



MODEL YEAR **2023**

OWNER'S / OPERATOR'S MANUAL



GOLF CAR

 Read this manual carefully before operating this vehicle.

DRIVE²



**DR2 POWERTECH AC
IRS Li**



WARNING: This product can expose you to chemicals including phthalates and lead which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

INTRODUCTION

Congratulations on your purchase of a Yamaha golf car. This manual contains information you will need for proper operation, maintenance, and care of your golf car. A thorough understanding of these simple instructions will help you to obtain maximum enjoyment from your new Yamaha.

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

Yamaha Golf-Car Company

**DR2 POWERTECH AC IRS Li
OWNER'S/OPERATOR'S MANUAL
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LIT-19626-A2-65**

IMPORTANT MANUAL INFORMATION

Particularly important information is distinguished in this manual by the following notations:

	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
 WARNING	A WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.
 NOTICE	A NOTICE indicates special precautions that must be taken to avoid damage to the vehicle or other property.
TIP	A TIP provides key information to make procedures easier or clearer.

TIP

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

WARNING

Read and understand this manual completely before operating your golf car. This manual should be considered a permanent part of your golf car and should remain with the car when resold.

Lithium-ion battery disposal

Lithium-ion batteries are recyclable. If you have any questions concerning battery disposal or recycling, please consult your Yamaha dealer.



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WARRANTY

LIMITED 4-YEAR WARRANTY FOR DRIVE² FLEET GOLF CAR

Yamaha Golf-Car Company hereby warrants that any new Yamaha DRIVE² Gas or DRIVE² Electric Fleet golf car purchased from Yamaha, or an Authorized Dealer or Distributor in the United States will be free from defects in material and workmanship for FOUR years from date of purchase, subject to the stated limitations. DURING THE PERIOD OF WARRANTY, any authorized Yamaha golf car service technician, dealer, or distributor will, free of charge, repair or replace, at Yamaha's option, any part adjudged defective by Yamaha 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 Yamaha Golf-Car Company.

Car Components	Warranty Period	Electric Car Specific Parts	Warranty Period
Frame	Limited Lifetime to Original Owner	Battery - Trojan T875 FLA	4 Years or 23,500 amp hours whichever comes first / without HydroLink Watering System
Transaxle	4 Years		4 Years or 25,000 amp hours whichever comes first / with HydroLink Watering System *See Trojan Warranty Statement for details
Steering / Suspension Components	4 Years	Battery - Trojan T875 AGM	5 Years or 50,000 amp hours whichever comes first *See Trojan Warranty Statement for details
Brakes (Excluding Shoes / Pads)	4 Years	RoyPow® Lithium-Ion Battery	5 Years or 97,000 amp hours whichever comes first *See RoyPow Battery Warranty Statement for details
Sun Top	4 Years	Battery Charger and Cord	4 Years
Electrical Wires, Switches, and Relays	3 Years	Electric Motor and Controller	4 Years
Pedal Assy	3 Years	Charger Receptacle	4 Years
Body Parts	3 Years	Throttle Position Sensor	2 Years
Bumpers / Bag Carrier	3 Years	Gas Car Specific Parts	Warranty Period
Seats	2 Years	Gas Engine	4 Years
Scorecard Holder	2 Years	Starter Generator	4 Years
Floor Mats	2 Years	Exhaust / Intake	4 Years
Common Accessories	Warranty Period	Clutch (Excluding Drive Belt)	4 Years
Genuine Yamaha Fleet Accessories	3 years *Refer to the Accessory Warranty Statement for details	Throttle / Control Cables	3 Years
		Starting Battery	1 Year
		All Remaining Parts	1 Year

EXCLUSIONS from this Warranty shall include any failures caused by:

- Abnormal strain, neglect, or abuse, including lack of proper maintenance, and use contrary to the Owner's/Operator's Manual instructions.
- Accident or collision damage.
- Installation of parts or accessories that are not original equipment.
- 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.
- Damage due to improper transportation.
- Acts of God, e.g. lightning, hail damage, flooding, fire, etc.

This Limited Warranty does not cover any parts replaced due to normal wear or routine maintenance, including oil and air filter elements, brake shoes, tire wear, spark plugs, starter and clutch drive belts. Any charges incurred in transporting a golf car or charger to and from an authorized Yamaha golf car dealer for service or in performing field service are also excluded from this warranty. Gasoline-powered golf car starting batteries on vehicles equipped with a golf course GPS device, or any other device with a parasitic current draw, unless the vehicle is equipped from the factory with an optional deep cycle starting battery, are also excluded from this warranty.

The Customer's Responsibility under this warranty shall be to:

- Operate and Maintain the golf car, personal transportation vehicle (PTV), or commercial (Utility) vehicle as specified in the appropriate Owner's/Operator's manual, and
- Give notice to an authorized Yamaha Golf car dealer/distributor of all apparent defects within ten (10) days of discovery, and make the car available at that time for inspection and repairs at the dealer's/distributor's place of business, and
- Transporting the car to and from an authorized dealer or distributor for warranty service.

EMISSION CONTROL SYSTEM WARRANTY (USA only):

Yamaha Golf-Car Company also warrants to the ultimate purchaser of each gas-powered golf car covered by this warranty that the product is designed, built, and equipped so as to conform at the time of sale with all U.S. emission standards applicable at the time of manufacture and that it is free from defects in materials and workmanship which would cause it not to meet these standards within the same time period described in THE PERIOD OF WARRANTY above, or a minimum of two years, whichever is longer. Failures other than those resulting from defects in material or workmanship which arise solely as a result of owner abuse and/or lack of proper maintenance are not covered by this warranty.

Yamaha Golf-Car Company makes no other warranty of any kind, expressed or implied. All implied warranties of merchantability and fitness of merchantability and fitness for a particular purpose which exceed the obligations and time limits stated in this warranty are hereby disclaimed by Yamaha Golf-Car Company and excluded from this Warranty.

Some states do not allow limitations on how long implied warranty lasts, so the above limitation may not apply to you. Also excluded from this Warranty is any incidental or consequential damages including loss of use. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. This Warranty give you specific legal rights, and you may also have other rights, which vary from state to state.

YAMAHA GOLF-CAR COMPANY, KENNESAW, GEORGIA 30144

EFFECTIVE DATE: 9/1/21

5-YEAR LIMITED WARRANTY FOR ROYPOW® BRAND BATTERY SYSTEM WHEN CHARGED WITH A YAMAHA PROVIDED 48-VOLT CHARGER

Yamaha Golf-Car Company (herein referred to as "YGC") hereby warrants to the Original Retail Purchaser or Lessee of a Yamaha Drive® Golf car, PTV, Multi passenger, or Utility car purchased from Yamaha, or an Authorized Dealer or Distributor in the United States, that the RoyPow® brand battery charged with a Yamaha provided battery charger will be free from defects in materials and workmanship, and will provide "36-hole performance" as follows:

- 5-years or 97,000 amp-hours, whichever comes first, with S51105PC battery system

WARRANTY LIMITATIONS

Yamaha Golf-Car Company's and RoyPow Technology Company Limited's limit of liability shall be to replace a defective battery. Replacement shall mean furnishing a new battery or used battery with sufficient life to complete the remainder of the warranty term, at no cost to the purchaser during the limited warranty period, except for labor or transportation expenses. The following conditions apply:

- Amp-hours will be determined either through the PC Genius controller or through other means necessary in the event of a controller failure or replacement.
- This warranty only applies to factory installed RoyPow® battery charged with a Yamaha provided battery charger.
- The customer must perform (or have a contracted Yamaha Dealer perform) all periodic maintenance and discharge testing as specified in the Yamaha Service Manual Maintenance Schedule. No labor or transportation expenses are included in this limited warranty. Maintenance records must be kept.
- YGC supplied or approved replacement battery may be of a different brand or capacity, but are warranted to provide 36-hole performance for the remainder of the original warranty term.
- "36-hole performance" is defined as 83 minutes (@ 56 amp draw) discharge time as tested and recorded using a Lester model #17770 discharge machine at an ambient temperature of 80 degrees F (27 degrees C).
- The customer must notify the Dealer within 10 days that a vehicle has failed to make 36 holes per day. YGC reserves the right to test and recharge any battery in question.

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

LIMITED WARRANTY EXCLUSIONS:

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

THE PROVISIONS OF THIS LIMITED WARRANTY SHALL NOT APPLY IF BATTERIES ARE SUBJECTED TO ANY OF THE FOLLOWING CONDITIONS:

- Batteries subjected to any parasitic load while in storage or transit.
- Batteries operated with accessory loads in excess of 8AH draw.
- Abuse or neglect such as loose or defective wiring, rusted or corroded hardware.
- Lack of proper maintenance as outlined in the electric vehicle Owner's / Operator's Manual. For example, improper charging procedures during long term storage.
- Damage caused by improper removal or installation of the battery.
- Neglect, breakage, freezing, fire, explosion, wreckage, impact, the addition of any chemical, or the operation of the battery in an uncharged condition (below half-charge).
- Battery charged by systems other than the original equipment type battery charger.
- On fleet golf cars, the use of any non-YAMAHA supplied electrical devices that consume more than one amp-hour per round or two amp-hours per day of battery energy. Examples of these devices include, but are not limited to: heating or cooling systems; GPS (global position system) devices; information gathering devices; lights; radios or stereos; or yardage measuring devices.
- Less than one charger per car or inadequate facility electrical power to power all chargers. Examples include more than one charger on a single circuit, circuit rating of less than 15 amps, or not enough circuits for the number of cars.
- In fleet applications, less than one battery charger per vehicle. For example, using only 10 battery chargers to charge a 15 car fleet.
- The use of any system that does not allow the battery chargers to shut off automatically. For example, timer systems that are designed to switch battery charger AC power on and off during peak demand hours.
- Damage not resulting from a defect in materials or workmanship or which occurs due to abuse or neglect (including failure to provide reasonable and necessary maintenance), accident, alteration or acts of God is excluded from this limited warranty.

