

YAMAHA

**OWNER'S/
OPERATORS
MANUAL**

GOLF CAR

**G16A
G16E**

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.

**TECHNICAL SERVICE DEPT
GOLF CAR SALES GROUP
YAMAHA MOTOR
MANUFACTURING CORP OF
AMERICA**

**G16A, G16E
OWNER'S/OPERATOR'S
MANUAL**

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Manufacturing Corporation
of America
1st edition**

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Corporation of America
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P/N LIT-19626-16-97**

IMPORTANT MANUAL INFORMATION

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



The Safety Alert Symbol means
ATTENTION! BE ALERT! YOUR SAFETY IS INVOLVED!

! WARNING

Failure to follow WARNING instructions could result in severe injury or death to the golf car occupants, a bystander, or a person inspecting or repairing the golf car.

CAUTION

This message describes special precautions that must be taken to avoid damage to the golf car.

NOTE:

- 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.

- This manual should be considered a permanent part of your golf car and should remain with the car when resold.

! WARNING

Read and understand this manual completely before operating your golf car.

NOTE:

This message provides additional key information.

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WARRANTY

1

YAMAHA MOTOR MANUFACTURING CORPORATION OF AMERICA G16A, G16E LIMITED WARRANTY

Yamaha Motor Manufacturing Corporation of America hereby warrants that any new G16 (gas and electric models) Yamaha Golf Car purchased from an authorized Yamaha dealer in the United States will be free from defects in material and workmanship for the period of time stated herein, subject to the stated limitations.

THE PERIOD OF WARRANTY for any G16 (gas and electric models) will be three years from date of purchase.

The first year of warranty shall cover the entire car except for batteries, battery chargers, tires and rims, which are warranted by their respective manufacturers.

The second year of warranty shall cover the engine assembly, clutch, transmission, axles, electrical system, frame, suspension components, electric motor, control cables, and steering gear.

Parts excluded from the second year of warranty include the body parts, seats, mats, bumper assembly, bag carrier, scorecard holder, and the trim.

The third year of warranty shall cover the engine assembly, clutch, transmission, axles, frame, suspension components, steering gear, and (on the G16E) electronic speed controller.

Parts excluded from the third year of warranty include the second year exclusions and the electrical system (except electronic speed controller), electric motor, and control cables.

DURING THE PERIOD OF WARRANTY any authorized Yamaha Golf Car Dealer 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 machine's warranty period. All parts replaced under warranty become property of Yamaha Motor Manufacturing Corporation of America.

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.
- e. Modification or alteration that affects 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.

SPECIFIC EXCLUSIONS from this warranty shall include any parts replaced due to normal wear or routine maintenance; including oil, air filter elements, brake shoes, spark plugs, starter and clutch drive belts. Any charges incurred in transporting a golf car to and from an authorized Yamaha Golf Car Dealer for service or in performing field service is also excluded from this warranty.

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

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

WARRANTY TRANSFER: To transfer any remaining warranty from the original purchaser to any subsequent purchaser, it is imperative that the machine be inspected and registered for warranty by an authorized Yamaha Golf Car Dealer. In order for this warranty to remain in effect, this inspection and registration must take place within ten (10) days after transfer. An inspection and registration fee may be charged for this service.

YAMAHA MOTOR MANUFACTURING CORPORATION OF AMERICA 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 YAMAHA MOTOR MANUFACTURING CORPORATION OF AMERICA AND EXCLUDED FROM THIS WARRANTY.

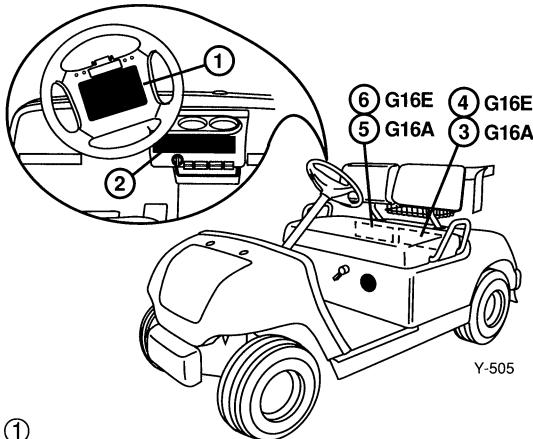
SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. ALSO EXCLUDED FROM THIS WARRANTY ARE ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING LOSS OF USE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

YAMAHA MOTOR MANUFACTURING
CORPORATION OF AMERICA
Newnan, Georgia 30265-1320

Effective Date: 2/1/96
LIT-13710-00-96

IMPORTANT LABELS



Safety and Instruction Labels

2

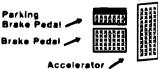
WARNING

Please read the following labels carefully before operating your golf car, and promptly replace any labels which become damaged or removed.

①

OPERATING INSTRUCTIONS

- Read the warning label on the beverage holder panel before operating.
- Be sure occupants are seated.
- Set "PARK" 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.
- Keep the vehicle balanced 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.
- Control speed according to direction.
- Press the parking brake pedal until it locks, and turn the main switch to "OFF" before leaving the vehicle.
- 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.

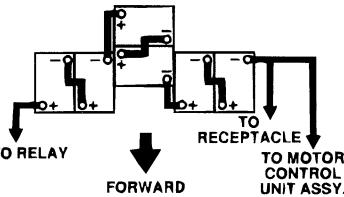
YAMAHA

JH3-K7742-01

Y-500

⑥

BATTERY INSTALLATION AND WIRE LEAD CONNECTION



YAMAHA

JN4-K7745-00

Y-66

④

WARNING/AVERTISSEMENT



EXPLOSIVE GASES
released when batteries are charged or discharged. Keep well ventilated. Shield eyes from spray. Shield eyes from spray near batteries.

LES GAZ EXPLOSIFS
se dégagent lors de la charge ou de la décharge des batteries. Garder bien ventilé. Éviter les éclaboussures, flammes et étincelles. Éviter les cigares et l'usage des cigarettes à l'approche des batteries. Se protéger les yeux lorsque l'on travaille près des batteries.



SULFURIC ACID
batteries will burn skin, eyes and clothing. Do not tip batteries. Keep vent caps closed. Avoid flames and sparks. In event of injury, flush with water and call physician immediately.

L'ACIDE SULFURIQUE
dans les batteries brûle la peau, les yeux et les vêtements. Ne renversez pas les batteries. Garder les bouchons d'aération fermés. Évitez des flammes et étincelles. Évitez les cigares et l'usage des cigarettes à l'approche des batteries. Se protéger les yeux lorsque l'on travaille près des batteries.



ELECTRICAL SHORTS
can result in burns. Do not make connection between positive and negative battery terminals.

LES COURTS-CIRCUITS ÉLECTRIQUES
peuvent causer des brûlures. Ne pas faire de connexion entre la borne positive et la borne négative d'une même batterie.

JH4-K2257-10

Y-770

②

WARNING

- Read Operating Instructions on steering wheel before operation.
- Operate only when motor is turned on in designated areas.
- Do not operate while under influence of alcohol or drugs.

OFF



- Turn main switch 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 while under influence of alcohol or drugs.

⑤

WARNING AVERTISSEMENT



- Gasoline is extremely flammable.
- Keep heat, sparks and flame away from fuel tank and fuel lines.
- Do not smoke while engine is running.
- Do not modify fuel system or service tank unless performed by dealer or qualified personnel.

- L'essence est extrêmement inflammable.
- Éloigner le feu, les étincelles, les flammes et chaleur loin du réservoir et des tuyaux à carburant.
- Ne pas fumer lorsque l'engine tourne.
- Ne pas modifier ni réparer le système d'alimentation. Toute modification doit être faite chez le fournisseur ou par du personnel qualifié.

USE REGULAR UNLEADED GASOLINE ONLY

UTILISER UNIQUEMENT DE L'ESSENCE SANS PLOMB

Pour l'huile du moteur, il faut:

- Utiliser SAE 10W-30, API Service SE or SE+
- Maintenir l'huile entre les marques "MIN" et "MAX" indiquées sur le jaquette d'huile.

JH3-K2257-10

Y-767

WARNING AVERTISSEMENT

- Do not tamper with governor to increase speed of operation at higher speeds.
- Operation at higher speeds can cause loss of control which can result in severe injury or death.

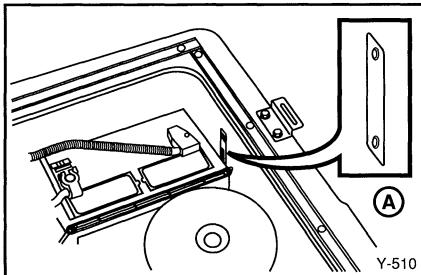
Ne pas toucher au régulateur afin d'accroître la vitesse. Un fonctionnement à des vitesses supérieures au réglage initial peut entraîner une perte de contrôle qui peut mener à une blessure grave, voire fatale.

JH3-K2299-10

Y-764

IMPORTANT LABELS

2



GOLF CAR SERIAL NUMBER

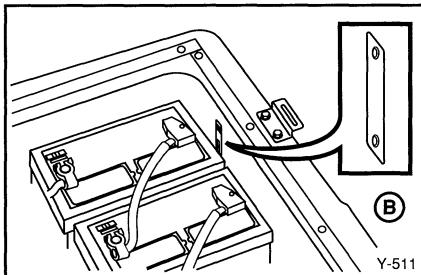
The golf car serial number is stamped in the location shown.

