



YAMAHA

RD 400D

OWNER'S MANUAL

www.legends-yamaha-enduros.com

1A1-28199-11

RD400D OWNER'S MANUAL
1ST. PRINTING, MAY 1976
ALL RIGHTS RESERVED
BY YAMAHA MOTOR COMPANY
LIMITED, JAPAN

PRINTED IN JAPAN
P/N LIT-11626-00-02

INTRODUCTION

Thank you for buying the Yamaha RD400D.

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Some data in this manual may become outdated due to improvements made to

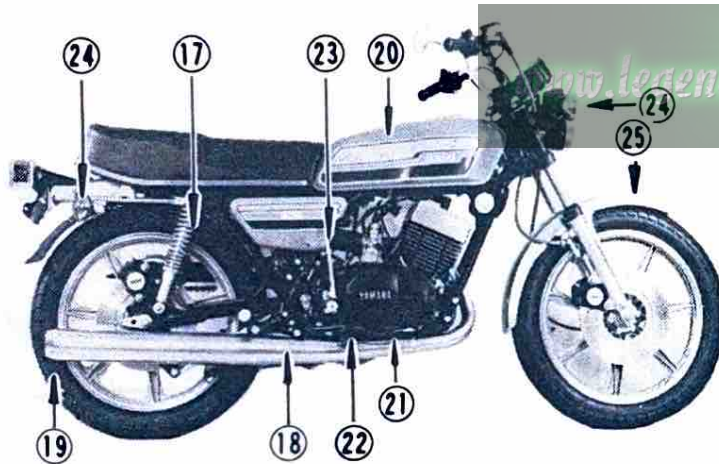
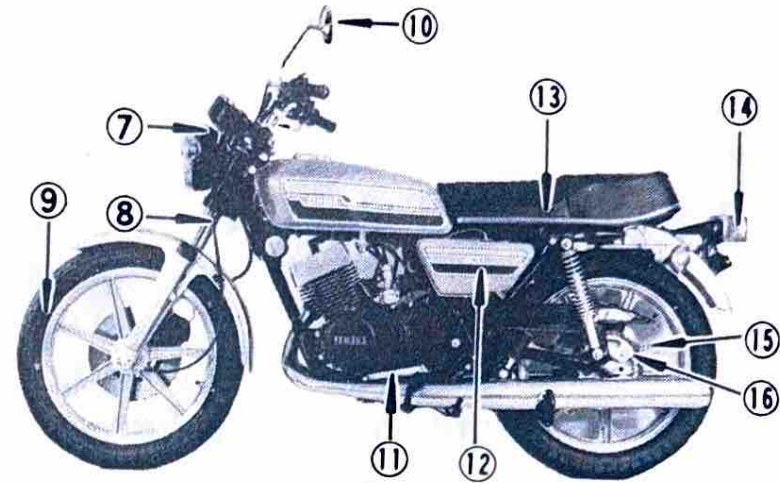
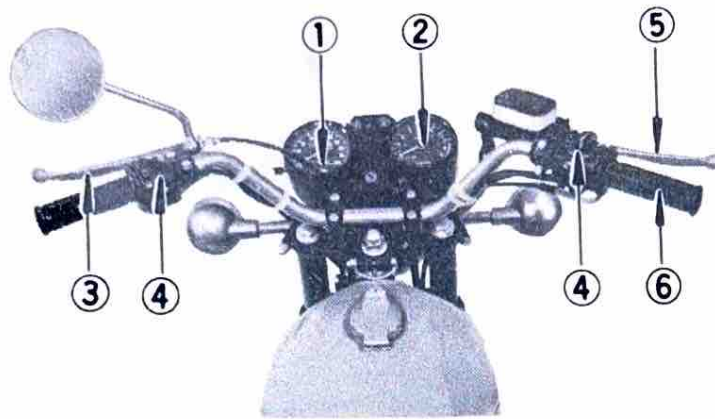
this model in the future. If there is any question concerning this manual, consult your nearby Yamaha dealer.

SERVICE DEPT.
INTERNATIONAL DIVISION
YAMAHA MOTOR CO., LTD.

CONTENTS

NOMENCLATURE	3
MACHINE IDENTIFICATION	4
SPECIFICATIONS	5
CONTROL FUNCTIONS	8
PRE-OPERATION CHECKS	16
OPERATION AND IMPORTANT RIDING POINTS	20
PERIODIC MAINTENANCE AND MINOR REPAIR	28
CLEANING AND STORAGE	58
MISCELLANEOUS	61
WARRANTY INFORMATION	63
CIRCUIT DIAGRAM	64

NOMENCLATURE



NOTE:

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

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

MACHINE IDENTIFICATION

Frame number

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

Engine number

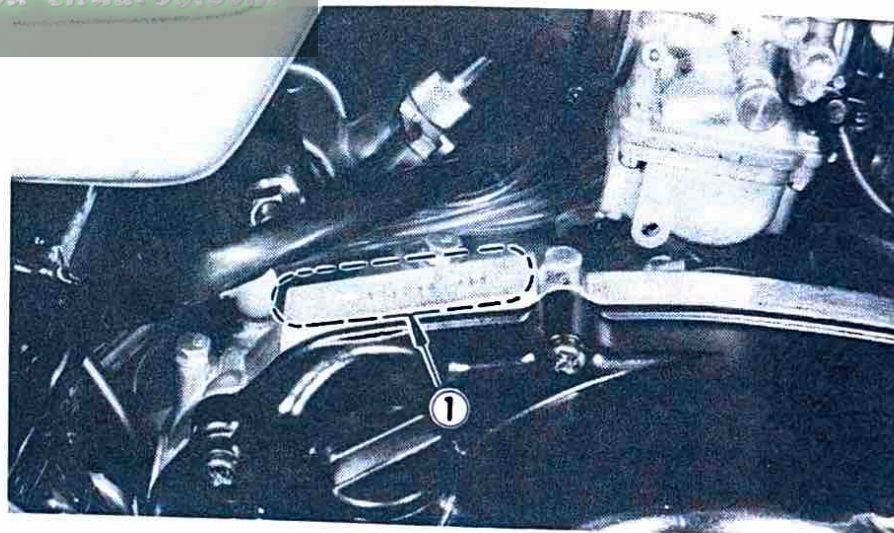
The engine serial number is stamped into the elevated part of the right rear section of the engine.

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	RD400D
Dimension: Overall length Overall width Overall height Wheelbase Minimum road clearance	2,015 mm (79.3 in) 830 mm (32.7 in) 1,090 mm (42.9 in) 1,315 mm (51.8 in) 155 mm (6.1 in)
Weight: Dry	155 kg (342 lb)
Performance: Minimum turning radius Climbing capacity	2,310 mm (90.9 in) 28°
Engine: Type Engine model Cylinder Displacement Bore and Stroke Compression ratio	2 stroke gasoline, air cooled 1A1 Twin in parallel, Forward Inclined, "Torque induction" system 398 cc (24.29 cu.in) 64 mm × 62 mm (2.520 in × 2.491 in) 6.2

Model		RD400D	
Starting system Ignition system Gasoline tank capacity Oil tank capacity Transmission oil capacity Lubricating system Battery type/Capacity Generator system Spark plug Carburetor Air cleaner Clutch type		Kick starter Battery ignition 13 lit (3.4 US.gal) 1.8 lit (1.9 US.qt) Periodic oil change: 1,500 cc (1.6 US.qt) Separate lubricant (Yamaha Autolube) AYT2-12/12V, 5.5AH A.C. Generator B-8ES N.G.K. VM28SC Dry, paper filter Wet, multiple disk	
Transmission: Primary reduction system Primary reduction ratio Secondary reduction system Secondary reduction ratio Gear box type Operating system/Type		Helical gear 2.869 (66/23) Chain 2.235 (38/17) Constant mesh, 6-speed forward Left foot operation/Return	
Gear ratio:			
First		36/14 (2.571)	
Second		32/18 (1.777)	
Third		29/22 (1.318)	
Fourth		26/24 (1.083)	