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

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

Some states do not allow limitation on the duration of an implied warranty, exclusions or limitations of incidental or consequential damages. Therefore, the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary state to state.

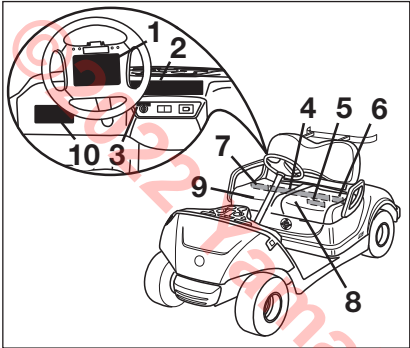
YAMAHA GOLF-CAR COMPANY, KENNESAW, GEORGIA 30144

EFFECTIVE DATE: 9/1/21

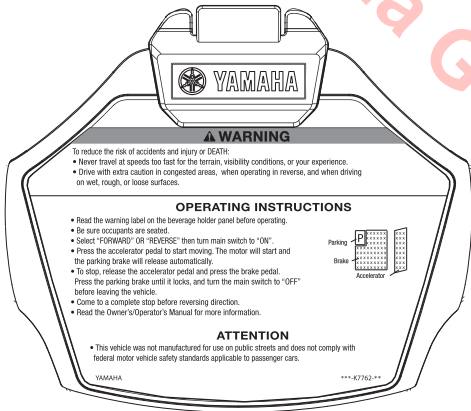
IMPORTANT LABELS

SAFETY AND INSTRUCTION LABELS

Read the following labels carefully before operating your golf car. If any of these labels are damaged or missing, contact a Yamaha dealer for replacements.



1



2

⚠ WARNING

To reduce the risk of accidents and injury or DEATH:

- Read the label located on the steering wheel before operation.
- Operate only when authorized and only in designated areas.
- Operate from driver's seat only.
- This vehicle is restricted to 2 occupants per bench seat.
- Do not start vehicle until all occupants are seated.
- Remain seated and hold on when in motion.
- Keep entire body inside vehicle.
- Drive slowly in turns.
- Drive straight up and down slopes.
- Set parking brake before leaving vehicle.
- Turn main switch to "OFF" and remove key when not in use.
- Do not operate or ride while distracted or under the influence of alcohol or drugs.

YAMAHA

***-K7768-**

3



4

	⚠ WARNING Electrical shorts can result in burns. • Do not make connection between positive and negative battery terminals.	⚠ AVERTISSEMENT Les courts-circuits électriques peuvent causer des brûlures. • Ne pas relier la borne positive et la borne négative d'une même batterie.		⚠ WARNING High voltage. Risk of shock. • Do not touch uninsulated electrical terminals or wires. • Do not open battery case. • No user serviceable parts inside. • Battery must be serviced only by trained personnel.	⚠ AVERTISSEMENT Haute tension. Risque d'électrochoc. • Ne touchez pas les bornes ou les fils électriques non isolés. • N'ouvrez pas le boîtier de la batterie. Aucune pièce réparable par l'utilisateur. • La batterie ne doit être entretenue que par du personnel qualifié.
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***-K8297-**

5

NOTICE

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.

NOTIFICATION

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 decharge totale de la batterie et endommager la batterie pendant l'entreposage a long terme.
- Apres avoir change l'interrupteur de position "RUN" a position "TOW", attendre un minimum de 15 seconds avant de le remettre.

YAMAHA

***-K8298-**

IMPORTANT LABELS

6

DATE OF CONSTRUCTION: *** ** MY***
YAMAHA MOTOR POWERED PRODUCTS CO., LTD
200-1 SAKAGAWA, KAKEGAWA, JAPAN
MAX. BATTERY WEIGHT: ** kg
NOMINAL SYSTEM VOLTAGE: ***V
VEHICLE LOAD CAPACITY: *** kg PER SEAT, ** kg BAGWELL

CE
MODEL: *****
MAX.POWER: *** hp (** kW)
WEIGHT (NO BATT): *** kg



***-F4236-**

2

7

CAN ICES-002/NMB-002

***-H5377-**

8



Authorized personnel allowed to operate only.
Do not disassemble or incinerate.
Follow product charging instructions.



High voltage. Risk of shock.
Do not touch uninsulated termin
or connectors.



No sparks!
No flames!
No smoking!



Li-ion



9



HOT

10

 **WARNING**

Improper tire pressure or overloading can cause loss of control. To reduce the risk of accidents and injury or DEATH:

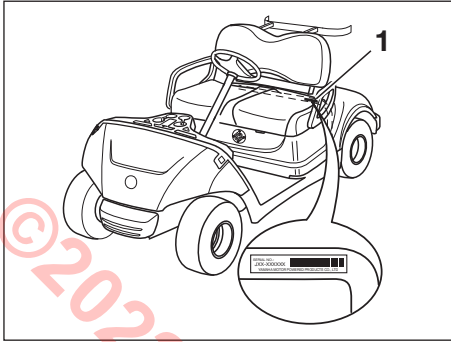
- Operating tire pressure: set with tires cold.

	Recommended	
Tire size	Front	Rear
205/65-10, 4ply	151 kPa, 22 psi	/ 151 kPa, 22 psi
18x8.50-8, 4ply	137 kPa, 20 psi	/ 137 kPa, 20 psi

YAMAHA

***-F1696-**

IMPORTANT LABELS



1. Vehicle serial number

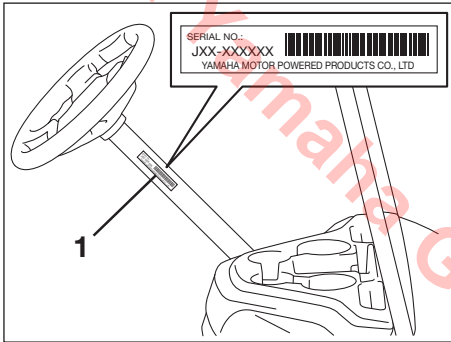
SERIAL NUMBER

The serial number is identified in the location shown.

TIP

The first three digits of the serial number are for model identification; the remaining digits are the unit production number. Keep a record of these numbers for reference when ordering parts from a Yamaha Golf-Car Company dealer.

2



1. Vehicle serial number

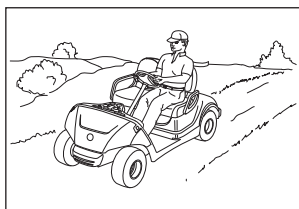
Serial number:

SAFETY INFORMATION

Yamaha golf cars are designed to be simple to operate. However, be sure to observe the following to reduce the risk of serious injury or death due to loss of control and other hazards:

BEFORE OPERATING THE GOLF CAR

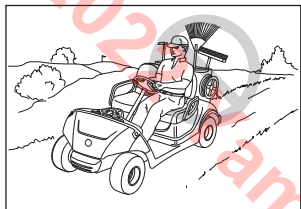
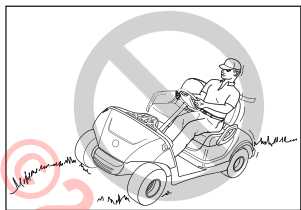
- Read this Owner's/Operator's manual and all safety and instruction labels on the golf car before operating.
- Perform the pre-operation checks found in Section 5 of this manual.
- Only authorized people should drive the golf car, from the driver's side only, and only in designated areas.
- Do not allow more than two occupants per seat. This golf car is restricted to two occupants unless equipped with a rear 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.



WHILE OPERATING THE GOLF CAR

- Keep your entire body inside the golf car, remain seated, and hold on when the car is in motion.
- Do not start the golf car until all occupants are seated.
- Keep your hands on the steering wheel and your eyes on the path ahead.
- Use extra care in congested areas or when backing up. Always back up slowly, and watch carefully.
- Avoid starting or stopping abruptly.
- Vary the speed of the golf car to match the terrain of the course.

SAFETY INFORMATION



- Avoid turning the steering wheel too sharply at higher speeds to avoid tipping or rolling the golf car.
- Always drive slowly straight up or straight down slopes – never at an angle to avoid tipping or rolling the golf car.

- Do not make any modification or addition which affects capacity or safe operation, or make any changes not in accordance with the owner's/operator's manual.

SAFETY INFORMATION

Like all machines, golf cars can cause injury if improperly used or maintained. This section contains broad safety practices required for safe golf car operation. Before golf cars are operated, golf course personnel should establish any additional safety practices that may be required for safe operation.

