

YAMAHA

RD 60

OWNER'S MANUAL

www.legends-yamaha-enduros.com

388-28109 11

Congratulations! You are now the owner of a YAMAHA RD60 manufactured by YAMAHA, the leading manufacturer of motorcycles in Japan. The YAMAHA RD60 is the latest member of the YAMAHA family. YAMAHA has won world wide recognition for its power ruggedness, reliability, handling and economy.

This booklet tells you the necessary steps for the operation and care of your new machine. Please read this booklet carefully and become familiar with all the features and advantages that are built into your YAMAHA RD60.

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SPECIAL FEATURES

1. Reed Valve employed in Inlet System

Another new type engine has made its debut! The reed valve has been adopted as a new inlet system to Yamaha's RD60. This together with torque induction ensures excellence in steady engine performance from low to high speed running.

2. Reliable Yamaha Autolube

Like every other Yamaha model, the Yamaha RD60 also employs the worldrenowned Autolube. It automatically meters oil to the engine on demand, depending on speed and load. Thus, lubrication is extremely thorough and economical.

3. Starter-jet Built-in Carburetor

The starter-jet equipped carburetor makes starting easy even in the coldest season.

4. Convenient Primary Kick Starter

The primary kick starter enables the engine to be started with the transmission in any position. This is a welcome convenience to the rider in heavy traffic.

5. Stable Braking

Waterproof, dustproof brake drums employed for both front and rear wheels provide stable, fade-free braking on wet or dusty roads.

6. Unique Design

The stream lined design, including the fuel tank, compact engine, and separate speedometer, brings a new racer "image" to the street. Adding to a touch of extravagant luxury are the chrome-plated flasher lights, front and rear fenders, and buffed front and rear hubs.

7. Safety Equipment

For the sake of the rider's safety, a larger-sized head light flasher lights are employed, along with ball-joint back mirror. Another improvement is a symmetrical double-edged key which is designed to serve a main and steering key.

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Specifications RD60

Model	YAMAHA RD60
Dimensions	
Overall length	71.9 in.
Overall width	24.8 in.
Overall height	38.0 in.
Wheelbase	46.7 in.
Minimum road clearance	5.9 in.
Weight (Net)	163 lbs
Performance	
Maximum speed	50~53 mph
Fuel consumption (on paved level road)	188 mile/US gal (19) mph
Climbing capacity	18°
Braking distance	23.0 ft/(22) mph
Minimum turning radius	70.9 in.
Engine	
Model	388
Classification	Air-cooled, 2-stroke gasoline, Torque Induction
Lubricating system	Yamaha Autolube: separate lubrication
Number of cylinders	Single

Displacement	3.36 cu.in. (55 cc)
Bore & Stroke	1.654 x 1.563 in. (42.0 x 39.7 mm)
Compression ratio	6.9 : 1
Maximum power	4.9 B.H.P/8,000 r.p.m.
Maximum torque	3.4 ft-lb/6,500 r.p.m.
Starting system	Kick starter, Primary coupled
Ignition system	Flywheel magneto
Carburetors	VM16SH
Air cleaner	Molt plain
Transmission	
Primary reduction ratio	3.578 (68/19), gear
Secondary reduction ratio	3.500 (42/12), chain
Clutch	Wet, multi-disc type
Gear box	Constant mesh, 5-speed
Gear ratio First	3.250 (39/12)
Second	2.000 (34/17)
Third	1.428 (30/21)
Fourth	1.125 (27/24)
Fifth	0.961 (25/26)
Frame model	388
Suspension	
Front suspension	Telescopic (coil spring, oil damper)
Rear suspension	Swing arm (coil spring, oil damper)

Steering Caster Trail	62 ° 3.3 in.
Brakes Type Front Rear	Interval expansion Right hand-operated Right foot-operated
Tires Front Rear	2.50 - 17 - 4PR 2.50 - 17 - 4PR
Volumes Gasoline tank capacity Oil tank capacity	2.1 U.S. gals. 1.1 U.S. qts.
Spark plug	B-7HS

WHAT IS YAMAHA AUTOLUBE?

Yamaha Autolube is an automatic lubricating device for 2-stroke engines. Developed by the Yamaha Technical Institute, it meters oil to the engine with respect to the 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 the 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 also connected to the throttle.

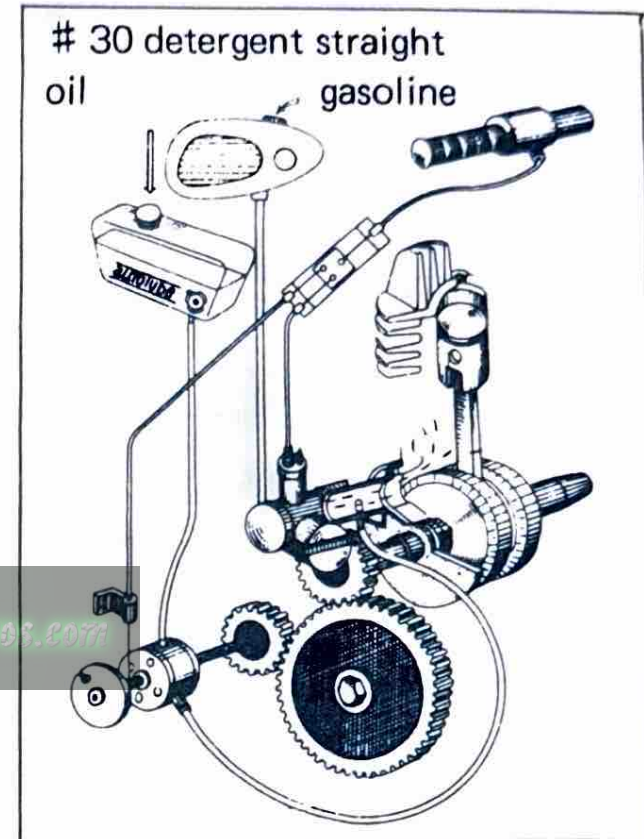


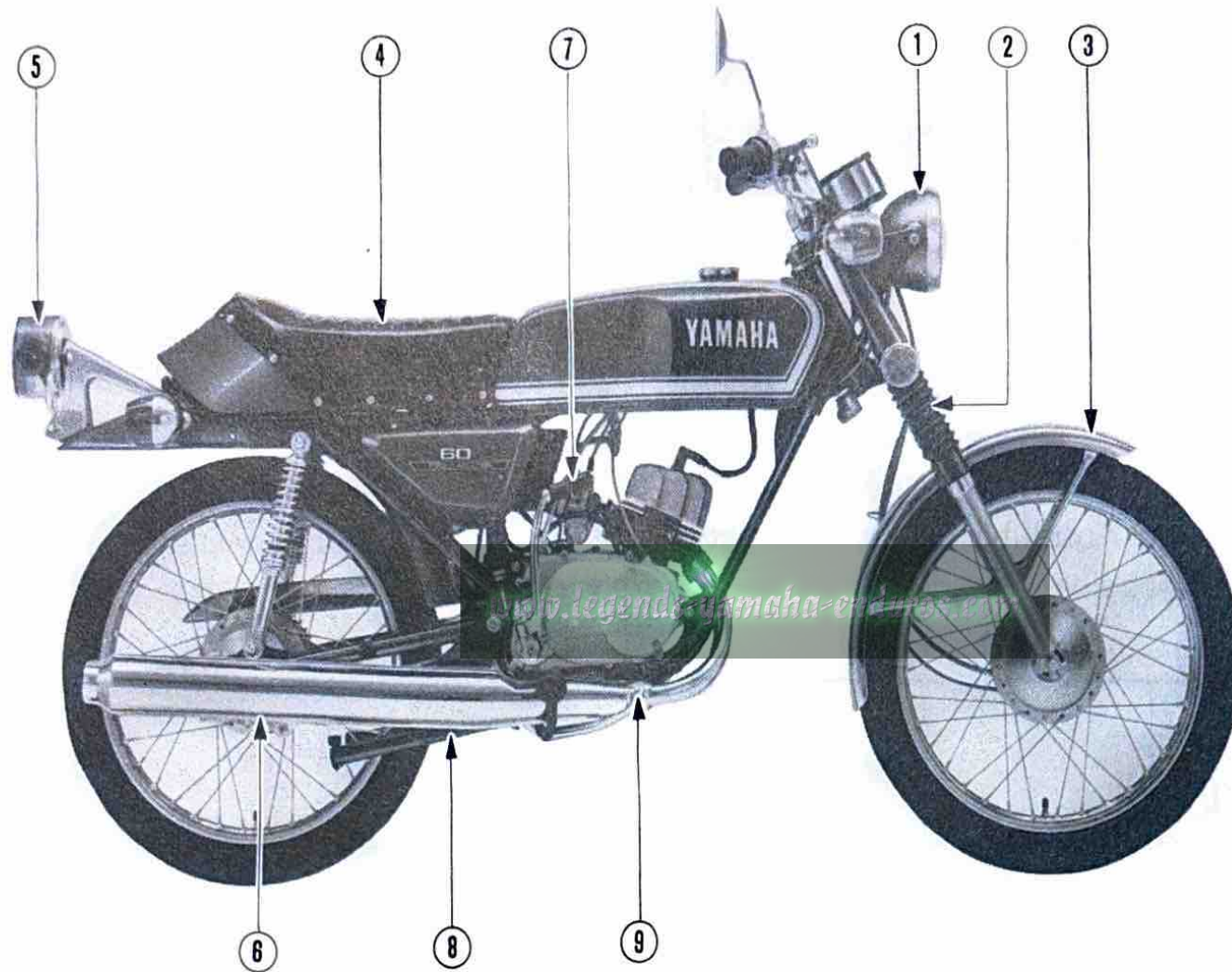
Diagram of Autolube operation

AUTOLUBE MERITS

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 the engine compression as a brake, the oil injection continues according to the engine rpm, even though the throttle may be closed.
 7. Improves performance; not 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 (°F)	14	68
Temperature (°C)	-10	20
SAE (Be sure to use 2-stroke motor oil or motor oil.)	← 5W → ← 10W →	← 20W → ← 30W → ← 10W/30 (Multi-grade) →