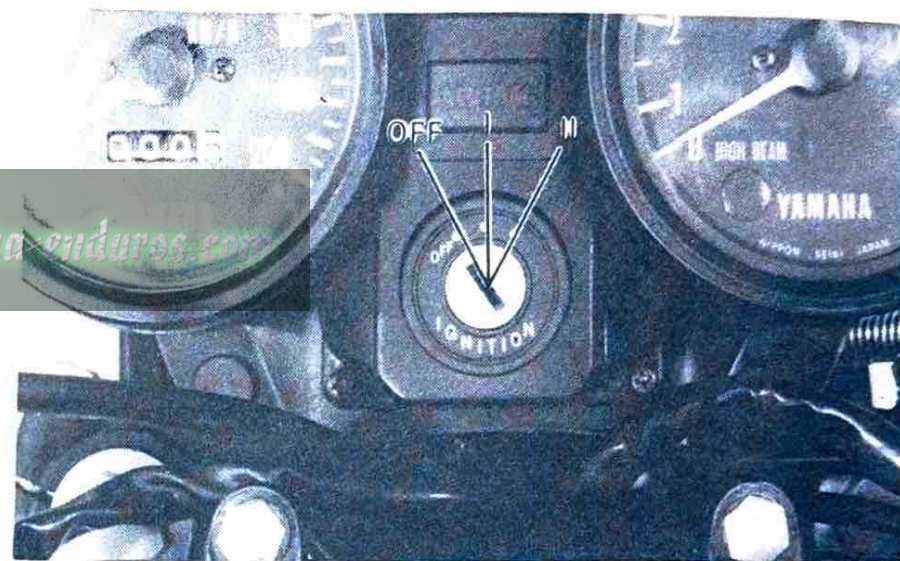
Model		RD400D	
	Fifth	25/26	(0.961)
	Sixth	24/27	(0.888)
Chassis:			
Frame type		Double cradle type, high tensil tube	
Steering:	Caster	62.5°	
	Trail	109 mm (4.33 in)	
Tire size:	Front	3.25S18 — 4PR	
	Rear	3.50S18 — 4PR	
Braking system:	Front	Hydraulic disc brake/Right hand operation	
	Rear	Hydraulic disc brake/Right foot operation	
Suspension:	Front	Telescopic fork	
	Rear	Swing arm	
Shock absorber:	Front	Coil spring, oil damper	
	Rear	Coil spring, oil damper	
Electrical:			
Headlight (High/Low beam)		12V, 40W/30W	
Tail/Stoplight		12V, 8W/27W	
Flasher light		12V, 27W	
Pilot lights:	Flasher	12V, 3.4W	
	High beam	12V, 3.4W	
	Neutral	12V, 3.4W	
	Oil caution	12V, 3.4W	
Meter light		12V, 3.4W	

CONTROL FUNCTIONS

Main switch

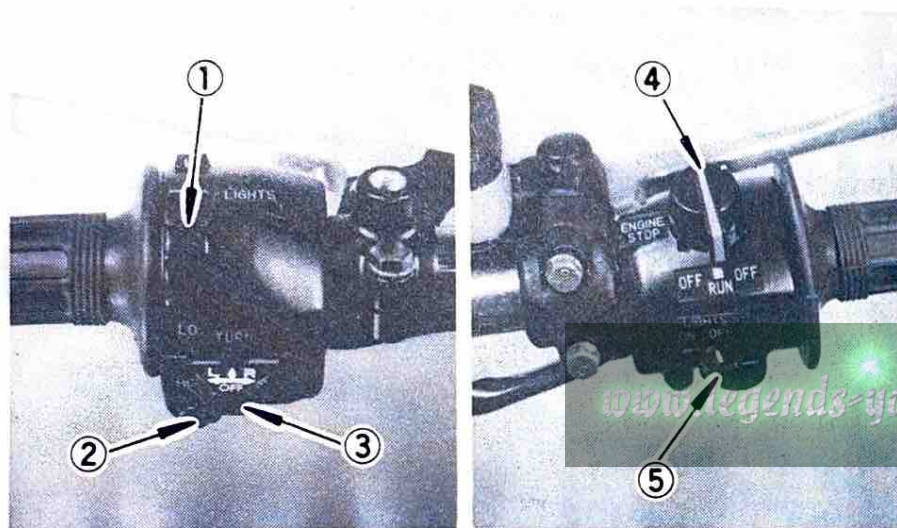
The following chart shows the key position at which the lamps, horn and ignition circuit are switched on or off: (The circle (○) denotes "Switch on".)

Part name	Key position					Instructions
	OFF	I		II		
Lights switch		ON	OFF	ON	OFF	Set the right handle-bar switch
Headlight		○		○		www.Legends-ya
Taillight		○		○		
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 trou-

ble takes place in the throttle system. The engine will not start when the engine switch is turned to “OFF”.

“LIGHTS” switch

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

“LIGHTS” switch (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.

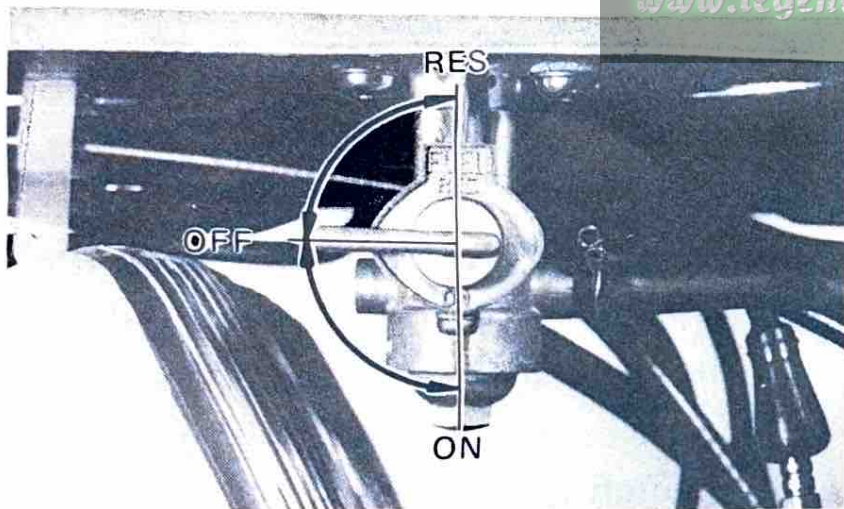
“TURN” switch

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 150 meters (490 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 "TURN" (orange):

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

Neutral light "NEUTRAL" (green):

This indicator lights when the transmission is in neutral.

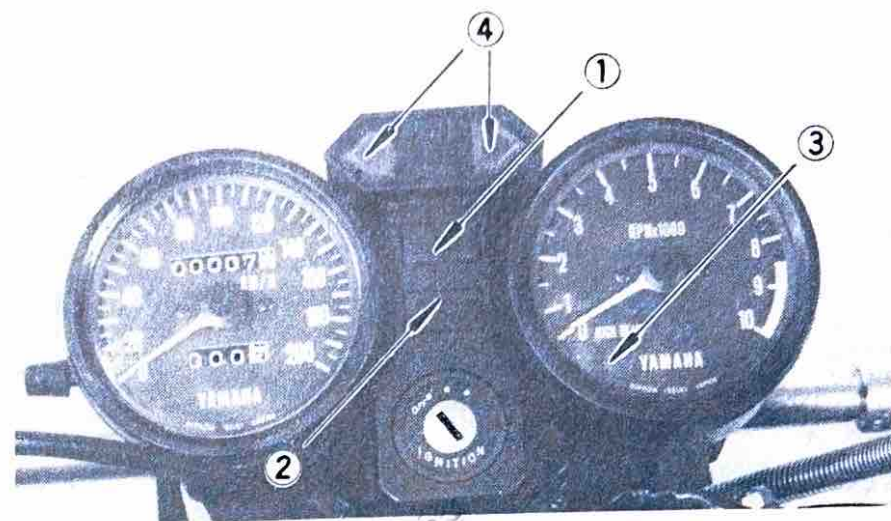
High beam indicator light "HIGH BEAM" (blue):

This indicator lights when the headlight high beam is used.

