



OWNER'S / OPERATOR'S MANUAL

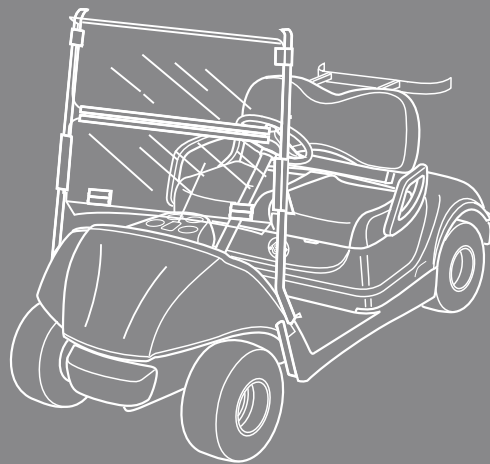


READ THIS MANUAL CAREFULLY!
It contains important safety information.

DK L617 SERIES

48 VOLT GOLF CARTS

ALL MODELS





INTRODUCTION

Congratulations on your purchase of a DRAKE golf cart. DRAKE vehicles are designed and built to provide the ultimate in performance efficiency; however proper maintenance and repair are essential for achieving maximum enjoyment from your new DRAKE Golf cart.

This manual provides detailed information for the maintenance and repair of the electric DRAKE vehicles, and should be thoroughly reviewed prior to servicing the vehicle. The procedures provided herein must be properly implemented, and the DANGER, WARNING, and CAUTION statements must be heeded.

If you have any questions about the operation or maintenance of your golf cart, please consult a DRAKE dealer.



DK L617 AC OWNER'S/OPERATOR'S MANUAL

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IMPORTANT MANUAL INFORMATION

Particularly important information is highlighted in this manual by the following symbols and notes. It is important to note that this information relates to specific safety issues, and must be read, understood, and heeded before proceeding with any operational or servicing procedures.



SAFETY ALERT SYMBOL

Used to alert you to potential personal injury hazards. Obey all safety messages that follow this alert to avoid possible injury or death.



WARNING

A WARNING alert indicates an immediate hazard that could result in severe personal injury or death – please heed.

CAUTION

A CAUTION alert indicates precautions that must be taken to avoid damage to the vehicle.

NOTE

A NOTE alert provides additional information to make procedures easier or clearer to understand.

NOTE

DRAKE continually seeks advancements in product design and quality; while this manual represents the most current information at the time of publication, there may be minor discrepancies between your golf car and this manual. If you have any questions concerning this manual, please consult your DRAKE dealer.

DRAKE reserves the right to change specifications and designs at any time without notice and without the obligation of making changes to units previously sold.



WARNING

Read and understand this manual completely before operating or servicing your golf car. This manual should be permanently with your golf car and should remain with the car when resold.

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1 IMPORTANT LABELS

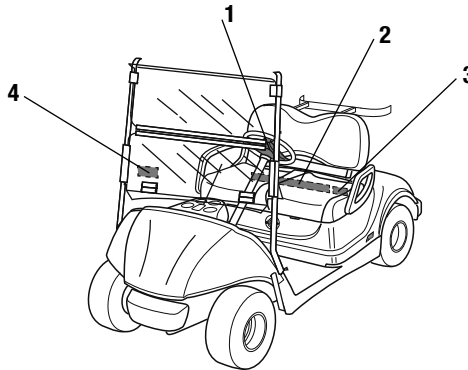


SAFETY AND INSTRUCTION LABELS



WARNING

Read the following labels carefully before operating your car and replace any labels that are damaged or have been removed. Ignoring these safety labels can result in severe personal injury or even death.



1

⚠ WARNING

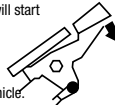
TO REDUCE THE RISK OF ACCIDENTS AND INJURY OR DEATH:

- Never travel at speeds too fast for the terrain, visibility conditions, or your experience.
- Drive with extra caution in congested areas, when operating in reverse, and when driving on wet, rough, or loose surfaces.

OPERATING INSTRUCTIONS

Read the Owners manual and all safety/instruction labels before operating.

- Be sure occupants are seated.
- Select "FORWARD" OR "REVERSE" then turn main switch to "ON".
- Press the accelerator pedal to start moving. The motor will start and the parking brake will release automatically.
- To stop, release the accelerator pedal and press the brake pedal. Press the parking brake until it locks, and turn the main switch to "OFF" before leaving the vehicle.
- Come to a complete stop before reversing direction.
- Read the Owner's/Operator's Manual for more information.



ATTENTION

- This vehicle was not manufactured for use on public streets and does not comply with Federal motor vehicle safety standards applicable to passenger cars.

DRAKE

2

<p>BATTERY INSTALLATION AND LEAD CONNECTION TO MOTOR TO REAR</p> <p>REARWARD</p>	<p>INSTALLATION DES BATTERIES ET RACCORDEMENT DES CÂBLES DE LA BATTERIE AU MOTEUR À L'AVANT</p> <p>AVANT</p>	<p>⚠ WARNING Electric shocks can be released when batteries are charged or discharged. • Keep sparks, flames and cigarettes away. • Avoid open flames, smoking or smoking near batteries.</p>		<p>⚠ WARNING Do not touch the batteries until you turn skin, eyes, and clothing, to batteries. • Keep vent caps tight and level. • Do not touch the vent caps. If you touch them with water and coil physician immediately.</p>	<p>⚠ ADVERTISSEMENT Ne touchez pas les batteries avant d'avoir lavé la peau, les yeux et vos vêtements. • Gardez les bouchons serrés et horizontaux. • Évitez de toucher les bouchons avec l'eau et le ressort de la bobine. Si vous touchez les bouchons avec l'eau et le ressort de la bobine, consultez immédiatement un médecin.</p>		<p>⚠ WARNING Electric shocks can result in injury. • Do not make contact with the positive and negative battery terminals.</p>	<p>⚠ ADVERTISSEMENT Les chocs électriques peuvent causer des lésions. • Ne pas faire la borne positive et négative d'une même batterie.</p>
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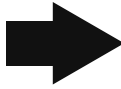


3

NOTICE / NOTIFICATION

- Move switch to the "TOW" position before towing or storage. Failure to do so may lead to:
- Drive system damage when towing.
 - Complete battery discharge and battery damage when storing long term.
 - After moving switch from "RUN" to "TOW", wait 15 seconds minimum before switching again.

TOW SWITCH



- Mettre l'interrupteur a position "TOW" avant de remorquer ou avant l'entreposage. Non-observation pourrait:
- Dommages de système d'entraînement en remorquant.
 - Causer une décharge totale de la batterie et endommager la batterie pendant l'entreposage a long terme.
 - Après avoir change l'interrupteur de position "RUN" a position "TOW", attendre un minimum de 15 seconds avant de le remettre.



