YAMAHA

RD400C

OWNER'S MANUAL

1A1-28199-10

INTRODUCTION

Thank you for buying the Yamaha RD400C.

This model is the product of many years of Yamaha experience and strict Yamaha quality control. The resultant ease of handling, high performance and reliability promise you full pride of ownership.

This manual is written in such a way as to provide the owner with a good understanding of the features, operation, maintenance and inspection of this vehicle. All information required for safe and reliable use of the vehicle is contained in this manual, so read it carefully and completely before operating the vehicle. If you have any questions concerning the information, ask your dealer before operating the vehicle.

NOTICE:

Some data in this manual may become outdated due to improvements made to this model in the future. If there is any question concerning this manual, consult your nearby Yamaha dealer.

CONTENTS

FEATURES

Torque induction system
The torque induction system is a completely new air/fuel mixture intake method.
Intake efficiency is increased by the 7-port cylinder and reed valve assembly. This combination provides improved performance, especially at low and midrange r.p.m.

Starter equipped carburetor
The carburetor on this vehicle has a separate starter system. By merely operating the starter (choke) lever a rich mixture is supplied to the engine when starting.
This makes starting easy even in cold weather.

6 speed transmission
With 6 speeds, power is delivered efficiently to the rear wheel, providing excellent performance for all operating conditions.

Disc brakes
The large diameter disc brakes perform superbly high speeds. Braking is stable. The brakes feature automatic adjustments the pads wear. The pad is provided with a wear indicator so a glance tells you the condition of the brake without disassembly.

Rigid frame
The high tensile strength steel tubing, double cradle frame is nearly identical to the frame used for road racers. It is light but very rigid and provides excellent stability at high speeds.

Adjustable rear suspension
The rear spring preload can be adjusted to suit rider preference and riding conditions.

Large diameter headlight
The large diameter, large capacity sealed beam headlight illuminates a wide area for safer night time riding.

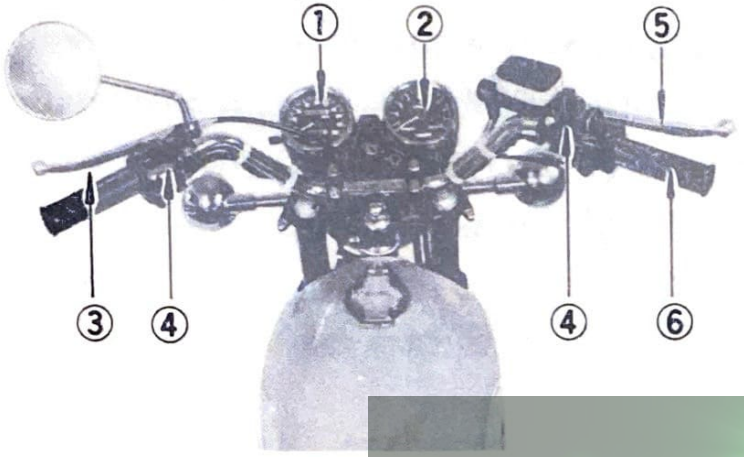
Symmetrical key

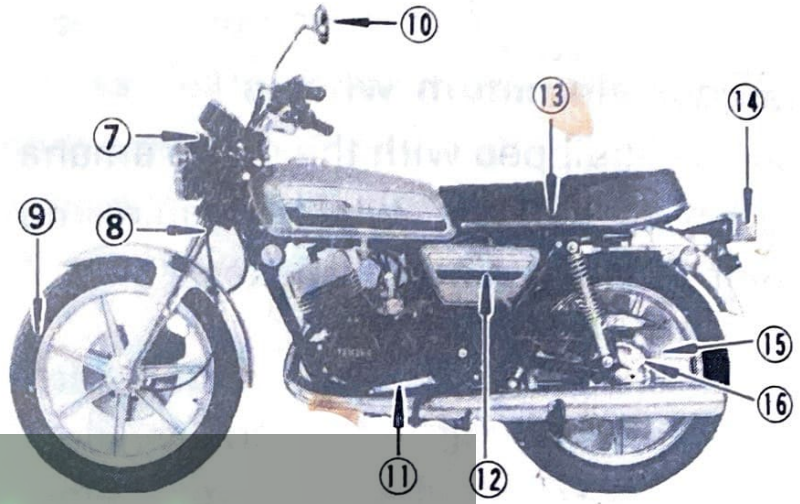
The key is the same on either side so it can be inserted either way.

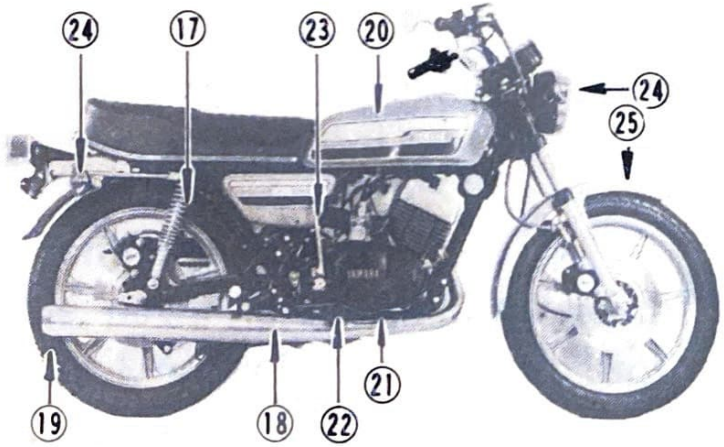
Yamaha cast aluminum wheels

This model is equipped with the new Yamaha cast aluminum wheels which require no adjustment or tightening of spokes.

NOMENCLATURE







1. Speedometer
2. Tachometer
3. Clutch lever
4. Handle switch
5. Brake lever
6. Accel. grip
7. Headlight
8. Front fork
9. Front wheel
10. Rear view mirror
11. Change pedal
12. Oil tank
13. Seat
14. Taillight
15. Chain
16. Sprocket wheel
17. Rear shock absorber
18. Muffler
19. Rear wheel
20. Fuel tank
21. Brake pedal
22. Footrest
23. Kick crank
24. Flasher light
25. Front fender

MACHINE IDENTIFICATION

Frame number

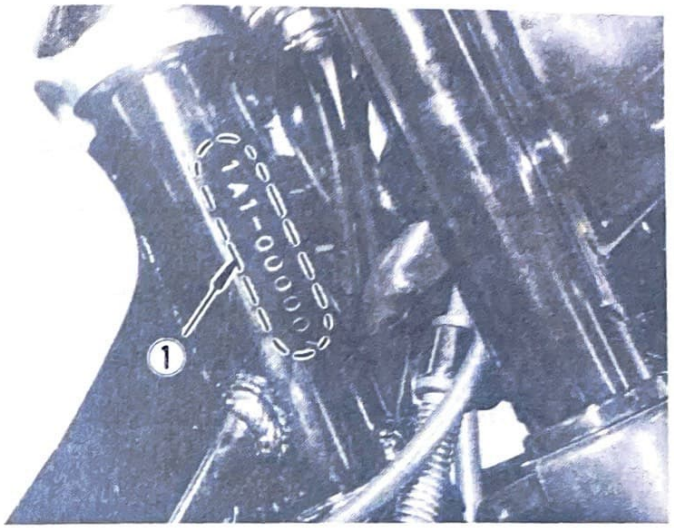
The frame number is stamped on the right side of the steering head pipe.

Engine number

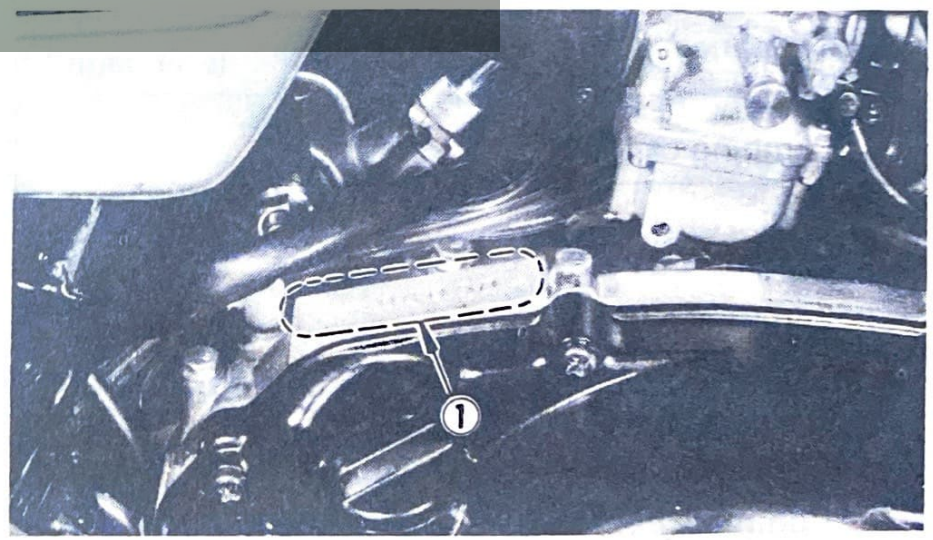
The engine serial number is stamped into the elevated part of the right rear section of the engine.

NOTE:

The first three digits of these numbers are for model identification; The remaining digits are the unit production number. The two serial numbers are usually identical but they may sometimes be 2 or 3 numbers apart.



1. Frame number



1. Engine number

SPECIFICATIONS

GENERAL SPECIFICATIONS

Model	RD400C
Dimension:	
Overall length	2,035 mm (80.1 in)
Overall width	830 mm (32.7 in)
Overall height	1,090 mm (42.9 in)
Wheelbase	1,315 mm (51.8 in)
Minimum road clearance	155 mm (6.1 in)
Weight:	
Dry	155 kg (342 lb)
Performance:	
Minimum turning radius	2,310 mm (90.9 in)
Climbing capacity	28°
Engine:	
Type	2 stroke, gasoline, "Torque induction"
Engine model	1A1
Cylinder	Two in parallel, Forward Inclined, Torque induction
Displacement	398 cc (24.29 cu.in)
Bore and Stroke	64 mm × 62 mm (2.5 × 2.4 in)
Compression ratio	6.2

Model	RD400C
Starting system	Kick starter system
Ignition system	Battery ignition
Gasoline tank capacity	13 lit (13.7 US.qt.)
Oil tank capacity	1.8 lit (1.9 US.qt.)
Transmission oil capacity	1,450 ~ 1,550 cc (1.55 ~ 1.65 US.qt.)
Lubricating system	Separate lubrication (Yamalube)
Battery capacity	12V. 5.5AH.
Battery type	AYT2-12/Furukawa
Generator system	AC. Generator
Generator type	AZ2015Y
Generator manufacturer	Mitsubishi
Spark plug	B-7ES N.G.K.
Carburetor	VM28SC
Air cleaner	Dry, paper filter
Transmission:	
Primary reduction system	Gear
Primary reduction ratio	2.869 (66/23)
Secondary reduction system	Chain
Secondary reduction ratio	2.245 (38/17)
Clutch	Wet, multi-disc type
Gear box type	Constant mesh, 6-speed forward
Operating system/type	Left foot operation/Return

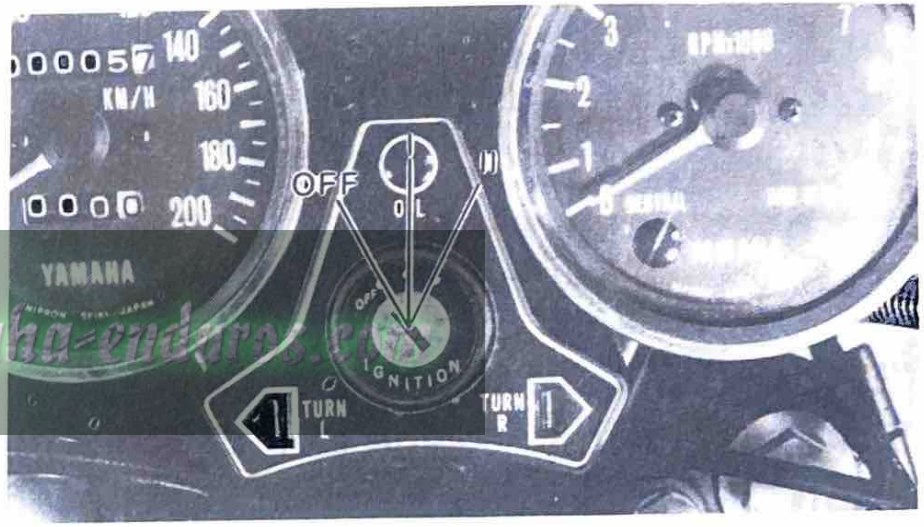
Model		RD400C
Gear ratio:	First	2.571 (36/14)
	Second	1.777 (32/18)
	Third	1.318 (29/22)
	Fourth	1.083 (26/24)
	Fifth	9.61 (25/26)
	Sixth	0.888 (24/27)
Steering:	Caster	62°30′
	Trail	109 mm (4.3 in)
Tire size:	Front	3.25S18—4PR
	Rear	3.50S18—4PR
Suspension:	Front	Telescopic fork
	Rear	Swing arm
Cushion:	Front	Coil spring, oil damper
	Rear	Coil spring, oil damper
Frame:		Tubular, double-cradle
Braking:	Front	Hydraulic disc
	Rear	Hydraulic disc

CONTROL FUNCTIONS

Main switch

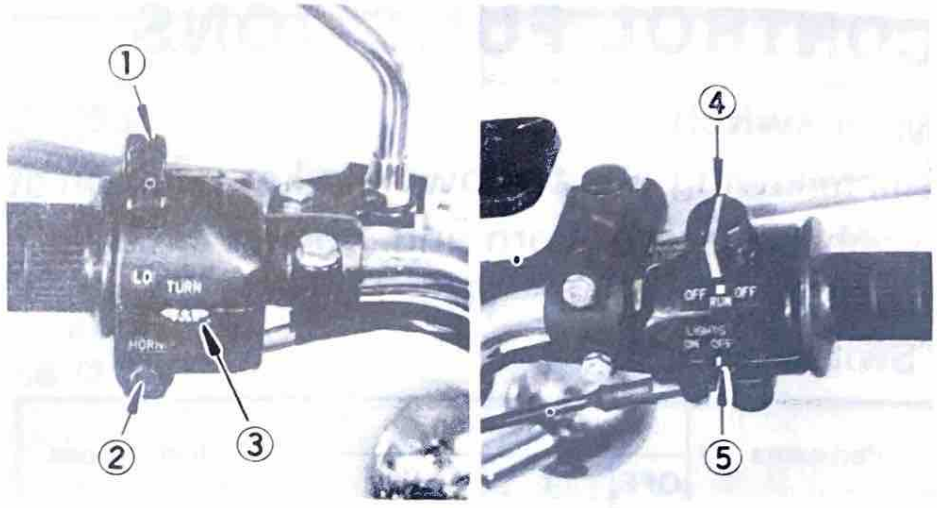
The following chart shows the key position at which the lamps, horn and ignition circuit are switched on or off: (The circle (○) denotes "Switch on".)

Part name	Key position					Instructions
	OFF	I		II		
Lights switch		ON	OFF	ON	OFF	Set the right handle-bar switch
Headlight		○		○		—
Taillight		○		○		Use II for night parking
Meter lights		○		○		—
Ignition circuit		○				Kick the kick crank to start the engine
Neutral light		○				The change pedal is in neutral
Brake light		○				The brake is applied
Flasher lights		○				Turn on the left handlebar switch
Horn		○				Press the horn button



Handle switches

The handle switches are located near the right and left handle grips (see illustration) and are used for the following functions:

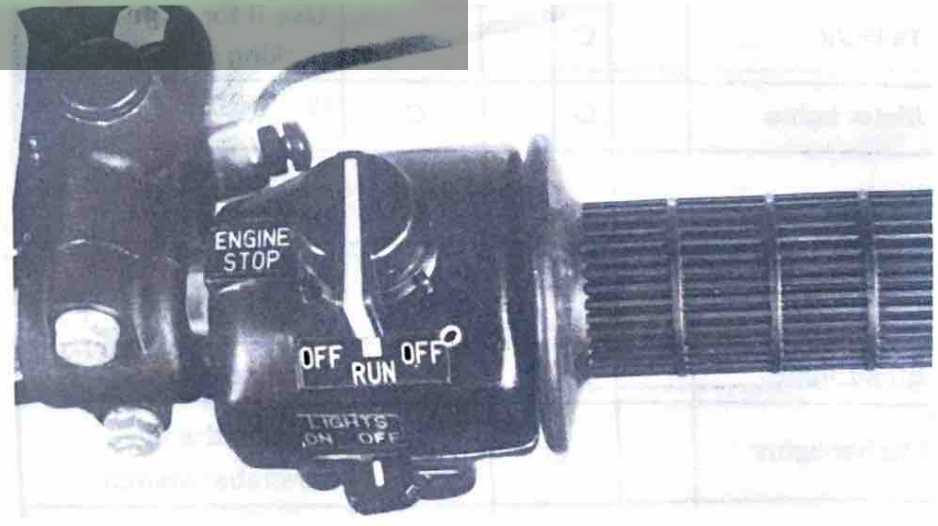


1. Dimmer switch
2. Horn button
3. Turn switch
4. Engine stop switch
5. Light switch

"ENGINE STOP" switch

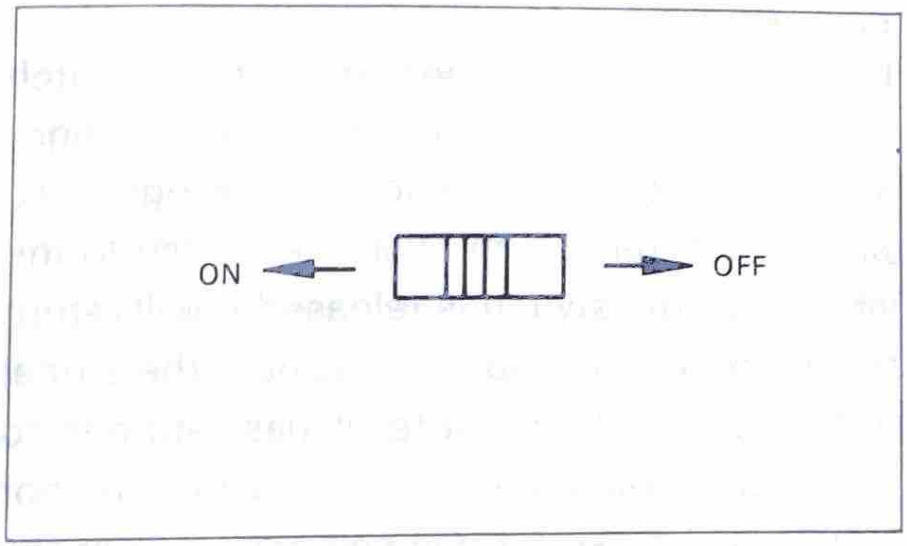
Make sure that the engine stop switch is on "RUN". The engine switch has been equipped to ensure safety in an emergency such as when the motorcycle is upset or trouble takes place in the throttle system.

The engine will not start when the engine switch is turned to "OFF".



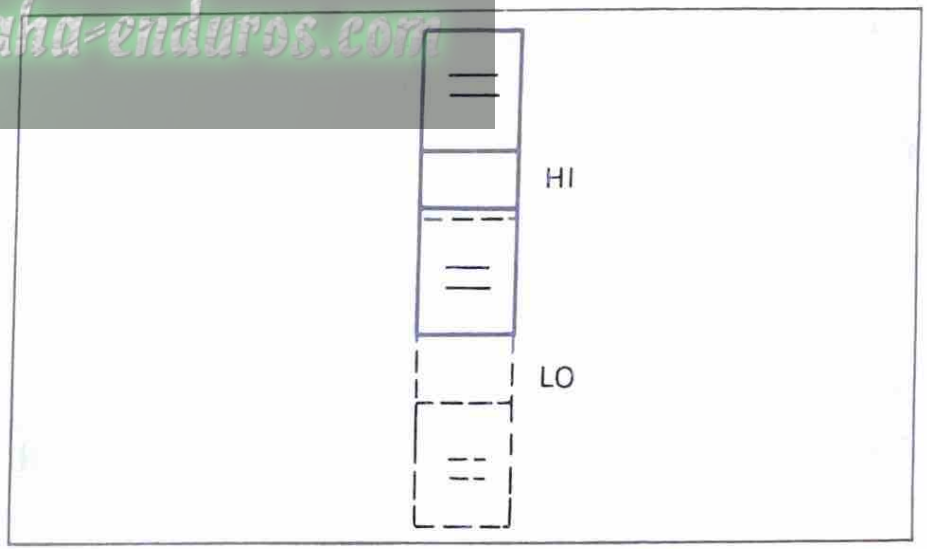
"LIGHT" switch

Turn the light switch to the ON position to turn on the headlight and the taillight.



