC line to which the charger is to be connected must be capable of supplying 10 amperes to each charger. The rear seat should be held up with the rubber cord while charging (Figure 22).

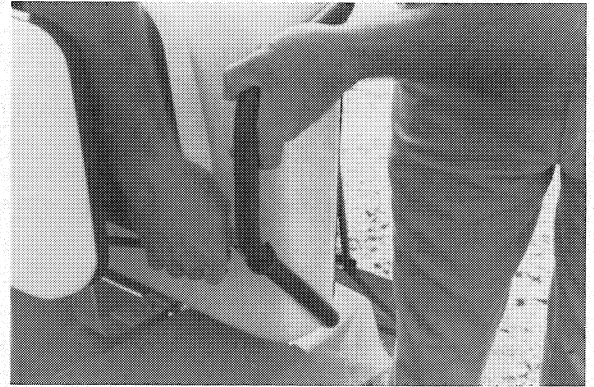


Figure 22

WARNING:

Each charger should have its own 20 ampere (maximum) branch circuit protection (circuit breaker or fuse), in accordance with the National Electrical Code, ANSI/NFPA 70, and local codes and ordinances.

CAUTION:

Be sure AC plug is unplugged from outlet before driving vehicle. Charger and AC outlet will be damaged if charger is not unplugged before driving.

Be sure AC cord is properly wound up on reel before driving vehicle.

SPECIFICATIONS	DS GASOLINE	DS ELECTRIC	FAIRWAY VILLAGER GASOLINE	FAIRWAY VILLAGER ELECTRIC
POWER SOURCE				
Engine...4 cycle, OHV, 286 cc, 9.0 hp, single cylinder, air cooled pressure lubrication system	•		•	
Drive Motor...Direct Drive, 36 volt DC, Series Wound, 2.97 hp		•		•
Carburetor...Float bowl with fixed jets and impulse fuel pump	•		•	
Governor...Automatic ground speed sensing, internally geared in transmission	•		•	
Ignition...Transistor electronic ignition with electric RPM limiter	•		•	
Transmission...Fully synchronized forward and reverse with .97:1 ratio forward, 1.03:1 ratio reverse and neutral	•		•	
Drive Unit...Double reduction helical gear with 12.28:1 direct drive axle	•	•	•	•
Electrical System...36 volt DC, 18 volt reverse with warning buzzer		•		•
Electrical System...12 volt 325 cold cranking amp battery and 35 amp charging capacity	•		•	
Batteries...High capacity T-105 batteries (107 minutes rated)		•		•
Charger...Automatic 21 amp Accu-Power UL and CSA approved		•		•
Torque Converter...Automatic, variable speed, dry type	•		•	
STEERING/SUSPENSION				
Steering...Self-adjusting rack and pinion	•	•	•	•
Suspension...Front and rear tapered mono-leaf springs with dual hydraulic shocks	•	•	•	•
Brakes...Dual rear wheel brakes with cast iron drums and single brake pedal with automatic-release park brake	•	•	•	•
BODY/CHASSIS				
Frame/Chassis...Twin I-Beam welded aluminum	•	•	•	•
Rear Body...Molded thermoplastic olefin (TPO)	•	•	•	•
Front Body...Molded thermoplastic olefin (TPO)	•	•	•	•
Paint...clear coat over molded-in color	•	•	•	•
Tires...18.00 x 8.50-8.00 tubeless, 4-ply rated	•	•	•	•
SEATING CAPACITY/FUEL CAPACITY				
Seating Capacity...2 persons	•	•		
...4 persons			•	•
Fuel Tank...7 gal. U.S., regular or unleaded	•		•	