Experience has shown that golf cars are safe when operated in accordance with the safety warnings affixed to every golf car. This safe operation is enhanced when golf cars are used according to the safety rules and practices established to meet the terrain and conditions of the course they are used on.

The information contained here is intended for golf course personnel responsible for golf car safety. If you are responsible for the operation and maintenance of this golf car, we encourage you to implement this golf car safety program.

DRIVER QUALIFICATIONS

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 conspicuous place near the golf car rental area or golf car pick-up area.

It is also recommended that the following warning 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.



SAFETY INFORMATION

GOLF COURSE SAFETY SURVEY

Perform safety surveys regularly to identify hazardous areas where golf cars should not be operated.

GOLF COURSE HAZARD PREVENTION

The following golf course hazards must be made safe:

- **Steep Grades.** Where steep grades exist, restrict golf cars to designated golf car pathways where possible. In addition, identify steep grades with a suitable warning like:



WARNING

Descend steep grades 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.

- **Sharp Turns, Blind Corners, Bridge Approaches.** Chain or rope off these potentially hazardous areas or identify them with a suitable warning describing the nature of the hazard and the proper precautions to be taken to avoid the hazard.
- **Wet Areas.** Wet grass may cause a golf car to lose traction and may affect stability. Golf car operators should reduce speed in wet areas or during periods of inclement weather.
- **Loose Terrain.** Loose terrain may cause a golf car to lose traction and may affect stability. Repair loose terrain, chain or rope off these areas, or identify loose terrain with a suitable warning.
- **Golf Car and Pedestrian Interference.** Reroute golf car traffic or pedestrian traffic in congested areas wherever possible to prevent accidents. If it is impractical to reroute traffic, erect warning signs to warn pedestrians of golf car traffic, and to warn golf car operators to drive slowly, use caution, and watch for pedestrians.

MAINTENANCE REQUIRED FOR GOLF CAR SAFETY

Practice the following to help ensure the safety of golf car operators:

- **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.

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.

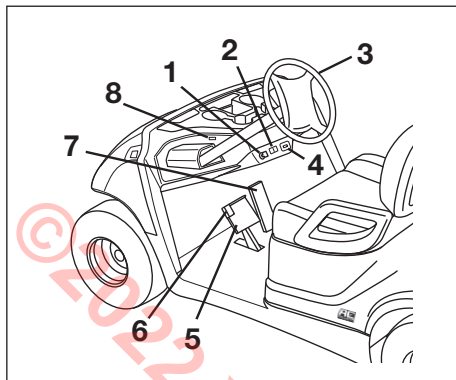
- Do not open battery case. The battery has no user serviceable parts.
- Maintain all safety devices including brakes, steering mechanisms, warning devices, and governors, in a safe operating condition. Do not modify these safety devices as supplied by the manufacturer.
- After each maintenance or repair, 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 Yamaha dealer.

STORAGE AND BATTERY CHARGING

Take the following precautions 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.

CONTROLS

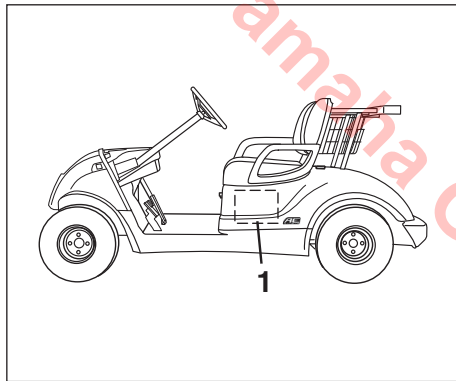


FEATURES

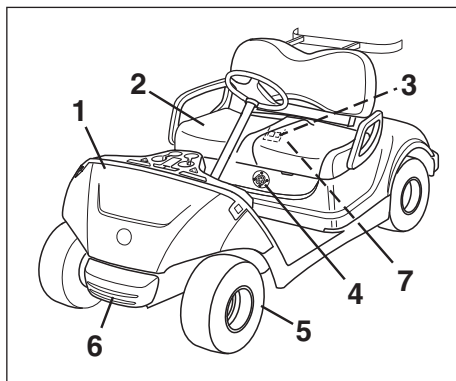
1. Main switch
2. Drive select switch
3. Steering wheel
4. Battery gauge*
5. Brake pedal
6. Parking brake pedal
7. Accelerator pedal
8. USB ports

*Optional battery gauge

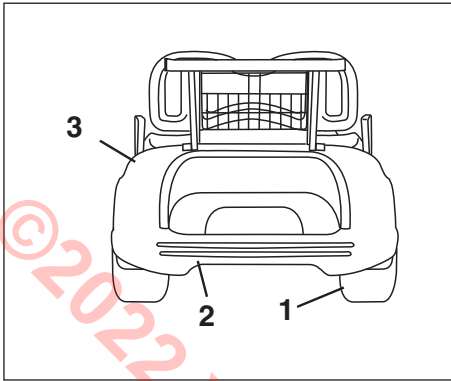
4



1. Battery



1. Front body
2. Seat
3. Tow switch
4. DC charger receptacle
5. Front tire
6. Front bumper
7. Fuses

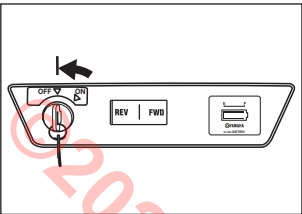


1. Rear tire
2. Rear bumper
3. Rear body

CONTROLS

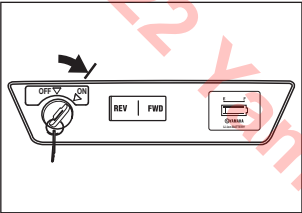
MAIN SWITCH

The main switch controls the following items:



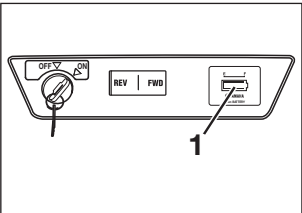
“OFF”

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.

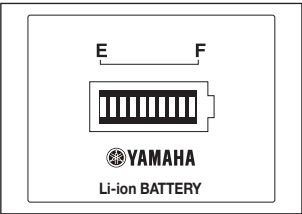


“ON”

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



1. Battery gauge



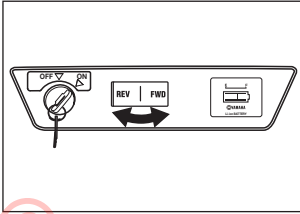
OPTIONAL BATTERY GAUGE

The battery gauge displays how much charge is left in the battery. When the battery is at full charge, all the LEDs will be lit.

As the battery energy decreases, the LEDs will move to the left toward the “E.” When the LED light below the “E” is the only one lit, the battery must be charged.

Use the table to determine the remaining battery capacity. For example, if 7 of the 10 LED lights are lit, the battery still has SOC (state of charge) 64-71 % left. When the battery falls to SOC 20 % or less, 1 LED will blink on and off, meaning the battery should be charged immediately.

BAR LEVEL	1 BLINK	2	3	4	5	6	7	8	9	10
SOC (%)	0-20	20-29	29-37	37-46	46-54	54-64	64-71	71-80	80-88	88-100



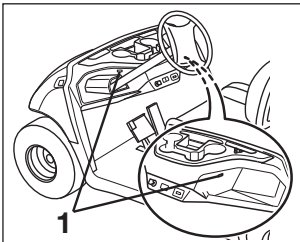
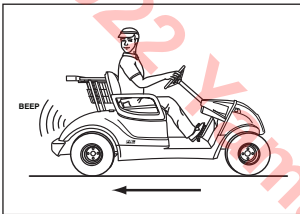
DRIVE SELECT SWITCH

The drive select switch is used to shift the golf car into forward or reverse. After coming to a complete stop, move the lever to the desired position.

Switch Position	Car Movement
FWD	FORWARD
REV	REVERSE

TIP

The reverse alarm will sound when the drive select switch is turned to "REV."

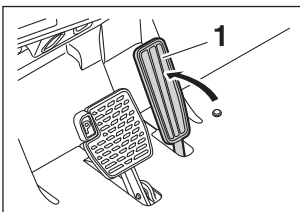


1. USB port

USB PORTS

A USB port is located inside the dash on the driver side and passenger side. These can be used to power or charge USB devices or accessories.

The USB is only powered when the key is in the ON position.



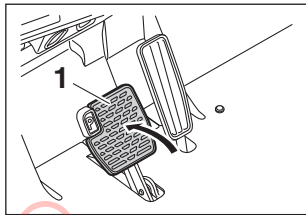
1. Accelerator pedal

ACCELERATOR PEDAL

The accelerator pedal controls the golf car's speed.

Action	Car Speed
Depress pedal	Increase
Release pedal	Decrease

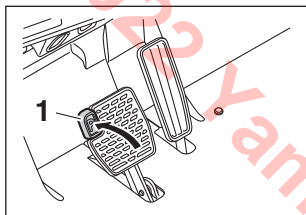
CONTROLS



1. Brake pedal

BRAKE PEDAL

Press down on the brake pedal to stop the golf car.



