

**YAMAHA**

**G7S**

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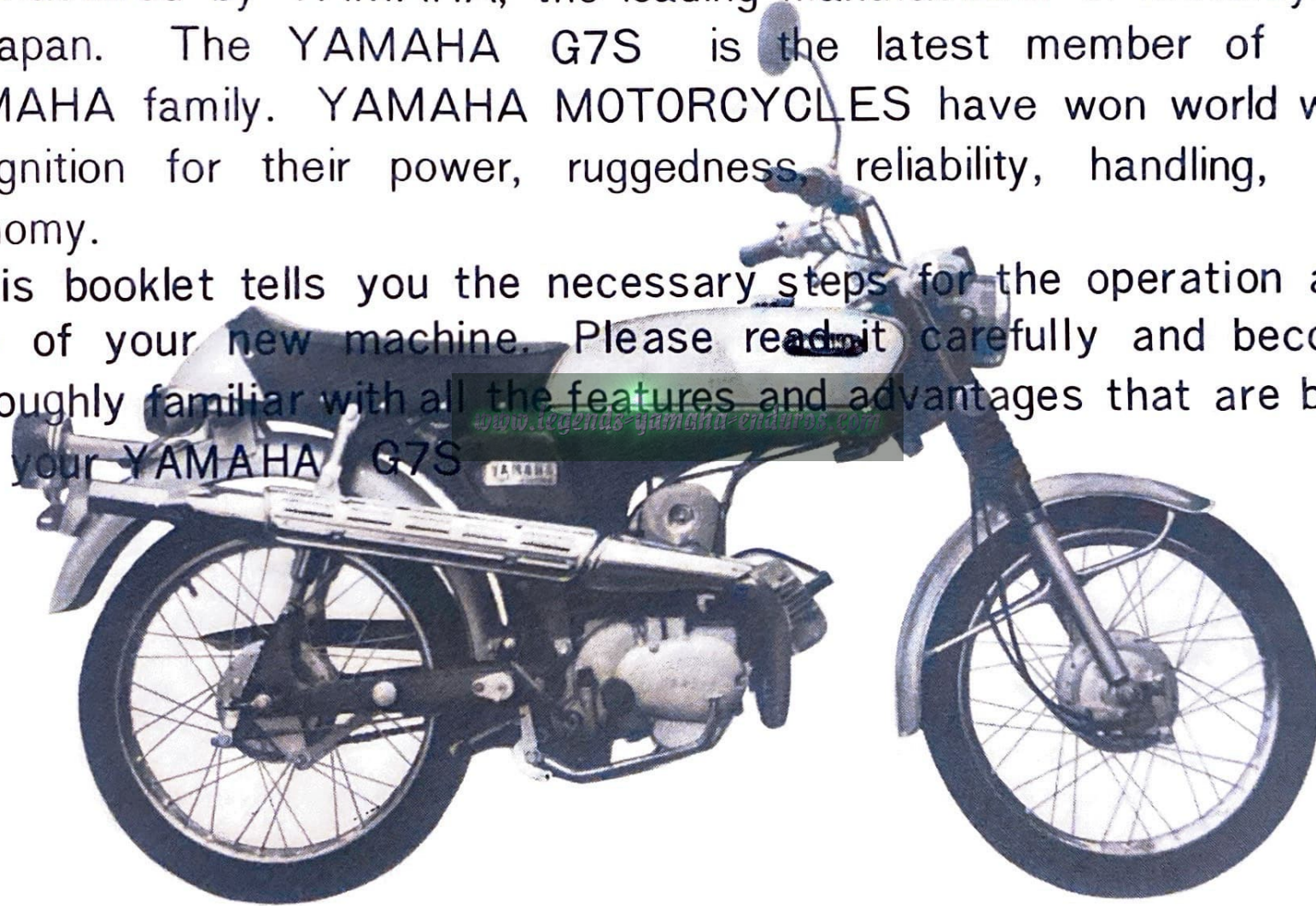
**RIDER'S MANUAL**

232-28199-10



Congratulations! You are now the owner of a YAMAHA G7S manufactured by YAMAHA, the leading manufacturer of motorcycles in Japan. The YAMAHA G7S is the latest member of the YAMAHA family. YAMAHA MOTORCYCLES have won world wide recognition for their power, ruggedness, reliability, handling, and economy.

This booklet tells you the necessary steps for the operation and care of your new machine. Please read it carefully and become thoroughly familiar with all the features and advantages that are built into your YAMAHA G7S



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# **SPECIAL FEATURES**

## **\* YAMAHA AUTOLUBE**

The new YAMAHA G6S-B has an exclusive lubricating device that automatically delivers the proper amount of oil to the engine. Oil is injected into the engine at a rate proportional to both engine rpm and throttle opening. This device solves the old problem of mixing the gas and oil.

## **\* HIGH PERFORMANCE ENGINE (ROTARY VALVE)**

The world famous YAMAHA rotary valve engine assures improved performance and acceleration at both high and low speed riding. It is an engineering masterpiece in the field of two-stroke engine design.

## **\* CARBURETOR WITH BUILT-IN STARTER JET**

This new type of carburetor, proven on all YAMAHA motorcycles, makes your G6S-B easy to start and warm up, even in cold weather.

## **\* DEPENDABLE BRAKES**

The powerful dust and waterproof brakes assure you of having the best possible braking efficiency under all conditions.

## **\* PRIMARY KICK SYSTEM**

A primary-coupled kick-starter lets you start the engine with the gearchange pedal in any position, eliminating the need to shift to neutral before starting in an emergency simply squeeze the clutch lever and kick the starter.

## **\* COMFORTABLE RIDE AND EXCELLENT HANDLING**

The shape of the handlebars, width of the gas tank, position of the foot pegs and knee pads, etc. are all part of a new design based on the rider's natural body position. This riding position, combined with the stable yet maneuverable chassis of the YAMAHA G6S-B, allows balanced control on any terrain.

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# SPECIFICATIONS

## Dimensions :

Overall length.....	71.3 in. (1,810 mm.)
Overall width.....	31.1 in. ( 790 mm.)
Overall height.....	39.2 in. ( 995 mm.)
Wheelbase.....	45.9 in. (1,165 mm.)
Ground clearance.....	5.3 in. ( 135 mm.)
Weight Gross.....	186 lbs. (84 kg)
Net.....	173 lbs. (78 kg)

## Performance :

Speed range.....	50~55 mph
Fuel consumption (on level, paved road.).....	190 mpg at 25 mph
Climbing ability.....	20 degrees
Minimum turning radius.....	70.9 in. (1,800 mm.)

## Engine :

Model.....	Yamaha G6S-B
Lubrication system.....	Autolube (oil injection system)
Number & arrangement of cylinders.....	Single, forward inclined
Piston displacement.....	4.46 cu.in. (73 c.c.)
Bore & stroke.....	1.77×1.65 in. (47×42 mm.)
Compression ratio.....	6.8 : 1
Maximum power.....	4.9 PS/7,500 r.p.m.
Maximum torque.....	4.05 ft-lbs/5,500 r.p.m. (0.56 kg-m/5,500 r.p.m.)
Ignition system.....	Flywheel Magneto Ignition
Starting system.....	Kickstarter, Primary coupled

**Transmission :**

Primary reduction system & ratio.....	Gear, 3.894 (74/19)	
Secondary reduction system & ratio .....	Chain, 2.643 (37/14)	
Clutch .....	Wet, multi-disc	
Gear box.....	Constant mesh, 4-speed	
Reduction ratio .....	Gear box . Total reduction ratio	
Low .....	3.077	(31.671)
2nd .....	1.889	(19.443)
3rd .....	1.304	(13.421)
4th .....	0.963	( 9.911)

**Suspension :**

Front .....	Telescopic fork
Rear.....	Swinging arm

**Steering :**

Caster .....	63.5 degrees
Trail .....	3.07 in. (78 mm.)
Tire, front .....	2.50-17-4PR
Tire, rear .....	2.50-17-4PR

**Brakes :**

Front .....	Right hand operated, internal expanding
Rear .....	Right foot operated, internal expanding

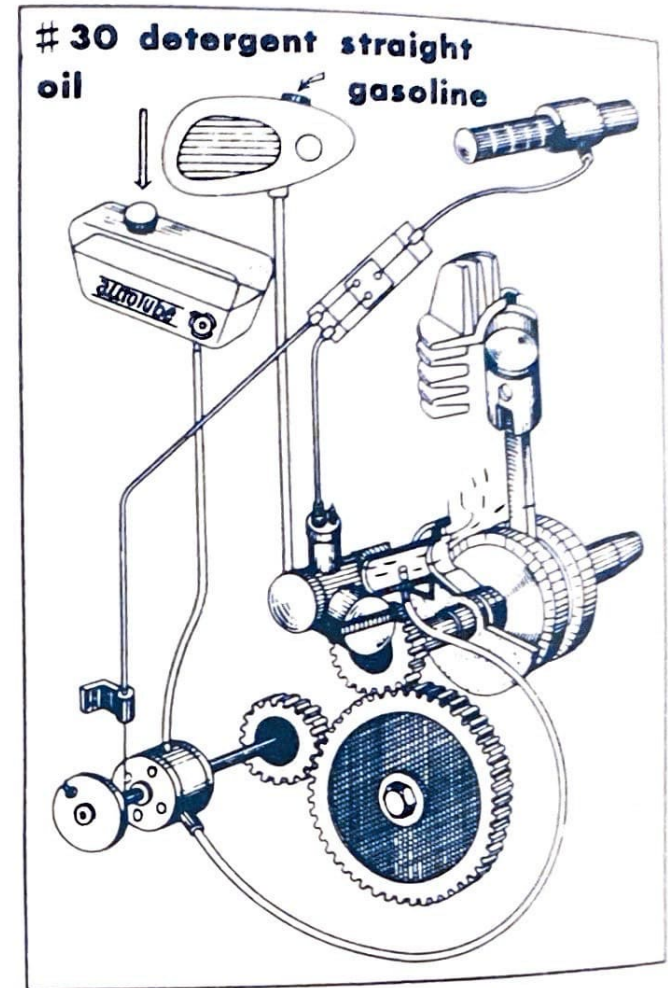
**Volumes :**

Gasoline tank capacity.....	1.6 gal. (6.0 liter)
Oil tank capacity .....	1.5 qt. (1.4 liter)
Gear box capacity.....	0.64~0.68 US qts
Front fork capacity .....	R 154 cc
	L 136 cc



# WHAT IS YAMAHA AUTOLUBE

Yamaha's Autolube is an automatic lubricating device for 2-stroke engines. Developed by the Yamaga Technical Institute, it meters oil to the engine with respect to engine speed and throttle opening by means of a precision pump. As a result, the Yamaha engine does not require pre-mixed gas and oil like other 2-stroke engines. Controlled lubrication is automatically applied to the working parts of the engine. This makes Yamaha Autolube the best lubricating system ever devised for production 2-stroke engines. The oil pump is driven by the engine, through a reduction gear system, and the length of the pump stroke is controlled by throttle setting.