SPECIFICATIONS	DS GASOLINE	DS ELECTRIC	FAIRWAY VILLAGER GASOLINE	FAIRWAY VILLAGER ELECTRIC
DIMENSIONS				
Overall Length	94"	94"	100"	100"
Overall Width	44.5"	44.5"	44.5"	44.5"
Overall Height	48.25"	47.5"	46"	46"
Wheelbase	65.5"	65.5"	65.5"	65.5"
Ground Clearance	4.5"	4.5"	4.5"	4.5"
Front Wheel Tread	34.5"	34.5"	34.5"	34.5"
Rear Wheel Tread	38.5"	38.5"	38.5"	38.5"
Weight...Electric (without batteries)		448 lbs.		488 lbs.
Weight...Gasoline (dry)	593 lbs.		633 lbs.	
Forward Speed (gasoline governed)	12-14 mph	12-14 mph	12-14 mph	12-14 mph
Curb to Curb Clearance Circle	17'6"	17'6"	17'6"	17'6"
Braking Distance at 12 mph	14'	14'	14'	14'

OPTIONAL EQUIPMENT: Canopy Top, Snap-on Tinted Windshield, Weather-proof Enclosure, Extra Two-Bag Attachment, Sweater Basket, Sand Trap Rake Kit, Bagwell Protector, Adjustable Seat Back, Wheel Covers, Power Rib Tires, Extra Traction Tires, Whitewall Tires, Custom Club Decals, I.D. Numbers, Accent Stripe, Custom Colors, AM/FM Stereo Cassette Radio with Clock, Ashtray, Lighting Package (High/Low Beam Headlights, Taillights, Brakelights and Horn), Deluxe Lighting Package with Turn Signals, Fuel Gauge, Hour Meter, Sand Bottle Divot Repair Kit, Woodgrain Decal, Information Holder, Trailer Hitch, Rear View Mirror, Permanent Tow Bar for multiple car towing (factory installation), Temporary Tow Bar for single car towing, Ultra-Power II (LED) Battery Charger, 3½ hp Electric Motor, On Board Charger with rewind cord, Glove Box, V-Glide Accelerator System (Electric Cars), Scuff Guards, Sand Basket and Bucket Divot Repair Kit.

STANDARD EQUIPMENT: Rack and Pinion Steering, Ball Holder, Two Double Beverage Holders, Dual Dash Compartments, Scorecard and Pencil Holder, Reverse Warning Buzzer, Wear Resistant Floor Mats and Pedals, Front-Rear-Side Protective Bumpers, Two-Way Ignition Key, Automatic-Release Park Brake, Quick Release Bag Strap Buckles, Solid State Speed Controller. **Gas Cars:** Neutral Lock-Out, Low Oil Level Warning Light, Fresh Air Intake System.

NOTICE: The company reserves the right to make design changes to either Gasoline or Electric Cars without obligation to make these changes on units previously sold.

NOTICE: These vehicles are designed and manufactured for off-road use only. They do not conform to Federal Motor Vehicle Safety Standards or EPA regulations and are not equipped for operation on public streets, roads or highways.

SOLID STATE CONTROLLER VEHICLE

If the DS Electric vehicle is equipped with a Solid State Speed Controller, it should be driven and maintained as stated in the Owner's Manual with the following exception:

ALL REFERENCES TO RESISTOR COILS SHOULD BE DELETED, I.E., HOT RESISTOR WARNING DECAL, PERIODIC SERVICE OF RESISTOR ASSEMBLY, ETC.

In order to properly service and maintain this Solid State Controller Vehicle, it is necessary to understand the electrical circuitry and the functions of all components in this system. Therefore, if any repairs or service need to be performed, we recommend that they be performed by an authorized CLUB CAR Distributor/Dealer representative using CLUB CAR OEM parts.

WARNING:

Only trained people should repair or service the solid state speed controller. Potential for electrical shock exists and could cause severe personal injury.

**CLUB CAR LIMITED LIFETIME WARRANTY FOR 1993 FLEET GOLF CARS
IN THE UNITED STATES AND CANADA**

1. **WARRANTY:** CLUB CAR, INC. ("CLUB CAR") hereby warrants to the Original Retail Fleet Purchaser or the Original Retail Fleet Lessee, as those terms are defined herein, and subject to the provisions, limitations and exclusions contained in this limited warranty, that its new 1993 Model DS golf car purchased from CLUB CAR or an authorized distributor or dealer for use in the United States or Canada shall be free from defects in materials and workmanship under normal use and service for the periods stated below.