① Head

② Front fork

③ Front fender

④ Seat

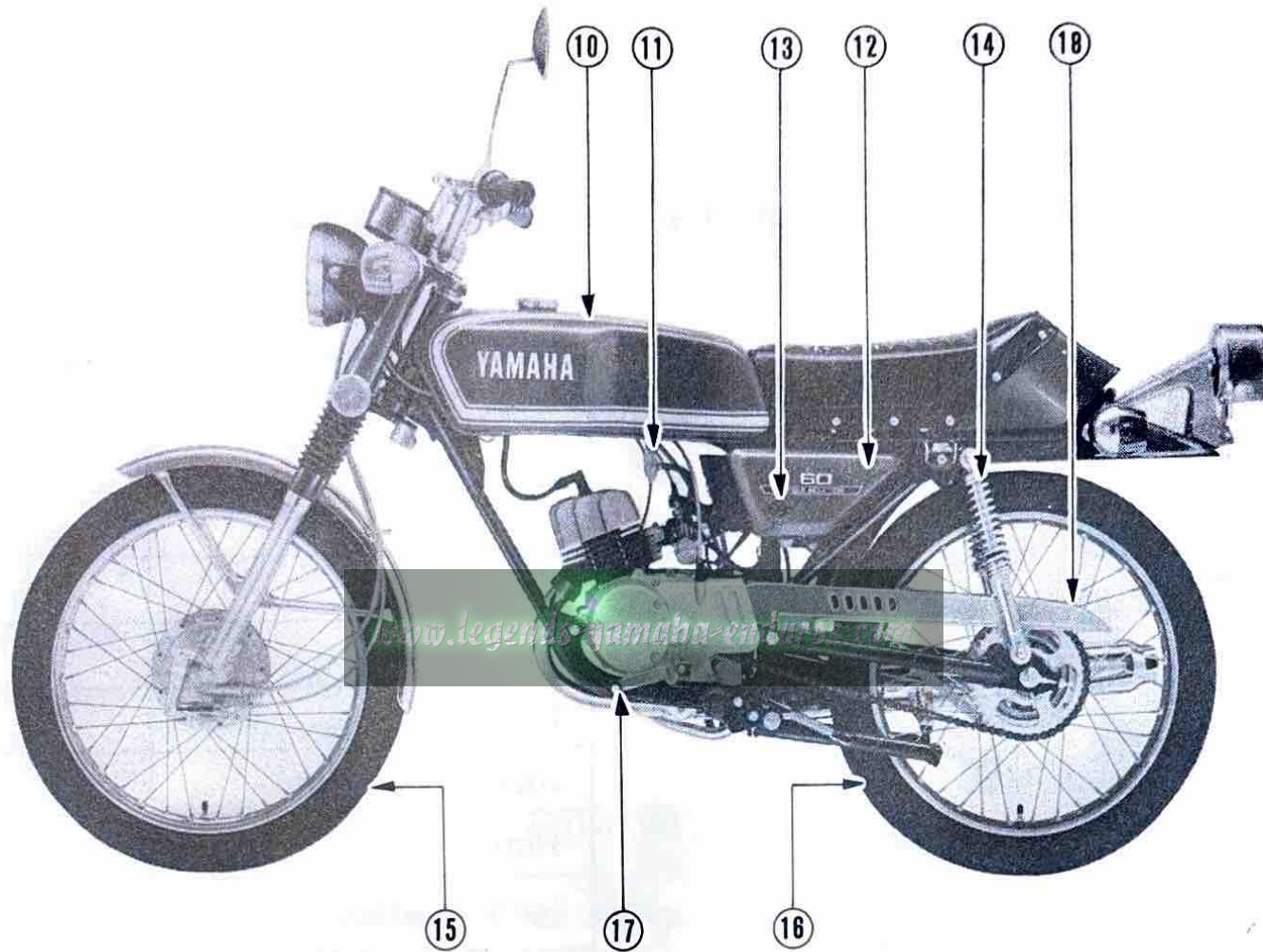
⑤ Taillight

⑥ Muffler

⑦ Kick crank

⑧ Main stand

⑨ Brake pedal



⑩ Gasoline tank

⑪ Fuel cock

⑫ Side cover (left)

⑬ Oil tank

⑭ Rear cushion

⑮ Front wheel

⑯ Rear wheel

⑰ Gear change pedal

⑱ Chain guard

OPERATING INSTRUCTIONS

WHAT YOU SHOULD KNOW

a) Main switch

The following chart shows the key position at which the lights and horn are switched on. (The circle (○) denotes switch "ON")

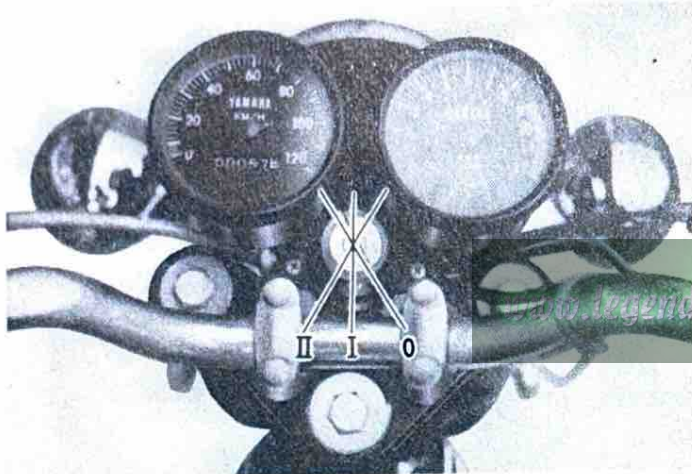


Fig. 1

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 cock

Turn the fuel cock lever to OPEN position and let fuel flow into the carburetor. If you run low of gas 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.

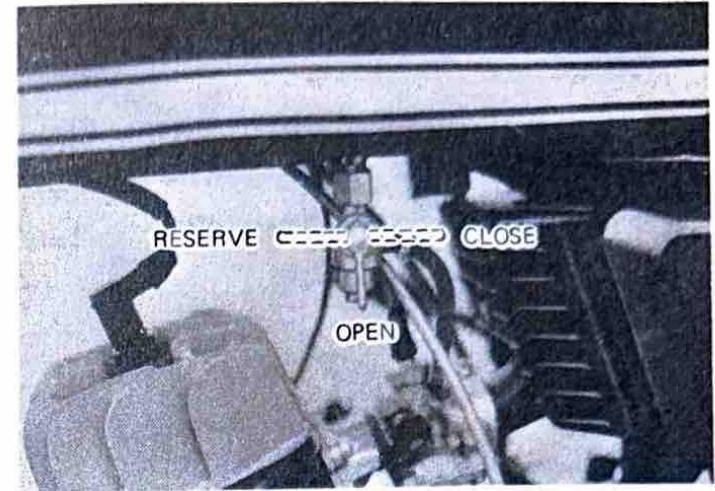


Fig. 2

c) Left handlebar switch

Horn button

Press button (a) to sound the horn.

Headlight switch

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

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

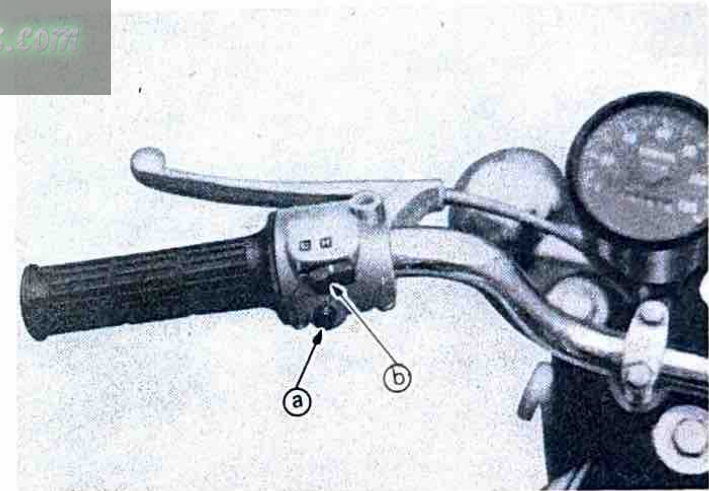


Fig. 3

d) Right handlebar switch

Flasher switch

To light the left flasher lights, push switch (a) to the left, and to light the right flasher lights, push the switch to the right.