**Diagram of Autolube operation**

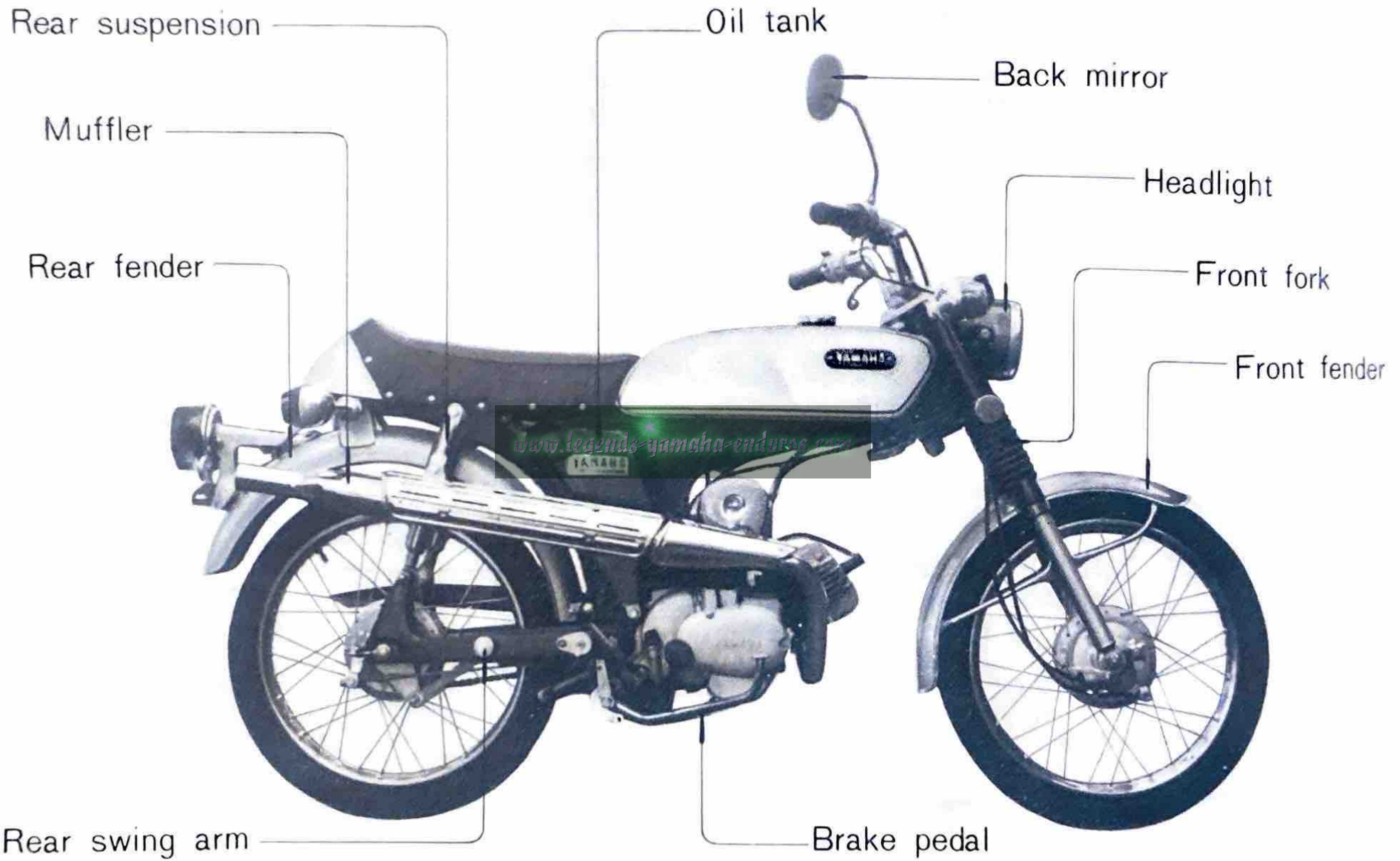
## ADVANTAGES OF AUTOLUBE

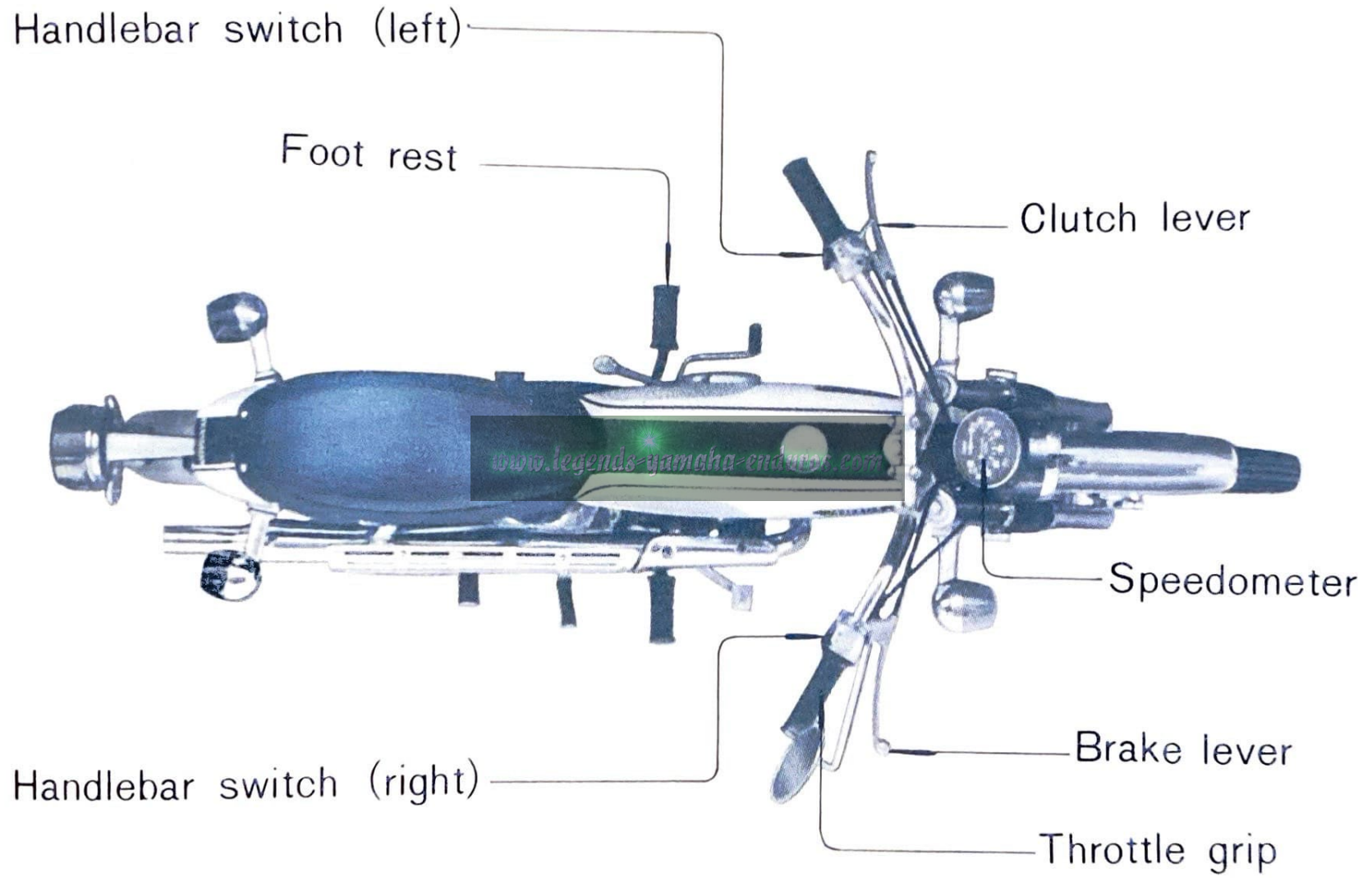
1. Eliminates the bother of pre-mixing gas and oil.
  2. Maintains optimum lubrication according to both engine RPM and throttle opening.
  3. Reduces sparkplug fouling by injecting just enough oil for proper lubrication.
  4. Can cut oil consumption to 1/3 that of conventional 2-strokes.
  5. Reduces exhaust smoke.
  6. Lets you use engine compression as a brake; the oil injection continues to operate according to engine rpm, even though the throttle may be closed.
  7. Improves performance; no excess oil to interfere with complete combustion of the gas-air mixture.
  8. Prolongs engine life.
- ※ Be sure to use Yamaha Autolube Oil or equivalents listed below for higher performance and longer life of your Yamaha engine.