4

⚠ WARNING
Windscreens do not provide protection from golf balls or other flying objects.

DRAKE



SAFETY CONSIDERATIONS

Many vehicles are used for a variety of tasks beyond the original intended use of the vehicle. No warnings can take the place of good common sense and prudent driving practices.

PRE-OPERATION SAFETY

Read this Owner's/Operator's manual and observe all warnings and operation instruction labels affixed to the vehicle.

Perform the pre-operation checks found in Section 6 of this manual.

Only authorized people should drive the golf car, from the driver's side only, and only in designated areas.

Do not allow more than two occupants per seat.

Do not operate the golf car while under the influence of alcohol or drugs; their effect on vision and judgment make operating a golf car dangerous.

Do not operate the golf car on public streets, roads or highways unless allowed by law or local regulating authority.

DURING OPERATION

All persons must be seated. Keep entire body inside the vehicle and hold on while vehicle is in motion.

Observe all safety rules established in the area where the vehicle is being operated.

Reduce speed to compensate for poor terrain or conditions.

Apply service brake to control speed on steep gradients.

Maintain adequate distance between vehicles.

Reduce speed in wet areas.

Use extreme caution when approaching sharp or blind turns.

Use extreme caution when driving over loose terrain.

Use extreme caution in areas where pedestrians are present.

Do not make any modification or additions to the car which affects capacity or safe operation.



WARNING

The vehicle must come to a complete stop before engaging either the Forward or Reverse selector. Failure to do so will void the Warranty.



SAFETY CONSIDERATIONS

This section contains broad safety practices required for safe golf car operation. If you are responsible for the operation and maintenance of this golf car, we recommend you implement this golf car safety program.

Allow only authorized people to operate golf cars. It is recommended that only people who possess a valid motor vehicle driver's license be allowed to operate golf cars.

Place operation and safety instructions recommended by the golf car manufacturer, along with the golf course safety rules, in a highly visible place near the golf car rental area or golf car pick-up area.

It is also recommended that the following warnings be posted in a conspicuous location:



WARNING

Do not operate golf cars when under the influence of alcohol or drugs. Death or serious personal injury can result from failing to comply with the safety and warning instructions affixed to the golf car.



WARNING

Descend steep gradients slowly with foot on brake. Death or serious personal injury can result from failing to comply with the safety and warning instructions affixed to the golf car.



MAINTENANCE REQUIRED FOR GOLF CAR SAFETY

This section contains broad safety practices required for safe golf car operation. If you are responsible for the operation and maintenance of this golf car, we recommend you implement this golf car safety program.

Preventative Maintenance. Perform all scheduled maintenance in accordance with manufacturer's recommendations to provide the golfing patron with a safe, properly operating golf car.

Personnel. Allow only qualified, trained, and authorized personnel to inspect, adjust, and maintain golf cars.

Parts and Materials. Use only replacement parts and materials recommended by the manufacturer.

Ventilation. Properly ventilate all maintenance and storage areas in accordance with applicable fire codes and ordinances to avoid fire hazards. Ventilation is also required to remove hydrogen gas from the car storage areas during the battery charging process.

Hydrogen gas is generated in the charging cycle of batteries and is explosive in concentrations as low as 4%. Because hydrogen gas is lighter than air, it will collect in the ceiling of buildings necessitating proper ventilation. Five air exchanges per hour is considered the minimum requirement.



SAFETY PRECAUTIONS DURING MAINTENANCE

When performing maintenance, follow all safety instructions contained in the manufacturer's operation and service manuals, as well as the following safety procedures:

Properly immobilize golf car before beginning any maintenance to avoid any unexpected vehicle movement.

Properly block chassis before working underneath golf car to avoid any unexpected vehicle movement.

When working on the fuel system or the battery, do not smoke, or allow any sparks or open flames near the vehicle, to avoid any fires or explosions.

Before working on an electric golf car, disable the car's electrical system in accordance with the manufacturer's instructions to avoid electrical shock or damage to the electrical system.

Use only properly insulated tools when working on electrically powered golf cars or around batteries to avoid electrical shock or damage to the electrical system.

Maintain all safety devices including brakes, steering mechanisms, warning devices, and governors, in a safe operating condition. Do not modify these safety devices as supplied by the manufacturer.

After each maintenance or repair, the car must be driven by a qualified, trained, and authorized person – in an area free of pedestrian traffic – to ensure proper operation and adjustment.

Record all maintenance performed in a maintenance record log by date, name of person performing maintenance, and type of maintenance. Periodically inspect maintenance log to ensure accurate and complete entries.

Provide operator comment cards to assist in identifying non-periodic maintenance needs for specific golf cars.

Maintain in a legible condition all nameplates, warnings, and instructions provided by the manufacturer.

If new nameplates, warnings, or instructions are needed, contact your Drake Golf, Lifestyle and Commercial Carts Company dealer.



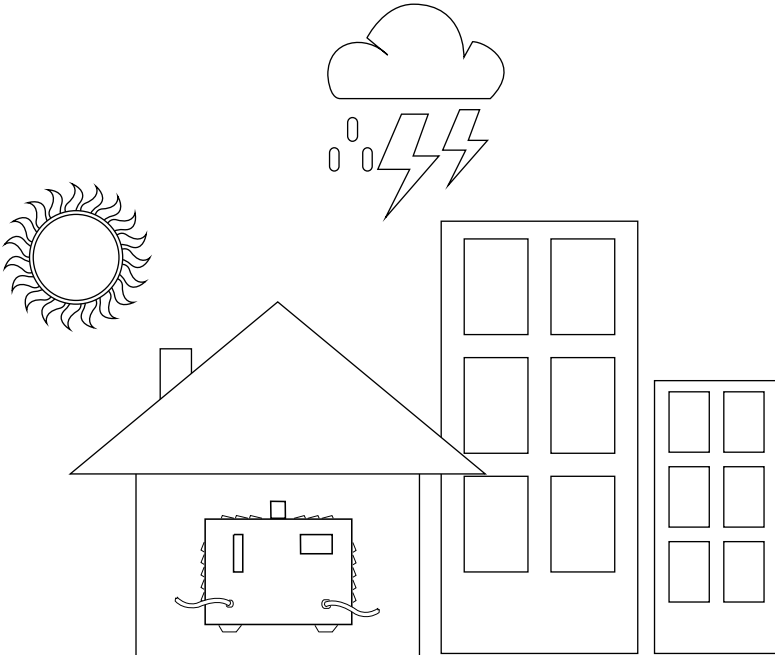
BATTERY STORAGE AND MAINTENANCE

The following precautions must be adhered to in order to ensure Maintenance worker safety.

Only use battery charging facilities and procedures that are in accordance with applicable ordinances and regulations to avoid explosions, electrical shock or damage to the electrical system.

Periodically inspect charging facilities and procedures to be certain that applicable safety codes, regulations, and procedures are being followed to avoid any fires or explosions.

