

OWNER'S / OPERATOR'S MANUAL

# YDRA 4 STROKE GOLF CAR

LIT-19626-11-07 JW1-F8199-10

# **AWARNING**

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

YAMAHA LIT-CALIF-65-01

#### 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

MANUAL
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1st Edition

YDRA OWNER'S/OPERATOR'S

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Printed in U.S.A.

LIT-19626-11-07

JW1

# 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!

#### **A** 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.

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This message provides additional key information.

#### 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.

#### **A** WARNING

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

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**WIRING** 

#### WARRANTY

# YAMAHA LIMITED 3-YEAR GOLF CAR WARRANTY

Yamaha Golf-Car Company hereby warrants that any new YDRA gas or YDRE electric Yamaha golf car purchased from an authorized Yamaha golf car dealer in the United States will be free from defects in material and workmanship for THREE years from date of purchase, subject to the stated limitations.

DURING THE PERIOD OF WARRANTY any authorized 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 Golf-Car Company.

**GENERAL 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.
- b. 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, or which makes the car serve a purpose other than use as a two-person, golf course vehicle.
- Damage due to improper transportation.
- g. Acts of God, i.e. lightning, hail damage, flooding, fire, etc.

SPECIFIC EXCLUSIONS: The first year of warranty shall cover the entire car except for the specific exclusions below. Parts excluded from the second year of warranty include the YDRA battery, body parts, seats, mats, bumper assembly, bag carrier, scorecard holder, and the trim. Parts excluded from the third year of warranty include the second year exclusions and the electrical system (except electronic speed controller, battery charger, and electric motor), and control cables. Other specific exclusions from this warranty shall include any parts replaced due to normal wear or routine maintenance, including oil and air filter elements, 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 is also excluded from this warranty.

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

- Operate and maintain the golf car and charger as specified in the appropriate Owner's/Operator's Manual:
- Give notice to an authorized Yamaha golf car dealer of any and all apparent defects within ten (10) days after discovery, and make the machine or charger 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 will be charged for this service.

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

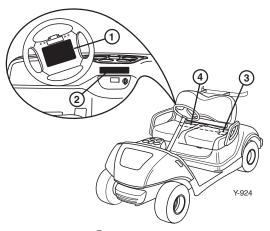
THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY, FROM STATE TO STATE.

Yamaha Golf-Car Company, NEWNAN, GEORGIA 30265-1320

EFFECTIVE DATE: 10/01/06 LIT-13710-03-06B

1-1 JW1

#### IMPORTANT LABELS



#### ⚠ SAFETY AND INSTRUCTION **LABELS**

#### **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





- OPERATING INSTRUCTIONS

  Read the warning label on the beverage holder panel before operating.

  Be sure occupants are seated.

  Select "FORWARD" or "REVERSE" then turn main switch to "ON".

  Press the accelerator pedal to start main witch the particular of the will release automatically.

  To stop, release the accelerator pedal and press the brake pedal.

  Never travel at speeds too fast for the terrain, visibility conditions, or your experience.

  Drive with extra cauciton in congested areas, when operating in reverse, and when driving on wet, rough, or lose surfaces.

  Come to a complete stop before reversing 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 JU0-K7762-00

Y-500a

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### WARNING **AVERTISSEMENT**

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

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

YAMAHA

JN3-K8299-10 Y-764a

2-1

# **IMPORTANT LABELS**

 Do not operate while under the influence of alcohol or drugs. Turn main switch to "OFF" and remove key when not in use.

Drive slowly straight up and down slopes.
Set parking brake before leaving vehicle.

# **▲** WARNING

# DEATH OR SEVERE PERSONAL INJURY CAN RESULT FROM FAILURE TO FOLLOW THESE INSTRUCTIONS.

Read the label located on the steering wheel before operation.

(N)

- Operate only when authorized and only in designated areas.
  - Do not allow more than two occupants per seat. Operate from driver's side only.
- Do not start vehicle until all occupants are seated. Remain seated and hold on when in motion. Keep entire body inside vehicle.

