



YAMAHA

AG100B

AG175B

OWNER'S MANUAL

3HA-28199-23

**AG100B/AG175B
OWNER'S MANUAL**

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1st Edition, August 1990**

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INTRODUCTION

Congratulations on your purchase of the Yamaha AG100B/AG175B. This model is the result of Yamaha's vast experience in the production of fine sporting, touring, and pacesetting racing machines. It represents the high degree of craftsmanship and reliability that have made Yamaha a leader in these fields. This manual will give you an understanding of the operation, inspection, and basic maintenance of this machine. If you have any questions about the operation or maintenance of your machine, please consult a Yamaha dealer.

**TECHNICAL PUBLICATIONS
SERVICE DIVISION
MOTORCYCLE GROUP
YAMAHA MOTOR CO., LTD.**

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



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

WARNING

Failure to follow **WARNING** instructions could result in severe injury or death to the machine operator, a bystander or a person inspecting or repairing the machine.

CAUTION

A **CAUTION** indicates special precautions that must be taken to avoid damage to the machine.

NOTE:

A **NOTE** provides key information to make procedures easier or clearer.

NOTE: _____

This manual should be considered a permanent part of this machine and should remain with it even if the machine is subsequently sold.

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 machine and this manual. If there is any question concerning this manual, please consult your Yamaha dealer.

WARNING _____

PLEASE READ THIS MANUAL CAREFULLY AND COMPLETELY BEFORE OPERATING THIS MACHINE.

⚠ WARNING

THIS MACHINE IS DESIGNED AND MANUFACTURED FOR OFF-ROAD USE ONLY. IT IS ILLEGAL TO OPERATE THIS MACHINE ON ANY PUBLIC STREET, ROAD OR HIGHWAY. SUCH USE IS PROHIBITED BY LAW. THIS MACHINE COMPLIES WITH ALMOST ALL STATE OFF-HIGHWAY NOISE LEVEL AND SPARK ARRESTER LAWS AND REGULATIONS. PLEASE CHECK YOUR LOCAL RIDING LAWS AND REGULATIONS BEFORE OPERATING THIS MACHINE.

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⚠ SAFETY INFORMATION

TWO-WHEELED MACHINES ARE SINGLE TRACK VEHICLES. THEIR SAFE USE AND OPERATION ARE DEPENDENT UPON THE USE OF PROPER RIDING TECHNIQUES AS WELL AS THE EXPERTISE OF THE OPERATOR.

EVERY OPERATOR SHOULD KNOW THE FOLLOWING REQUIREMENTS BEFORE RIDING. HE OR SHE SHOULD:

1. OBTAIN THOROUGH INSTRUCTIONS FROM A COMPETENT SOURCE ON ALL ASPECTS OF MACHINE OPERATION.
2. OBSERVE THE WARNINGS AND MAINTENANCE REQUIREMENTS IN THE OWNER'S MANUAL.
3. OBTAIN PROFESSIONAL TECHNICAL SERVICE AS INDICATED BY THE OWNER'S MANUAL AND/OR WHEN MADE NECESSARY BY MECHANICAL CONDITIONS.

SAFE RIDING

1. Always make pre-operation checks. Careful checks may help prevent an accident.
2. This machine is designed for off-road use only. It is illegal for this machine to be operated on any public street, road, or highway. Off-road use on public lands may be illegal. Please check local regulations before riding.
3. This machine is designed to carry the operator only. No passengers.
4. Many accidents involve inexperienced operators.
 - a. Know your skills and limits. Staying within your limits may help you to avoid an accident.
 - b. Only lend your machine to experienced operators.

5. Many machine accidents have been caused by machine operator errors. A typical error made by the operator is veering wide on a turn due to **EXCESSIVE SPEED** or undercornering (insufficient lean angle for the speed). Never travel faster than warranted by conditions.
6. Ride cautiously in unfamiliar areas. You may encounter hidden obstacles which could cause an accident.
7. The operator's posture is important for proper control. The operator should keep both hands on the handlebars and both feet on the operator footrests during operation to maintain control of the machine.
8. Never ride under the influence of alcohol or drugs.

PROTECTIVE APPAREL

The majority of fatalities from machine accidents are the result of head injuries. The use of a safety helmet is the single most critical factor in the prevention or reduction of head injuries.

1. Always wear an approved helmet.
2. Wear a face shield or goggles. Wind on your unprotected eyes could contribute to an impairment of vision which could delay seeing a hazard.
3. The use of heavy boots, jacket, trousers, gloves, etc. is effective in preventing or reducing abrasions or lacerations.
4. Never wear loose fitting clothing. It could catch on the control levers, footrests, or wheels and cause injury or accident.
5. Never touch the engine or exhaust system during or after operation. They become very hot and can cause burns. Always wear protective clothing that covers your legs, ankles, and feet.

MODIFICATION

Modifications made to the machine not approved by Yamaha, or the removal of original equipment, may render your machine unsafe for use and may cause severe personal injury. Modifications may also make your machine illegal to use.

LOADING AND ACCESSORIES

Adding accessories or cargo to your machine can adversely affect stability and handling if the weight distribution of the machine is changed. To avoid the possibility of an accident, extreme caution should be used if adding cargo or accessories to your machine. Use extra care if riding a machine which has added cargo or accessories. Here are some general guidelines to follow if loading cargo or adding accessories to your machine:

LOADING

The total weight of the operator, accessories and cargo must not exceed the maximum load limit. When loading within these weight limits, keep the following in mind:

1. Cargo and accessory weight should be kept as low and close to the machine as possible. Be sure to distribute the weight as evenly as possible on both sides of the machine to minimize imbalance or instability.
2. Shifting weights can create a sudden imbalance. Make sure that accessories and cargo are securely attached to the machine before riding. Recheck accessory mounts and cargo restraints frequently.
3. Never attach any large or heavy items to the handlebars, front forks, or front fender. These items, including such cargo as sleeping bags, duffle bags, or tents, can create unstable handling or slow steering response.

ACCESSORIES

Genuine Yamaha accessories have been specifically designed for use on this machine. Since Yamaha cannot test all other accessories which may be available, you must personally be responsible for the proper selection, installation and use of non-Yamaha accessories. You should use extreme caution when selecting and installing any accessories. Keep in mind these guidelines for mounting accessories in addition to those provided under "LOADING".

1. Never install accessories or carry cargo that would impair the performance of your machine. Carefully inspect the accessory before using it to make sure it does not in any way reduce ground clearance or cornering clearance, limit suspension travel, steering travel or control operation, or obscure lights or reflectors.
 - a. Accessories fitted to the handlebar or the front fork area can create instability due to improper weight distribution or aerodynamic changes. If accessories are added to the handlebar or front fork area, they must be as lightweight as possible and should be kept to a minimum.
 - b. Bulky or large accessories may seriously affect the stability of the machine due to aerodynamic effects. Wind may attempt to lift the machine, or the machine may become unstable in cross winds. These accessories may also cause instability when being passed by or passing large vehicles.
 - c. Certain accessories can displace the operator from his or her normal riding position. This improper position limits the freedom of movement of the operator and may limit control ability. Therefore such accessories are not recommended.
2. Caution must be used if adding electrical accessories. If these accessories exceed the capacity of machine's electrical system, an electric failure could result, which could cause a dangerous loss of lights or engine power.

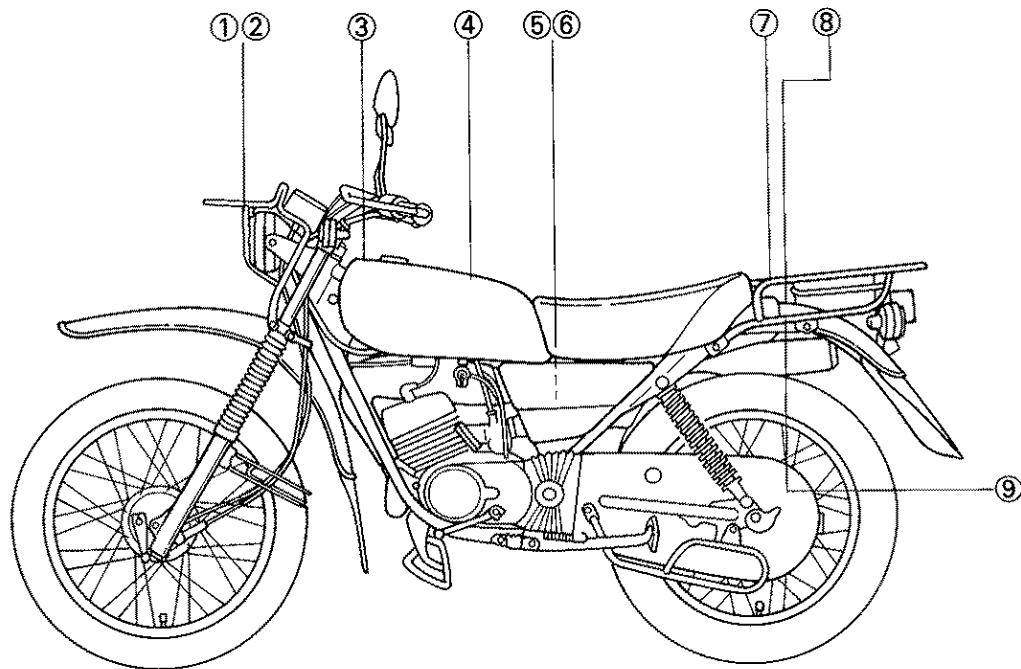
GASOLINE AND EXHAUST GAS

1. GASOLINE IS HIGHLY FLAMMABLE:

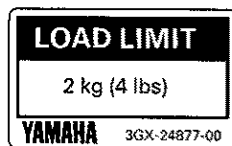
- a. Always turn off the engine when refueling.
 - b. Take care not to spill any gasoline on the engine or exhaust pipe(s)/muffler(s) when refueling.
 - c. Never refuel while smoking or in the vicinity of an open flame.
2. Never start the engine or let it run for any length of time in a closed area. The exhaust fumes are poisonous and may cause loss of consciousness and death within a short time. Always operate your machine in an area that has adequate ventilation.
3. Always turn off the engine before leaving the machine unattended and remove the ignition key. When parking the machine, note the following.
- a. The engine and exhaust pipe(s)/muffler(s) may be hot. Park the machine in a place where pedestrians or children are not likely to touch these hot areas.
 - b. Do not park the machine on a slope or soft ground; the machine may fall over.
 - c. Do not park the machine near a flammable source, e.g. a kerosene heater, or near an open flame. The machine could catch fire.
4. When transporting the machine in another vehicle, be sure it is kept upright and that the fuel cock(s) is turned to "ON" or "RES" (for vacuum type)/"OFF" (for manual type) If it should lean over, gasoline may leak out of the carburetor or fuel tank.
5. If you should swallow any gasoline, inhale a lot of gasoline vapor, or allow gasoline to get in your eye(s), see your doctor immediately. If any gasoline spills on your skin or clothing, immediately wash it off with soap and water and change your clothes.

