

# YAMAHA

**125 AS2C**

**RIDER'S MANUAL**

YAMAHA MOTORCYCLES & SNOWMOBILES



*Don*

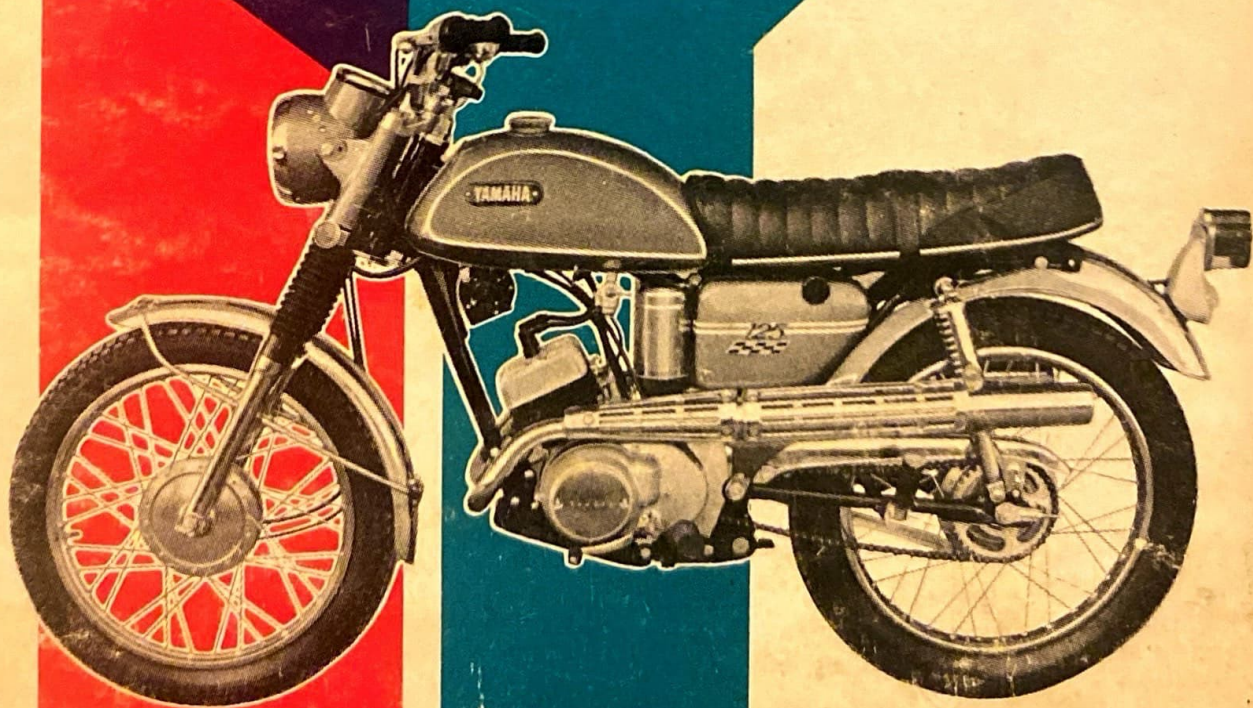
**GEORGE'S SPORT CENTER, INC.**

CLARENCE, N. Y. RTE. 5

(716) 759-8127

Cycles-Snowmobiles  
YAMAHA

[www.legends-yamaha-enduros.com](http://www.legends-yamaha-enduros.com)



**YAMAHA MOTOR CO., LTD.**

(U. S. A. CANADA.)

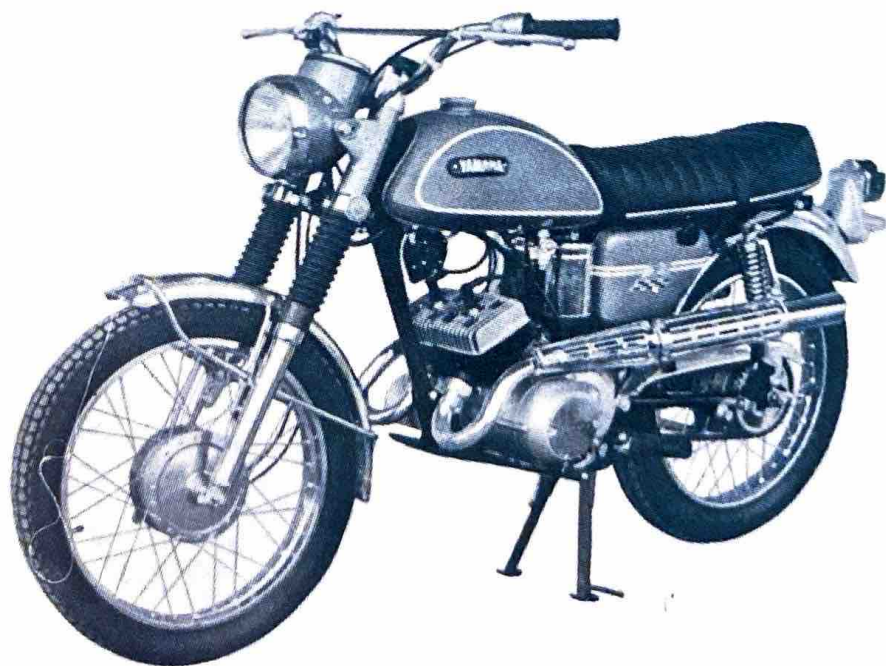


Congratulations. You are now the owner of a new Yamaha AS2C. The AS2C is a high-performance motorcycle manufactured by the leading manufacturer of motorcycles in Japan.

The AS2C, the newest of the Yamaha line model is designed for competition and high-speed road use. It features a rugged, powerful 2-cycle twin engine and Auto Lube, the revolutionary lubricating system developed by Yamaha Technical Research Laboratory and proved in all Yamaha models.

This manual explains some steps necessary for operating and caring for your new motorcycle. Please read it carefully to become thoroughly familiar with all features and advantages built into your AS2C.

[www.legends-yamaha-enduros.com](http://www.legends-yamaha-enduros.com)



# CONTENTS

<b>1 Special Features and Specifications</b> .....	3
<b>1-1 Special Features</b> .....	3
<b>1-2 Specifications</b> .....	4
<b>2 What is Yamaha Auto Lube ?</b> .....	6
<b>3 Main Parts</b> .....	8
<b>4 Operating Instructions</b> .....	11
<b>4-1 What You Should Know Before Operating</b> .....	11
4-1-1 Gasoline and Oil .....	11
4-1-2 Main Switch .....	12
4-1-3 Fuel Cock .....	13
4-1-4 Handlebar Switch & Horn Button .....	13
4-1-5 Steering Lock Key .....	14
4-1-6 Steering Damper .....	14
4-1-7 How to Adjust the Rear Suspension .....	15
<b>4-2 What You Should Check Before Riding</b> .....	16
<b>4-3 Starting, Shifting Gears, Stopping and Parking</b> .....	17
4-3-1 Starting .....	17
4-3-2 Shifting Gears .....	18
4-3-3 Driving on Hills .....	19
4-3-4 Stopping and Parking .....	20
<b>4-4 Breaking in Period</b> .....	21
<b>5 How to Keep Your Motorcycle in Top Condition</b> .....	22
<b>5-1 Periodical Service at Yamaha Dealer's</b> .....	22
<b>5-2 What You Should Do Yourself</b> .....	23
<b>5-3 Periodical Inspection Guide</b> .....	23
<b>5-4 Service Tools and Their Use</b> .....	24
5-4-1 Service Tools .....	24
5-4-2 Use of The Service Tools .....	25
Adjusting the Brakes .....	25
Adjusting the Clutch .....	27
Gear Oil .....	28
Battery .....	29
Spark Plug .....	30
Air Cleaner .....	31
Adjusting the Carburetor .....	32
Drive Chain .....	33
Cleaning the Muffler .....	34
Cleaning the Fuel Cock Filter .....	35
Bolts and Nuts .....	35
Greasing and Oiling .....	35
<b>6 Repair and Troubleshooting Charts</b> .....	36
<b>6-1 Factory Authorized Service</b> .....	36
<b>6-2 Genuine Yamaha Parts</b> .....	36
<b>6-3 If a Trouble Should Occur</b> .....	37
<b>6-4 Troubleshooting Charts</b> .....	38



# 1 Special Features and Specifications

---

## 1-1 Special Features

### 1 Parallel Twin Engine with 5 Port Cylinders

The YAMAHA AS2C employs a powerful 2-stroke 125cc twin cylinder engine equipped with special 5 port cylinders.

This new 5 port cylinder has two more scavenging ports than the conventional piston ported system, resulting in more power and performance.

### 2 Advanced Engine with Auto Lube and Aluminum Cylinders

This highly sophisticated powerful 2-stroke engine when lubricated with Auto Lube develops 15.2 HP at 8,500 rpm. After normal break-in you can expect outstanding acceleration and a top speed of over (75 mph) You can enjoy high-speed touring and competition to the fullest.

### 3 5-Speed Gearbox

A five speed transmission assures you of plenty of power in any driving situation.

### 4 Special Twin Carburetors [www.legends-yamaha-enduros.com](http://www.legends-yamaha-enduros.com)

Starter jets are used in the AS2C's carburetors, and in all other Yamaha motorcycles, to make starting easy even in freezing weather.

### 5 Reliable Brakes

Both brakes are sealed against dirt and water. This means that your brakes will work well in rain or on dirt roads.

### 6 Adjustable Rear Suspension

The rear springs can be adjusted to suit changes of road surface, speed and load.

### 7 Primary Kick System

A primary-coupled kick-starter crank lets you start the engine with the gear change 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.

### 8 Additional Safety

The design emphasis of the AS2C is on the increased safety of the rider. It is provided with reflex reflectors for the rear end and both sides of the machine to protect him from on-coming vehicles during the night. Another safety feature is the front brake stop light.



## 1-2 Specifications Model AS2C

Model	YAMAHA AS2C	
Dimensions	Overall length	1,875 mm 77.8 in.
	Overall width	800 mm 31.5 in.
	Overall height	1,020 mm 40.2 in.
	Wheelbase	1,200 mm 47.2 in.
	Minimum ground clearance	160 mm 6.3 in.
Weight	Gross	110 kg 242 lbs.
	Net	100 kg 220 lbs.
Performance	Speed range	115—120 km/h, 70~75 mph.
	Fuel consumption(on paved level road)	65 km/ℓ (at40km/h) 152.9 mpg (at25mph)
	Climbing capacity	23.5°
	Braking distance	11.5 m/50 km 37.7 ft at 31 mph
	Minimum turning radius	1,800 mm 70.9 in.
Engine	Model	YAMAHA AS2
	Classification	Air-cooled, 2-cycle gasoline, 5-port
	Lubricating system	Yamaha Auto Lube: automatic lubrication
	Number of cylinder	Two in parallel
	Displacement	124 cc (7.56 cu. in.)
	Bore and Stroke	43 mm (1.693×1.693 in.)
	Compression ratio	7.0 : 1
	Maximum power	15.2 HP/8,500 rpm
	Maximum torque	(9.4 ft.lbs/7,500 rpm)
	Starting system	Kick starter
Ignition system	Battery ignition	

Model	YAMAHA AS2C	
Transmission	Primary reduction ratio Secondary reduction ratio Clutch Gear box	74/19 = 3.894 gear 39/15 (2.600) chain Wet, multi-disc Constant mesh, 5-speed
Gear ratio	Gear ratio	First 3.182 ( $\frac{35}{11}$ ) Second 1.875 ( $\frac{29}{16}$ ) Third 1.300 ( $\frac{26}{20}$ ) Fourth 1.045 ( $\frac{23}{22}$ ) Fifth 0.840 ( $\frac{21}{25}$ )
Body	Frame Front suspension Rear suspension	Diamond-type tube frame Telescopic (coil spring oil damper) Swing arm (coil spring oil damper)
Steering	Steering angle Caster Trail	47° 63° 92 mm 3.4 in.
Brake	Type Front Rear	Internal expansion Right hand operated, cable-actuated Right foot operated, rod-actuated
Tires	Front Rear	2.75-18-4P.R. 3.00-18-4P.R.
Tanks	Gasoline tank capacity Oil tank capacity	7.5 ℓ (2.0 gal.) 7.5 ℓ (2.0 gal.)