WARNING

JW1-K7768-00

# **▲** WARNING

**USE REGULAR UNLEADED GASOLINE ONLY** Motor Oil Requirements:

Do not tamper with governor to higher speeds can cause loss ncrease speed. Operation at of control that can result in

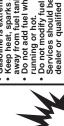
severe injury or death.

Use only SAE 10W-30, API service SE or SF.

Maintain oil level between dipstick "MIN"

and "MAX" marks.

JW1-K8297-00



 Keep heat, sparks and open flame away from fuel tank and fuel lines. Gasoline is extremely flammable. Do not modify fuel system.
 Services should be performed by dealer or qualified personnel. Do not add fuel while engine is running or hot.

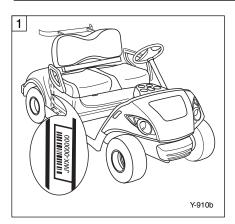
(m)

2-2

Drive slowly in turns.

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# **IMPORTANT LABELS**



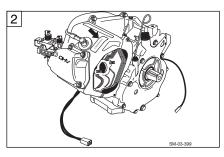
# GOLF CAR SERIAL NUMBER

The golf car serial number ① is identified in the location shown.

#### 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 Golf-Car Company dealer.

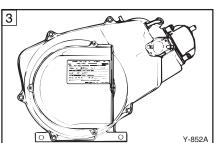
The engine serial number ② is affixed in the location shown.



#### ③ Engine Information

E IVI REFER TO OWN	IER'S MANUAL FOR MA	ENGINE FAMILY : INTENANCE SPECIF			MENTS.	YAMAHA
DISPLACEMENT:	*** cm²	VALVE LASk(mm)	N:	**~**	EX:	**,**
IGNITION TIMING &	IQUE MIXTURE	NO OTHER ADJUST	MENTS NE	CEO		
DLE SPEED.	****	cpes AT NO LOAD				
FUEL: THIS ENGINE	IS CERTIFIED TO OPERATE O	UNLEACED GASOLINE.				
ENGINE OIL:	SAE 10W-30	TVPE	SD			
THIS ENGINE	MEETS **** - **** CAI	IFORNIA EMISSION R	EGULATIO EGULATIO	ONS FOR OFF-ROA	AD ENGINE:	S.

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JW1 2-3

#### ∴ OPERATOR SAFETY

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

#### 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 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 affect 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.



- 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.

JW1







3-1

#### OPERATOR SAFETY

- 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.



• Do not run the engine indoors. Exhaust gas is poisonous.



• 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.



3-2 JW1

#### ↑ SAFETY CONSIDERATIONS

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.

#### **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. Reduce speed in wet areas or during periods of inclement weather.

4-1 JW1

#### **↑** SAFETY CONSIDERATIONS

- 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.
- 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 the car storage areas during the battery charging process.

#### **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.

4-2 JW1

# SAFETY CONSIDERATIONS

#### **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 performing any maintenance, 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.

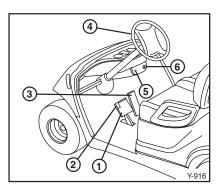
- Record all maintenance performed in a maintenance record log by date, name of person performing maintenance and type of maintenance. Periodically inspect maintenance log to ensure accurate and complete entries.
- Provide operator comment cards to assist in identifying non-periodic maintenance needs 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 Golf-Car Company dealer

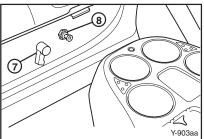
#### **FUEL HANDLING/** STORAGE AND **BATTERY CHARGING**

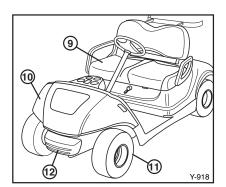
Take the following precautions to ensure maintenance worker safety:

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

4-3

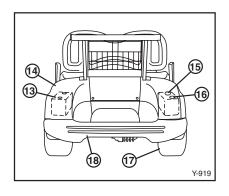




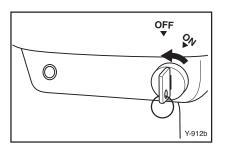


#### **FEATURES**

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



JW1 5-1

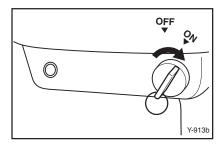


#### **MAIN SWITCH**

The main switch controls the following items:

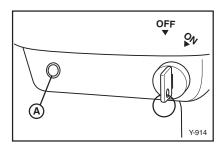
#### OFF

All electrical circuits are switched off. The key can be removed only in this position.