LOCATION OF THE IMPORTANT LABELS

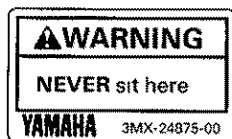
Please read the following labels carefully before operating this machine.



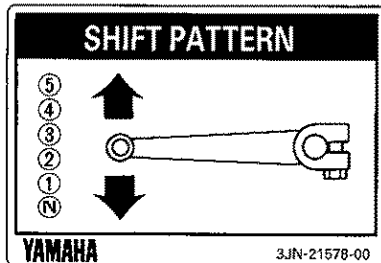
①



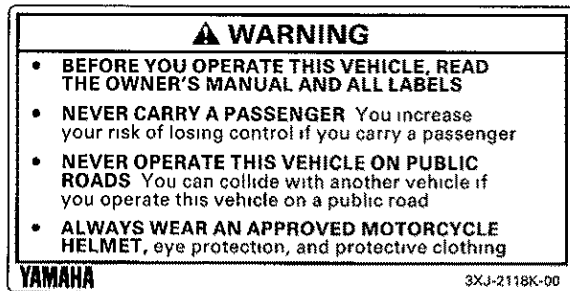
②



③



④



⑤ For AG175B

TIRE INFORMATION	
Cold tire normal pressure should be set as follows	
FRONT	125 kPa, {1.25 kgf/cm ² }, 18 psi
REAR	150 kPa, {1.50 kgf/cm ² }, 22 psi
YAMAHA 3VU-21668-00	

⑤ For AG100B

TIRE INFORMATION	
Cold tire normal pressure should be set as follows	
FRONT	100 kPa, {1.00 kgf/cm ² }, 15 psi
REAR	125 kPa, {1.25 kgf/cm ² }, 18 psi
YAMAHA 3HA-21668-00	

⑥

CAUTION
• Read owner's manual before servicing battery • Electrolyte will damage metal parts or paint If electrolyte spills, wash area with fresh water immediately • Be sure to connect breather hose after installing battery
YAMAHA 3JL-28177-00

⑦

⚠ WARNING	
NEVER sit here	
YAMAHA 3MX-24875 00	

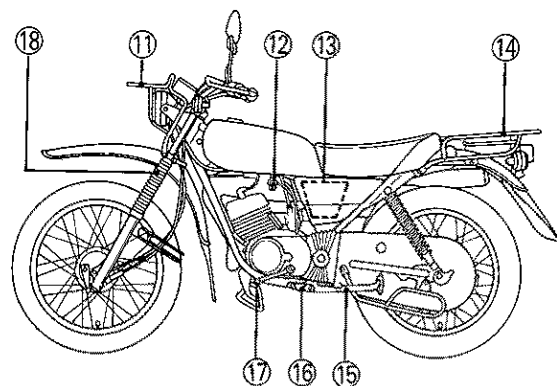
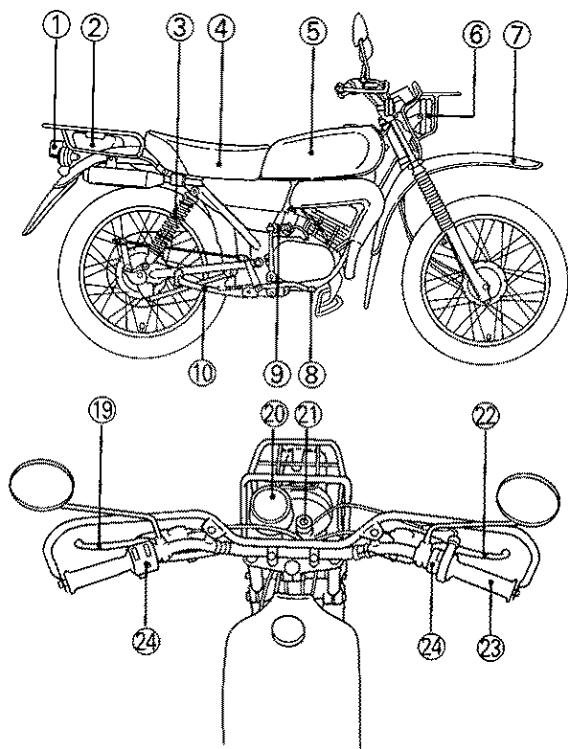
⑧

⚠ WARNING	
Improper loading can cause loss of control Read owner's manual for proper loading	
YAMAHA 3JJ-28446-00	

⑨

LOAD LIMIT
20 kg (44 lbs)
YAMAHA 3GX-24897 00

DESCRIPTION



- | | | |
|-----------------------|------------------|---------------------|
| 1 Tail/brake light | 9 Kick starter | 17 Shift pedal |
| 2 Tool box | 10 Sidestand | 18 Front fork |
| 3 Rear shock absorber | 11 Front carrier | 19 Clutch lever |
| 4 Seat | 12 Fuel cock | 20 Speedometer |
| 5 Fuel tank | 13 Oil tank | 21 Main switch |
| 6 Headlight | 14 Rear carrier | 22 Brake lever |
| 7 Front fender | 15 Sidestand | 23 Throttle grip |
| 8 Brake pedal | 16 Footrest | 24 Handlebar switch |

NOTE:

The machine that you have purchased differs partly in design and specifications from that shown in this photo.

MACHINE IDENTIFICATION

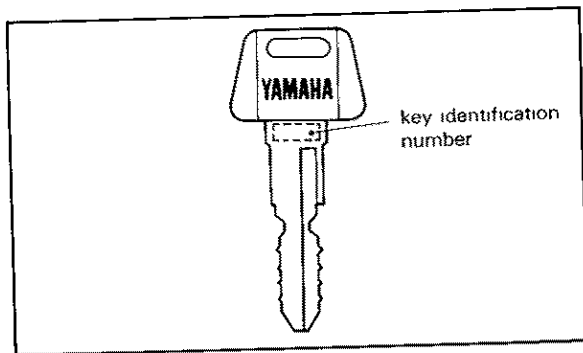
Identification numbers record

1. KEY IDENTIFICATION NUMBER:

2. VEHICLE IDENTIFICATION NUMBER: FRAME SERIAL NUMBER.

3. ENGINE SERIAL NUMBER:

Your key identification number is stamped on your key as shown in the following illustration. Record this number in the space provided for reference if you need a new key.



Record your vehicle identification number (or frame serial number) and engine serial number in the spaces provided to assist you in ordering spare parts from your Yamaha dealer or for reference in case your vehicle is stolen.

Vehicle identification number (For Australia)

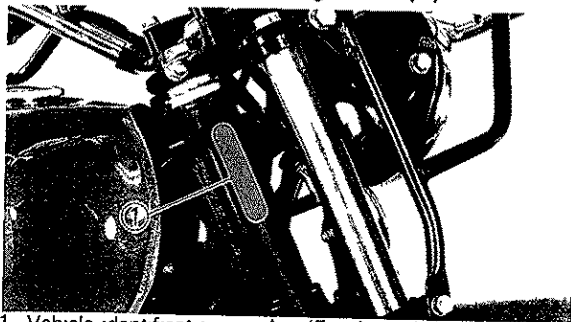
The vehicle identification number is stamped into the steering head pipe.

NOTE:

The vehicle identification number is used to identify your machine and may be used to register your machine with the licensing authority in your state.

Frame serial number (Except for Australia)

The frame serial number is stamped into the right side of the steering head pipe.



1 Vehicle identification number (For Australia)

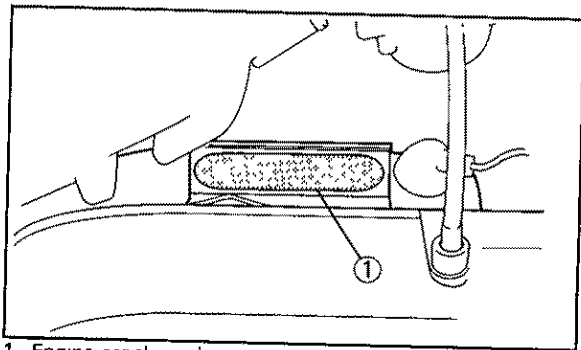
1 Frame serial number (Except for Australia)

Engine serial number

The engine serial number is stamped into the left side of the engine on top of the crankcase.

NOTE:

The first three digits of these numbers are for model identifications; the remaining digits are the unit production number.



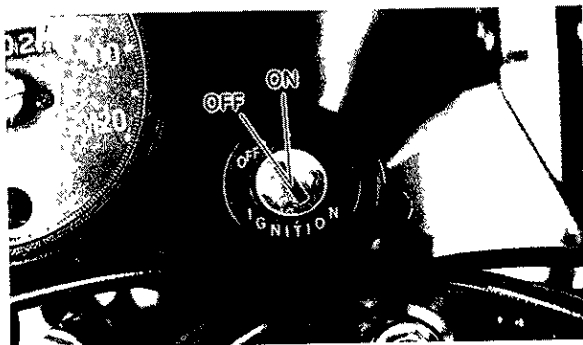
1. Engine serial number

CONTROL FUNCTIONS

Main switch

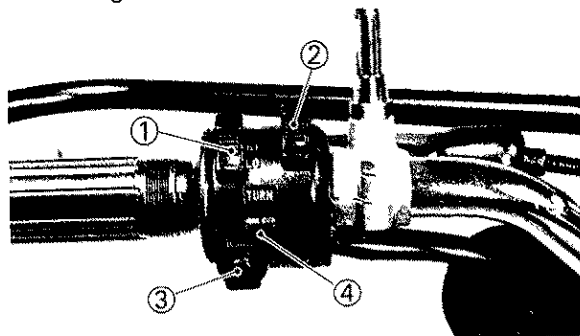
According to the main key position, the ignition and lighting systems can be used as follows.

Key position	Description	Key removal
OFF	Engine cannot be started Lights and horn cannot be operated	Possible
ON	Engine can be started Lights and horn can be operated	Not possible



Handle switches

The handle switches are located near the left and right handlebar grip and are used for the following functions



1. "LIGHTS" (Dimmer) switch
2. "LIGHTS" switch

- 3 "HORN" switch
- 4 "TURN" switch

"LIGHTS" switch

Turn the light switch to forward position to turn on the headlight

"LIGHTS" (Dimmer) switch

Turn to the "HI" position for the high beam and to the "LO" position for the low beam.