## 2 What is Yamaha Auto Lube?

---

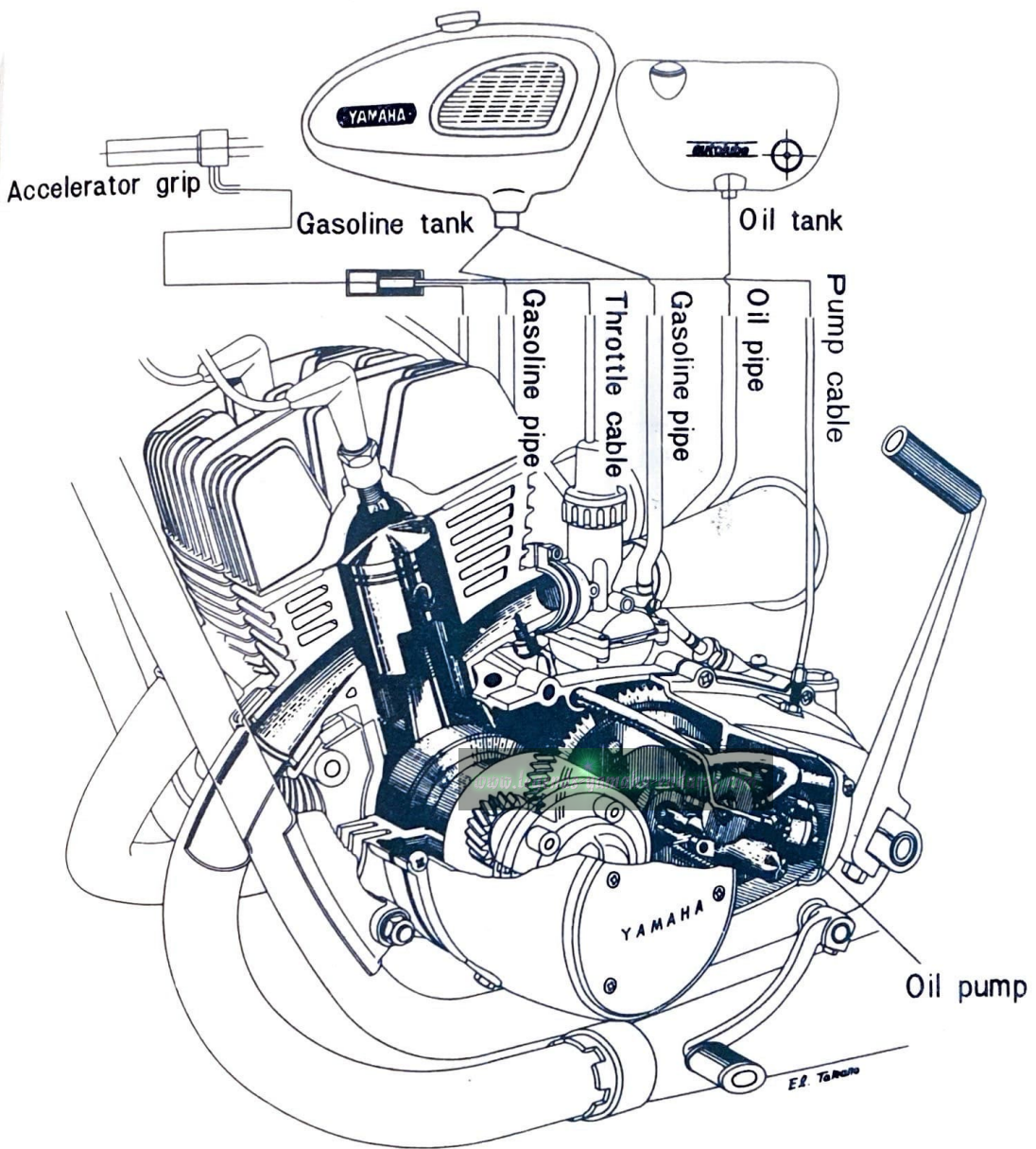
Auto Lube is the best lubricating system available for 2-stroke engines. It eliminates the need for mixing oil and gasoline. The amount of oil injected into the manifold is controlled by a compact, high-precision oil pump. The plunger pump, driven by the reduction gear has its displacement controlled by the throttle opening.

The rate of injection varies with engine speed and load as indicated by throttle opening. Because of the wide range of control Auto Lube offers, precisely the right amount of oil is available at all times.

Auto Lube eliminates a number of major problems unavoidable with pre-mix lubrication system. This means both improved performance and reliability.

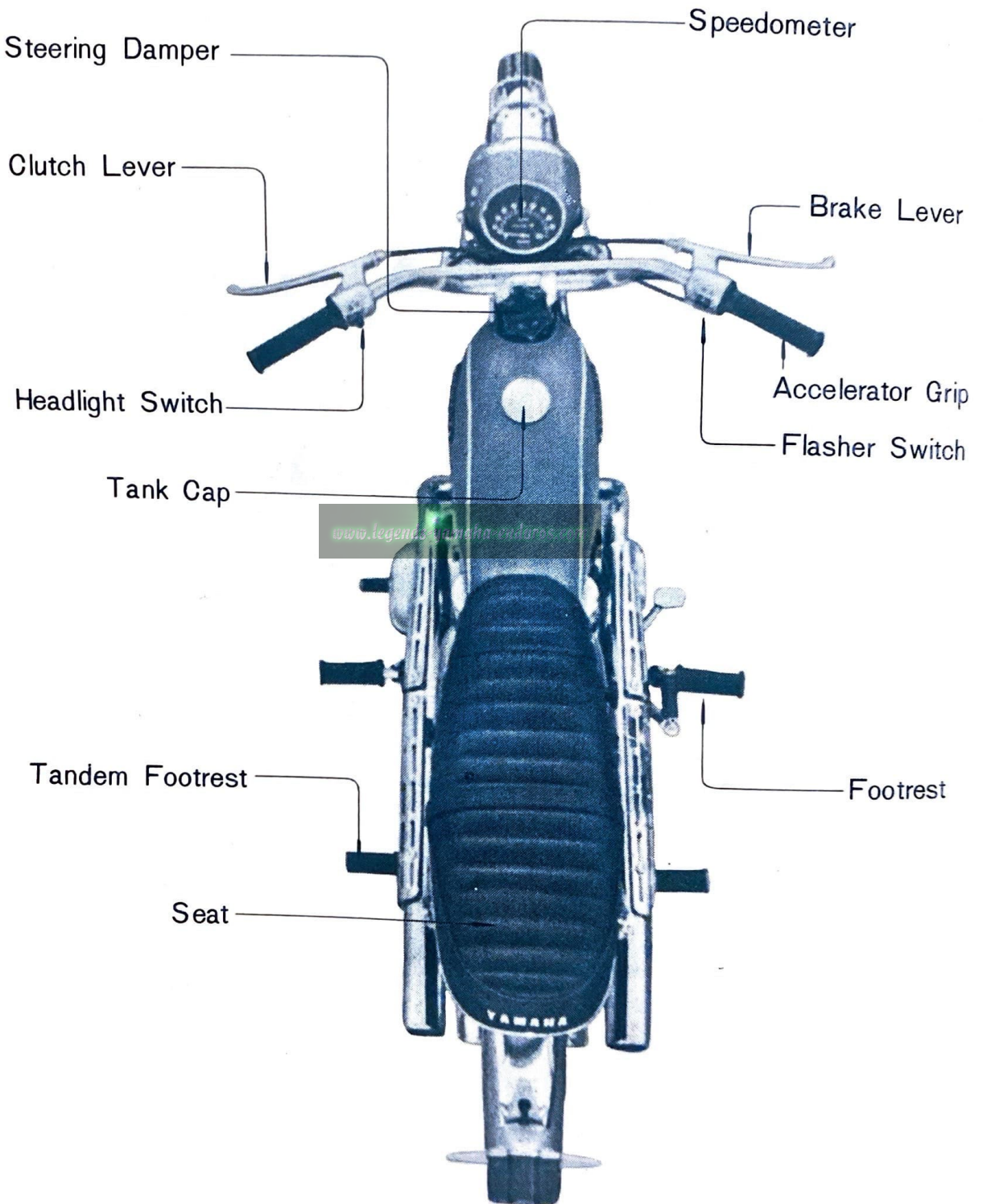
### Yamaha Auto Lube Features:

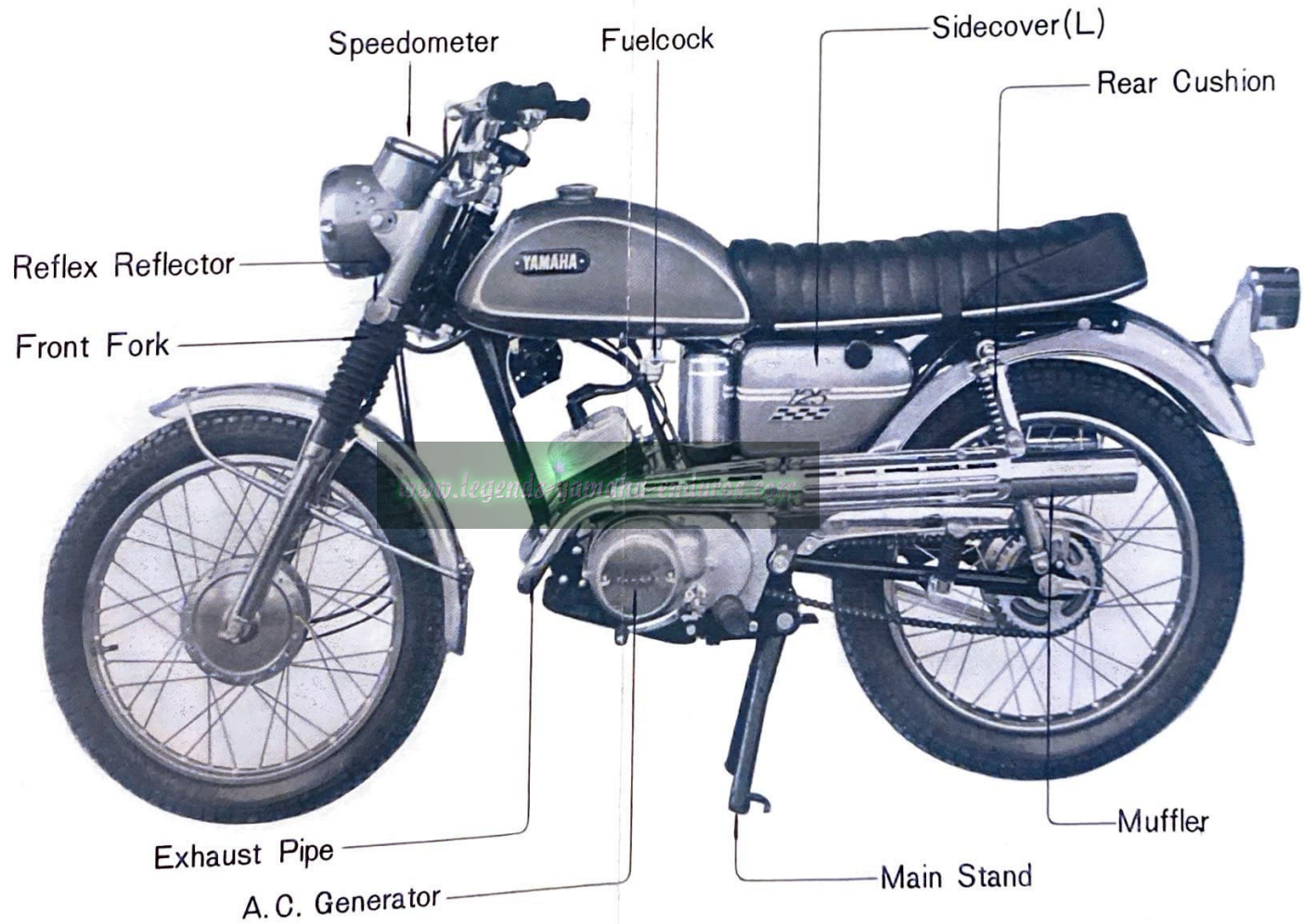
1. Oil consumption is greatly reduced.
2. More effective lubrication results because the oil enters the engine in larger size droplets.
3. There is much less unwanted carbon deposited on the spark plugs, cylinder heads, pistons and exhaust system!
4. There is much less exhaust smoke.
5. Refueling is simplified.
6. Because poor quality oils can easily be avoided, and because the possibility of mismeasuring or inadequately mixing fuel is eliminated, Auto Lube offers completely consistent lubrication.



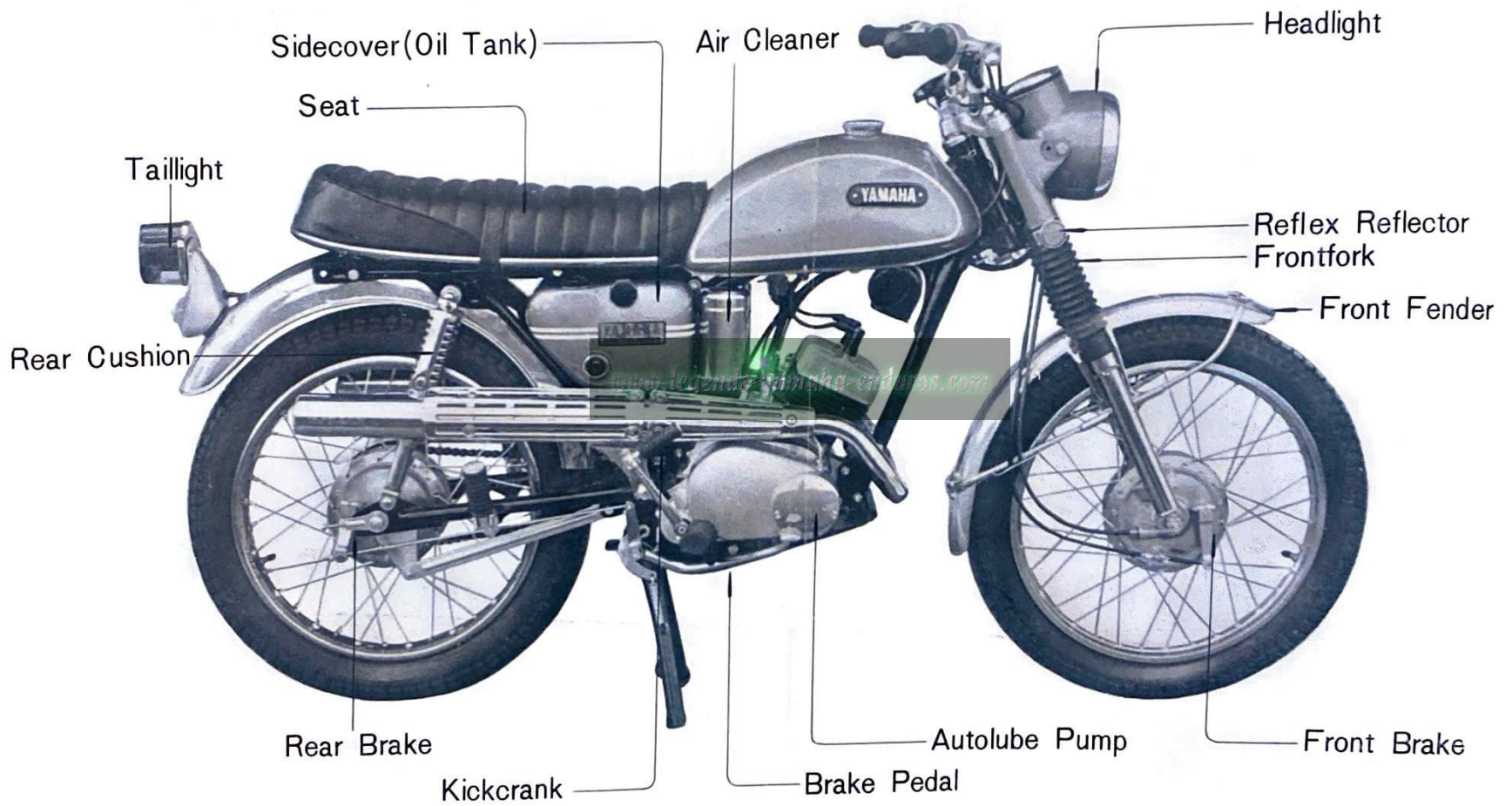


### 3 Main Parts









## 4 Operating Instructions

### 4-1 What You Should Know Before Operating

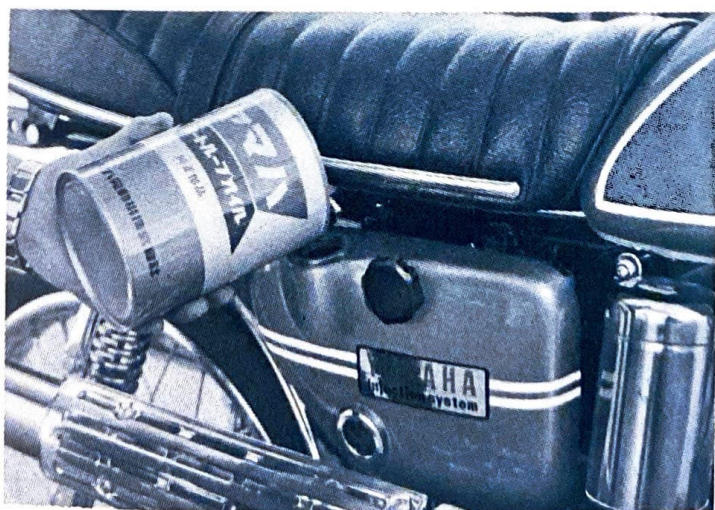
#### 4-1-1 Gasoline and Oil

Since it is unnecessary to mix fuel and oil with Auto Lube, gas can be pumped directly into the fuel tank. The oil tank is located on the righthand side of the machine. The minimum octane required to avoid preignition is 72. It is not necessary to use premium fuel.

Use Yamaha Autolube Oil or equivalents listed below in the Auto-lube system.

Temperature	Recommendable oil	Remarks
20° C (68° F) or more	SAE30W, 10W/30, 20W	Be sure to use 2 stroke motor oil or motor oil.
20° C (68° F) ~ -10° C (14° F)	SAE10W/30	
-10° C (14° F) or less	SAE5W, 10W	

Find the best oil available in your area and use this brand consistently. Your dealer will be able to help you in your selection. The few pennies you save by using low grade oils will not pay for damage they often do.



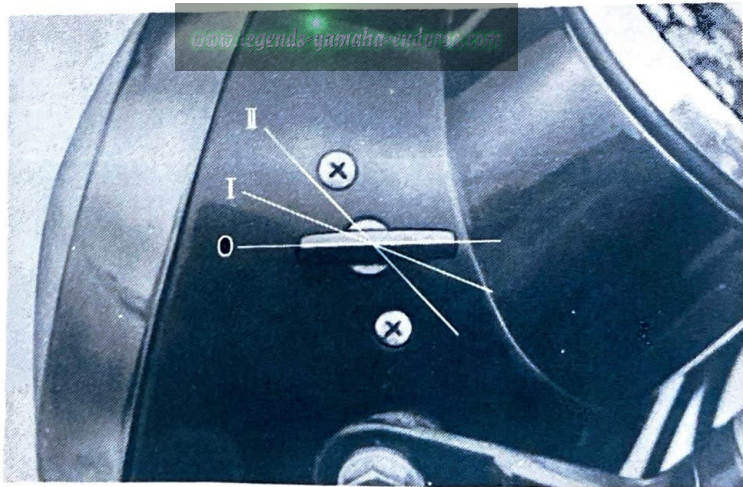


### 4-1-2 Main switch

The following chart shows the key position at which the lights, horn and ignition circuit are switched on or off:

(The circle (○) denotes "Switch on")

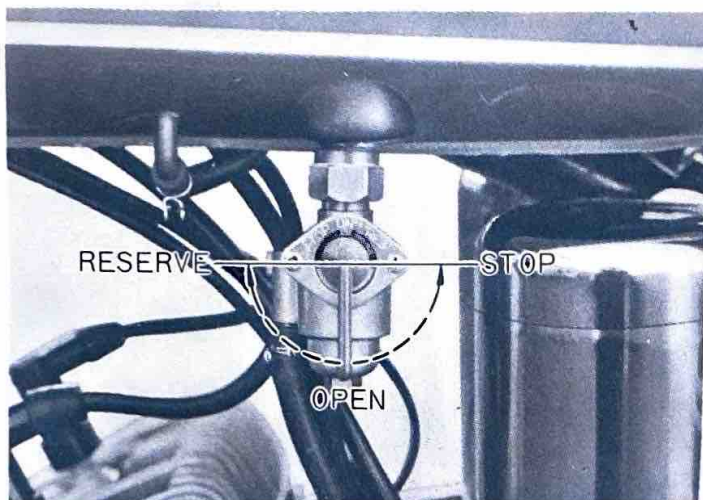
Parts Name	Key Position			Instructions
	0	I	II	
Ignition circuit		○	○	I & II...Kick starting
Headlight			○	
Taillight			○	
Stop light		○	○	
Neutral light		○	○	The change pedal is in neutral.
Meter light			○	
Horn		○	○	The horn button is depressed.