1. Parking brake pedal

PARKING BRAKE PEDAL

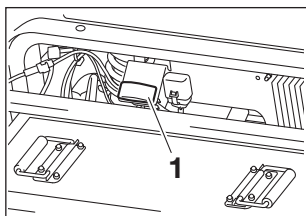
Press down on the parking brake pedal whenever parking the golf car.

TIP

Release the parking brake by depressing the accelerator pedal.

⚠ WARNING

The parking brake will automatically release when 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.



1. Tow switch

TOW SWITCH

Before operating the car, make sure the tow switch is in the "RUN" position.

NOTICE

Ensure that the "Drive Select Switch" is in the "FWD" position and then move the "TOW Switch" to "TOW" before towing.

After moving switch from "RUN" to "TOW," wait 15 seconds minimum before switching again.

Failure to do so may lead to drive system damage while towing.

TIP

If move the TOW switch from RUN to TOW while the main key is ON, the buzzer will sound.

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PRE-OPERATION CHECKS

Pre-operation checks should be made each time you use your golf car. Get in 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.

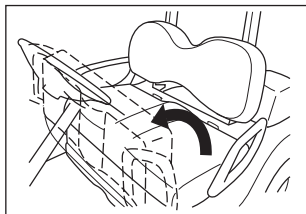
Death or serious personal injury can result from failing to comply with the safety instructions in this manual.

PRE-OPERATION CHECKS

Refer to the Periodic Maintenance and adjustment charts on pages 24 and 26.

SEAT

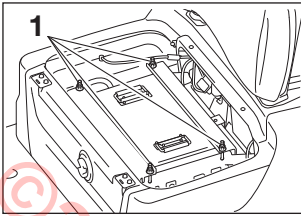
Lift up the seat for checking and servicing.



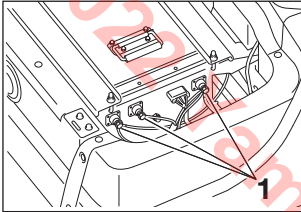
PRE-OPERATION CHECKS

BATTERY

Check that the battery is held securely in place to prevent it from being damaged from vibration or jarring. Check the battery terminals for corrosion and tightness.



1. Battery hold-down

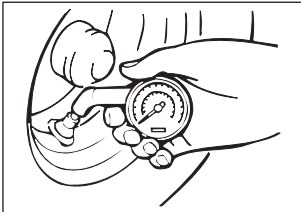


1. Battery terminal

TIRE CONDITION

Tire Air Pressure

Check the tire air pressure before operating the golf car.

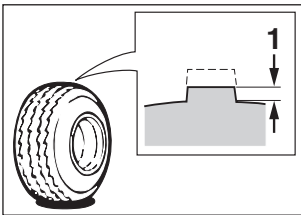


Tire pressure:

137 kPa (1.40 kgf/cm², 20 psi)

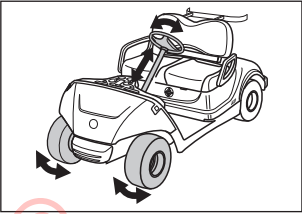
Tire Wear Limit

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



1. Wear limit

PRE-OPERATION CHECKS

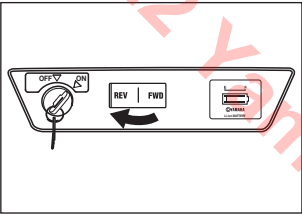


STEERING SYSTEM

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 Yamaha dealer.



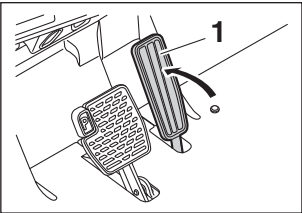
REVERSE ALARM

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 Yamaha dealer.

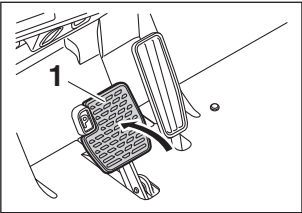
Accelerator Pedal



1. Accelerator pedal

WARNING

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

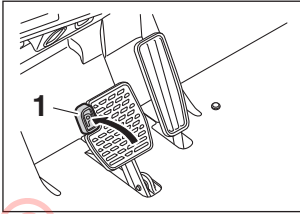


1. Brake pedal

Brake Pedal

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

PRE-OPERATION CHECKS



1. Parking brake pedal

Parking Brake Pedal

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

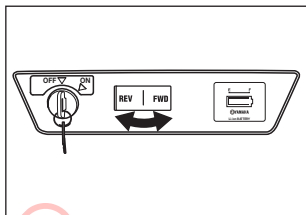
TIP

Release the parking brake by depressing the accelerator pedal.

BODY AND CHASSIS

Before each use, visually inspect the golf car body and chassis for damage and/or missing parts.

OPERATION

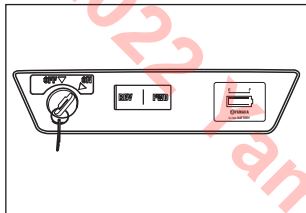


STARTING

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

NOTICE

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

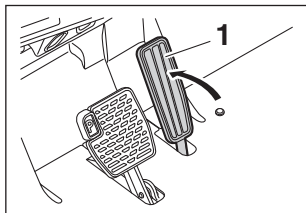
Do not depress the accelerator pedal when turning on the main switch or the golf car may start moving unexpectedly. Death or serious personal injury can result from failing to comply with the safety instructions in this manual.

3. Check that your path is clear in the direction you plan to go, and slowly depress the accelerator pedal. The golf car will start to move.

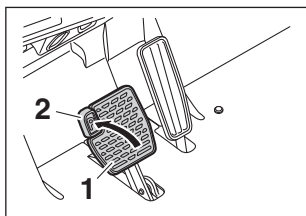
TIP

The parking brake automatically releases when the accelerator pedal is depressed.

6



1. Accelerator pedal



1. Brake pedal
2. Parking brake pedal

STOPPING

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

NOTICE

Do not hold the golf car on an incline with the accelerator – use the brake. Transmission damage can result.

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

MAINTENANCE AND ADJUSTMENT

PERIODIC MAINTENANCE AND ADJUSTMENT CHARTS

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

Even if the vehicle isn't driven for the stated mileage or engine hours, the month maintenance intervals should still be followed. Items marked with an asterisk should be performed by a Yamaha dealer as they require special tools, data and technical skills.

⚠ WARNING

Be sure to turn off the main switch and apply the parking brake when you perform maintenance, unless otherwise specified. If the owner is not familiar with servicing the machine, death or serious personal injury can result. When in doubt the work should be done by a Yamaha dealer or other qualified mechanic.

NOTICE

Yamaha Golf-Car Company does not approve the use of high-pressure washers to clean the products they manufacture. Doing so may damage the finish on the body or result in doing other damage not covered by warranty.

CS - CHECK CA - CHECK AND ADJUST R - REPLACE S - SERVICE CL - CLEAN AND LUBRICATE L - LUBRICATE

	Remarks	Daily Pre- Operation	40 rounds 20 hours 100 miles 160 kms (Every Month)	250 rounds 125 hrs 600 mls 1000 kms (Every 6 months)	500 rounds 250 hrs 1200 mls 2000 kms (Every Year)	1000 rounds 500 hrs 2500 mls 4000 kms (Every 2 years)	2000 rounds 1000 hrs 5000 mls 8000 kms (Every 4 years)	Page
PRE-OP	Charge battery	S	S	S	S	S	S	12 / 27
	Check for tightness of battery hold-down screws and terminals	S	S	S	S	S	S	20
	Check brake pedal freeplay and adjust if necessary	CS	CA	CA	CA	CA	CA	21 / 44
	Check steering operation	CS	CS	CS	CS	CS	CS	21
	Check tire pressure, tread depth, tire surface for damage	CS	CA	CA	CA	CA	CA	20

* Items without a page number reference should be serviced by a Yamaha dealer or other qualified mechanic. This manual does not contain these procedures. They are contained in the Service Manual.

** Do no operate vehicle if discrepancy is found.

MAINTENANCE AND ADJUSTMENT

CS - CHECK CA - CHECK AND ADJUST R - REPLACE S - SERVICE CL - CLEAN AND LUBRICATE L - LUBRICATE

	Remarks	Daily Pre- Operation	40 rounds 20 hours 100 mls 160 kms (Every Month)	250 rounds 125 hrs 600 mls 1000 kms (Every 6 months)	500 rounds 250 hrs 1200 mls 2000 kms (Every Year)	1000 rounds 500 hrs 2500 mls 4000 kms (Every 2 years)	2000 rounds 1000 hrs 5000 mls 8000 kms (Every 4 years)	Page
PRE-OP	Check body and chassis for damage	CS	CS	CS	CS	CS	CS	22
	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	21
	Check for the proper operation of pedal control area**	CS	CS	CS	CS	CS	CS	21
EVERY MONTH	Check for loose or broken connections		CS	CS	CS	CS	CS	*
	Clean/Lube pedal control area		CL	CL	CL	CL	CL	—
	Check the debris around the battery and resistor.		CS	CS	CS	CS	CS	47
EVERY 6 MONTHS	Check all wire insulation for cracks and/or worn spots			CS	CS	CS	CS	*
	• Check brake cable operation • Inspect for abrasions and damage, and replace if necessary			CS R	CS R	CS R	CS R	44
	Check shock absorbers for oil leaks and damaged springs			CS	CS	CS	CS	*
EVERY YEAR	Apply battery Terminal protectant				S	S	S	—
	Check rear axle bearing play for roughness or freeplay				CS	CS	CS	*

* Items without a page number reference should be serviced by a Yamaha dealer or other qualified mechanic. This manual does not contain these procedures. They are contained in the Service Manual.