Oil caution light "OIL" (red):

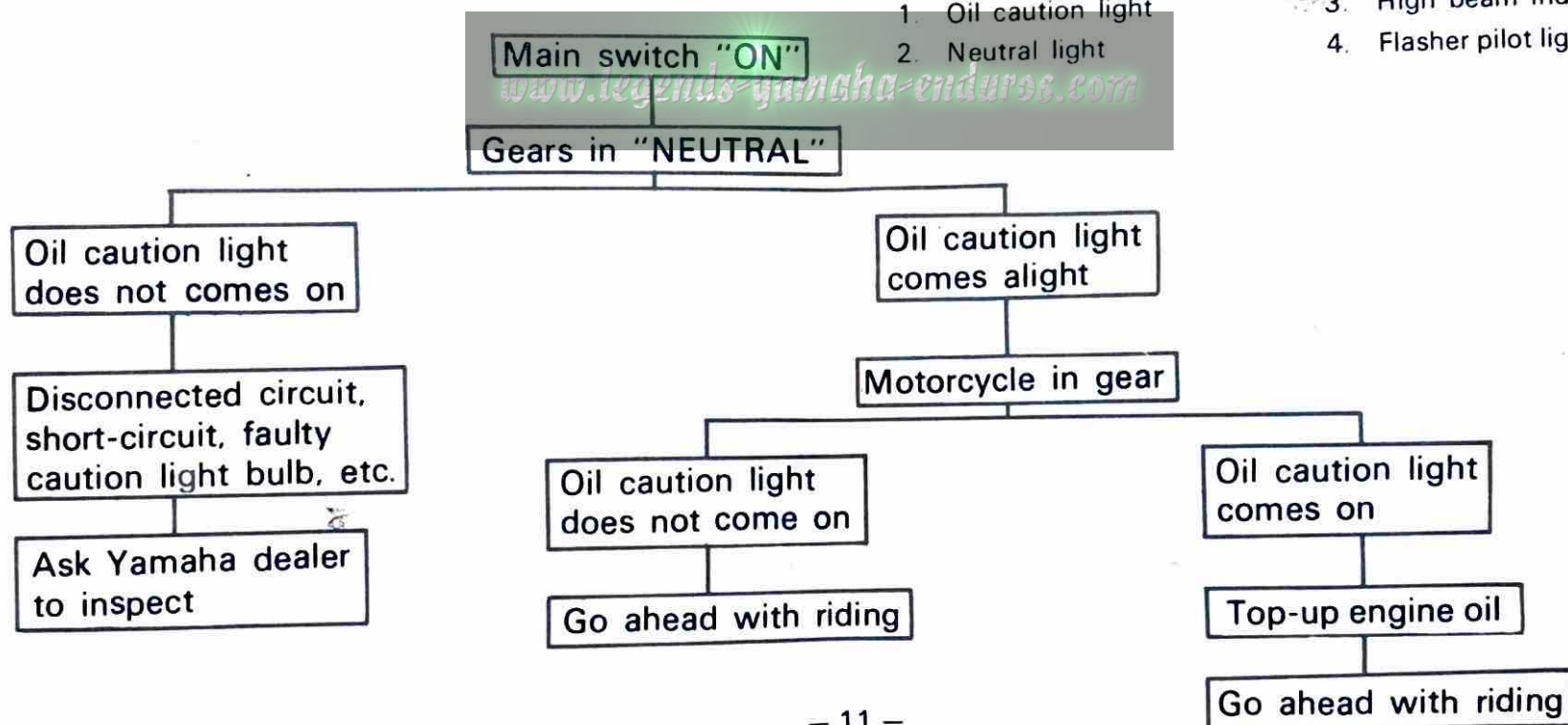
The light comes on when there is little oil in the oil tank, thus warning the rider.

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.



- 1. Oil caution light
- 2. Neutral light

- 3. High beam indicators
- 4. Flasher pilot light



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 ratios 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.

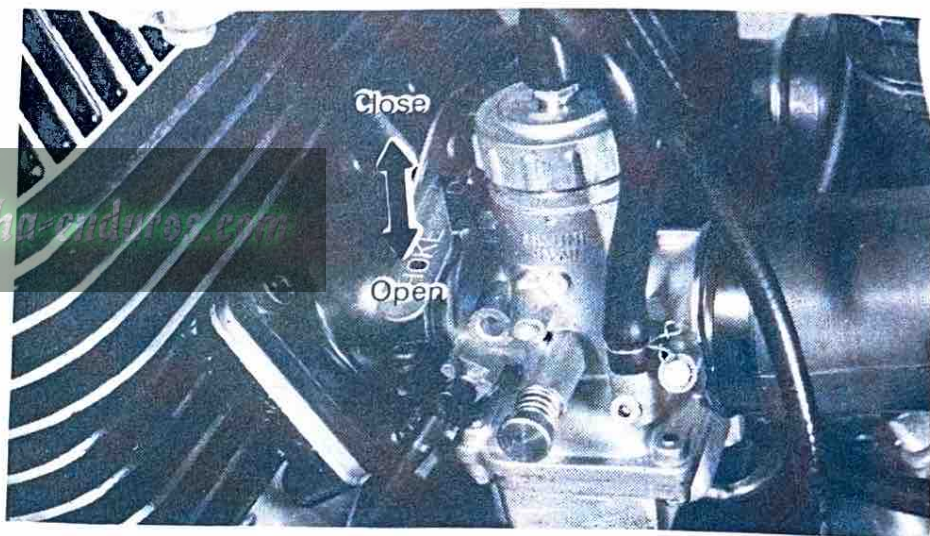


(N) Neutral

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.



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.