- 0 When stopped
- I Day driving
- II Night driving

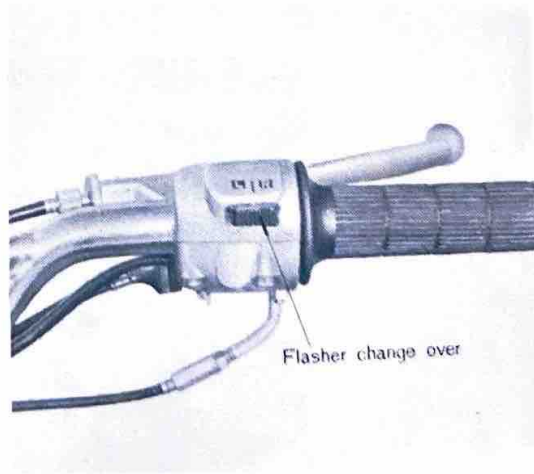
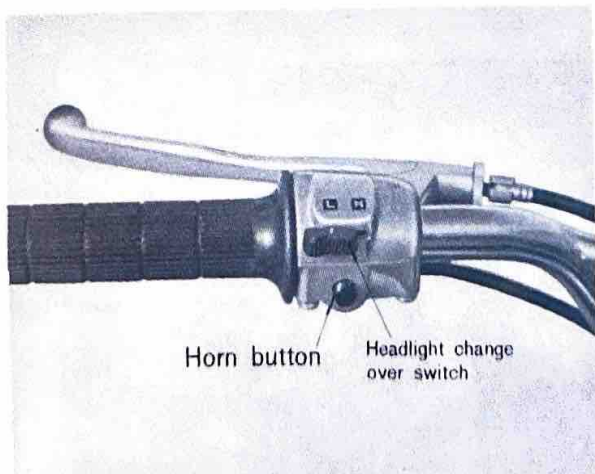
### 4-1-3 Fuel Cock

To fill the carburetor float bowels, set the fuel cock lever to OPEN position. If you should run low of fuel on the road, turn the lever to RESERVE position. With just over a quart of fuel, you can drive nearly 40 miles—enough to get you to the nearest service station for refueling. When parking or storing your machine, be sure that the lever is in STOP position



### 4-1-4 Handlebar Switch & Horn Button

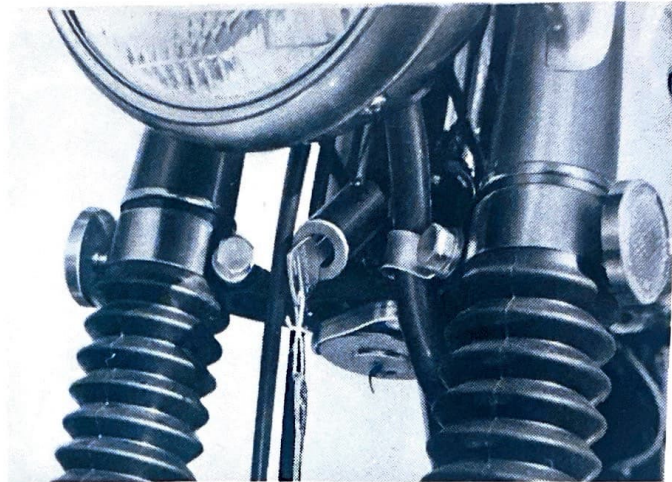
- To sound the horn, depress the horn button.
- To raise the headlight beam, push the switch to the right. To lower the beam, push the switch to the left.
- To light the left flasher light, push the switch to the left, and to light the right flasher light, push the switch to the right.





#### 4-1-5 Steering Lock Key

Turn the handlebars to the left lock, insert the steering lock key and turn it 90° counterclockwise. Remove the key after checking to see that the front forks are securely locked. Be sure to lock your forks whenever you park.

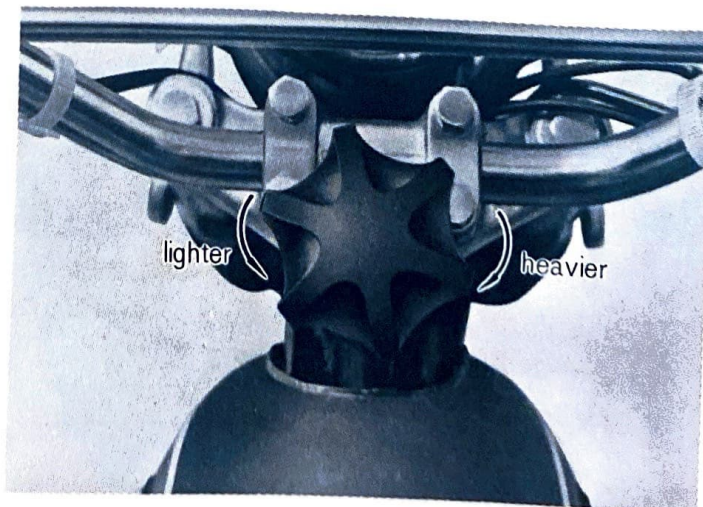


#### 4-1-6 Steering Damper

When driving on rough roads, adjust the steering damper to absorb shock by turning it clockwise.

To get heavier steering, turn the damper knob clockwise.

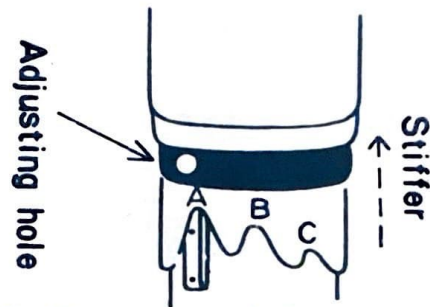
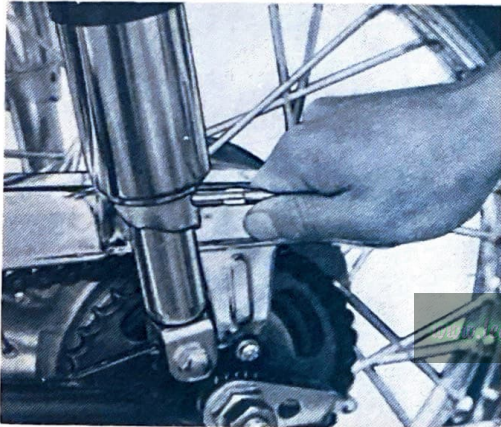
To get lighter steering, turn the damper knob counterclockwise.



#### 4-1-7 How to Adjust the Rear Suspension

Insert the screwdriver from your rider's tool kit in the adjusting hole. Turn the notched collar to change the spring rate. The rear suspension should be adjusted to fit your load, speed and road conditions.

- Standard .....A
- Intermediate .....B
- Stiff .....C



\* Both right & left in the same position



## 4-2 What You Should Check Before Riding

Before you start for a ride you should check several points for safety.

- a Do you have enough fuel ?
- b Do you have enough oil ?

If the oil is below the red level mark in the glass port, add oil.  
Always use the best oil available.



- c Are your tire pressures correct ?

Incorrect tire pressures affect the comfort, handling, acceleration and tire of your machine. Incorrect tire pressures can lead to accidents !

Correct tire pressures

Front tire 24 lbs/in<sup>2</sup> .(1.7kg/cm<sup>2</sup>)

Rear tire 28 lbs/in<sup>2</sup> .(2.0 kg/cm<sup>2</sup>)

- d Do both brakes and the brake light work ?
- e Are the lights and horn in working order ?

Check the headlight, taillight, speedometer lights and warning lights. The few minutes you save by not checking are not worth being stranded without lights !

## 4-3 Starting, Shifting Gears, Stopping and Parking

### 4-3-1 Starting

#### a Before Starting

1. Turn the fuel cock lever to the "OPEN" position.
2. Insert the ignition key and turn it to "DRIVING".

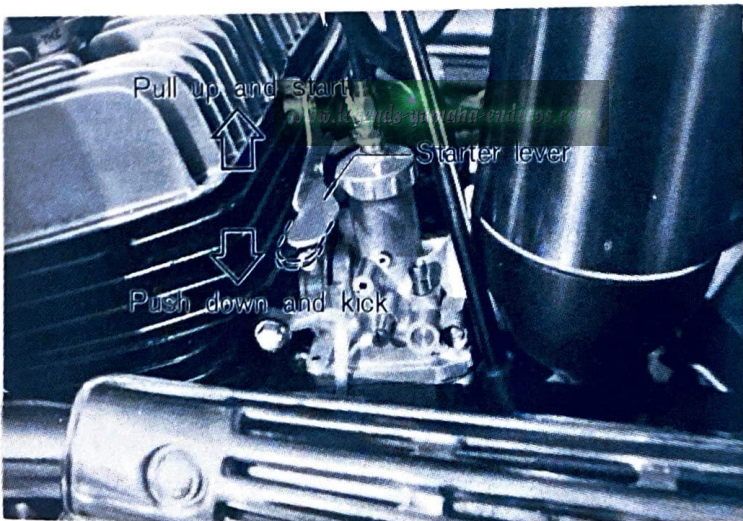
Make sure the neutral light is on.

**CAUTION:** Never start the engine unless you are in neutral.

#### b Starting in Cold Weather

Any engine is difficult to start in cold or freezing weather. However, AS2C uses a new type carburetor with a built-in starter jet that gives a richer mixture for easier start.

1. Depress the starter jet lever.
2. Start the engine with the kick starter keeping the throttle closed.



#### c Starting When Your Engine is Warm

When your engine is warm after riding or in the summer, don't use the starter lever.

Open the throttle slightly ( $\frac{1}{4}$  turns or less) and kick the starter.



#### d Warming Up

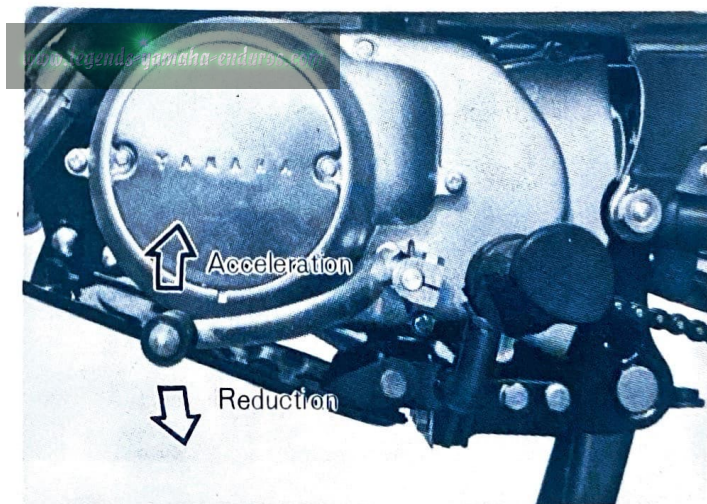
To get maximum engine life, always “warm up” the engine for 1 or 2 minutes before starting off. Never accelerate hard with a cold engine! To see whether or not the engine is warm, see if it responds to throttle normally. Don't forget to release the starter lever.

### 4-3-2 Shifting Gears

The AS2C has a 5-speed transmission. The transmission allows you to control the amount of power you have available at a given speed for starting, accelerating, climbing hills, etc.