"DIMMER" switch

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

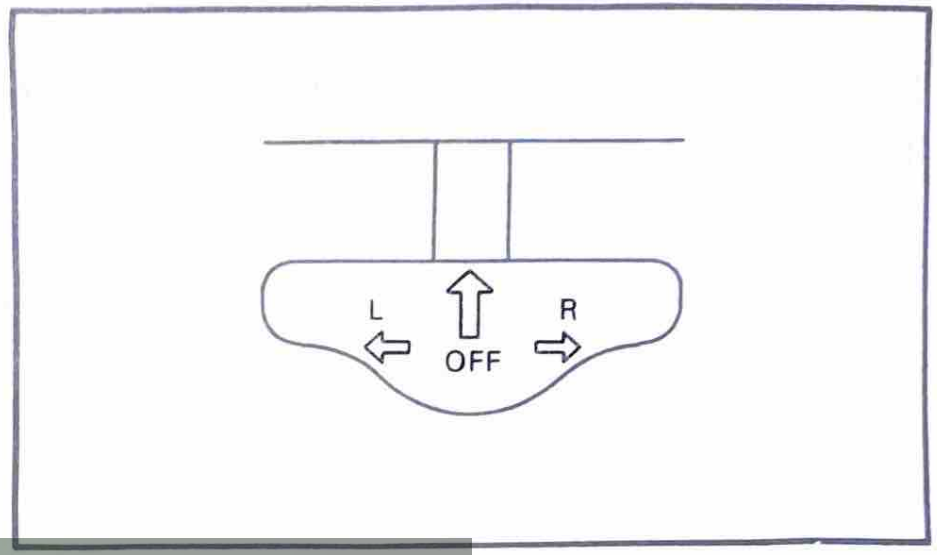


"HORN" switch

Press button to sound the horn.

Turn switch

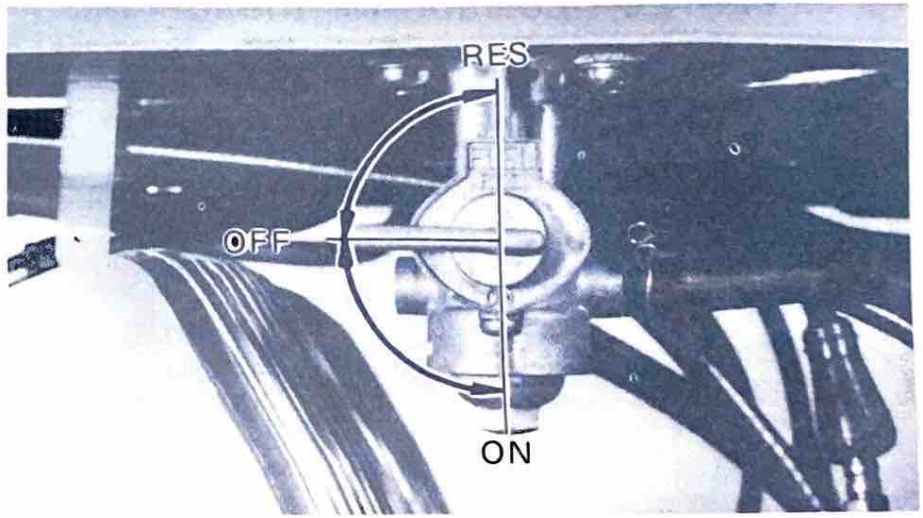
This model is equipped with turn switch that are self cancelling. To signal a right hand turn push the switch to the right. To signal a left hand turn push the switch to the left. Once the switch is released it will return to the center position. To cancel the signal push the switch "in" after it has returned to the center position. If the switch is not cancelled by hand it will self cancel after the machine has travelled for 10 seconds or 100 meters (328 feet), whichever is greater.



Fuel petcock

The fuel petcock conducts fuel from the tank to the carburetor and also filters the fuel.
The fuel petcock has the following three positions:

OFF: With the lever in this position fuel will not flow. Return the lever to this position when the engine is not running.



ON: With the lever in this position fuel flows to the carburetor. Normal driving is done with the lever in this position.

RES: This indicates reserve. If you run out of fuel while driving, move the lever to this position. Then, fill the tank at the first opportunity.

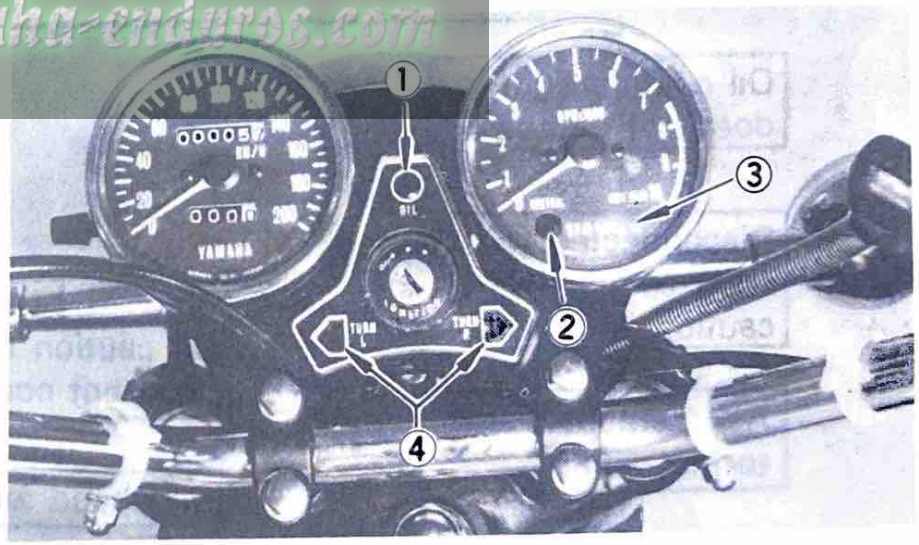
Indicator lights

Flasher pilot light (orange):

The pilot light flashes when the flasher switch is "ON".

Neutral light (green):

This light is located on the face of the tachometer and lights when the transmission is in neutral.



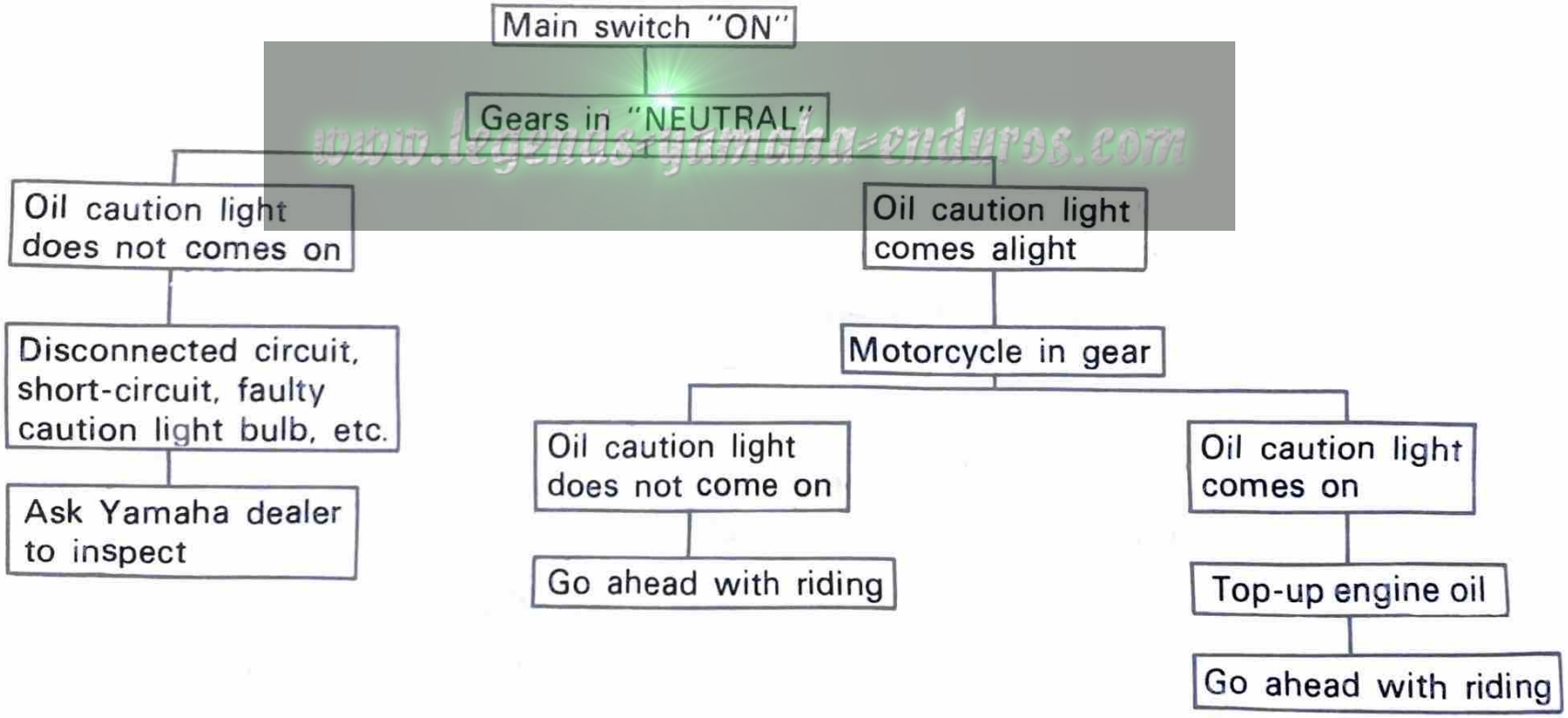
1. Oil caution light
2. Neutral light
3. High beam indicators
4. Flash

High beam indicator "BEAM" (blue):

This indicator lights when the headlight high beam is used.

Oil caution light "OIL" (red):

The light comes on when there is little oil in the oil tank, thus warning the rider. The rider can check the circuit for any disconnection by putting the machine in neutral. Both the neutral light and the oil caution light should come on.



Front brake lever

The front brake lever is located on the right handle bar; pivot it toward the handlebar to activate the front brake.

Rear brake pedal

The rear brake pedal is on the right side of the motorcycle.

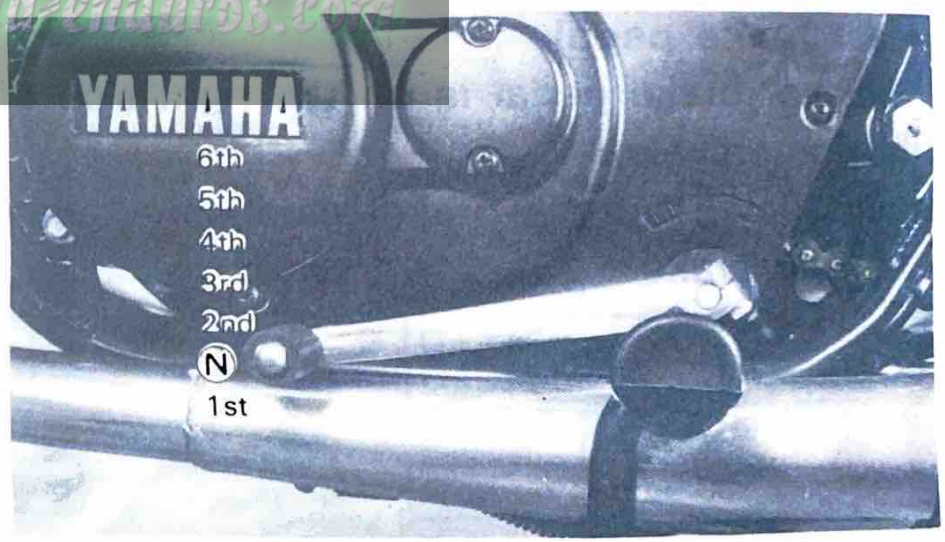
Press down on the brake pedal to activate the rear brake.

Clutch lever

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

Gear shifting

The gear rations of the constant mech 6 speed transmission are ideally spaced. The gears can be shifted by using the change pedal on the left side of the engine.

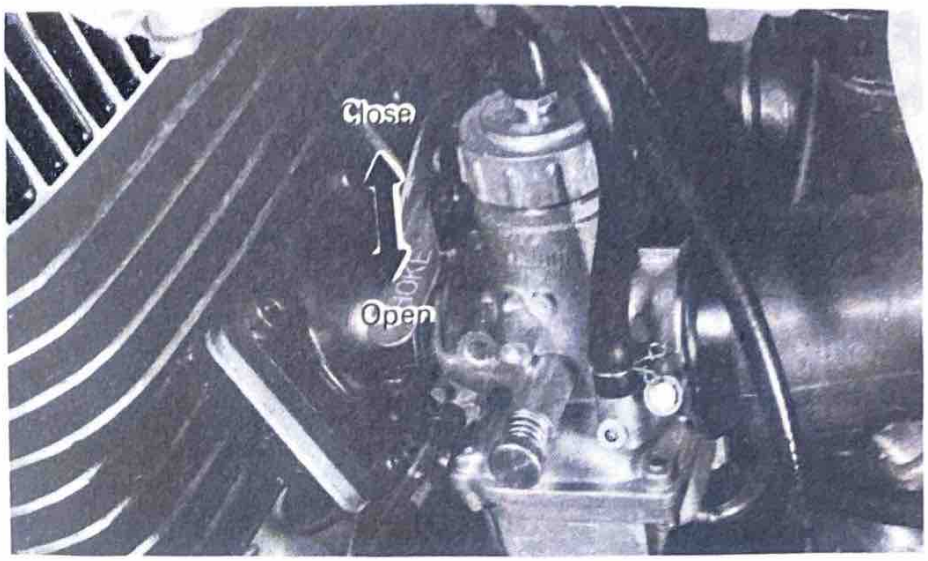


Ⓝ Neutral

Starter lever (choke lever)

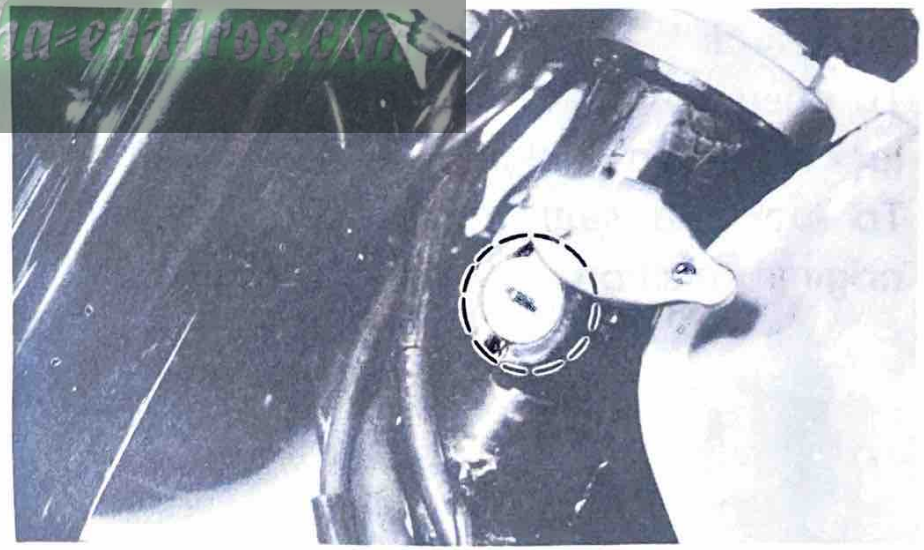
When cold the engine requires a richer fuel mixture for starting. A separate starter circuit, which is controlled by the starter lever, supplies this mixture.

Push the lever down to open the circuit (for starting) and pull it up to close the circuit.



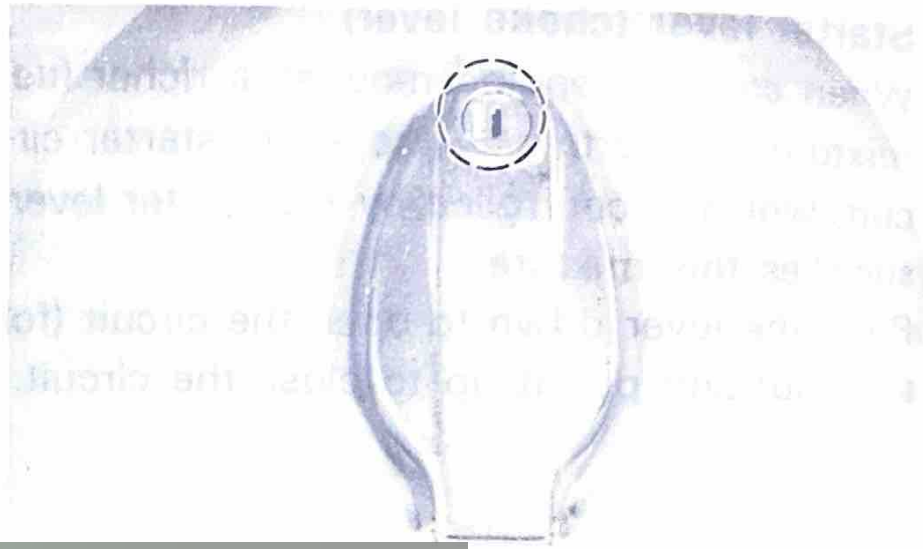
Steering lock

To lock the steering, turn the handle bars fully to the right, insert the key into the steering lock and turn the key about 1/8 counterclockwise; then push the key in and turn it about 1/8 clockwise. After checking if the lock is engaged, remove the key from the lock. To release the lock, reverse the above steps.



Fuel tank cap

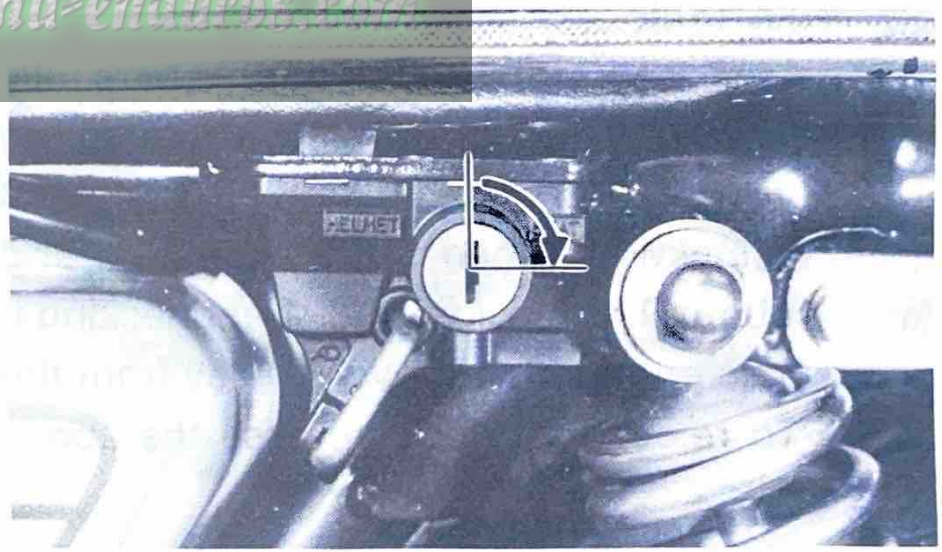
Insert the key and push down and turn clockwise about 1/8 turn the lock will be released and the fuel tank cap can be opened. The cap can be locked by merely pushing it into position.



Seat lock

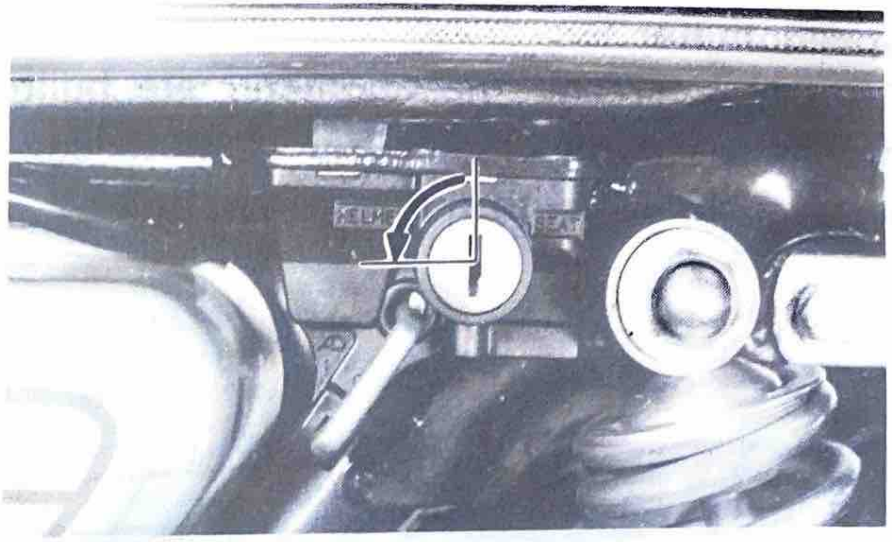
To open the seat lock, insert the key in the lock and turn it clockwise.

To lock the seat, replace the seat in the original position.



Helmet holder

To open the helmet holder, insert the key in the lock and turn it counterclockwise.
To lock the helmet holder, replace the holder in the original position.