** Do not operate vehicle if discrepancy is found.

MAINTENANCE AND ADJUSTMENT

CS - CHECK **CA** - CHECK AND ADJUST **R** - REPLACE **S** - SERVICE **CL** - CLEAN AND LUBRICATE **L** - LUBRICATE

	Remarks	Daily Pre- Opera- tion	40 rounds 20 hours 100 miles 160 kms (Every Month)	250 rounds 125 hrs 600 mls 1000 kms (Every 6 months)	500 rounds 250 hrs 1200 mls 2000 kms (Every Year)	1000 rounds 500 hrs 2500 mls 4000 kms (Every 2 years)	2000 rounds 1000 hrs 5000 mls 8000 kms (Every 4 years)	Page
EVERY YEAR	Check steering knuckle bushing freeplay / Adjust wheel alignment				CA	CA	CA	*
	Check wheel nut tightness, front wheel bearing play				CS	CS	CS	*
	Check transmis- sion oil level and inspect for leakage				CS	CS	CS	41
	Adjust parking brake release				CA	CA	CA	46
	Inspect pedal components**				CS	CS	CS	*
EVERY 4 YEARS	Replace transmis- sion oil						R	*
	Inspect brake shoes and adjust or replace if nec- essary						CA	*

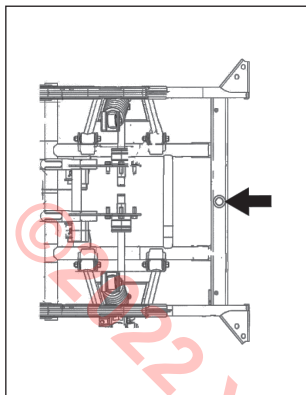
* Items without a page number reference should be serviced by a Yamaha dealer or other qualified mechanic. This manual does not contain these procedures. They are contained in the Service Manual.

** Do not operate vehicle if discrepancy is found.

TIP

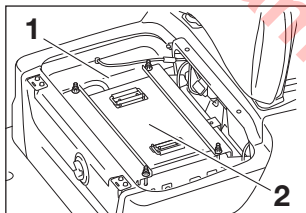
Some maintenance items need more frequent service if you drive in unusually wet, dusty, sandy, or muddy areas.

MAINTENANCE AND ADJUSTMENT



REAR LIFTING POINT

If the rear of the car needs to be lifted for a maintenance procedure, make sure it is lifted at the correct rear lifting point (see arrow).



BATTERY CHARGING

⚠ WARNING

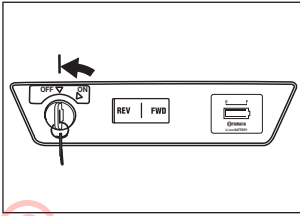
- Read and understand the owner's manual provided with your golf car's battery charger before charging battery. Death or serious personal injury can result from failing to comply with the safety instructions in this manual.
- Remove any and all debris that collects around the resistor heat shield and the resistor. Allowing debris build up can create a fire hazard.
- The Lithium-ion battery charging system is equipped with a resistor. This resistor activates at the end of the charging cycle. When the resistor is activated the resistor heat shield and resistor will become hot.

To charge the battery in your golf car, follow the instructions contained in your battery charger's owner's manual. The following is a summary of the charging steps.

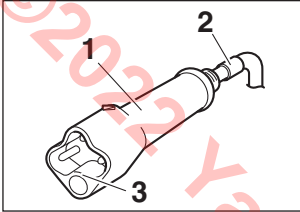
Battery ambient temperature

Charging : 5-49 °C (42-121 °F)

MAINTENANCE AND ADJUSTMENT



1. Turn main switch key to “OFF” position.

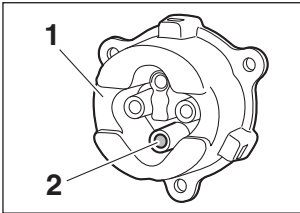


2. Check the DC output plug and code for damage.

TIP

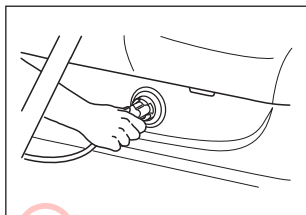
The location of the dummy pin is different between the flood battery and the Lithium-ion battery.

1. DC output plug for Lithium-ion battery
2. Identification wrap (Green)
3. Rib



1. Receptacle for Lithium-ion battery
2. Dummy pin

MAINTENANCE AND ADJUSTMENT



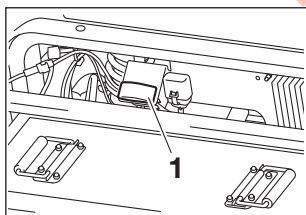
3. With the charger properly connected and grounded (see charger's owner's manual), insert the DC output plug into the DC charger receptacle.

⚠ WARNING

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

NOTICE

Do not insert the DC output plug from a Lithium-ion battery charger into the DC charger receptacle of a car equipped with a different battery type. DC plug or receptacle damage can result. See the identification procedure on page 27.



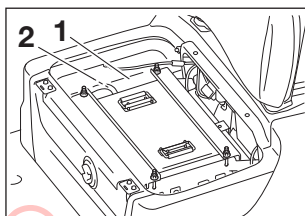
1. Tow switch

4. Lift up the seat and move the tow switch to the TOW position.

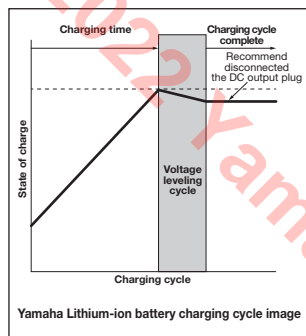
NOTICE

- Put the tow switch in the “TOW” position after connect DC plug to receptacle, otherwise damage to the electrical system may result.
 - Use only the Yamaha provided Lithium-ion battery charger that is rated for use with a Lithium-ion battery powered Yamaha Golf Car. Serious battery damage can result. Thoroughly read and understand the user manual supplied with your charger for Yamaha Lithium-ion battery system.
5. Once the battery is fully charged, the charge cycle will stop automatically.

MAINTENANCE AND ADJUSTMENT



1. Heat shield
2. Resistor



6. After the end of the charge cycle, a battery voltage leveling cycle begins. The voltage leveling cycle turns on the resistor.
7. After the battery charging and voltage leveling cycle has finished, disconnect the DC output plug from the DC charger receptacle by grasping the plug body and pulling the plug straight out of the receptacle.

TIP

- Recommended to disconnect after the voltage leveling cycle for efficient use of regenerative charging. (See the figure on the left)
- After disconnecting the DC output plug from receptacle, wait at least 3 seconds before switching the tow switch from "TOW" to "RUN".

FUSE REPLACEMENT

WARNING

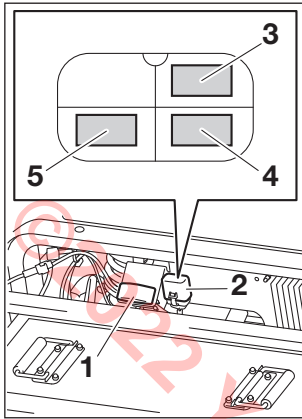
Be sure to use the specified fuse. Using a wrong fuse can cause electrical system damage and create a fire hazard. Death or serious personal injury can result from failing to comply with the safety instructions in this manual.

NOTICE

When replacing a fuse be sure the main switch is turned off to prevent accidental short-circuiting and electrical system damage. Put tow switch in the tow position.

The fuse holder is located under the seat. (next to the tow switch)

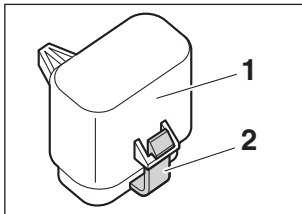
MAINTENANCE AND ADJUSTMENT



To access the fuse holder

1. Lift up the seat (see page 19).
2. Locate the fuse holder next to the tow switch.

1. Tow switch
2. Fuse holder
3. USB Mini fuse (1.0A 58V)
4. Main Mini fuse (5.0A 58V)
5. MCU Mini fuse (3.0A 58V)



3. Depress the locking tab of the fuse holder, and then remove the fuse holder cover.
4. Pull the fuse out and inspect it. Replace the fuse if necessary.
5. Install the fuse holder cover.
6. Close the seat.

1. Fuse holder cover
2. Locking tab

MAINTENANCE AND ADJUSTMENT

BATTERY CHARGER

Prepare for Emergencies

Be prepared for possible injury or fire.

Keep the following items handy:

- First aid kit
- Fire extinguisher
- Emergency phone numbers

Read the text located on the case of the charger before operating or using the charger.

Features

Switch-Mode Design: High-efficiency operation with smooth, ripple-free DC output.