#### ON

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



#### **OIL WARNING LIGHT**

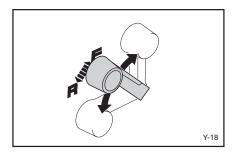
When the engine oil level falls below an acceptable level, this light comes on.

#### **CAUTION**

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

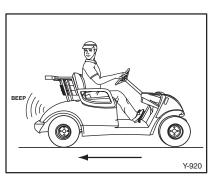
5-2



#### **DRIVE SELECT LEVER**

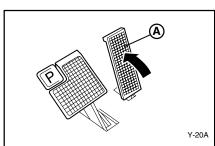
The drive select lever is used to shift the golf car into forward or reverse. After coming to a complete stop, move the lever to the desired position.

Lever Position	Car Movement
F	FORWARD
R	REVERSE



#### NOTE: \_\_\_\_

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

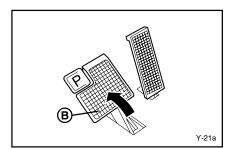


#### **ACCELERATOR PEDAL**

The accelerator pedal controls the golf car's speed.

Action	Car Speed
Depress pedal	Increase
Release pedal	Decrease

Accelerator pedal

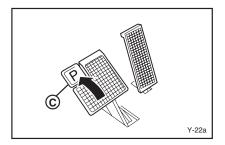


#### **BRAKE PEDAL**

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

(B) Brake pedal

Jw1 5-3



# 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.

#### **A** 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.

#### **CHOKE KNOB**

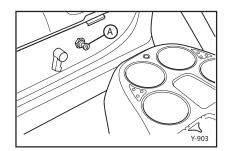
Pull and hold out choke knob when starting a cold engine. Release the knob after the engine starts.

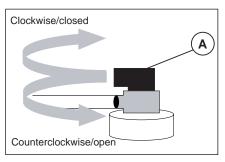
(A) Choke knob



Ensure the fuel shutoff valve is in the "OPEN" position for normal operation.

(A) Fuel shutoff valve





5-4

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.

#### **A** 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.

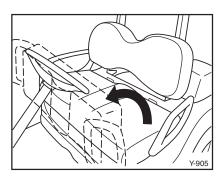
# PRE-OPERATION CHECKLIST

Before each use check the following:

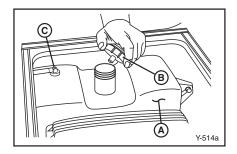
- ✓ Fuel system
- ✓ Engine oil level
- ✔ Battery
- Tire condition
- Steering system
- ✔ Back-up buzzer
- ✔ Pedal operation
- ✓ Body and chassis

#### SEAT

Open the seat for checking and servicing.



JW1 6-1



#### **FUEL SYSTEM**

Make sure there is sufficient fuel in the tank and that the fuel shutoff valve is open. Also check fuel line and connections for leakage.

- (A) Fuel tank
- Fuel cap
- © Fuel shutoff valve

#### **A** WARNING

Gasoline and its vapors are highly flammable and explosive.

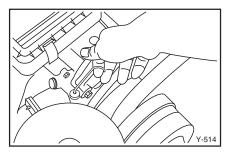
- Do not smoke when refueling and keep away from sparks, flames, or other sources of ignition.
- Stop engine and allow it to cool for several minutes before refueling.
- Refuel in a well-ventilated area.
- Take care not to spill gasoline. If gasoline spills, wipe it up immediately with dry rags. Always dispose of gasolinesoaked 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.