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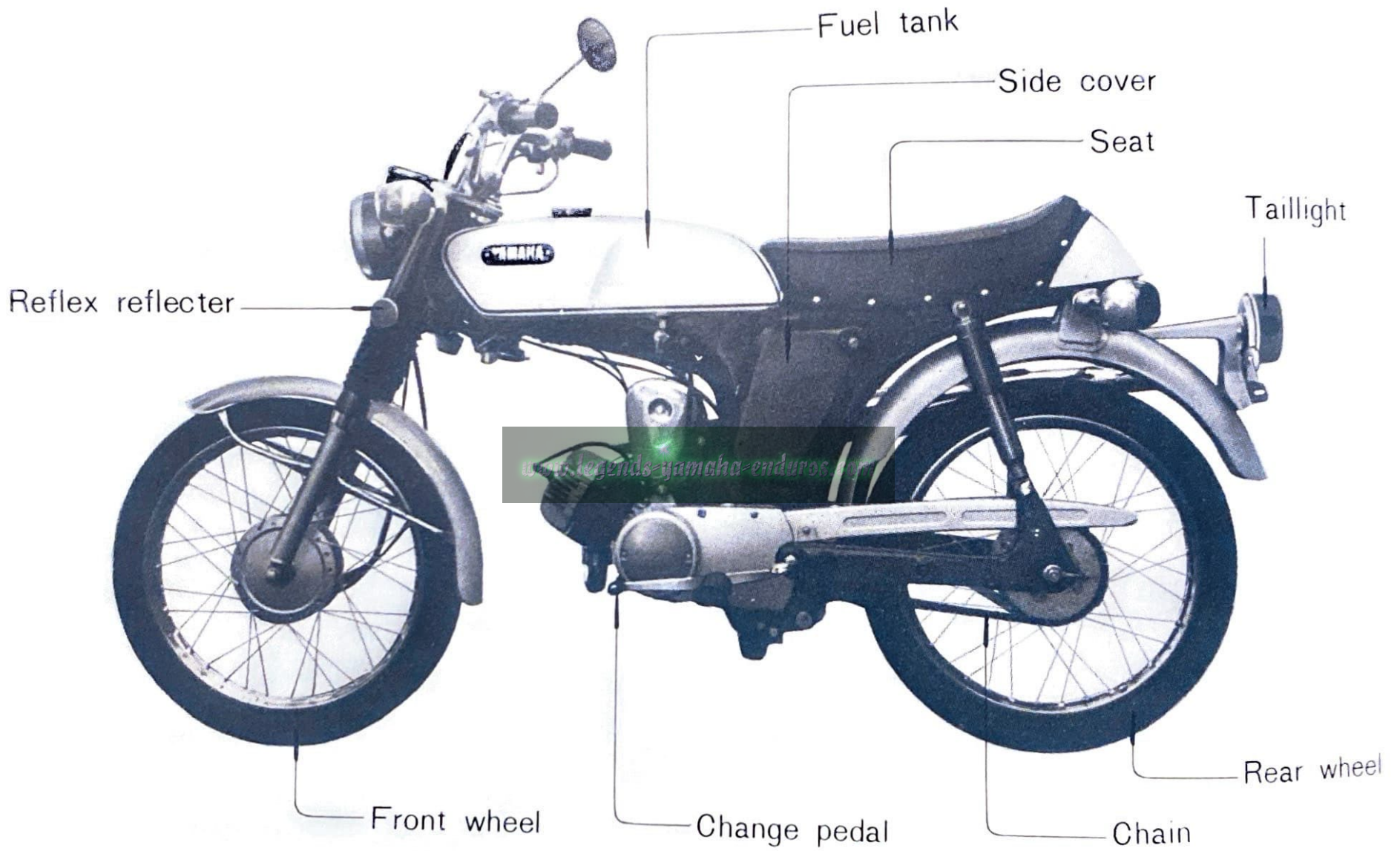
Temperature	Recommendable Oil	Remarks
0°C (32°F) or more	SAE30W, 10W/30, 20W	If possible, use 2 cycle motor oil for air cooled engines
0°C (32°F) ~ -10°C (14°F)	SAE10W/30	
-10°C (14°F) or less	SAE5W, 10W	







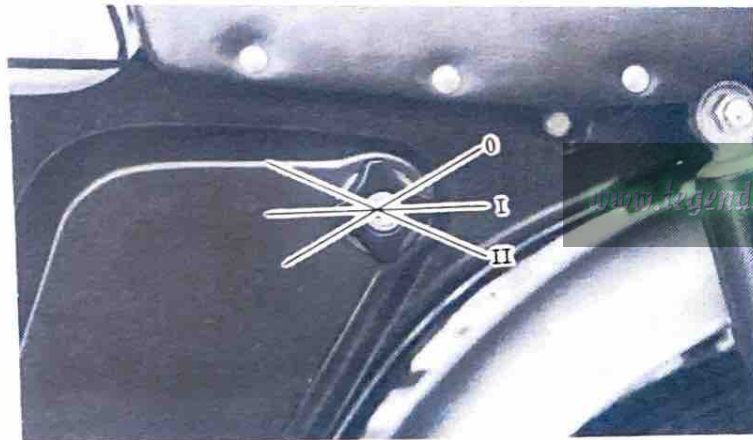




# OPERATING INSTRUCTIONS

## a) Main switch (Fig. 1)

The following chart shows the key position at which the ignition, lights and horn are switched on.



(Fig. 1)

Note:

0 : When stopped

I : Day riding

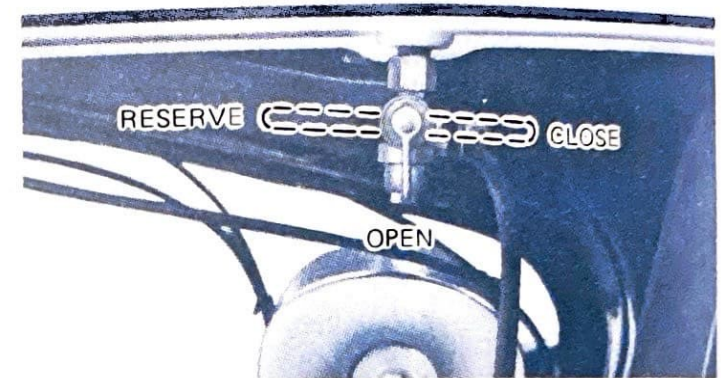
II: Night riding

Part Name	Key Position		
	0	I	II
Headlight			○
Taillight			○
Stop light		○	○
Neutral light		○	○
Instrument light			○
Horn		○	○
Ignition system		○	○



**b) Fuel pet cock** (Fig. 2)

Turn the fuel pet cock lever to the OPEN position and let fuel flow into the carburetor. If you run low of fuel while riding, turn the lever to RESERVE position and a quarter gallon of reserve fuel will let you ride nearly 25 miles (40 km) to find a gas station.



(Fig. 2)

**c) Left handlebar switch** (Fig. 3)

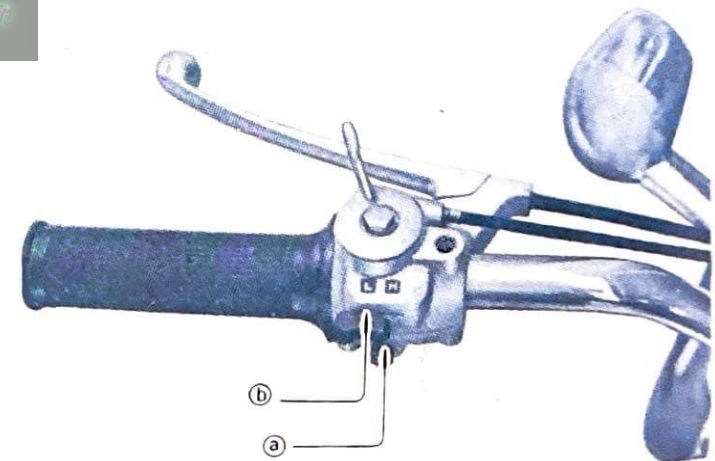
Horn button

Press the button (a) to sound the horn.

Headlight switch

To lower the headlight beam, pull the switch (b) to the left.

To raise the headlight beam, push the switch to the right.



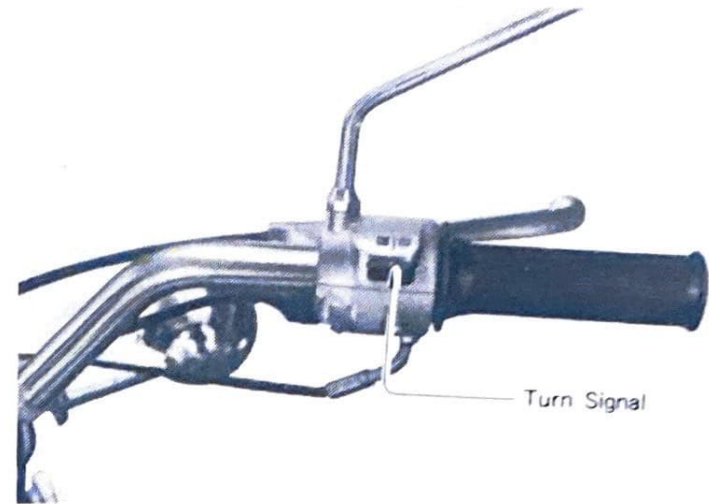
(Fig. 3)

#### **d) Right handlebar switch (Fig. 4)**

##### Turn Signal Switch

To light the left signal, push the switch to the left and to light the right signal, pull the switch to the right.

Note: Although the G6S-B is not equipped with turn signal lights, the necessary wiring and switch are installed. The lights and flasher relay can be purchased from your dealer.



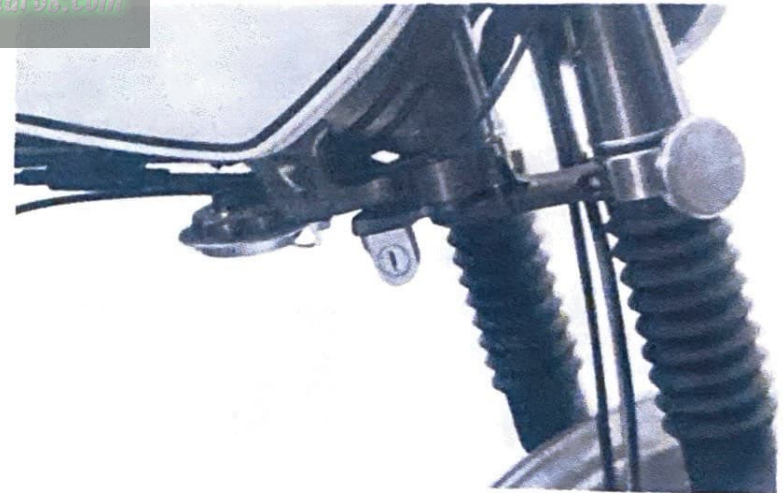
(Fig. 4)

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#### **e) Steering lock**

Turn the handlebars all the way left or right, then insert the key in the lock just below the front fork pivot and turn it to lock the steering.

Make sure the handlebar will not turn and then remove the key.



(Fig. 5)



## DAILY INSPECTION

For safety's sake, be sure to check the following before every ride.

### a) Fuel

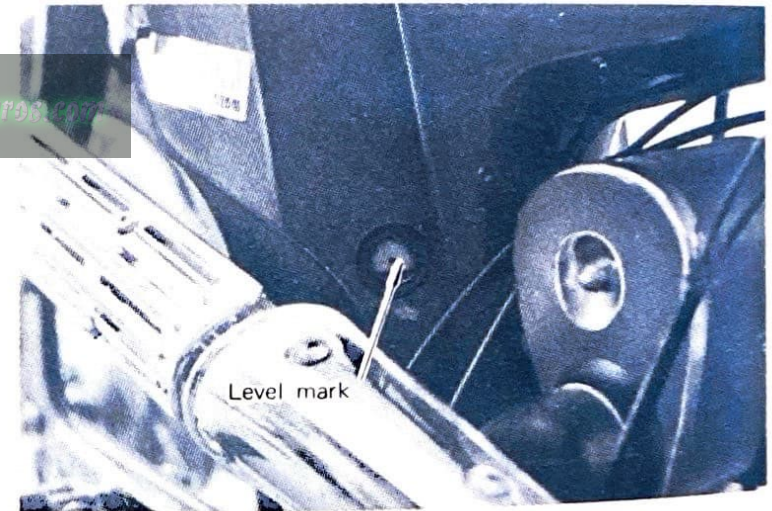
Do you have enough gas for your ride? If not, fill the gas tank with "straight" gasoline. The Autolube system eliminates pre-mixing with oil.