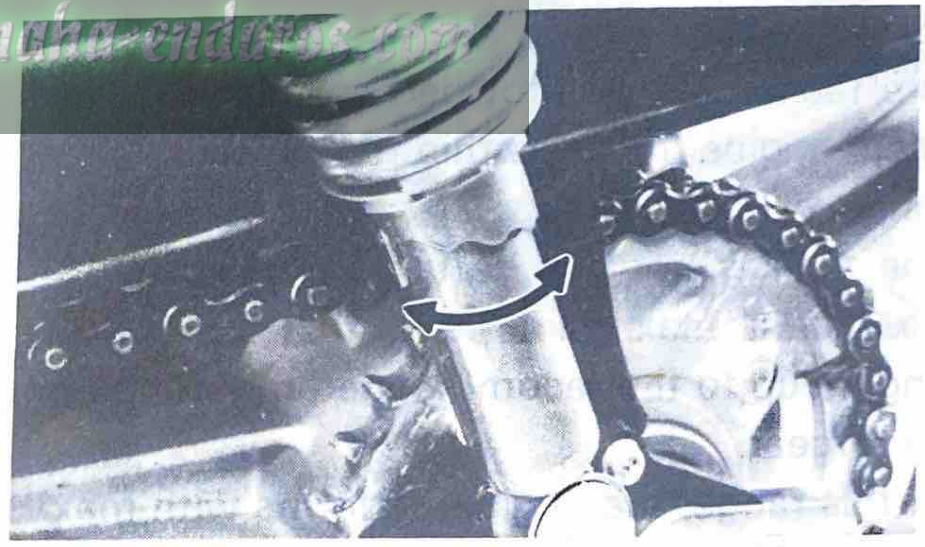


Rear shock absorber

The spring preload of the rear shock absorber can be adjusted to suit rider preference and riding conditions.
If the spring seat is raised, the spring becomes harder and if lowered the spring becomes softer.

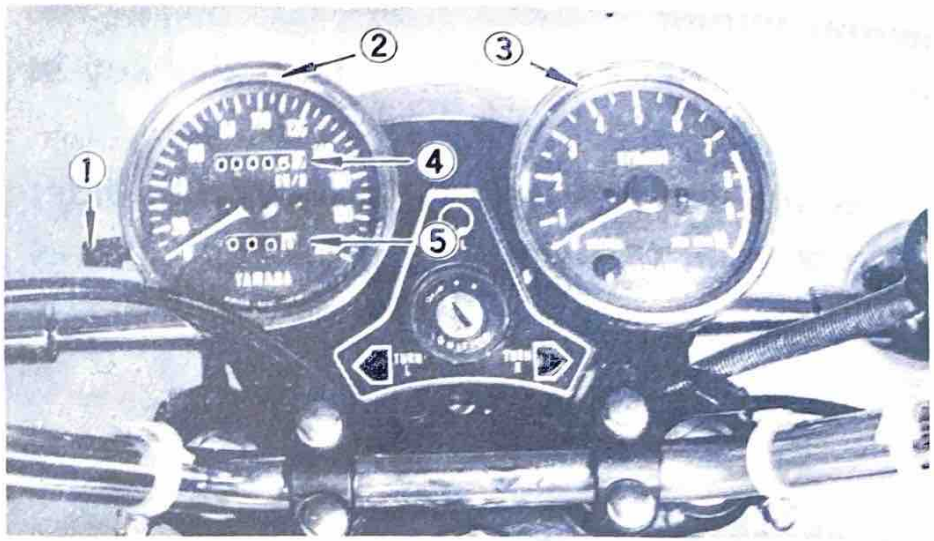
NOTE:

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



Speedometer

The odometer and trip odometer are built into the speedometer. The trip odometer can be reset to "O" with the reset knob.



1. Reset knob
2. Speedometer
3. Tachometer
4. Odometer
5. Trip odometer

Tachometer

The tachometer is provided so the rider can keep engine rpms within the ideal power range.

The tachometer can be used as follows:

To obtain maximum performance, run the engine up to the recommended rpm range in each gear.

In this range, the engine performs with maximum efficiency and minimum wear. Never

operate the engine outside the recommended range.

Recommended rpm range:

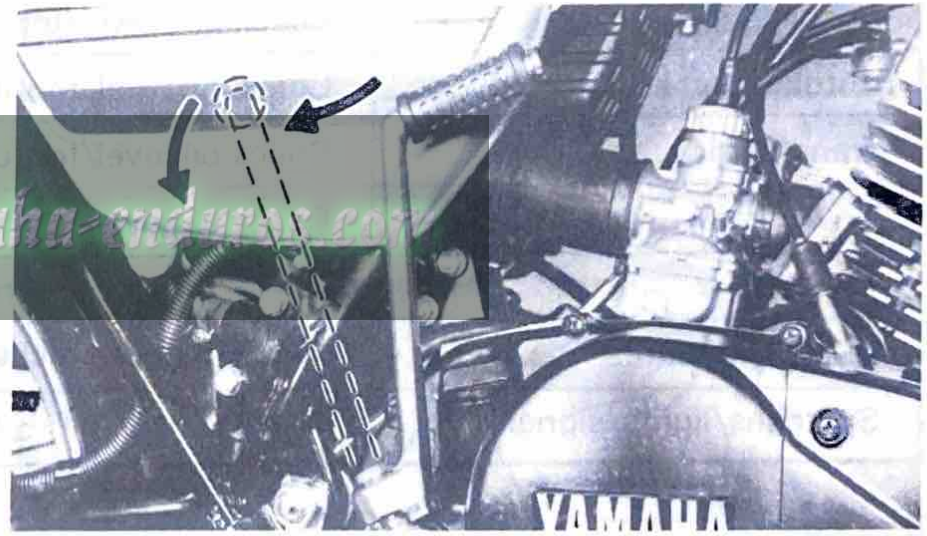
3,000 ~ 6,000 r.p.m.

Do not operate in the red zone.

Red zone: 7,500 ~ 10,000 r.p.m.

Kick starter

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



PRE-OPERATION CHECKS

Before using this motorcycle please check the following points:

Item	Routine	Page
Brakes	Check operation/brake fluid/brake pads	24
Clutch	Check operation/lever adjustment	51
Gasoline tank	Check gas level/top-up as required	23
Autolube tank	Check oil level/top-up as required	39
Transmission	Check oil level/top-up as required	40
Drive chain	Check alignment/adjustment/lubrication	59
Throttle	Check for proper throttle and autolube cable operation	48
Wheels and tires	Check wheel cracks, bends and tires wear, pressure	24
Switches/lights/signals	Check/head/tail — stop/flasher and other indicator lights	10

NOTE:

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

Fuel

Make sure there is sufficient fuel in the tank.

Recommended gasoline: 90 octane

Fuel tank capacity:

13 lit (13.7 US.qt.)

Engine oil

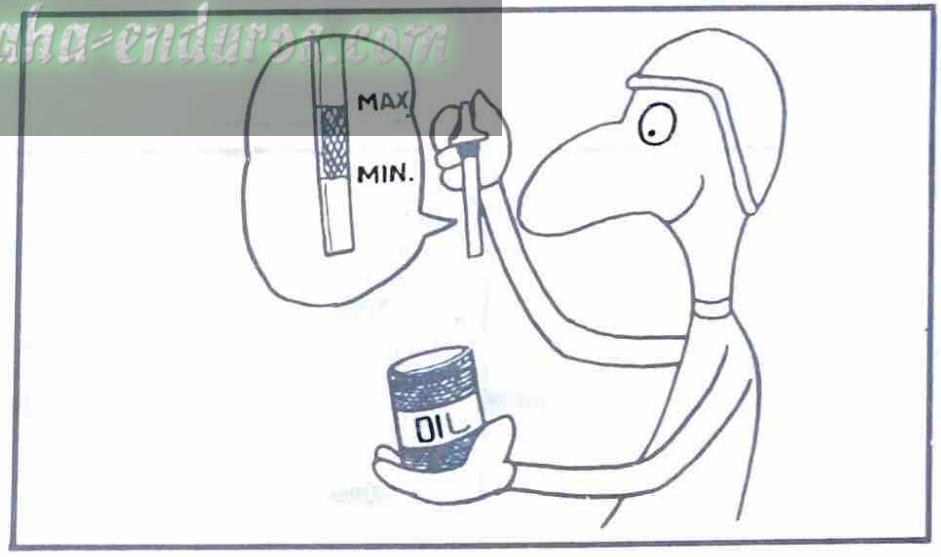
Make sure there is sufficient engine oil in the oil tank. Add oil as necessary.

Recommended oil: Yamalube 2-cycle

See page 39, "Engine oil section"

Oil tank capacity:

1.8 lit (1.9 US.qt)



Transmission oil

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

Recommended oil:

Yamalube 4-cycle or SAE 20W/40 type "SE" motor oil

Oil quantity:

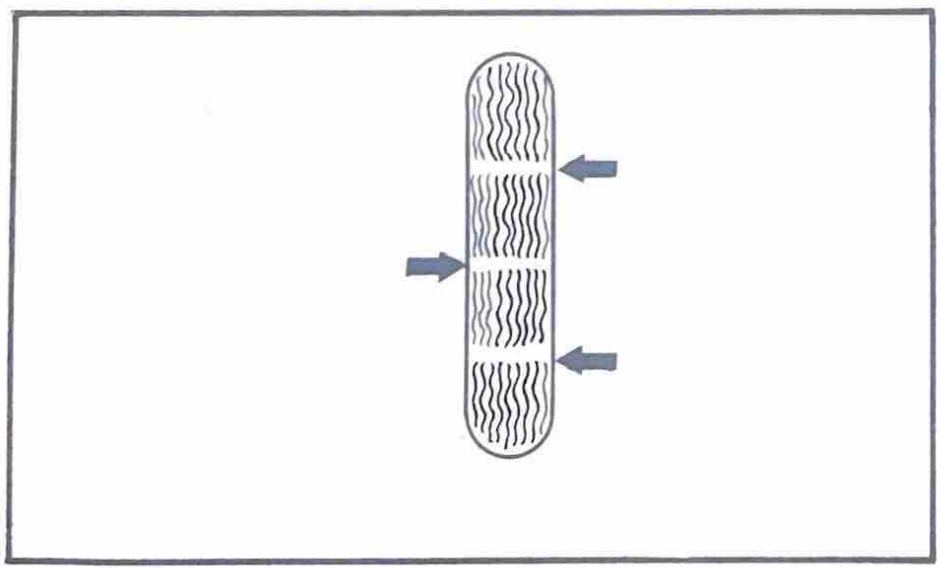
1,450 ~ 1,550 c.c. (1.55 ~ 1.65 US.qt.)

Tires

Check the tire pressure and check the tires for wear.

Tire pressure

Front	2.3 lbs/in.^{2} (1.6 kg/cm^2)	Normal riding
Rear	28 lbs/in.^{2} (2.0 kg/cm^2)	
Front	28 lbs/in.^{2} (2.0 kg/cm^2)	High speed riding
Rear	33 lbs/in.^{2} (2.3 kg/cm^2)	



If a tire tread shows cross wise lines, it means that the tire is worn to its limit. Replace the tire.

CAUTION:

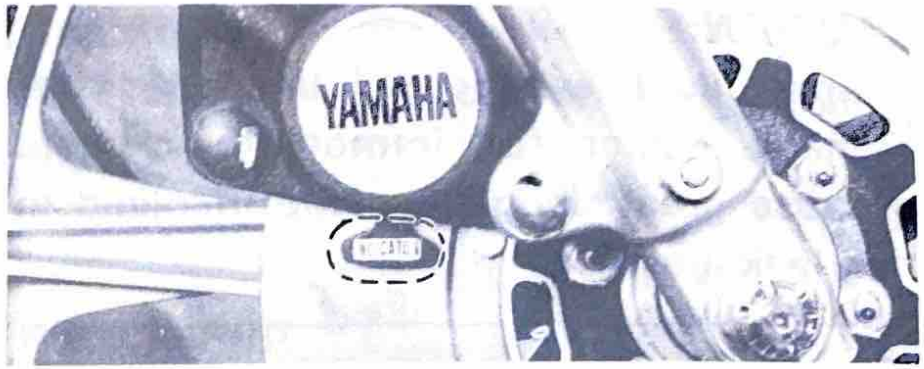
A great damger is apprehended from driving with a worn tire. When a tire tread begins to show lines, have your Yamaha dealer replace the tire immediately.

Brake lever and brake pedal

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

Brake fluid

Remove the reservoir tank caps and check the brake fluid level. Add fluid if necessary.
Recommended fluid: DOT #3

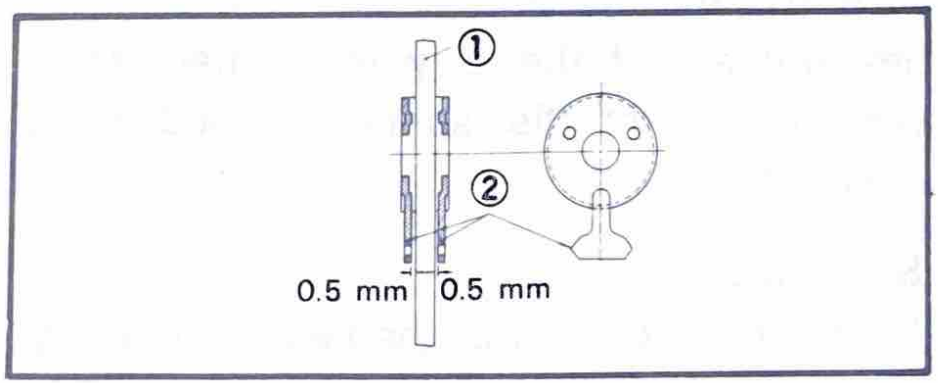


Checking the disc brake pads

For easy check of wear on the disc brake pads, a wear indicator is attached to each brake pad. This indicator permits a visual check without disassembling the pads.
To check, apply the brake, and measure the gap between the disc and the indicator.
If the gap measures less than 0.5 mm. (0.019 in.) have your Yamaha dealer replace the pads.

Brake fluid leakage

Apply the brake for a few minutes, and check to see if any brake fluid leaks out from pipe joints or the cylinder.



1. Brake disc
2. Indicator

CAUTION:

If brake fluid leakage is found, ask your Yamaha dealer for immediate repairs, because great danger will be involved in this leakage.

Clutch lever

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

Speedometer and tachometer

Check for proper operation.

Throttle grip

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

Switches

Check the operation of the headlight switch, flasher switch, stoplight switch, horn button, main switch, etc.

OPERATION AND IMPORTANT RIDING POINTS

CAUTION:

Before riding this motorcycle, become throughly familiar with all operating controls and their function.

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

Starting a cold engine

1. Shift transmission into neutral.
2. Turn the fuel petcock to "ON".
3. Turn the ignition key to the "I" position and turn the engine stop switch to the "RUN" position.
4. Operate the carburetor starter jet (choke) lever and completely close the throttle grip.

5. Kick the kick crank with full strength to start the engine.
6. After the engine starts, warm up for one or two minutes. Make sure the starter jet (choke) lever is returned to the original position before driving.

Starting a warm engine

1. Shift transmission into neutral.
2. Turn the fuel petcock to "ON".
3. Turn the ignition key to the #1 position and engine stop switch to "RUN".
4. Slightly open the throttle grip.
5. Kick the kick crank with full strength to start the engine.

NOTE:

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

CAUTION:

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

Warming up

To get maximum engine life, always "warm-up" the engine before starting off. Never accelerate hard with a cold engine ! To see whether or not the engine is warm, see if it responds to throttle normally with the starter jet (choke) turned off.

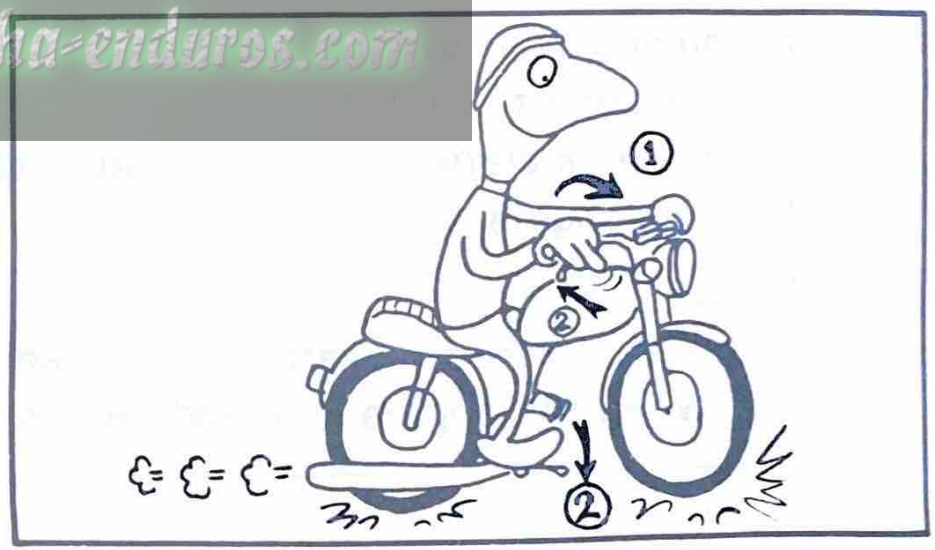
Brake operation

Brakes are provided to stop the moving motorcycle; however, care must be exercised when braking at high speeds or under poor driving conditions such as rough roads, snow, rain, etc. Several braking methods are described below for your information. Pulling in the clutch lever and twisting the throttle grip in the closed direction will permit you to

gradually glide to a stop, as will downshifting through the gears, using the drag of the engine to slow down is another. However, the best method, and the one most universally used, is to use both engine braking (downshifting through the gears as the machine slows) and the front and rear brakes. After the rear brake starts to take hold, gradually apply the front brake. Since excessive braking pressure will cause the wheel to lock and skid, the rider must use both brakes with moderate pressure to get. Maximum stopping power without losing control.

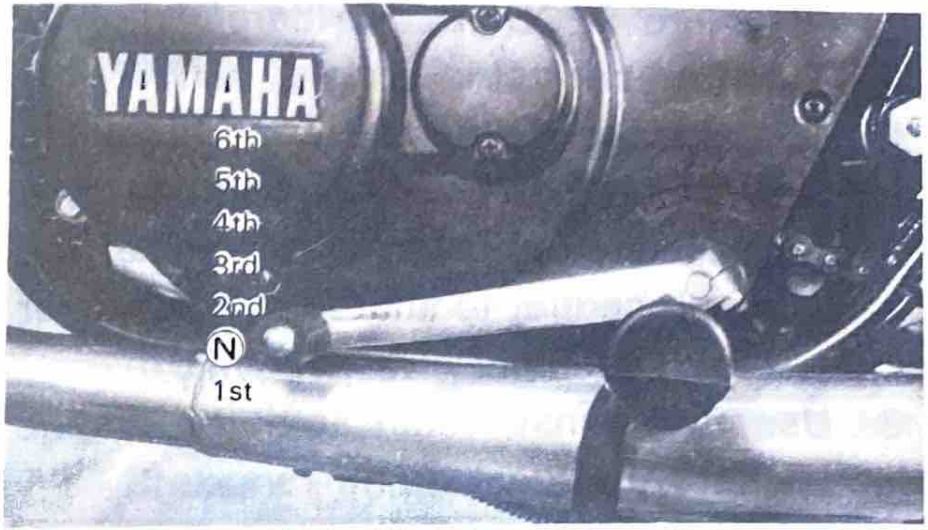
As the machine continues to slow, shift down through the gears using engine brake to aid the slowing effect. When shifting down, watch the tachometer to see that the engine does not over rev.

Use the engine brake when descending long, steep hills. Do not operate the brakes continuously for very long periods. Use at repeated intervals. Special care is required in braking on poor roads and in bad weather. If the front brake is applied too strongly in such conditions the wheel may lock and cause a fall. At high speeds the front and rear brakes must be applied with balanced force; apply the brakes repeatedly with moderate force and avoid sudden application. Practice the above procedures for safe braking at all times.



NOTE:

When using engine braking for long periods, it is very important not to exceed maximum recommended r.p.m. (tachometer red zone). It is also necessary to open the throttle occasionally because the engine relies on the fuel for internal cooling.



Ⓝ Neutral

Shifting and acceleration

This model has a 6-speed transmission. The transmission allows you to control the amount of power you have available at a given speed or starting accelerating, climbing hills, etc. The use of the change pedal is shown in the illustration. To shift into NEUTRAL, repeatedly depress the change pedal to the end of its travel (you will feel a stop when you are in first gear.), then raise it slightly.

To start out and accelerate, proceed as follows:

1. Pull the clutch lever to disengage the clutch.
2. Shift into FIRST gear.
3. Open the throttle gradually, and at the same time, release the clutch lever slowly.
4. At 15 ~ 25 km/h (10 ~ 15 mi/h) close 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 gradually release the clutch lever.
7. To accelerate or decelerate, use the same procedure to shift into next higher or next lower gear, respectively.
8. Use the transmission to keep engine speed in its ideal r.p.m. range.

Ideal r.p.m. range: 3,000 ~ 6,000

Cruising

A frequently asked question is "What r.p.m. should I cruise at ?". The BREAK-IN section provides limitations when the motorcycle is new, but once the engine has been broken in, then we suggest that you follow these guide lines. For sustained load and throttle conditions, such as those encountered on open highways, cruise at 3/4 throttle or at 3/4 of the r.p.m. "red line", whichever comes first.