"HORN" switch

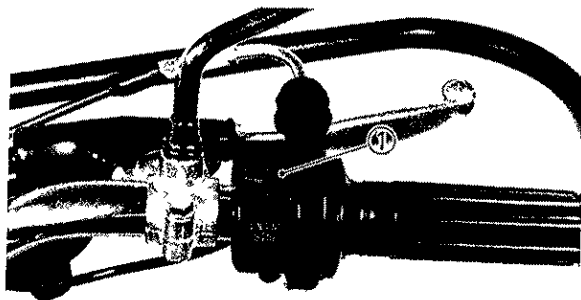
Press switch to sound the horn.

"TURN" switch

This is a three-way switch: the center position is off; turn to the "L" position for the left flasher and to the "R" position for the right flasher. Be sure to turn the switch off after completing a turn.

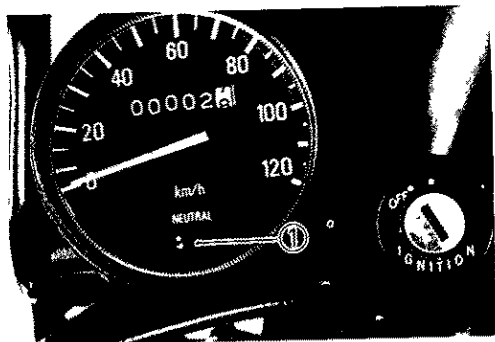
"ENGINE STOP" switch

Make sure that the engine stop switch is turned to "RUN" position. The engine stop switch has been equipped to ensure safety in an emergency such as when the machine is upset or trouble takes place in the throttle system. The engine will not start or run when the engine stop switch is turned to "OFF". In case of an emergency, turn the stop switch forward to shut off the engine.



1 "ENGINE STOP" switch

Indicator lights



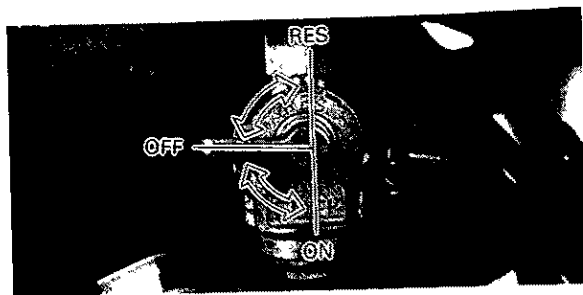
1 "NEUTRAL" indicator light

"NEUTRAL" indicator light (green):

This indicator lights when the transmission is in neutral.

Fuel cock

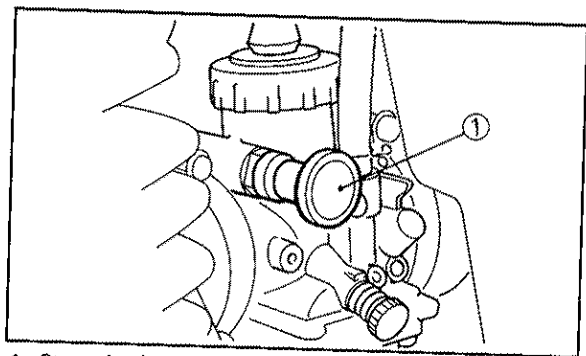
The fuel cock supplies fuel from the tank to the carburetor while filtering the fuel. The fuel cock has three positions:



- OFF With the lever in this position fuel will not flow. Always return the lever to this position when the engine is not running
- ON: With the lever in this position fuel flows to the carburetor. Normal riding is done with the lever in this position.
- RES This indicates "RESERVE". If you run out of fuel while riding, move the lever to this position. THEN, FILL THE TANK AT THE FIRST OPPORTUNITY.

Starter knob (CHOKE)

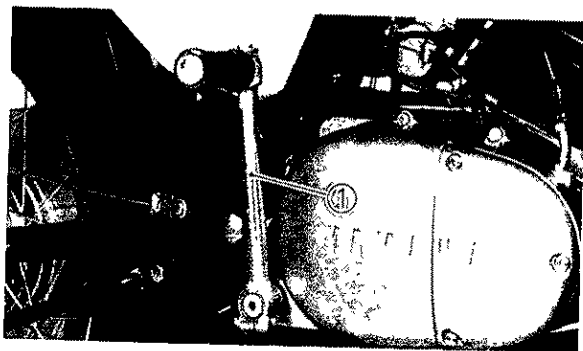
When cold, the engine requires a richer air-fuel mixture for starting. A separate starter circuit, which is controlled by the starter, supplies this mixture. Pull the starter out to open the circuit for starting. When the engine has warmed up push it in to close the circuit.



1 Starter knob

Kick starter

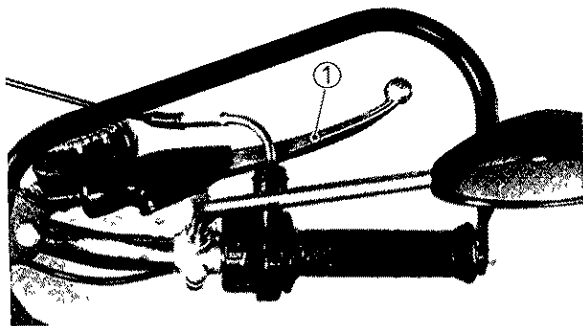
To start the engine, rotate the kick starter, push down lightly with your foot until the gears engage, and then kick smoothly and forcefully. This model has a primary kick starter so the engine can be started in gear if the clutch is disengaged. In normal practices, however, shift to neutral before starting.



1 Kick starter

Front brake lever

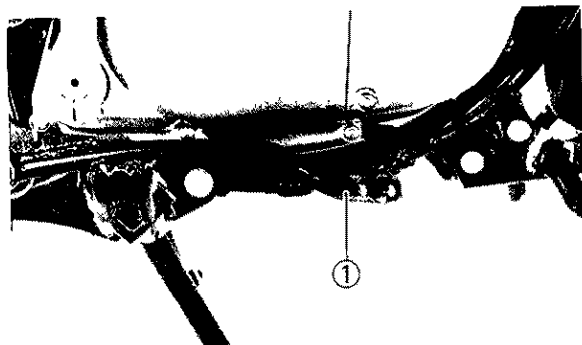
The front brake lever is located on the right handlebar. Pull it toward the handlebar to activate the front brake.



1 Front brake lever

Rear brake pedal

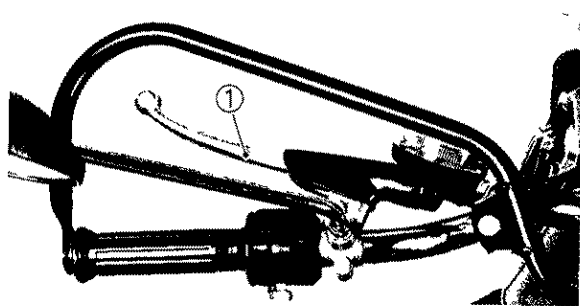
The rear brake pedal is in front of the right footrest. Press down on the brake pedal to activate the rear brake.



1 Rear brake pedal

Clutch lever

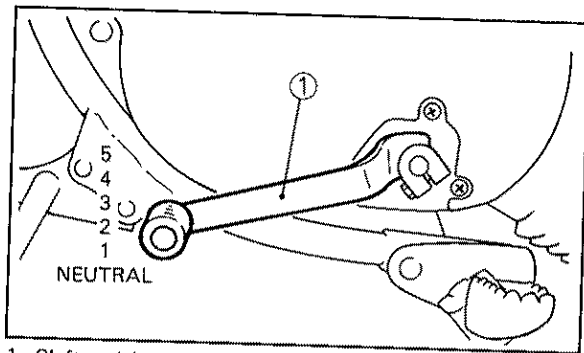
The clutch lever is located on the left handlebar and disengages or engages the clutch. Pull the clutch lever to the handlebar to disengage the clutch and release the lever to engage the clutch. The lever should be pulled rapidly and released slowly for smooth operation.



1. Clutch lever

Shift pedal

The gear ratios of the constant mesh 5 speed transmission are ideally spaced. The gears can be shifted by using the shift pedal on the left side of the engine.



1 Shift pedal

PRE-OPERATION CHECKS

Before using this machine please check the following points:

Item	Routine	Page
Brakes	Check operation/adjustment	21, 36 ~ 39
Clutch	Check operation/lever adjustment	21, 36
Throttle	Check for proper throttle and Autolube cable operation	22
Autolube tank	Check oil level/top-up as required	21, 30
Transmission oil	Check oil level/top-up as required	21, 30 ~ 32
Drive chain	Check alignment/adjustment/lubrication	21, 39 ~ 41
Air filter	Foam type must be clean and damp w/oil always	34, 35
Wheels and tires	Check pressure/runout/spoke tightness/axle nuts	22, 23
Fittings/fasteners	Check all — tighten as necessary	23
Lights/signals	Check headlight/tail-stoplights	22
Battery	Check fluid level, top-up with distilled water if necessary	22, 43 ~ 44

NOTE:

Pre-operation checks should be made each time the machine is used. Such an inspection can be thoroughly accomplished in a very short time, and the added safety it assures is more than worth the time involved.

** WARNING**

If any item in the Pre-Operation Check is not working properly, have it inspected and repaired before operating the machine.

Brake (Front and Rear)

Check for correct play in the brake lever and pedal and make sure they are working properly. Check the brakes at low speed shortly after starting out

Clutch

Check for correct play in the clutch lever and make sure the lever operates properly

Engine oil (oil tank)

Make sure there is sufficient engine oil in the oil tank. Add oil as necessary.

Recommended oil:

Air cooled 2-stroke engine oil

Oil tank capacity:

1.5 L (1.3 Imp qt, 1.6 US qt)

Transmission oil

Make sure the transmission oil is at the specified level. Add oil as necessary.

Recommended oil

SAE 10W30 type SE motor oil

Oil capacity: 0.7 ~ 0.75 L

(0.6 ~ 0.7 Imp qt, 0.7 ~ 0.8 US qt)

To check level, screw the dip stick completely out and then just rest the stick in the hole. The oil level should be between the two marks on the dipstick

Fuel

Make sure there is sufficient fuel in the tank.

Recommended fuel:

Regular gasoline

For Australia: Unleaded fuel only.

Fuel tank capacity:

11 L (2.4 Imp gal, 2.9 US gal)

Drive chain

Check the chain tension and condition

Throttle

Turn the throttle grip to see if it operated properly and if the play is normal. Make certain the throttle snaps closed when released.

Battery

Check the fluid level and top-up if necessary. Use only distilled water if refilling is necessary.