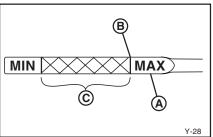
#### Recommended fuel: Unleaded gasoline

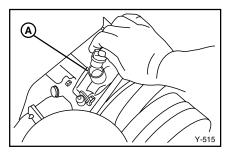
Fuel tank capacity: 6.6 US gal (25.0 L)

#### **CAUTION**

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







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

Engine oil capacity: 1.0 US qt (1.0 L, 1000 cc)

Oil change quantity: 1.0 US qt (1.0 L, 1000 cc)

#### **ENGINE OIL**

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 crosshatched area on the end of the dipstick).

- A Oil level dipstick
- (B) 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.

(A) 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.

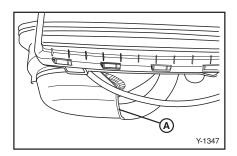
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IVI	u	

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.

JW1 6-3



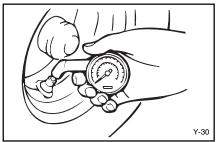
#### **Engine Cooling Inlet Duct**

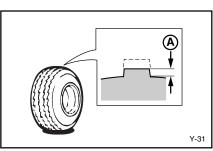
Check the engine cooling inlet duct for debris. Remove any debris present.

(A) Engine cooling inlet duct

#### **BATTERY**

Check that the battery is held securely in place to prevent the battery 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.





#### **TIRE CONDITION**

#### Tire Air Pressure

Check the tire air pressure before operating the golf car.

Tire pressure:

For JW1: 16 psi

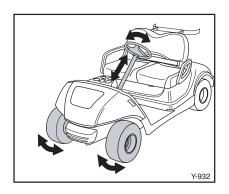
(110 kPa, 1.1 kgf/cm<sup>2</sup>)

#### **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

6-4 JW1

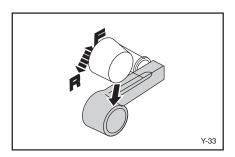


#### STEERING SYSTEM

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.



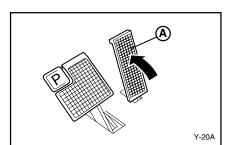
#### **BACK-UP BUZZER**

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



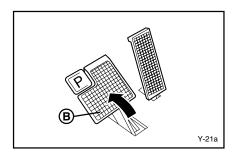
#### **A** WARNING

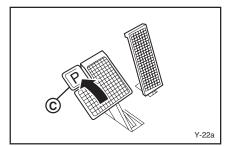
Before checking operation of the accelerator pedal, be sure the main switch is in the "OFF" position.

Make sure the accelerator pedal operates smoothly.

(A) Accelerator pedal

JW1 6-5





#### **Brake Pedal**

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

B 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.

© Parking brake pedal

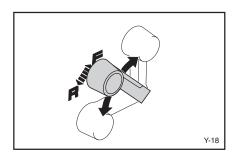
NOTE: \_\_\_\_

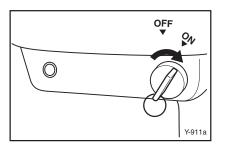
Release the parking brake by depressing the accelerator pedal.

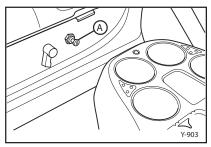
#### **BODY AND CHASSIS**

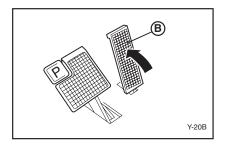
Before each use, visually inspect the golf car body and chassis for damage and/or missing parts.

#### **OPERATION**









#### **STARTING**

 With the parking brake applied, turn the drive select lever to "FWD" for forward, or "REV" for reverse.

#### **CAUTION**

Do not shift from "FWD" forward to "REV" reverse while the golf car is moving.

2. Turn the main switch to "ON."

#### **A** 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. Release the choke knob after the engine starts.
- (A) Choke knob

#### NOTE: \_\_\_\_\_

The choke is not required when the engine is warm.