The use of the gear shift lever is illustrated below.

FIFTH  
FOURTH  
THIRD  
SECOND  
NEUTRAL  
FIRST



To shift into NEUTRAL, depress the gear shift lever to the end of its travel (you will feel a stop when you are in low gear),: then raise it slightly.

If you are in neutral, the green light in the speedometer will be on.

1. Pull the clutch lever to disengage the clutch.
2. Shift into FIRST.
3. Open the throttle gradually, and, at the same time, release the clutch lever slowly.
4. At 10 to 13 mph, release the throttle, and at the same time pull in the clutch lever quickly.
5. Shift into SECOND. Be careful not to shift into neutral.
6. Open the throttle part way and release the clutch lever.
7. To accelerate or decelerate, use the same procedure.
8. Except for competition or high speed driving, shift so that the engine speed remains between 4,000 and 5,000 rpm.

Gear	Driving conditions	Optimum speed mph(km/h)
First	Starting or hill climbing	0 to 15 (0~25)
Second	Hill climbing or going slowly	15 to 22 (25~35)
Third	On easy uphills or in streets	19 to 28 (30~45)
Fourth	On main roads	25 to 40 (40~65)
Fifth	High-speed running	31 (50) or over

### 4-3-3 Driving on Hills

#### a Going Uphill

When starting to climb a gentle grade, open the throttle little by little to avoid loosing engine speed and power.

When climbing a steep grade, shift down from THIRD to SECOND or fom SECOND to FIRST as required.

#### b Going Downhill

On a long down grade or sharp descent, don't rely on the brakes alone, but use the engine compression as a brake: shift into



THIRD or SECOND as required by the grade and release the throttle.

**CAUTION:** Never attempt turn off the ignition switch on a long hill. This will only cause the spark plug to foul.

#### **4-3-4 Stopping and Parking**

##### **a Stopping**

1. Be sure to apply the front and rear brakes together. Applying only one may, under certain conditions, cause skids.
2. Apply both brakes gently.
3. After stopping, be sure to shift into NEUTRAL.
4. Turn the fuel cock lever to the "STOP" position.
5. Remove the ignition key.

##### **b Parking**

1. Close the fuel cock and remove the ignition key.
2. Lock the handlebars by using the steering lock key.

[www.legends-yamaha-enduros.com](http://www.legends-yamaha-enduros.com)

## 4-4 Breaking in Period

During the first 600 miles, (1,000 km), you can, by observing a few simple precautions, greatly increase the life of your AS2C and its performance. The following precautions will guarantee proper seating in for your engine.

1. Up to the first 300 miles (500 km), drive at 37 mph (60 km/h) or under while in top gear.
2. Up to the next 300 miles (500 km), drive at 47 mph (75 km/h) or under while in top gear.

(For the speed limit of each gear against top gear, see the following table.)

Driving Distance miles (km)	Maximum speed, mph (km/h)				
	5th	4th	3rd	2nd	1st
0~300( 0~ 500)	37(60)	31(50)	25(40)	19(30)	12(20)
300~600(500~1,000)	47(75)	37(60)	31(50)	22(35)	12(20)

3. Don't accelerate or decelerate suddenly. Use the throttle gently.



## 5 How to Keep Your Motorcycle in Top Condition

Regular inspection and maintenance help keep your motorcycle in top condition. They are preventative measures. Don't wait until something goes wrong.

### 5-1 Periodical Service at Your Yamaha Dealer's

When you have reached 300, 1,000 and 2,000 miles (500, 1,500 and 3,000 km), have your Yamaha dealer inspect and service the following things.

#### Periodical Inspection Guide

Check Point	Driving Distance			
	300miles	1,000miles	2,000miles	thereafter every 2,000miles
Front & rear brakes adjustment	○	○	○	○
Clutch adjustment	○	○	○	○
Gear oil change	○	○	○	○
Greasing		○	○	○
Battery fluid	○	○	○	○
Spark plugs	○	○	○	○
Ignition timing		○	○	○
Carburetors adjustment		○	○	○
Carburetors cleaning			○	○
Air cleaners cleaning		○	○	○
Cylinder heads & pistons cleaning		○	○	○
Mufflers cleaning		○	○	○
Bolts & nuts tightening		○	○	○
Drive chain adjustment	○	○	○	○
Oil pump adjustment	○	○	○	○

## 5-2 What You Should Do Yourself

In addition to the periodic inspections by your Yamaha dealer, it is wise to check the following things yourself once or twice a month. All these operations can be carried out with the tools in your rider's tool kit.

## 5-3 Periodical Inspection Guide

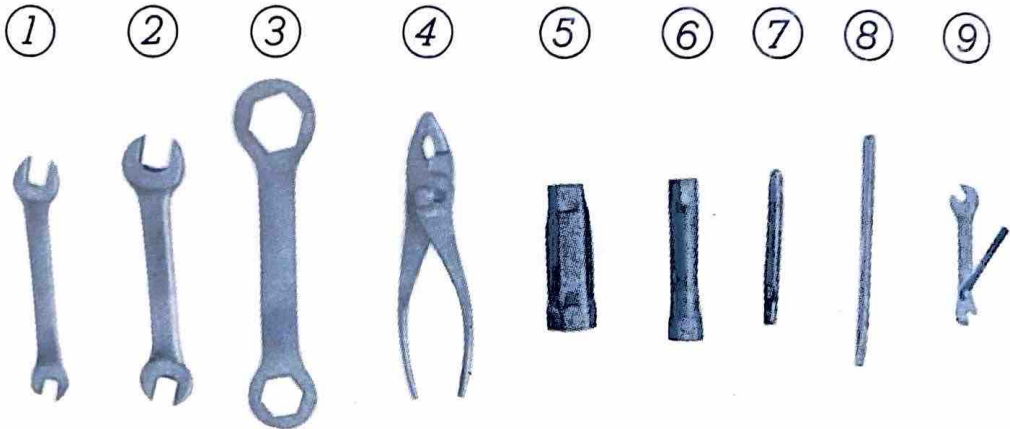
Check point	Instructions	P. Ref.
Spark plugs	Clean.	30
Air cleaners	Clean.	31
Battery	Check or if necessary replenish battery fluid.	29
Drive chain	Adjust and oil.	33
Gear oil	Change.	28
Front & rear brakes	Adjust cables	25 - 26
Mufflers	Clean.	34
Bolts & nuts	Tighten.	35

Be sure to go through this inspection before long trips.



## 5-4 Service Tools and Their Use

### 5-4-1 Service Tools:



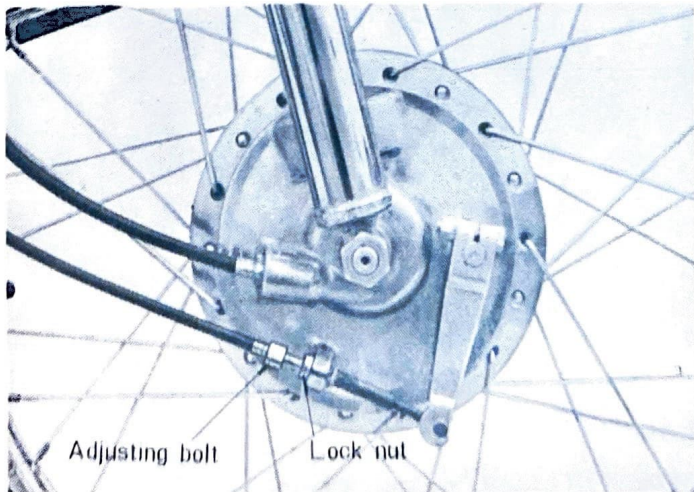
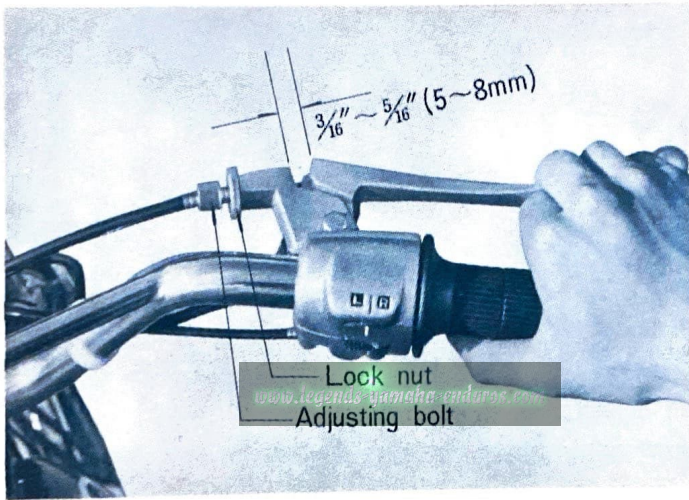
[www.legends-yamaha-enduros.com](http://www.legends-yamaha-enduros.com)

1. 8 × 10 mm double-ended spanner
2. 13 × 17 mm double-ended spanner
3. 22 × 26 mm double-ended spanner
4. Pliers
5. 21 mm plug socket
6. Screwdriver handle
7. ⊕ screwdriver
8. ⊕ ⊖ screwdriver
9. Point spanner (5.5 × 7 mm)

## 5-4-2 Use of Service Tools

### 1 Adjusting the brakes a Front Brake

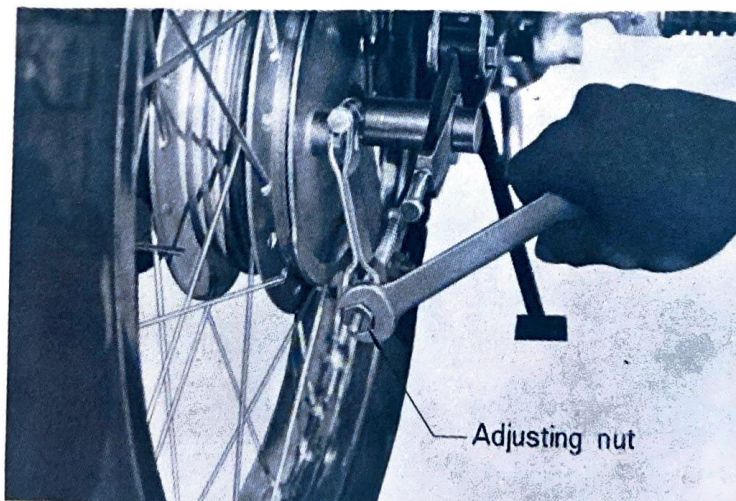
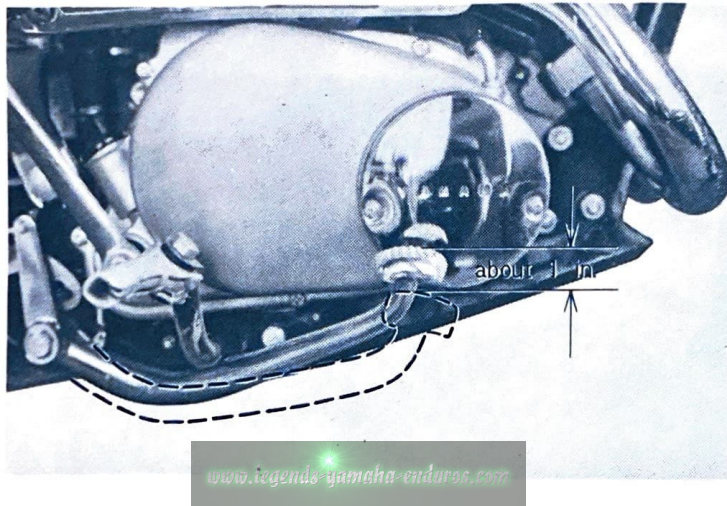
The correct free play of the front brake lever is 0.2 to 0.3 in. (5 to 8 mm). To adjust, turn the adjusting bolt to the front brake cable end/or the adjusting bolt located at the lever. After adjustment, be sure to tighten the lock nut fully. Check the stop light to see if it functions properly.