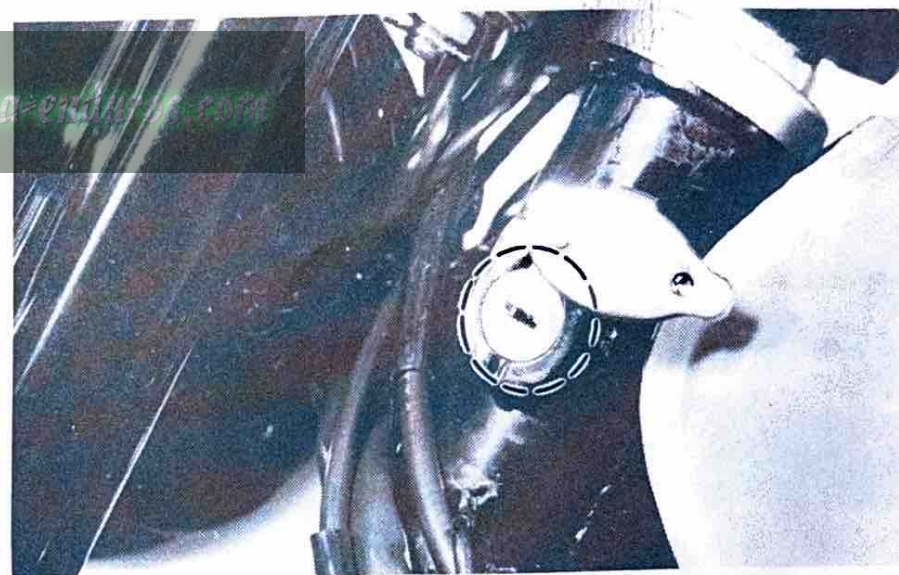
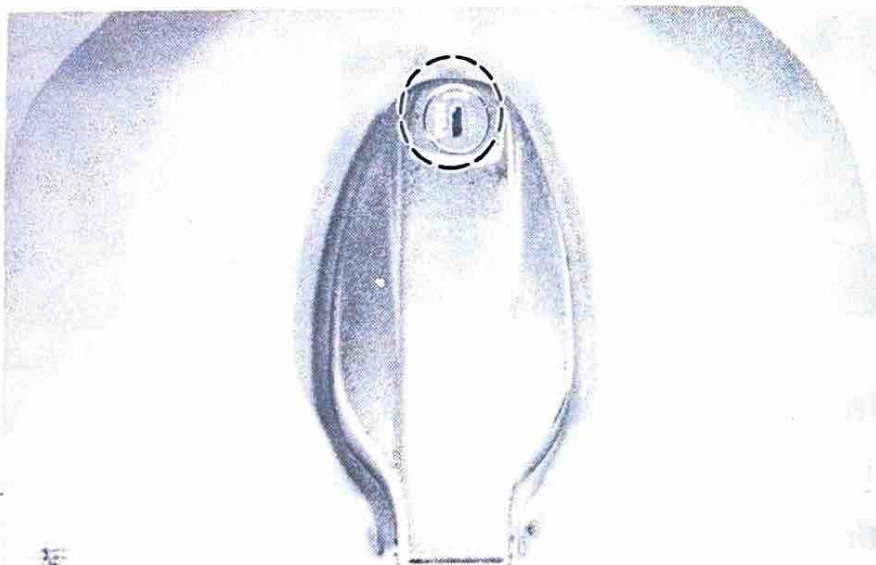
Press down on the brake pedal to activate the rear brake.

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.

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.



Speedometer

The odometer and trip odometer are built into the speedometer. The trip odometer can be reset to "0" with the reset knob.

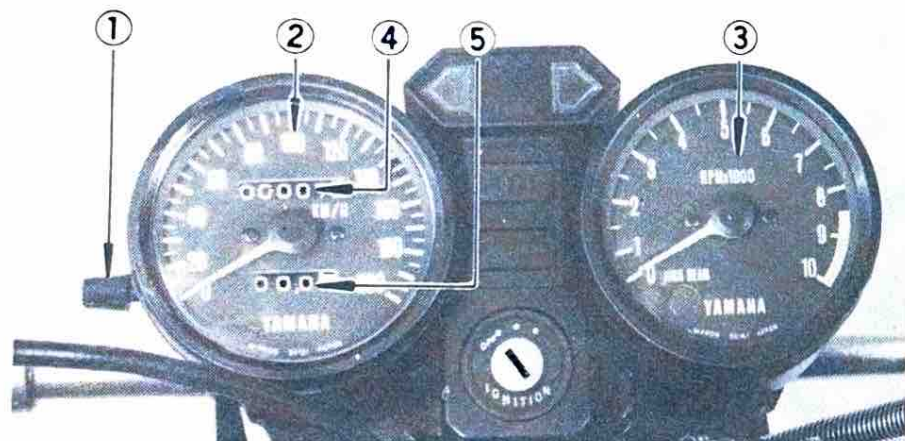
Tachometer

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

Do not operate in the red zone.

Red zone: 8,500 ~ 10,000 rpm

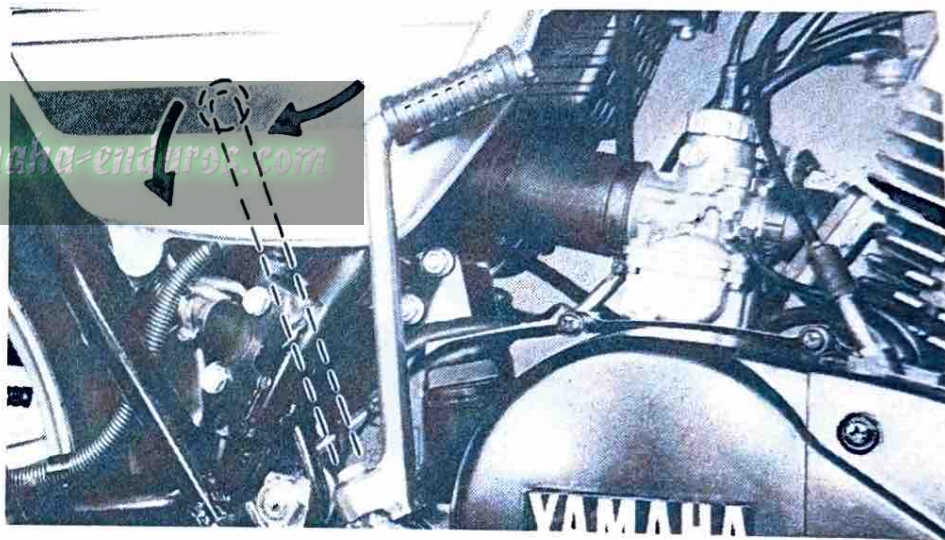
www.legends-yamaha-enduros.com



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

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.



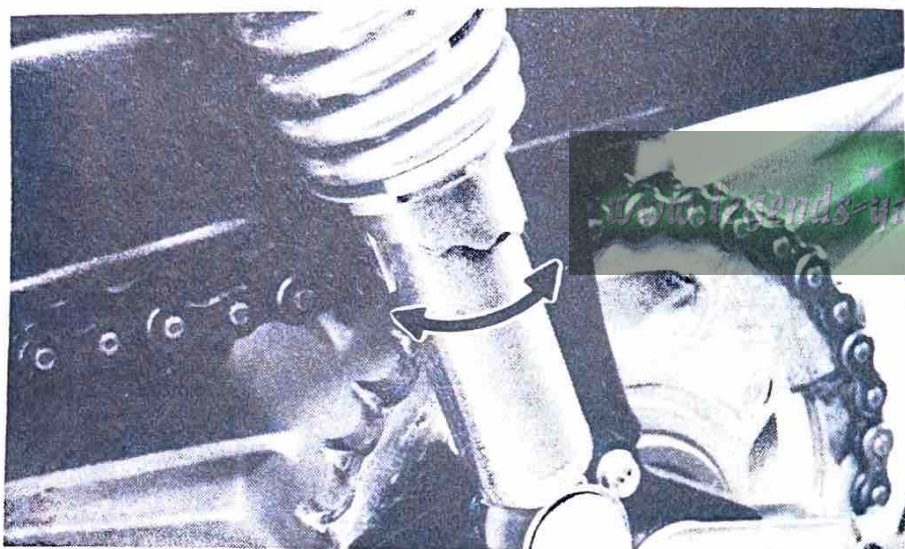
Rear shock absorber

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: _____

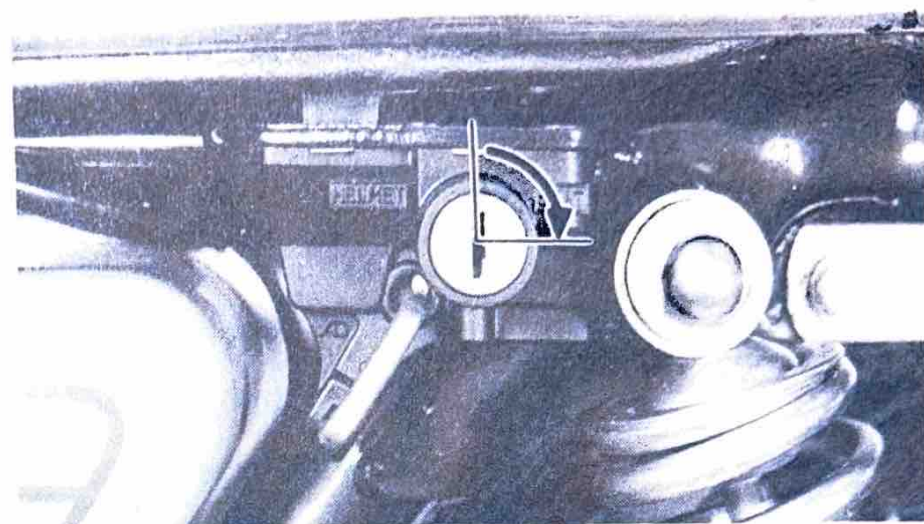
Adjust both the right and left sides to the same position.