Provide Protection from the Elements



Do Not Block Airways



MAIN SWITCH

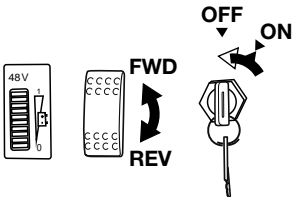
The main switch controls the following items:

“OFF”

All electrical control circuits are switched off (controller remains energized). The golf car cannot be operated. The key can be removed only in this position.

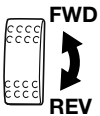
“ON”

Electrical circuits are switched on. The golf car can be driven.



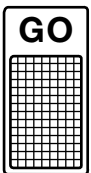
VOLTAGE INDICATOR

The voltage indicator displays how much charge is left in the batteries. When the batteries are at full charge, all the LEDs will be lit. As the battery energy decreases, the LEDs will move down toward the “0” bar. When the LED light on the first bar is the only one lit, the batteries must be charged.



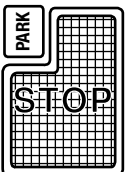
DRIVE SELECT SWITCH

The drive select switch is used to shift the golf car into forward or reverse. **ONLY** after coming to a complete stop, move the lever to the desired position. When the Drive select switch is to “REV” the alarm will buzz.



ACCELERATOR PEDAL

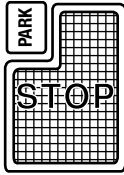
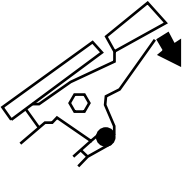
The accelerator pedal controls the speed of the cart. When depressed the speed will increase, when released the speed will decrease.



BRAKE PEDAL

Press down on the brake pedal to stop the car.

3 CONTROLS



PARK PEDAL

Press down on the park pedal whenever car is stationary.

NOTE

Disengage the parking brake by depressing the accelerator pedal.

WARNING

The parking brake will automatically disengage if the accelerator pedal is depressed. If the main switch is in the “ON” position, depressing the accelerator may suddenly cause the golf car to move. Death or serious personal injury can result from failing to comply with the safety instructions in this manual.

TOW SWITCH

Before operating the car, make sure the tow switch is in the “RUN” position. Vehicles are equipped with a “Run-Tow/Maintenance” switch located underneath the seat on the passenger side. The “Tow/Maintenance” position allows the vehicle to roll freely without activating the warning beeper and eliminating potential damage to controller or motor.

With the switch in “TOW/MAINTENANCE” position:

- the controller is deactivated
- the electronic braking system is deactivated which allows the vehicle to be towed or roll freely
- the warning beeper is deactivated

RUN ←  → TOW / MAINTENANCE

WARNING

Before attempting to tow vehicle, move the Run-Tow/Maintenance switch to the “Tow/Maintenance” position. Failure to do so will damage the controller or motor.

Before disconnecting or connecting a battery, or any other wiring, move the Run-Tow/Maintenance switch to the “Tow/Maintenance” position.

After connecting a battery, or any other wiring, wait a minimum of 30 seconds before moving the Run-Tow/Maintenance switch to the “Run” position.



OPERATOR SAFETY

Pre-operation checks should be made each time you use your golf car. Get into the habit of performing the following checks in the same way so that they become second nature.

⚠ WARNING

To keep car from moving while performing pre-operation checks: Remove main switch key. Apply parking brake. Death or serious personal injury can result from failing to comply with the safety instructions in this manual.

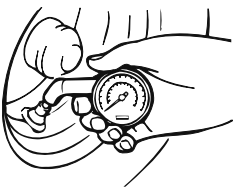
BATTERIES

Check that the batteries are held securely in place to prevent them from being damaged from vibration or jarring. Also check that no battery caps are missing to prevent battery acid from spilling from the batteries. Check the battery terminals for corrosion.

⚠ WARNING

Battery electrolyte is poisonous and dangerous, causing severe burns, etc. It contains sulphuric acid. Avoid contact with skin, eyes or clothing. Ventilate when charging or using in an enclosed space. Always shield your eyes when working near batteries. KEEP OUT OF REACH OF CHILDREN.

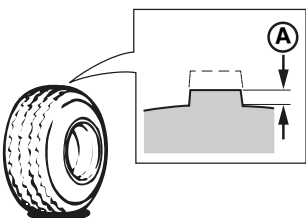
TYRES



Air Pressure

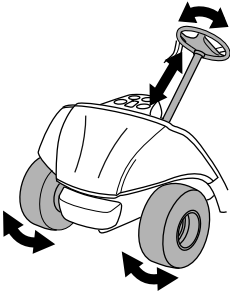
Check the tyre air pressure before operating the golf car.

Tyre pressure: 172 kPa, 25 psi



Wear Limit

Check the tyre surface for damage, cracks or embedded objects. When tire tread wears down to 1 mm (0.04 in.) see A in the diagram, replace the tyre.

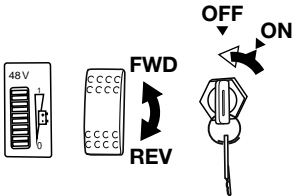


STEERING SYSTEM

Check the steering system for excessive free play by:

- moving the steering wheel up and down, and back and forth.
- turning the steering wheel slightly to the right and left.

If you feel excessive free play, or hear rattling sounds which may indicate loose steering components, consult a DRAKE dealer.



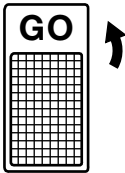
REVERSE ALARM

Check the reverse alarm by moving the drive select switch to “REV” for reverse. The alarm should sound.

PEDAL OPERATION

Check the following pedal controls for proper operation. If a pedal does not work properly, consult a DRAKE dealer.

ACCELERATOR PEDAL

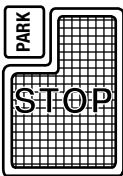


⚠ WARNING

With the main switch in the “OFF” position, make sure the accelerator pedal operates smoothly.

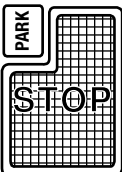
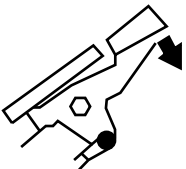
BRAKE PEDAL

Make sure the brake pedal feels firm when pressed and returns to its original position when released.



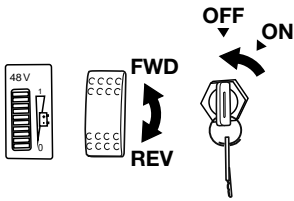
PARKING BRAKE PEDAL

Make sure the parking brake pedal locks in place with a positive click, and releases when the accelerator pedal is pressed.



NOTE

Disengage the parking brake by depressing the accelerator pedal.