LIMITED LIFETIME WARRANTY: The golf car frame (excluding the front and rear bumper mounts); the rack and pinion steering gearbox unit; and the suspension system (defined as the shock absorbers, shock mounts, A-plates, leaf springs, shackles, and associated hardware) are warranted with respect to parts and labor against defects in materials and workmanship for the lifetime of the vehicle while owned by the Original Retail Fleet Purchaser or in the possession of the Original Retail Fleet Lessee.

LIMITED THREE YEAR WARRANTY: The gasoline engine; transmission; torque converter (drive and driven); drive unit; starter generator; and electric motor are warranted with respect to parts and labor against defects in materials and workmanship for three years from the date of purchase while owned by the Original Retail Fleet Purchaser or in the possession of the Original Retail Fleet Lessee.

LIMITED TWO YEAR WARRANTY: All remaining components of the golf car not specified otherwise 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 while owned by the Original Retail Fleet Purchaser or in the possession of the Original Retail Fleet Lessee.

This Limited Warranty covers materials, workmanship and repair labor costs as to those items specifically listed above for the periods specified. Such repair labor shall be performed only by CLUB CAR, its authorized distributors or 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, PROOF OF DATE OF PURCHASE MUST BE PROVIDED WITH ANY WARRANTY CLAIM.

2. **EXCLUSIONS:** Excluded from any CLUB CAR warranty are all optional equipment and accessories; fuses; filters; decals; spark plugs; lubricants; the body, cowl and trim pieces; seats; routine wear items such as the charger plug and receptacle, brake shoes, belts, brushes, bushings, engine mounts, mats and pads; maintenance adjustments; cosmetic deterioration; items which deteriorate or fail due to exposure or ordinary wear and tear; batteries; and the battery charger and tires (warranted by their respective manufacturers). The CLUB CAR battery charger is covered under a separate warranty. Also excluded from any CLUB CAR warranty is damage to a golf car 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 service are also excluded from this warranty.

3. **VOIDING OF WARRANTY:** THIS AND ANY OTHER WARRANTY SHALL BE VOID IF THE GOLF CAR 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, DRIVE UNIT OR OTHER OPERATING SYSTEMS OF THE CAR TO CAUSE IT TO PERFORM OUTSIDE CLUB CAR SPECIFICATIONS. THE WARRANTY IS LIKEWISE VOID IF THE CAR 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 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 golf car or component thereof that CLUB CAR deems to be defective. Replacement shall mean furnishing, during the applicable limited warranty period, a new golf car or component thereof which is identical or reasonably equivalent to the warranted product at no cost to the purchaser. Repair shall mean remedying a defect in the golf car or component thereof at no cost to the purchaser during the applicable limited warranty period. If CLUB CAR elects to repair the golf car, 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 golf car or defective component to an authorized CLUB CAR distributor or dealer or send the defective component, freight prepaid, to WARRANTY ADMINISTRATION, CLUB CAR, INC., 4152 Washington Road, P.O. Box 204658, Augusta, Georgia 30917-4658.

6. **DEFINITIONS:** For the purpose of this warranty, an Original Retail Fleet Purchaser is the original purchaser of the golf car who is in the business of owning or operating golf courses and who purchases such golf car for the purpose of renting it to golf players for use on such courses. An Original Retail Fleet Lessee is the first end-user of the golf car who is in the business of owning or operating golf courses and who leases such golf car for the purpose of renting it to golf players for use on such courses. In the event the golf car is purchased or leased by any entity for the purpose of leasing it to an Original Retail Fleet Lessee, then this limited warranty shall extend only to the first Original Retail Fleet Lessee, and not to such entity or to any subsequent lessee of the golf car.

7. **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 GOLF CAR OR COMPONENT 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.**

8. **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 GOLF CAR, 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.

9. **INFORMATION:** For further information, contact WARRANTY ADMINISTRATION, CLUB CAR, INC., P.O. Box 204658, Augusta, Georgia 30917-4658, U.S.A., 706-863-3000.

10. **WARNING:** Any modification or alteration of any golf car beyond factory specifications, including those that affect the weight distribution, stability, or speed of the golf car, can cause serious personal injury or death.



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Club Car, Inc. / P. O. Box 204658

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