(A) G16A

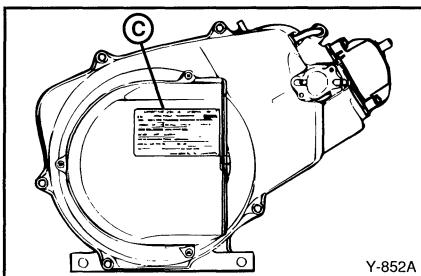
(B) G16E

NOTE:

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 dealer.



© Engine Information



IMPORTANT ENGINE INFORMATION			
ENGINE FAMILY : *****			
REFER TO OWNER'S MANUAL FOR MAINTENANCE SPECIFICATIONS AND ADJUSTMENTS.			
DISPLACEMENT:	*** cm ³	VALVE LASH/mm	IN: ***.** EX: ***.**
IGNITION TIMING & IDLE MIXTURE	NO OTHER ADJUSTMENTS NEEDED.		
IDLE SPEED:	**** rpm	AT NO LOAD	
FUEL: THIS ENGINE IS CERTIFIED TO OPERATE ON UNLEADED GASOLINE.			
ENGINE OIL:	SAE 10W-30	TYPE	SD
THIS ENGINE CONFORMS TO **** U.S. EPA REGULATIONS FOR SMALL KIONROAD ENGINES.			
YAMAHA MOTOR CO.,LTD. JN6-2179V-00			

YAMAHA

Y-843

U.S. (Except California)

IMPORTANT ENGINE INFORMATION			
ENGINE FAMILY : *****			
REFER TO OWNER'S MANUAL FOR MAINTENANCE SPECIFICATIONS AND ADJUSTMENTS.			
DISPLACEMENT:	*** cm ³	VALVE LASH/mm	IN: ***.** EX: ***.**
IGNITION TIMING & IDLE MIXTURE	NO OTHER ADJUSTMENTS NEEDED.		
IDLE SPEED:	**** rpm	AT NO LOAD	
FUEL: THIS ENGINE IS CERTIFIED TO OPERATE ON UNLEADED GASOLINE.			
ENGINE OIL:	SAE 10W-30	TYPE	SD
THIS ENGINE MEETS 1995-1996 CALIFORNIA EMISSION REGULATIONS FOR SPECIALTY VEHICLES BELOW 25HP.			
THIS ENGINE CONFORMS TO **** U.S. EPA REGULATIONS FOR SMALL KIONROAD ENGINES.			
YAMAHA MOTOR CO.,LTD. JR3-2179R-00			

YAMAHA

Y-851

California Only



OPERATOR SAFETY

Yamaha golf cars are designed to be simple to operate. However, be sure to observe the following:

3

BEFORE OPERATING THE GOLF CAR

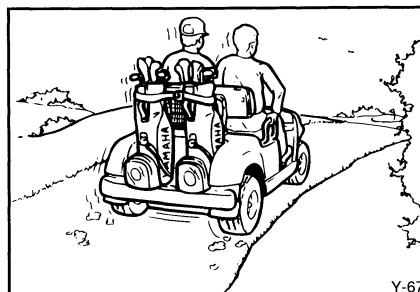


- Read this Owner's/Operator's manual and all safety and instruction labels on the golf car before operating.
- Perform the pre-operation checks found in Section 6 of this manual.
- Only authorized people should drive the golf car, from the driver's side only, and only in designated areas.
- Do not allow more than two people to ride in the golf car. This golf car is restricted to two occupants.
- Do not operate the golf car while under the influence of alcohol or drugs; their affect on vision and judgment make operating a golf car dangerous.
- Do not operate the golf car on public streets, roads or highways. Such use is prohibited by law, and dangerous. Operation on public roads can result in collision with other vehicles.



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WHILE OPERATING THE GOLF CAR



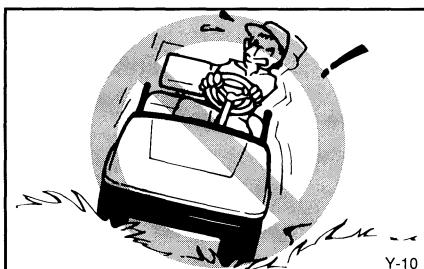
- Keep your entire body inside the golf car, remain seated, and hold on when the car is in motion.
- Do not start the golf car until all occupants are seated.



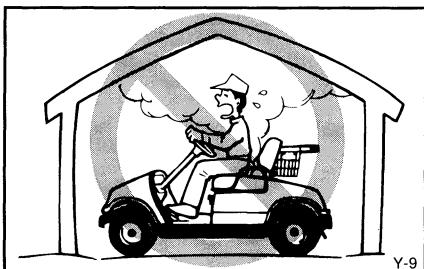
OPERATOR SAFETY

3

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

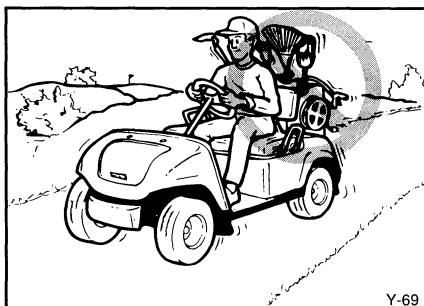


Y-10



Y-9

- Do not run the engine indoors (G16A). Exhaust gas is poisonous.



Y-69

- 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.



MAINTENANCE SAFETY PROGRAM

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:

Do Not Operate Golf Cars When Under The Influence Of Alcohol Or Drugs

GOLF COURSE SAFETY SURVEY

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

4

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: Steep Grade, Descend Slowly With Foot On Brake

- **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. Chain or rope off wet areas or identify wet areas with a suitable warning.



MAINTENANCE SAFETY PROGRAM

4

- **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. Ventilation is required to remove flammable vapors and fumes from gasoline powered car storage areas. Ventilation is also required to remove hydrogen gas from electric powered car storage areas during the charging process.

For electric powered golf cars, the amount of hydrogen gas emitted during charging depends on a number of factors, such as the condition of the batteries, the output rate of the battery charger, and the amount of time the batteries are on charge. Because of the highly volatile nature of hydrogen gas and its propensity to rise and accumulate at the ceiling in pockets, a minimum of 5 air changes per hour is recommended. Consult applicable fire and safety codes for the specific ventilation levels requirement, as well as requirements for the use of explosion proof electrical apparatus.



MAINTENANCE SAFETY PROGRAM

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.
- Properly block chassis before working underneath golf car.
- Before disconnecting any part of the fuel system, drain the applicable part of the system to prevent fuel leaks.
- Avoid fire hazards, and have appropriate fire protection equipment available.
- Before working on an electric golf car, disable the car's electrical system in accordance with the manufacturer's instructions.
- Use only properly insulated tools when working on electrically powered golf cars or around batteries.
- 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.

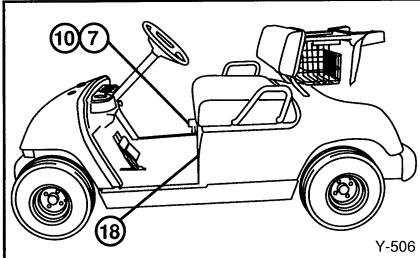
4

FUEL HANDLING/ STORAGE AND BATTERY CHARGING

Take the following precautions to ensure maintenance worker safety:

- Supervise the storage and handling of liquid fuels in accordance with applicable fire and safety requirements.
- Only use battery changing and charging facilities and procedures that are in accordance with applicable ordinances and regulations.
- Periodically inspect fueling and charging facilities and procedures to be certain that applicable safety codes, regulations, and procedures are being followed.

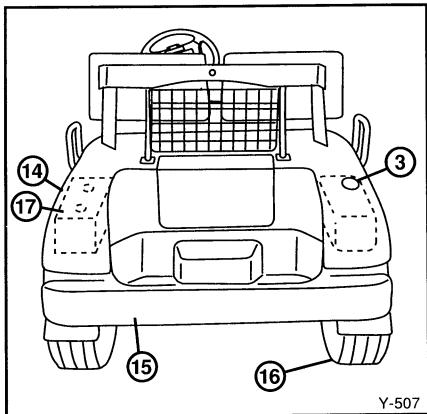
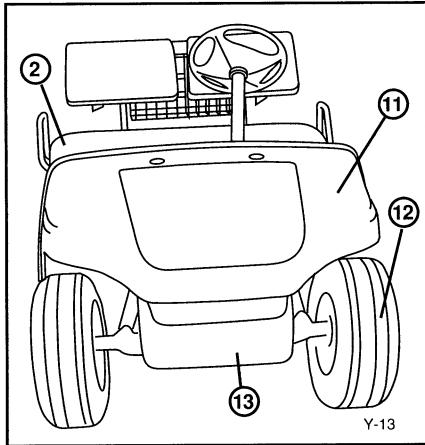
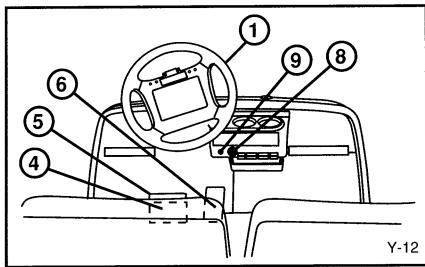
CONTROLS