Always bear in mind, though, the maximum allowable speed limit for the area through which you are riding. This is a recommendation, not a "hard and fast" rule. Any modification or personalization of the final gearing could possibly change the operating range most comfortable and most efficient for the engine.

Riding on poor roads

When going from a paved road to an unpaved area, lower the engine speed and drive ahead at reduced speed.

Riding on unpaved or rough roads

Grip the fuel tank firmly with both knees, lift the body slightly and use knee action to absorb shock. If the road is very rough, do not place the center of gravity too far forward. Do not accelerate, brake or turn suddenly on a rough road.

Riding in rain

Roads become slippery in rainy weather and are very dangerous; therefore, always maintain the proper tire pressure, operate at reduced speed and never apply the brakes or throttle suddenly.

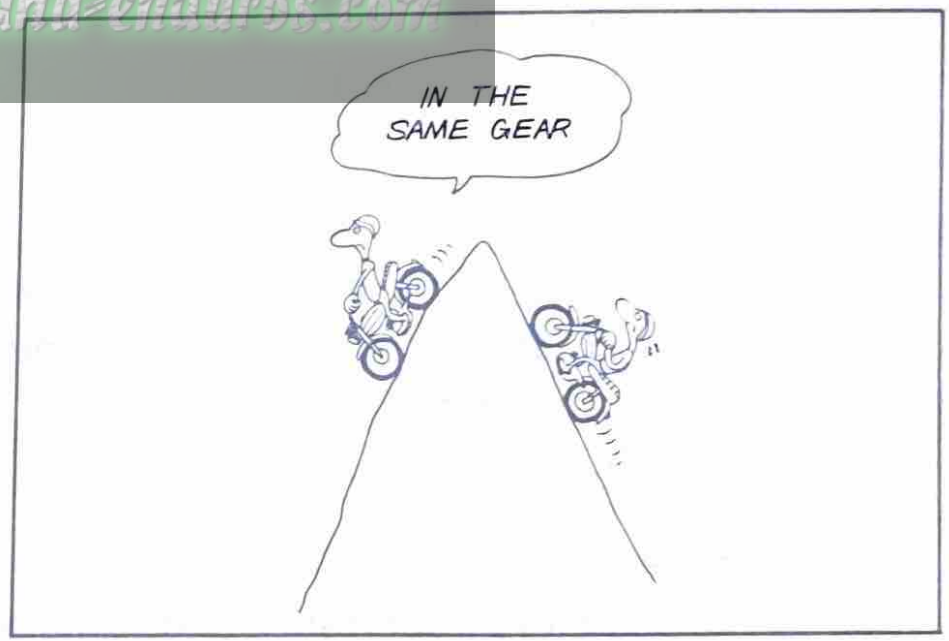
Riding in snow

Operating a motorcycle in snow or on frozen roads is normally very difficult and there is always the danger of falling.
On such roads take the following precautions for your own protection and safer driving.

1. Equip the tires with chains.
2. Avoid using the brakes as much as possible.
3. Use engine braking to reduce speed.
4. Drive slowly in lower gears.
5. Follow the tire marks made by cars.
6. Keep sufficient distance between yourself and the vehicle ahead.

Riding on hilly roads

1. When driving uphill, shift to a lower gear and reduce speed unless the hill can be climbed in the same gear.
2. When driving downhill, use the same gear as for climbing the hill and always use engine braking. It can be dangerous to shift gears in the middle of a hill. Brakes can be used when necessary but be careful not to apply the front brake too suddenly. A fall may result.



3. When stopped in the middle of ascending a hill, re-starting requires some skill. Take the following precautions:

a) Apply the front brake and support the motorcycle with your right leg.
b) Pull the clutch lever and shift into low gear.
c) While still gripping the clutch lever, shift the weight to the left leg and step on the brake pedal with the right foot.
d) While opening the throttle grip, gradually release the clutch lever while releasing the brake and move forward.

Cornering

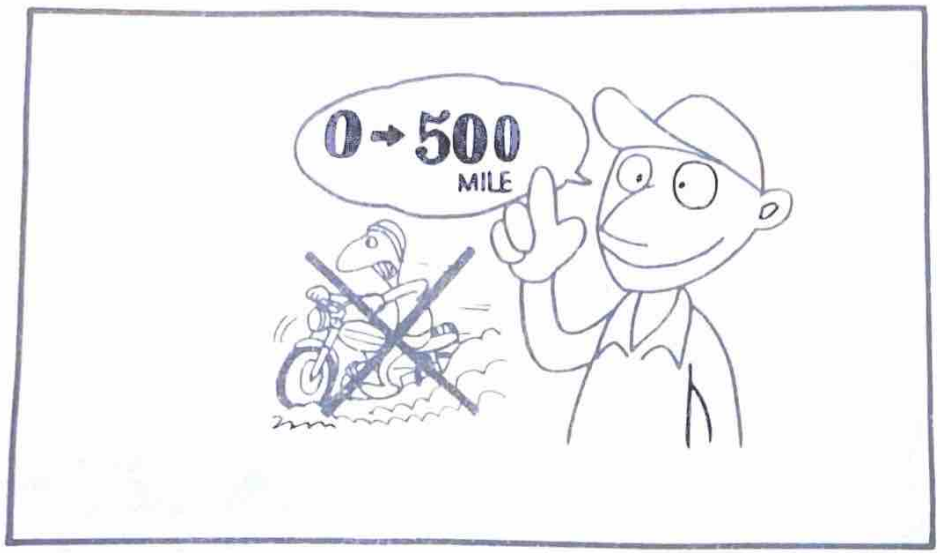
Reduce speed before entering the curve and proceed slowly. Be careful when applying the brakes with the motorcycle leaned into a corner as it may slip.

Engine break-in

There is never a more important period, in the life of your motorcycle, than the period between zero and 800 kms. (500 mi.). For this reason we ask that you carefully read the following material. Because the engine is brand new, you must not put an excessive load on it for the first several hours of running. During the first 800 kms. (500 mi.) the various parts in the engine wear and polish themselves to the correct operating clearances. During this period prolonged full throttle operation, or any condition which might result in excessive heat of cylinder, must be avoided. However, momentary full throttle operation, under load (2 ~ 3 seconds maximum), does not harm the engine.

Each full throttle acceleration sequence should be followed with a substantial rest period for the engine by cruising at lower r.p.m.'s so the engine can rid itself of the temporary build up of heat.

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



1. 0 ~ 100 mi.:
   Avoid operation above 4,000 r.p.m. Allow a cooling off period of 5 to 10 minutes after every hour of operation. Vary the speed of the motorcycle from time to time. Do not operate it at one, set throttle position.
2. 100 ~ 250 mi.:
   Avoid prolonged operation above 5,000 r.p.m. Allow the motorcycle to rev freely through the gears but do not use full throttle at any time.
3. 250 ~ 500 mi.:
   Avoid prolonged full throttle operation. Avoid cruising speeds in excess of 6,000 r.p.m.
4. 500 mi. and beyond:
   Avoid prolonged full throttle operation. Avoid engine speeds in excess of 7,000 r.p.m. Vary speeds occasionally.

Parking

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

NOTE:

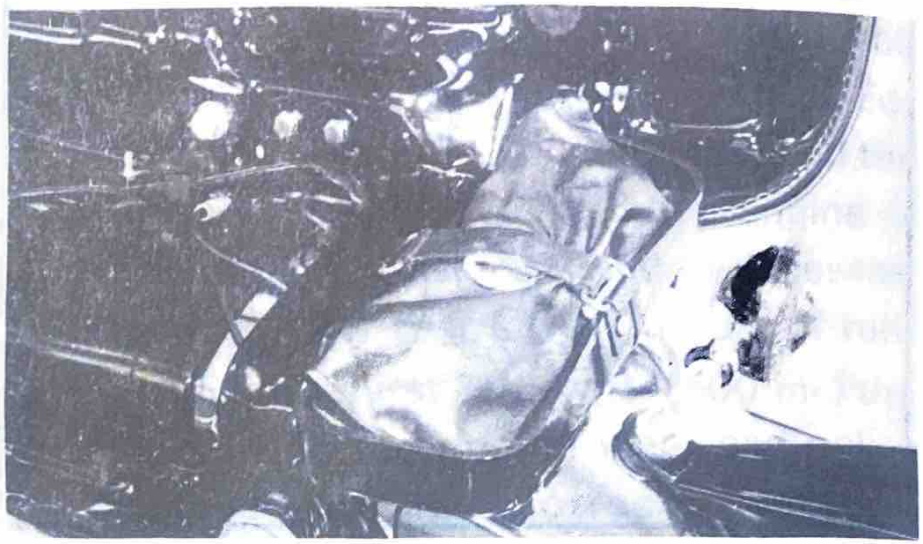
Select a parking place where the motorcycle is not apt to fall.

Night parking

When temporarily parking at night, turn the ignition key to the parking position and remove it.

NOTE:

If the parking light is used for long periods, the battery may be discharged, making starting difficult.



PERIODIC MAINTENANCE AND MINOR REPAIR

TOOL KIT

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

CAUTION:

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

PERIODIC MAINTENANCE

The most important points of motorcycle inspection, adjustment and lubrication are explained below; if the owner is not familiar with motorcycle service, this work should be done by a Yamaha dealer.

LUBRICATION INTERVALS

Page	Item	Remarks	Type	Initial (mile)				Thereafter every (mile)		
				250	500	1,000	2,000	1,000	2,000	4,000
40	Transmission oil change	Warm engine before draining	No. 1	CHK	○	○		CHK	○	
61	Drive chain	Lube/Adjust as required	No. 2	See service notes						
59	Drive chain	Remove/Clean/Lube/Adjust	No. 2			○		○		
—	Control and meter cables	All-apply thoroughly	No. 3			○	○		○	
48	Throttle grip and housing	Light application	No. 4				○		○	
Dealer	Tacho and speedo gear housings	Light application	No. 4				○			○
—	Rear arm pivot shaft	Apply until shows	No. 5			○		○		
—	Brake pedal shaft	Light application	No. 4			○			○	
—	Change pedal shaft	Light application	No. 4			○			○	
—	Stand shaft pivot(s)	Light application	No. 4			○			○	
Dealer	Front forks	Drain completely	No. 8		CHK		○	CHK	○	
Dealer	Steering ball races	Inspect thoroughly/Pack	No. 6				○		CHK	○
Dealer	Point cam lubrication wick	Very light application	No. 7			○				○
Dealer	Wheel bearings	Do not over-pack	No. 6				○	CHK	○	

Be sure to check the above points before long-distance touring.

See Service Notes on following page.

Recommended lubricants

1. Use Yamalube 4-cycle oil, or SAE 20W/40 type "SE" motor oil.
2. Use SAE 10W/30 type "SE" motor oil. (If desired, specialty type lubricants of quality manufacture may be used.)
3. Use SAE 10W/30 type "SE" motor oil. (If desired, or at ambient temperature below 30°F, a graphite base "dry" lubricant of quality manufacture may be used.)
4. Light duty: Lithium soap base grease. Heavy duty: Standard chassis lube grease. (Do not use chassis lube grease on throttle/throttle housing.)
5. Use a soft chassis lube grease (soft fiber).
6. Medium-weight wheel bearing grease of quality manufacture — preferably waterproof.
7. Light-weight machine oil.
8. Use Yamaha fork oil.

NOTE:

Drive chain must be lubricated every 300 ~ 400 kms. (200 ~ 250 mi.). If unit is subjected to extremely hard usage, chain must be inspected constantly and serviced as required.

PERIODIC MAINTENANCE INTERVALS

Page	Item	Remarks	Initial (mile)				Thereafter every (mile)	
			250	500	1,000	2,000	1,000	2,000
55	Brake system (complete)	Check/Adjust as required — repair as required		○	○		○	
51	Clutch	Check/Adjust as required		○	○		○	
52	Battery	Top-up/Check specific gravity montly	○		○		○	
41	Spark plug(s)	Inspect/Clean or replace as required	○	○	○		○	
—	Wheels and tires	Pressure/Wear/Balance	○	○	○		○	
—	Fittings and fasteners	Tighten before each trip and/or	○	○	○		○	
59	Drive chain	Tension/Alignment (No. 1)	○	○	○		○	
—	Engine oil level check	Unit level/Engine warm	○	○	○		○	
42	Air filter	Paper type — clean/Replace as required (No. 2)			○	○	○	
50	Fuel petcock(s)	Clean/Flush tank as required	○		○		○	
Dealer	Ignition timing	Adjust/Clean or replace parts as required		○	○	○		○
44	Carburetor adjustment	Check operation/Timings		○	○	○		○
Dealer	Carburetor overhaul	Clean/Repair as required/Refit/Adjust						4,000

SERVICE NOTES:

No. 1. DRIVE CHAIN: In addition to tension and alignment, chain must be lubricated every 300 ~ 400 kms. (200 ~ 250 mi.). If unit is subjected to extremely hard usage and wet weather riding, chain must be checked constantly. See "Lubrication Intervals" for additional details.

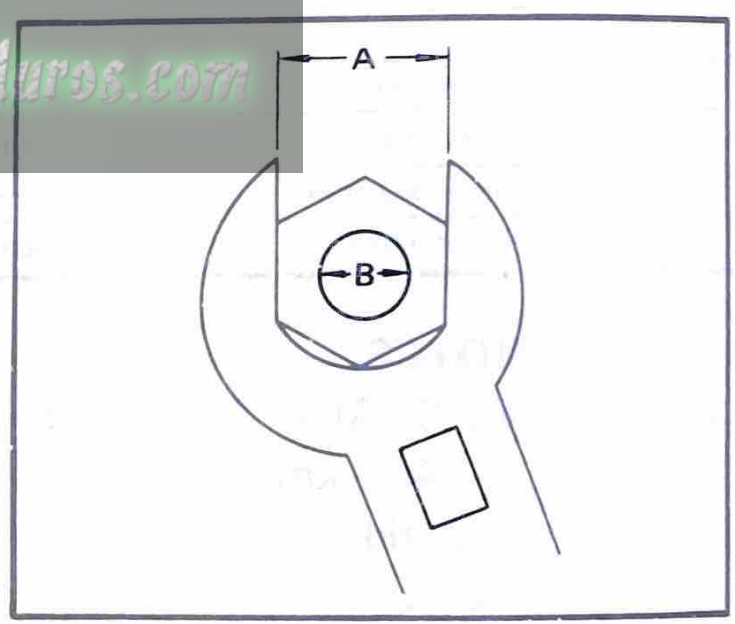
No. 2. AIR FILTER: Remove and clean filter at least once per month or every 1,600 kms. (1,000 mi.).

Torque specifications

The list below covers those stud bolt sizes with standard I.S.O. pitch threads. Torque specifications for components with thread pitches other than standard are given within the applicable chapter.

Torque specifications call for dry, clean threads. Components such as the cylinder or cylinder head should be at room temperature prior to torquing. A cylinder head or any other item with several fasteners should be torqued down in a crisscross pattern in successive stages until torque specification is reached. The method is similar to installing an automobile wheel and will avoid warping the component.

A (Nut)	B (Bolt)	TORQUE SPECIFICATION		
		m-kg	ft-lb	in-lb
10 mm	6 mm	1.0	7.2	85
12 mm	8 mm	2.0	15	175
14 mm	10 mm	3.5 ~ 4.0	25 ~ 29	300 ~ 350
17 mm	12 mm	4.0 ~ 4.5	29 ~ 33	350 ~ 400
19 mm	14 mm	4.5 ~ 5.0	33 ~ 36	400 ~ 440
22 mm	16 mm	5.5 ~ 6.5	41 ~ 49	480 ~ 570
24 mm	18 mm	5.8 ~ 7.0	42 ~ 50	500 ~ 600
27 mm	20 mm	7.0 ~ 8.3	50 ~ 60	600 ~ 700
Spark plug		2.5 ~ 3.0	18 ~ 22	220 ~ 260



Engine oil

Engine oil is consumed along with gasoline in your engine.

Use the engine oils in the following list. We recommend Yamalube 2-cycle oil (available at most Yamaha dealers) but, if other oils are used, select from the following list which is given in order of preference.

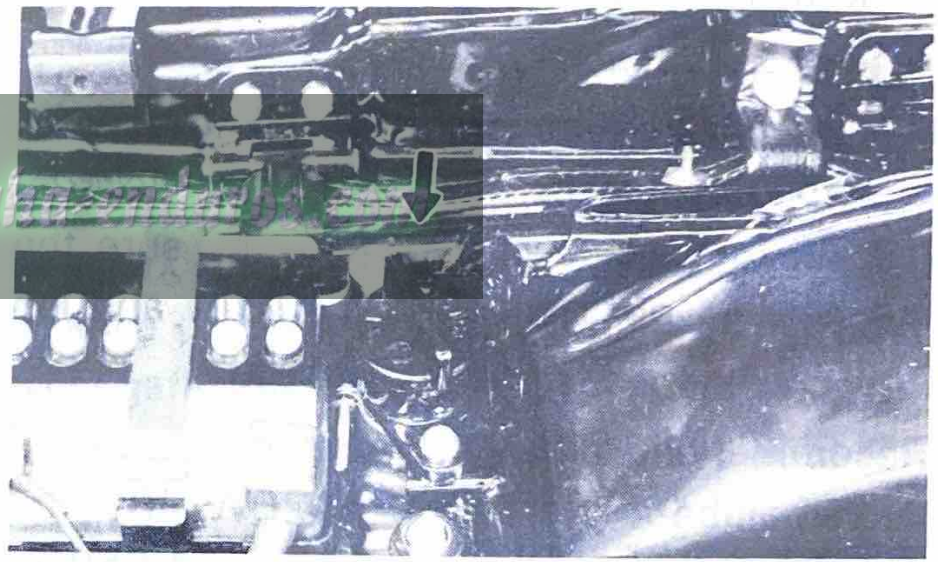
1. 2-stroke engine oil labelled "BIA certified for service TC-W".
2. SAE 30 weight, detergent type automobile engine oil with an "SE" rating.

   This last oil should be used only as an emergency measure when 2-stroke oils are not available.

NOTE:

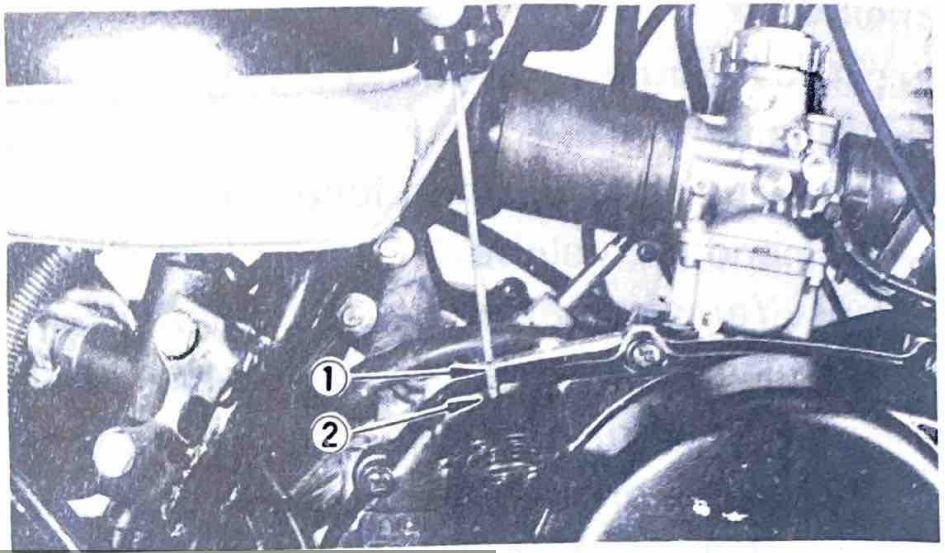
Oil viscosity increases in very cold weather (where the normal temperature is below 0°C, 32°F) and oil does not flow well. In such areas, consult your Yamaha dealer.

1.8 lit (1.9 US.qt.)



Transmission oil

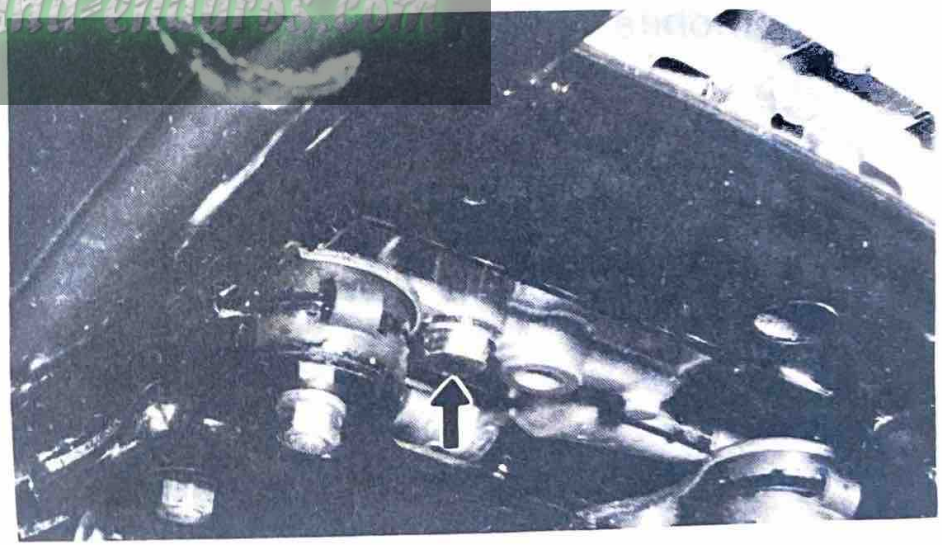
The only servicing for you to do is to check and fill the transmission lubricating oil. The transmission dip stick is located right above the kickstarter. To check the level, warm the engine up for several minutes, screw the dip stick completely out and then just rest the stick in the hole.