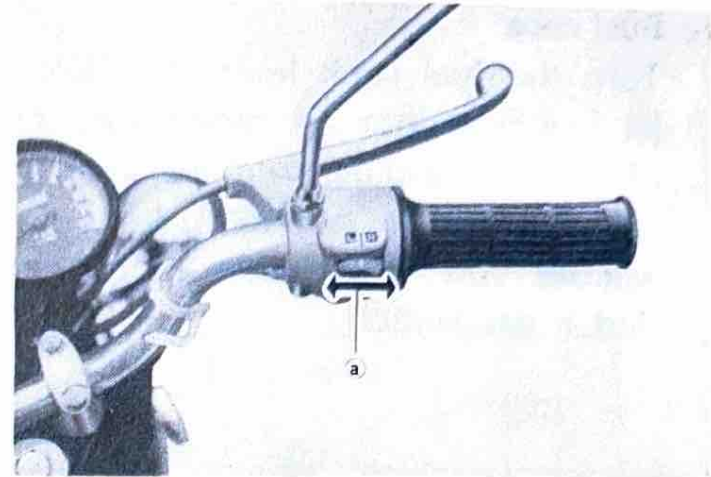


Fig. 4

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.

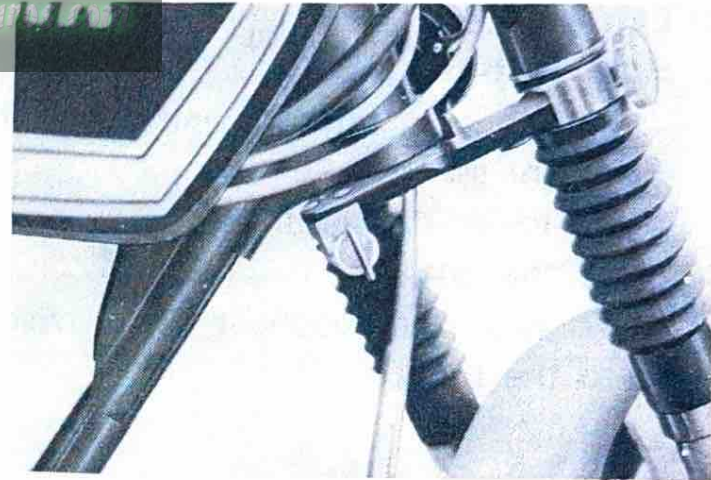


Fig. 5

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 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 and
- 2) When it reaches the middle of viewport in the Autolube tank you can add a full quart of oil.

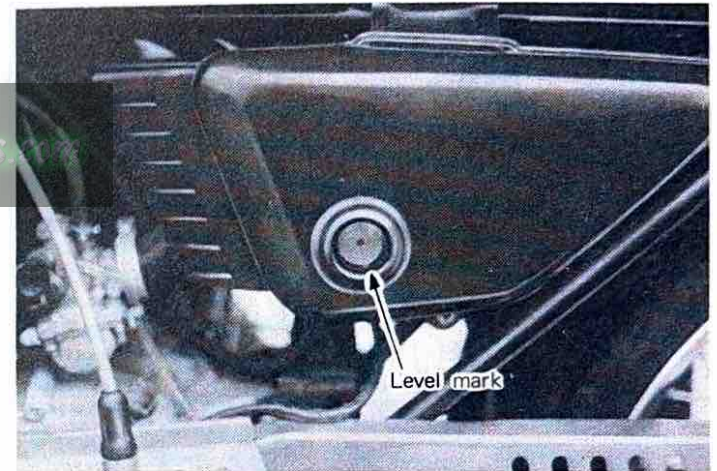


Fig. 6

c) **Tire pressure**

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

Front tire	20 lbs/in ² . (1.4 kg/cm ²)
Rear tire	28 lbs/in ² . (1.9 - 2.0 kg/cm ²)

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 head-light, taillight and speedometer light for proper operation.

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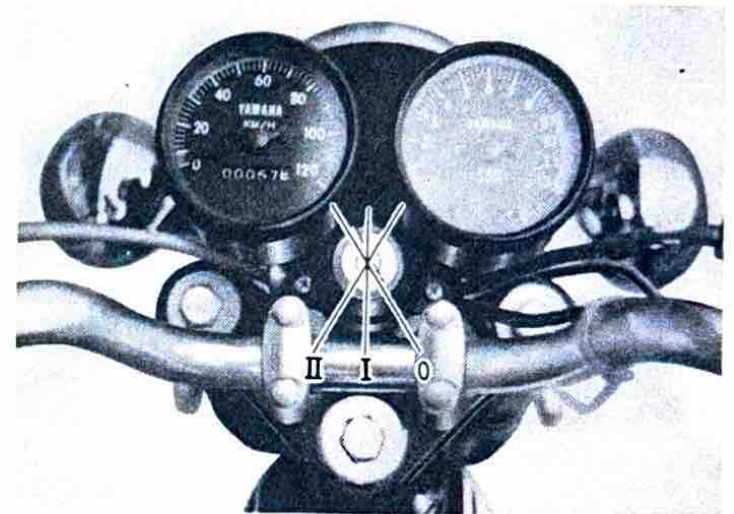


Fig. 7

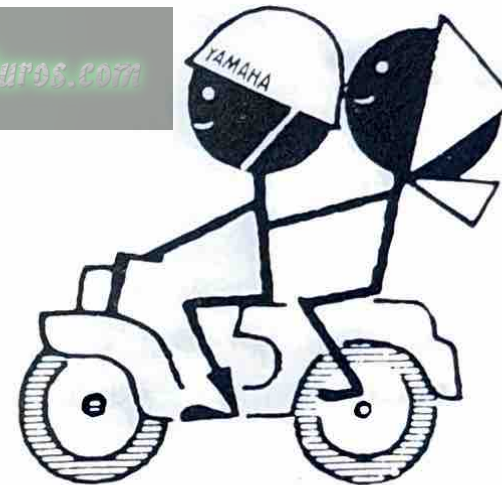
RIDING ESSENTIALS

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

a) Starting the engine

- 1) Turn the gasoline fuel cock to OPEN position.
- 2) Turn on the main switch.
- 3) Leave the accelerator grip closed, straddle the machine, and push down the kick starter crank once or twice until your engine starts.

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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 lever,

(Fig.8)

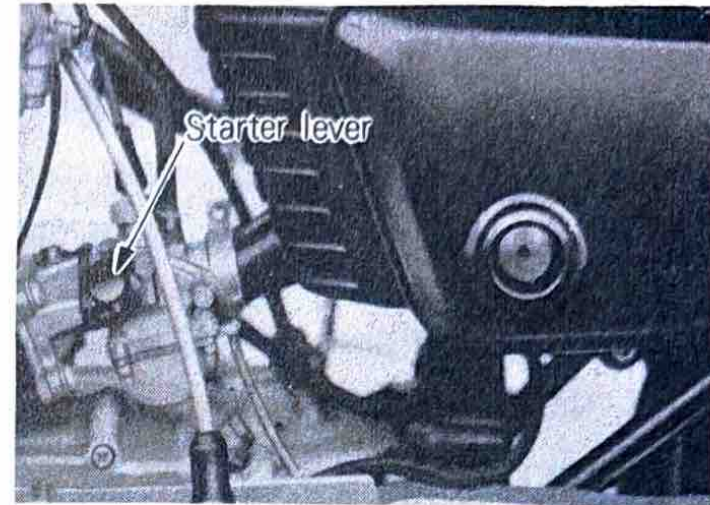


Fig. 8

5) Warming up

When the engine starts, open the throttle slightly to keep it running, but don't close the starter lever. The engine warm up is complete when you can close the starter lever and rev up the engine quickly with a twist of the throttle.

6) Starting when the engine is warm.

a) Leave the starter lever closed.

b) Hold the throttle open $\frac{1}{4}$ to $\frac{1}{2}$ turn

(Fig.9) and push down on the kick starter crank with your foot.