FEATURES

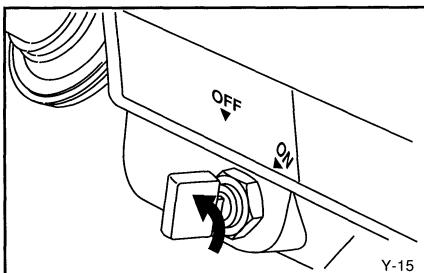
- ① Steering wheel
- ② Seat
- ③ Fuel cap (for G16A)
- ④ Brake pedal
- ⑤ Parking brake pedal
- ⑥ Accelerator pedal
- ⑦ Drive selector lever
- ⑧ Main switch
- ⑨ Oil warning light (for G16A)
- ⑩ Choke knob (for G16A)
- ⑪ Front cowl
- ⑫ Front tire
- ⑬ Front bumper
- ⑭ Rear cowl
- ⑮ Rear bumper
- ⑯ Rear tire
- ⑰ Battery (for G16A)
- ⑱ Receptacle (for G16E)

5



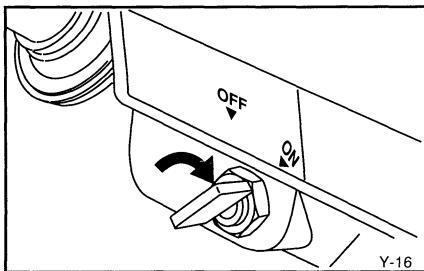
MAIN SWITCH

The main switch controls the following items:



OFF

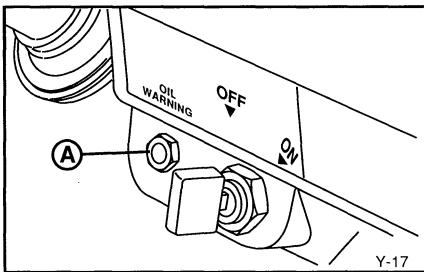
Ignition circuit is switched off.
The key can be removed only in this position.



ON

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

5

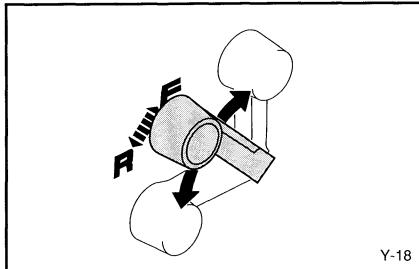


OIL WARNING LIGHT (G16A)

When the engine oil level falls below an acceptable level, this light comes on. If the light comes on, stop the engine, check the engine oil level, and add oil as necessary. (See page 6-3).

(A) Oil warning light

CONTROLS

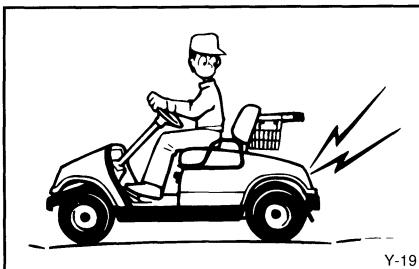


DRIVE SELECT LEVER

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

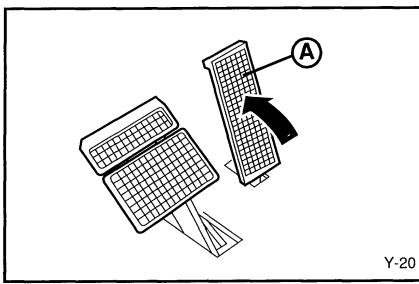
Lever Position	Car Movement
F	FORWARD
R	REVERSE

5



NOTE: _____

The back-up buzzer will beep when the drive select lever is turned to "R."

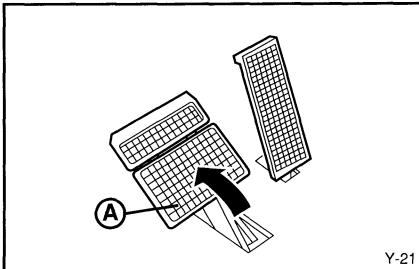


ACCELERATOR PEDAL

The accelerator pedal controls the golf car's speed.

Action	Car Speed
Depress pedal	Increase
Release pedal	Decrease

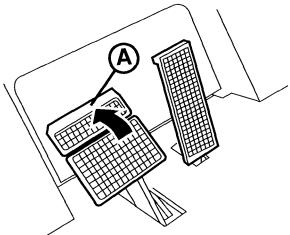
(A) Accelerator pedal



BRAKE PEDAL

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

(A) Brake pedal



Y-22

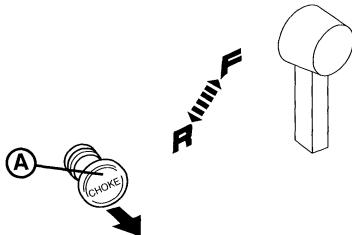
PARKING BRAKE PEDAL

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

Ⓐ Parking brake pedal

NOTE:

Release the parking brake by depressing the accelerator pedal.



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CHOKE KNOB (G16A)

Pull and hold out choke knob when starting a cold engine. Release the knob after the engine starts.

Ⓐ Choke knob

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

- Be sure the main switch key is removed before performing the pre-operation checks to prevent accidental starting, and apply the parking brake to keep the car from moving.
- For the G16A: During the pre-operation checks, avoid touching engine parts or the muffler while they are still hot.

6

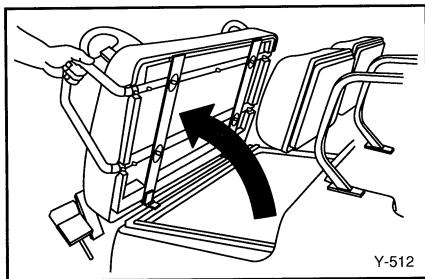
PRE-OPERATION CHECKLIST

Before each use check the following:

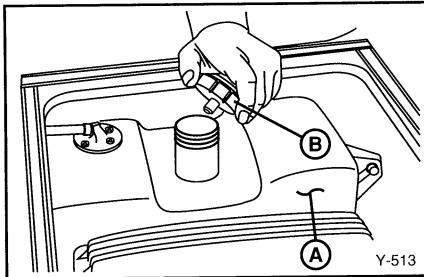
- ✓ Fuel system (G16A)
- ✓ Engine oil level (G16A)
- ✓ Battery
- ✓ Tire condition
- ✓ Steering system
- ✓ Back-up buzzer
- ✓ Pedal operation
- ✓ Body and chassis

SEAT

Open the seat for checking and servicing.



PRE-OPERATION CHECKS



FUEL SYSTEM (G16A)

Make sure there is sufficient fuel in the tank, and check fuel line and connections for leakage.

- (A) Fuel tank
- (B) Fuel cap

⚠ WARNING

Gasoline and its vapors are highly flammable and explosive.

- Do not smoke when refueling and keep away from sparks, flames, or other sources of ignition.
- Stop engine and allow it to cool for several minutes before refueling.
- Refuel in a well-ventilated area.
- Take care not to spill gasoline. If gasoline spills, wipe it up immediately with dry rags. Always dispose of gasoline-soaked rags properly.
- Tighten the filler cap securely after refueling.
- If you swallow gasoline, inhale a lot of gasoline vapor, or get gasoline in your eyes, get immediate medical attention.
- If any gasoline gets on your skin, immediately wash with soap and water. Change clothing if gasoline spills on it.

6

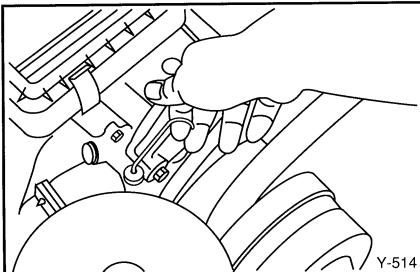
Recommended fuel:
Unleaded gasoline

Fuel tank capacity:
6.3 US gal
(24.0 L, 5.3 Imp gal)

CAUTION

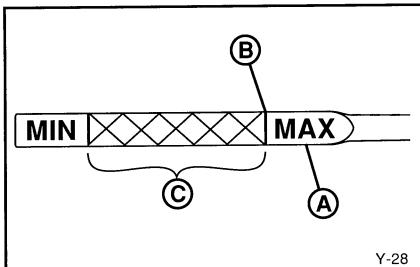
Avoid using gasoline blended with methyl alcohol which can damage fuel system parts.

PRE-OPERATION CHECKS

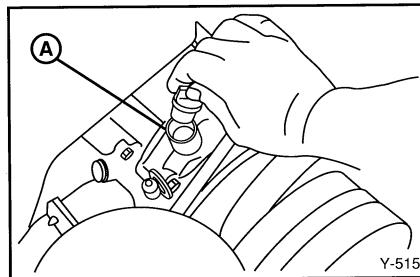


ENGINE OIL (G16A)

With the golf car parked on level ground, remove the dipstick and make sure the engine oil is between the MIN and MAX marks (the cross-hatched area on the end of the dipstick).



6



Recommended oil:
YAMALUBE 4-cycle oil or
SAE 10W-30

Engine oil capacity:
1.16 US qt
(1.0 L, 0.24 Imp gal)

Oil change quantity:
1.0 US qt
(0.9 L, 0.19 Imp gal)

- Ⓐ Oil level dipstick
- Ⓑ Maximum oil level
- Ⓒ Safe operating range

If the oil level is **below** the MIN mark on the dipstick, add oil through the oil filler hole until the oil level is between the MIN and MAX marks.

Ⓐ Oil filler hole

CAUTION

- Use care not to fill past the MAX dipstick mark, and be sure no foreign material enters the crankcase.
- Use care not to get oil on the starter belt.

NOTE:

The distance between the dipstick marks represents approx. 1/2 US qt (1/2 L) of oil.

NOTE:

Recommended engine oil classification: API Service SE, SF, or SG. Engine oils labeled "Energy Conserving II" are recommended.