### b) Autolube oil

To avoid running out of oil or adding fractions of quarts:

- 1) Check the oil level whenever you stop for gas.
- 2) When it reaches the middle of the viewport in the Autolube tank you can fill with a full quart of oil.

NOTE: The machine will operate well on quality (MS) motor oil but two-stroke oil for air-cooled engines offers a greater degree of safety in the event of severe operation.



(Fig. 6)

### c) Tire pressures

Low tire pressure will not only impair riding comfort, but will also affect the stability and of the machine and decrease tire life.

	1-person riding	2-person riding
Front tire	20 lbs/in <sup>2</sup> (1.4 kg/cm <sup>2</sup> )	20 lbs/in <sup>2</sup> (1.4 kg/cm <sup>2</sup> )
Rear tire	28 lbs/in <sup>2</sup> (1.9 kg/cm <sup>2</sup> )	32 lbs/in <sup>2</sup> (2.2 kg/cm <sup>2</sup> )

### d) Brakes

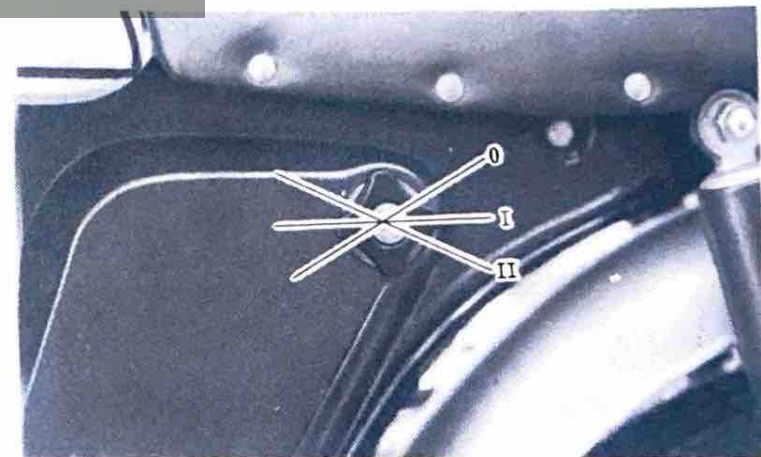
Ride a few yards and apply the front and rear brakes simultaneously. Do they feel properly adjusted?

### e) Lights and Horn

Turn the main switch to position I and check the brake light, neutral light, and horn. Turn the switch to position II and again check the brake light, neutral light and horn; then check the headlight, taillight and speed-meter light for proper operation with the engine running.

### f) Flasher switch

To light the left flasher lamp, push switch to the left, and to light the right flasher lamp, push the switch to the right.



(Fig. 7)

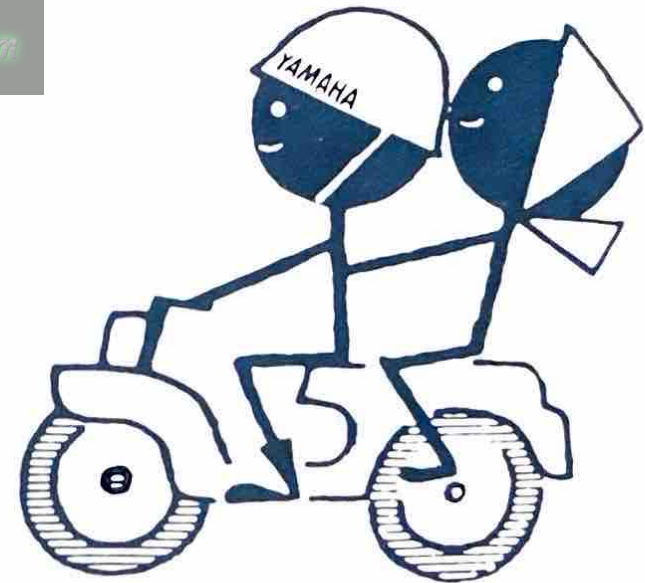
## RIDING ESSENTIALS

If fuel level, tire pressure and brakes are O.K., you are ready to ride.

**a) Starting the engine** (see Fig. 2 page 14)

- 1) Turn the gasoline fuel pet cock to OPEN position.
- 2) Turn on the main switch.

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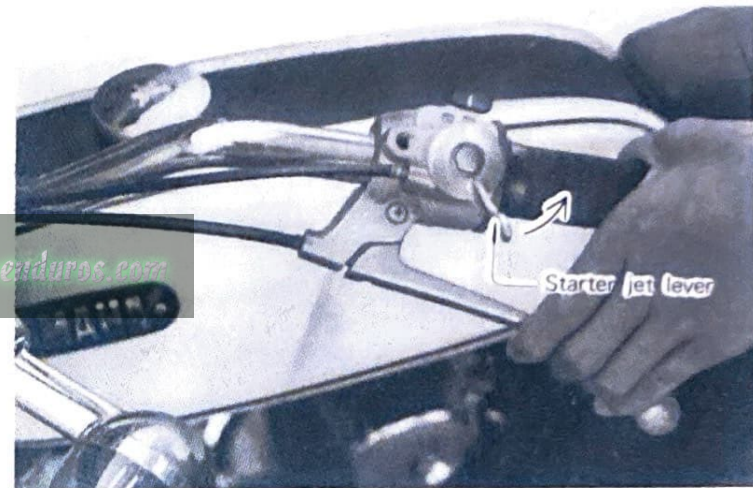


3) Leave the accelerator grip closed, straddle the machine, and push down on the kick starter crank until your engine starts.

4) Starting in cold weather

All engines are hard to start in cold weather, but your Yamaha has a new type carburetor with built-in starter jet to enrich the fuel mixture for easy starting, even in cold weather.

Pull the starter jet lever on the left handlebar (Fig. 8).



(Fig. 8)

5) Warming up

When the engine starts, open the throttle slightly to keep it running, but don't close the starter jet lever. Warm-up is complete if the engine will rev freely with the starter lever closed.

6) Starting when the engine is warm.

a) Leave the starter jet lever closed.

b) Hold the throttle open  $1/4$  to  $1/2$  turn (Fig. 9) and push down on the kick starter crank with your foot. (If the transmission is in gear, squeeze in on the clutch.)



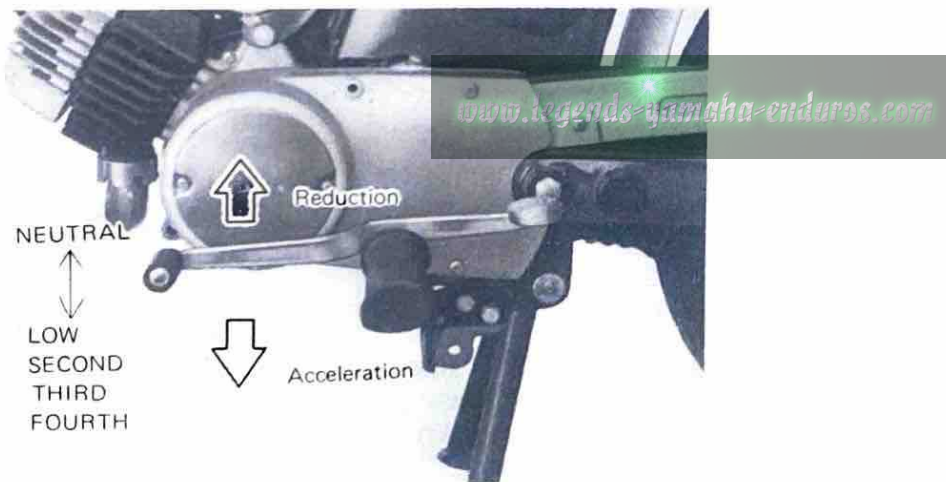
(Fig. 9)

# RIDING

## 1) Shifting gears

Your Yamaha G6S-B has a 4-speed transmission to provide a correct balance between speed and power under varying riding conditions. To shift into neutral, raise the gear lever to the highest position. When the gear box is in neutral, the green lamp in the speedometer will light up.

The use of the gear lever is illustrated below.



(Fig. 10)



- 2) After you start the engine
  - a) Squeeze the clutch lever to disengage the transmission from the engine.
  - b) Press the shift lever down into LOW.
  - c) Gradually open the throttle and slowly release the clutch lever to get your machine moving.
- 3) Shifting gears
  - a) At 10 to 15 MPH, close the throttle and, at the same time, squeeze the clutch lever;
  - b) then shift to SECOND (press the gear lever down again) and
  - c) again open the throttle as you release the clutch lever.

You can use the engine's compression to decelerate:

Close the throttle as you squeeze the clutch lever, and downshift to THIRD, SECOND or LOW. Keep the throttle closed and slowly release the clutch lever.

To avoid abusing the engine, shift gears according to your riding conditions as follows:

Gear	Power	Speed	Use	Optimum Speed
Low	High	Slow	Starting; on steep grades	Up to 10 mph
2nd	Medium	Medium	Uphill; slow riding	10~15 mph
3rd	Medium	Medium	Gentle slopes, gravel roads	15~25 mph
Top	Low	Fast	Level riding, cruising	25 mph

NOTE: THESE SPEEDS ARE RECOMMENDED FOR AFTER THE BREAK-IN PERIOD. FOR BREAK-IN RECOMMENDATIONS SEE PAGE 25.

## RIDING ON HILLS

### 1) Uphill

When climbing a slight grade, gradually open the throttle to avoid losing speed. When you are climbing a steep hill, downshift promptly from TOP to THIRD or from THIRD to SECOND, to maintain engine RPM and power.