Lights/Signals

Check the headlight, taillight, brake light, meter lights and all the indicator lights to make sure they are in working condition.

Tires

Check the tire pressure and check the tires for wear.

Tire pressure

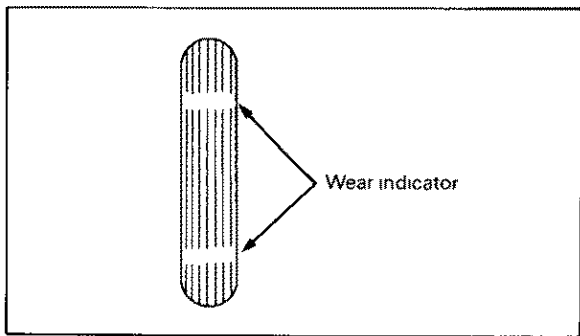
AG100B.

Front	100 kPa (1.0 kg/cm ² , 15 psi)	Normal riding
Rear	125 kPa (1.25 kg/cm ² , 18 psi)	

AG175B

Front	125 kPa (1.25 kg/cm ² , 18 psi)	Normal riding
Rear	150 kPa (1.5 kg/cm ² , 22 psi)	

A tread-wear indicator is built into the tire. If a tire tread shows crisscross lines, it means that the tire is worn to its limit. Replace any worn-out tire.



CAUTION:

A great danger is apprehended from driving with a worn tire. When a tire tread begins to show lines, have your Yamaha dealer replace the tire immediately.

Rear tire turning direction

When installing the rear tire, take care so that the arrow mark on the tire indicates the correct direction of rotation.



Fittings/Fasteners

Always check the tightness of chassis fittings and fasteners before riding.

OPERATION AND IMPORTANT RIDING POINTS

⚠ WARNING

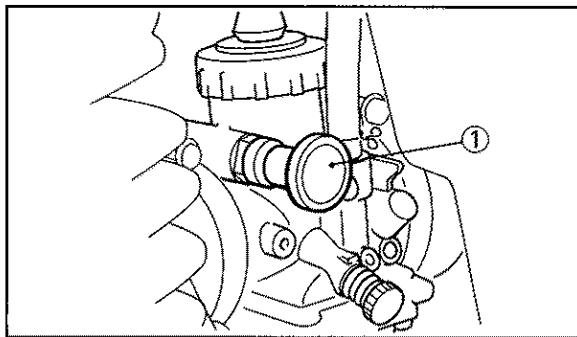
Before riding this machine, become thoroughly familiar with all operating controls and their function.

Consult your Yamaha dealer regarding any control or function you do not thoroughly understand.

Starting a cold engine

1. Turn the fuel cock to "ON".
2. Turn the ignition key to "ON" position and turn the engine stop switch to the "RUN" position.
3. Shift transmission into neutral.
4. Operate the carburetor starter knob and completely close the throttle grip.
5. Kick the kick starter briskly to start the engine.

6. After the engine starts, warm up for one or two minutes. Make sure the starter (choke) knob is returned to the original position before riding.



1 Starter knob

Warming up

To get maximum engine life, always "warm-up" the engine before starting off.

Never accelerate hard with a cold engine! To see whether or not the engine is warm, see if it responds to throttle normally with the starter (CHOKE) turned off.

⚠ WARNING

Before starting out, always be sure the sidestands are up. Failure to retract the sidestand completely can result in a serious accident when you try to turn a corner.

Starting a warm engine

1. Turn the fuel cock to "ON".
2. Turn the ignition key to "ON" position.
3. Slightly open the throttle grip.
4. Kick the kick starter with full strength to start the engine.

NOTE:

Do not operate the starter (choke) when the engine is already warm.

⚠ CAUTION:

See "Break-in Section" prior to operating engine for the first time.

Engine break-in

There is never a more important period, in the life of your machine, than the period between zero and 1,000 km (600 mi). For this reason we ask that you carefully read the following material. Because the engine is brand new, you must not put an excessive load on it for the first several hours of running.

During the first 1,000 km (600 mi) the various parts in the engine wear and polish themselves to the correct operating clearances. During this period prolonged full throttle operation, or any condition which might result in excessive heat of cylinder, must be avoided. However, momentary full throttle operation, under load (2 ~ 3 seconds maximum), does not harm the engine. Each full throttle acceleration sequence should be followed with a substantial rest period for the engine by cruising at lower rpm's so the engine can rid itself of the temporary build up of heat.

If any abnormality is noticed during this period, ask your Yamaha dealer to check.

1. 0 ~ 500 km (0 ~ 300 mi):
Avoid operation above one half throttle
2. 500 ~ 1,000 km (300 ~ 500 mi):
Avoid full throttle operation. Allow the machine to rev freely through the gears but do not use more than 3/4 throttle in any gear.
3. 1,000 km (600 mi) and beyond:
Avoid prolonged full throttle operation.
Avoid cruising speeds in excess of one half throttle. Vary speeds occasionally.

CAUTION:

If any engine trouble should occur during the break-in period, consult a Yamaha dealer immediately.

Parking

When parking, stop the engine and remove the ignition key. Make it a habit to turn the fuel cock to "OFF" whenever stopping the engine.

⚠ WARNING

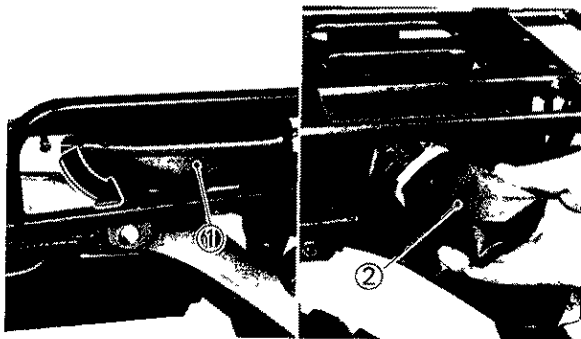
The muffler and exhaust pipe are hot. Park the machine in a place where pedestrians or children are not likely to touch the machine.

Do not park the machine on a slop or soft ground; the machine can easily overturn.

PERIODIC MAINTENANCE AND MINOR REPAIR

Tool kit

The tools provided in the owner's tool kit are sufficient for most periodic maintenance and minor repair purpose, except that a torque wrench is also necessary to properly tighten nuts and bolts.



1 Tool bag

2 Tool kit

CAUTION:

The following sections provide information for the disassembly, troubleshooting and maintenance of various components of the machine. If you do not have the necessary tools and an understanding of the mechanical principles involved, please refrain from attempting repairs. The use of improper tools and/or procedures can cause major damage to the unit and result in additional repair costs.

Periodic maintenance

Periodic inspection, adjustment and lubrication will keep your machine in the safest and most efficient condition possible. Safety is an obligation of the machine owner. The most important points of machine inspection, adjustment and lubrication are explained below. If the owner is not familiar with machine service, this work should be done by a Yamaha dealer.

⚠ WARNING

If the owner is not familiar with machine service, this work should be done by your Yamaha dealer.

LUBRICATION INTERVAL

Unit km (mi)

Item	Remarks	Type	Initial			Thereafter every	
			500 (300)	1,500 (1,000)	3,000 (2,000)	3,000 (2,000)	6,000 (4,000)
* Transmission oil	Replace/Warm engine before draining	SAE 10W30 type SE motor oil	○	check	○	○	
Air cleaner	Washed and damped with oil	SAE 10W30 motor oil		○	○	○	
* Control and meter cables	All — Apply thoroughly	SAE 10W30 motor oil		○	○	○	
Throttle grip and housing	Light application	Lithium base grease	○		○		○
Brake pedal shaft	Light application	Lithium base grease		○	○	○	
Brake camshaft	Light application	Lithium base grease		○	○	○	
Front forks	Drain completely — Check specifications	SAE 10W30 motor oil	○		○		○
Steering ball and ball races	Inspect thoroughly / Medium pack	Medium-weight wheel bearing grease			○		○
Speedometer gear housing	Inspect thoroughly / Medium pack	Lithium base grease		○	○		
Rear arm pivot shaft	Light application	Lube grease			○		○
Wheel bearings	Do not over-pack	Medium-weight wheel bearing grease			○		○
* Drive chain	Lubricate chain thoroughly	Heavy-weight gear oil SAE 30 ~ 50	Every 500 (300)				
Stand shaft pivot(s)	Light application	Lithium base grease					○

* indicates pre-operation check items

PERIODIC MAINTENANCE

Unit km (mi)

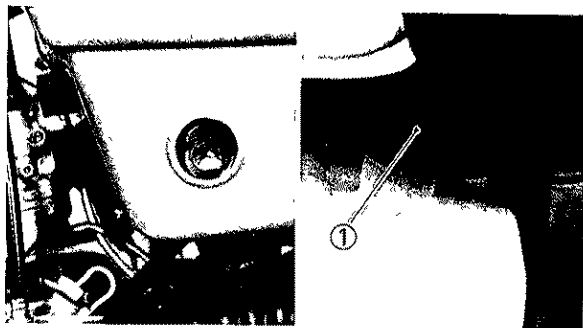
Item	Remarks	Initial			Thereafter every	
		500 (300)	1,500 (1,000)	3,000 (2,000)	3,000 (2,000)	6,000 (4,000)
Cylinder head/Exhaust pipe	Decarbonize		○	○		○
* Clutch	Check/Adjust	○	○	○	○	
Carburetor	Check operation/Fittings		○	○	○	
Carburetor	Clean/Repair/Refit/Adjust		○	○		○
Autolube pump	Check/Adjust/Air bleeding	○	○	○	○	
Air cleaner	Foam element air-filter must be clean and damped with oil		○	○	○	
Fuel cock	Clean			○		○
* Drive chain	Check/Adjust as required/Replace as required	Every 500 (300)				
* Wheels and tires	Pressure/Spoke tension/Runout	○	○	○	○	
* Suspension system	Check/Adjust/Tighten	○	○	○	○	
* Brake system	Check/Adjust/Repair	○	○	○	○	
Silencer	Clean/Replace		○			
Ignition timing	Check/Clean	○	○	○	○	
Spark plug	Inspect/Clean/Replace	○	○	○	○	
* Battery	Top-up/check specific gravity and breather pipe	○	○	○	○	
* Lights and signals	Check operation/Adjust	○	○	○	○	
* Fittings and fasteners	Tighten before each trip and/or	○	○	○	○	

* indicates pre-operation check items

Engine oil

Check the engine oil level in the oil tank. If the oil level is lower than window, add the sufficient oil.