## b Rear Brake

The correct free play for the rear brake pedal is about 1 in.(25 mm). Adjust this by turning the adjusting nut at the end of the rear brake cable a half turn at a time. After adjusting the brake, make sure the brake light is working. If not, readjust the stop light switch.



**NOTE:** Inspect the brake linings for wear and clean the brake shoes and drums every 2,000 miles(3,000 km).  
Always Keep the shoes and drums free of oil.

## 2 Adjusting the Clutch

The clutch lever should be adjusted to have free play.

If there is too much free play, the lever may not disengage the clutch.

If there is no free play, the clutch will slip.

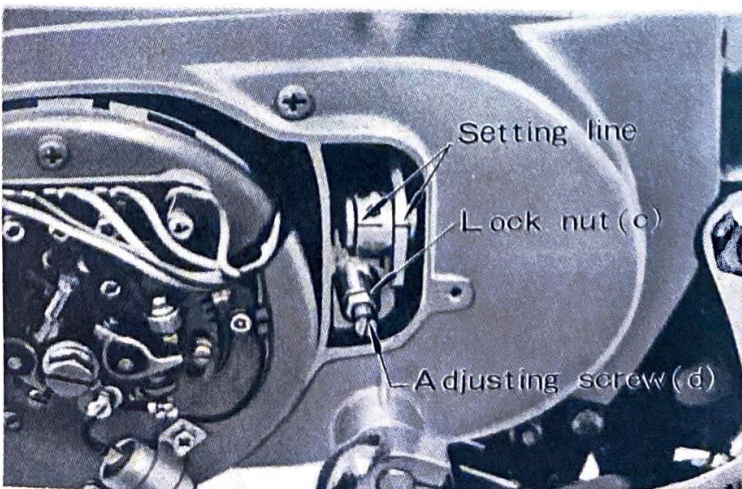
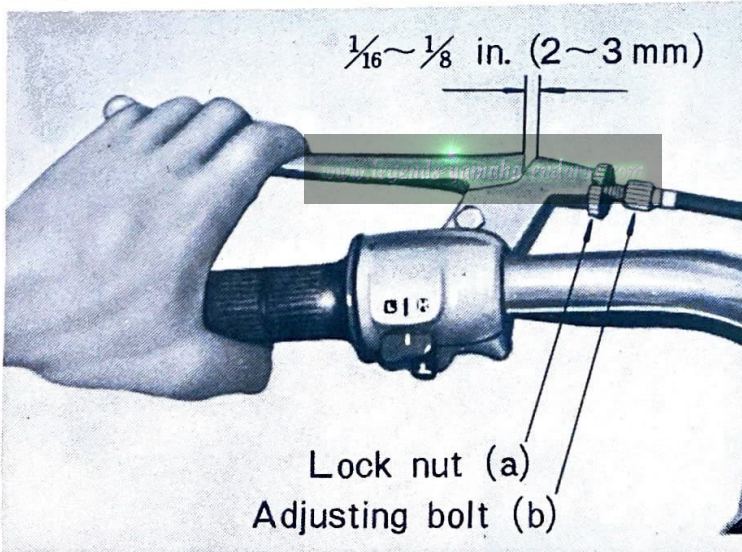
### Clutch lever side

1. Loosen the locknut (a)
2. To decrease play, turn the adjusting bolt(b) clockwise. To increase play, turn the bolt counterclockwise.
3. Tighten the lock nut(a) fully.

### Crankcase cover side

1. Loosen the locknut (c)
2. To increase play, loosen adjusting screw(d)(counterclockwise)and to decrease play, tighten the nut (clockwise)
3. Tighten the lock nut(c) fully.

**NOTE:** The error of each setting line should be  $\pm 0.04$  in.(1 mm) or less, or some clutch malfunction will be resulted.



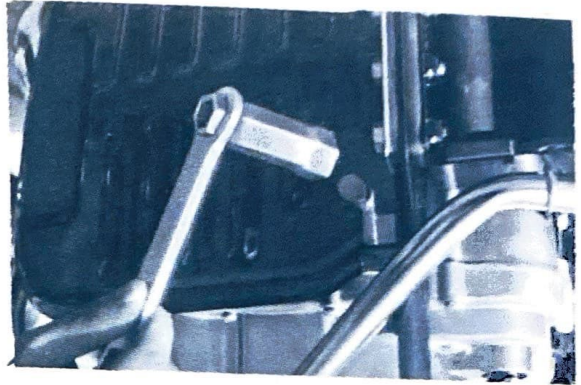
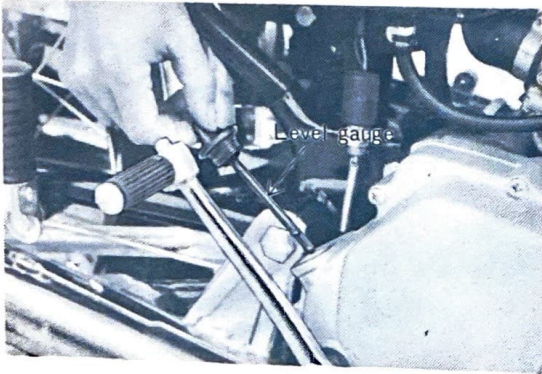


### 3. Gear Oil

During the breaking-in period, replace the gear oil after 30 days from the purchase or after 300 miles (500 km) running.

After the first replacement, replacement should be made at least every three months or every 1,200 miles (2,000 km).

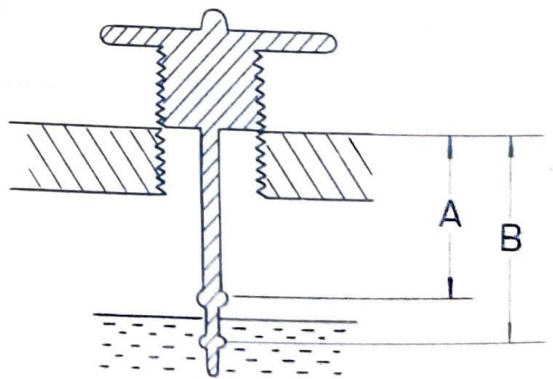
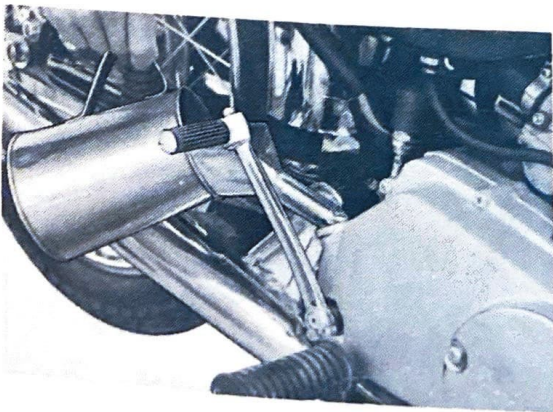
To drain the oil from the bottom of the crankcase, remove the oil drain plug.



After draining the oil, fully tighten the oil drain bolt, and fill with new oil up to the specified level.

Oil ----- Yamaha Gear Oil or Motor Oil SAE 10W/30.

Amount ----- 750~850 cc(0.8 qt.)

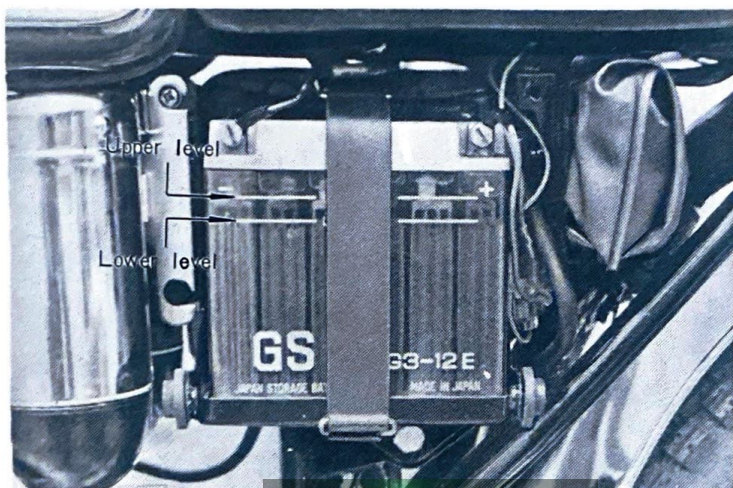


The correct oil level is A to B.



#### 4 Battery

The battery fluid should always be kept between the upper and lower level lines. If it is below the lower one, fill it with distilled water up to the upper one.



[www.legends-yamaha-enduros.com](http://www.legends-yamaha-enduros.com)

Check to see that the overflow tube is not clogged.

If your motorcycle will not be in use for more than a month, remove the battery and keep it in a dry cool place, or give it to your dealer to keep for you. Be sure to have your dealer charge it once a month.

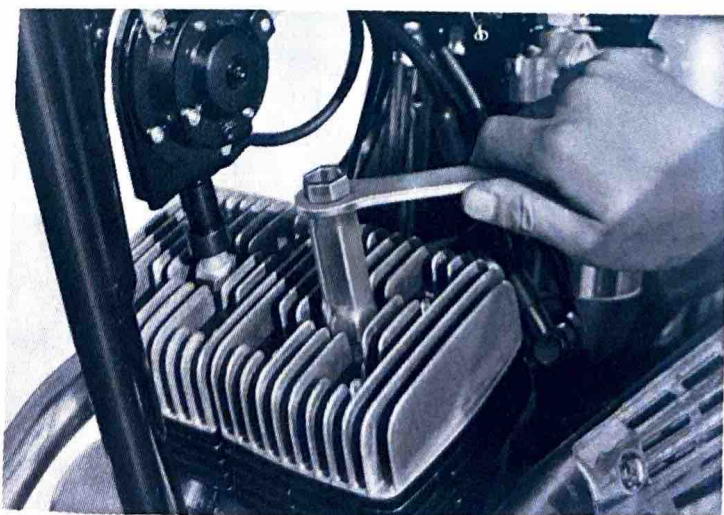
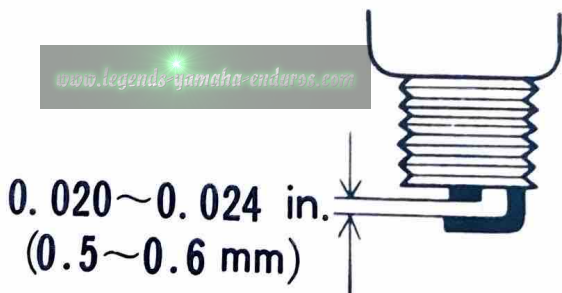


## 5 Spark Plugs

A spark plug ignites the fuel-air mixture in the cylinder. Carboned or oiled plug cause hard starting, misfiring and other problems.