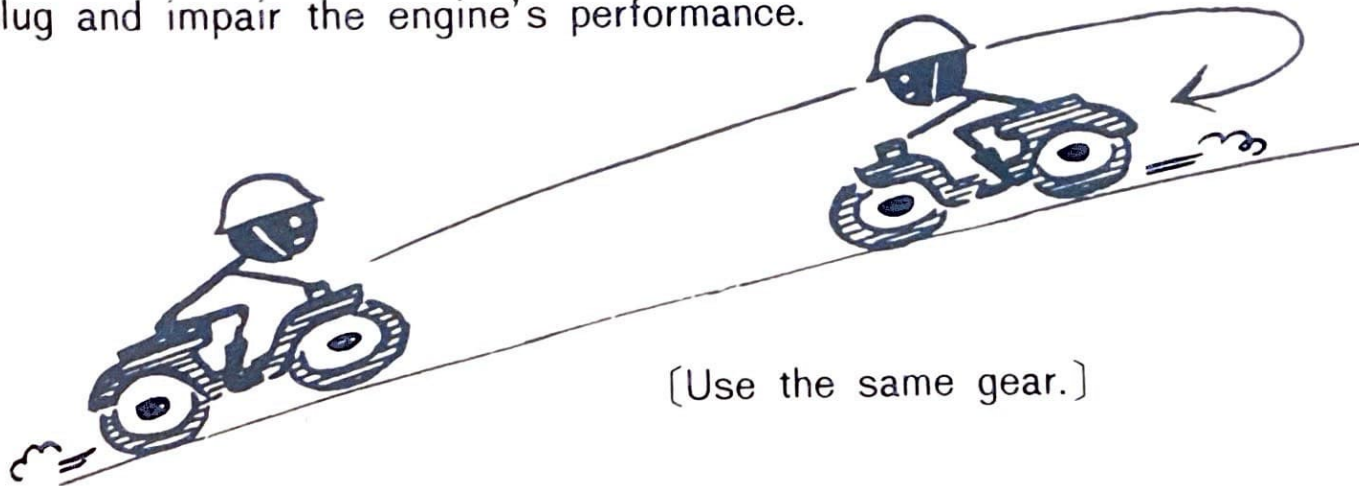
### 2) Downhill

When riding down a long steep hill, use the engine compression as well as the brakes to hold you back: keep the throttle closed and downshift to THIRD or SECOND, depending on the grade. Use the same gear for riding down a hill as you would use for climbing the same hill.

#### CAUTION:

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Never turn off the main switch when riding down a long hill; it will foul the spark-plug and impair the engine's performance.



[Use the same gear.]

## STOPPING AND PARKING

### 1) Stopping

- a) Be sure to apply the front and rear brakes at the same time. Applying only one (front or rear) brake may cause skidding or loss of control.
- b) Apply the brakes gently, not sharply.
- c) Don't overheat your brakes; apply them at repeated intervals rather than continuously when you're riding down a long hill.

### 2) Parking

- a) Lock the handlebars and remove the key (see page. 15).
- b) Remove the main switch key.
- c) Turn the fuel cock to STOP position.

NOTE: Be sure to observe parking regulations.

Park your machine where it will be protected.



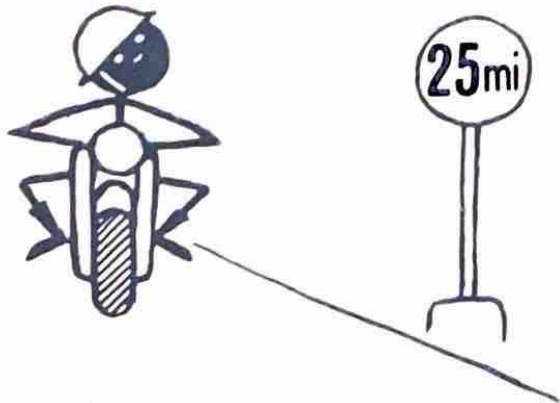
## BREAK IN

The YAMAHA G6S-B is a precision-built motorcycle. It has been tested extensively for ruggedness and dependability, but the first 600 miles (1,000 km) are still the most important. This break-in period will affect the life of the engine and all other revolving parts; carefully observe the following break-in procedure.

- a) Up to 300 miles (500 km) ride at 35 mph or less.
- b) From 300 to 600 miles (500–1,000 km), ride at 40 mph or less in top gear.

### BREAK-IN SPEED LIMIT FOR EACH GEAR

Odometer mileage	Top	Second	Low
Up to 300 miles	35 mph	20 mph	6 mph
300-600 miles	40 mph	25 mph	6 mph



# INSPECTION AND MAINTENANCE

Periodic inspection and maintenance by you and your dealer is the key to keeping your motorcycle in top condition for many years.

## a) Dealer Service

All items in the list on page 27 should be inspected or serviced at maximum intervals of 1,000 miles or 4 months, whichever occurs first. These are preventative maintenance measures that will insure you of proper operation. When the odometer shows 500 and 1,000 miles, have your Yamaha Dealer inspect and adjust your machine as indicated by the chart on page 27.

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## CHECK POINTS AT YAMAHA DEALER

No.	Check Points	RIDING DISTANCE			
		500 mi.	1000 mi.	2000 mi.	4000 mi. *
1	Adjust Front and Rear brakes	○	○	○	○
2	Change Transmission Oil	○	○	○	○
3	Grease		○	○	○
4	Replenish Battery Fluid	○	○	○	○
5	Clean Sparkplug	○	○	○	○
6	Adjust Ignition Timing	○	○	○	○
7	Adjust Carburetor			○	○
8	Adjust Autolube Cable		○	○	○
9	Clean Air Cleaner		○	○	○
10	Clean Cylinder Head & Piston		○	○	○
11	Clean Muffler		○	○	○
12	Tighten Bolts and Nuts	○	○	○	○
13	Adjust Drive Chain	○	○	○	○
14	Adjust Minimum Stroke of Autolube Pump.	○	○	○	○

\*Every 2000 miles there after



## b. Periodic Inspection

In addition to the check points listed on page 27, the following parts should be cleaned and/or adjusted by the owner every 500 miles, before every long distance trip, or every month. This section covers the maintenance of your machine with service tools.

	CHECK POINTS	WHAT YOU SHOULD DO YOURSELF	PAGE
1	Front & rear brakes	Adjust cable & rod free play	30. 31
2	Clutch	Adjust cable free play	32
3	Gear box oil	Check amount of oil, replenish, if necessary	33
4	Battery	Check battery fluid; replenish, if necessary	34
5	Sparkplug	Clean	35
6	Air Cleaner	Clean	36
7	Drive Chain	Adjust and apply oil	37
8	Other Parts	Tighten bolts and nuts	39

# SERVICE TOOLS

## Identification of metric tools:

- (1) Phillips type screw driver
- (2) Combination slotted & phillips types screw drivers
- (3) 8mm×10mm wrench
- (4) 13mm×17mm wrench
- (5) Screw driver handle
- (6) 21mm×23mm socket
- (7) Handle
- (8) Tool bag



(Fig. 11)

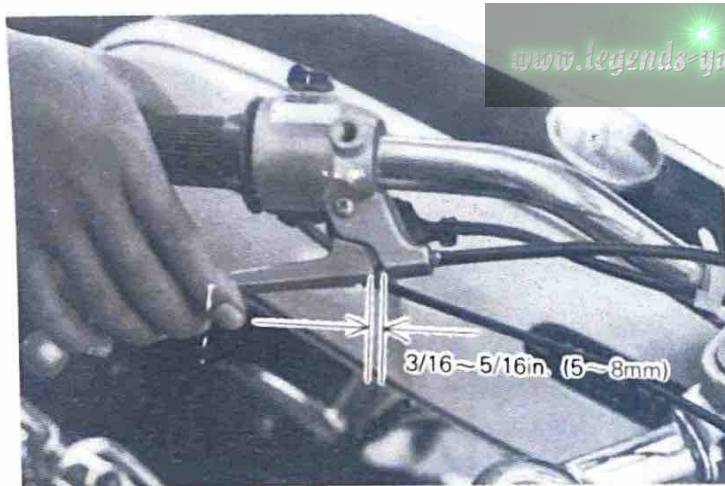
Use these tools for adjustments and repair; Always keep them with the motorcycle.

## Routine Maintenance

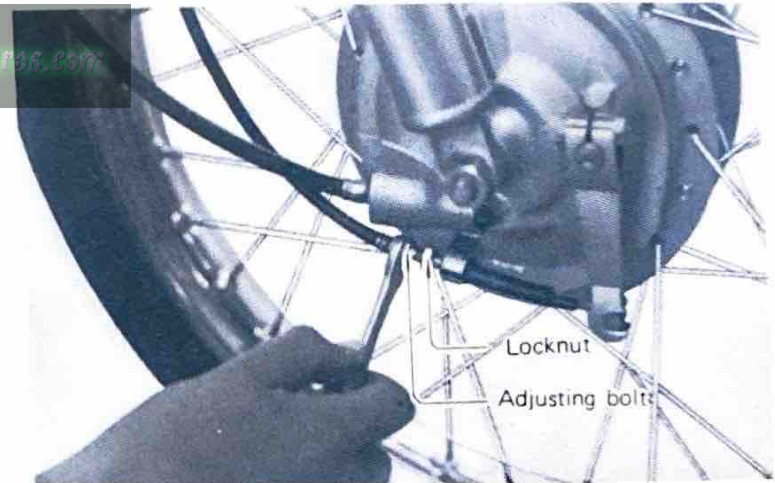
### 1) Adjusting the brakes

#### a. Front brake

- (1) Loosen the locknut and adjust by turning the adjusting bolt at the end of the brake cable a half-turn at a time (counterclockwise to remove slack).
- (2) The proper brake lever free play is  $3/16$  to  $5/16$  in. (5~8 mm.)  
(See Figs. 12 & 13)



(Fig. 12)

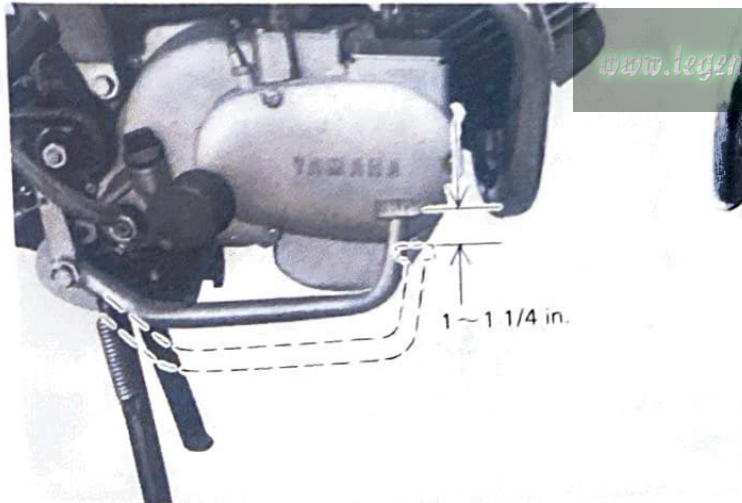


(Fig. 13)

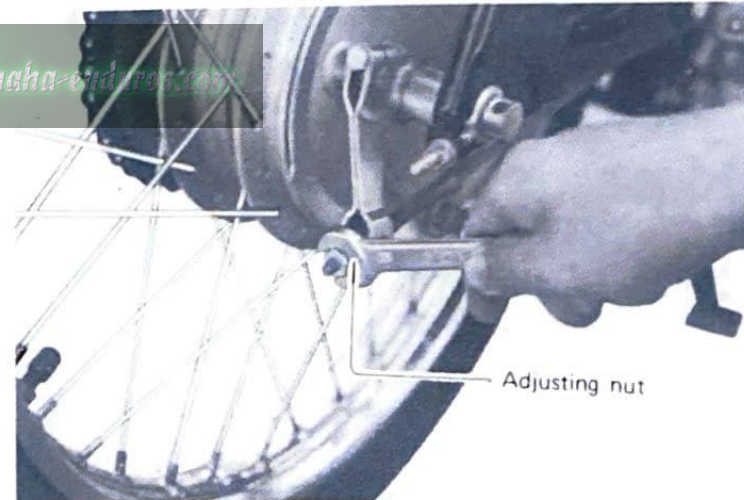


b. Rear brake

- (1) Adjust by turning the adjusting nut at the end of the brake rod a half turn at a time (clockwise to remove slack)
- (2) The proper amount of free play for the brake pedal is 1 to 1 ¼ in. (25 to 30 mm.)
- (3) Always check rear brake adjustment and stop light operation anytime the rear wheel is removed or the chain is adjusted.