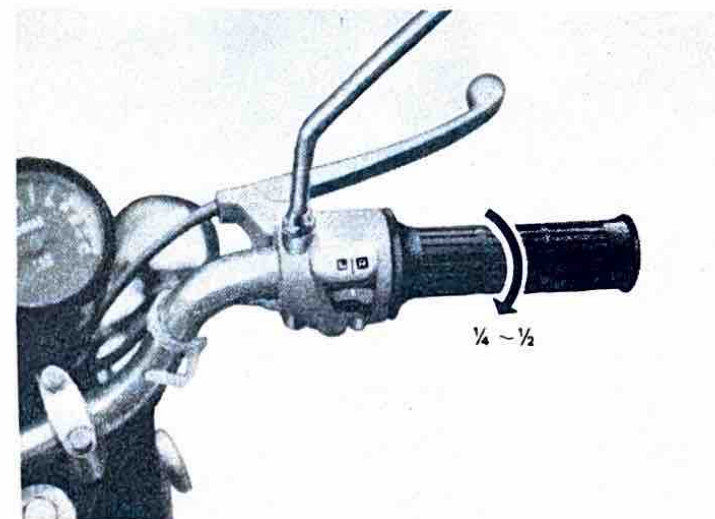


Fig. 9

RIDING

1) Shifting gears

Your Yamaha RD60 has a 5-speed transmission to provide a correct balance between speed and power under varying riding conditions. To shift into neutral, move the toe section of the change pedal downward and then raise it slightly to the neutral detent.

The neutral position is between the first and the second gear position. The use of the change pedal is illustrated below.

FIFTH
FOURTH
THIRD
SECOND
NEUTRAL
FIRST

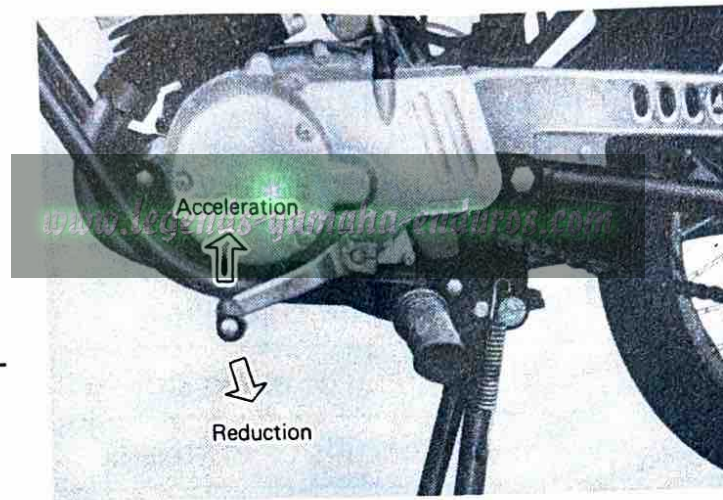


Fig. 10

2) After you start the engine

a) Squeeze the clutch lever to disengage the transmission from the engine.

b) Press the gear change pedal down into FIRST.

c) Gradually open the throttle and slowly release the clutch lever to get your machine moving.

3) Shifting Gears

a) At 5 - 6 mph (10km/h), close the throttle and, at the same time, squeeze the clutch lever;

b) then shift to SECOND 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 FIRST.

Keep the throttle closed and slowly release the clutch lever.

Gear	Power	Speed	Use	Optimum speed
1st	High	Slow	Starting or hill climbing	12 mph (0~20 km/h)
2nd	Medium	Medium	Hill climbing or going slowly	12~22 mph (20~35 km/h)
3rd	Medium	Medium	On easy uphill or in streets	22~32 mph (35~50 km/h)
4th	Low	Fast	On main roads	32~40 mph (50~65 km/h)
5th	Low	Fast	High-speed running	40 mph (65 km/h) or more

NOTE: THESE SPEEDS ARE RECOMMENDED FOR AFTER THE BREAK-IN PERIOD. FOR BREAK-IN RECOMMENDATIONS SEE PAGE 23.

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 THIRD to SECOND or from SECOND to FIRST, to maintain engine RPM and power.

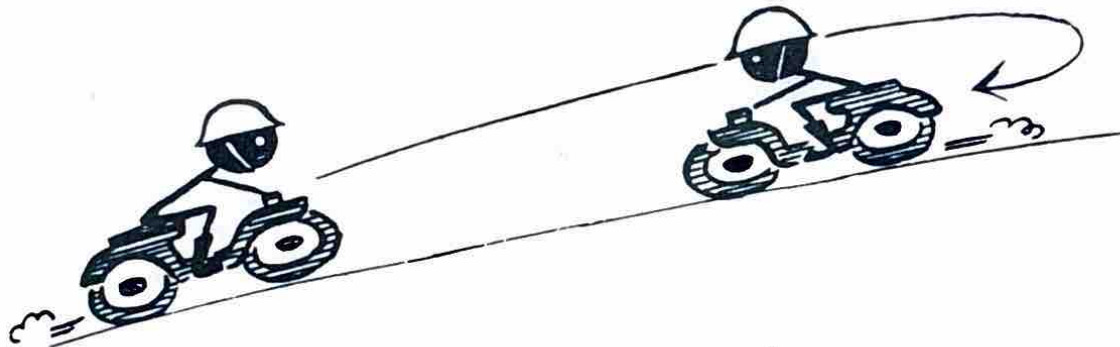
2) Downhill

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 SECOND or FIRST, depending on the grade. Use the same gear for riding down a hill as you would use for climbing the same hill.

CAUTION:

Never turn off the main switch when riding down a long hill; it will foul the sparkplug and impair the engine performance.

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(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 14).
- b) Remove the main switch key.
- c) Turn the fuel cock to the STOP position.

NOTE: Be sure to observe parking regulations. www.yamaha-enduros.com
Park your machine where it will be protected.

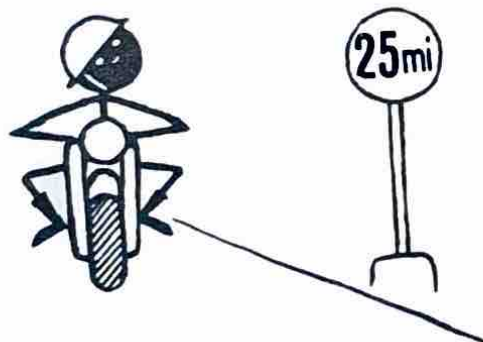
BREAKING-IN YOUR NEW MOTORCYCLE

The YAMAHA RD60 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.

- Up to 300 miles (500 km) ride at 37 mph (60 km/h) or less.
- From 300 to 600 miles (500-1,000 km), ride at 44 mph (70 km/h) or less in 5th gear.

BREAKING SPEED LIMIT FOR EACH GEAR

Odometer mileage	5th	4th	3rd	2nd	1st
Up to 300 miles (500 km)	37 mph (60 km/h)	31 mph (50 km/h)	25 mph (40 km/h)	19 mph (30 km/h)	8 mph (15 km/h)
300~600 miles (500~1,000 km)	44 mph (70 km/h)	37 mph (60 km/h)	28 mph (45 km/h)	22 mph (35 km/h)	12 mph (20 km/h)



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 25 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 300 and 1,000 miles, (500 and 1,500 km) have your Yamaha Dealer inspect and adjust your machine as indicated in the list page.

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CHECK POINTS AT YAMAHA DEALER

No.	Check Points	RIDING DISTANCE			
		300miles (500km)	1000miles (1500km)	2000miles (3000km)	4000miles (6000km)*
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	○	○	○	○

* Every 2000 miles (3000 km) thereafter

b) Periodic Inspection

In addition to the check points listed on page 25, the following parts should be cleaned and/or adjusted by the owner every 300 miles (500 km) before every long distance trip, for 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 play	28,29
2	Clutch	Adjust cable slack	30
3	Transmission oil	Check amount of oil, replenish, if necessary	31
4	Battery	Check battery fluid, replenish, if necessary	32
5	Sparkplug	Clean or adjust point gap	33
6	Air Cleaner	Clean	34
7	Drive Chain	Adjust and apply oil	35
8	Other Parts	Tighten bolts and nuts	37

PERIODIC INSPECTION USING SERVICE TOOLS

Identification of metric tools:

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

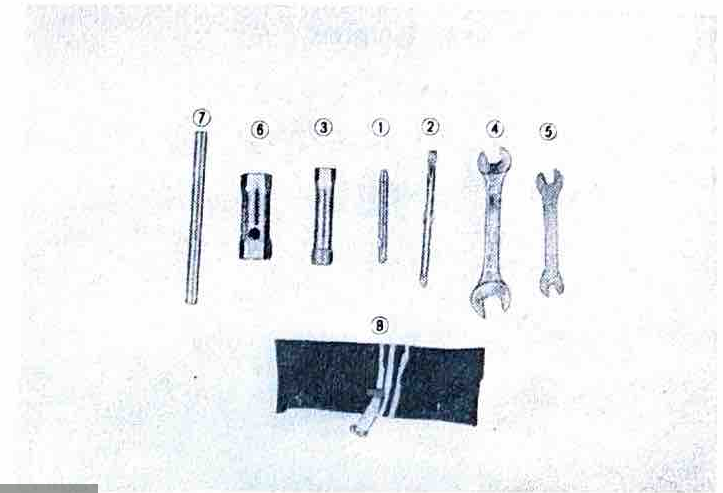


Fig. 11

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

MAINTENANCE

1) Adjusting the brakes

a. Front brake

- (1) Adjust by turning the adjusting nut at the end of the brake cable a halfturn at a time (loosen to remove slack).
- (2) The proper brake lever free play is $3/16$ to $5/16$ in. (5 ~ 8mm)