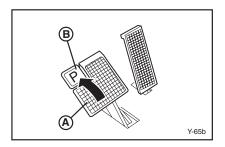
- Check that your path is clear in the direction you plan to go, and slowly depress the accelerator pedal. The golf car will start to move.
- (B) Accelerator pedal

#### NOTE: \_\_\_\_\_

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

JW1 7-1

# **OPERATION**



#### **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.

7-2

#### PERIODIC MAINTENANCE CHARTS

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

#### **A** 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.

C - 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 rds 125 hrs 600 mls 1000 kms (Every 6 months)	500 rds 250 hrs 1200 mls 2000 kms (Every year)	1000 rds 500 hrs 2500 mls 4000 kms (Every 2 years)	2000 rds 1000 hrs 5000mls 8000 kms (Every 4 years)	Page
PRE-OP	Check engine oil	С	С	С				6-3
	Check air cooling duct	С	С	С	С	С	С	*
	Check fuel lines for leakage	С	С	С	С	С	C	6-2
	Check fuel level	С	С	С	С	С	C	6-2
	Check for looseness and corrosion of battery terminals and hold downs	С	С	С	С	С	С	6-4
	Check brake pedal free play and adjust if necessary	С	CA	CA	CA	CA	CA	8-12
	Check steering operation	С	С	С	С	С		6-5
	Check tire pressure, tread depth, tire surface for damage	С	CA	CA	CA	CA	CA	6-4
	Check body and chassis for damage	С	С	С	С	С	С	6-6
	Check tightness of all bolts, nuts, screws and rivets	С	С	С	С	С	С	*
	Check back-up buzzer operation	С	С	С	С	С	С	6-5
EVERY	Check fuel filter for clogging		С	С	С	С	С	*
MONTH	Check wear of drive belt		С	С	С	С	С	8-8
	Check operation of Forward / Reverse shifting		С	С	С	С	С	7-1
	Clean / Lube pedal control area		CL					_
EVERY 6 MONTHS	Wash pre-filter, check air cleaner element			s	s	s	s	8-7
	Check spark plug and plug cap condition** / Check compression			С	С	С	С	8-4
	Check shock absorbers for oil leaks and damaged springs			С	С	С		*

<sup>\*</sup> 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.

8-1

<sup>\*\*</sup> Related to emission control system.

C - 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 rds 125 hrs 600 mls 1000 kms (Every 6 months)	500 rds 250 hrs 1200 mls 2000 kms (Every year)	1000 rds 500 hrs 2500 mls 4000 kms (Every 2 years)	2000 rds 1000 hrs 5000mls 8000 kms (Every 4 years)	Page
EVERY	Replace engine oil				R	R	R	8-5
YEAR	Adjust throttle cables,** choke cable, check carburetor throttle shaft for wear**				CA	CA	CA	*
	Check starter V-belt for damage and tension				С	С	С	*
	Check drive belt for slippage, wear or scratches				С	С	С	8-8
	Check operation of speed limiter				С	С	С	*
	Apply battery terminal protectant				S	S	S	-
	Check wiring connections and insulation				С	С	С	_
	Check rear axle bearing play for roughness or freeplay				С	С	С	*
	Check steering knuckle bushing free play / Adjust wheel alignment				CA	CA	CA	*
	Check wheel nut tightness, front wheel bearing play				С	С	С	*
	Check transaxle oil level and inspect for leakage				С	С	С	8-10
	Check operation and adjust pedal stop if necessary				CA	CA	CA	*
EVERY 2 YEARS	Check brushes for wear and commutator for dirt					С	s	*
EVERY 4 YEARS	Replace fuel filter and fuel hoses						R	*
	Check tightness of cylinder head / Adjust valves						CA	*
	Replace transaxle oil						CR	*
	Inspect internal wet brake and replace pads if necessary						CR	*

<sup>\*</sup> 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.

8-2 Jw1

<sup>\*\*</sup>Related to emission control system.

# 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	El (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".

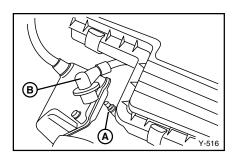
It is recommended that these items be serviced by a Yamaha dealer or other qualified mechanic.

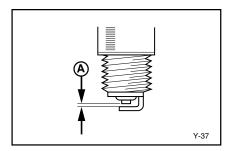
#### **TROUBLESHOOTING**

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

Cause	Remedy
Fuel	System
No fuel in tank	Fill fuel tank
Fuel shutoff valve closed	Open fuel shutoff valve
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
Electrica	al System
Spark plug dirty with carbon, or wet	Clean carbon or wipe spark plug dry
Faulty ignition system	Consult Yamaha dealer

JW1 8-3





#### **Spark Plug Inspection**

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

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

#### **A** 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.

8-4 JW1

#### **Engine Oil Replacement**

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



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.