1. Maximum
2. Minimum

NOTE:

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



Recommended oil:

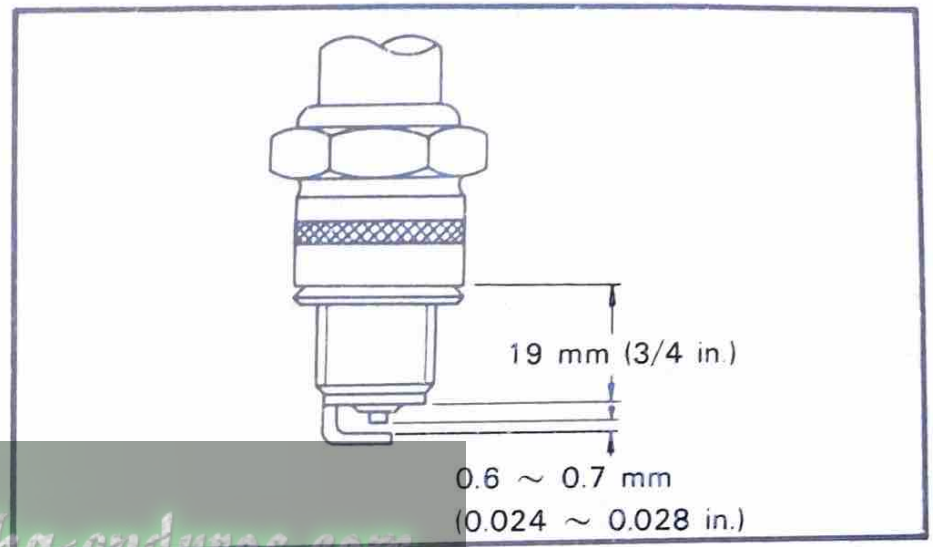
Yamalube 4-cycle or SAE 20W/40 motor oil, type "SE" 1,450 ~ 1,550 cc (1.55 ~ 1.65 US.qt.)

The dip stick has a Minimum and a Maximum mark, and the oil level should be between the two. If the level is lower, then add sufficient

oil to raise it to the proper level.
During the break-in period, you should replace the gear oil 30 days or 400 km (250 mi) after the date of purchase.

Spark plug inspection

The spark plug is one of the most important of the engine components and is the easiest to inspect. By examining the condition of the spark plug we can, to some extent, determine the condition of the engine.
If the engine is operating correctly, and the machine is being ridden correctly, the white porcelain insulator around the center electrode will be a medium to light tan color.
If the porcelain is very dark brown or black color and the firing end is wet with oil or sooty, the spark plug may be too "cold". A "hotter" spark plug may be required. This situation is common during engine break-in.
If the insulator is glazed and very light or white in color, or if the electrodes show signs of melting, a "colder" spark plug may be required.



If spark plug appearance indicates a performance problem, ask a Yamaha dealer to investigate the situation. Do not change the spark plug type without consulting with your dealer. You should, however, periodically remove and inspect the spark plug because heat and deposits will cause any spark plug to slowly break-down and erode. If electrode erosion becomes excessive, or if carbon and other deposits are excessive, you should

replace the spark plug with one of the proper type.

Standard spark plug: B-7ES

Spark plugs are produced in several different thread lengths. The thread length (reach) is the distance from the spark plug gasket seat to the end of the threaded portion. If the reach is too long, overheating and engine damage may result.

If the reach is too short, spark plug fouling and poor performance may result; also, carbon will form on the exposed threads resulting in combustion chamber hot spots and thread damage. Always use a spark plug with the proper reach.

Spark plug reach: 19 mm (3/4 in.)

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

Spark plug gap:
0.6 ~ 0.7 mm (0.024 ~ 0.028 in.)

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

Spark plug torque:
2.5 ~ 3.0 m-kg (230 ~ 250 ft-lb)

Cleaning the air cleaner element

The air cleaner element filters dirt from the air entering the carburetor, keeping engine wear to an absolute minimum. This model uses a paper type element which provides very effective filtering action.

1. Turn the fuel cock lever to "OFF" position, and remove the fuel pipes.

2. Lift the seat and remove the bolts (2) holding the fuel tank. Lift the tank.

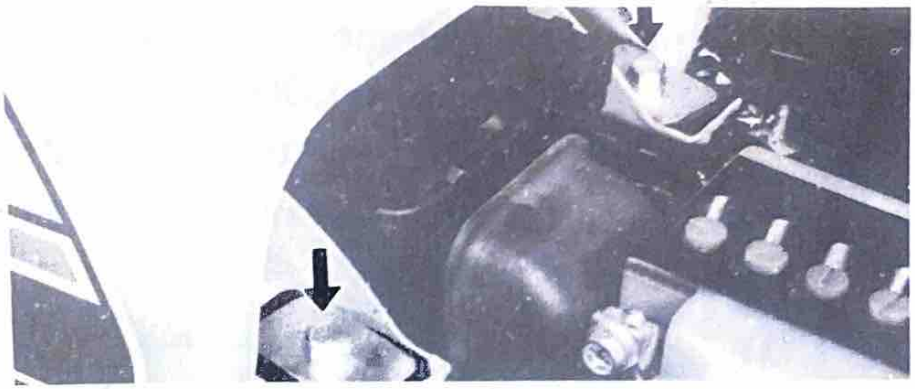
NOTE:

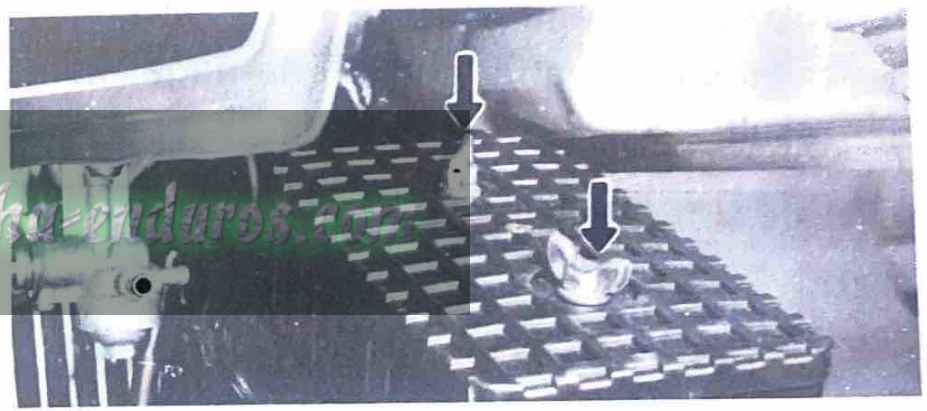
In this step take care that the fuel level pipe (front end of fuel tank) is not disconnected.

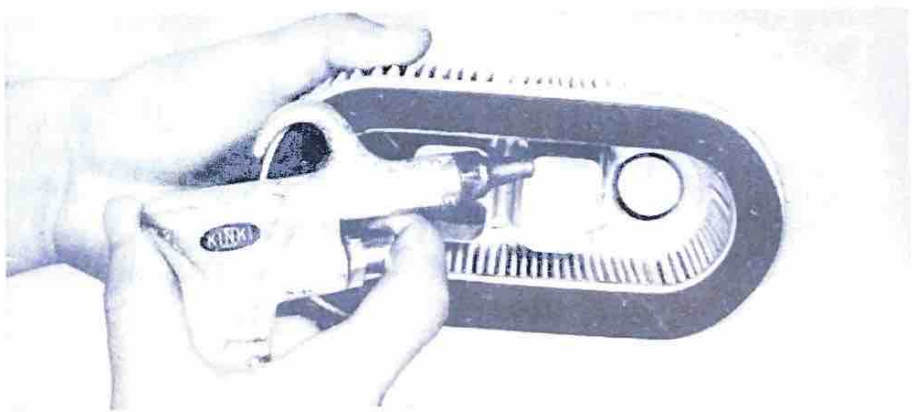
3. Remove the air filter case cap by removing the wing nuts (2). Pull out the element.
4. Tap the element lightly to remove most of the dust and dirt; then blow out the remaining dirt with compressed air through the inner surface of the element. Be careful not to get oil or water on the filter paper. If element is wet, excessively dirty or damaged, replace.
5. Reassemble by reversing the removal procedure. Check whether the element is seated completely against the case.

NOTE:

Install the element as indicated.







6. The air filter element should be cleaned once a month or every 1,000 miles. It should be cleaned every ten hours or more often if the machine is operated in extremely dusty areas.

NOTE:

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

Carburetor adjustment

The carburetor is a vital part of the engine and requires very sophisticated adjustment. Most adjusting should be left to a Yamaha dealer who has the professional knowledge and experience to do so. However, the following three points may be serviced by the owner as part of his usual maintenance routine.

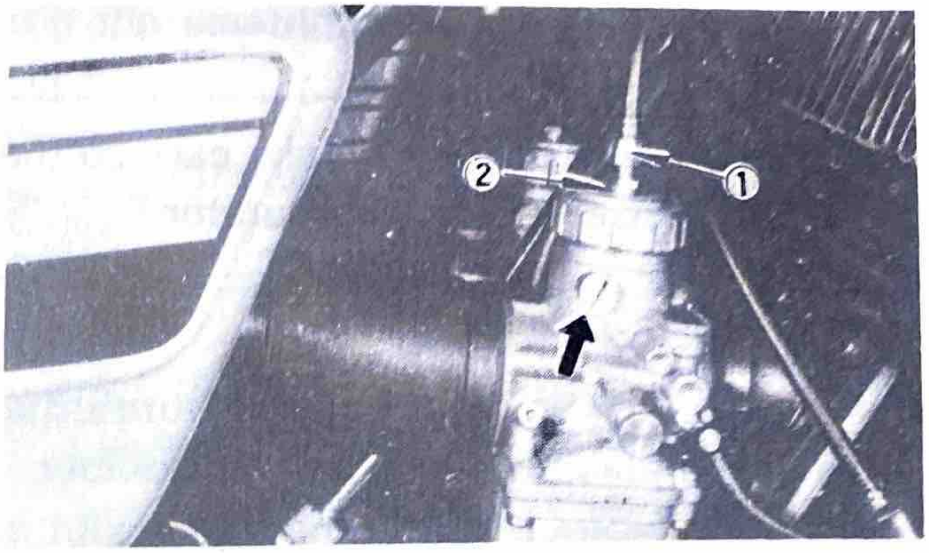
1. Carburetor (throttle opening) adjustment
2. Idle mixture adjustment
3. Idling speed adjustment
4. Throttle cable play adjustment

NOTE:

The carburetor was set at the Yamaha factory after many tests. If the settings are disturbed by someone not having appropriate technical knowledge, poor engine performance and damage may result.

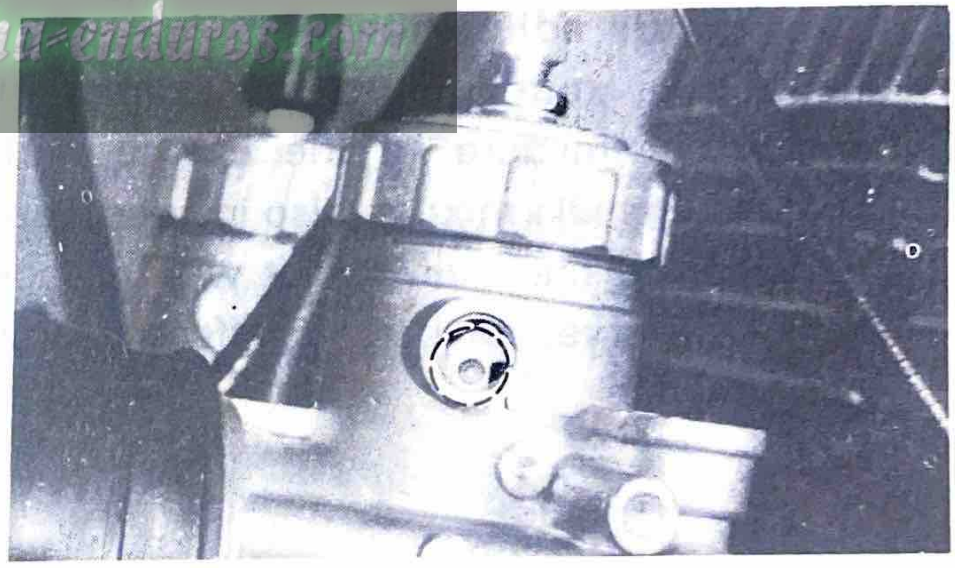
Carburetor (throttle opening) adjustment

1. Remove the bolts from the throttle opening adjusting ports of both right and left carburetors, and fully turn the throttle grip out.



1. Adjuster 2. Locknut

2. Adjust the marks on the throttle slides in both carburetors to the positions as illustrated.
   a. Loosen the locknuts.
   b. By turning the adjusters in or out, adjust the throttle slides to the same position.
   c. Tighten the locknuts.
3. Turn the throttle grip in once, and fully open it again. With the throttle grip in this position, check the position of both throttle slides.



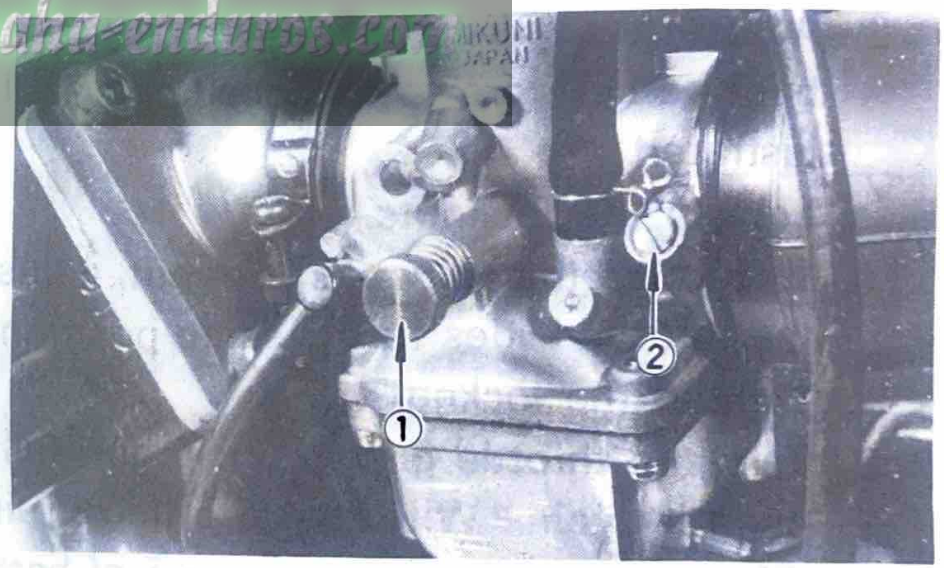
4. Install the bolts and tighten.

NOTE:

During this operation, take care so that not dust enters the carburetor.

Idle mixture adjustment

The idle mixture adjustment controls the amount of mixture to the engine at low r.p.m.s. The idle mixture also insures smooth transition to the main circuit with no power loss or misfire; so it does affect midrange performance.



1. Throttle stop screw
2. Pilot air screw

Make this adjustment as described below: Tighten the idle mixture (pilot air) screw unit it lightly touches the seat; then back the screw out the specified number of turns (see illustration). This should be done with the engine stopped.

Standard pilot air screw setting (number of turns out): 1-1/2

Idling r.p.m. adjustment

Start the engine and warm it up for a few minutes (normally, 1 or 2 minutes) at approximately 1,000 to 2,000 r.p.m., occasionally raising to 4,000 to 5,000 r.p.m. for a few seconds. When the engine responds quickly, the warm up is complete. With the engine stopped, pull off the left spark plug high tension lead. Start the engine and set the left carburetor so it idles at 1,000 r.p.m.

Stop the engine and connect the left spark plug lead.

Standard idling r.p.m.: 1,150 ±50 r.p.m.

Carburetor inspection

In addition to the above adjustment, check the following periodically:

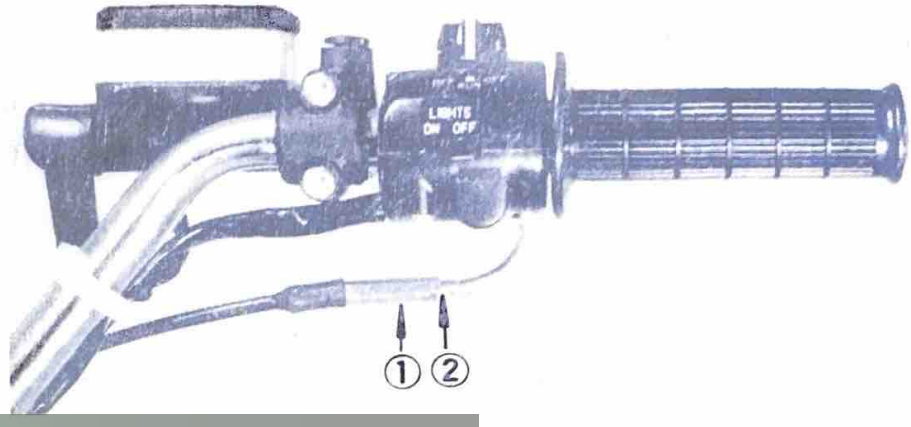
1. Are the carburetor holding screws loose?
2. Is the air vent pipe in the correct position ?
3. Is the overflow pipe connected properly ?
4. Is the mixing chamber top too loose ?

Inspection and adjustment of throttle cable play

A throttle cable should always have some play. If too tight, a sharp turn may cause the engine speed to increase. On the other hand, if the throttle valve does not open fully when the throttle grip is fully turned, full speed is not possible.

Adjust as discribed below:

Check play in turning direction of throttle grip. The play should be 0.12 ~ 0.28 in. (3 ~ 7 mm) at grip flange. Loosen the locknut and turn the wire adjuster to make the necessary adjustment. After adjusting, be sure to tighten the locknut properly.



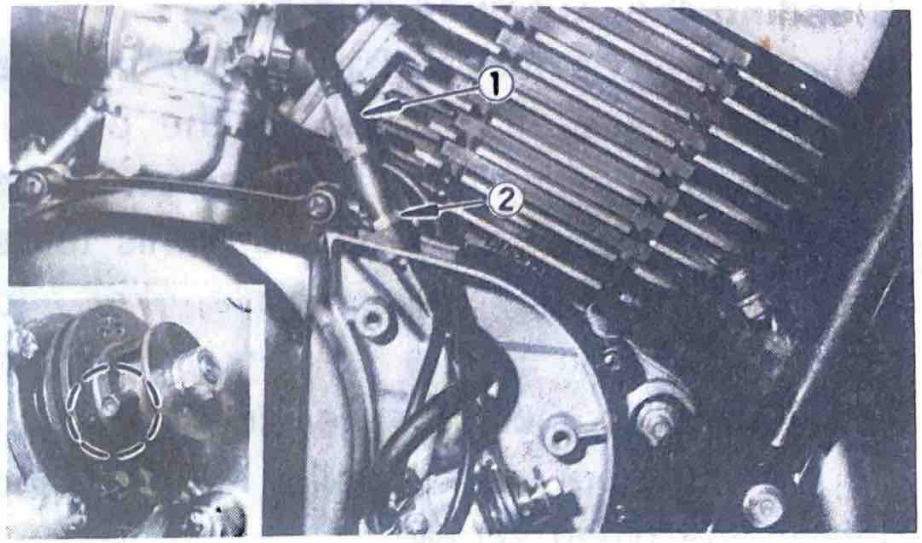
1. Adjuster
2. Locknut

Autolube pump cable adjustment

NOTE:

Prior to this adjustment, make sure that the throttle valve can be opened to the full-open position.