Air Cooled 2-stroke engine oil



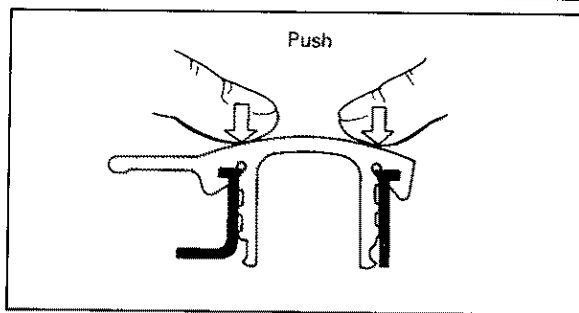
1. Oil tank filler cap

Oil tank capacity:

1.5 L (1.3 Imp qt, 1.6 US qt)

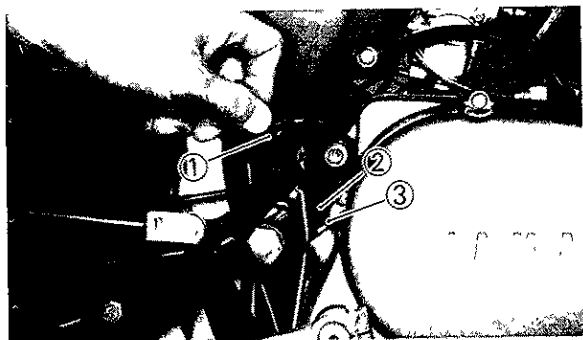
NOTE:

Install the oil tank filler cap and push it fully into the filler.



Transmission oil

The only servicing for you to do is to check and fill the transmission lubricating oil. The transmission dip stick is located right above the kick starter. To check the level, warm the engine up for several minutes, screw the dip stick completely out and then just rest the stick in the hole.



1 Dip stick 2 Maximum level 3 Minimum level

NOTE:

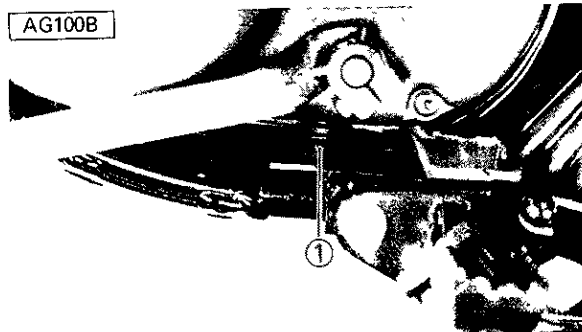
When checking transmission oil level with the dip stick, let the unscrewed dip stick just rest on the case threads. Also, be sure the machine is positioned straight up and on both wheels.

Recommended oil:

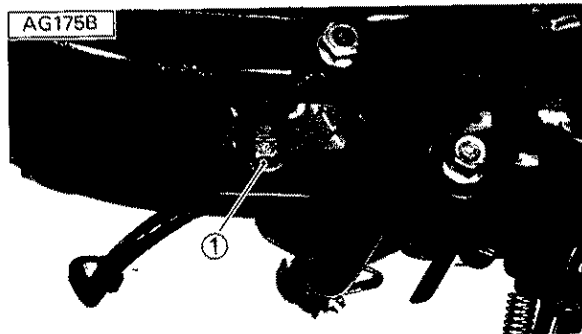
SAE 10W30 type SE motor oil

Oil capacity: 0.7 ~ 0.75 L

(0.6 ~ 0.7 Imp qt, 0.7 ~ 0.8 US qt)



1 Drain plug



1 Drain plug

The dip stick has a Minimum and a Maximum mark, and the oil level should be between the two. If the level is lower, then add sufficient oil to raise it to the proper level. During the break-in period, you should replace the gear oil 30 days or 500 km (300 mi) after the date of purchase. The transmission should be drained and refilled approximately every 3,000 km (600 mi).

On the bottom of the engine there is a drain plug. Remove it and drain all the transmission oil out. Reinstall the drain plug (make sure it is tight). Add oil through the oil hole.

NOTE: _____

Do not add any chemical additives. Transmission oil also lubricates the clutch and additives could cause the clutch to slip

Spark plug inspection

The spark plug is an important engine component and is easy to inspect. The condition of the spark plug can indicate something of the condition of the engine. Check the coloration on the white porcelain insulator around the center electrode. The ideal coloration at this point is a medium to light tan color for a machine that is being ridden normally. If a spark plug shows a distinctly different color, there could be something wrong with the engine. For example, a very white center electrode porcelain color could indicate an intake tract air leak or carburetion problem for that cylinder. Do not attempt to diagnose such problems yourself. Instead, take the machine to your Yamaha dealer.

You should periodically remove and inspect the spark plug because heat and deposits will cause any spark plug to slowly break down and erode. Consult your dealer before changing to a different type of spark plug.

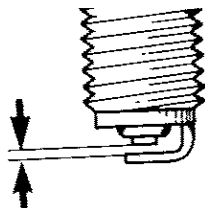
Standard spark plug:

B7ES (NGK) (AG100B)

B6ES (NGK) (AG175B)

Spark plugs are produced in several different thread lengths. The thread length (reach) is the distance from the spark plug gasket seat to the end of the threaded portion. If the reach is too long, overheating and engine damage may result. If the reach is too short, spark plug fouling and poor performance may result; also, carbon will form on the exposed threads resulting in combustion chamber hot spots and thread damage. Always use a spark plug with the proper reach.

0.6 ~ 0.7 mm
(0.024 ~ 0.028 in)



Before installing any spark plug, measure the electrode gap with a wire thickness gauge and adjust to specifications.

Spark plug gap.

0.6 ~ 0.7 mm (0.024 ~ 0.028 in)

When installing the plug, always clean the gasket seat surface and use a new gasket. Wipe off any grime from the threads and torque the spark plug properly.

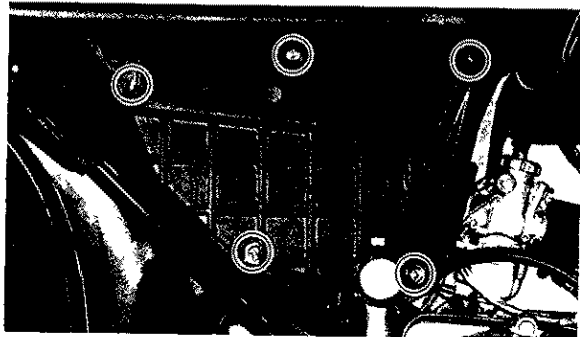
Spark plug torque:

20 Nm (2.0 m·kg, 14 ft·lb)

Cleaning the air filter element

The air filter protects the engine from dirt which can enter with the intake air and cause rapid engine wear. This dirt is filtered from the air by the air filter element. This model uses a cartridge type air filter element which consists of foam rubber moistened with oil. When this filter element becomes dirty it should be cleaned with solvent and reoiled.

Cleaning method



1. Remove the air filter element from its case, remove element from core and clean with solvent. After cleaning, remove the remaining solvent by squeezing the foam rubber.
2. Then apply SAE 10W30 motor oil to the entire surface and squeeze out the excess oil.
Foam should be wet but not dripping.
3. When installing the air filter element in its case, be sure its sealing surface matches perfectly the sealing surface of the case so there is not air leakage.
4. The air filter element should be cleaned once a month or every 3,000 km (2,000 mi). It should be cleaned more often than above if the machine is operated in extremely dusty areas.

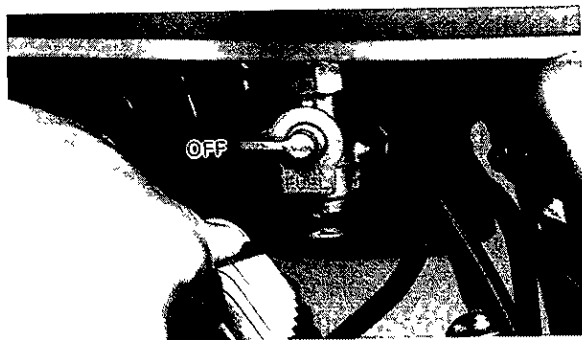
CAUTION

The engine should never be run without the air cleaner element installed; overheating or piston damage may result.

Fuel cock inspection and cleaning

The fuel cock has a built-in filter to remove any particles before they reach the carburetor. If the filter becomes blocked, the fuel cannot enter the carburetor. To prevent this, inspection and cleaning should be done at recommended intervals.

1. First, turn the cock lever to the "OFF" position; then remove the filter cup and clean the bottom of the cup with solvent.
2. After removing the filter cup, remove and clean the filter screen. At the same time, you should examine the condition of the filter gasket. Replace if damaged



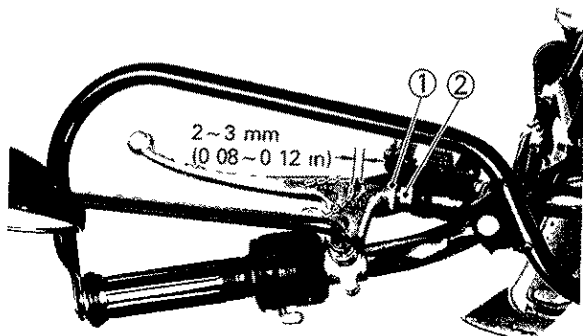
Carburetor adjustment

The carburetor setting should not be changed unnecessarily, or the performance of the carburetor will be adversely affected. It is advisable that the carburetor be adjusted under the guidance of your Yamaha dealer.

Clutch adjustment

There are two different clutch adjustments; (1) adjusting the play at the clutch lever, and (2) adjusting the play in the clutch push screw. Adjusting the play at the lever is usually sufficient; adjusting the play in the push screw should be left to the dealer.

Loosen the lock nut and make the necessary adjustment by turning the adjuster until the clearance between the front of the clutch lever and the lever holder is between 2 ~ 3 mm (0.08 ~ 0.12 in).



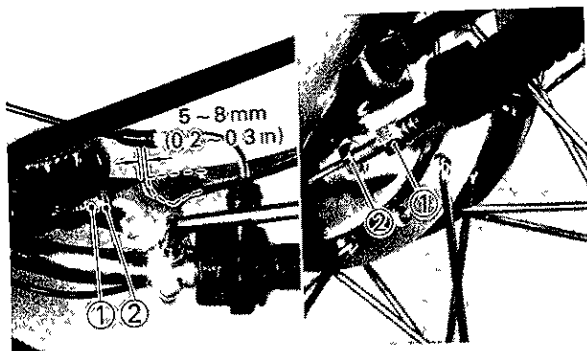
1 Lock nut

2 Adjuster

Front brake adjustment

Front brake should be adjusted to suit rider preference with a minimum cable slack of 5 ~ 8 mm (0.2 ~ 0.3 in) play at the brake lever pivot point.