(Fig. 14)



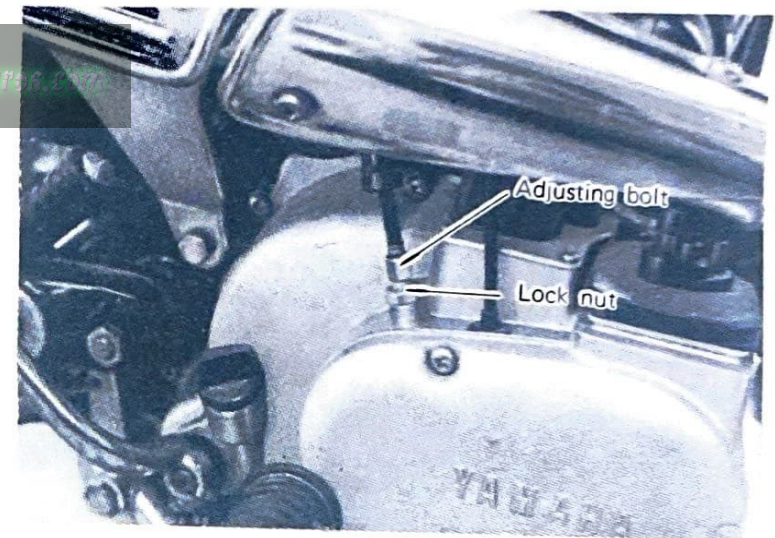
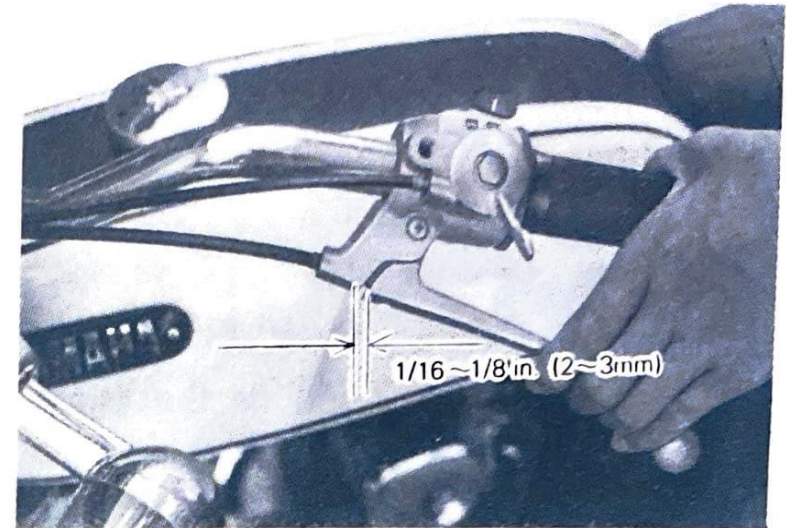
(Fig. 15)

## 2) Adjusting the clutch

Clutch lever free play must be adjusted to 1/16~1/8 in. (2~3 mm.) to let the clutch springs apply full pressure to the clutch facings.

With excessive lever play, the clutch will not completely disengage, but without freeplay it will not completely engage, and slipping will occur.

- a. Loosen locknut.
- b. To decrease play, loosen adjusting bolt (counterclockwise); to increase play, tighten the bolt (clockwise). When your adjustment is correct, tighten locknut.



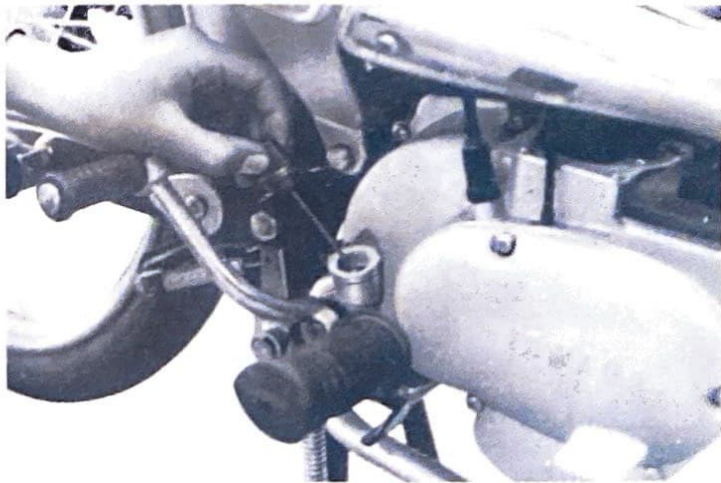
(Fig. 17)



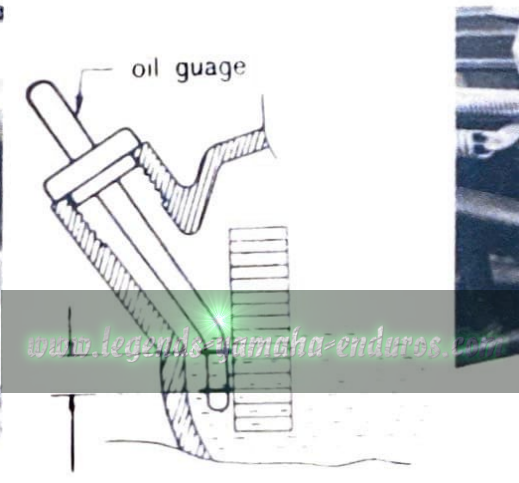
### 3) Checking and changing the gearbox oil

#### a. Oil level

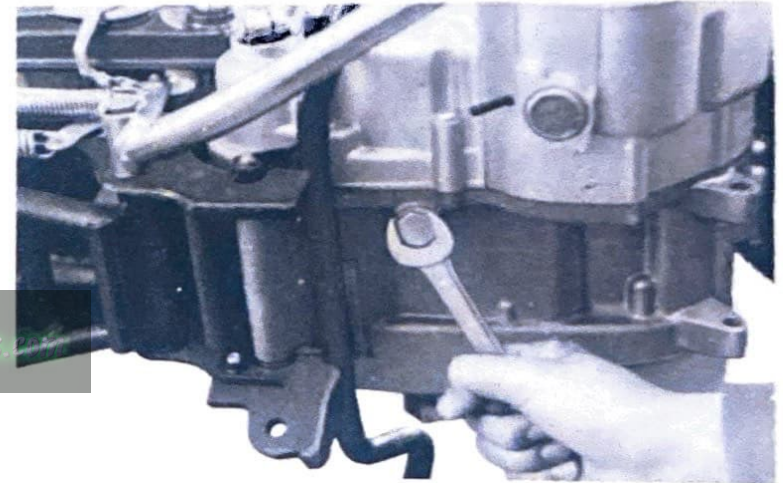
Remove the check plug in the rear edge of the right crankcase cover and insert the oil gauge as illustrated (Fig. 18). If the flat section of the gauge comes out covered with oil, your gearbox oil level is correct. If not, add oil as described below (Fig. 19).



(Fig. 18)



Keep the oil level between these levels.



(Fig. 19)

#### b. Changing the gear oil

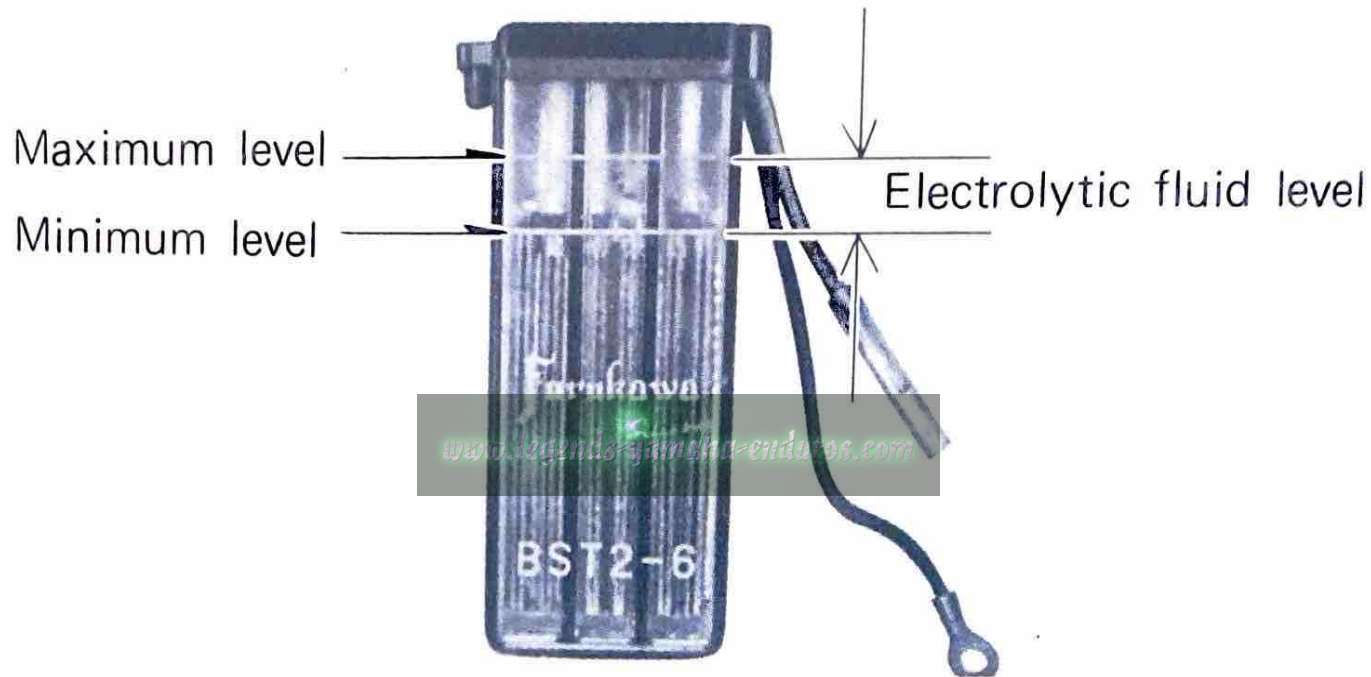
Change gear oil every 1,200 miles (2,000 km). During the break-in period, replacement should be made after 30 days from the purchase or after 300 miles (500 km) running. Remove the plug in the bottom of the right crankcase and let the oil drain into a pan. After draining, replace the plug firmly and add the 600~650 c.c. (0.64~0.68 qt.) of #30 detergent oil into your machine. Start your machine and let it run a few minutes; then check the oil level: clutch lubrication depends on transmission oil overflow, so a correct gearbox oil level means the clutch also has proper lubrication.