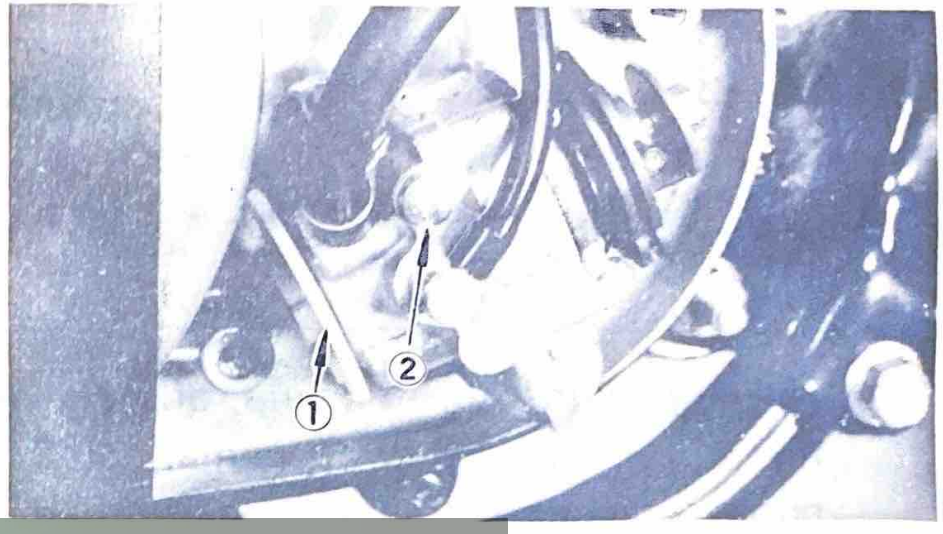
1. Fully open the throttle grip, and adjust the pump cable so that the mark on the pump adjusting pulley aligns with the adjusting pulley guide pin.
   a. Loosen the locknuts.
   b. By turning the adjusters in or out, adjust so that the pump marks are correctly aligned.
   c. Tighten the locknuts.
2. Back off the throttle grip once, and fully open it again. Make sure that the pump cable is correctly adjusted.



1. Adjuster
2. Locknut

Bleeding the Autolube pump

If the pump runs out of oil, the pump must be bled to release air trapped in the pump. Remove the Phillips head bleed screw, twist the throttle to full open position (this turns the Autolube pump to maximum stroke), and rotate the plastic manual starter pump plate until only oil comes out the bleed hole (air stops coming out with the oil). Reinstall and tighten the bleed screw.

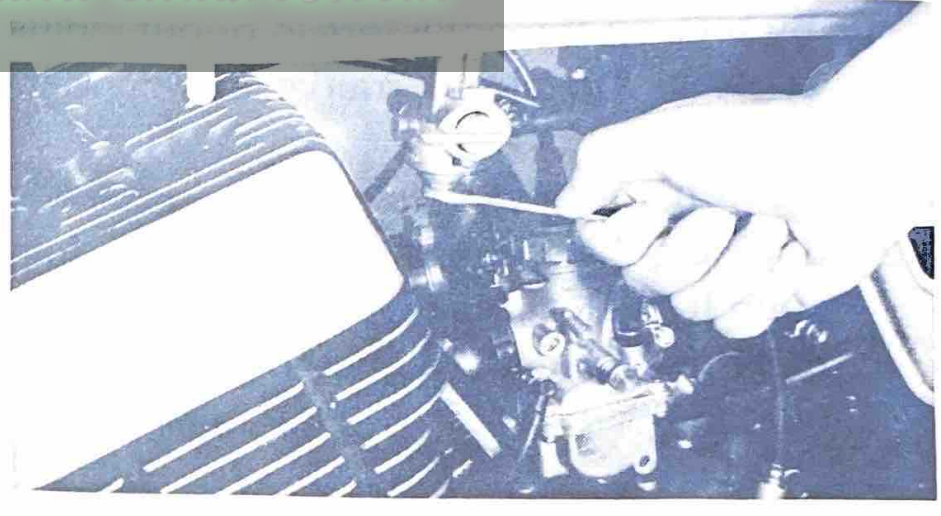


1. Starter plate
2. Bleed screw

Fuel petcock inspection and cleaning

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

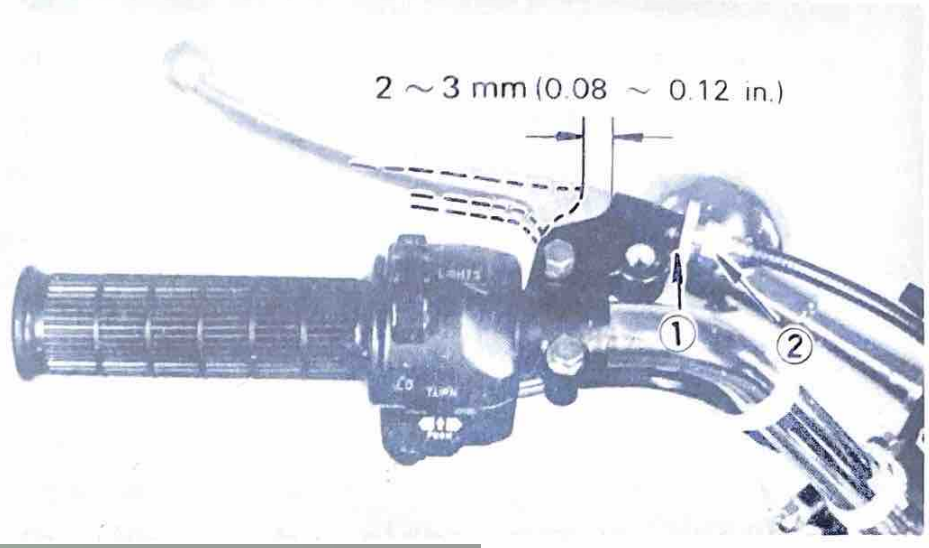
1. First, turn the petcock lever to the "OFF" position; then remove the filter cup and clean the bottom of the cup with solvent.



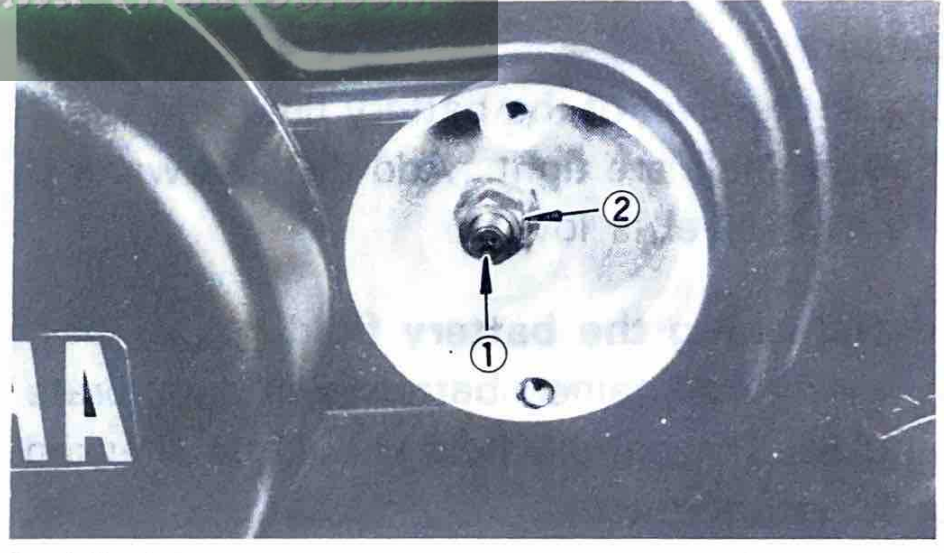
Clutch adjustment

This model has a clutch cable length adjuster and a clutch mechanism adjuster. The cable length adjusters are used to take up slack from cable stretch and to provide sufficient free play for proper clutch operation under various operating conditions. The clutch mechanism adjuster is used to provide the correct amount of clutch "throw" for proper disengagement. Normally, once the mechanism is properly adjusted, the only adjustment required is maintenance of free play at the clutch handle lever.

1. Freeplay adjustment
   Loosen the handle lever adjuster locknut. Next, turn the length adjuster in or out until proper lever free play is achieved.
2. Mechanical adjustment
   The second adjustment is located behind the adjusting cover. Removing the cover will expose the adjusting set screw and locknut.



1. Locknut
2. Adjuster

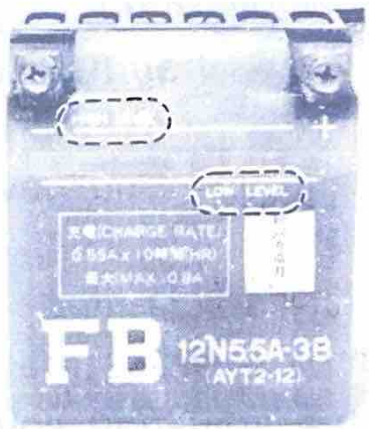


1. Adjusting screw
2. Locknut

Loosen the locknut, rotate the set screw in until it lightly seats against a clutch push rod that works with the set screw to operate the clutch. Back the set screw out 1/4 turn and tighten the locknut. This adjustment must be checked because heat and clutch wear will affect this free play, possibly enough to cause incomplete clutch operation. Recheck clutch cable adjustment at handlebar after adjusting.

Battery

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



Replenishing the battery fluid

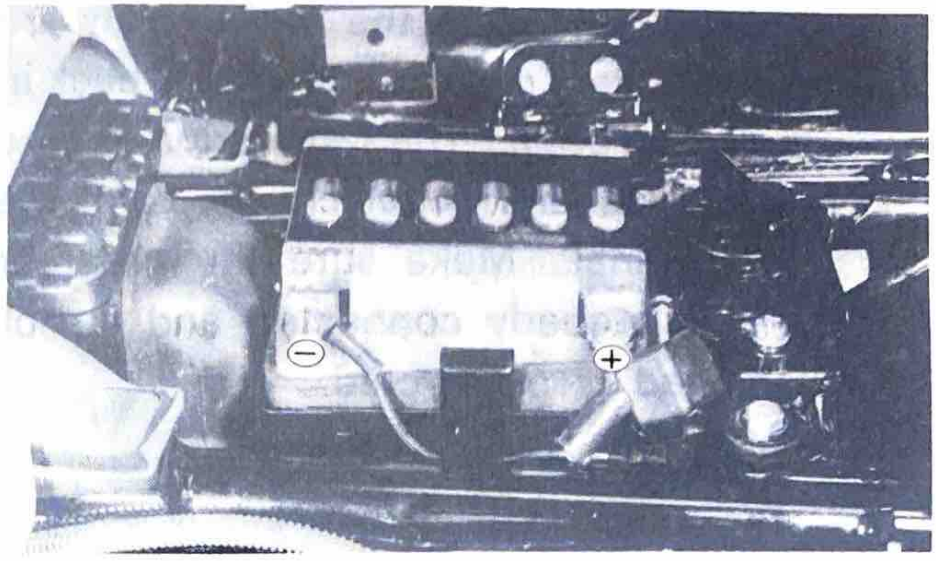
A poorly maintained battery will deteriorate quickly. The battery fluid should be checked at least once a month.

1. The level should be between the high

and low level marks. Use only distilled water if refilling is necessary.

NOTE:

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



2. When the motorcycle is not to be used for a month or longer, remove the battery and store it in a cool, dark place. Completely recharge the battery before reusing.
3. If the battery is to be stored for a longer period than the above, check the specific gravity of the fluid at least once a month and recharge the battery when it is too low.

4. Always make sure the connections are correct when putting the battery back in the motorcycle. The red lead is for the + terminal and the black lead is for the − terminal. Make sure the breather pipe is properly connected and is not damaged or obstructed.

Brake pedal position adjustment

Set the brake pedal position as illustrated.

1. Loosen the adjuster locknut.
2. By turning the adjuster to the right or to the left, adjust the brake pedal position so that its top end is 5 mm (0.2 in) below the foot rest top end.
3. Tighten the locknut.

1. Adjuster
2. Locknut

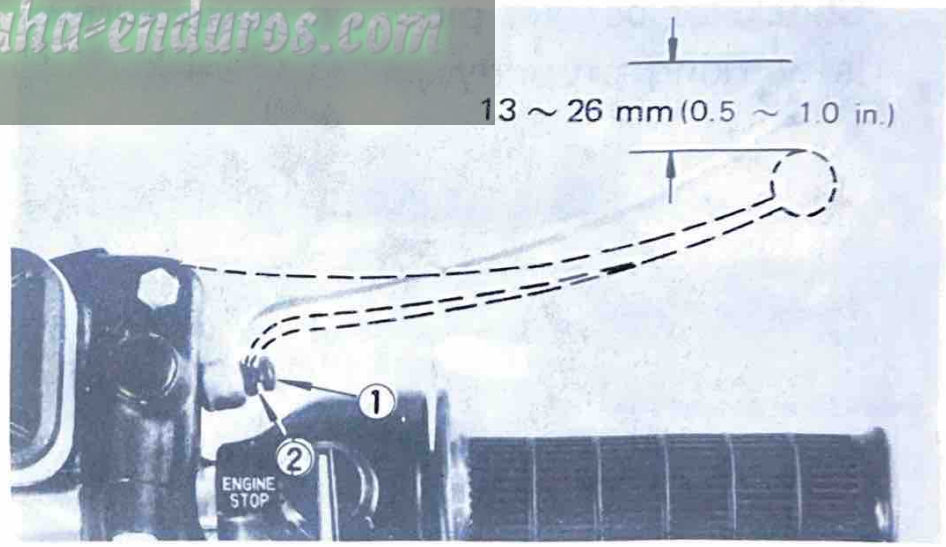
Brake adjustment

The brake can be adjusted by simply adjusting the distance that the brake lever and pedal can travel since the piston in the caliper moves forward as the brake pad wears out, automatically adjusting the clearance between the brake pad and the brake disc.

A. Front disc

The front brake lever should be so adjusted that it has a free play of 13 ~ 26 mm (0.5 ~ 1.0 in.) from when the brake lever is pulled to when the brake begins to be effected.

1. Loosen the adjust screw locknut at the brake lever.
2. Turn the screw so that the brake lever movement is 13 ~ 26 mm (0.5 ~ 1.0 in.)
3. After adjusting, tighten the locknut.

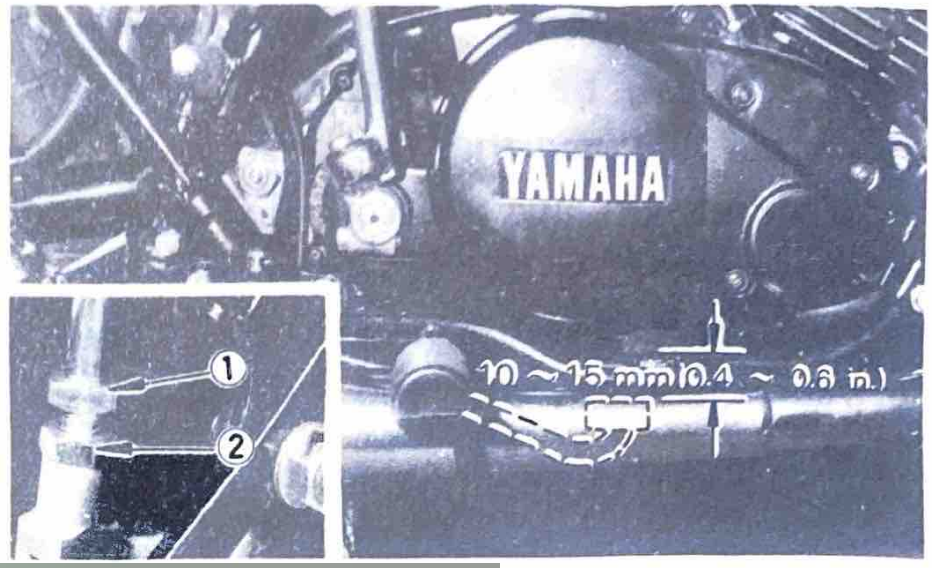


1. Adjust screw
2. Locknut

B. Rear disc

The rear brake pedal should be so adjusted that it has a free play of 10 ~ 15 mm (0.4 ~ 0.6 in) from when the brake pedal is trod to when the brake begins to be effected.

1. Loosen the adjuster locknut at the push rod.
2. Turn the adjuster so that the brake pedal moves 10 ~ 15 mm (0.4 ~ 0.6 in.)
3. After adjusting, tighten the locknut.
   Check for correct play and make sure it is working properly.



1. Adjuster
2. Locknut

Inspecting the brake fluid level

Insufficient brake fluid may allow air to enter the brake system, possibly causing the brakes to become ineffective.

Before driving, check the brake fluid level and replenish when necessary, and observe these precautions:

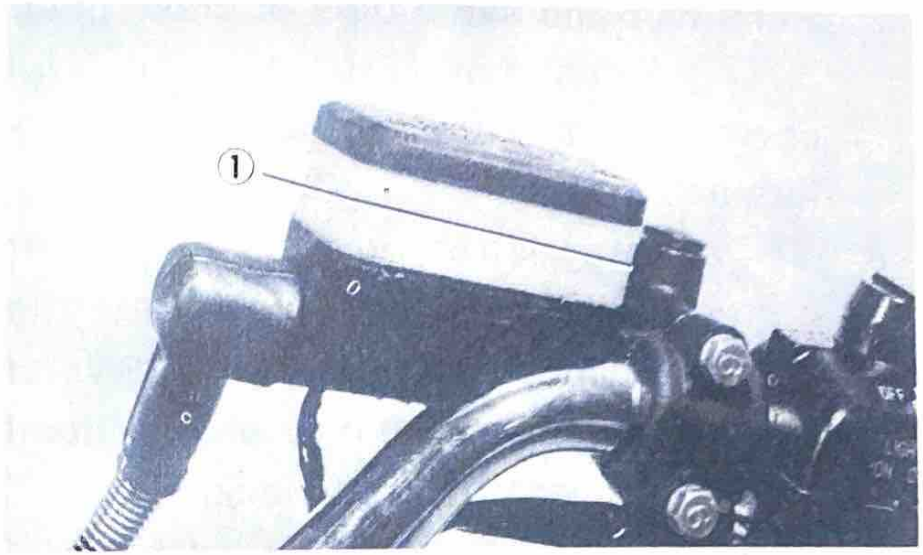
NOTE:

To inspect rear brake master cylinder remove righthand plastic side cover.

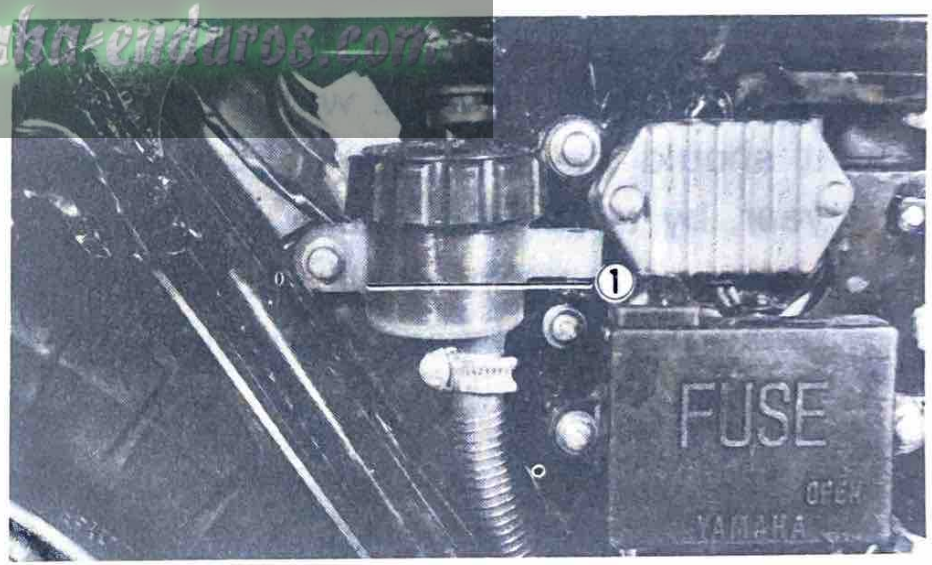
1. Use only the designated quality brake fluid; otherwise, the rubber seals may deteriorate causing leakage and poor brake performance.

   Recommended brake fluids:

   Dot #3, Dot #4 or Dot #5, with 240°C (464°F) boiling point.



1. Low level

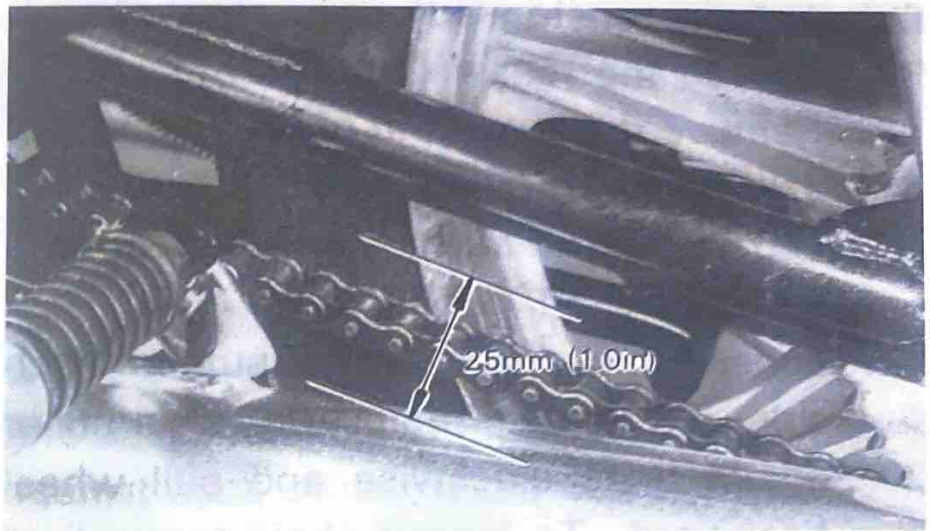


1. Low level

2. Refill with the same type of brake fluid; mixing fluids may result in a harmful chemical reaction and lead to poor performance.
3. Be careful that water or other contamination does not enter the master cylinder when refilling. Water will significantlylower the boiling point and may result in vapor lock.
4. Brake fluid may erode painted surfaces or plastic parts. Always clean up spilled fluid immediately.
5. Because brake fluid is water absorbent, it should be changed at least once a year, by a Yamaha dealer.
6. Have a Yamaha dealer check if the brake fluid level goes down faster than normal.