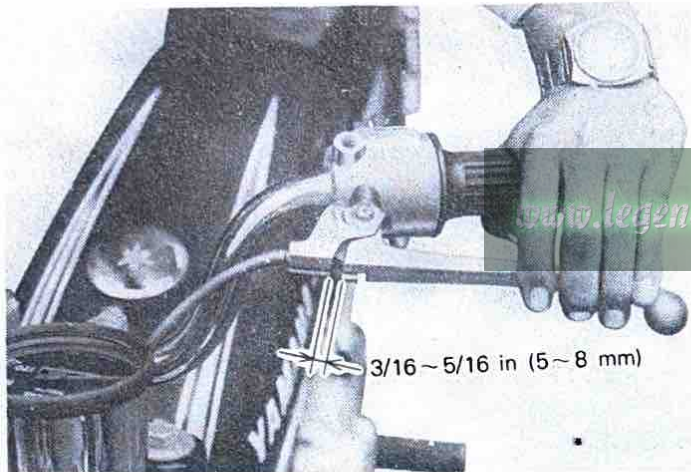


Fig. 12

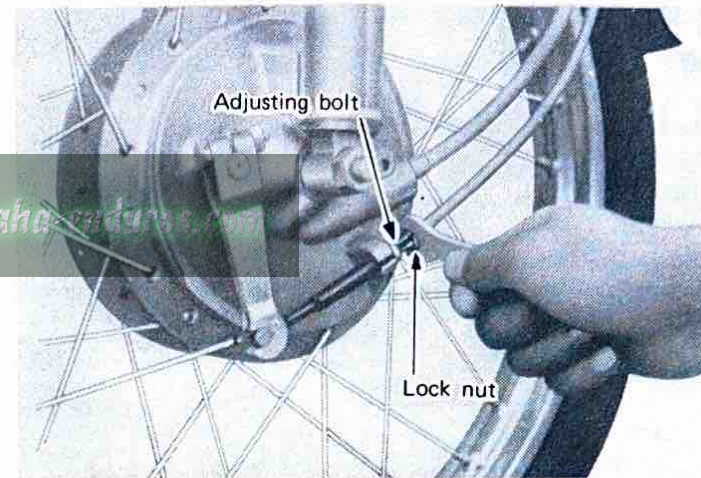


Fig. 13

b. Rear brake

- (1) Adjust by turning the adjusting nut at the end of the brake rod a half turn at a time (tighten to remove slack).
- (2) The proper amount of free play for the brake pedal is 1 in. to 1¼ in. (25 mm to 30 mm)

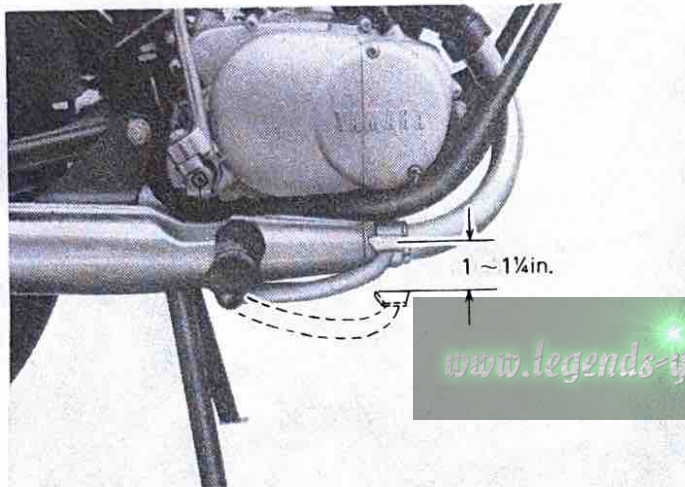


Fig. 14

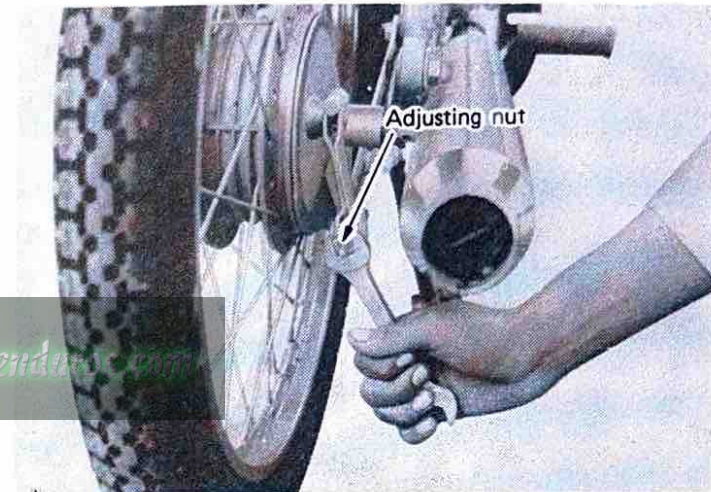


Fig. 15

2) Adjusting the clutch

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

With excessive lever play, the clutch will not completely engage, and slipping will occur.

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



Fig. 16

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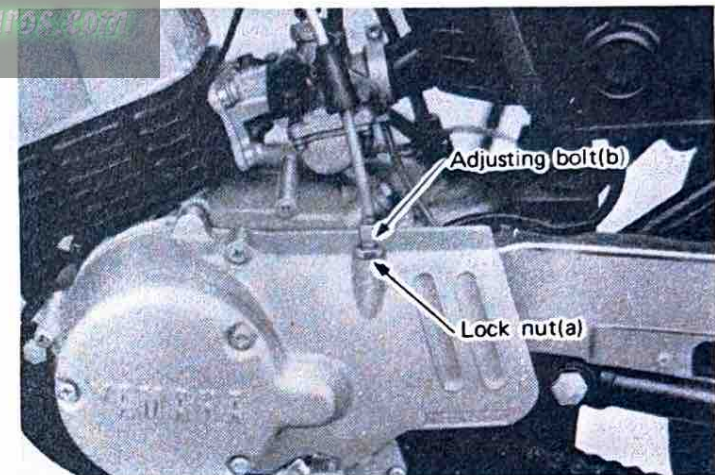


Fig. 17

3) Checking and changing 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)

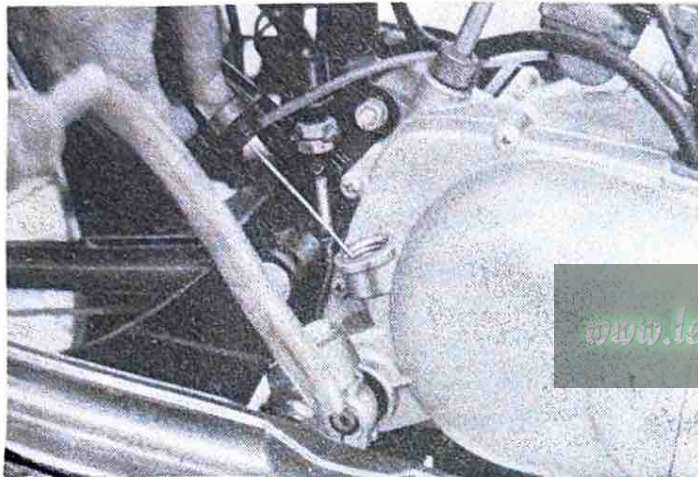
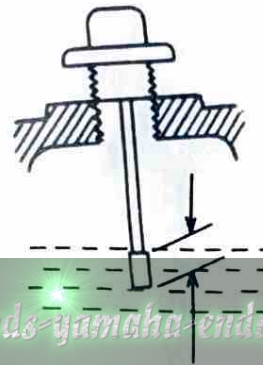


Fig. 18



Keep the oil level
between these levels.

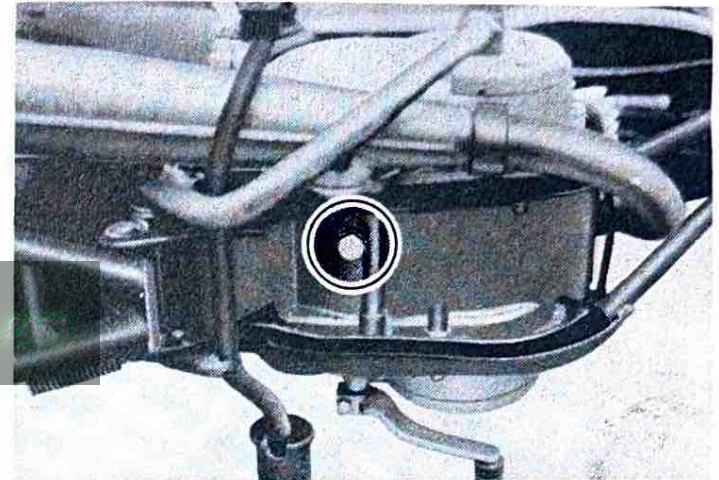


Fig. 19

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 ~ 650cc (0.64 ~ 0.68qt.) 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 levels should be always between the maximum and minimum levels as illustrated.