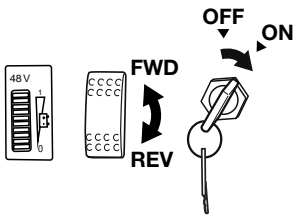


STARTING

1. With the parking brake applied, turn the drive select switch to “FWD” for forward, or “REV” for reverse.

CAUTION

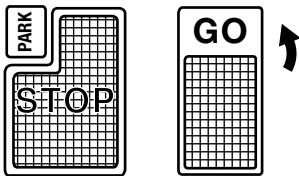
Do not shift from “FWD” forward to “REV” reverse while the golf car is moving. Transmission damage can result.



2. Turn the main switch to “ON”.

WARNING

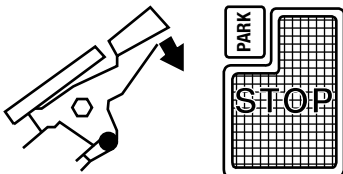
Do not depress the accelerator pedal when turning on the main switch or the golf car may start moving unexpectedly. Death or serious personal injury can result from failing to comply with the safety instructions in this manual.



3. Check that your path is not obstructed in the direction you plan to go, and slowly depress the accelerator pedal. The golf car will start to move.

NOTE

The parking brake will automatically release when the accelerator pedal is depressed.



STOPPING

1. To stop the golf car, gradually press down on the brake pedal.

NOTE

The parking brake will automatically release when the accelerator pedal is depressed.

2. When the car has come to a stop, apply the parking brake pedal and turn the main switch to “OFF.”

BATTERY CARE**⚠ WARNING**

Battery electrolyte is poisonous and dangerous, causing severe burns, etc. It contains sulphuric acid. Avoid contact with skin, eyes, or clothing.

Antidote:

EXTERNAL: Flush with water.

INTERNAL: Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg, or vegetable oil. Call physician immediately.

EYES: Flush with water for 15 minutes and get prompt medical attention.

Batteries produce explosive gases. Keep sparks, flame, cigarettes, etc., away.

Ventilate when charging or using in an enclosed space. Always shield eyes when working near batteries.

KEEP OUT OF REACH OF CHILDREN.

Six 8-volt deep cycle batteries provide power for your electric golf car and must be properly maintained and recharged for maximum performance and service life.

To maintain your batteries:

1. Clean the tops of the batteries with a solution of baking soda and water, as is required, to remove corrosion.

NOTE

Do not allow cleaning solution to enter battery cells. Serious battery damage can result.

2. Check the fluid level before and after charging.

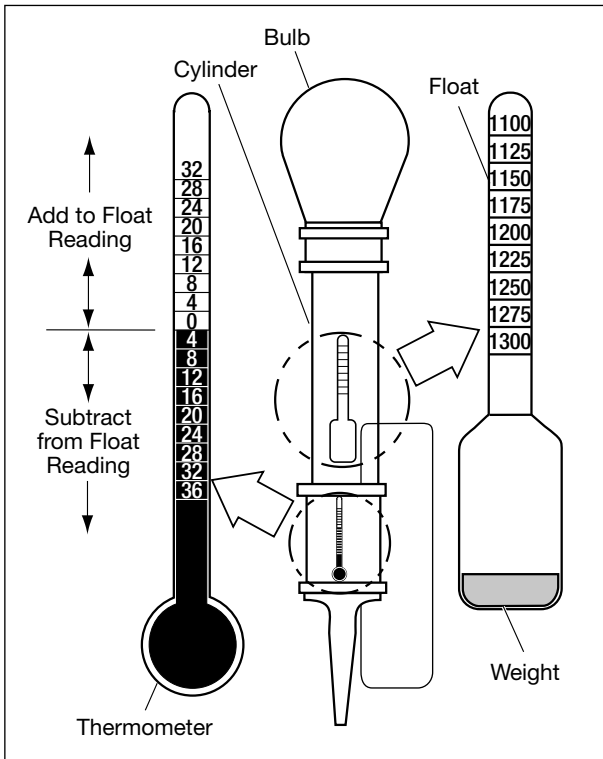
Before charging: only add distilled water if fluid is below the top of the plates, and then add just enough to cover plates.

After charging: Distilled Water is required to be added after charging the car. See the Trojan Battery Operation manual for instructions.

BATTERY CARE cont.

3. Using a hydrometer, check the specific gravity of the battery fluid in each cell against the readings on the chart below. Consult a DRAKE dealer if any low readings are found, or if readings vary more than one point between cells.

Temperature		Satisfactory Uncorrected Hydrometer Reading
°C	°F	
48.9	120	1.244
43.3	110	1.248
37.8	100	1.252
32.2	90	1.256
26.7	80	1.260
21.1	70	1.264
15.6	60	1.268
10.0	50	1.272
4.4	40	1.276
-1.1	30	1.280



5 MAINTENANCE

BATTERY CHARGING

The battery charger is designed to fully charge the battery set. If the batteries are severely deep cycled, some automatic battery chargers contain an electronic module that may not activate and the battery charger will not function. Automatic chargers will determine the correct duration of charge to the battery set and will shut off when the battery set is fully charged. Always refer to the instructions of the specific charger used.

Before charging please ensure the electrolyte level in all cells are at the recommended level and cover the plates.

CAUTION

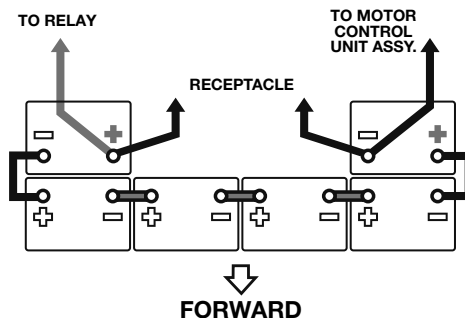
Do not overfill batteries. The charging cycle will expel electrolyte and result in component damage.

WARNING

Do not disconnect the DC output cord from the DC charger receptacle when the charger is on or an arc could occur that may cause an explosion.

BATTERY INSTALLATION

Use care to connect the battery wires as shown below. Tighten the battery post hardware to 50 - 70 in. lbs. (6 - 8 Nm) torque. Protect the battery terminals and battery wire terminals with a commercially available protective coating.



WARNING

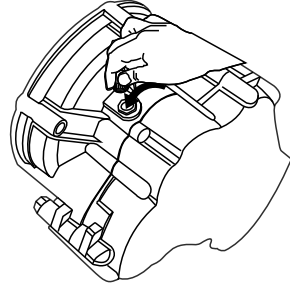
When working with batteries, do not put wrenches or other metal objects across the battery terminals. An arc can occur causing an explosion or fire at the battery. Always remove the negative (-) cable to the motor controller first, and install it last. A spark can occur causing an explosion or fire at the battery.

TRANSAXLE OIL

The only maintenance required for the first five years is the periodic inspection of the lubricant level. The rear axle is provided with a lubricant level check/fill plug located on the bottom of the differential. Unless leakage is evident, the lubricant need only be replaced after five years.