1. Loosen the adjuster lock nut.
2. Turn the cable length adjuster in or out until adjustment is suitable.
3. Tighten the adjuster lock nut.
4. When adjusting the cable length on the brake hub side, first screw in the adjuster on the brake lever side and adjust to specification. Use cable length adjuster. After adjustment, cover the adjuster with rubber cover.



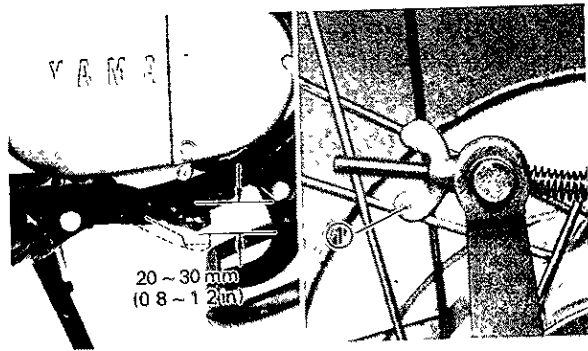
1 Adjuster

2 Lock nut

Rear brake adjustment

The rear brake should be adjusted so the end of the brake pedal moves 20 ~ 30 mm (0.8 ~ 1.2 in). To adjust, turn the adjuster on the brake rod clockwise to reduce play; turn it counterclockwise to increase play.

Check whether or not the brakelight operates correctly after adjusting.



1 Adjuster

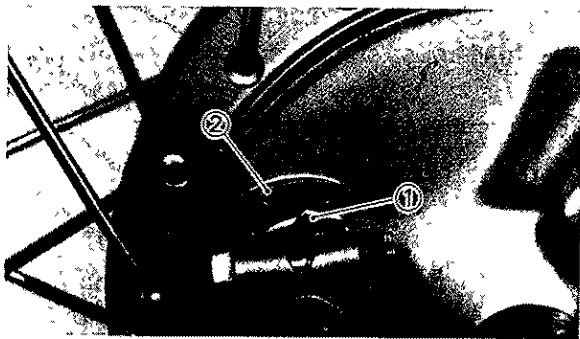
Checking the brake shoes

The brake shoes should be replaced when the brake lining wears to less than 2 mm (0.08 in) thickness. And wear indicator is attached to each brake to facilitate brake shoe check. This indicator permits a visual check without disassembling the brake.

FRONT:

To check, see the wear indicator position while pulling the brake lever. If the indicator reaches to the wear limit line, ask your

Yamaha dealer to replace the shoes as a set.

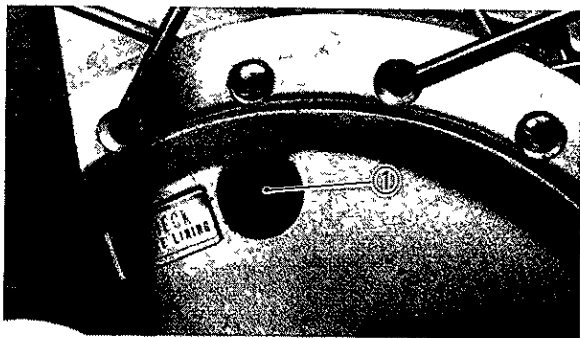


1 Wear indicator

2 Wear limit

REAR:

To inspect, remove the plug from the inspection hole and check the thickness of the lining. If worn out, ask your Yamaha dealer to replace the shoes. Be sure to reinstall the plug properly so water cannot enter the shoe plate.



1 Inspection hole

Brakelight switch adjustment

The brakelight switch is operated by movement of the brake pedal. To adjust, hold the switch body with the hand so it does not rotate and turn the adjuster. Proper adjustment is achieved when the brake starts to take effect and the brakelight illuminates simultaneously.



1 Main body

2 Adjuster

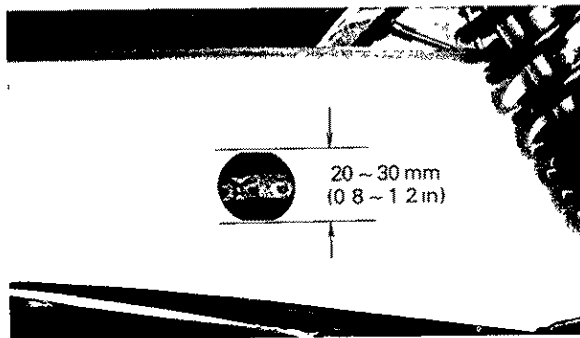
Drive chain tension check

NOTE:

Before adjusting, rotate rear wheel through several revolutions and check tension several times to find the tightest point. Adjust chain tension with rear wheel in this "tight chain" position.

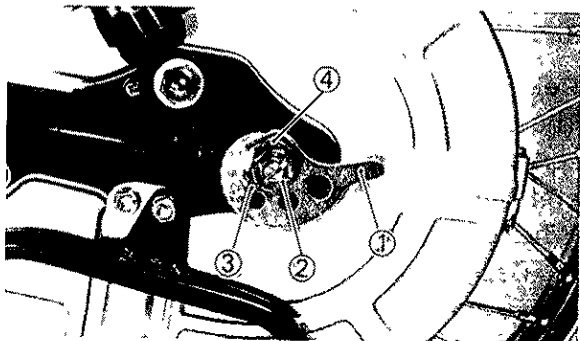
To check and/or adjust the chain play, the machine must stand vertically with its both wheels on the ground and without rider on it. Then measure the play at the bottom of the chain at a point midway between the drive and driven sprockets.

The normal vertical deflection is approximately 20 ~ 30 mm (0.8 ~ 1.2 in). If the chain deflection is not as specified, adjust the chain tension.



Drive chain tension adjustment

1. Loosen the rear brake adjuster.
2. Remove the cotter pin of the rear wheel axle nut with pliers.
3. Loosen the rear wheel axle nut and sprocket shaft nut.
4. Turn chain puller both left and right, until axle is situated in same cam slot position.



- 1 Chain puller cam 2 Axle nut 3 Cotter pin
4 Sprocket shaft nut

5. After adjustment, be sure to tighten the sprocket shaft nut and axle nut. If the nut notch and the cotter pin hole do not match, tighten the nut slightly to match.

Tightening torque:

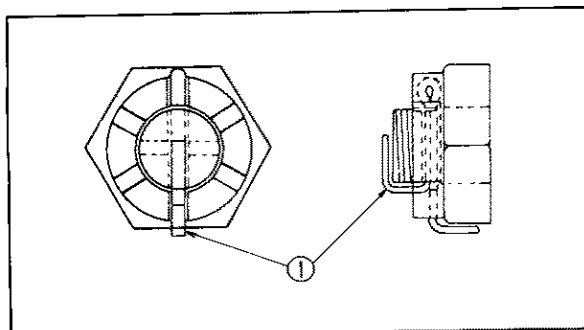
Sprocket shaft nut and axle nut:

85 Nm (8.5 m · kg, 61 ft · lb)

6. Insert a new cotter pin into the rear wheel axle nut and bend the end of the cotter pin as shown in the illustration (if the nut notch and the cotter pin hole do not match, loosen the nut slightly to match).

⚠ WARNING

Always use a new cotter pin on the axle nut.



1 Cotter pin

7. In the final step, adjust the play in the brake pedal.

CAUTION:

Excessive chain tension will overload the engine and other vital parts; keep the tension within the specified limits.

Drive chain lubrication

This machine has a drive chain with small rubber O-rings between the chain plates. Steam cleaning, high-pressure washes, and certain solvent can damage these O-rings. Use only kerosene to clean the drive chain. Wipe it dry, and thoroughly lubricate it with SAE 30 ~ 50 gear oil. Do not use any other lubricants on the drive chain. They may contain solvents that could damage the O-rings.

Rear shock absorber Adjustment

The spring pre-load of the rear shock absorber can be adjusted to suit rider preference, weight and the road conditions.

When springing feels excessive and too hard:

- Decrease the spring pre-load.

When bottoming feels excessive and too soft:

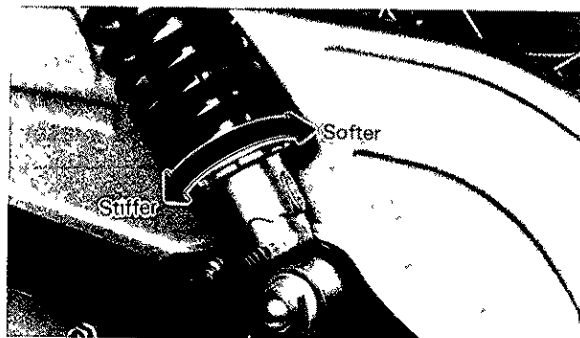
- Increase the spring pre-load.

To increase pre-load, spring seat is raised.
To decrease pre-load, spring seat is lowered.

	Hard ←				STD
Adjusting Position	5	4	3	2	1

NOTE:

Adjust both the right and left sides to the same position.



Cable inspection and lubrication

1. Damage to the outer housing of the various cables may cause corrosion and often free movement will be obstructed. An unsafe condition may result so replace such cables as soon as possible.
2. If the inner cables do not operate smoothly, lubricate or ask your Yamaha dealer to replace them.

Recommended lubricant:
SAE 10W30 motor oil

Lubrication of levers, pedals, etc.

1. Lubricate the pivoting parts of the brake and clutch levers with SAE 10W30 motor oil.
2. Lubricate the shaft of the brake pedal with lithium base grease.

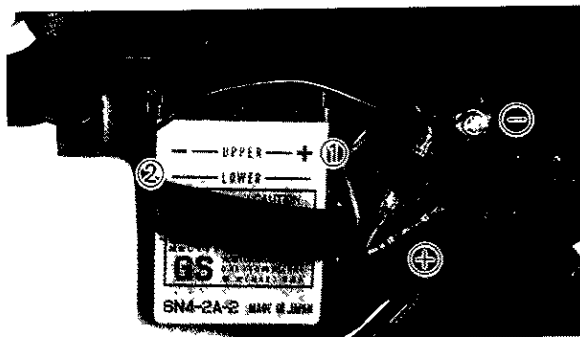
Battery

Check the level of the battery fluid and see if the terminals are tight. Add distilled water if the fluid level is low.

Replenishing the battery fluid

A poorly maintained battery will deteriorate quickly. The battery fluid should be checked at least once a month.

1. The level should be between the upper and lower level marks. Use only distilled water if refilling is necessary. Tighten the terminals after refilling.
2. When the machine is not to be used for a month or longer, remove the battery and store it in a cool, dark place. Completely recharge the battery before reusing.