PRE-OPERATION CHECKS

BATTERY

Charge G16E batteries before each use. See charging steps in chapter 8, *Maintenance*.

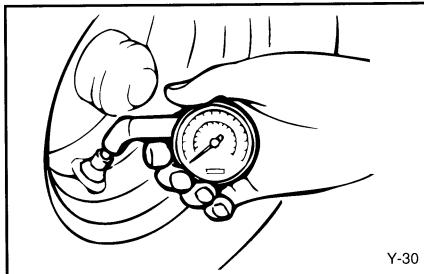
Check that the battery (G16A) or batteries (G16E) are held securely in place to prevent the batteries from being damaged from vibration or jarring. Also check that no battery caps are missing to prevent battery acid from spilling from the battery. Check the battery terminals for corrosion.

6

TIRE CONDITION

Tire Air Pressure

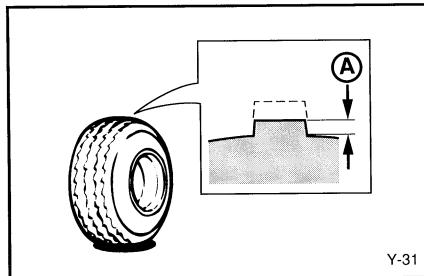
Check the tire air pressure before operating the golf car.



Tire pressure:

For G16A:
16 psi
(108 kPa, 1.1 kgf/cm²)

For G16E:
20 psi
(137 kPa, 1.4 kgf/cm²)

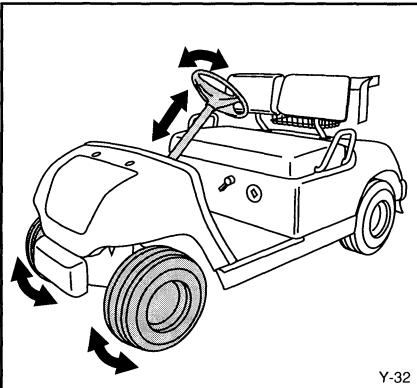


Tire Wear Limit

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

(A) Wear limit

PRE-OPERATION CHECKS

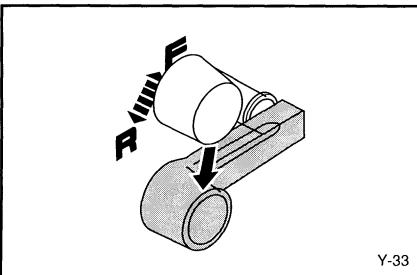


STEERING SYSTEM

Check the steering system for excessive freeplay by:

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

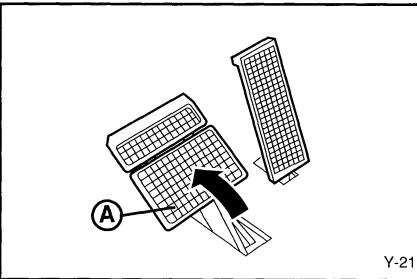
If you feel excessive freeplay, or hear rattling sounds which may indicate loose steering components, consult a Yamaha dealer.



BACK-UP BUZZER

Check the back up buzzer by moving the drive select lever to "R" for reverse. The buzzer should sound.

6



PEDAL OPERATION

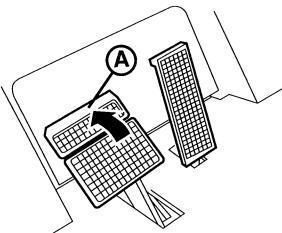
Check the following pedal controls for proper operation. If a pedal does not work properly, consult a Yamaha dealer.

Brake Pedal

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

(A) Brake pedal

PRE-OPERATION CHECKS



Y-22

Parking Brake Pedal

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

(A) Parking brake pedal

NOTE:

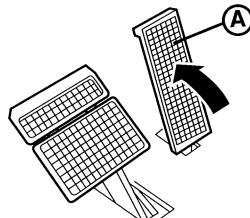
Release the parking brake by depressing the accelerator pedal.

6

Accelerator Pedal

WARNING

Before checking operation of the accelerator pedal, be sure the main switch is in the "OFF" position.



Y-20

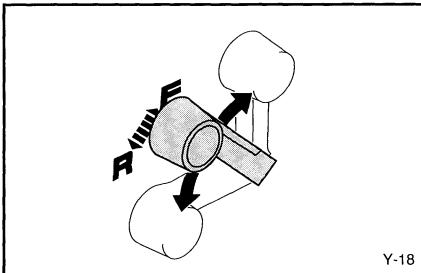
Make sure the accelerator pedal operates smoothly.

(A) Accelerator pedal

BODY AND CHASSIS

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

OPERATION

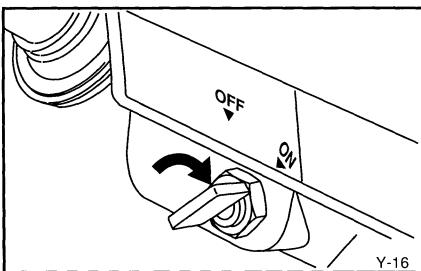


STARTING

- With the parking brake applied, turn the drive select lever to "F" for forward, or "R" for reverse.

CAUTION

Do not shift from "F" forward to "R" reverse while the golf car is moving.



- Turn the main switch to "ON."

WARNING

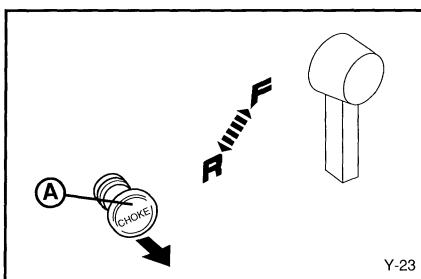
Do not depress the accelerator pedal when turning on the main switch or the golf car may suddenly start moving.

- Pull the choke knob out and hold it while starting (G16A). Release the choke knob after the engine starts.

(A) Choke knob

NOTE:

The choke is not required when the engine is warm.

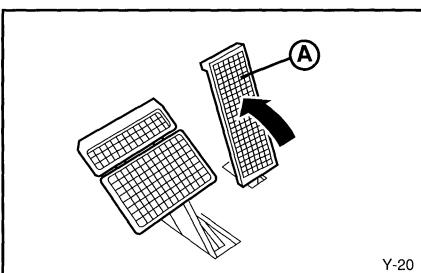


- Check that your path is clear in the direction you plan to go, and slowly depress the accelerator pedal. The golf car will start to move.

(A) Accelerator pedal

NOTE:

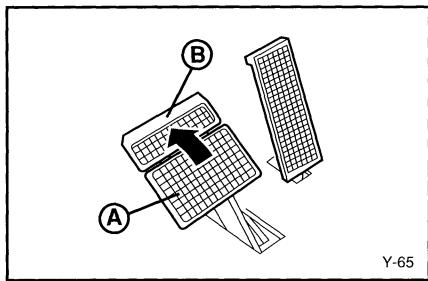
The parking brake automatically releases when the accelerator pedal is depressed.



STOPPING

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

(A) Brake pedal



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

(B) Parking brake pedal

CAUTION

Do not hold the golf car on an incline with the accelerator – use the brake.

TROUBLESHOOTING G16A

If G16A's gas engine won't start, use the following chart:

Cause	Remedy
Fuel System	
No fuel in tank	Fill fuel tank
Clogged fuel line	Clean fuel line – Consult Yamaha dealer
Foreign matter in fuel filter	Clean fuel filter – Consult Yamaha dealer
Clogged carburetor	Clean carburetor – Consult Yamaha dealer
Electrical System	
Spark plug dirty with carbon, or wet	Clean carbon or wipe spark plug dry
Faulty ignition system	Consult Yamaha dealer

MAINTENANCE

PERIODIC MAINTENANCE CHARTS

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

WARNING

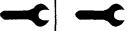
Be sure to turn off the main switch and apply the parking brake when you perform maintenance unless otherwise specified. If the owner is not familiar with machine servicing, this work should be done by a Yamaha dealer or other qualified mechanic.

FOR G16A

Check or Adjust

Lubricate

Replace

Item	Remarks	Every							Page
		Pre-Operation	20 Rounds 20 hours 100 miles 160 kms (1 month)	125 rds 125 hrs 600 mls 1000 kms (6 months)	250 rds 250 hrs 1200 mls 2000 kms (1 year)	500 rds 500 hrs 2500 mls 4000 kms (2 yrs)	1000 rds 1000 hrs 5000mls 8000 kms (4 yrs)		
Engine	Adjust valve clearance (cold)**								*
	Check tightness of cylinder head								*
	Check condition of air cleaner pre-filter**								8-8
	Wash the pre-filter with soap and water and allow it to dry**								8-8
	Check condition of air filter element**								8-8
	Check spark plug for condition of electrode**								8-5
	Check engine oil								6-3
	Replace engine oil								8-6
	Check compression pressure								*
Fuel system	Adjust throttle cable								*
	Adjust choke cable**								*
	Check carburetor for dirt or wear**								*
	Check fuel lines for leakage								6-2
	Replace fuel hoses								*
	Check fuel filter for clogging								*
	Replace fuel filter								*
	Check fuel level								6-2
Starter	Check starter V-belt for damage and tension								*
	Check brushes for wear								*
	Check commutator for dirt								*

* 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.