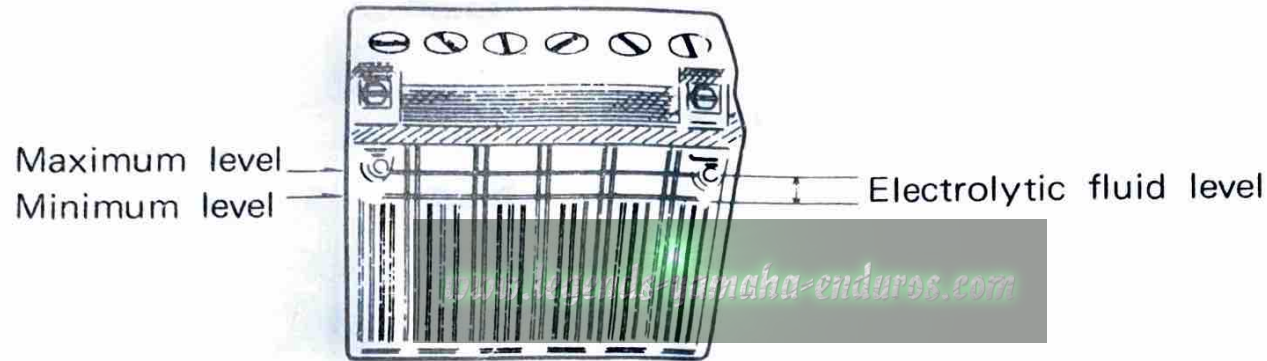


Fig. 20

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. The 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 electrode with a wire brush or fine sandpaper.
- c) Check the gap between the electrodes (See Fig.22)
- d) The plug is correct for your engine's present operating conditions if the porcelain around their center electrodes is a light tan color. If the porcelain is covered with carbon, change to hotter-type plug. If the porcelain is burned white, install colder-type plug. Spark plug heat range requirements differ with individuals' riding habits, so consult your dealer before you switch plug. For example: if your standard B-7HS plug is covered with carbon, as some times during early break-in, your dealer may suggest hotter-type B-6HS plug.

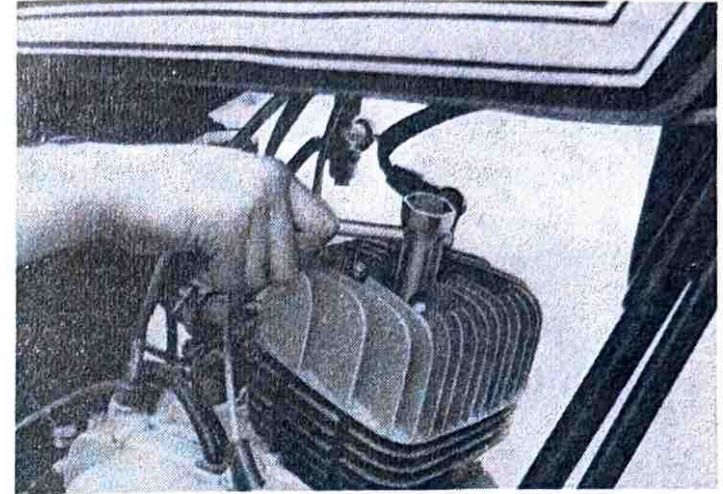
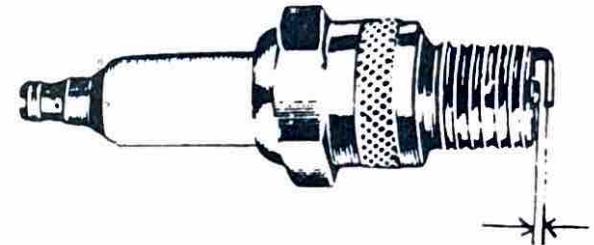


Fig. 21



0.020 ~ 0.024 in. (0.5 ~ 0.6 mm)

Fig. 22

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 side cover, then remove the cleaner case cap.
- b) The cleaner element can be pulled out.

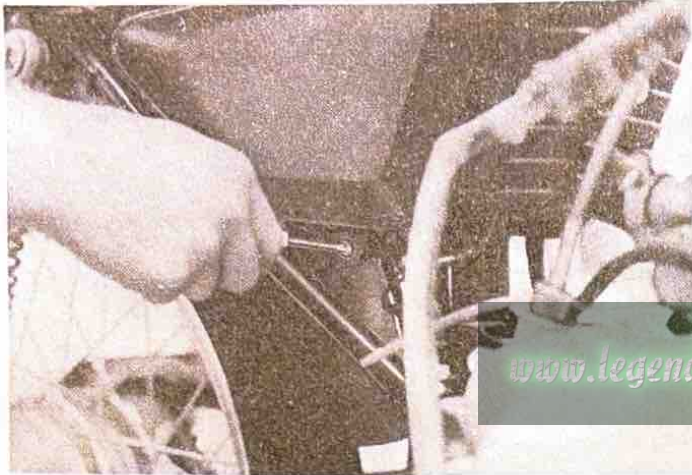


Fig. 23

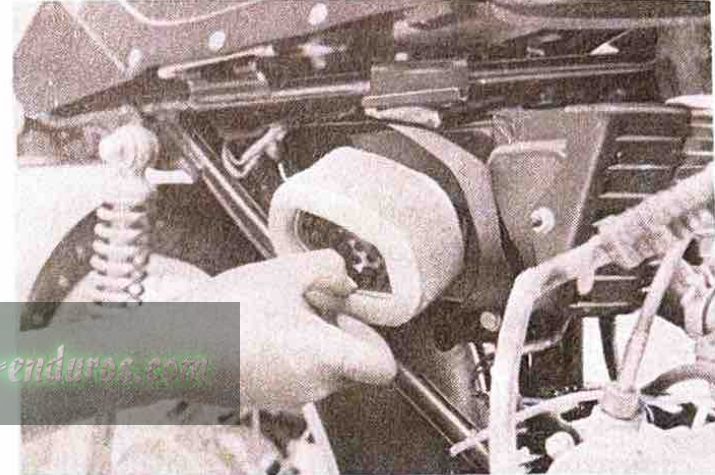


Fig. 24

Wash the foam filter thoroughly in solvent until all dirt has been removed. Squeeze all the solvent out. Pour oil onto the filter (any grade of 20 or 30 wt), work it completely in, and then squeeze out the surplus oil. The filter should be completely impregnated with oil, but not "dripping" with it. Under no circumstances should you run the motorcycle without the air filter. First, dirt and dust will be able to pass through into the cylinder. Premature engine failure will be the result. Secondly, more air will flow to the engine and there will not be enough gasoline for all the air. The lean mixture will result in higher engine temperatures and possibly severe engine damage.

7) Adjusting the drive chain

- a) Move the chain up and down to check chain play (Fig. 25) with the rear wheel on the ground. If total play is more than $7/8$ inch, adjust it to no less than $5/8$ inch. (20 mm)
- b) Loosen the rear wheel outside axle nut (a) with the 17 mm wrench.
- c) The loosen the inner axle nut (b) with the 23 mm wrench and screwdriver.



Fig. 25

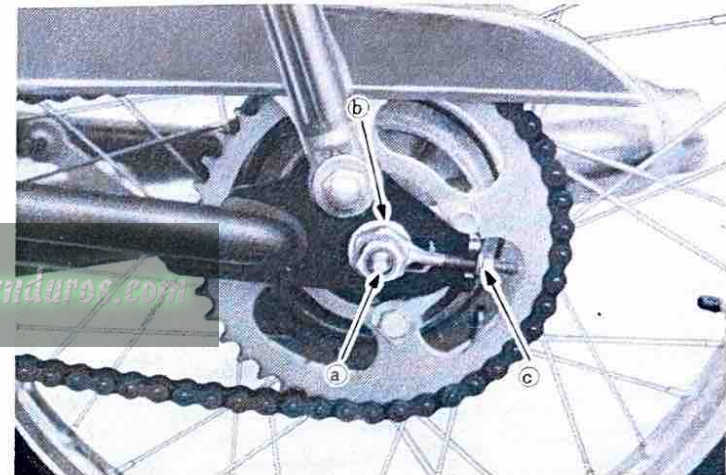


Fig. 26

- d) Tighten the 10mm adjusting nut (c) to increase chain play, loosen them knock the wheel rearward to decrease play. Adjust both adjusting plates to equal marks on the swing arm.
- e) After adjustment, tighten nut (c), then nut (b) and nut (a).