1 Upper level

2 Lower level

CAUTION:

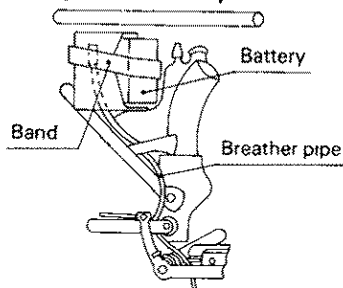
Normal tap water contains minerals which are harmful to a battery; therefore, refill only with distilled water.

⚠ WARNING

Battery fluid on the chain can cause premature failure and a possible accident.

3. If the battery is to be stored for a longer period than the above, check the specific gravity of the fluid at least once a month and recharge the battery when it is too low.
4. Always make sure the connections are correct when putting the battery back in the machine. The red lead is for the + terminal and the black lead is for the - terminal. Make sure the breather pipe is properly connected and is not damaged or obstructed.

How to layout battery breather pipe



⚠ WARNING

Battery electrolyte is poisonous and dangerous, causing severe burns, etc. 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 a physician immediately.

Eyes: Flush with water for 15 minutes and get prompt medical attention. Batteries produce explosive gases. Keep sparks, flame, cigarettes, etc., away. Ventilate when charging or using in an enclosed space. Always shield eyes when working near batteries.

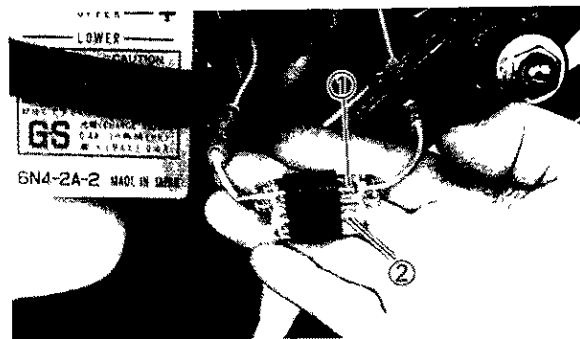
KEEP OUT OF REACH OF CHILDREN.

Fuse replacement

If the fuse is blown, turn off the ignition switch and the switch in the circuit in question and install a new fuse of proper amperage. Then turn on the switches, and see if the electrical device operates. If the fuse immediately blows again, consult your Yamaha dealer or other qualified mechanic.

⚠ WARNING

Do not use fuses of a higher amperage rating than those recommended. Substitution of a fuse of improper rating can cause extensive electrical system damage and possibly a fire.



1 Fuse 2 Spare fuse

Specified fuse: 10A

Troubleshooting

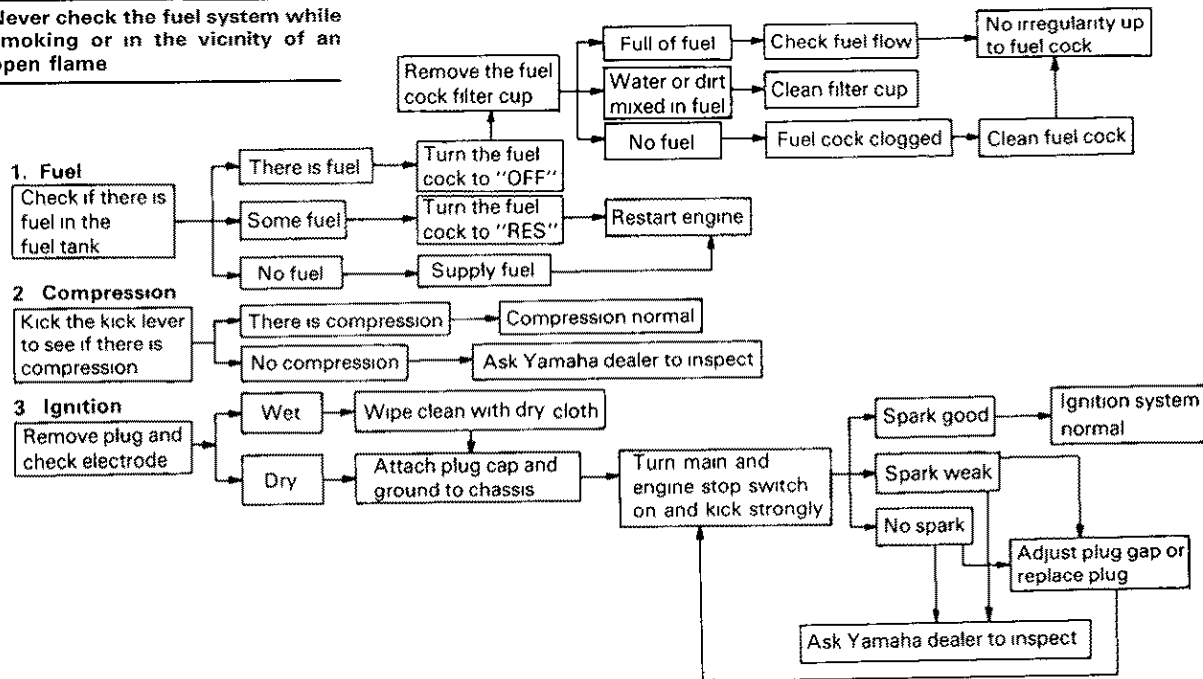
Although Yamaha machines are given a rigid inspection before shipment from the factory, trouble may occur in operation. If this happens check the machine in accordance with the procedures given in the troubleshooting chart below. If repair is necessary, ask your Yamaha dealer.

The skilled technicians at your Yamaha dealer provide excellent service. For replacement parts, use only genuine Yamaha parts. Imitation parts are similar in shape but often inferior in quality of materials and workmanship; consequently, service life is shorter and more expensive repairs may be necessitated. Any fault in the fuel, compression or ignition systems can cause poor starting or loss of power while riding. The troubleshooting chart describes quick and easy procedures for checking these systems.

Troubleshooting chart

▲ WARNING

Never check the fuel system while smoking or in the vicinity of an open flame



CLEANING AND STORAGE

A. CLEANING

Frequent thorough cleaning of your machine will not only enhance its appearance but will improve general performance and extend the useful life of many components.

1. Before cleaning the machine:
 - a. Block off end of exhaust pipe to prevent water entry; a plastic bag and strong rubber band may be used.
 - b. Remove air cleaner or protect it from water with plastic covering.
 - c. Make sure spark plug(s), fuel tank cap, oil tank cap, transmission oil filler cap are properly installed.
2. If engine case is excessively greasy, apply degreaser with a paint brush. Do not apply degreaser to chain, sprockets, or wheel axles.

3. Rinse dirt and degreaser off with garden hose, using only enough hose pressure to do the job

CAUTION:

Excessive hose pressure may cause water seepage and contamination of wheel bearings, front forks, brake drums, and transmission seals. Many expensive repair bills have resulted from improper high pressure detergent applications such as those available in coin-operated car washers.

4. Once the majority of the dirt has been hosed off, wash all surfaces with warm water and mild, detergent-type soap. An old tooth brush or bottle brush is handy to reach hard-to-get-to places.
5. Rinse machine off immediately with clean water and dry all surfaces with a chamois, clean towel, or soft absorbent cloth.

6. Immediately after washing, remove excess moisture from chain and lubricate to prevent rust.
7. Chrome-plated parts such as handlebars, rims, spokes, forks, etc., may be further cleaned with automotive chrome cleaner.
8. Clean the seat with a vinyl upholstery cleaner to keep the cover pliable and glossy.
9. Automotive-type wax may be applied to all painted and chrome-plated surfaces. Avoid combination cleaner-waxes. Many contain abrasives which may mar paint or protective finish on fuel and oil tanks.
10. After finishing, start the engine immediately and allow to idle for several minutes.

B. STORAGE

Long term storage (60 days or more) of your machine will require some preventive procedures to insure against deterioration. After cleaning machine thoroughly, prepare for storage as follows:

1. Drain fuel tank, fuel lines, and carburetor float bowl(s).
2. Remove empty fuel tank, pour a cup of SAE 10W30 oil in tank, shake tank to coat inner surfaces thoroughly and drain off excess oil. Reinstall tank.
3. Remove spark plug(s), pour about one tablespoon of SAE 10W30 oil in spark plug hole(s) and reinstall spark plugs. Kick engine over several times (with ignition off) to coat cylinder walls with oil.
4. Remove drive chain. Clean thoroughly with kerosene and lubricate. Reinstall chain or store in a plastic bag (tie to frame for safe-keeping).
5. Lubricate all control cables.

6. Block up frame to raise both wheels from ground.
7. Tie a plastic bag over exhaust pipe outlet(s) to prevent moisture from entering.
8. If storing in humid or salt-air atmosphere, coat all exposed metal surfaces with a light film of oil. Do not apply oil to rubber parts or seat cover.
9. Remove battery and charge. Store in a dry place and re-charge once a month. Do not store battery in an excessively warm or cold place less than 0°C (30°F) or more than 30°C (90°F).

NOTE: _____

Make any necessary repairs before storing the machine.

SPECIFICATIONS

Model	AG100B	AG175B
Dimension:		
Overall length	2,110 mm (83.1 in)	2,120 mm (83.5 in)
Overall width	930 mm (36.6 in)	←
Overall height	1,080 mm (42.5 in)	1,085 mm (42.7 in)
Seat height	800 mm (31.5 in)	805 mm (31.7 in)
Wheel base	1,315 mm (51.8 in)	1,330 mm (52.4 in)
Minimum ground clearance	235 mm (9.3 in)	240 mm (9.4 in)
Basic weight:		
With oil and full fuel tank	109 kg (240 lb)	116 kg (256 lb)
Minimum turning radius:	2,060 mm (81.1 in)	2,100 mm (82.7 in)
Engine:		
Type	Air cooled 2-stroke, gasoline	←
Model	3HA4	3GY4
Cylinder arrangement	Single cylinder, Forward inclined	←
Displacement	97 cm ³	171 cm ³
Bore × Stroke	52.0 × 45.6 mm (2.047 × 1.795 in)	66.0 × 50.0 mm (2.598 × 1.969 in)
Compression ratio	6.6 : 1	6.5 : 1