 Install the drain plug, along with a new drain plug gasket, fingertight before tightening to the following torque:

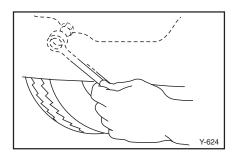
Drain plug torque: 23 ft·lb

(31 Nm, 3.1 m·kg)

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

NI	П	т	ᆮ	
IV	u	"	ᆮ	

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

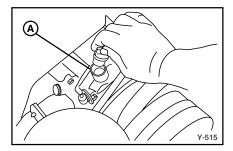


Recommended oil: YAMALUBE 4-cycle oil or SAE 10W-30

Engine oil capacity: 1.0 US qt (1.0 L, 1000 cc)

Oil change quantity: 1.0 US qt (1.0 L, 1000 cc)

JW1 8-5



(A) Oil filler hole

#### **CAUTION**

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

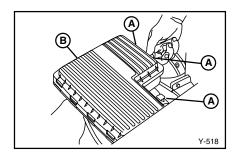


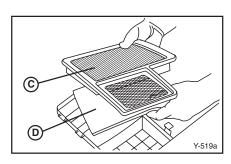
To remove the air filter elements:

- 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.
- © Air filter
- D Pre-filter

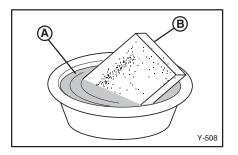
#### CAUTION

Be careful not to drop anything into the air inlet.





Q



Inspection and cleaning:

- 3. Wash the foam pre-filter in soap and water. Allow it to dry.
- (A) Soap and water
- B Foam element
- 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.

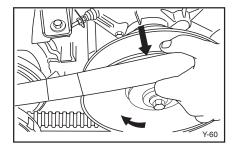
#### **CAUTION**

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

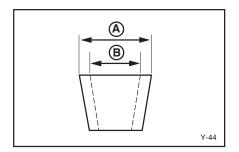
#### **Drive Belt**

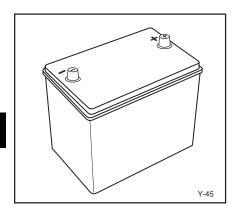
To remove the drive belt:

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



JW1 8-7





#### Inspection:

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: 1.09 in. (27.6 mm)
- (B) Replace when belt reaches: 0.95 in. (24 mm)
- 5. To install the drive belt, reverse the above steps, rolling the belt back over the secondary sheave.

#### **Battery**

The 12-volt battery that provides starting power to your gas car normally does not require the addition of water. If the battery loses its charge, have an experienced mechanic charge it.

8-8 JW1

#### **A** 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.

JW1 8-9

#### **Fuse Replacement**

#### **A WARNING**

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

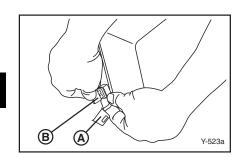
#### **CAUTION**

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

- Locate the in-line fuse holder on the main wire harness adjacent to the battery.
- 2. Pull fuse holder cover off.
- 3. Pull fuse out, inspect and replace if necessary.
- (A) Fuse holder
- (B) Fuse

Fuse Type:

10 Amp, Blade Style





③

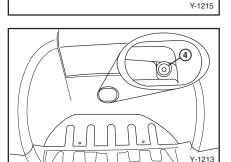
#### To check transaxle oil level:

- Place the golf car on a flat, level surface.
- 2. Remove seven plastic rivets ① and two bolts ②, and remove the bag holder insert.
- 3. Place an oil pan under the transaxle case.
- 4. Clean area around servicing plug (4).
- Using an 8 mm hex wrench, remove transaxle oil servicing plug located on the rear of the transaxle case.
- Transaxle oil should be at the top of the oil servicing hole or just beginning to run out of hole.