10-LED Display: Displays state of charge and charge error conditions.

Charge Protection: Protects from improper connection, overload and excessive temperatures.

Programmed safety features include charge time monitoring and over temperature protection.

INSTALLATION

WARNING

RISK OF FIRE - Use this charger only on circuits with a 15-amp or higher branch circuit protection (circuit breaker or fuse) in accordance with the national electrical code, ANSI/NFPA 70 and all applicable local codes and ordinances.

When using an extension cord, use only a grounded, 3-wire, 12-AWG cord no longer than 15 m (50 ft.). The use of an improper extension cord could result in a risk of a fire or electric shock.

WARNING

The output of chargers with greater than 48 volts may pose an energy and/or shock hazard under normal use.

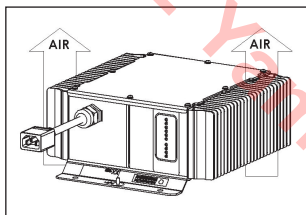
MAINTENANCE AND ADJUSTMENT

NOTICE

Avoid connecting a charger and another device to a single 15A/20A circuit or the circuit may become overloaded.

The AC outlet the charger is connected to must be capable of supplying 12 Amperes.

Also, maximum Ampere varies depending on AC voltage. Please refer to “AC Input” in General Specifications.



MOUNTING

⚠ WARNING

This charger is not designed for on-board use. Improper mounting or installation could result in a risk of fire or damage to the golf car.

Mount the charger on a shelf or on the wall with adequate ventilation.

Ideally it will be mounted horizontally with airflow from below. If it will be mounted vertically, it is recommended that the AC-input cord be at the lower end of the charger.

Keep the charger free of oil, dirt, mud or dust to keep the cooling fins operating as efficiently as possible. Mount the charger by the mounting plate using appropriate fasteners.

TIP

The charger's AC plug must be located at least 46 cm (18 in.) above the ground and the display visible to the user.

⚠ WARNING

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

MAINTENANCE AND ADJUSTMENT

GROUNDING

The battery charger must be grounded to reduce the risk of electric shock. The charger is equipped with a 3-prong AC cord set. The AC cord set must be connected to an appropriate receptacle that is properly installed and grounded in accordance with the National Electrical Code and all local codes and ordinances.



WARNING

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

The conductor with insulation that has an outer surface that is green, with or without yellow stripe(s), is the equipment-grounding conductor. If repair or replacement of the charger's AC cord set is necessary, do not connect the equipment-grounding connector to a live terminal.

MAINTENANCE AND ADJUSTMENT

CHARGING

WARNING

To reduce the risk of an electric shock, connect only to a properly grounded, single-phase (3-wire) outlet. Also, refer to grounding instructions.

WARNING

Risk of electric shock! Do not touch any uninsulated parts of the charger output plug, DC charger receptacle or battery terminals.

WARNING

Surfaces may be hot. To avoid risk of burns, do not touch.

NOTICE

Charge only Yamaha Lithium-ion battery systems manufactured by RoyPow Technology Co., Ltd. Damage to the charger and batteries may result if this charger is used on the wrong battery type.

WARNING

Visually and manually inspect to verify that the DC output cord, plug and battery charging receptacle are in good working condition before each and every use. Do not use the charger under any of the following conditions:

- The DC charging receptacle does not grip the DC output plug tightly, is loose or does not make a good electrical connection.
- The DC output plug or charging receptacle feels hotter than normal.
- The DC output plug or charging receptacle contacts are bent, corroded, or are dark or bluish in appearance.
- The DC output plug, cords, receptacle or equipment-charging wiring are cut, worn, broken or have any exposed conductors.
- The DC output plug, cords, charger or receptacles are damaged or distressed in any way.

MAINTENANCE AND ADJUSTMENT

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

WARNING

Do not disconnect the DC output plug from the DC charger receptacle when the charger is on. If the charger must be stopped, first disconnect the AC power supply cord from its AC outlet, and then disconnect the charger DC output plug from the DC charger receptacle.

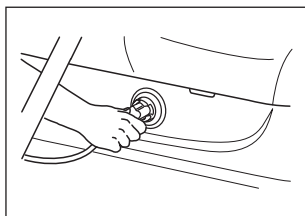
WARNING

Whenever disconnecting a AC or DC cord set plug from receptacle, pull from the plug body and not from their respective cords.

The instructions printed on the charger (shown below) are for daily reference. The charger is factory preset for use with Yamaha Lithium-ion golf car batteries.

OPERATING INSTRUCTIONS

1. PLUG AC CORD INTO A GROUNDED RECEPTACLE
2. PLUG DC CORD INTO DC CHARGER RECEPTACLE
3. CHARGE CYCLE WILL BEGIN AFTER A FEW SECONDS AND AMMETER WILL TURN ON
4. CHARGER SHUTS OFF AUTOMATICALLY WHEN BATTERIES ARE CHARGED

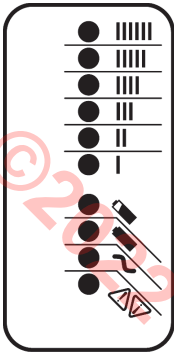


Connect battery charger's AC cord set to AC power. Then, connect the DC output plug to the vehicle charging receptacle by grasping the plug handle and pushing the plug straight into the DC charger receptacle. The charger will start automatically.

Upon connection to AC power source, the lower four LEDs come on as a Power-On Self-Test, then the AC power LED turns on. Upon connection to battery pack, output indicators turn on to indicate charging is active.

MAINTENANCE AND ADJUSTMENT

Under normal charge circumstances, the LEDs operate as follows:



Ammeter (Amber)     	On:	Displays approximate scale of the output current during charging.
	Blinking:	High internal charger temperature. Current output reduced.
80% Charge (Amber) 	On:	Charging, >80% charged.
	Blinking:	With no battery connected, the number of flashes indicates the algorithm ID number.
100% Charge (Green) 	On:	Charging complete. Charger in Storage Mode.
AC On (Amber) 	On:	The AC power is good.
Fault (Red) 	Blinking:	Charger error. Refer to Troubleshooting on next page.

To reset charger after 100% charge (Green LED), disconnect the DC plug from battery for more than 30 seconds. Then, reconnect DC plug.

MAINTENANCE AND ADJUSTMENT

TROUBLESHOOTING

1. LED Error Codes (For Battery Condition)

WARNING

Incorrect reassembly may result in a risk of electric shock or fire. The following procedures are intended only to determine if a malfunction may exist in the charger.

WARNING

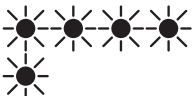
To reduce the risk of electric shock, always disconnect the charger's AC cord set plug from AC power and its DC output plug from the vehicles DC charger receptacle before attempting any maintenance or cleaning.

WARNING

Do not operate the charger if it is malfunctioning. Personal injury or property damage could result.

MAINTENANCE AND ADJUSTMENT

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

Red Flashes	Cause	Solution
	Battery High Voltage	Check battery size and condition and reset charger (i.e., remove the DC cord from the vehicle for 15 seconds).
	Battery Low Voltage	Check battery size and condition and reset charger (i.e., remove the DC cord from the vehicle for 15 seconds).
	Charge Timeout caused by battery pack not reaching required voltage.	Check connections.
	Charger output was reduced due to high temperatures.	Operate charger at a lower ambient temperature.
	Unable to communicate with Battery Management System.	Check DC connection to vehicle and battery.
	Over-Temperature: Charger shut down due to high internal temperature.	Ensure sufficient cooling air flow and reset charger (i.e., remove the DC cord from the vehicle for 15 seconds).
	Charger Internal Fault	Reset charger (i.e., remove the AC power or DC connection for 15 seconds). Return to a qualified service depot if the fault persists.

 WARNING

Have qualified service technician inspect if problems persist.

MAINTENANCE AND ADJUSTMENT

2. Hardware System Faults

Problem Description	Cause	Remedy
Charger does not start. No LEDs illuminate or blink when AC cord is connected.	No AC power to charger.	Ensure correct voltage at AC outlet. Check AC cord connections. Replace AC cord if damaged.
Charger does not start charging when DC cord set is plugged into charger receptacle and the Amber AC On LED is illuminated.	Incorrect wiring or disconnection from DC cord, charger receptacle and batteries.	Ensure polarity for wiring is correct from DC cord, charger receptacle and batteries.

WARNING

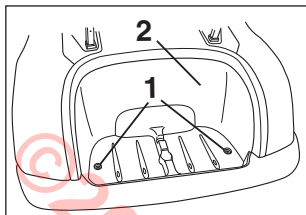
Have qualified service technician inspect if problems persist.

MAINTENANCE AND ADJUSTMENT

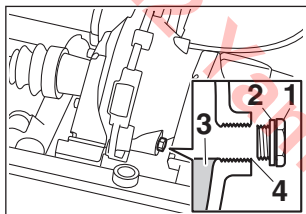
TRANSMISSION OIL

To check the transmission oil level:

1. Place the golf car on a flat, level surface.
2. Remove two bolts and remove the rear floor cover.
3. Place an oil pan under the transmission case.