#### 4) Inspecting the battery fluid

Remove the left side cover and check the battery: its fluid level should be always between the maximum and minimum levels as illustrated (Fig. 20).

CAUTION: Do not overfill the battery. Fill with distilled water.



(Fig. 20)

If your motorcycle will not be used for more than a month:

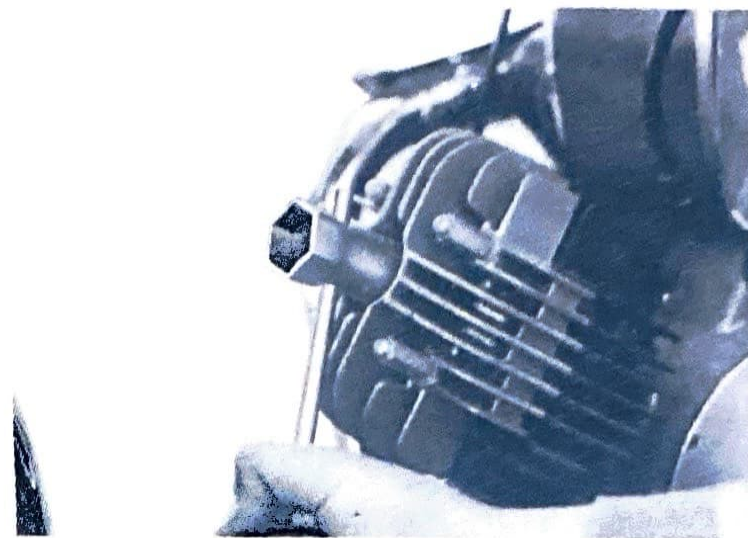
- a) remove the battery from your machine and keep it in a cool, dry place or have your dealer store it for you;
- b) have your dealer recharge it once a month.

NOTE: After long storage, you should completely recharge your battery before reinstallation.

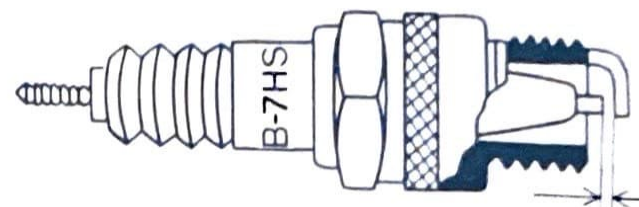
## 5) Cleaning the spark plug

The spark plug ignites the carburetor's air-fuel mixture. A defective or fouled plug will cause hard starting, poor acceleration, engine misfiring, etc. Check the plug to keep your engine running smoothly.

- a) Pull off the sparkplug wire and unscrew the plug with the 21 mm. socket wrench as illustrated (Fig. 21)
- b) Clean the carbon from plug's electrodes with a wire brush or fine sandpaper.
- c) Check the gap between the electrodes 0.020~0.023 in. (0.5~0.6 mm.) (See Fig. 22).
- d) The plug is correct for your engine's present operating conditions if the porcelain around it's center electrode is a light tan color. If the porcelain is covered with carbon, change to hotter-type plug. If the porcelain is burned white, install a colder-type plug. Spark plug heat range requirements differ with individuals' riding habits, so consult your dealer before you switch pluges. For example: if your standard B-7HS plug is covered with carbon, as sometimes occurs during early break-in, your dealer may suggest a hotter-type B-7H plug.



(Fig. 21)



(Fig. 22)

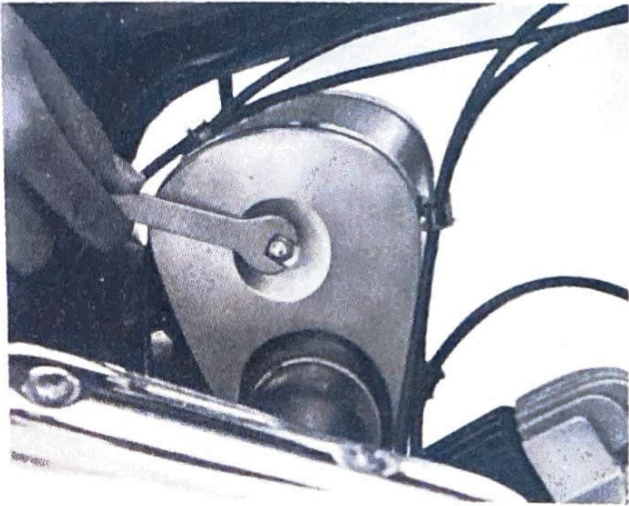
0.020~0.023 in.  
(0.5~0.6 mm)



## 6) Cleaning the air cleaner

The air cleaner protects the engine from dust and grit, but it must be kept clean to stay efficient.

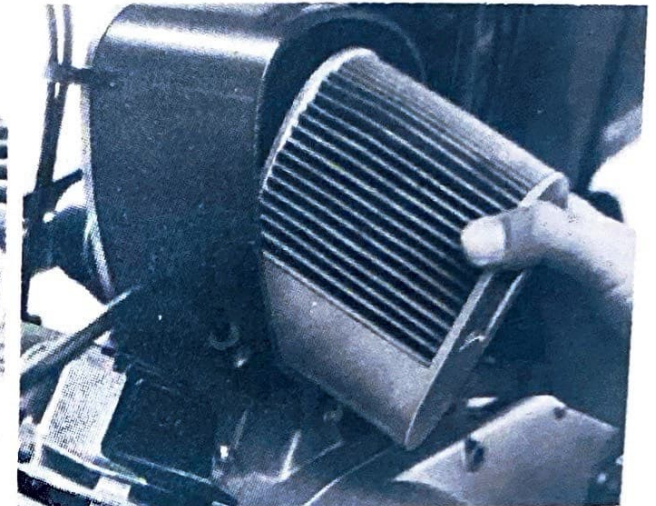
- a) Remove the bolt and nut holding the cover to the cleaner; then remove the cover.
- b) Remove the joint rubber holding clip, and pull out the air cleaner.



(Fig. 23)



(Fig: 24)



(Fig. 25)

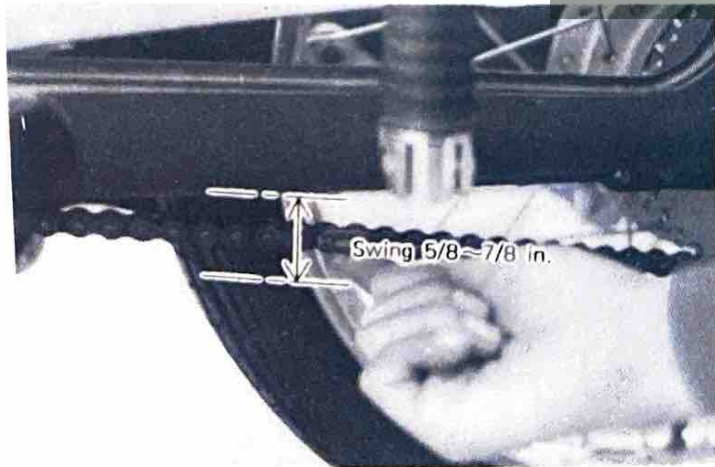


- c) Knock off dust and dirt by tapping the element on the floor.
- d) Remove the remainder of the dirt by blowing compressed air on the inside surface of the element.

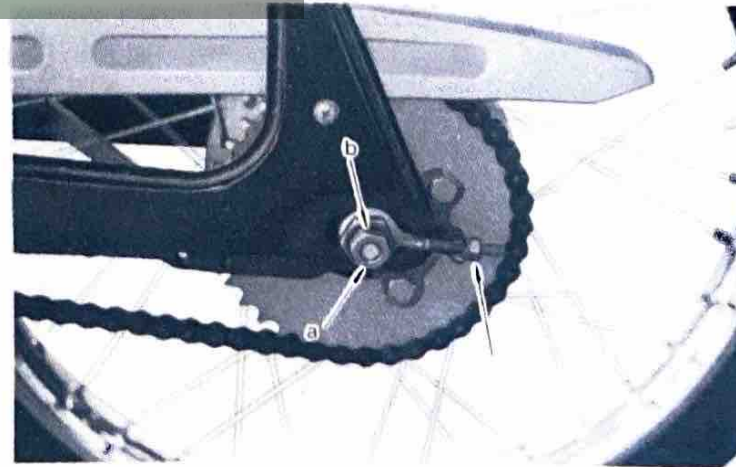
NOTE: The element is a bry paper type so be careful to keep it free of gas, oil and grease that would impair filtration. Very dirty or oil saturated elements must be replaced to regain peak engine performance.

### 7) Adjusting the drive chain

- a) Move the chain up and down to check chain play (Fig. 26) with the rear wheel on the ground. If total play is more than 1.0 inch (25 mm.) adjust it to 5/8 inch. (20 mm.)
- b) Loosen the rear wheel's outside axle nut (a) with the 17 mm. wrench.
- c) Then loosen the inner axle nut (b) with the 23 mm. socket and screwdriver.



(Fig. 26)



(Fig. 27)

- d) Loosen the lock nut (c) with the 10 mm. wrench.
- e) Tighten the adjusting bolt (d) to decrease chain play, loosen them and knock the wheel forward to increase play. Adjust both adjusting plates to equal marks on.
- f) After adjustment, tighten nut (c), then nut (b) and nut (a).
- g) Readjust brake pedal free play to 1-1¼ inches (25~30 mm.) and check the stop light operation.
- h) Oil the chain every 500 miles (1,000 km). Lack of oil will impair performance and shorten chain life.

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## 8) Checking other parts

Check all bolts, nuts, and screws holding the parts listed below and tighten them if necessary.

Front and rear axles	Engine
Rear swing arm shaft	Chain guard
Shock absorber units	Handle lever holders
Handlebars	Crankcase covers
Footrests	Cylinder heads (90 in/lbs. torque)
Center and side stands	Carburetors
Mufflers	Air cleaner cover
Seat	Others



## OTHER PERIODIC MAINTENANCE

### 1) Cleaning the muffler

Carbon coated exhaust pipe and muffler can cause power loss, poor acceleration, and overheating. Use a phillips type screw driver to remove the screw holding the inner baffle and pull it out with pliers. Scrape off carbon with a wire brush. Remove hard-to-reach carbon by tapping the baffle on a hard surface (See Figs. 28 & 29).