- f) Readjust brake pedal play to 1-1¼ inches (25 ~30mm).
- g) 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 case
Steering arm shaft	Chain guard
Shock absorber units	Handle lever holders
Handlebars	Crankcase covers
Footrests	Cylinder heads
Center and side stands	Carburetors
Muffler	Air cleaner cover
Seat	Others

OTHER PERIODIC MAINTENANCE

1) Cleaning the muffler

Carbon coated exhaust pipe and muffler can cause power loss, power acceleration, and overheating. Remove the screw holding the inner baffle out with pliers. Scrape off carbon with a wire brush. Remove hard-to-reach carbon by tapping the baffle on a hard surface.

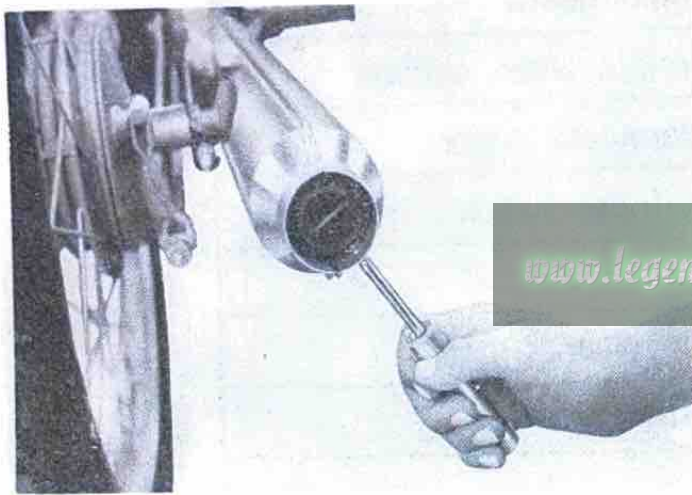


Fig. 27

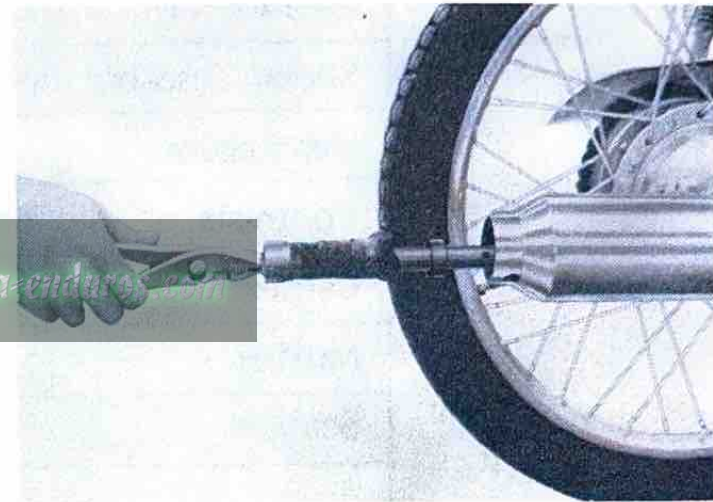


Fig. 28

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 10mm socket wrench. (Fig.29) Pull off the heads and scrape the carbon from combustion chamber.
- b) Move 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 in gasoline.

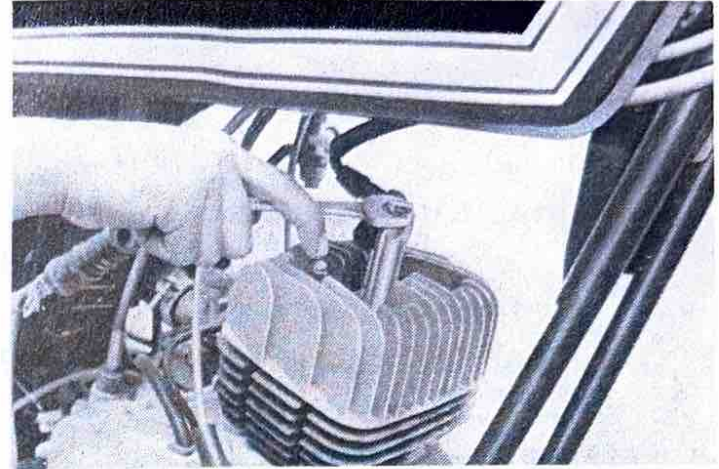


Fig. 29

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.

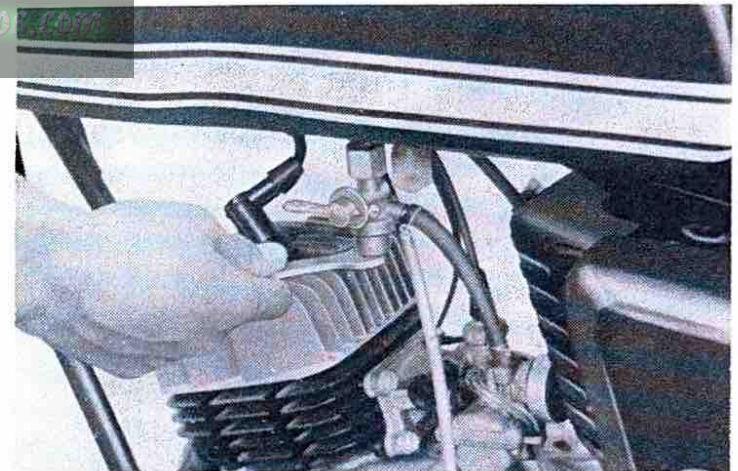


Fig. 30

4) Wheel Removal

Wheel removal is necessary to repair the falt tires.

a) Front wheel

- (1) Remove the brake cable and speedometer cable from the brake backing plate. (Fig.31)
- (2) Remove the 17 mm nut on the right side of the axle.
- (3) Pull out the axle from the left side.

b) Rear wheel

- (1) Remove the 13 mm adjusting nut at the end of the brake rod.
- (2) Remove the cotter pin and the bolt holding bar to the hub. (Fig.33)
- (3) Unscrew the outer and inner axle nuts and pull out the axle from the right side.
- (4) Pull the wheel to the left to separate its hub. Leave the sprocket and hub clutch on the swing arm.

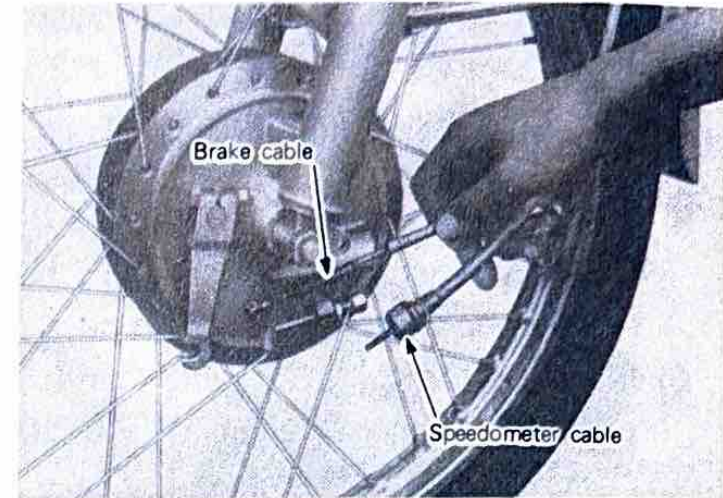


Fig. 31

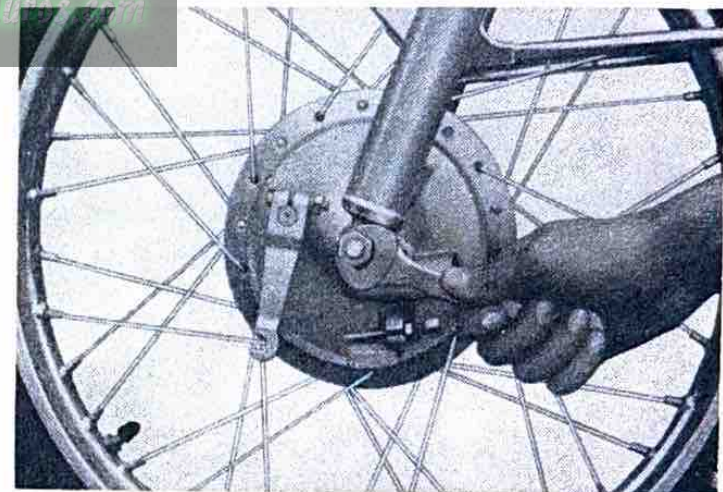


Fig. 32

5) Headlight beam adjustment

If your headlight does not suit your in its present position, simply adjust its position.

- a) Loosen the mounting nuts in the right and left headlight brackets, and pivot the headlight up or down while you are sitting on the motorcycle. (Fig.34)
- b) Position the headlight where its beam is most effective, then carefully tighten both nuts.