Replacing the lubricant:

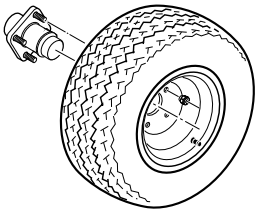
- place the car on a flat, level surface
- lift the cushion
- clear the area around the oil plug
- remove the oil plug
- If required add SAE 90 gear box oil until it is level with the plug opening
- replace the oil plug



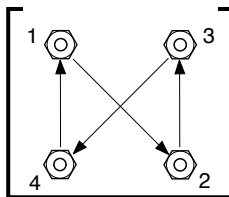
CAUTION

Do not allow foreign material to enter the transaxle. Serious transaxle damage can result.

WHEEL REPLACEMENT



Tyre style may vary



“Cross Sequence”

To remove and install a wheel on your golf car:

1. Block the wheels to prevent the golf car from moving, loosen the lug nuts.
2. Elevate the golf car with a jack and remove the lug nuts and the wheel.
3. Reverse the removal steps when installing the wheel using the “cross sequence” when tightening the lug nuts.
4. Wheel nut tightening torque: 80 Nm, 8.0 m.kg (58 ft.lb)

WARNING

Before performing wheel or brake maintenance, verify that the main switch is in the “OFF” position. Accidental starting of the vehicle could cause the vehicle to move, causing death or serious personal injury.

5 MAINTENANCE

BRAKE ADJUSTMENT

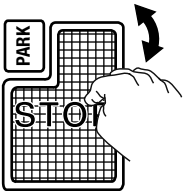
The brakes on your golf car are self-adjusting. Before you operate the golf car, press down on the brake pedal several times to make sure the brakes are functioning properly.

⚠ WARNING

Consult your DRAKE dealer before using your golf car if you suspect any brake problems. Brake failure could result in a serious accident. Death or serious personal injury can result from failing to comply with the safety instructions in this manual.

BRAKE PEDAL FREE PLAY ADJUSTMENT

Check the brake pedal free play by pressing against the pedal with two fingers (using light force) and measuring the distance the pedal travels before resistance is felt.

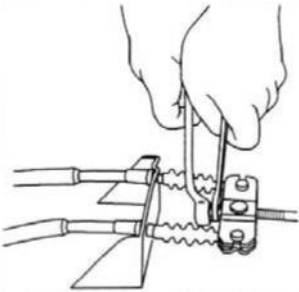


To adjust the brake pedal free play:

1. Remove the floor mat and service lid from the floor of the golf car.
2. If the free play distance needs adjusting, loosen the lock nut and turn the adjusting nut in or out until free play specification is met. Then tighten the lock nut in place.
3. Brake pedal free play movement should be 20 – 30mm.

⚠ WARNING

Over-tightening the brake cables will increase brake wear and affect overall performance of the braking function. Premature brake wear can result. Death or serious personal injury can result from failing to comply with the warning labels in this manual.



MAINTENANCE CHARTS

Regular maintenance is required to ensure the best performance and safe operation of your golf car.

WARNING

Turn off the main switch and apply the parking brake when you perform maintenance, unless otherwise specified. If you're not familiar with servicing the machine, death or serious personal injury can result. When in doubt the work should be done by a Drake dealer or other qualified mechanic.

CS – CHECK CA – CHECK & ADJUST R – REPLACE S – SERVICE CL – CLEAN & LUBRICATE L – LUBRICATE

	Remarks	Pre-Op	40 rounds 20 hours 160 kms (Every month)	250 rounds 125 hrs 1000 kms (Every 6 months)	500 rounds 250 hrs 2000 kms (Every year)	1000 rounds 500 hrs 4 000 kms (Every 2 years)	2000 rounds 1000 hrs 8 000 kms (Every 4 years)
PRE-OP	Charge	S	S	S	S	S	S
	Clean battery tops, check hold-down screws and terminals are tight	S	S	S	S	S	S
	Check brake pedal free play and adjust if necessary	CS	CA	CA	CA	CA	CA
	Check steering operation	CS	CS	CS	CS	CS	CS
	Check tyre pressure, tread depth and tyre surface for damage	CS	CA	CA	CA	CA	CA
	Check body and chassis for damage	CS	CS	CS	CS	CS	CS
	Check tightness of all bolts, nuts, screws and rivets	CS	CS	CS	CS	CS	CS
	Check reverse alarm operation	CS	CS	CS	CS	CS	CS
EVERY MONTH	Check electrolyte level		CS	CS	CS	CS	CS
	Check for loose or broken connections		CS	CS	CS	CS	CS
EVERY 6 MONTHS	Clean/lube pedal control area		CL				
	Check all wire insulation for cracks and/or worn spots			CS	CS	CS	CS
EVERY 12 MONTHS	Check shock absorbers for oil leaks and damaged springs			CS	CS	CS	CS
	Perform a discharge test				S	S	S
	Apply Terminal protectant				S	S	S
	Check rear axle bearing play for roughness or freeplay				CS	CS	CS
	Check Steering knuckle bushing free play / Adjust wheel alignment				CA	CA	CA
	Check wheel nut tightness, front wheel front wheel bearing play				CS	CS	CS
	Check transaxle oil level and and inspect for leakage				CS	CS	CS
	Check pedal stop operation and adjust if necessary				CA	CA	CA
EVERY 4 YEARS	Replace transaxle oil						R
	Inspect brake shoes and adjust or replace if necessary						CA

Perform the following preparations when not using your golf car for extended periods of time:

NOTE

Turn the main switch key to the “OFF” position, lift the seat and move the tow switch into the “TOW” position. Remove the key from main key switch, and store key in a safe place.

BATTERY PREPARATION

Recharge the batteries and check the fluid level every 60-90 days to keep them fully charged.

In cases of long storage periods, disconnect the cables.

Clean the top of the batteries with a solution of baking soda and water, if necessary, to remove corrosion.

CAUTION

Do not allow cleaning solution to enter battery cells. Serious battery damage can result.

CHASSIS PREPARATION

Verify that the air pressure in the tyre is 25psi or 172 kPa.

Clean exterior of the golf car and apply a rust inhibitor where necessary.

Cover the golf car and store it in a dry, well-ventilated place.