Seat lock

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

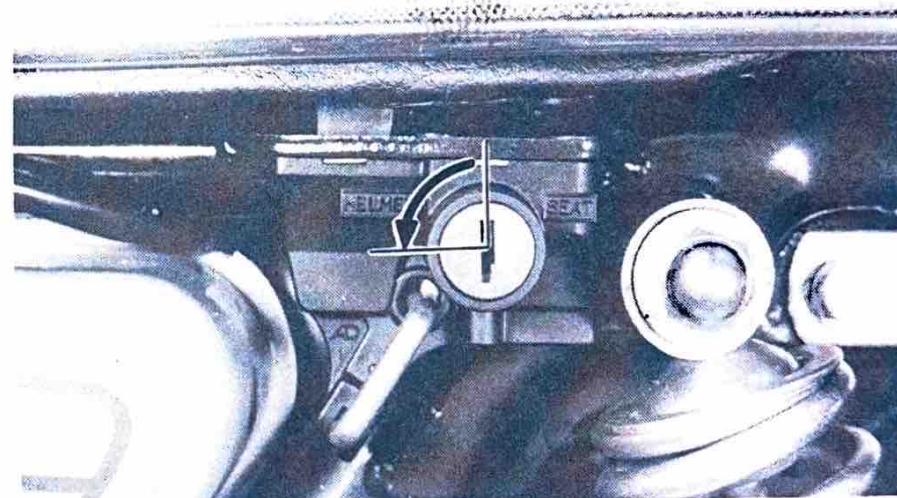
To lock the seat, replace the seat in the original position.



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.



PRE-OPERATION CHECKS

Before using this motorcycle please check the following points:

Item	Routine	Page
Brakes (front and rear)	Check for operation/leakage/fluid level/brake pads	19, 45, 46, 47, 48
Clutch	Check for operation/free play	20, 42, 43
Fuel tank	Check fuel level/top-off as required	17
Oil tank	Check oil level/top-off as required	17, 32
Transmission oil	Check for leakage/add oil as required	17, 32, 33
Drive chain	Check chain tension/adjust as required/lubrication	49, 50, 51
Throttle	Check for proper throttle and pump cable operation	20
Wheels and tires	Check for cracks/bends/tires wear/pressure	17, 18
Battery	Check electrolyte level/add distilled water as required	44, 45
Switches/lights/signals	Check for proper operation	20

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:

Regular or low lead gasoline

Fuel tank capacity:

13 lit (3.4 US gal)

Engine oil

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

Recommended oil: Yamalube 2-cycle oil

See page 32, "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. (See page 33)

Recommended oil:

Yamalube 4-cycle oil or

SAE 20W/40 type

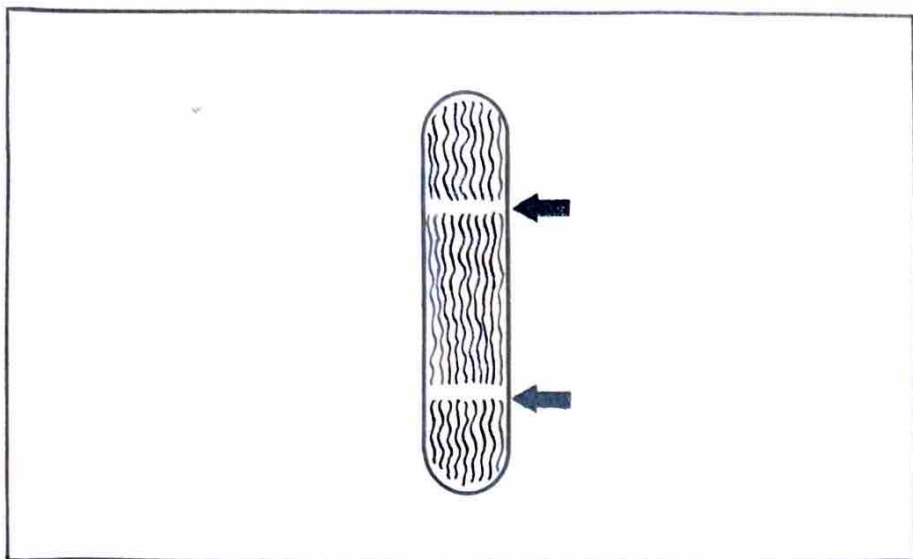
"SE" motor oil

Tires

Check the tire pressure and check the tires for wear.

Tire pressure		
Front	1.8 kg/cm ² (26 psi)	Normal riding
Rear	2.0 kg/cm ² (28 psi)	
Front	2.0 kg/cm ² (28 psi)	High speed riding (above 100 km/h (60 mph)) or with passenger
Rear	2.3 kg/cm ² (33 psi)	

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



WARNING:

It is dangerous to ride with a worn-out tire. When a tire tread begins to show lines, have your Yamaha dealer replace the tire immediately.

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 ex-

ists 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.

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

Check the brake fluid level. Add fluid if necessary. (See page 47, 48)

Recommended fluid: DOT #3

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 master cylinders.

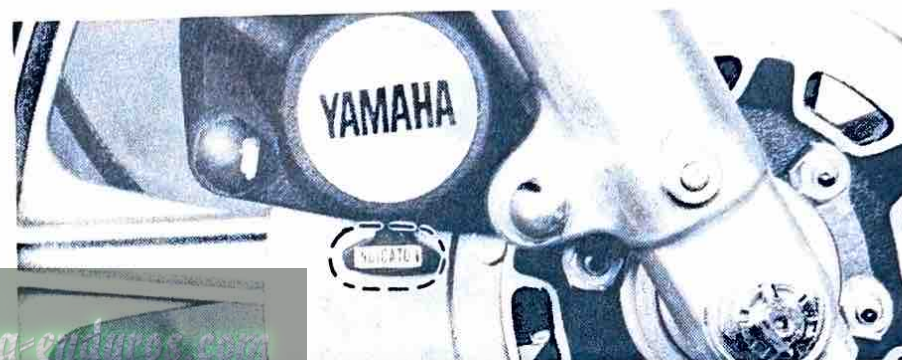
WARNING:

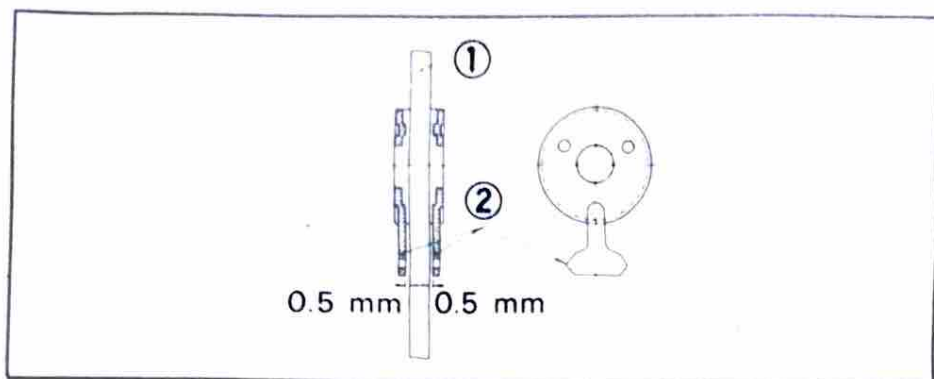
If brake fluid leakage is found, ask your Yamaha dealer for immediate repairs, because great danger will be involved in this leakage.