Remove carbon from the electrodes with a wire brush from time to time.

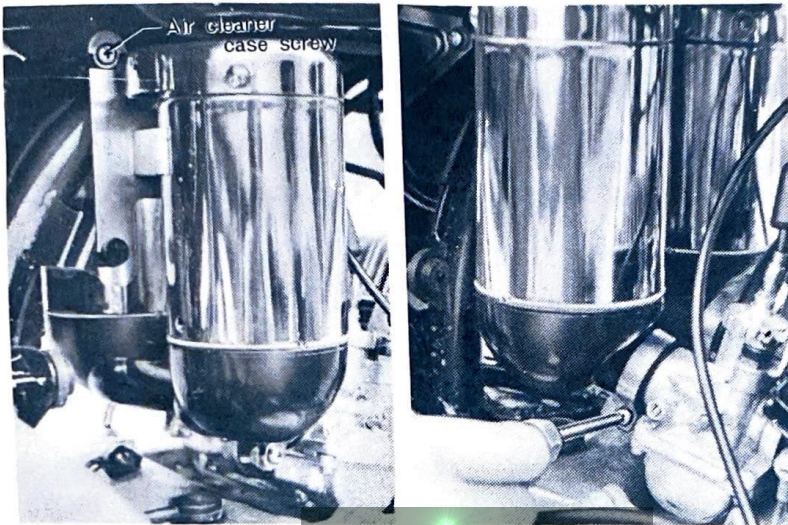
- a **Spark Plug Gap:** The correct gap is 0.020~0.024 in. (0.5~0.6 mm)
- b **Heat Range:** The standard plug is an NGK B9HC or B7HZ  
The spark plug will be covered with carbon if it is too cool for operating conditions. If the plug is correct, the insulator will be relatively clean and have a tan color. If the standard plug is too cool, use an NGK B8HC or B7H.



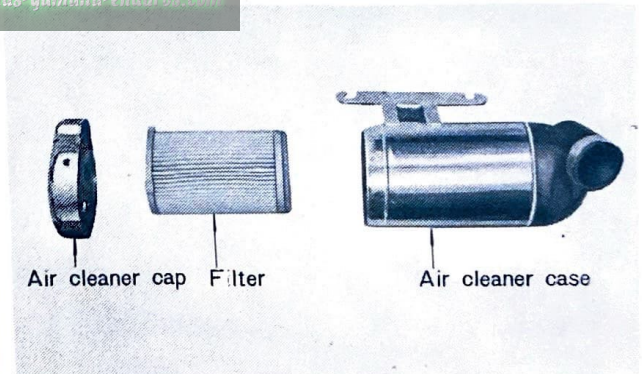


## 6 Air Cleaners

An air cleaner excludes dust and dirt from the engine. It must be clean at all times. If you drive often on dirt roads, be sure to clean it at least once a month.



[www.legends-yamaha-enduros.com](http://www.legends-yamaha-enduros.com)



### Cleaning

The air cleaner is a paper filter. Wash the filter in clean gasoline. Blow compressed air through it from the inside. Never wash the filter in water or oil. Use clean gasoline.



## 7 Checking the Carburetors

Each carburetor is set by the factory after careful tests. Except for the following, do not change the carburetor setting without consulting your local Yamaha dealer.

### a Idling Speed Adjustments

Fully tighten the pilot air screw (1), and back off it  $1\frac{1}{2}$  turns.

Slightly loosen the adjusting screw of the throttle cable A connected to the accelerator grip, and start the engine.

After this adjustment, loosen the lock nut (3) to adjust the play of the throttle cable B to 0.02 to 0.04 in. (0.5 to 1.0 mm.); and turn the throttle cable adjuster (2) while pulling the throttle cable B for the adjustment. Then lock the throttle cable B with the lock nut.

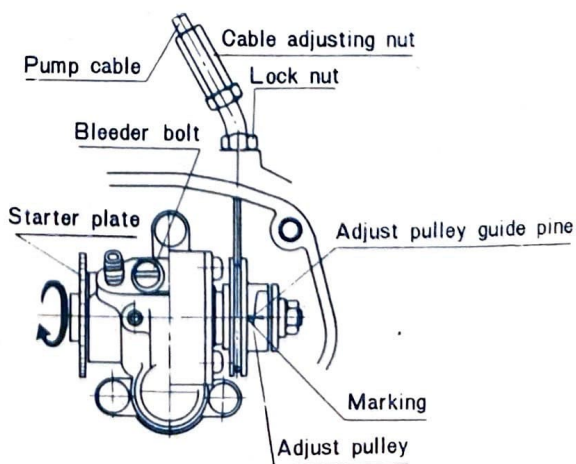
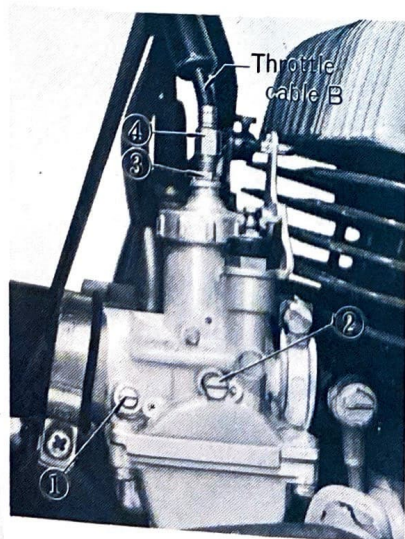
### b Adjusting the Pump Cable

After adjustment of the carburetors, adjust the pump cable coupled with the throttle valve.

Slightly turn the accelerator grip from the closed position so that free play of the accelerator grip is nil. (In other words, the throttle valve is ready to open only another slight turning of the throttle.)

Turn the pump cable adjusting nut so that the marking on the adjusting pulley is aligned with the guide pin.

**NOTE:** The right and left throttle slides should move simultaneously when the throttle is turned.

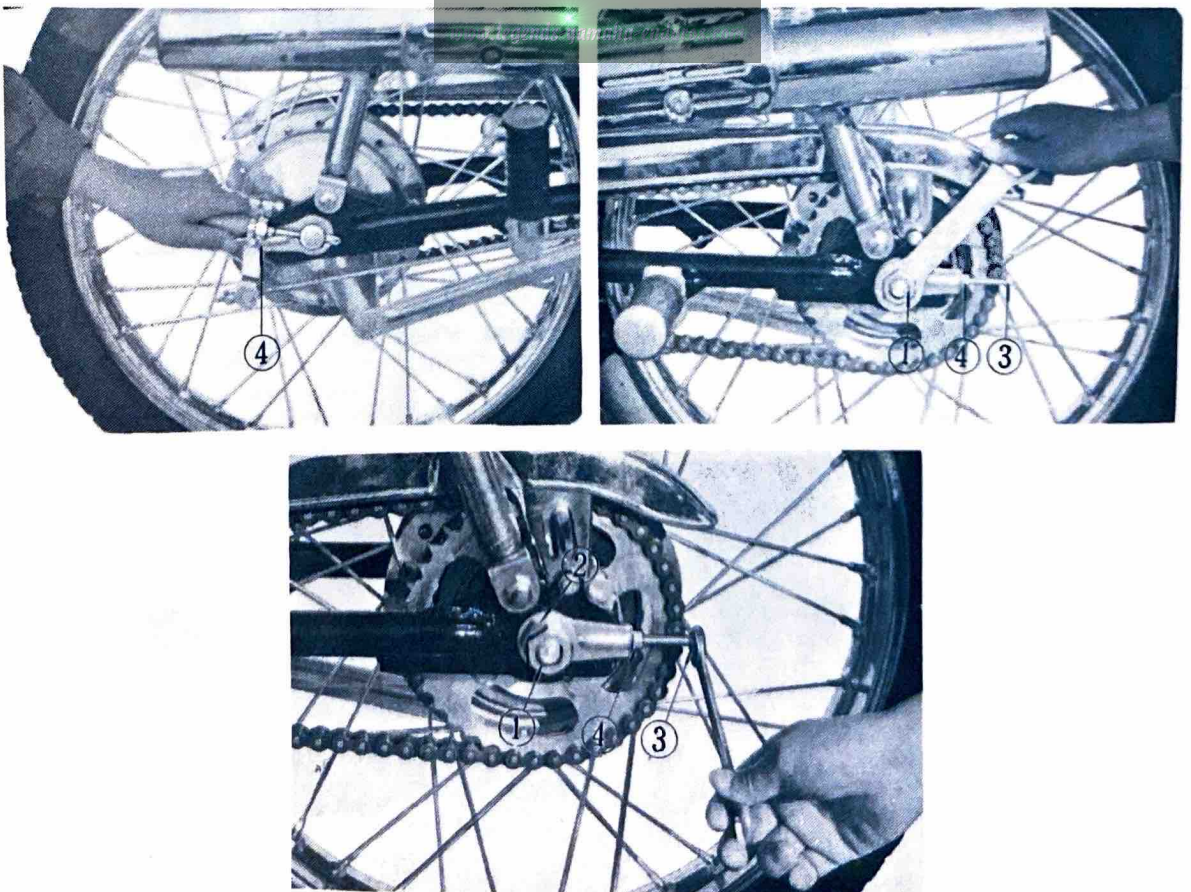


## 8 Drive Chain

The drive chain should have 0.8 in. (20 mm) of up and down play measured at the center of the lower section of the chain wheel on the ground. A dirty or dry chain will wear rapidly and damage the sprockets. Check the chain regularly to make sure that it is properly oiled and adjusted. It is wise to wash the chain off with gasoline before reoiling it.

### Adjusting

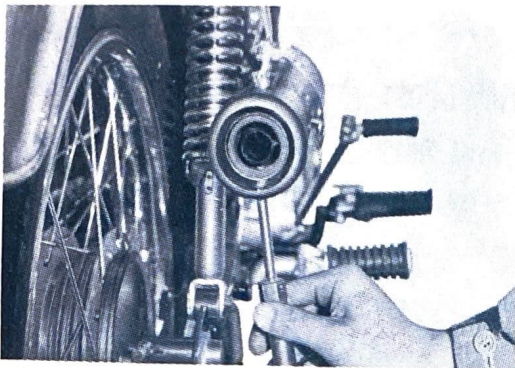
- a Loosen the rear wheel outside axle nut(1).
  - b Then loosen the inner axle nut(2) and both lock nuts(4).
  - c Tighten the both adjusting bolts(3), to increase chain play. Loosen them, to decrease the play.
  - d After adjustment, tighten th lock nuts(4), then the inner axle nut (2), and the outside axle nut(1).
- ※ After these adjustments, check the play of the brake pedal and function of the stop .light.





## 9 Cleaning the Muffler

To remove the inner cylinder from the muffler, remove the cylinder set screw and pull the cylinder out with pliers. Remove the carbon with a wire brush.