1. Bolt
2. Rear floor cover



1. Transmission oil filler bolt
2. O-ring
3. Transmission oil
4. Correct oil level

4. Clean the area around the transmission oil filler bolt, and then remove the bolt.

NOTICE

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

5. The oil level should be up to the brim of the transmission oil filler hole.
6. If the level is low, add sufficient oil of the recommended type to raise it to the specified level.

Recommended oil brand:



Available viscosity index:

SAE 80W-90 or SAE 90

Transmission oil change quantity:

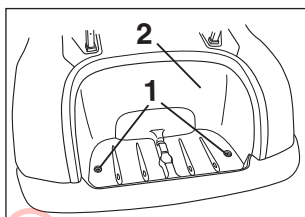
475 cc (475 mL, 0.50 US qt)

7. Allow excess transmission oil to flow out of the hole until it stops.
8. Check the O-rings for damage, and replace them if necessary.
9. Install the transmission filler bolt.

Transmission oil filler bolt tightening torque:

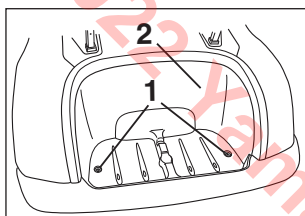
4.3 N·m (0.43 kgf·m, 3.1 lb·ft)

MAINTENANCE AND ADJUSTMENT



1. Bolt
2. Rear floor cover

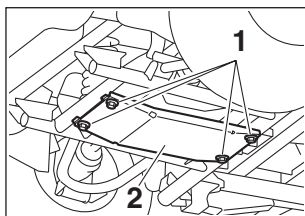
10. Install the rear floor cover and secure with two bolts.



1. Bolt
2. Rear floor cover

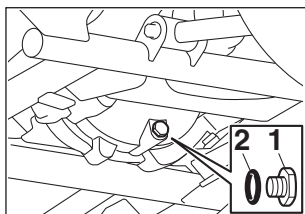
To replace the transmission oil :

1. Place the golf car on a flat, level surface.
2. Remove two bolts and remove the rear floor cover.



1. Bolt
2. Transmission cover

3. Remove the four bolts and remove the transmission cover.
4. Place an oil pan under the transmission case to collect the used oil.



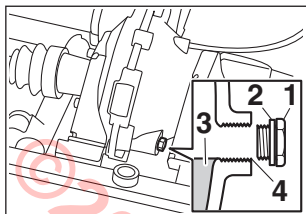
1. Transmission oil drain bolt
2. O-ring

5. Clean the area around the transmission oil filler bolt and transmission oil drain bolt. Remove the transmission oil filler bolt, the transmission oil drain bolt, and their O-rings to drain the oil.

NOTICE

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

MAINTENANCE AND ADJUSTMENT



1. Transmission oil filler bolt
2. O-ring
3. Transmission oil
4. Correct oil level

6. Check the O-rings for damage, and replace them if necessary.
7. Install the transmission oil drain bolt and its O-ring, and then tighten the bolt to the specified torque.

Transmission oil drain bolt tightening torque:

4.3 N·m (0.43 kgf·m, 3.1 lb·ft)

8. Refill the transmission case with the recommended oil.
Allow excess transmission oil to flow out of the hole until it stops.

Recommended oil brand:



Available viscosity index:

SAE 80W-90 or SAE 90

Transmission oil change quantity:

475 cc (475 mL, 0.50 US qt)

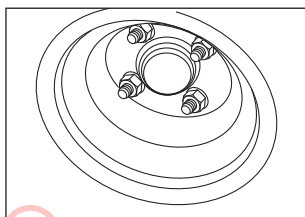
9. Install the transmission oil filler bolt and its O-ring, and then tighten the bolt to the specified torque.

Transmission oil filler bolt tightening torque:

4.3 N·m (0.43 kgf·m, 3.1 lb·ft)

10. Install the transmission cover and secure with four bolts, and then install the rear floor cover and secure with two bolts.

MAINTENANCE AND ADJUSTMENT



WHEEL REPLACEMENT

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.

To remove and install a wheel on your golf car:

1. With the wheels blocked to prevent the golf car from moving, loosen the wheel nuts.
2. Elevate the golf car with a suitable jack and remove the wheel nuts and the wheel.
3. Reverse the removal steps when installing the wheel.

Wheel nut tightening torque:

100 N·m (10 kgf·m, 74 lb·ft)

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.

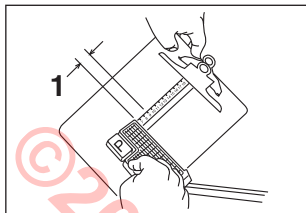
WARNING

Consult your Yamaha dealer before using your golf car if you suspect 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.

MAINTENANCE AND ADJUSTMENT

BRAKE PEDAL FREE PLAY ADJUSTMENT



1. Brake pedal free play

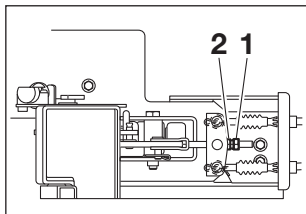
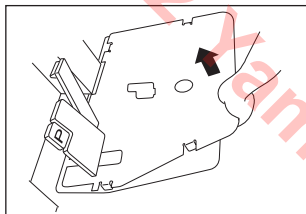
Check the brake pedal free play by pressing against the pedal with two fingers (using light force) and measuring the distance the pedal travels before resistance is felt.

Brake pedal free play:

50-55 mm (1.97-2.17 in.)

To adjust the brake pedal free play:

1. Remove the floor mat and service lid from the floor of the golf car.



1. Locknut
2. Adjusting nut

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.

WARNING

Do not over-tighten the brake cables. Over-tightening will increase brake wear and affect overall performance of golf car.

Premature brake wear can result.

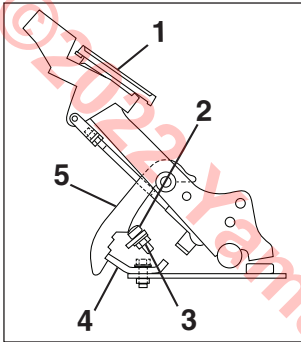
Death or serious personal injury can result from failing to comply with the warning labels in this manual.

MAINTENANCE AND ADJUSTMENT

PARKING BRAKE RELEASE ADJUSTMENT

NOTICE

Before performing parking brake release adjustment, adjust brake pedal free play.



1. Parking brake pedal
2. Bolt
3. Locknut
4. Brake nail
5. Sector

1. Apply pressure to the parking brake pedal until the brake nail catches the first latch position on the sector.
2. Loosen the locknut and turn the bolt counter-clockwise until it contacts the sector.
3. Turn the bolt clockwise $\frac{1}{3}$ of a turn (120 degrees), then tighten locknut.

STORAGE

Perform the following preparations when storing your golf car for extended periods of time:

NOTICE

Yamaha Golf-Car Company does not approve the use of high-pressure washers to clean the products they manufacture. Doing so may damage the finish on the body or result in doing other damage not covered by warranty.

TIP

Turn main switch key to "OFF" position, lift seat and put the tow switch in the "TOW" position. Remove key from main key switch, and store key in a safe place.

CHASSIS PREPARATION

1. Verify the tire pressure is set to 137 kPa (1.40 kgf/cm², 20 psi).
2. Clean exterior of the golf car and apply a rust inhibitor.
3. Cover the golf car with a breathable cover and store it in a dry, well-ventilated area.

BATTERY PREPARATION

1. Leave the battery in the golf car during storage. Do not charge it before storage.
The charger should not be left connected to the car during storage.
1 month or less in storage
Storage temperature : -20 – 45 °C (-4 – 113 °F)

More than 1 month in storage
Storage temperature : 0 – 35 °C (32 – 95 °F)
SOC range(%) : 30 – 50 % (48 – 52.8 V)
Must be discharged and charged every 6 months.
2. Remove any grass, leaves, branches or other objects from around the battery and resistor if necessary.

GENERAL SPECIFICATIONS

Items	DR2 POWERTECH AC IRS Li
Dimensions:	
Overall length	2380 mm (93.7 in.)
Overall width	1200 mm (47.2 in.)
Overall height (steering height)	1200 mm (47.2 in.)
Overall height (Sun top height)	1765 mm (69.5 in.)
Height of floor	295 mm (11.6 in.)
Wheelbase	1635 mm (64.4 in.)
Tread:	
Front	885 mm (34.8 in.)
Rear	990 mm (39.0 in.)
Ground clearance	110 mm (4.3 in.)
Weight:	
Curb weight (With Lithium-ion battery)	314 kg (692 lb)
Curb weight (With Sun top, W/S, Lithium-ion battery)	344 kg (758 lb)
Performance:	
Maximum speed	19.2 km/h (12.0 mph)
Maximum reverse speed	10.0 km/h (6.2 mph)
Turning radius	2.8 m (9.2 ft)
Seating capacity	Two occupants per seat
Hill climbing capacity	20°

BATTERY

Items	DR2 POWERTECH AC IRS Li
Lithium-ion battery:	Yamaha Lithium-ion battery manufactured by RoyPow 51-volt 5.3 kwh