** Related to emission control system.

MAINTENANCE

FOR G16A

Item	Remarks	Every								Page
		Pre-Operation	20 Rounds 20 hours 100 miles 160 kms (1 month)	125 rds 125 hrs 600 mls 1000 kms (6 months)	1250 mls 250 hrs 1200 mls 2000 kms (1 year)	250 rds 500 hrs 2500 mls 4000 kms (2 yrs)	500 rds 500 hrs 2500 mls 4000 kms (2 yrs)	1000 rds 1000 hrs 5000 mls 8000 kms (4 yrs)		
Primary and secondary sheaves	Check drive belt for slippage, wear, or scratches									8-9
	Grease secondary sheave bearing									*
	Check for operation and wear of sliding sheave									*
	Check for wear of ramp shoes on secondary spring seat									*
	Grease primary sheave									*
Gear box	Check operation of speed limiter									*
	Check operation of forward-reverse shifting									6-5
	Check for damage to shifting cable									*
	Check gear box oil level and leakage									8-16
	Replace gear box oil									*
Battery	Check for looseness of battery terminals and hold downs									6-4

FOR G16E

Batteries	Charge									8-11
	Check electrolyte level									8-11
	Clean tops and terminals, check for corrosion									8-11
	Check for looseness of battery terminals and hold downs									6-4
	Check the specific gravity of electrolyte									8-12
Traction motor	Check for loose or broken connections									*
	Check brush and commutator									*
Wiring	Check all wire insulation for cracks and/or worn spots									*
Gear box	Check gear box oil level and leakage									8-16
	Replace gear box oil									*

MAINTENANCE

FOR G16A AND G16E

Item	Remarks	Pre-Operation	Every						Page
			20 Rounds 20 hours 100 miles 160 kms (1 month)	125 rds 125 hrs 600 mls 1000 kms (6 months)	250 rds 250 hrs 1200 mls 2000 kms (1 year)	500 rds 500 hrs 2500 mls 4000 kms (2 yrs)	1000 rds 1000 hrs 5000 mls 8000 kms (4 yrs)		
Brakes	Check and adjust if necessary								6-5/ 8-18
	Check brake pedal free play								8-19
	Check shoe lining thickness								*
Steering	Check and adjust if necessary								6-5
	Check gearbox for leakage								*
	Adjust wheel alignment								*
	Check kingpin play, seal, and cap								*
	Lubricate kingpin								*
Wheel	Check tire pressure								6-4
	Check tire tread depth								6-4
	Check tire surface for damage								6-4
	Check wheel nut tightness								8-18
	Check front wheel bearing play								*
	Check rear axle bearing play								*
	Check rear axle for damage								*
Body and chassis	Check body and chassis for damage								6-6
	Check tightness of all bolts, nuts, and screws								*
	Check shock absorbers for oil leaks								*
	Check coil springs for cracks or damage								*
Accelerator stop switch	Check operation and adjust pedal stop if necessary								*
Back-up buzzer	Check operation								6-5

MAINTENANCE

EXHAUST EMISSION CONTROL SYSTEM AND COMPONENTS

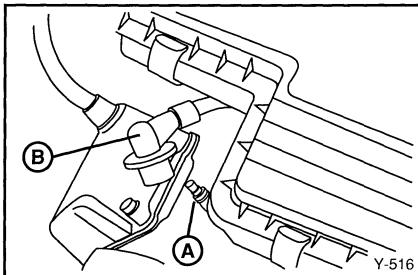
Item	Acronym
• CARB. ASSY., LH., JT., CARBURETOR 2 & JT., CARBURETOR 1	CARB (Carburetor)
• T.C.I. MAGNETO ASSY. & PLUG, SPARK	EI (Electronic Ignition)
• CRANKCASE 1 & HEAD, CYLINDER 1	PCV (Positive Crankcase Ventilation)
• AIR FILTER ASSY.	ACL (Air Cleaner)
• MUFF., 2	

The above items and the corresponding acronyms are provided in accordance with U.S. EPA REGULATIONS FOR SMALL NONROAD ENGINES and the CALIFORNIA REGULATIONS FOR NEW 1995 AND LATER OFF-HIGHWAY RECREATIONAL VEHICLES AND ENGINES.

The acronyms conform to the latest version of the SAE's recommended practice document J1930, "Diagnostic Acronyms, Terms, and Definitions For Electrical/Electronic System".

It is recommended that these items be serviced by a Yamaha dealer or other qualified mechanic.

MAINTENANCE - G16A

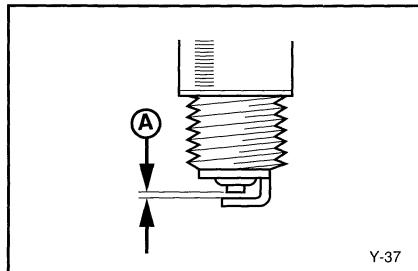


Spark Plug Inspection

You should periodically remove and inspect the spark plug. Dirty or worn spark plugs can cause poor performance.

- (A) Spark plug
- (B) Spark plug cap

1. Check for discoloration and remove carbon deposits with a spark plug cleaner or wire brush. The normal electrode color will be tan.
2. Check the spark plug type, and check the spark plug gap with a feeler gauge.



Standard spark plug:
BPR2ES

Spark plug gap:
0.028 ~ 0.031 in (0.7 ~ 0.8 mm)

- (A) Gap

3. Clean the gasket and plug surfaces and install the spark plug finger tight before tightening to the following torque:

Spark plug torque:
14.5 ft·lb
(20 Nm, 2.0 m·kg)

⚠ WARNING

When removing or installing the spark plug, be careful not to damage the insulator. A damaged insulator could allow external sparks, which could lead to explosion or fire.

MAINTENANCE - G16A

Engine Oil Replacement

1. Warm up the engine for several minutes, place the golf car on a level surface, then stop the engine.

⚠ WARNING

Use caution not to touch hot engine oil or hot engine parts, during the following procedure.

2. Place an oil pan under the engine drain plug.
3. Remove the oil drain plug and let the oil drain completely.

NOTE:

Dispose of used oil in an environmentally safe way, such as taking oil to an oil collection station.

4. Install the drain plug, along with a new drain plug gasket, finger tight before tightening to the following torque:

Drain plug torque:
23 ft·lb
(31 Nm, 3.1 m·kg)

5. Add the correct quantity of oil through the oil filler hole.

NOTE:

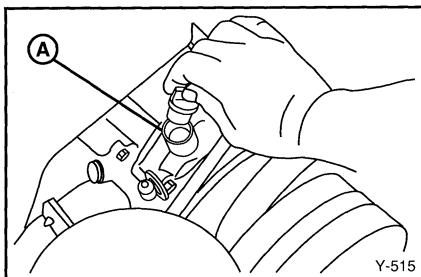
Recommended engine oil classification: API Service SE, SF, or SG. Engine oils labeled "Energy Conserving II" are recommended.

Recommended oil:
YAMALUBE 4-cycle oil or
SAE 10W-30

Engine oil capacity:
1.16 US qt
(1.0 L, 0.24 Imp gal)

Oil change quantity:
1.0 US qt
(0.9 L, 0.19 Imp gal)

MAINTENANCE - G16A

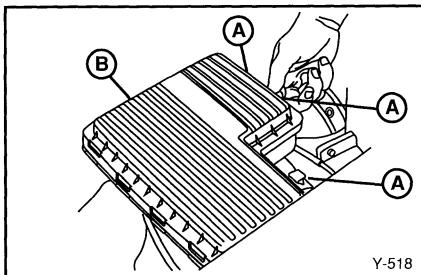


(A) Oil filler hole

CAUTION

Use care not to fill past the MAX dipstick mark, and be sure no foreign material enters the crank-case. After replacing engine oil, check for oil leaks around the drain plug. If oil leaks are found, consult a Yamaha dealer.

Air Filter



To remove the air filter elements:

1. Unlatch the air filter cover clips and remove cover.

(A) Air filter cover clips
(B) Air filter cover

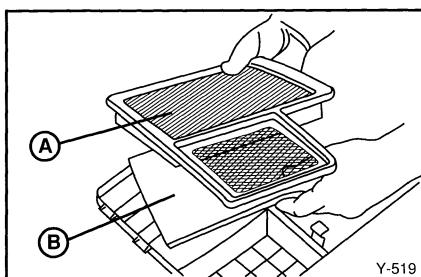
2. Lift the air filter and pre-filter out of the air filter case.

(A) Air filter
(B) Pre-filter

CAUTION

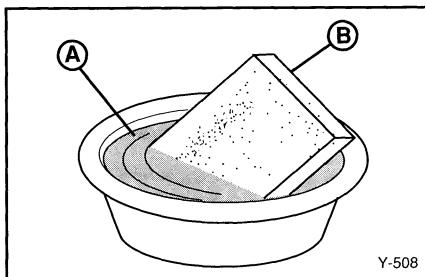
Be careful not to drop anything into the air inlet.

8



MAINTENANCE - G16A

Inspection and cleaning:



3. Wash the foam pre-filter in soap and water. Allow it to dry.
- (A) Soap and water
(B) Foam element
4. Check the filter element. If damaged or dirty, replace it.

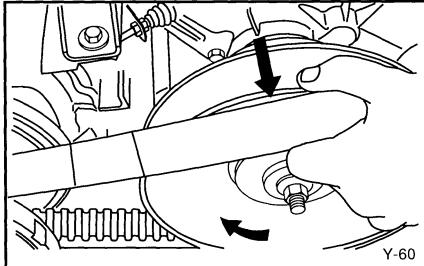
CAUTION

Do not wring out the foam pre-filter, this could cause it to tear.