Drive chain tension check

Inspect the drive chain with both tires touching the ground. Check the tension at the position shown in the illustration. The normal vertical deflection is approximately 25 mm (1.0 in.). If the deflection exceeds 25 mm (1.0 in.) adjust the chain tension.

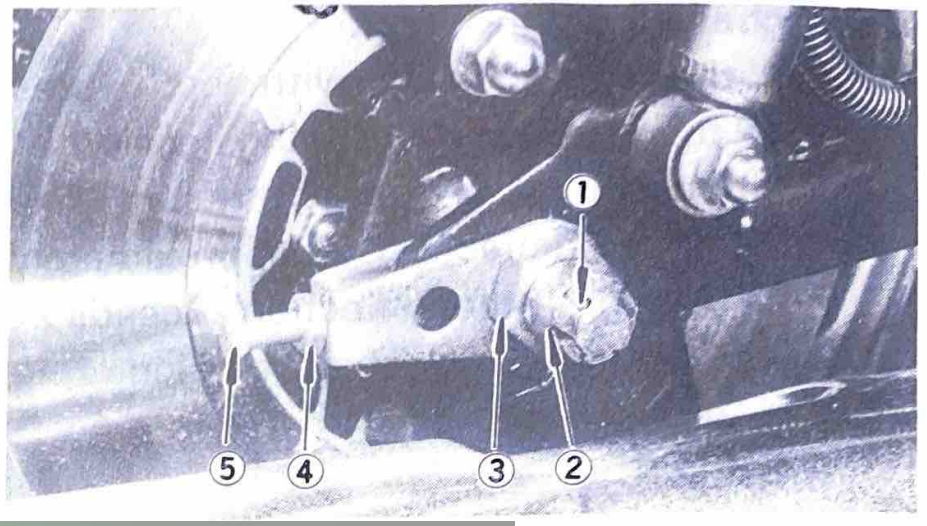


Drive chain tension adjustment

1. Loosen the tension bar locknut.
2. Remove the cotter pin of the rear wheel axle nut with pliers.
3. Loosen the rear wheel axle nut and sprocket shaft nut.
4. Loosen the adjust bolt locknuts on each side. To tighten chain turn chain puller adjust bolts clockwise and pull wheel backward. To loosen chain turn adjust bolts counterclockwise. Turn each bolt exactly the same amount to maintain correct axle alignment (There are marks on each side of rear arm and on each chain puller; use them to check for proper alignment).

NOTE: ———————————————

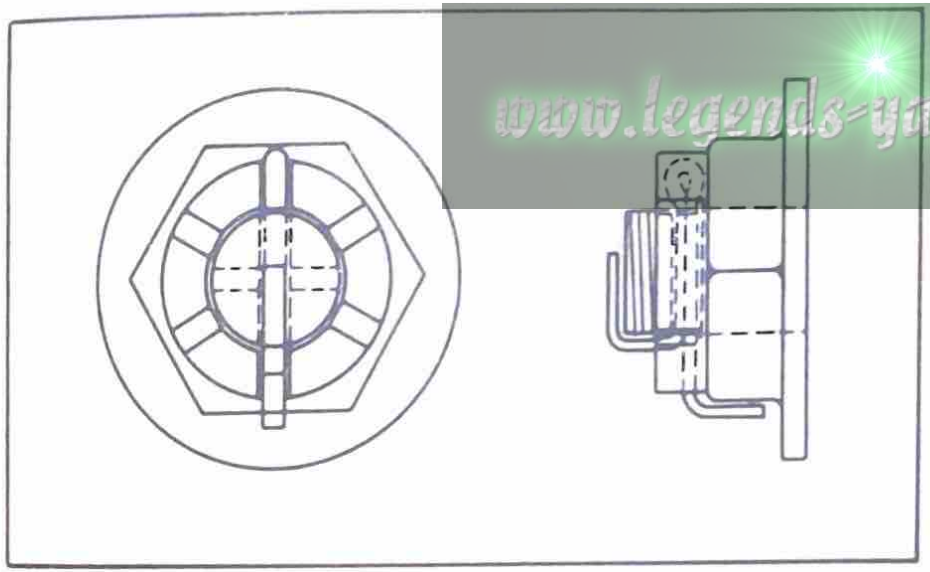
Before adjusting, rotate rear wheel through several revolutions and check tension several times to find the tightest



1. Cotter pin
2. Axle nut
3. Sprocket shaft nut
4. Locknut
5. Adjusting bolt

point. Adjust chain tension with rear wheel in this "tight chain" position.

5. After adjusting, be sure to tighten the locknuts, rear wheel axle nut, sprocket shaft nut and tension bar locknut.
6. Insert the cotter pin into the rear wheel axle nut and bend the end of the cotter pin as shown in the illustration (if the



nut notch and the cotter pin hole do not match, loosen the nut slightly to match).

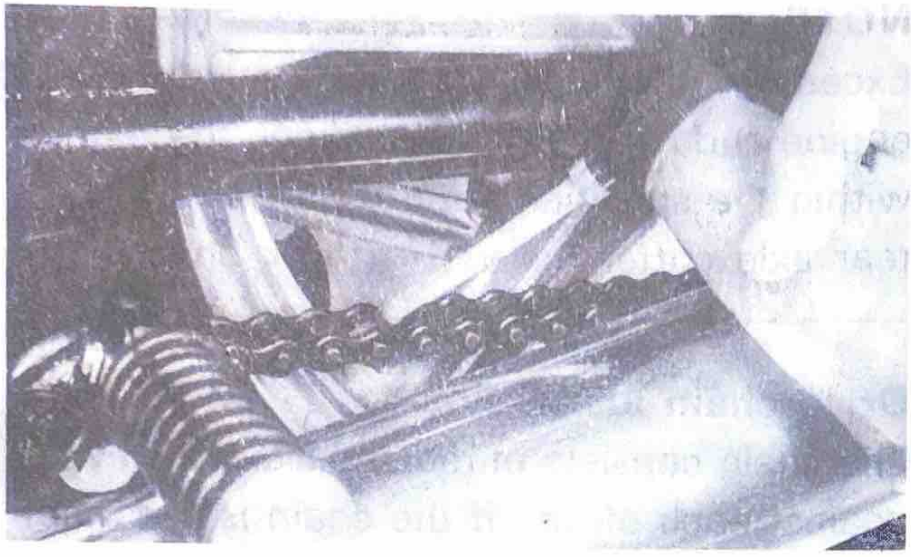
NOTE:

Excessive chain tension will overload the engine and other vital parts; keep the tension within the specified limits. Also, replace the rear axle cotter pin with a new one.

Drive chain lubrication

The chain consists of many parts which work against each other. If the chain is not maintained properly, it will wear out rapidly. Without lubrication the chain could wear out within 1,000 km (600 mi); therefore, form the habit of periodically servicing the chain. This service is especially necessary when riding in dusty conditions.

1. Use any of the many brands of spray type chain lubricant. First, remove dirt and mud from the chain with a brush or cloth and then spray the lubricant between both rows of side plates and on all center rollers. This should be performed every 400 km (250 mi.)



Cable inspection and lubrication

1. Damage to the outer housing of the various cables, may cause corrosion and often free movement will be obstructed. An unsafe condition may result so replace as soon as possible.
2. If the inner cables do not operate smoothly, lubricate or ask your Yamaha dealer to replace them.
   Recommended lubricant:
   SAE 10W/30 Type "SE" motor oil

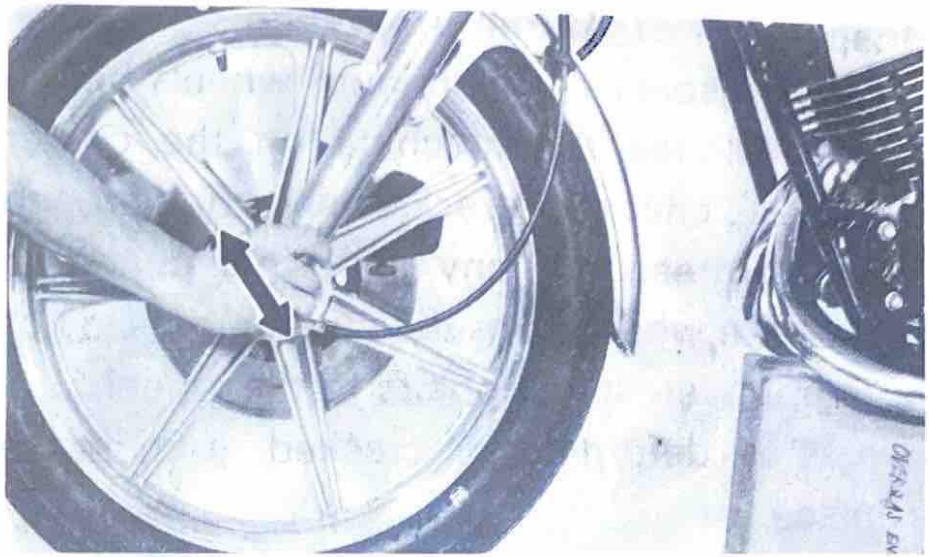
Lubrication of lever, pedal, etc.

1. Lubricate the pivoting parts of the clutch lever with motor oil (10W/30).
2. Lubricate the shaft of the brake pedal with lithium soap grease.

Steering inspection

Periodically inspect the condition of the steering. Worn out or loose steering bearings may be dangerous.

Place a block under the engine to raise the front wheel of the motorcycle off the ground; then hold the lower end of the front fork and try to move forward and backward. If any free play can be felt, ask a Yamaha dealer to inspect and adjust.



Inspection is easier if the front wheel is removed. Ask a dealer to lubricate the steering bearings every 5000 km (3000 miles) of operation (move often in cases of off-road operation).

Inspection of Aluminum Wheels

Always inspect the aluminum wheels before a ride. Place the machine on the center stand and check for cracks, bends or warpage of the wheels. If any abnormal condition exists in a wheel, consult your dealer. Do not attempt even small repairs to the wheel. If a wheel is deformed or cracked, it must be replace.

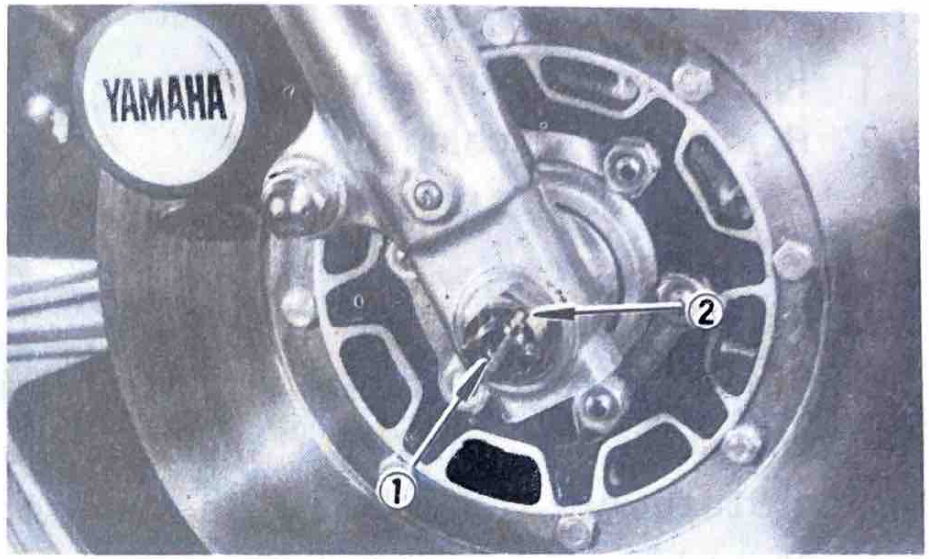
CAUTION:

These aluminum wheels are not designed for use with tubeless tires.

If you must change your own tires, use extreme caution with tire changing tools so as not to damage the wheel surface. Brake pad replacement, tire, tube and related wheel parts replacement should be left to a Yamaha service technician.

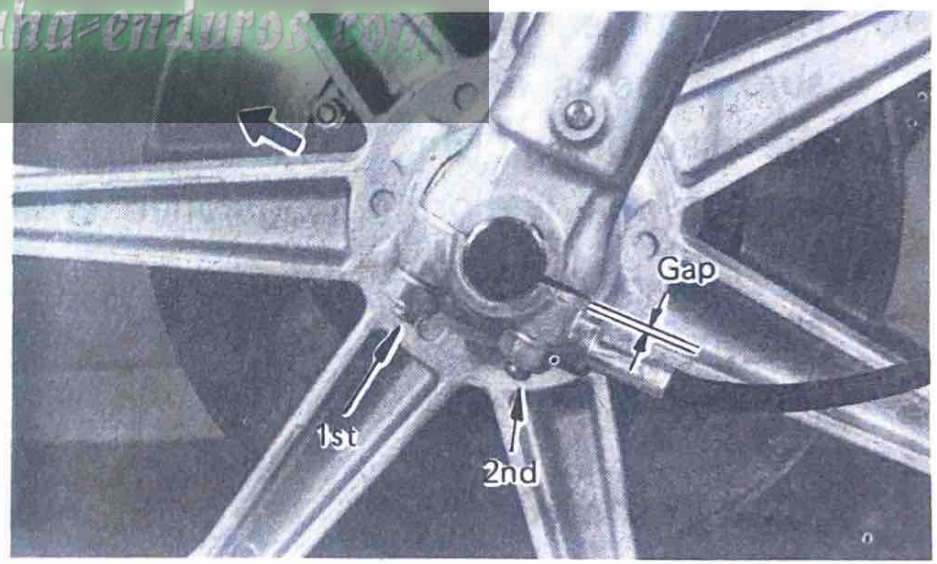
Front wheel removal

1. Place machine on center stand.
2. Remove the cotter pin and wheel nut.
3. Loosen front wheel axle holder nuts (Do not remove axle holder.)
4. Make sure the motorcycle is properly supported. Remove front axle and front wheel.



1. Cotter pin
2. Axle nut

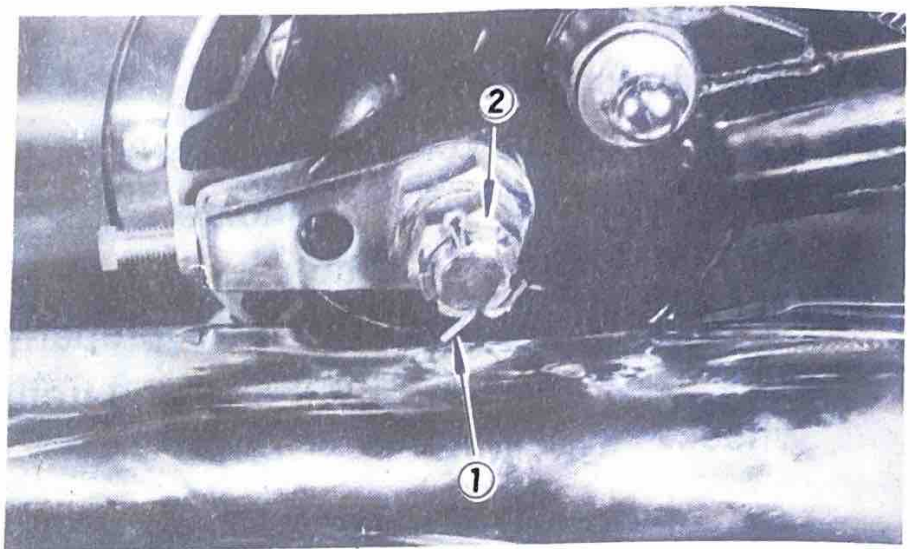
5. During reassembly, check the following:
   Make sure there is an enough gap between disc pads.
   The axle holder nuts should be tightened in the sequence shown at right.
   Make sure the axle nut is properly torqued and a new safety cotter pin is installed.



Axle nut torque:
8.3 ~ 13 m-kg (60 ~ 94 ft-lb)

Rear wheel removal

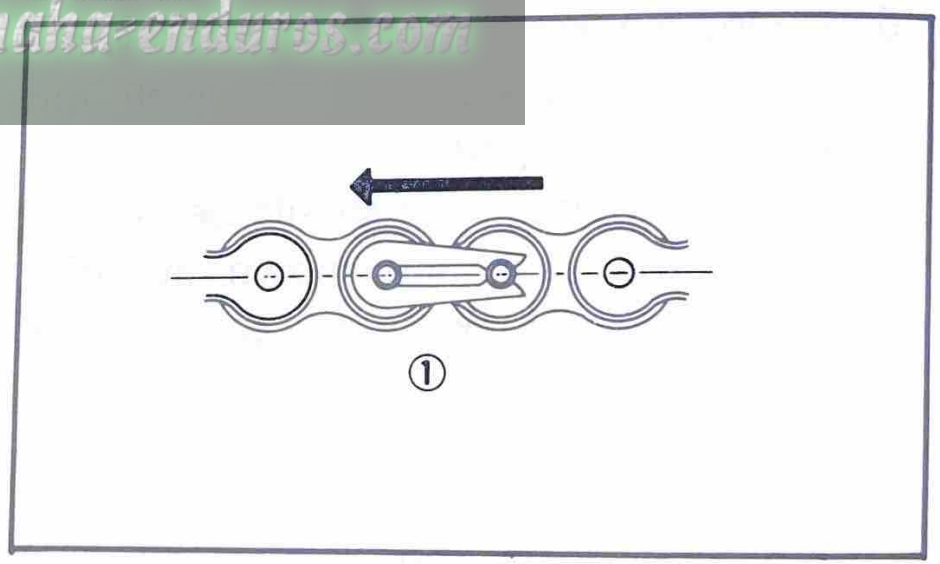
1. Place machine on center stand.
2. Remove drive chain.
3. Remove cotter pin and axle nut from rear axle.
4. Remove rear axle.
5. Remove rear wheel. It may be necessary to raise the rear of the motorcycle to clear the caliper assembly.



1. Cotter pin
2. Axle nut

6. Reassemble in reverse order. Make sure there is an enough gap between the disc pads. Make sure drive chain master link is correctly installed with rounded end in direction of chain travel. Make sure the axle nut is properly torqued. Install a new safety cotter pin.

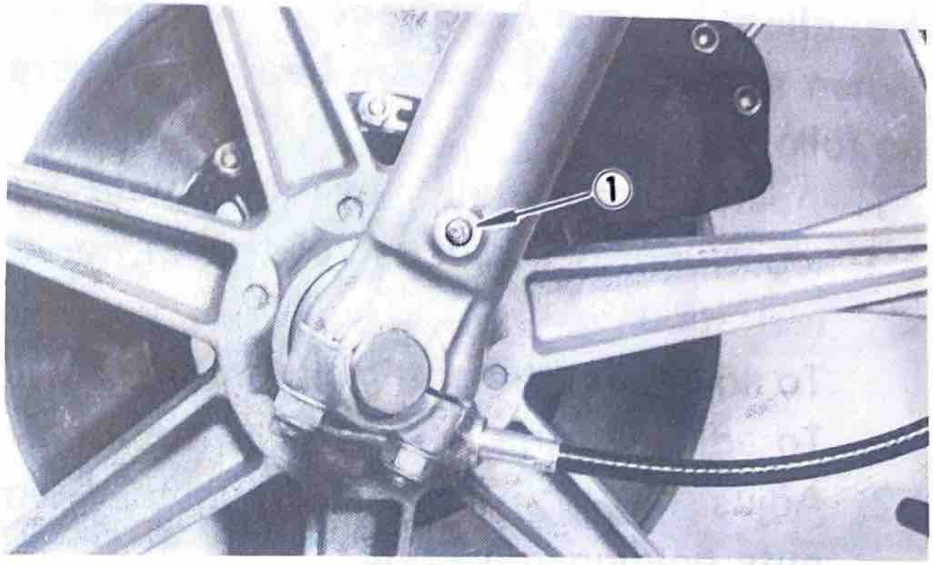
Axle nut torque:
12 ~ 18 m-kg (87 ~ 130 ft-lb)



1. Direction of travel

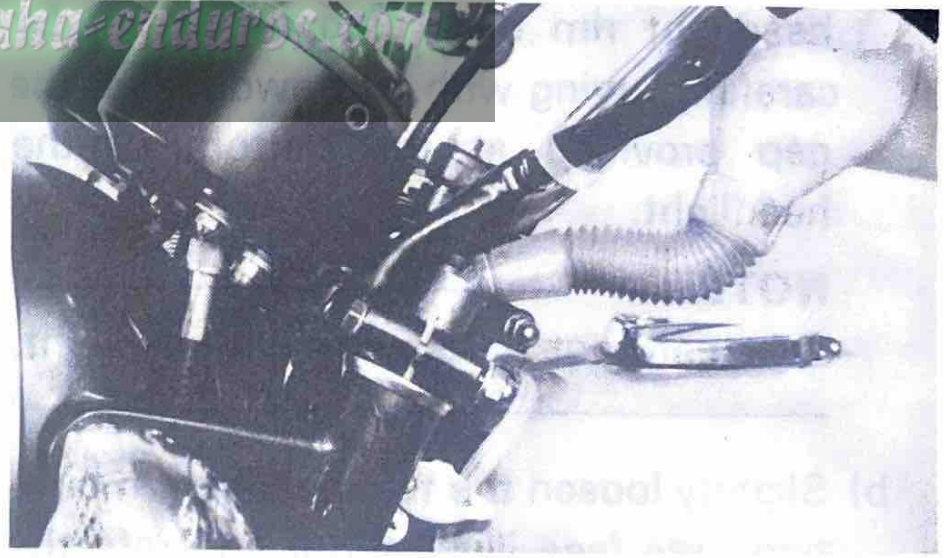
Front fork

At least every 6,400 km (4,000 miles) the front fork oil should be completely drained and refilled. Remove the Phillips head screws in the very bottom of the forks. Next, remove the fork cap found on top of each fork tube and most of the fork oil will drain out. Compress the forks several times to pump all the remaining oil out. Reinstall screws slowly pour in 155 c.c. (5.3 oz.) oil in each fork leg. (see Lubrication Recommendations section for type of oil).