7 SPECIFICATIONS

MODEL	DK LUX-L617.2
SYSTEM	48V 4.0KW AC system
Key Components	
Battery	Trojan T-875 8V*6pcs
Motor	4.0KW A.C motor
Controller	Curtis 1234e (275A)
Transaxle	12.31:1 gear ratio
Performance	
Passenger Capacity	2
Range (loaded) based on flat road @ 20 km/h	80-90 km
Max. speed @12.31:1 gear ratio	25 km/h
Minimum turning radius	2.9 m
Max. climbing ability (loaded)	30%
Max. movement after braking	< 6m
Cart weight + battery	507 kgs
Dimensions	
Overall dimensions: LWH (mm)	2400*1200*1800 mm
Min. ground clearance (mm)	100 mm
Wheelbase (mm)	1660 mm



*photo for reference only

Detailed Configurations: S denotes standard configuration whilst O denotes optional configuration

Body and Frame		
Frame	Welded high yield strength tubular steel	S
Body	"PP" Alloy automatic industrial spec plastic	S
Roof	"PP" Plastic injection	S
Windshield	Hinged	S
Rear Basket	Plastic injection	S
Front Dash	Forward/Reverse switch, voltage indicator, ignition key	S
Large Seats	Backrest, cushion and armrest	S
Floor	Rubber	S
Mirror Outside		O
Cooler Box		O
Sand Bottle		O
Electric System		
Lighting system	2pc front & rear LED lights with LED indicators	S
DC-DC Converter	48V/12V-300W	S
Reversing Alarm		S
Speedometer		O
Charger	Canadian Delta-Q onboard charger, input 100V-240V 50/60Hz, output 48V/17A	S
Steering and Suspension		
Steering System	Dual automotive-style strut and self-adjust rack-and-pinion steering	S
Brake System	Dual rear wheel mechanical drum brakes, self-adjusting with non-asbestos linings	S
Accelerator	Electric accelerator	S
Suspension System	4 wheel independent Helical spring with hydraulic shocks	S
Wheel and Tyre	8" Steel wheel with Carlisle Hub Cap 18x8.5-8	S
	10" aluminium wheel & 205/50-10	O
	12" aluminium wheel & 215/35-12	O

SPECIFICATIONS

7

MODEL	DK LUX-L617.2+2
SYSTEM	48V 4.0KW AC system
Key Components	
Battery	Trojan T-875 8V*6pcs
Motor	4.0KW AC motor
Controller	Curtis 1234e (350A)
Transaxle	12.31:1 gear ratio
Performance	
Passenger Capacity	4
Range (loaded) based on flat road @ 20 km/h	80-90 km
Max. speed @12.31:1 gear ratio	25 km/h
Minimum turning radius	2.9 m
Max. climbing ability (loaded)	25%
Max. movement after braking	< 6m
Cart weight + battery	570 kgs
Dimensions	
Overall dimensions: LWH (mm)	2790*1200*1880 mm
Min. ground clearance (mm)	110 mm
Wheelbase (mm)	1660mm



*photo for reference only

Detailed Configurations: S denotes standard configuration whilst O denotes optional configuration

Body and Frame		
Frame	Welded high yield strength tubular steel	S
Body	"PP" Alloy automatic industrial spec plastic	S
Roof	"PP" Plastic injection	S
Windshield	Hinged	S
Rear Basket	Plastic injection	S
Front Dash	Forward/Reverse switch, voltage indicator, ignition key	S
Large Seats	Backrest, cushion and armrest	S
Floor	Rubber	S
Mirror Outside		O
Cooler Box		O
Sand Bottle		O
Electric System		
Lighting system	2pcs front & rear LED lights with LED indicators	S
DC-DC Converter	48V/12V-300W	S
Reversing Alarm		S
Speedometer		O
Charger	Canadian Delta-Q onboard charger, input 100V-240V 50/60Hz, output 48V/17A	S
Steering and Suspension		
Steering System	Dual automotive-style strut and self-adjust rack-and-pinion steering	S
Brake System	Dual rear wheel mechanical drum brakes, self-adjusting with non-asbestos linings	S
Accelerator	Electric accelerator	S
Suspension System	4 wheel independent Helical spring with hydraulic shocks	S
Wheel and Tyre	8" Steel wheel with Carlisle Hub Cap 18x8.5-8	S
	10" aluminium wheel & 205/50-10	O
	12" aluminium wheel & 215/35-12	O

7 SPECIFICATIONS

MODEL	DK RA-L617.2+2
SYSTEM	48V 5.0KW AC system
Key Components	
Battery	Trojan T-875 8V*6pcs
Motor	5.0KW AC motor
Controller	Curtis 1234e (350A)
Transaxle	12.31:1 gear ratio
Performance	
Passenger Capacity	4
Range (loaded) based on flat road @ 20 km/h	80-90 km
Max. speed @12.31:1 gear ratio	25 km/h
Minimum turning radius	3.6 m
Max. climbing ability (loaded)	25%
Max. movement after braking	< 6m
Cart weight + battery	585 kgs
Dimensions	
Overall dimensions: LWH (mm)	2760*1305*2020 mm
Min. ground clearance (mm)	160 mm
Wheelbase (mm)	1720 mm



*photo for reference only

Detailed Configurations: S denotes standard configuration whilst O denotes optional configuration

Body and Frame		
Frame	Welded high yield strength tubular steel	S
Raised Chassis	Higher ground clearance + 10" alu wheel + ATV tyre	S
Body	"PP" Alloy automatic industrial spec plastic	S
Roof	"PP" Plastic injection	S
Windshield	Hinged	S
Front Bumper	Plastic injection	S
Front Dash	Forward/Reverse switch, voltage indicator, ignition key	S
Large Seats	Backrest, cushion and armrest	S
Floor	Rubber	S
Mirror Outside		O
Electric System		
Lighting system	2pcs front & rear LED lights with LED indicators	S
DC-DC Converter	48V/12V-300W	S
Reversing Alarm		S
Speedometer		O
Charger	Canadian Delta-Q onboard charger, input 100V-240V 50/60Hz, output 48V/17A	S
Steering and Suspension		
Steering System	Dual automotive-style strut and self-adjust rack-and-pinion steering	S
Brake System	Dual rear wheel mechanical drum brakes, self-adjusting with non-asbestos linings	S
Accelerator	Electric accelerator	S
Suspension System	4 wheel independent Helical spring with hydraulic shocks	S
Wheel and Tyre	8" steel wheel & 18x8.5-8	O
	10" aluminium wheel & 205/50-10	O
	12" aluminium wheel & 22/11-12	S

SPECIFICATIONS

7

MODEL	DK RA-L617.4+2
SYSTEM	48V 5.0KW AC system
Key Components	
Battery	Trojan T-875 8V*6pcs
Motor	5.0KW AC motor
Controller	Curtis 1234e (350A)
Transaxle	12.31:1 gear ratio
Performance	
Passenger Capacity	6
Range (loaded) based on flat road @ 20 km/h	70-80 km
Max. speed @12.31:1 gear ratio	24 km/h
Minimum turning radius	5.05 m
Max. climbing ability (loaded)	20%
Max. movement after braking	<6 m
Cart weight + battery	650 kgs
Dimensions	
Overall dimensions: LWH (mm)	3585*1310*2075 mm
Min. ground clearance (mm)	160 mm
Wheelbase (mm)	2497 mm