5. To replace the elements, reverse the above steps.

CAUTION

The pre-filter has a notch on one side. It will only fit in the case one way.



Drive Belt

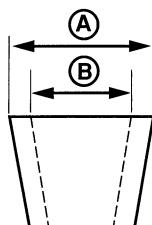
8

To remove the drive belt:

1. Set the drive select lever halfway between forward and reverse.
2. Pull up on the drive belt and push it outward over the edge of the secondary sheave.
3. Turn the secondary sheave clockwise and the drive belt will roll off the sheave.
4. Remove the drive belt from the primary sheave.

MAINTENANCE - G16A

Inspection:



Y-44

To inspect the drive belt, check for frayed edges or tears, and measure drive belt against the following specification. If the belt shows excessive wear or damage, replace the belt with a new one.

- (A) New: 1.22 in. (31.0 mm)
- (B) Replace when belt reaches:
1.06 in. (27 mm)

5. To install the drive belt, reverse the above steps, rolling the belt back over the secondary sheave.

Battery

⚠ WARNING

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

Antidote:

EXTERNAL: Flush with water.

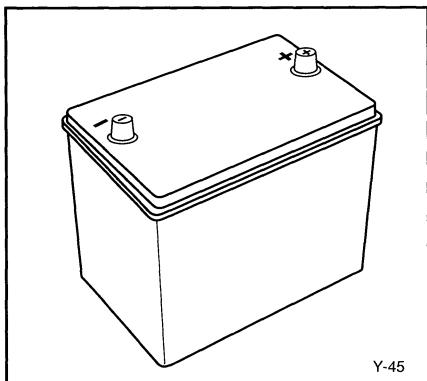
INTERNAL: Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg, or vegetable oil. Call physician immediately.

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 enclosed space. Always shield eyes when working near batteries.
KEEP OUT OF REACH OF CHILDREN.

MAINTENANCE - G16A



Y-45

The 12-volt battery that provides starting power to your gas car normally doesn't require the addition of water during the one year period provided by the battery manufacturer. If the battery loses its charge, have an experienced mechanic charge it.

Fuse Replacement

! WARNING

Be sure to use the specified fuse. Using a wrong fuse can cause electrical system damage and create a fire hazard.

CAUTION

When replacing a fuse be sure the main switch is turned off to prevent accidental short circuiting.

1. Remove cap screw on cover. Pull fuse case cover forward.

8

(A) Cap screw
(B) Fuse case cover

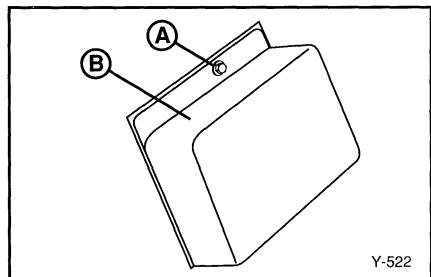
NOTE:

You do not have to remove the cover.

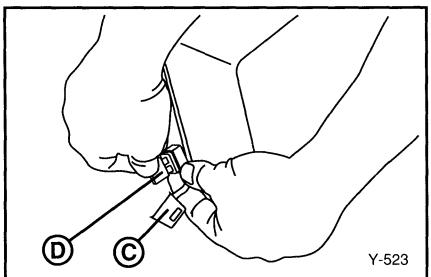
2. Pull cap off fuse. Pull fuse out and replace if necessary.

(C) Fuse cap
(D) Fuse

Replacement Fuse:
10 Amp, Blade Style



Y-522



Y-523

MAINTENANCE - G16E

Battery Care

WARNING

Battery electrolyte is poisonous and dangerous, causing severe burns, etc. It contains sulfuric 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, ciga-rettes, etc., away.

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

KEEP OUT OF REACH OF CHILDREN.

Six 6-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 necessary, to remove corrosion.

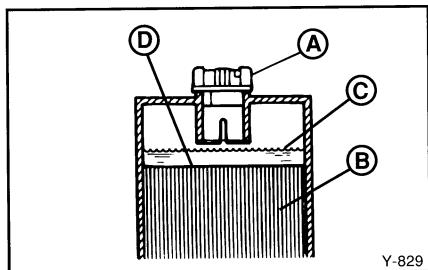
CAUTION

Do not allow cleaning solution to enter battery cells.

2. Check the fluid level before and after charging.

MAINTENANCE - G16E

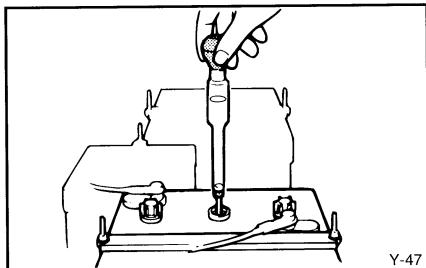
- **Before charging:** only add distilled water if fluid is below the top of the plates, and then add just enough to cover plates.
- **After charging:** check that the fluid level is approximately 1/4 to 1/2 inch above the plates and 1/4 to 3/8 inch below the level indicator. If the fluid level is low, carefully add distilled water. Adding distilled water **after** charging prevents boil over.



- (A) Battery cap
- (B) Plates
- (C) Maximum fluid level
- (D) Minimum fluid level

CAUTION

Normal tap water contains minerals which are harmful to a battery; therefore, refill only with distilled water.



Y-47

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

8

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

MAINTENANCE - G16E

Battery Charging

⚠ WARNING

Read and understand the owner's manual provided with your golf car's battery charger before charging batteries.

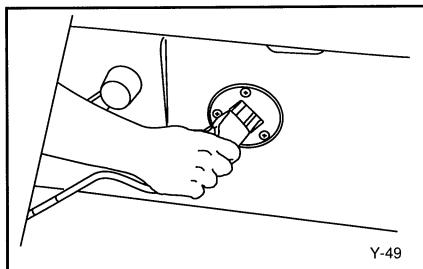
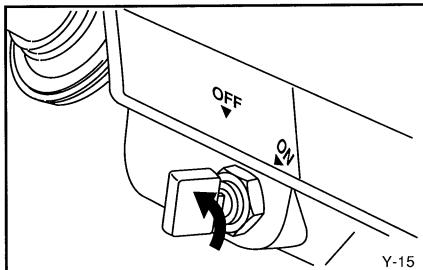
⚠ WARNING

Explosive hydrogen gas is produced while batteries are being charged. Only charge batteries in well ventilated areas (a minimum of 5 air changes per hour is recommended).

To charge the batteries 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. **Do not attempt to recharge your golf car's batteries without thoroughly reading and understanding the owner's manual provided with your charger.**

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1. Turn main switch key to "OFF" position.
2. With the charger properly connected and grounded (see charger's owner's manual), insert the DC output plug into the golf car receptacle.
3. Monitor the ammeter on the charger according to instructions found in the charger's owner's manual.

MAINTENANCE - G16E

⚠ WARNING

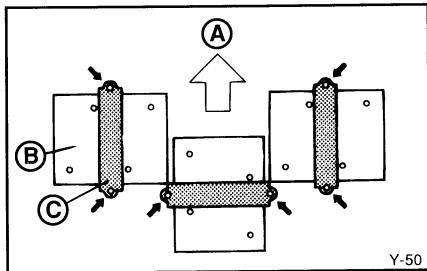
Do not disconnect the DC output cord from the battery receptacle when the charger is on or an arc could occur that may cause an explosion.

4. The charger will turn off automatically when the batteries reach full charge.
5. After the charger has turned off, disconnect the DC output plug from the golf car receptacle by grasping the plug body and pulling the plug straight out of the receptacle.

Battery Installation

⚠ WARNING

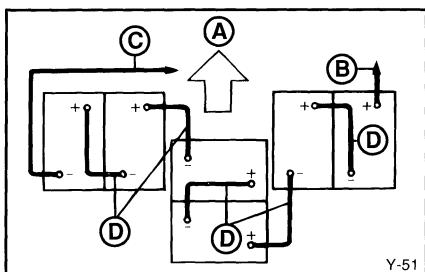
When working with batteries, do not put wrenches or other metal objects across the battery terminals. An arc can occur causing explosion of the battery.



1. Install the battery holdown plates as shown.

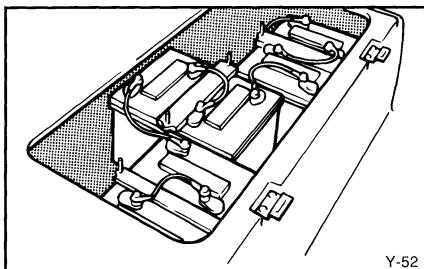
- (A) Forward
- (B) Battery
- (C) Battery fitting plate

MAINTENANCE - G16E



2. Connect the wire leads as shown.

- (A) Forward
- (B) To relay
- (C) To controller
- (D) Between batteries



⚠ WARNING

When installing batteries:

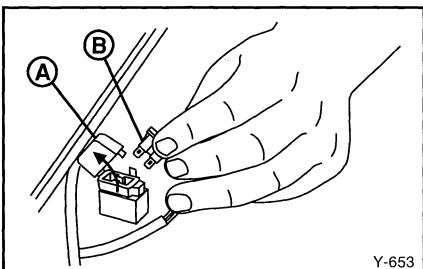
- Carefully place battery cables and hold-downs making sure that cables don't lie across vent caps.
- Always remove the negative (-) cable to the motor controller first, and install it last.

CAUTION

Do not overtighten the battery hold-down nuts. Excessive force will damage the battery casing.

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Fuse Replacement



⚠ WARNING

Be sure to use the specified fuse. Using a wrong fuse can cause electrical system damage and create a fire hazard.