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.





1. Brake disc

2. Indicator

Clutch

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 thoroughly familiar with all operating controls and their function.

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

Starting a cold engine

1. 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

To start a warm engine, the starter jet (choke) lever is not required.

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.

1. Twisting the throttle grip in the closed direction will permit you to gradually slow down. Downshifting through the gears, using the drag of the engine to slow down. 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 simultaneously. 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.
2. 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.

CAUTION: _____

When using engine braking for long periods, it is very important not to ex-

ceed maximum recommended rpm (tachometer red zone).

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 3,000 to 4,000 rpm 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 rpm range.

Ideal rpm range:

3,000 ~ 6,000 rpm

Cruising

A frequently asked question is "What rpm 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 rpm "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 precau-

tions:

- 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 bet-

ween zero and 800 km (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 800 km (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 heating of the engine must be avoided. However, momentary full throttle operation, under load (2 ~ 3 seconds maximum), does not harm the engine.

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

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

1. 0 ~ 160 km (0 ~ 100 mi):
Avoid operation above 4,000 rpm.
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.

Avoid engine speeds in excess of 7,000 rpm. Vary speeds occasionally.

CAUTION: _____
If any engine trouble should occur during the break-in period, consult your Yamaha dealer immediately.

2. 160 ~ 400 km (100 ~ 250 mi):
Avoid prolonged operation above 5,000 rpm. Allow the motorcycle to rev freely through the gears but do not use full throttle at any time.

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.

3. 400 ~ 800 km (250 ~ 500 mi):
Avoid prolonged full throttle operation.
Avoid cruising speeds in excess of 6,000 rpm.
4. 800 km (500 mi) and beyond:
Avoid prolonged full throttle operation.

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.

www.legends-yamaha-enduros.com

PERIODIC MAINTENANCE AND MINOR REPAIR

Periodic inspection, adjustment and lubrication will keep your motorcycle in the safest and most efficient condition possible. Safety is an obligation of the motorcycle owner. The most important points of motorcycle inspection, adjustment and lubrication are explained in the following pages.

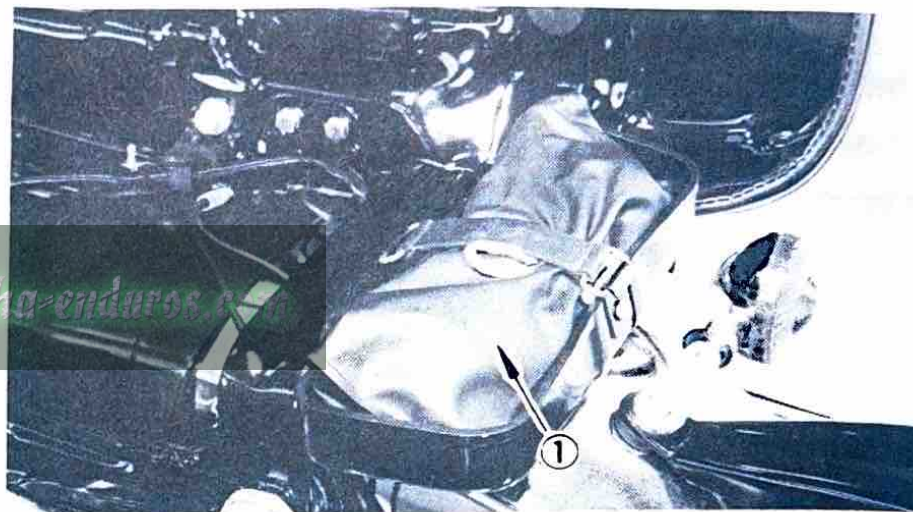
CAUTION: _____

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

Tool kit

The servicing information included in this manual is intended provide you, the owner, with the necessary information for com-

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



1. Tool kit

PERIODIC MAINTENANCE

Unit: km (mile)

Item	Remarks	Initial				Thereafter every	
		400 (250)	800 (500)	1,600 (1,000)	3,200 (2,000)	1,600 (1,000)	3,200 (2,000)
Brake system (Complete)	Check/Adjust as required — Repair as required		○	○	○	○	
Clutch	Check/Adjust as required		○	○	○	○	
Battery	Top-up/Check specific gravity and breather pipe	○	○	○	○	○	
Spark plugs	Inspect/Clean or replace as required	○			○		○
Air filter	Paper type — Clean/Replace as required			○		○	
Carburetor	Check operation/Adjust as required		○		○		○
Fuel petcock	Clean/Flush tank as required	○		○			○
Ignition timing	Adjust/Clean or replace parts as required		○	○	○		○
Lights/Signals	Check operation/Replace as required	○	○	○	○	○	
Wheels/Tires	Check pressure/Wear/Balance	○	○	○	○	○	
Drive chain	Check tension/Alignment (See service notes)	○	○	○	○	○	
Fittings/Fasteners	Tighten before each trip and/or	○	○	○	○	○	

SERVICE NOTES:

DRIVE CHAIN: In addition to tension and alignment, chain must be lubricated every 300 ~ 400 km (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.

LUBRICATION INTERVALS

Unit: km (mile)

Item	Remarks	Recommended lubricants	Initial				Thereafter every		
			400 (250)	800 (500)	1,600 (1,000)	3,200 (2,000)	1,600 (1,000)	3,200 (2,000)	6,400 (4,000)
Transmission oil change	Replace/Warm engine/ before draining	1. Yamalube 4-cycle oil 2. SAE 20W/40 "SE" motor oil	○		○		check	○	
Drive chain	Lube/Adjust as required	Yamaha chain and cable lube or SAE 10W/30 "SE" motor oil	See service notes						
	Remove/Clean/Lube/ Adjust				○		○		
Control/Meter cables	Apply thoroughly	Yamaha chain and cable lube or SAE 10W/30 motor oil			○	○		○	
Throttle grip/ Housing	Apply lightly	Lithium base grease	○			○		○	
Tachometer/ Speedometer gear housing	Inspect thoroughly/ Pack moderately	Lithium base grease				○			○
Rear arm pivot shaft	Apply unit shows	Soft chassis lube grease			○		○		
Brake/Change pedal shaft	Apply lightly	Lithium base grease			○			○	
Stand shaft pivots	Apply lightly	Lithium base grease			○			○	
Front forks	Drain completely — Check specifications	Yamaha fork oil 10W, 20W, 30W	○			○		○	
Steering ball bearings/ Ball races	Inspect thoroughly/ Pack moderately	Medium-weight wheel bearing grease				check		check	○

Item	Remarks	Recommended lubricants	Initial				Thereafter every		
			400 (250)	800 (500)	1,600 (1,000)	3,200 (2,000)	1,600 (1,000)	3,200 (2,000)	6,400 (4,000)
Wheel bearings	Do not over-pack	Medium-weight wheel bearing grease				○	check	○	
Point cam lubrication wicks	Apply very lightly	Light-weight machine oil			○				○

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

SERVICE NOTES:

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

TO TIGHTEN BOLTS AND NUTS FOR A SAFE RIDING, PLEASE ASK YAMAHA DEALER NEAR BY FOR THE PROPER OPERATION

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.