(Fig. 28)

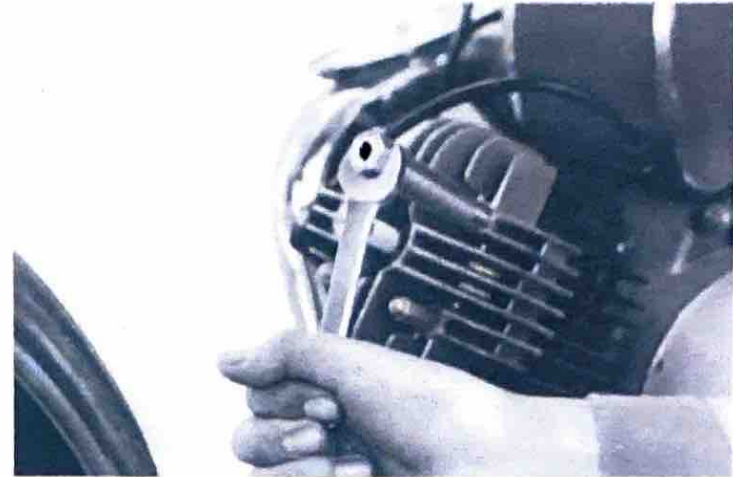


(Fig. 29)

## 2) **Cleaning the cylinder head and piston**

Carbon covered cylinder head and piston may cause overheating, loss of power, engine knock, etc.

- a) Remove the cylinder head nuts with the 10 mm socket wrench (Fig. 29). Pull off the head and scrape the carbon from combustion chamber.
- b) Move the piston to top dead center and scrape the carbon from its crown with a wire brush or screwdriver, then clean it with a rag moistened with gasoline.



(Fig. 30)



(Fig. 31)

## 3) **Cleaning the fuel cock filter**

The gasoline filter keeps impurities from entering the carburetor. A dirty filter will limit the flow of gasoline and cause other engine troubles. Use 10 mm wrench to unscrew the cap below the fuel cock; remove the filter element and wash it in gasoline (Fig. 31).



#### 4) Wheel Removal

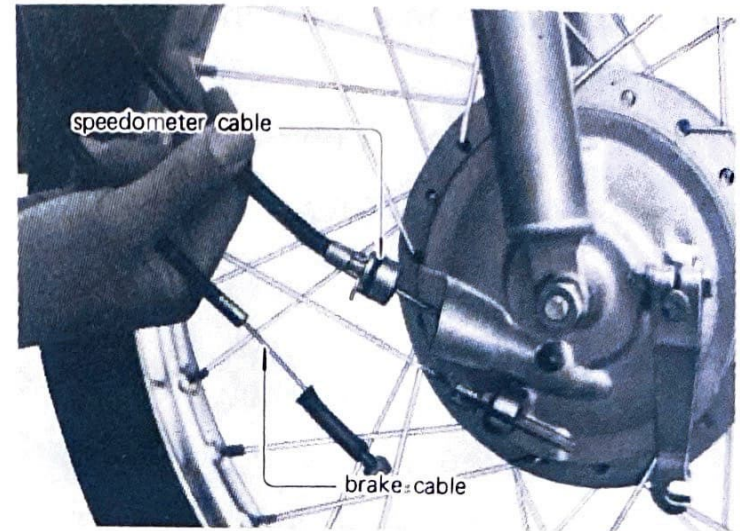
Wheel removal is necessary to repair flat tires.

##### a) Front wheel

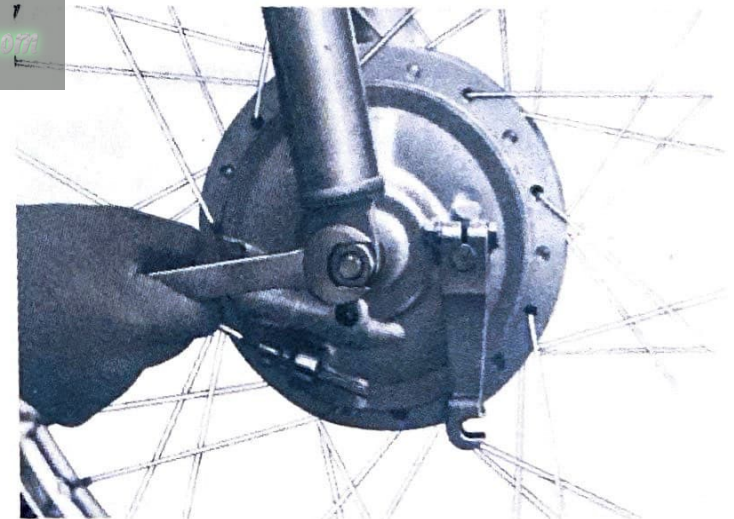
- (1) Remove the brake cable and speedometer cable from the brake backing plate (Fig. 32).
- (2) Remove the 17 mm. nut on the right side of the axle (Fig. 33).
- (3) Pull out the axle from the left side.

##### b) Rear wheel

- (1) Remove the 14 mm. adjusting nut at the end of the brake rod.
- (2) Remove the bolt holding the anchor bar to the wheel hub (Fig. 34).
- (3) Unscrew the outer axle nuts and pull out the axle from the right side.



(Fig. 32)



(Fig. 33)



- (4) Pull the wheel to the left to separate it from the clutch hub.  
Leave the sprocket and clutch hub on the swing arm.

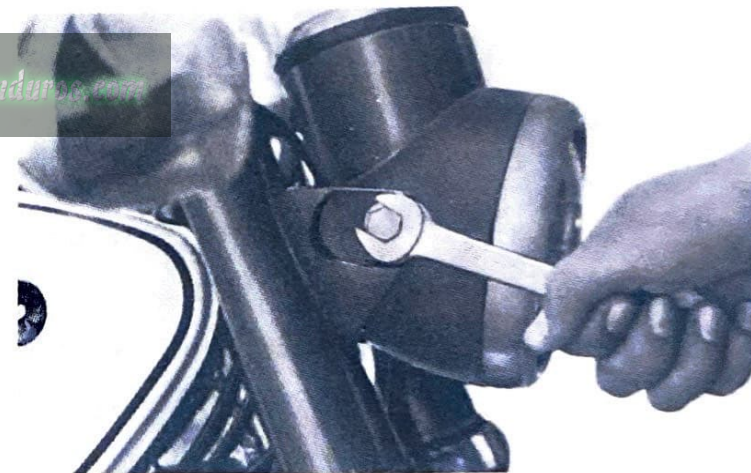


(Fig. 34)

### 5) Headlight beam adjustment

If your headlight does not suit you in its present position:

- a) Loosen the mounting bolts in the right and left headlight brackets, and pivot the headlight up or down while you are sitting on the motorcycle (Fig. 35).
- b) Position the headlight where its beam is most effective, then carefully tighten both bolts.



(Fig. 35)

# REPAIR INFORMATION

## 1. Genuine YAMAHA parts

All replacement parts must be of the same high quality as the originals to keep your Yamaha performing like new. The genuine, guaranteed Yamaha parts stocked by your dealer are manufactured and tested to meet the requirements of Yamaha's high standards.

The imitation Yamaha parts on the market today are not recommended for your bike because of their uncertain quality and durability; using them may adversely affect the life and performance of your machine.

## 2. Troubleshooting

All Yamaha motorcycles undergo rigid factory tests to insure their reliability. If trouble develops consult your dealer immediately. Every dealer's shop is staffed with trained mechanics and provided with a stock of genuine Yamaha parts.

NOTE: Some parts are sealed or cannot be detached or disassembled, so let your dealer repair them. Yamaha can only be responsible for the results of repairs made by its own authorized dealers. Repair and adjustment of the Autolube pump, for instance, should be left to your Yamaha dealer.

Listed in the following pages are possible causes of trouble and their remedies:

### a. Engine does not start

Cause	Remedy
1) No fuel	Add fuel
2) Fuel cock is closed	Open fuel cock
3) Carburetor flooded	You may have left the fuel cock open. Close starter jet lever.
4) Spark plug dirty	Remove and clean
5) Spark plug burned	Replace with colder plug
6) Wrong plug gap	Set gap to 0.023 in. (0.5 mm)
7) Spark piug damaged	Replace with new plug
8) Faulty magneto	Have a Yamaha dealer check and repair it.
NOTE: Remove plug from cylinder head and reconnect the high voltage lead. Then ground the plug to the engine and see if it sparks as you crank the kickstarter. No spark means the points, ignition coil, flywheel magneto or battery may be faulty.	



**b. Engine output falls off under load (while climbing a long slope), although nothing is wrong with the piston.**

Cause	Remedy
1) Spark plug temperature is too high (porcelain around center electrode is white).	Replace with colder-type plug.
2) Ignition timing is incorrect	Have your dealer check and set it.

**c. Engine overheats**

Cause	Remedy
1) Autolube oil tank is empty	Add #30 detergent oil (See page 9.)
2) Too much gear oil	Drain oil to correct level
3) Gear oil viscosity too high	Use #30 detergent oil.

- d. Engine over-revs in relation to the motorcycle's forward speed. This is possibly due to clutch slippage. Ask your dealer to check and, if necessary, adjust it.**
- e. The headlight is dim and the battery is easily discharged.**

Cause	Remedy
1) Low battery fluid level	Add distilled water
2) Battery fluid is wrong specific gravity.	Have your dealer charge the battery. (Specific gravity should be 1.26–1.28)
3) Others	Ask your dealer to check the electrical system.

**f. Other troubles.**

Consult your dealer for brake repair, hard steering, tendency to steer to one side, clutch slippage, hard starting, difficult shifting, or other major troubles.

## TEN REQUIREMENTS FOR A GOOD MOTORCYCLIST

1. Safety is more important than speed. Always observe traffic regulations & signs.
2. Always use quality gasoline and oil, and avoid the inconvenience of running out of gas or oil.
3. Check tire pressures, controls and lights before every ride.
4. Warm up the engine for a few minutes.
5. Shift gears gently, while momentarily closing the throttle; avoid power shifting
6. During the break-in period, ride at the suggested speed in each gear. (See page 25)
7. Apply the front and the rear brake at the same time. (See page 23)
8. Down a long hill, use engine compression as a brake. (See page 23)
9. When parking, be sure to turn off and remove the ignition key, turn off the fuel cock, and lock the steering.
10. Check parts at regular intervals as described in this manual.



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