*photo for reference only

Detailed Configurations: S denotes standard configuration whilst O denotes optional configuration

Body and Frame		
Frame	Welded high yield strength tubular steel	S
Raised Chassis	Higher ground clearance + 12" alu wheel + ATV tyre	S
Body	"PP" Alloy automatic industrial spec plastic	S
Roof	"PP" Plastic injection	S
Windshield	Hinged	S
Front Bumper	Plastic injection	S
Front Dash	Forward/Reverse switch, voltage indicator, ignition key	S
Large Seats	Backrest, cushion and armrest	S
Floor	Rubber	S
Mirror Outside		O
Electric System		
Lighting system	2pcs front & rear LED lights with LED indicators	S
DC-DC Converter	48V/12V-300W	S
Reversing Alarm		S
Speedometer		O
Charger	Canadian Delta-Q onboard charger, input 100V-240V 50/60Hz, output 48V/17A	S
Steering and Suspension		
Steering System	Dual automotive-style strut and self-adjust rack-and-pinion steering	S
Brake System	Dual rear wheel mechanical drum brakes, self-adjusting with non-asbestos linings	S
Accelerator	Electric accelerator	S
Suspension System	4 wheel independent Helical spring with hydraulic shocks	S
Wheel and Tyre	8" steel wheel & 18x8.5-8	O
	10" aluminium wheel & 205/50-10	O
	12" aluminium wheel & 22/11-12	S

7 SPECIFICATIONS

MODEL	DK FLEET-22G
SYSTEM	48V 4.0kW D.C. system
Key Components	
Battery	Trojan T-875 8V*6pcs
Motor	KDS 4.0kW D.C. motor
Controller	Curtis 1234 (275A)
Transaxle	12.31:1 gear ratio
Performance	
Passenger Capacity	2
Range (loaded) based on flat road @ 20 km/h	60-70 km
Max. speed @12.31:1 gear ratio	30 km/h
Minimum turning radius	2.9 m
Max. climbing ability (loaded)	25%
Max. movement after braking	4 m
Cart weight + battery	460 kgs
Dimensions	
Overall dimensions: LWH (mm)	2380*1180*1830 mm
Min. ground clearance (mm)	114 mm
Wheelbase (mm)	1650 mm



*photo for reference only

Detailed Configurations: S denotes standard configuration whilst O denotes optional configuration

Body and Frame		
Frame	High yield strength galvanised steel	S
Body	"PP" Alloy automatic industrial spec plastic injection	S
Roof	TPO injection moulding	S
Windshield	Hinged	S
Rear Basket	Plastic injection	S
Front Dash	Forward/Reverse switch, voltage indicator, ignition key	S
Large Seats	Backrest, cushion and armrest	S
Floor	Anti-Slip rubber	S
Side Mirrors		O
Cooler Box		O
Sand Bottle		O
Electric System		
Lighting system	Front LED light	O
DC-DC Converter	48V/12V-300W	S
Reversing Alarm		S
Speedometer		O
Charger	Onboard charger, input 100V-240V 50/60Hz, output 48V/25A	S
Steering and Suspension		
Steering System	Dual automotive-style strut and self-adjust rack-and-pinion steering	S
Brake System	Dual rear wheel mechanical drum brakes, self-adjusting with non-asbestos linings	S
Accelerator	Adjustable continuous variable speed system	S
Suspension System	Independent suspension system	S
Wheel and Tyre	8" Steel wheel with 18/8.5 hubcap	S
	10" aluminium wheel & 205/50-10	O
	12" aluminium wheel & 215/35-12	O

SPECIFICATIONS

7

MODEL	DK LUX-L617.4+2
SYSTEM	48V 5.0KW AC system
Key Components	
Battery	Trojan T-875 8V*6pcs
Motor	5.0KW AC Motor
Controller	Curtis 1234e (350A)
Transaxle	12.31:1 gear ratio
Performance	
Passenger Capacity	6
Range (loaded) based on flat road at road @ 20 km/h	80-90 km
Max. speed @12.31:1 gear ratio	25 km/h
Minimum turning radius	4.1 m
Max. climbing ability (loaded)	20%
Max. movement after braking	< 6 m
Cart weight + battery	636kgs
Dimensions	
Overall dimensions: LWH (mm)	3510*1200*1868 mm
Min. ground clearance (mm)	110 mm
Wheelbase (mm)	2415 mm



*photo for reference only

Detailed Configurations: **S** denotes standard configuration whilst **O** denotes optional configuration

Body and Frame		
Frame	Welded high yield strength tubular steel	S
Body	"PP" Alloy automatic industrial spec plastic	S
Roof	"PP" Plastic injection	S
Windshield	Hinged	S
Rear Basket	Plastic injection	S
Front Dash	Forward/Reverse switch, voltage indicator, ignition key	S
Large Seats	Backrest, cushion and armrest	S
Floor	Rubber	S
Mirror Outside		O
Solar Panels		O
Sand Bottle		O
Electric System		
Lighting system	2pcs front & rear LED lights with LED indicators	S
DC-DC Converter	48V/12V-300W	S
Reversing Alarm		S
Speedometer		O
Charger	Canadian Delta-Q onboard charger, input 100V-240V 50/60Hz, output 48V/17A	S
Steering and Suspension		
Steering System	Dual automotive-style strut and self-adjust rack-and-pinion steering	S
Brake System	Dual rear wheel mechanical drum brakes, self-adjusting with non-asbestos linings	S
Accelerator	Electric accelerator	S
Suspension System	4 wheel independent Helical spring with hydraulic shocks	S
Wheel and Tyre	8" Steel wheel with Carlisle Hub Cap 18x8.5-8	S
	10" aluminium wheel & 205/50-10	O
	12" aluminium wheel & 215/35-12	O

7 SPECIFICATIONS

MODEL	DK LUX-L617.6+2
SYSTEM	48V 5.0KW AC system
Key Components	
Battery	Trojan T-875 8V*6pcs
Motor	5.0KW AC motor
Controller	Curtis 1234e (350A)
Transaxle	12.31:1 gear ratio
Performance	
Passenger Capacity	8
Range (loaded) based on flat road at road @ 20 km/h	70-80 km
Max. speed @12.31:1 gear ratio	25 km/h
Minimum turning radius	5.1 m
Max. climbing ability (loaded)	20%
Max. movement after braking	< 6 m
Cart weight + battery	708 kgs
Dimensions	
Overall dimensions: LWH (mm)	4290*1200*1890 mm
Min. ground clearance (mm)	100 mm
Wheelbase (mm)	3310 mm



*photo for reference only

Detailed Configurations: S denotes standard configuration whilst O denotes optional configuration