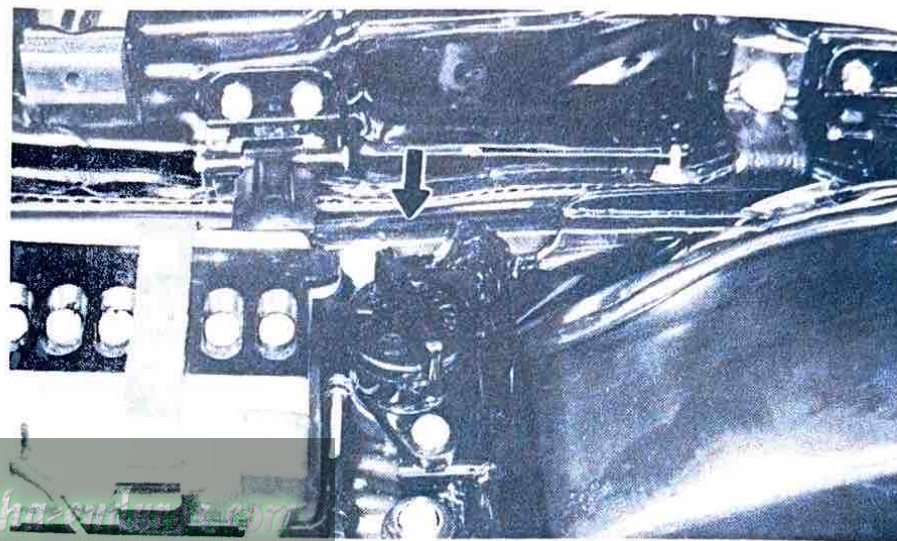
1. 2-stroke engine oil labelled "BIA certified for service TC-W".
2. SAE 30 weight, detergent type automobile engine oil with an "SE" rating.

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.



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.

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:

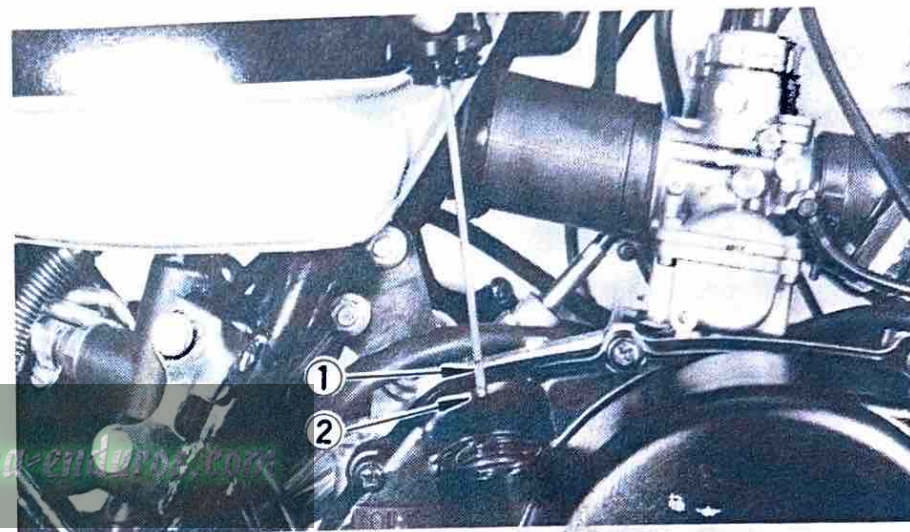
Yamalube 4-cycle oil or SAE
20W/40 motor oil, type "SE".

Oil quantity:

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

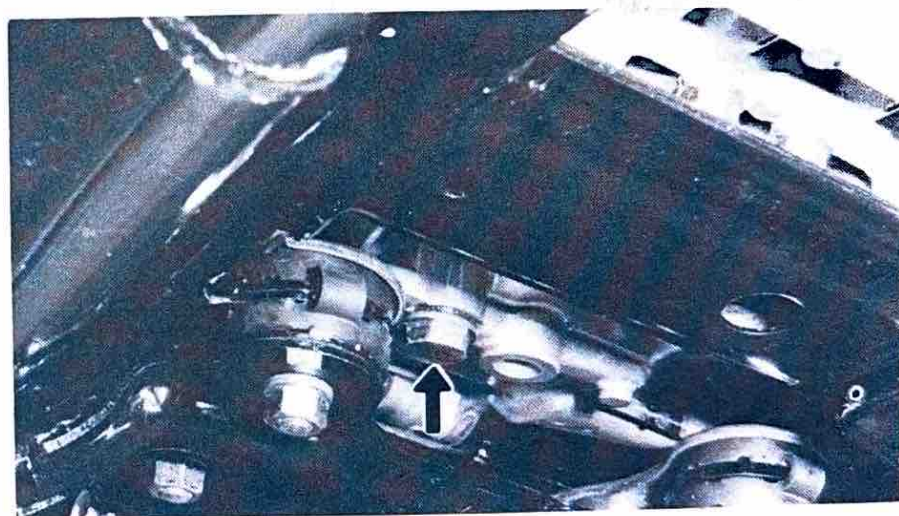
The dip stick has a Minimum and a Maximum mark, and the oil level should be between the two. If the level is lower, then add sufficient oil to raise it to the proper level.

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



1. Maximum

2. Minimum



Spark plug inspection

The spark plug is an important engine component and is easy to inspect. The condition of the spark plug can indicate something of the condition of the engine.

Normally, all spark plugs from the same engine should have the same coloration on the white porcelain insulator around the center electrode. The ideal coloration at this point is a medium to light tan color for a machine that is being ridden normally. If one spark plug shows a distinctly different color, there could be something wrong with the engine. For example, a very white center electrode porcelain color could indicate an intake tract air leak or carburetion problem for that cylinder. Do not attempt to diagnose such problems yourself. Instead, take the machine to your Yamaha dealer.

You should periodically remove and inspect the spark plug because heat and deposits will cause any spark plug to slowly break down

and erode. 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-8ES (N.G.K.)

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:
1.5 ~ 2.5 m·kg
(10.8 ~ 18.1 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.

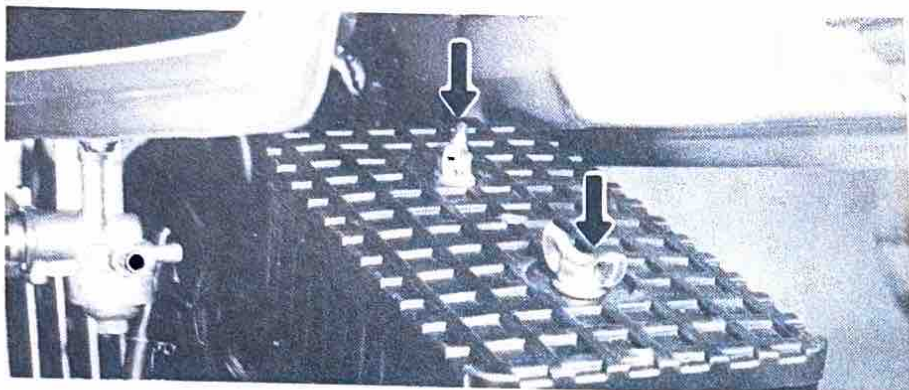
1. Turn the fuel cock lever to "OFF" position, and remove the fuel pipes.
2. Lift the seat and remove the bolts (2) holding the fuel tank. Lift the tank.

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 1,600 km (1,000 mi). It should be cleaned every ten hours or more often if the machine is operated in extremely dusty areas.