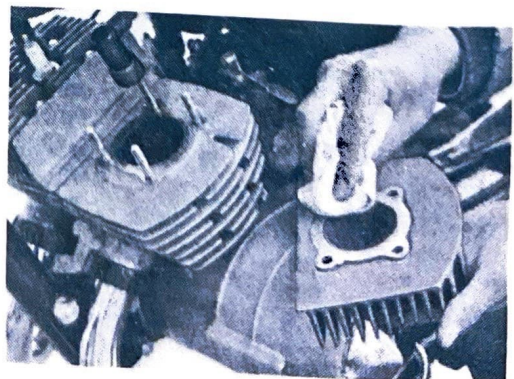
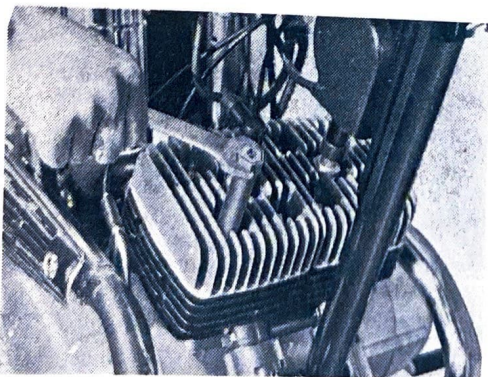


## 10 Cleaning the Cylinder Heads and Pistons

Carbon accumulations around the cylinder head and piston causes poor performance, loss of power, overheating, piston slap and other problems.

- a Remove the cylinder heads and remove all carbon from the combustion chambers.
- b Remove all carbon from the piston crowns.

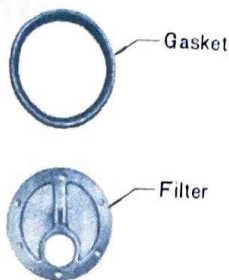
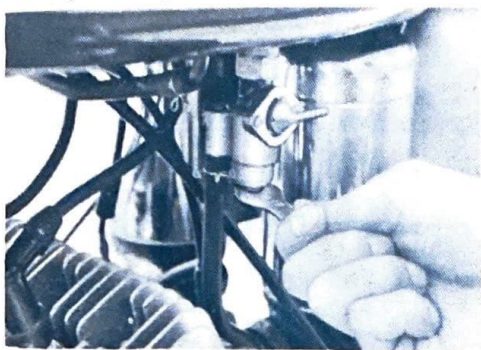
**NOTE:** Use a wire brush or screwdriver being careful not to mark the aluminum. Clean the surfaces with gasoline.





## 11 Cleaning the Fuel Cock Filter

The fuel cock filter removes impurities from the gasoline before it reaches the carburetors. A clogged filter will keep from fuel reaching the carbs. The filter must be cleaned from time to time. Remove the cup from the fuel cock and then the filter. Wash it carefully in gasoline.



## 12 Bolts and Nuts

Go over your machine periodically checking to see that all hardware is secure. In particular check the following items.

Front & rear axles

Engine fittings

Foot rests

Carburetors

Swinging arm shaft

[www.legends-yamaha-enduros.com](http://www.legends-yamaha-enduros.com) Air cleaner covers

Mufflers

Brake linkage

Center stand

Exhaust ring nuts

Side stand

Rear shock absorbers

## 13 Greasing and Oiling

	Parts to be lubricated	Distance of driving at 1st lubr., miles(km)	Lubrication interval, miles(km)	Type of Lubricant
1	Front brake cam shaft	600(1,000)	2,000(3,000)	cup grease
2	Rear brake cam shaft	600(1,000)	2,000(3,000)	↗
3	Front brake cable	600(1,000)	2,000(3,000)	↗
4	Rear brake cable	600(1,000)	2,000(3,000)	↗
5	Accelerator grip	600(1,000)	2,000(3,000)	↗
6	Stand shaft	600(1,000)	2,000(3,000)	↗
7	Brake linkage	600(1,000)	2,000(3,000)	↗
8	Drive chain	300(500)	600(1,000)	motor oil
9	Gear oil	300(500)	1,200(2,000)	↗
10	Swinging arm shaft	600(1,000)	2,000(3,000)	cup grease

## 6 Repair and Troubleshooting Charts

---

### 6-1 Factory Authorized Service

Your Yamaha dealer is a factory trained mechanic who guarantees thorough and correct maintenance for your motorcycle. We recommend that you let your dealer make all repairs and adjustments on your motorcycle. You will be assured prompt and good service.

### 6-2 Genuine Yamaha Parts

Always use genuine Yamaha parts and not “substitute” brands. Yamaha parts are manufactured to meet the factory’s exacting standards of precision and quality.

[www.legends-yamaha-enduros.com](http://www.legends-yamaha-enduros.com)

**IMPORTANT:** Some components are sealed or cannot be disassembled. If repairs to such components are necessary go to your Yamaha dealer. Yamaha cannot be responsible for repairs and adjustments to such components.

**NOTE:** The inspection and maintenance of Auto Lube are the dealer’s job.

### **6-3 If A Trouble Should Occur.....**

The AS2C undergoes rigid factory tests to assure you long and satisfactory performance. However, if something would go wrong with your machine, immediately ask your Yamaha dealer for advice. He is always glad to answer your questions.

[www.legends-yamaha-enduros.com](http://www.legends-yamaha-enduros.com)





## 6-4 Troubleshooting Charts

I Engine does not start while kicking.

1 a Empty gasoline tank b Closed fuel cock	Refill Open.
2 Incorrect usage of starter lever.	See Section 4-3-1.
3 Dirty or worn spark plug	If plug soots up with carbon, clean and blow dry, or replace.
4 There are sparks, but engine does not start.	Incorrect plug gap. See page 30 .
5 No spark (To see if there is no spark, remove plug with high-tension lead in place; ground it to cylinder head, and then kick down crank pedal).	Replace. If plug is not defective, either ignition coil or point breaker is faulty. Have your dealer repair.
6 Fuel in carburetor is overflowing.	Inspect carburetor for overflowing. Have your dealer disassemble and clean.

## 2 Engine overheats and speed is slow

1	Improper ignition timing	Have your dealer inspect
2	Clogged bypass in carburetor	Have your dealer clean
3	Loose carburetor fitting and/or cylinder head	Tighten
4	Dirty or clogged air cleaner	Clean
5	Lack of oil in drive chain	Apply oil
6	Carbon coated muffler	Clean (See p.34)

If any troubles should occur, please consult with your Yamaha dealer. He is always glad to answer your questions.

[www.legends-yamaha-enduros.com](http://www.legends-yamaha-enduros.com)



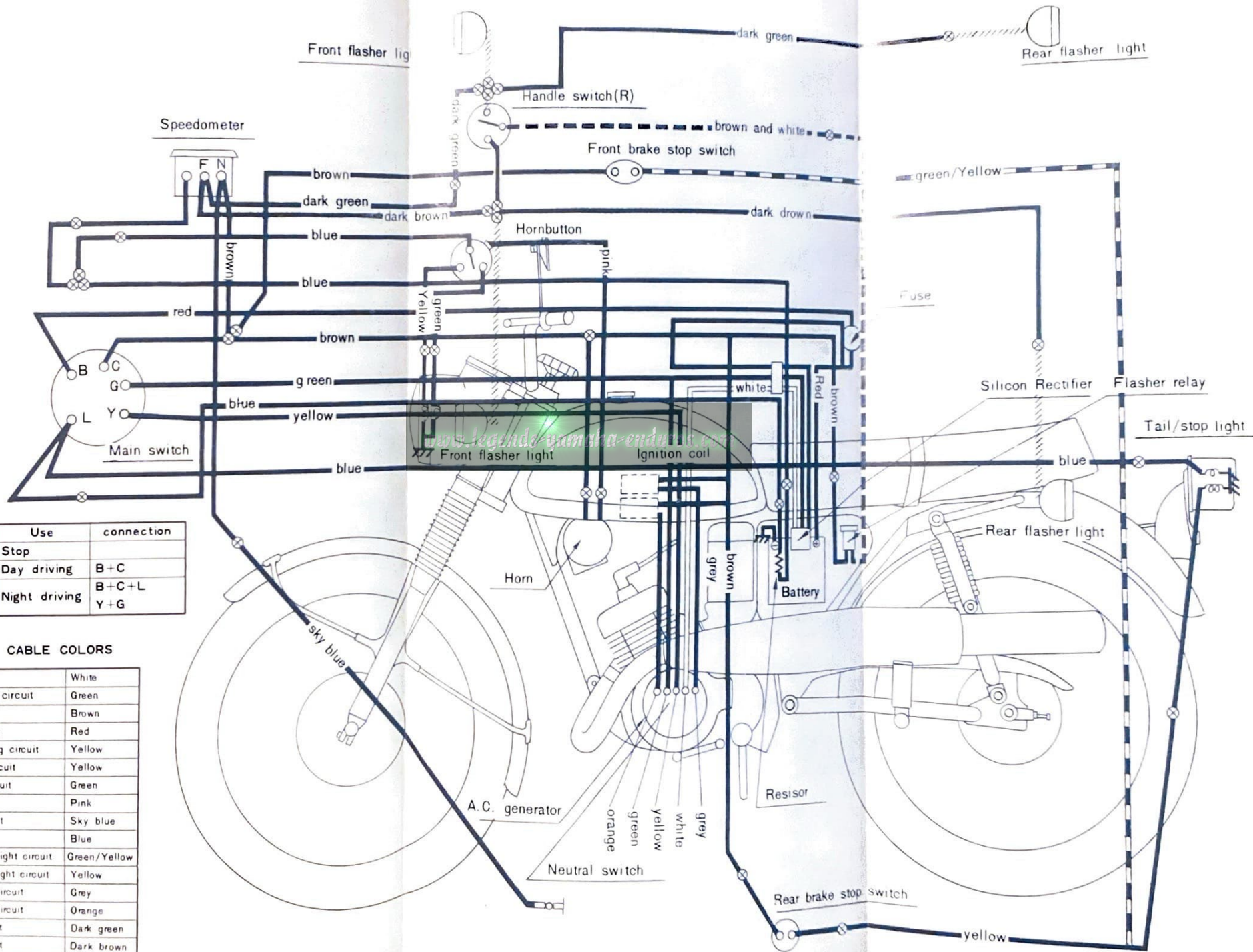
# MEMO

A series of horizontal dashed lines for writing.

[www.legends-yamaha-enduros.com](http://www.legends-yamaha-enduros.com)



# 125 AS1 C Circuit Diagram



Key Position	Use	connection
0	Stop	
I	Day driving	B+C
II	Night driving	B+C+L Y+G

## CHART OF CABLE COLORS

Stator circuit	White
Daytime charging circuit	Green
Common circuit	Brown
Battery (+) circuit	Red
Night time charging circuit	Yellow
Headlight main circuit	Yellow
Headlight sub circuit	Green
Horn circuit	Pink
Neutral light circuit	Sky blue
Tail light circuit	Blue
Front brake stop light circuit	Green/Yellow
Rear brake stop light circuit	Yellow
Ignition coil (R) circuit	Grey
Ignition coil (L) circuit	Orange
Flasher (R) circuit	Dark green
Flasher (L) circuit	Dark brown
Flasher relay circuit	Brown/White



[www.legends-yamaha-enduros.com](http://www.legends-yamaha-enduros.com)



**YAMAHA MOTOR CO., LTD.**  
PRINTED IN JAPAN