1. Drain Screw

At least every other time you should have your mechanic dismantle the fork assembly and thoroughly clean out each fork. Water and dirt eventually coat much of the inner fork surfaces and cannot be readily removed just by draining.



NOTE:

To change the front fork oil, place a wooden block under the engine to keep the front of the machine raised off the floor.

Headlight beam adjustment

When necessary, adjust the headlight beam as follows.

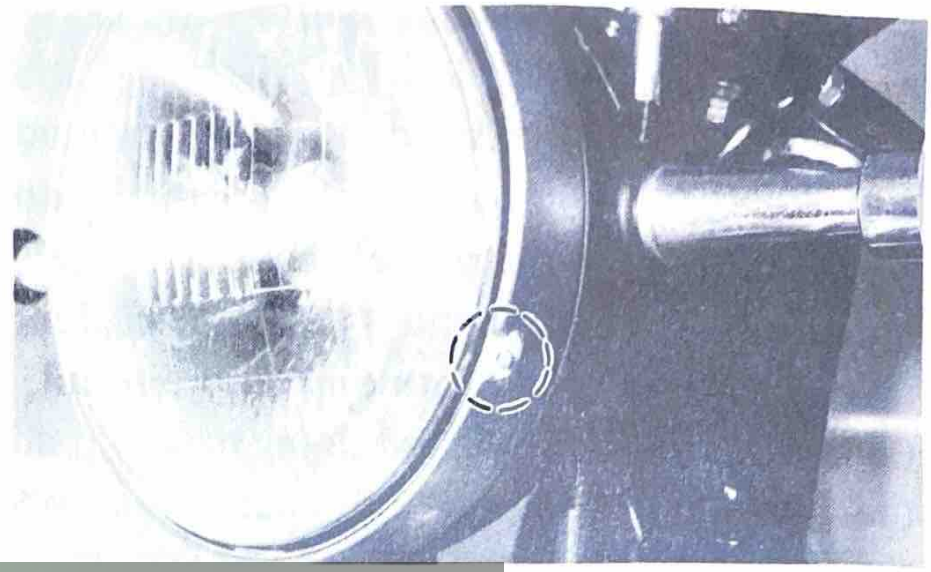
1. Adjust horizontally by tightening or loosening the adjust screw, as in the illustration.
   To adjust to the right: tighten the screw
   To adjust to the left: loosen the screw
2. Adjust vertically by loosening the two nuts holding the body.

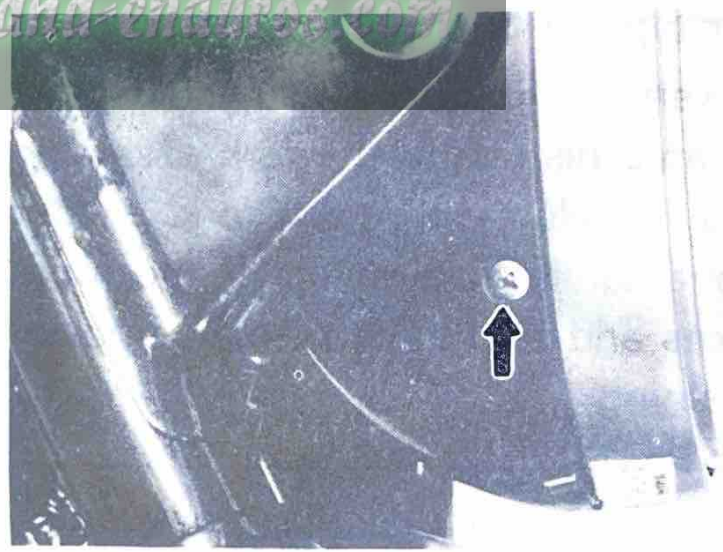
a) Remove the anchor screw holding the headlight rim and remove the rim by carefully prying with a screwdriver at the gap provided at the bottom of the headlight.

NOTE:

Take care not to damage the headlight.

b) Slightly loosen the two headlight mounting nuts (see illustration) and refit the rim to the headlight body.

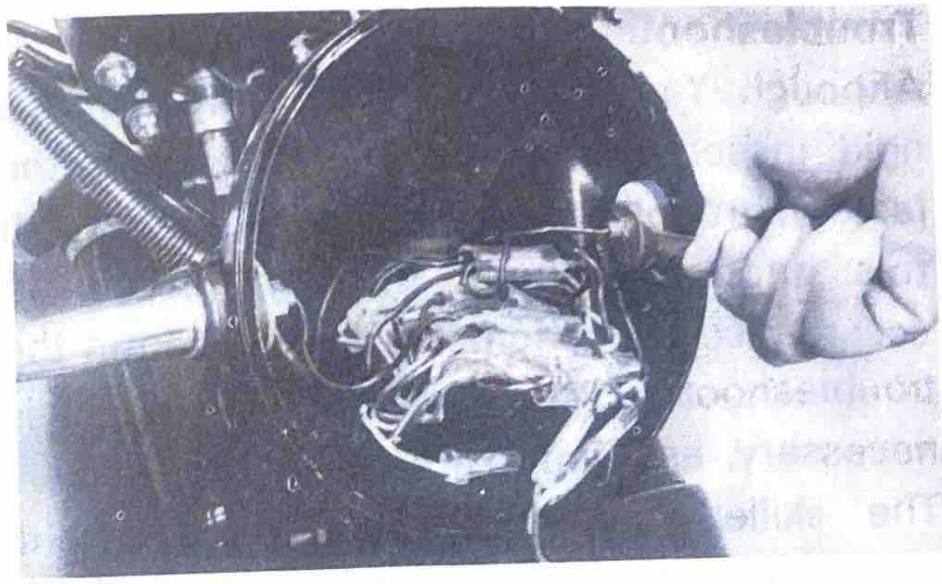




NOTE:

Do not tighten the anchor screw yet.

c) Next, adjust vertically by moving the headlight body. When adjustment is complete hold the body in place, remove the rim and tighten the two mounting nuts. Then refit the rim to the headlight body.



Replacing the headlight bulb

This motorcycle is equipped with a sealed beam headlight. If the headlight burns out, ask your Yamaha dealer for a lens unit replacement and adjustment.

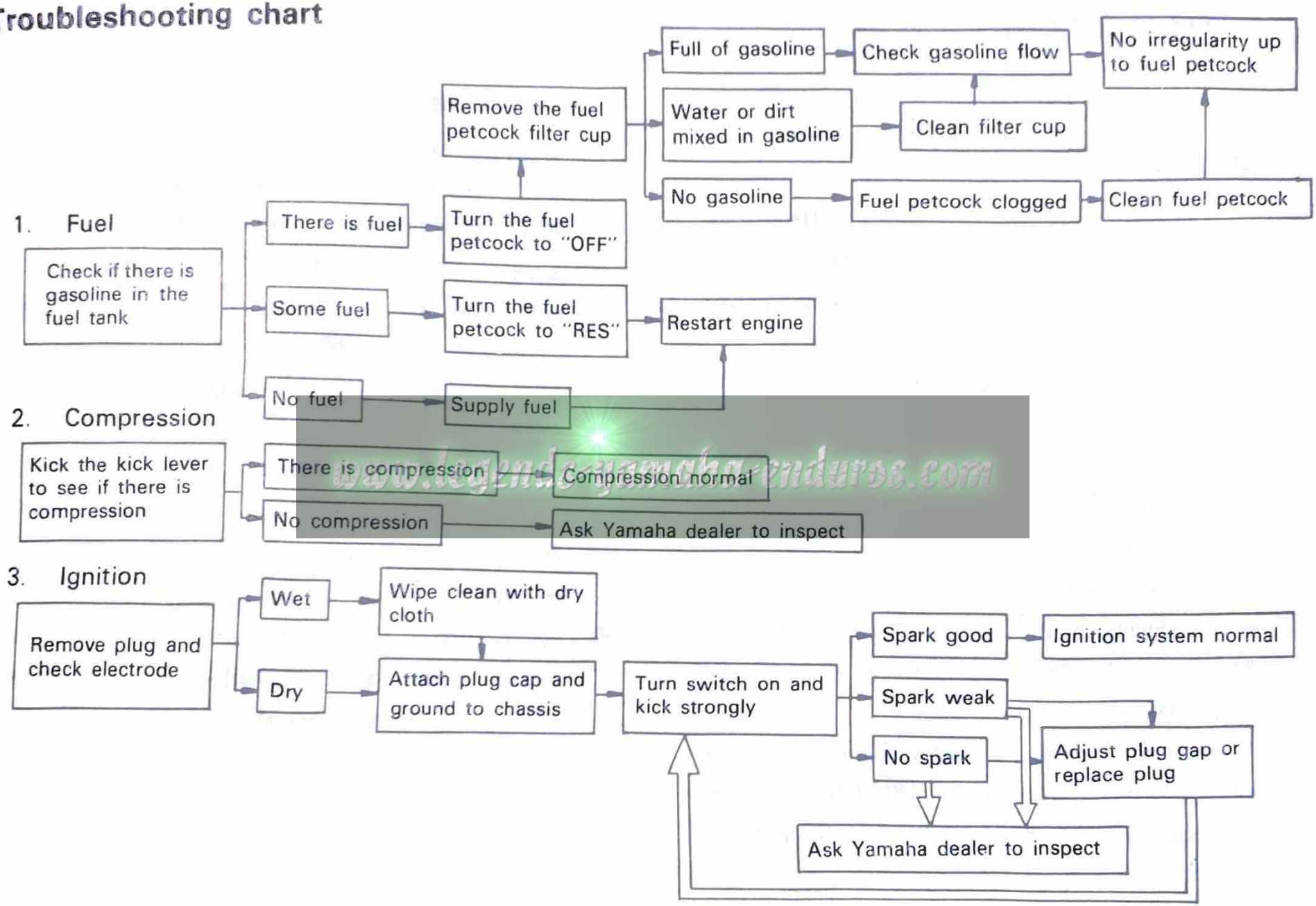
Troubleshooting

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

The skilled technicians at your Yamaha dealer provide excellent service. For replacement parts, use only genuine Yamaha Parts. Imitaion parts are similar in shape but often inferior in quality of materials and workmanship, consequently, service life is shorter and more expensive repairs may be necessitated.

Any fault in the fuel, compression or ignition systems can cause poor starting or loss of power while driving. The troubleshooting chart describes quick and easy procedures for checking these systems.

Troubleshooting chart



CLEANING AND STORAGE

A. CLEANING

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

1. Before cleaning the machine:
   a) Block off end of exhaust pipe to prevent water entry; a plastic bag and strong rubber band may be used.
   b) Remove air cleaner or protect it from water with plastic covering.
   c) Make sure spark plug(s), gas cap, oil tank cap, transmission oil filler cap are properly installed.
2. If engine case is excessively greasy, apply degreaser with a paint brush. Do not apply degreaser to chain, sprockets, or wheel axles.
3. Rinse dirt and degreaser off with garden hose, using only enough hose pressure to do the job. Excessive hose pressure may cause water seepage and contamination of wheel bearings, front forks and transmission seals. Many expensive repair bills have resulted from improper high pressure detergent applications such as those available in coin-operated car washes.
4. Once the majority of the dirt has been hosed off, wash all surfaces with warm water and mild, detergent-type soap. An old tooth brush or bottle brush is handy to reach hard-to-get-to places.
5. Rinse machine off immediately with clean water and dry all surfaces with a chamois, clean towel, or soft absorbent cloth.
6. Immediately after washing, remove excess moisture from chain and lubricate to prevent rust.

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

B. STORAGE

Long term storage (30 days or more) of your motorcycle will require some preventive procedures to insure against deterioration. After cleaning machine thoroughly, prepare for storage as follows:

1. Drain fuel tank, fuel lines, and carburetor float bowl(s).
2. Remove empty fuel tank, pour a cup of 10W to 30W oil in tank, shake tank to coat inner surfaces thoroughly and drain off excess oil. Re-install tank.
3. Remove spark plug(s), pour about one tablespoon of 10W to 30W oil in spark plug hole(s) and re-install spark plugs. Kick engine over several times (with ignition off) to coat cylinder walls with oil.
4. Remove drive chain. Clean thoroughly with solvent and lubricate. Re-install chain or store in a plastic bag (tie to frame for safe-keeping).
5. Lubricate all control cables.
6. Block up frame to raise both wheels off ground. (Main stands can be used on machines so equipped.)
7. Deflate tires to 10 m-kg/cm^2 (14 psi).
8. Tie a plastic bag over exhaust pipe outlet(s) to prevent moisture entering.

9. If storing in humid or salt-air atmosphere, coat all exposed metal surfaces with a light film of oil. Do not apply oil to rubber parts or seat cover. Remove battery and charge. Store in a dry place and re-charge once a month. Do not store battery in an excessively warm or cold place (less than 32°F or more than 90°F).

NOTE:

Make any necessary repairs before storing the motorcycle.

MISCELLANEOUS

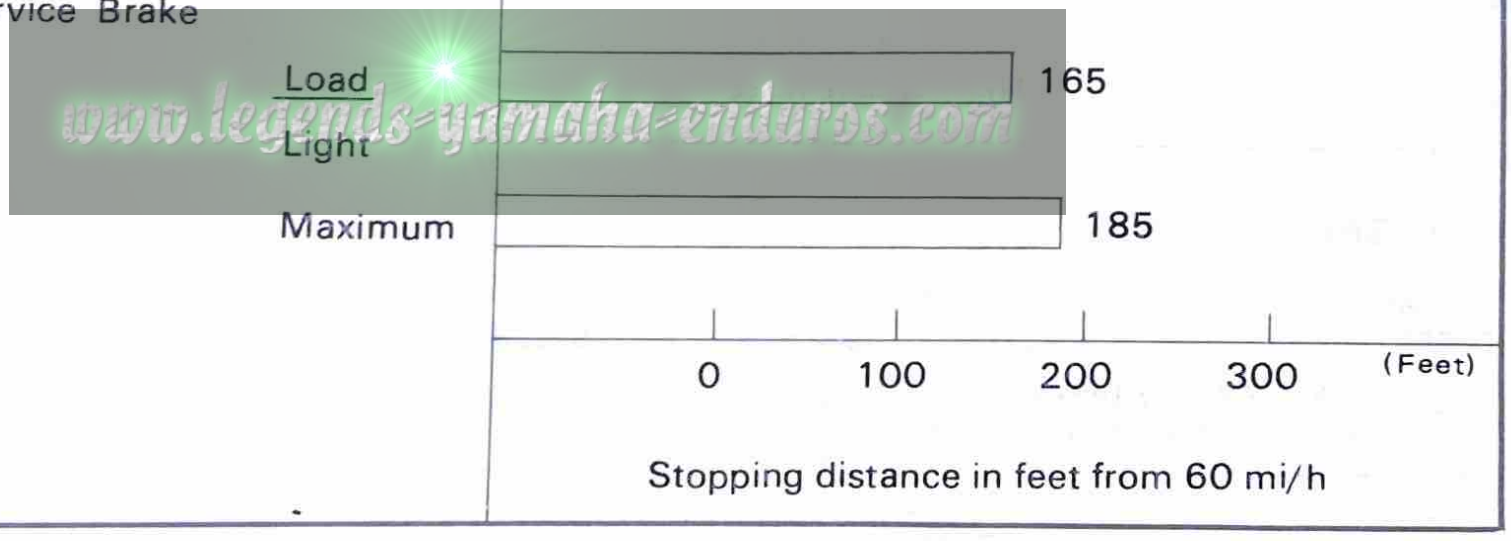
Consumer information

STOPPING DISTANCE

This figure indicates braking performance that can be met or exceeded by the vehicles to which it applies, without locking the wheels, under different conditions of loading and with partial failures of the braking system. The information presented represents results obtainable by skilled drivers under controlled road and vehicle conditions and the information may not be correct under other conditions.

Description of vehicles to which this table applies: Yamaha motorcycle RD400C

A. Fully Operational Service Brake



Stopping distance in feet from 60 mi/h

ACCELERATION AND PASSING ABILITY

This figure indicates passing times and distances that can be met or exceeded by the vehicles to which it applies, in the situations diagrammed below.

The low-speed pass assumes an initial speed of 20 mi/h. and a limiting speed of 35 mi/h. The high-speed pass assumes an initial speed of 50 mi/h. and a limiting speed of 80 mi/h.

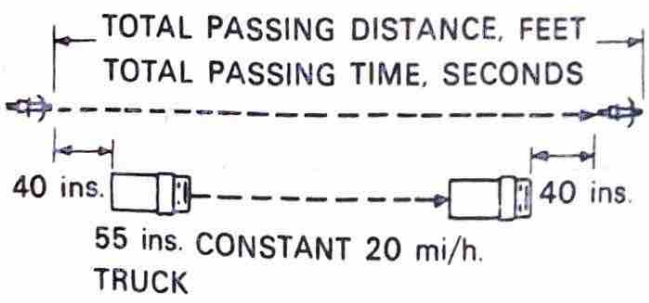
NOTICE: The information presented represents results obtainable by skilled drivers under controlled road and vehicle conditions, and the information may not be correct under other conditions.

Description of vehicles to which this table applies: Yamaha motorcycle RD400C

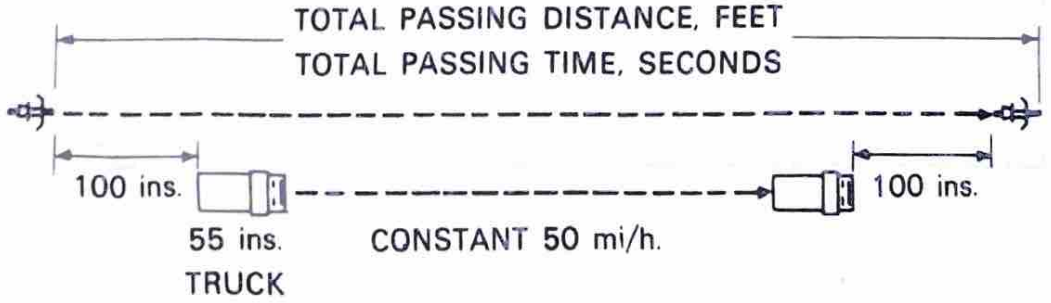
Summary table

Low-speed pass	350 feet:	7.1 seconds
High-speed pass	970 feet:	9.7 seconds

LOW-SPEED



HIGH-SPEED



WARRANTY INFORMATION

Please refer to your copy of the Yamaha Owner's Warranty Guide* for details of the warranty offered on your new Yamaha.

The Warranty Guide contains the warranty policy, an explanation of the warranty, and other important information. Becoming familiar with these policies will be to your advantage in making the best use of Yamaha's warranty programs.

There are certain requirements which you must meet in order to qualify for warranty coverage. FIRST, your new Yamaha must be operated and maintained properly, as explained in this manual. If you have any questions about any procedure in this manual, please consult your dealer. ABUSE AND NEGLECTED MAINTENANCE MAY LEAD TO MECHANICAL FAILURES WHICH CANNOT BE COVERED UNDER WARRANTY.

SECOND, IF ANY PROBLEMS OCCUR WHICH YOU FEEL SHOULD BE COVERED UNDER WARRANTY, NOTIFY YOUR DEALER IMMEDIATELY. Don't delay, as small problems left unrepaired can become large problems which may not be covered under warranty.

We recommend that the Warranty Guide be used as a folder in which you may keep your registration and other important documents related to your new Yamaha.

* The Yamaha Owner's Warranty Guide is to be supplied by your Yamaha dealer at the time of purchase. If you did not receive one, or have lost yours, you may obtain extra copies upon request from your Yamaha dealer or by writing to:

YAMAHA INTERNATIONAL CORPORATION
P.O. Box 6600
Buena Park, California 90620
Attn: Warranty Department

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YAMAHA MOTOR CO., LTD.

LIT-11626-00-02

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