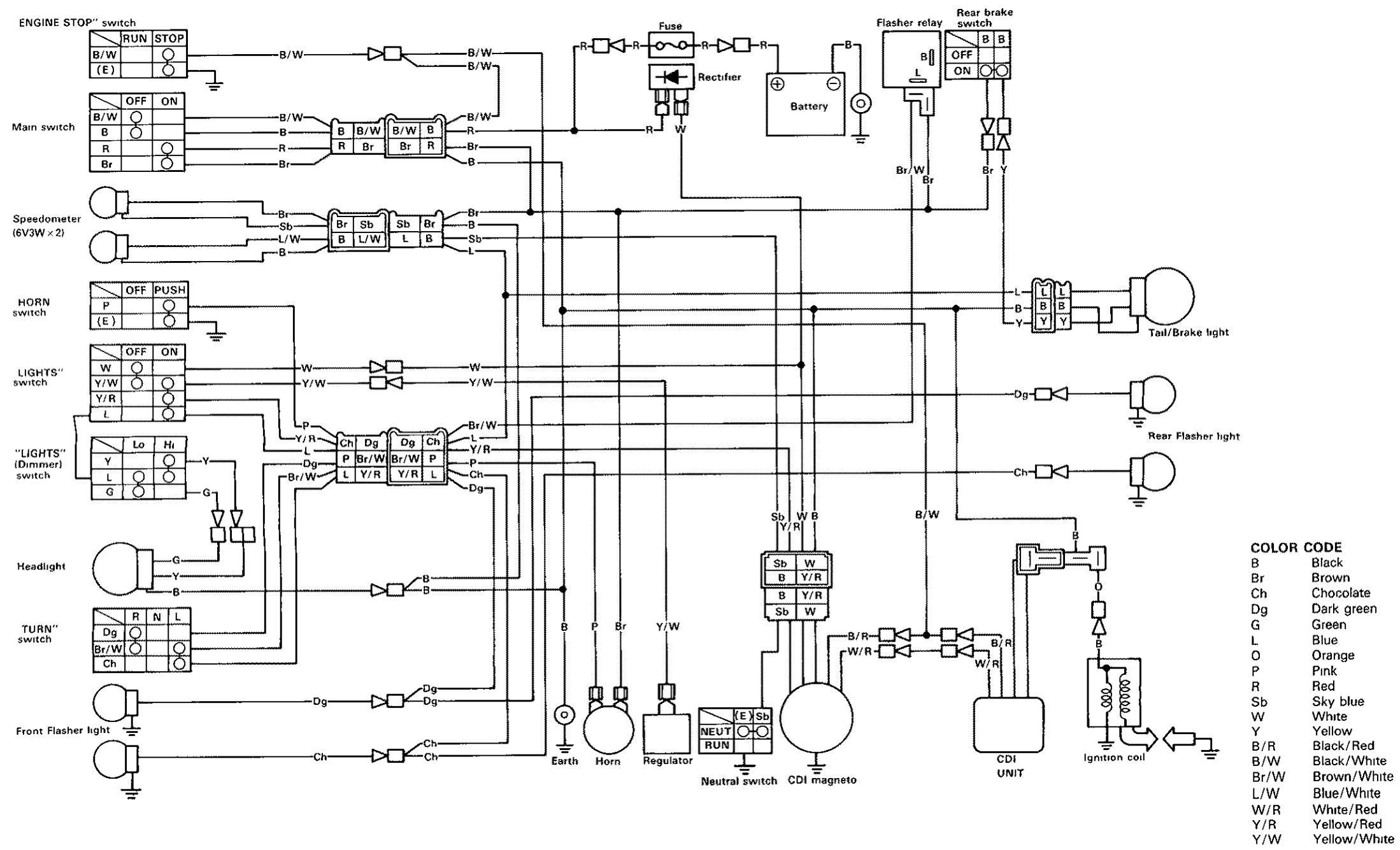
Model	AG100B	AG175B
Starting system	Kick starter	←
Lubrication system	Separate lubrication (Yamaha Autolube)	←
Engine oil (2-cycle):		
Type	Air cooled 2-stroke engine oil	←
Capacity	1.5 L (1.3 Imp qt, 1.6 US qt)	←
Transmission oil:		
Type	SAE 10W30 type SE motor oil	←
Capacity		
Periodic oil change	0.7 L (0.6 Imp qt, 0.7 US qt)	←
Total amount	0.75 L (0.7 Imp qt, 0.8 US qt)	←
Air filter.	Wet type element	←
Fuel:		
Type	Regular gasoline	←
	For Australia: Unleaded fuel only	
Tank capacity	11 L (2.4 Imp gal, 2.9 US gal)	←
Reserve amount	3 L (0.7 Imp gal, 0.8 US gal)	←
Carburetor:		
Type/manufacturer	VM20SS/MIKUNI	VM24SS/MIKUNI

Model	AG100B	AG175B
Spark plug: Type/manufacturer Gap	B7ES/NGK 0.6~0.7 mm (0.024~0.028 in)	B6ES/NGK ←
Clutch type:	Wet, multi-disc	←
Transmission: Primary reduction system Primary reduction ratio Secondary reduction system Secondary reduction ratio Transmission type Operation	Helical gear 77/17 (4 529) Chain drive 51/14 (3.643) Constant mesh 5-speed Left foot operation	← ← ← 47/15 (3.133) ← ←
Gear ratio 1st 2nd 3rd 4th 5th	35/11 (3.181) 30/16 (1.875) 25/20 (1 250) 21/24 (0.875) 18/27 (0.666)	← 30/15 (2.000) 26/19 (1 368) ← ←
Chassis: Frame type Caster angle Trail	Semi double cradle 29.5° 120 mm (4.7 in)	← 29° ←

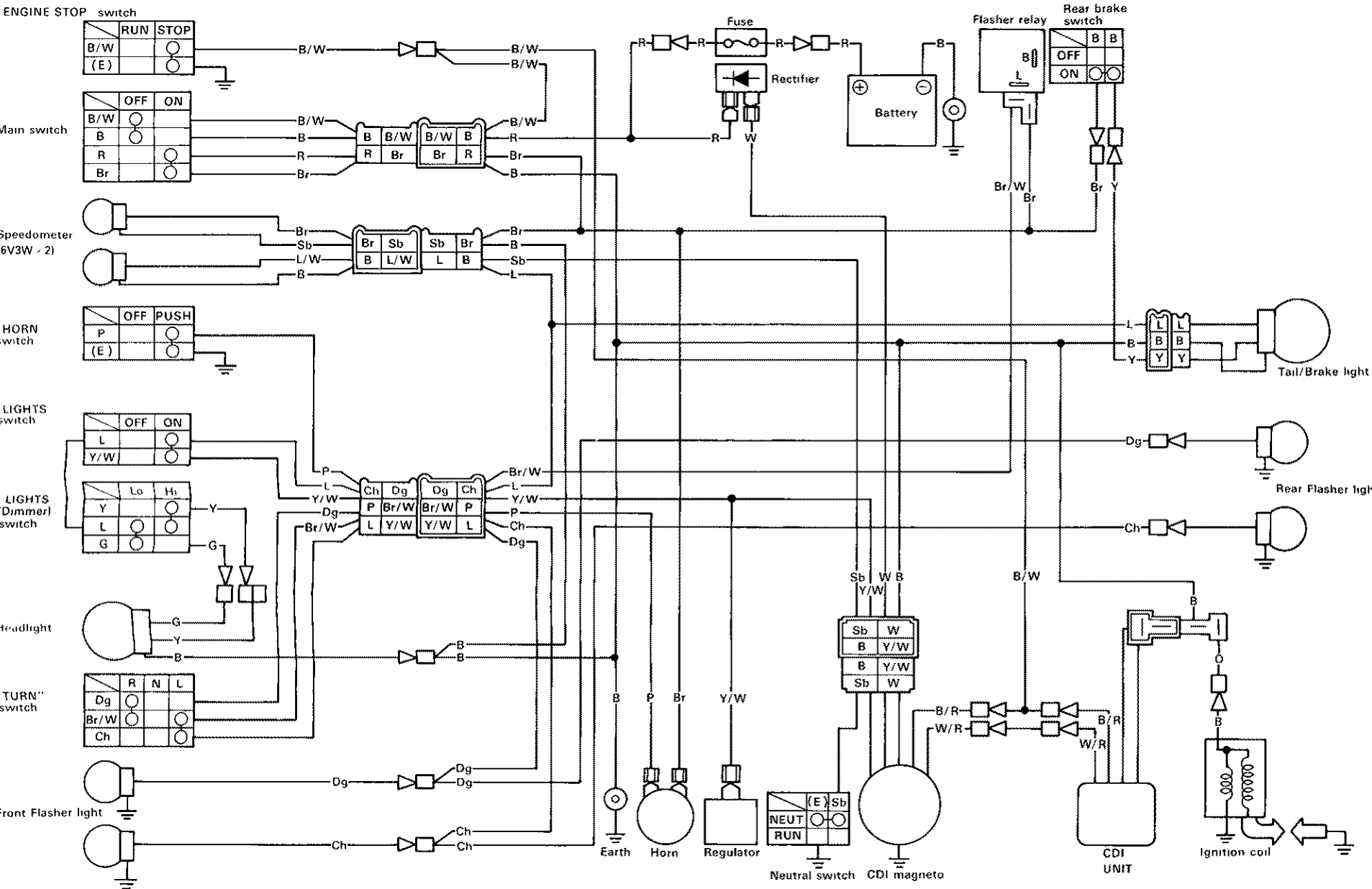
Model	AG100B	AG175B
Tire: Type Size — Front Rear	With tube 2.75-19 4PR 3.50-18 4PR	← 3.00-19 4PR 4.10-18 4PR
Brake: Front brake type Operation Rear brake type Operation	Drum brake Right hand operation Drum brake Right foot operation	← ← ← ←
Suspension: Front Rear	Telescopic fork Swingarm	← ←
Shock Absorber: Front Rear	Coil spring, Oil damper Coil spring, Oil damper	← ←
Wheel travel: Front Rear	165 mm (6.5 in) 130 mm (5.1 in)	← 145 mm (5.7 in)

Model	AG100B	AG175B
Electrical.		
Ignition system	CDI magneto	←
Generator system	Flywheel magneto	←
Battery type/capacity	6N4-2A-2/6V 4AH	←
Headlight type:	Bulb	←
Bulb wattage/quantity:		
Headlight	6V 25W/25W	←
Tail/brake light	6V 5.3W/17W	←
Flasher light	6V 10W×4	←
Meter light	6V 3W	←
Indicator light wattage/quantity:		
"NEUTRAL"	6V 3W	←

AG100 WIRING DIAGRAM



AG175 WIRING DIAGRAM



COLOR CODE

B	Black
Br	Brown
Ch	Chocolate
Dg	Dark green
G	Green
L	Blue
O	Orange
P	Pink
R	Red
Sb	Sky blue
W	White
Y	Yellow
B/R	Black/Red
B/W	Black/White
Br/W	Brown/White
L/W	Blue/White
W/R	White/Red
Y/R	Yellow/Red
Y/W	Yellow/White



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