CAUTION

When replacing a fuse be sure the main switch is turned off to prevent accidental short-circuiting.

Fuse Type:
10 Amp, Blade Style

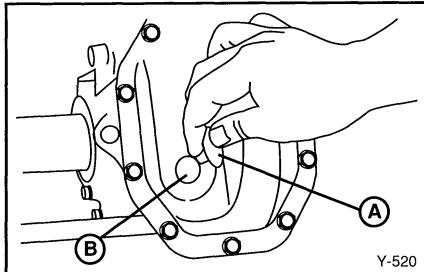
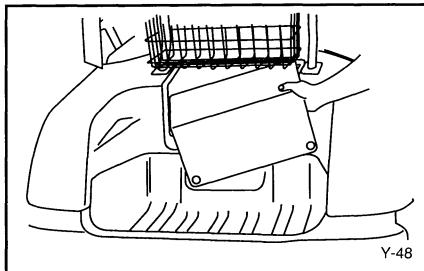
- (A) Fuse case
- (B) Fuse

MAINTENANCE - G16A & G16E

Gear Box Oil

To check gear box oil level:

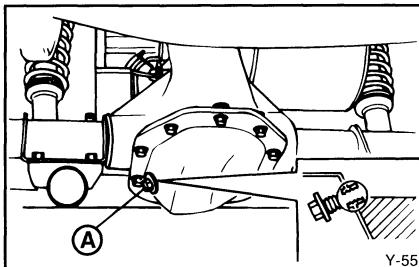
1. Place the golf car on a level surface.
2. Remove the access panel by removing the screws in the two lower corners of the panel and pulling the panel from the car.



3. For G16A:

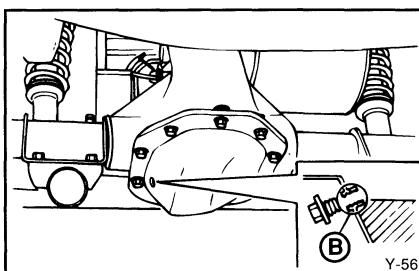
- Remove the oil level plug (A).
- Add gear oil little by little until oil flows from the level plug hole (B).

MAINTENANCE - G16A & G16E



For G16E:

- Remove the oil level plug (A).



- Add gear oil little by little until oil flows from the level plug hole (B).

Recommended oil:
SAE 90 gear oil

Gearcase capacity:
G16A: 0.44 US qt
(0.42 L, 0.09 Imp gal)

G16E: 0.32 US qt
(0.3 L, 0.06 Imp gal)

4. Allow excess gear oil to flow out until it stops.

CAUTION

Do not allow foreign material to enter the gear box.

5. Reinstall the oil level plug.

Oil level plug tightening torque:

G16E: 32 ft·lb
(44 Nm, 4.4 m·kg)

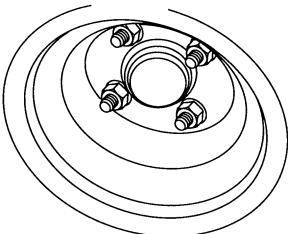
NOTE:

For gear oil replacement, consult a Yamaha dealer or other qualified mechanic.

MAINTENANCE - G16A & G16E

Wheel Replacement

To remove and install a wheel on your golf car:



Y-57

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

Wheel nut tightening torque:
58 ft·lb (80 Nm, 8.0 m·kg)

Brake Adjustment

The brakes on your golf car are self-adjusting.

Before you operate the car, press down on the brake pedal several times to make sure the brakes are functioning properly.

8

WARNING

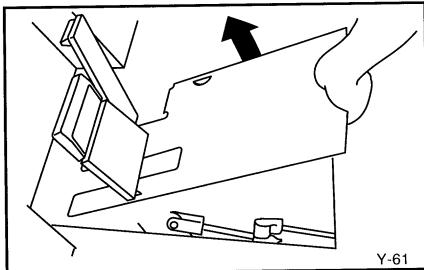
Consult your Yamaha dealer before using your golf car if you suspect brake problems. Brake failure could result in a serious accident.

MAINTENANCE - G16A & G16E

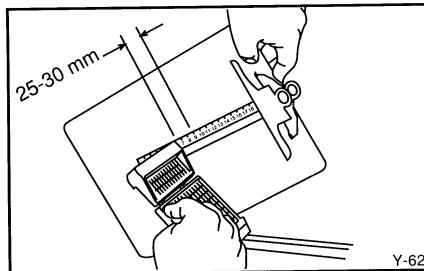
Brake Pedal Free Play Adjustment

CAUTION

Before adjusting brake pedal free play, pump the brake pedal several times to self-adjust the brakes.



Y-61



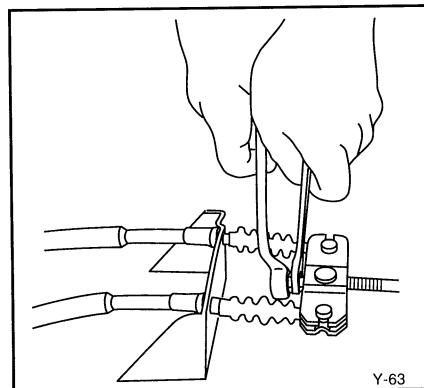
Y-62

To adjust the brake pedal free play:

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

2. 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:
25-30 mm (0.98-1.18 in.)



Y-63

3. If the free play distance needs adjusting, loosen the lock nut and turn the adjusting nut in or out until the free play specification is met. Then tighten the lock nut in place.

WARNING

Do not overtighten the brake cables. The self adjusters may not operate properly, reducing braking performance.

STORAGE

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

NOTE:

Turn main switch key to "OFF" position, remove key, and store key in a safe place.

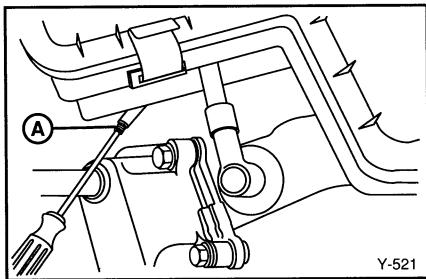
DRAINING FUEL (G16A GAS CAR)

⚠ WARNING

Gasoline and its vapors are highly flammable and explosive.

- Do not smoke when refueling and keep away from sparks, flames, or other sources of ignition.
- Stop engine and allow it to cool for several minutes before refueling.
- Refuel in a well-ventilated area.
- Take care not to spill gasoline. If gasoline spills, wipe it up immediately with dry rags. Always dispose of gasoline-soaked rags properly.
- Tighten the filler cap securely after refueling.
- If you swallow gasoline, inhale a lot of gasoline vapor, or get gasoline in your eyes, get immediate medical attention.
- If any gasoline gets on your skin, immediately wash with soap and water. Change clothing if gasoline spills on it.

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1. Fill the fuel tank.
- ④ Float bowl drain screw
2. Drain the carburetor float bowl into a suitable container by turning the screw located on the bottom of the carburetor.

STORAGE

ENGINE PREPARATION (G16A GAS CAR)

With the key removed and the spark plug lead disconnected, turn the clutch by hand until compression is felt. This puts the valves in the closed position.

CHASSIS PREPARATION

1. Increase the tire pressure to 20 psi (137 kPa, 1.4 kgf/cm²).
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

For G16A:

1. Remove the battery from the golf car and store it in a cool, dry place that stays between 32°F (0°C) and 90°F (30°C).

2. Have the battery recharged every 60-90 days to keep it fully charged. The battery must be kept fully charged to avoid damage.

NOTE:

Batteries like the one supplied with your car normally do not require you to check the water level inside the battery for the one year warranty period provided by the manufacturer.

For G16E:

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

CAUTION

Do not allow cleaning solution to enter battery cells.

2. Recharge the batteries and check the fluid levels at least once a month.

SPECIFICATIONS

GENERAL SPECIFICATIONS

Items	G16A	G16E
Dimensions:		
Overall length	93.9 in. (2385 mm)	
Overall width	47.2 in. (1200 mm)	
Overall height (steering height)	46.8 in. (1190 mm)	
Height of floor	11.8 in. (300 mm)	
Wheelbase	64.0 in. (1629 mm)	
Tread:		
Front	34.3 in. (870 mm)	
Rear	38.6 in. (980 mm)	
Min. ground clearance	3.8 in. (97 mm)	
Weight:		
Dry weight (without battery)	653 lb (296 kg)	560 lb (254 kg)
Performance:		
Maximum speed	12 mph (19 km/h)	12-15 mph (19-24 km/h)
Minimum turning radius	113.0 in. (2.8 m)	113.0 in. (2.8 m)
Seating capacity	2 persons	2 persons
Hill climbing ability	27° (50% grade) on pavement	20° (38% grade) on pavement

SPECIFICATIONS

ENGINE

Items	G16A
Description:	
Engine type	4-stroke, Gasoline, OHV
Number of cylinders	Single
Displacement	301 cm ³
Bore x stroke	3.07 x 2.48 in. (78 x 63 mm)
Compression ratio	8.1:1
Rated output	9.5 hp (7.1 kw)/4000 rpm
Cooling system	Forced air cooled
Starting system	Starter
Ignition system	TCI Magneto
Spark plug type	BPR2ES
Spark plug gap	0.028-0.031 in. (0.7-0.8 mm)
Lubrication system	Splash
Engine oil type	YAMALUBE 4 cycle oil or SAE 10W30
Engine oil capacity	1.16 US qt (1.0 L, 0.24 Imp gal)
Oil change quantity	1.0 US qt (0.9 L, 0.19 Imp gal)