SPECIFICATIONS

BATTERY AMBIENT TEMPERATURES

Lithium Battery Condition		Temperature
Operation		-20 – 55 °C (-4 – 131 °F)
Charging		5 – 49 °C (42 – 121 °F)
Storage	1 month or less	-20 – 45 °C (-4 – 113 °F)
	More than 1 month	0 – 35 °C (32 – 95 °F)

CHASSIS

Items	DR2 POWERTECH AC IRS Li
Suspension:	
Front	Independent (Coil-over strut type)
Rear	Independent (Coil-over strut type)
Steering system:	
Type	Rack and Pinion
Steering angle (L.H.)	1.85 turn
Steering angle (R.H.)	1.85 turn
Brakes:	
Brake system	Mechanical drum brake on each rear wheel with self-adjusters
Type of brake	Dual internal expanding shoe Leading/trailing shoes (self-adjusting)
Brake pedal freeplay linkage adjustment	50-55 mm (1.97-2.17 in.)
Parking brake	
Type	Foot type; rear wheel parking brake with automatic release.
Wheel	
Tire size: (Dia. [in]) × (Width [in]) - (Rim size [in]) / Ply rating)	
Front	18 × 8.50-8 / 4 PR
Rear	18 × 8.50-8 / 4 PR
Rim size: (Dia. [in]) × (Width [in]) (Offset [mm])	8 × 7.0 ±0

SPECIFICATIONS

Items	DR2 POWERTECH AC IRS Li
Tire pressure:	137 kPa (1.40 kgf/cm ² , 20 psi)

TRANSMISSION

Items	DR2 POWERTECH AC IRS Li
Differential/reduction gear	Secondary reduction system helical gear Secondary reduction ratio: Forward 12.44:1; Reverse 12.44:1 Differential type bevel gear Lubricant/capacity SAE 80W-90 or SAE 90 gear oil/475 cc (475 mL, 0.50 US qt)

SPECIFICATIONS

GENERAL SPECIFICATIONS (BATTERY CHARGER)

DC Output – see Operating Instructions

Voltage - nom (V)	48
Voltage - max (V)	67.2
Current - max (A)	18
Battery Type	Specific to selected algorithm
Reverse Polarity	Electronic protection – auto-reset
Short Circuit	Electronic current limit

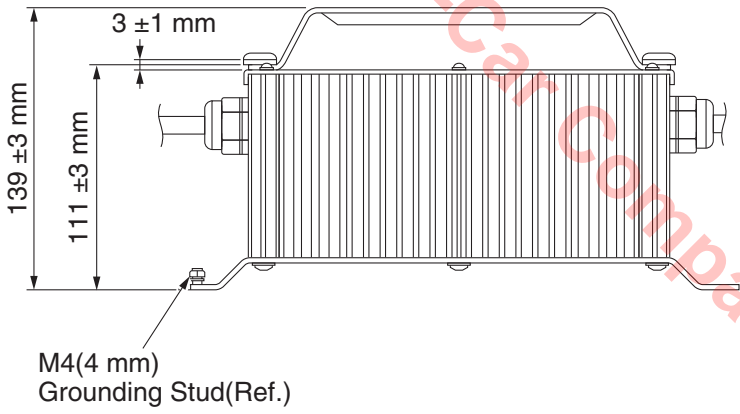
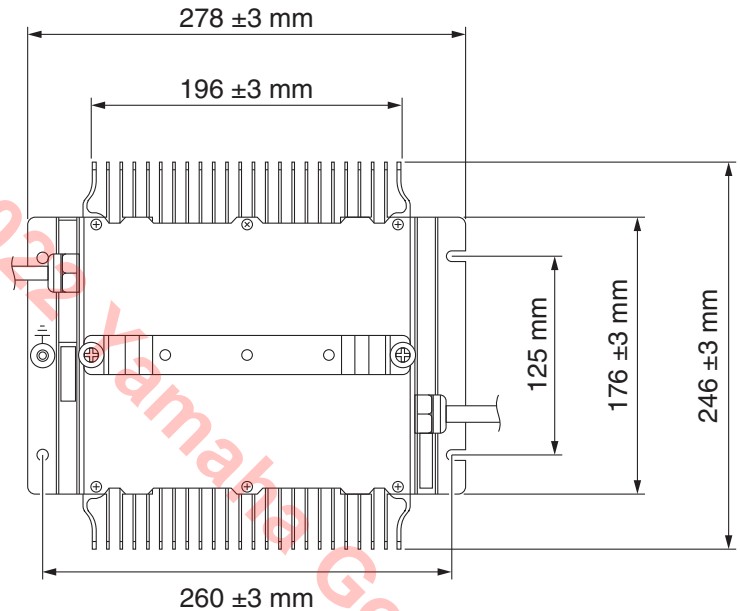
AC Input

Voltage - max (Vrms)	85-265
Frequency (Hz)	45-65
Current - max (Arms)	12A @ 100VAC / 11.5A @ 110VAC / 6.1A @ 200VAC / 5.6A @ 220VAC / 5.4A @ 230VAC / 5.1A @ 240VAC
Current - nom (Arms)	10A @ 120VAC / 6A @ 200VAC / 5.5A @ 220VAC
AC Power Factor	>0.98 at nominal input current

Mechanical

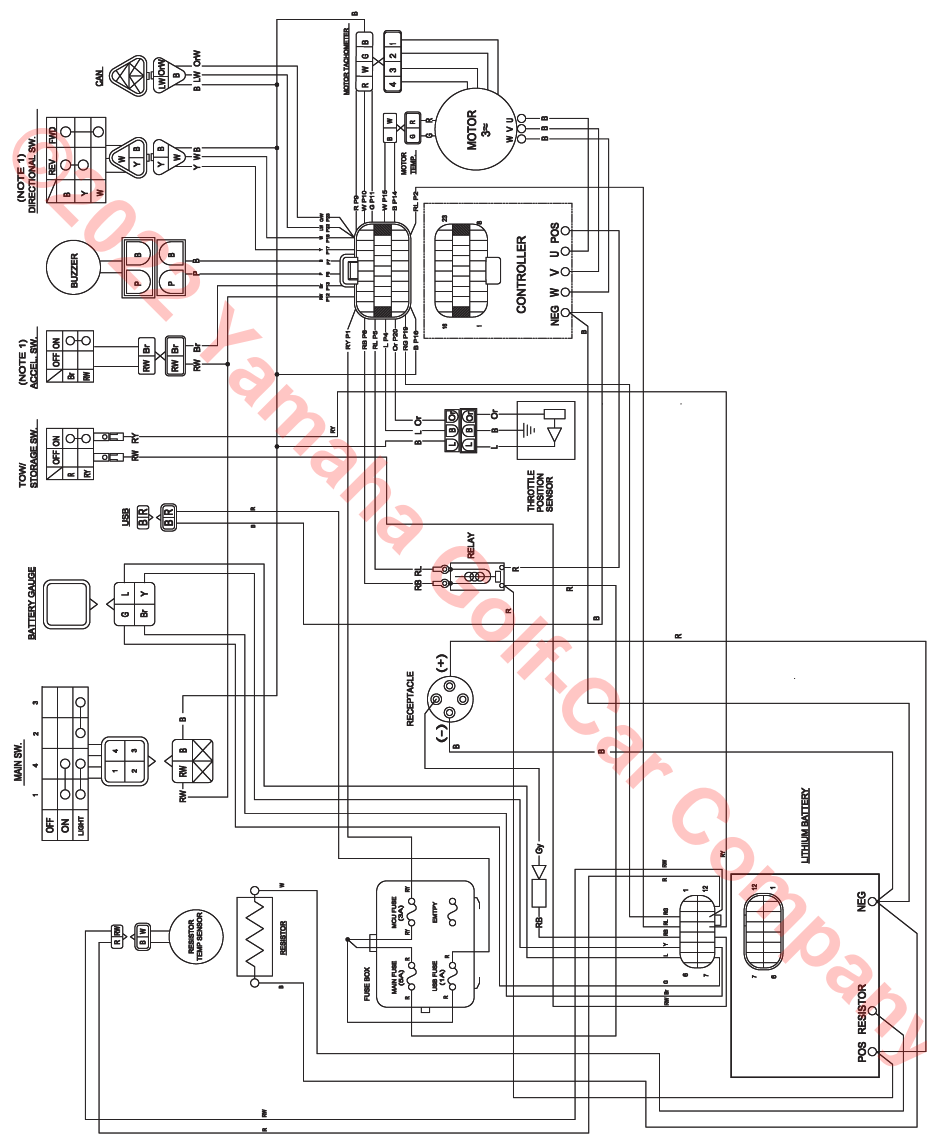
Dimensions	28.0 × 24.5 × 14.0 cm (11 × 9.7 × 5.5 in.)
Weight	<5 kg (11 lbs) w/standard cord
Environmental	Enclosure: IP66 except to AC connection pins (IP20)
Operating Temperature	-30°C to +50°C (-22°F to 122°F), derated above 30°C, below 0°C
Storage Temperature	-40°C to +70°C (-40°F to 158°F)
AC Input Connector	IEC320/C14 (≥1.8 m (6 ft) localized cord required)
DC output connector	OEM specific w/12AWG wire

MECHANICAL DRAWINGS (BATTERY CHARGER)



WIRING

DR2 POWERTECH AC IRS Li WIRING DIAGRAM



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