#### **CAUTION**

Do not allow foreign material to enter transaxle.

 If needed, add SAE80 W90 API GL-5 limited slip high performance gear oil until it is at the top of the plug hole or just beginning to run out of servicing hole.

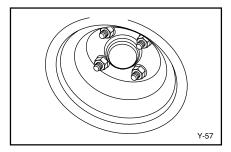


#### NOTE: \_

The YDRE Golf Car is equipped with an internal wet brake. Use of oil other than SAE80 W90 API GL-5 limited slip high performance gear oil will cause brake noise.

- 8. Install the transaxle servicing plug and tighten to 14-19 Nm (1.4-1.9 m•kg, 120-168 in•lb).
- 9. Install the bag holder insert ③ and secure with two bolts ② and seven plastic rivets ①.

Jw1 8-11



#### NOTE:

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

#### **CAUTION**

Before performing wheel or brake maintenance, verify that the main switch is in the "OFF" position.

#### Wheel Replacement

To remove and install a wheel on your golf car:

- With the wheels blocked to prevent the golf car from moving, loosen the wheel nuts.
- 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.

#### **A** WARNING

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

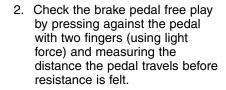
# **Brake Pedal Free Play Adjustment**

#### **CAUTION**

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

To adjust the brake pedal free play:

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

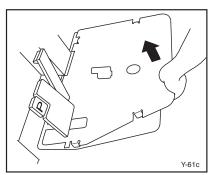


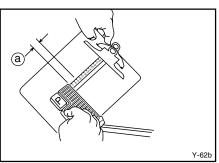
Brake pedal free play (a): 45-50 mm (1.77-1.96 in.)

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



Y-909A





# **A** WARNING

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

JW1 8-13

# **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.

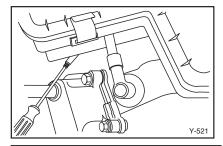
#### **DRAINING FUEL**

#### **A** WARNING

Gasoline and its vapors are highly flammable and explosive.

- Do not smoke when draining fuel and keep away from sparks, flames, or other sources of ignition.
- Stop engine and allow it to cool for several minutes before draining fuel.
- Drain fuel in a well-ventilated area.
- Take care not to spill gasoline.
  If gasoline spills, wipe it up
  immediately with dry rags.
  Always dispose of gasolinesoaked rags properly.
- Tighten the filler cap securely after checking fuel level.
- If you 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.

- Fill the fuel tank with fresh fuel and add the specified amount of Yamaha Fuel Stabilizer and Conditioner or equivalent product. Operate the vehicle for at least five minutes to distribute treated fuel through the fuel system.
- (A) Float bowl drain screw
- Turn the fuel shutoff valve to the "CLOSED" position.
- Drain the carburetor float chamber into a clean container by loosening the drain bolt (see item A below); this will help prevent fuel deposits from building up. Pour the drained fuel into the fuel tank.



#### Specified amount:

1 oz. of stabilizer for each gallon of fuel (7.5 cc of stabilizer for each liter of fuel)

#### NOTE

Use of fuel stabilizer and conditioner eliminates the need to drain the fuel system. Consult a Yamaha dealer if the fuel system needs to be drained instead.

# **STORAGE**

#### **ENGINE PREPARATION**

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

- Verify the tire pressure is set to 16 psi (110 kPa, 1.1 kgf/cm²).
- 2. Clean exterior of the golf car and apply a rust inhibitor.
- Cover the golf car with a breathable cover and store it in a dry, well-ventilated area.

# BATTERY PREPARATION

 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).  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.

#### **CAUTION**

Do not allow cleaning solution to enter battery cells.