TRANSMISSION

Items	G16A	
Transmission:		
Type	V-belt automatic centrifugal engagement	
V-belt width and outer line length	1.22 x 39.76 in. (31 x 1010 mm)	
V-belt wear limit	1.06 in. (27 mm)	
Governor:		
Type	Oil bath flyweight	
Factory speed setting	12 mph (19 km/h)	
Differential/reduction gear:	G16A	G16E
Differential type	Bevel gear	Bevel gear
Lubricant/capacity	SAE 90 gear oil/ 0.44 US qt (0.42 L, 0.09 Imp qt)	SAE 90 gear oil/ 0.32 US qt (0.3 L, 0.26 Imp qt)

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BATTERIES

Items	G16A	G16E
Battery:	BCI group 24, RC: minimum 75 min CCA: minimum 400A	BCI group GC-2 RC: minimum 105 min

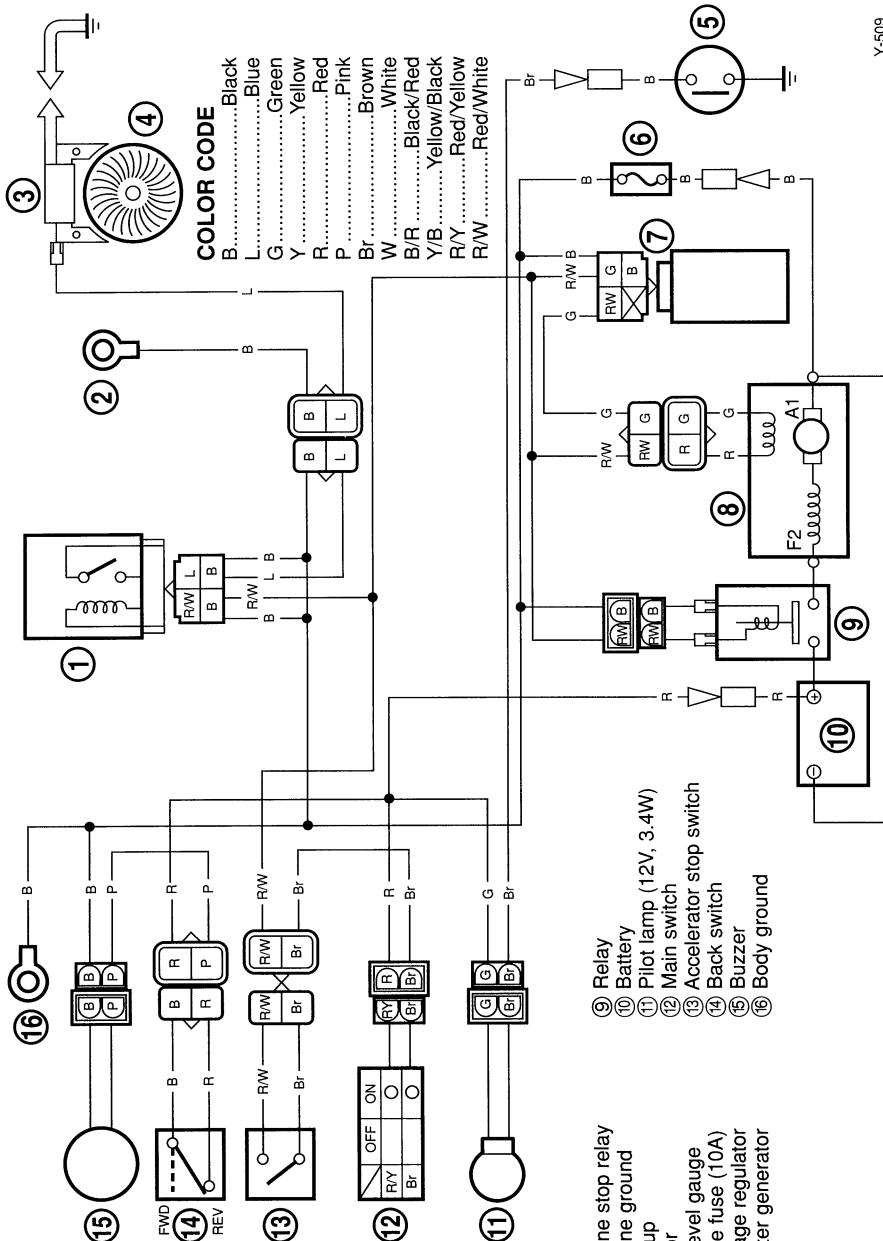
SPECIFICATIONS

CHASSIS

Items	G16A and G16E
Steering system: Type Steering angle (L.H.) Steering angle (R.H.) Lubricant/capacity	Worm and pin 1.5 turn 1.5 turn Grease/3.0 US oz (0.09 L, 3.17 Imp oz)
Brakes: Brake system Type of brake Brake pedal freeplay linkage adjustment (Brake cable end play)	Mechanical drum brake on each rear wheel with self-adjusters. Dual internal expanding shoe. Leading/trailing shoes (self-adjusting) 25-30 mm 0.004-0.02 in. (0.1-0.5 mm)
Parking brake: Type	Foot type; parking brake with automatic release.
Release timing (Bolt heads round parallel to arm)	0.04 in. (1 mm)
Wheel: Tire size: Front Rear Rim size: Tire pressure:	18 x 8.50-8.00/4 PR 18 x 8.50-8.00/4 PR 7.00-I-8.00 For G16A: 16 psi (108 kPa, 1.1 kgf/cm ²) For G16E: 20 psi (137 kPa, 1.4 kgf/cm ²)

WIRING

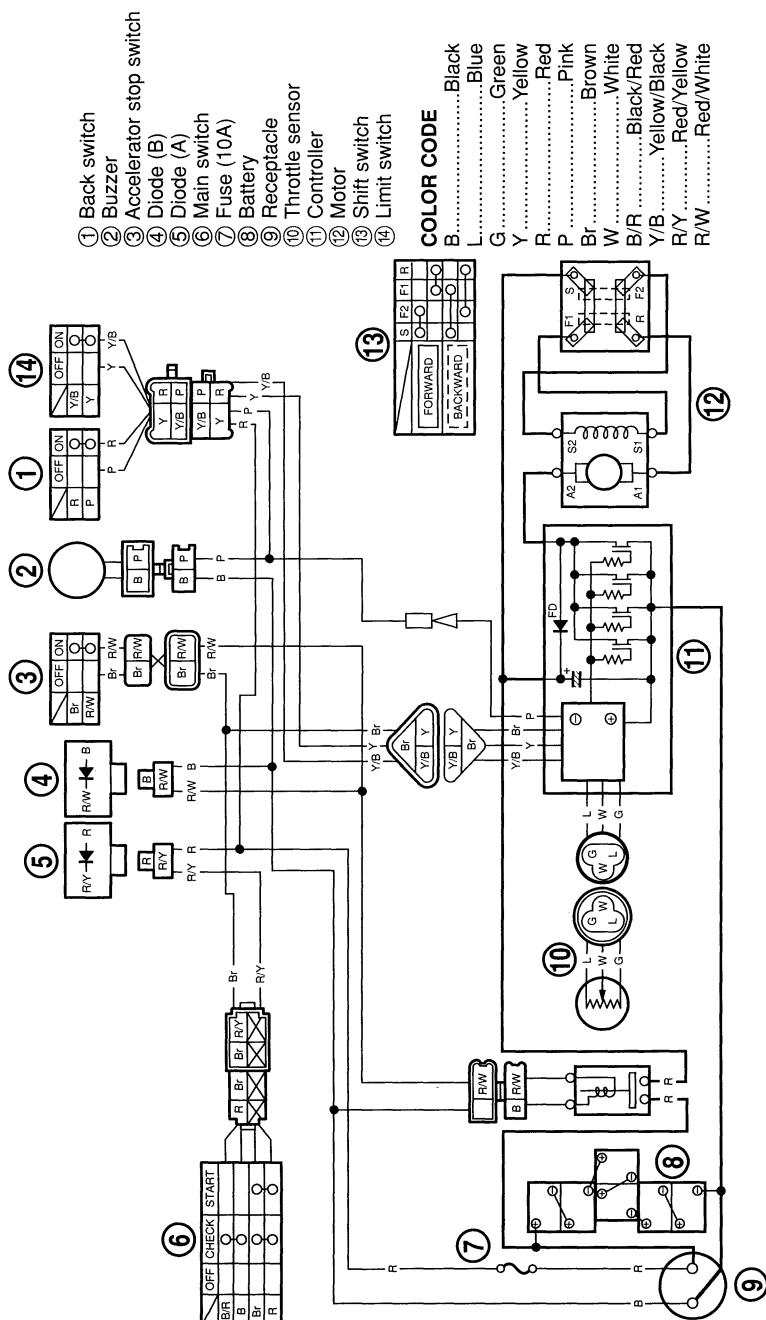
G16A WIRING DIAGRAM



- ① Engine stop relay
- ② Engine ground
- ③ Rotor
- ④ Pick-up
- ⑤ Plot lamp (12V, 3.4W)
- ⑥ Main switch
- ⑦ Accelerator, stop switch
- ⑧ Back switch
- ⑨ Buzzer
- ⑩ Body ground
- ⑪ Oil level gauge
- ⑫ Blade fuse (10A)
- ⑬ Voltage regulator
- ⑭ Starter generator

G16E WIRING DIAGRAM

WIRING



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