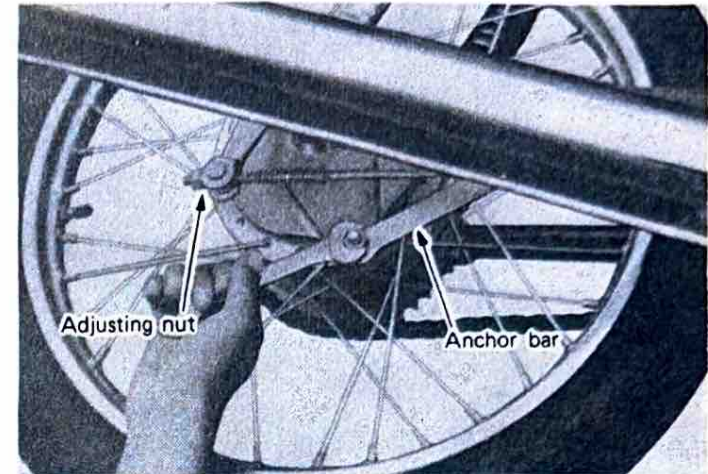


Fig. 33

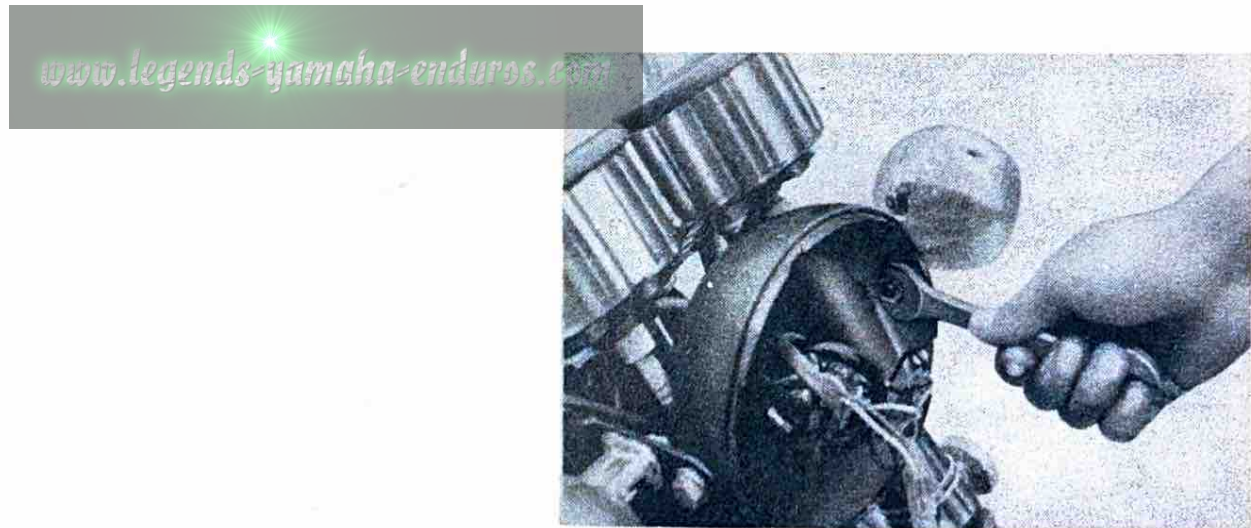


Fig. 34

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 deversely affect the life and performance of your machine.

2. Troubleshooting

All Yamaha motorcycles undergo rigid factory tests to insure their reliability, but 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 lever.
4) Spark plug dirty	Remove and clean
5) Spark plug burned	Replace with colder-type plug
6) Wrong plug gap	Set gap to 0.020 ~ 0.024 in. (0.5 ~ 0.6 mm)
7) Spark plug damaged	Replace with new plug
8) Faulty magneto	Have a Yamaha dealer check and repair it.
<p>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.</p>	

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 because the clutch may be slipping. 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 specified 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.

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f. Other troubles.

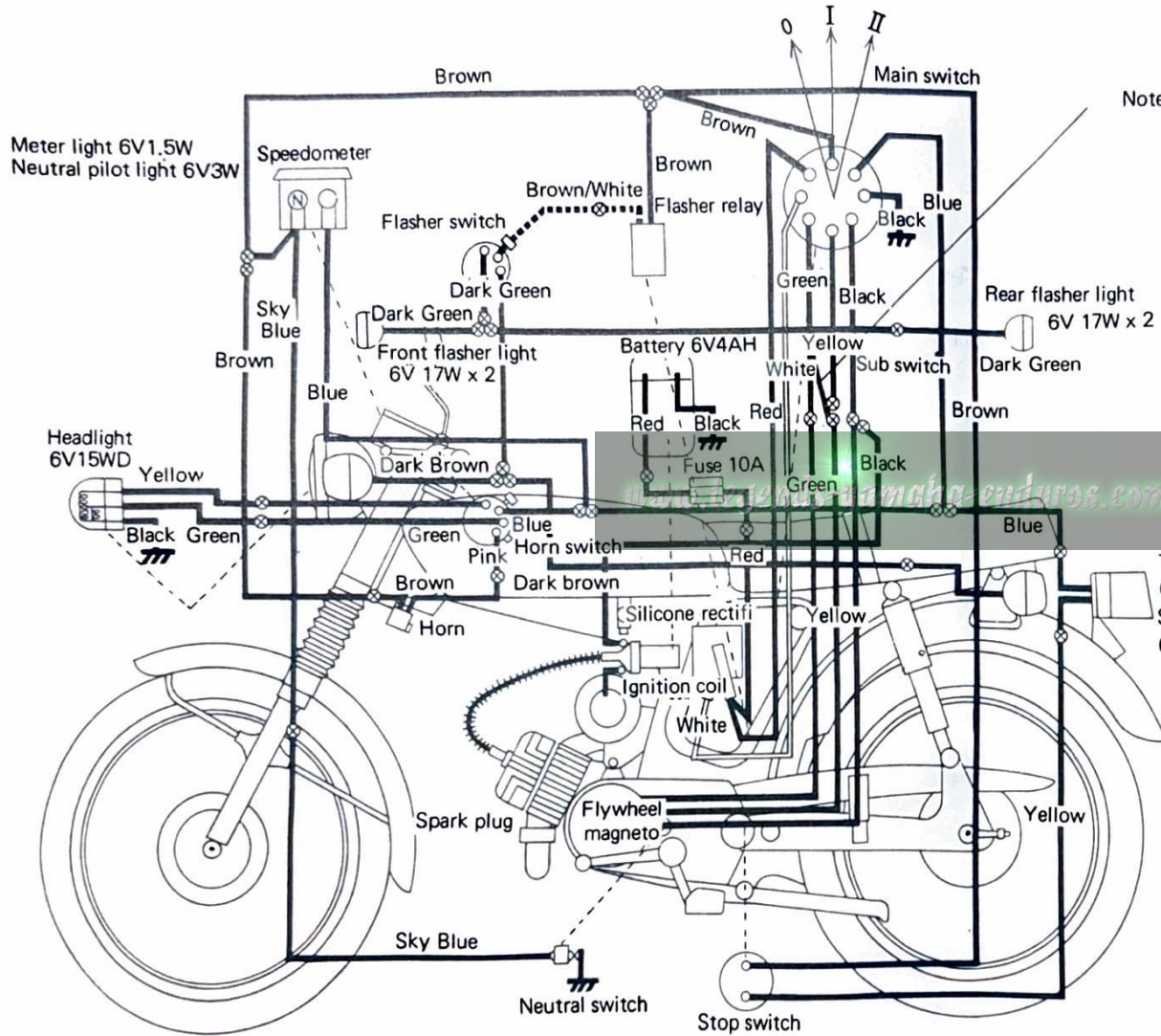
Consult your dealer for brake repair, hard steering, tendency to steer to one side, clutch slippage, hard starting, difficult shifting, or other major troubles.

10 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 pressure before every ride.
4. Warm up the engine for about one minute before riding.
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 23.)
7. Apply the front and the rear brake at the same time.
8. Down a long hill, use engine compression as a brake. (See page 21.)
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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YAMAHA RD60 CIRCUIT DIAGRAM



Note: If you often drive at slow speed or use the stop light and flasher light frequently, in other words, if the battery is rather discharged, you will do the following slight change in the circuit for the better changing. Connect the green lead wire of the main switch to the terminal of the yellow as illustrated in the circuit diagram with a dotted line.

Circuit connected by main switch

Color Position	Black-Earth	Green-White	Yellow-White	Yellow-Blue	Red-Brown
0	○	×	×	×	×
I	×	○	×	×	○
II	×	×	○	○	○

Chart of wire colors

Engine Stop Circuit	Black
Magnet (for day driving) Circuit	Green
Magnet (for night driving) Circuit	Yellow
Battery (+) Circuit	Red
Earth Circuit	Black
Silicon Circuit	White
Stop Light Circuit	Yellow
Neutral Light Circuit	Sky Blue
Light Circuit	Blue
Flasher (R) Circuit	Dark Green
Flasher (L) Circuit	Dark Brown
Common Circuit	Brown
Head light Main Circuit	Yellow
Head light Sub Circuit	Green
Horn Circuit	Pink
Flasher Relay Circuit	White

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