Body and Frame		
Frame	Welded high yield strength tubular steel	S
Body	"PP" Alloy automatic industrial spec plastic	S
Roof	"PP" Plastic injection	S
Windshield	Hinged	S
Rear Basket	Plastic injection	S
Front Dash	Forward/Reverse switch, voltage indicator, ignition key	S
Large Seats	Backrest, cushion and armrest	S
Floor	Rubber	S
Mirror Outside		O
Solar Panels		O
Sand Bottle		O
Electric System		
Lighting system	2pcs front lights, 2pcs rear lights, 2pcs indicator lights	S
DC-DC Converter	48V/12V-300W	S
Reversing Alarm		S
Speedometer		O
Charger	Canadian Delta-Q onboard charger, input 100V-240V 50/60Hz, output 48V/17A	S
Steering and Suspension		
Steering System	Dual automotive-style strut and self-adjust rack-and-pinion steering	S
Brake System	Dual rear wheel mechanical drum brakes, self-adjusting with non-asbestos linings	S
Accelerator	Electric accelerator	S
Suspension System	4 wheel independent Helical spring with hydraulic shocks	S
Wheel and Tyre	8" Steel wheel with Carlisle Hub Cap 18x8.5-8	S
	10" aluminium wheel & 205/50-10	O
	12" aluminium wheel & 215/35-12	O

SPECIFICATIONS

7

MODEL	DK U-L617.H2
SYSTEM	48V 4.0KW AC system
Key Components	
Battery	Trojan T-875 8V*6pcs
Motor	4.0KW AC Motor
Controller	Curtis 1234e (350A)
Transaxle	12.31:1 gear ratio
Performance	
Passenger Capacity	2
Range (loaded) based on flat road @ 20 km/h	80-90 km
Max. speed @12.31:1 gear ratio	25 km/h
Minimum turning radius	3.2 m
Max. climbing ability (loaded)	20%
Max. movement after braking	6 m
Cart weight + battery	605 kgs
Max. loading weight	300 kgs
Dimensions	
Overall dimensions: LWH (mm)	3100*1200*1880 mm
Cargo dimensions: LWH (mm)	1400*1100*265 mm
Min. ground clearance (mm)	110 mm
Wheelbase (mm)	1990 mm



*photos for reference only



Detailed Configurations: S denotes standard configuration whilst O denotes optional configuration

Body and Frame		
Frame	Welded high yield strength tubular steel	S
Raised Chassis	Higher ground clearance + 12" alu wheel + ATV tyre	O
Body	"PP" Alloy automatic industrial spec plastic	S
Roof	"PP" Plastic injection	S
Windshield	Hinged	O
Front Bumper	Plastic injection	S
Front Dash	Forward/Reverse switch, voltage indicator, ignition key	S
Large Seats	Backrest, cushion and armrest	S
Side Mirrors		O
Extended Cargo Box	1800*1100*300 mm	O
Electric System		
Lighting system	2pcs front & rear LED lights with LED indicators	S
DC-DC Converter	48V/12V-300W	S
Reversing Alarm		S
Speedometer		O
Charger	Canadian Delta-Q onboard charger, input 100V-240V 50/60Hz, output 48V/17A	S
Steering and Suspension		
Steering System	Dual automotive-style strut and self-adjust rack-and-pinion steering	S
Brake System	Dual rear wheel mechanical drum brakes, self-adjusting with non-asbestos linings	S
Accelerator	Electric accelerator	S
Suspension System	4 wheel independent Helical spring with hydraulic shocks	S
Wheel and Tyre	8" steel wheel & 18x8.5-8	S
	10" aluminium wheel & 205/50-10	O
	12" aluminium wheel & 215/35-12	O

8 WARRANTY

DRAKE Golf, Lifestyle and Commercial Carts Company hereby warrants that any new DK L617 series electric DRAKE golf car purchased from an authorized DRAKE golf car dealer in South Africa will be free from defects in material and workmanship for THREE years from date of purchase, subject to the stated limitations.

DURING THE PERIOD OF WARRANTY any authorized DRAKE golf car dealer will, free of charge, repair or replace, at Drake's discretion, any part adjudged defective by Drake due to faulty workmanship or material from the factory. Parts used in warranty repairs will be warranted for the balance of the vehicle's warranty period. All parts replaced under warranty become property of DRAKE Golf, Lifestyle and Commercial Carts Company.

GENERAL EXCLUSIONS from this warranty shall include any failures caused by:

- a. Abnormal strain, neglect, or abuse, including lack of proper maintenance, and use contrary to the Owner's/Operator's Manual instructions.
- b. Accident or collision damage.
- c. Installation of parts or accessories that are not original equipment.
- d. Fading, rust, or deterioration due to exposure or ordinary wear and tear.

Modifications or alterations that affect the car's condition, operation, performance, or durability, or which makes the car serve a purpose other than use as a two-person, golf course vehicle.

- f. Damage due to improper transportation.
- g. Acts of God, i.e. lightning, hail damage, flooding, fire, etc.

WARRANTY COVERAGE:

YEAR 1: The first year of warranty shall cover the entire vehicle except for the Specific Exclusions below.

YEAR 2: The second year exclusions are the speed controller, battery charger, body parts, seats, mats, bumper assembly, bag carrier, scorecard holder, trim, and the Specific Exclusions below.

YEAR 3: The third year of the warranty covers only the electric motor and transaxle on the DK L617.

WARRANTY

8

SPECIFIC EXCLUSIONS: Specific exclusions from this warranty shall include the following:

- Electric car batteries, which are covered under a separate warranty.
- Any parts replaced due to normal wear or routine maintenance.
- Any charges incurred in transporting a golf car or charger to and from an authorised DRAKE golf car dealer for service or in performing field service are also excluded from this warranty.

THE CUSTOMER'S RESPONSIBILITY under this warranty shall be to:

1. Operate and maintain the golf car and charger as specified in the appropriate Owner's/Operator's Manual;
2. Give notice to an authorized DRAKE golf car dealer of any and all apparent defects within ten (10) days after discovery, and make the vehicle or charger available at that time for inspection and repairs by the Drake's authorized representative.

WARRANTY TRANSFER: Any transfer of warranty must take place within the first three years of the original in-service date of the vehicle. The vehicle must be re-registered by an authorized DRAKE Golf Car Dealer within 30 days of transfer. A fee may be charged for the transfer of the warranty.

DRAKE GOLF, LIFESTYLE AND COMMERCIAL CARTS COMPANY MAKES NO OTHER WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED THE OBLIGATIONS AND TIME LIMITS STATED IN THIS WARRANTY ARE HEREBY DISCLAIMED BY DRAKE GOLF, LIFESTYLE AND COMMERCIAL CARTS COMPANY AND EXCLUDED FROM THIS WARRANTY.

ALSO EXCLUDED FROM THIS WARRANTY ARE ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING LOSS OF USE.



DRAKE
GOLF, COMMERCIAL & LIFESTYLE CARTS



DRAKE Golf, Commercial & Lifestyle Carts

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