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

JW1 9-2

# **SPECIFICATIONS**

#### **GENERAL SPECIFICATIONS**

Items	YDRA
Dimensions:	
Overall length	94.3 in. (2395 mm)
Overall width	47.2 in. (1200 mm)
Overall height (steering height)	46.9 in. (1190 mm)
Height of floor	12.2 in. (310 mm)
Wheelbase	64.6 in. (1640 mm)
Tread:	
Front	34.3 in. (870 mm)
Rear	38.6 in. (980 mm)
Minimum ground clearance	4.3 in. (110 mm)
Weight:	
Dry weight (without battery)	536 lb (243 kg)
Vibration Level:	
Vibration on seat (EN 1032,	
ISO5008) for Europe	Will not exceed 0.5 m/s <sup>2</sup>
Vibration on steering wheel	
(EN1032, ISO5008) (for Europe)	Will not exceed 2.5 m/s <sup>2</sup>
(EN 1032, 1303000) (101 Europe)	Will flot exceed 2.3 fl/s
Performance:	
Factory speed setting	12 mph (19 km/h)
Maximum speed	15 mph (24 km/h)
Minimum turning radius	110.2 in. (2.8 m)
Seating capacity	Two occupants per seat,
	four occupants maximum
Fuel Tank Capacity	6.6 U.S. Gallons (25.0L)

10-1 Jw1

# **SPECIFICATIONS**

#### **ENGINE**

Items	YDRA
Description:	
Engine type	4-stroke, Gasoline, OHV
Number of cylinders	Single
Displacement	357 cm <sup>3</sup>
Bore x stroke	3.30 x 2.48 in. (85 x 63 mm)
Compression ratio	8.1:1
Rated output	11.4 hp (8.5 kw)/3500 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 (1.1 L, 1100 cc)
Oil change quantity	1.0 US qt (1.0 L, 1000 cc)

#### **TRANSMISSION**

Items	YDRA
Transmission: Type V-belt width and outer line length V-belt wear limit	V-belt automatic centrifugal engagement 1.22 x 39.76 in. (31 x 1010 mm) 1.06 in. (27 mm)
Governor: Type Factory speed setting	Oil bath flyweight 12 mph (19 km/h)
Differential/reduction gear: Differential type Lubricant/capacity	Bevel gear SAE80 W90 API GL-5 limited slip high performance gear oil/ 1.85 US quarts (1750 mL, 1750 cc)

#### **BATTERIES**

Items	YDRA
Battery:	BCI group 24,
	RC: minimum 75 min
	CCA: minimum 400A

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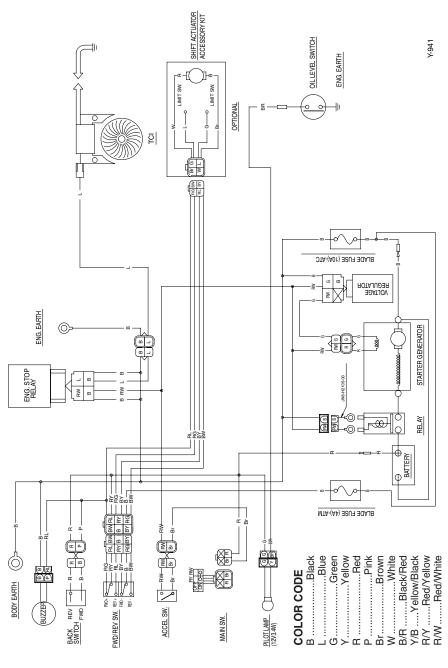
# **SPECIFICATIONS**

#### **CHASSIS**

Items	YDRA
Steering system:	
Туре	Rack and Pinion
Steering angle (L.H.)	1.85 turn
Steering angle (R.H.)	1.85 turn
Brakes:	
Brake system	Mechanical
Type of brake	Internal wet
Brake pedal free play linkage	
adjustment	45-50 mm
	(1.77-1.96 in.)
(Brake cable end play)	0.004-0.02 in. (0.1-0.5 mm)
Parking brake:	
Туре	Foot type; parking brake with automatic
	release.
Release timing	
(With pedal segment in second	
notch)	
(Bolt heads round parallel to arm)	0.000 ~ 0.001 in. (0.0 ~ 0.3 mm)
Wheel:	
Tire size:	
Front	18 x 8.50-8.00/4 PR
Rear	18 x 8.50-8.00/4 PR
Rim size:	7.00–I–8.00
Tire pressure:	16 psi (110 kPa, 1.1 kgf/cm²)
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# **NOTES**