CAUTION: _____
The engine should never be run without the air cleaner element installed; excessive piston and/or cylinder wear 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

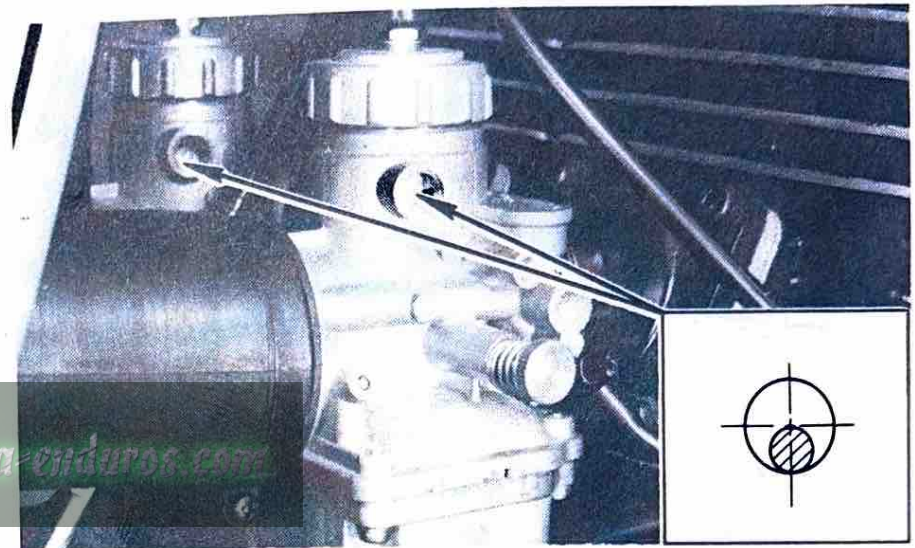
CATUTION: _____

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.

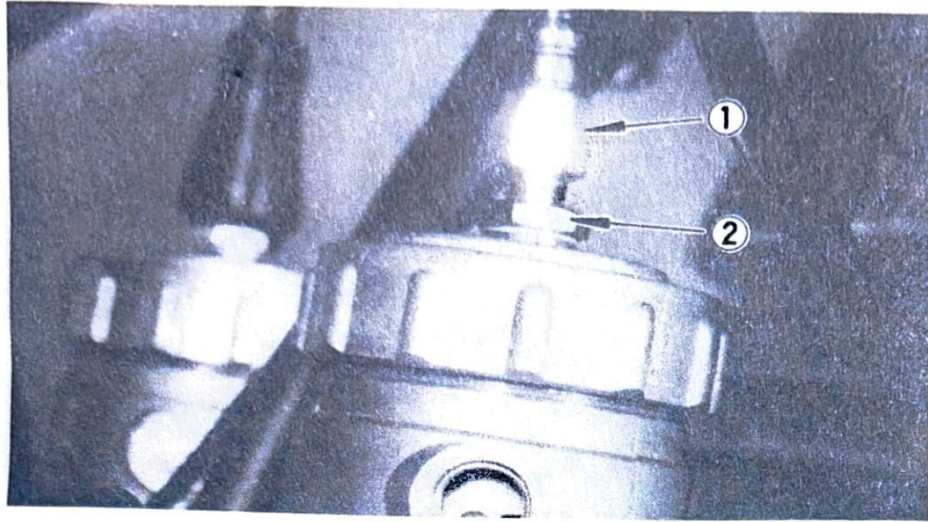
Carburetor (throttle opening) adjustment

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

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.



1. Adjuster 2. Locknut

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: _____

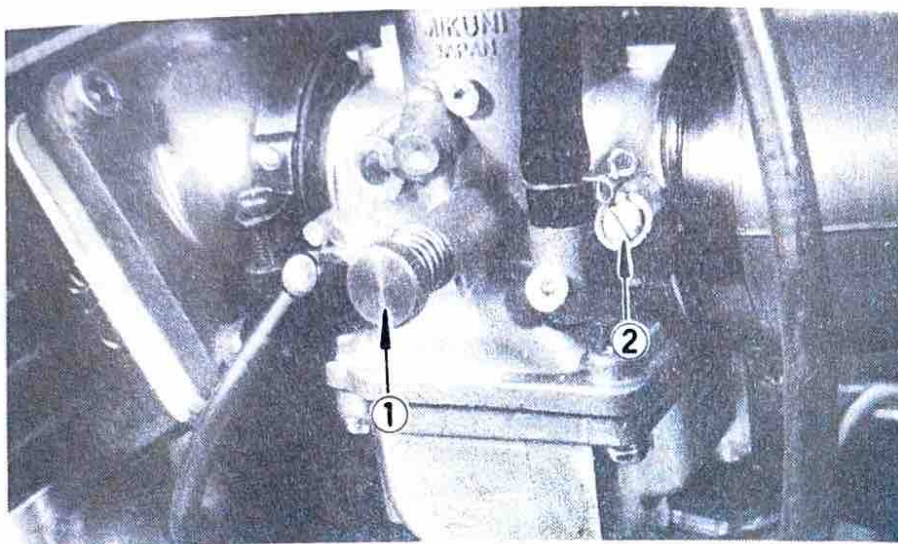
During this operation, take care so that not dust enters the carburetor.

Idle mixture adjustment

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

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



1. Throttle stop screw

2. Pilot air screw

Stop the engine and connect the left spark plug lead and disconnect the right lead. Start the engine and set the right carburetor so it idles at 1,000 rpm. With both leads connected and the engine running, both cylinders should be idling at the same speed and pull evenly as the engine speed is increased. If the engine rpm is too high at idle, back off both idle speed screws an even amount to specified engine rpm.

Idling rpm adjustment

Start the engine and warm it up for a few minutes (normally, 1 or 2 minutes) at approximately 1,000 to 2,000 rpm occasionally raising to 4,000 to 5,000 rpm 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 rpm.

Standard idling rpm:
 $1,150 \pm 50$ rpm

NOTE: _____
If the specified idling speed cannot be obtained after performing the above adjustment, consult your Yamaha dealer.

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?

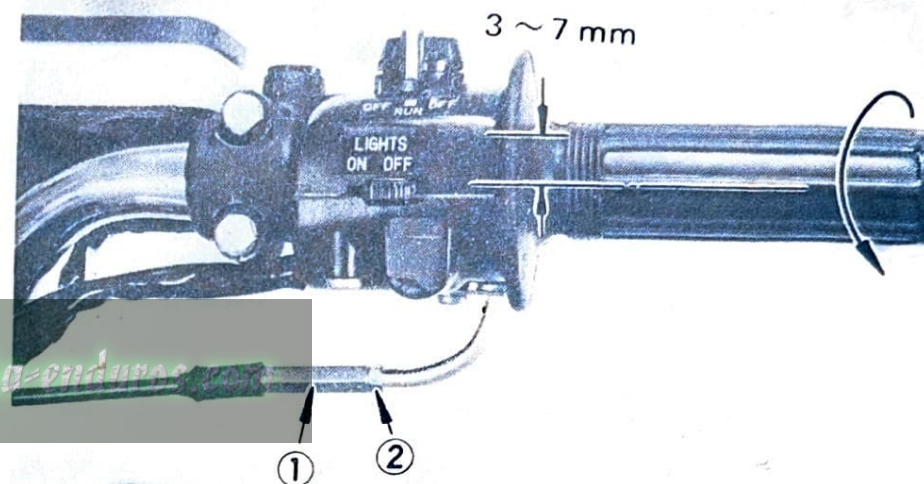
Inspection and adjustment of throttle cable play

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 described below:

Check play in turning direction of throttle grip. The play should be 3 ~ 7 mm (0.12 ~

0.28 in) 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

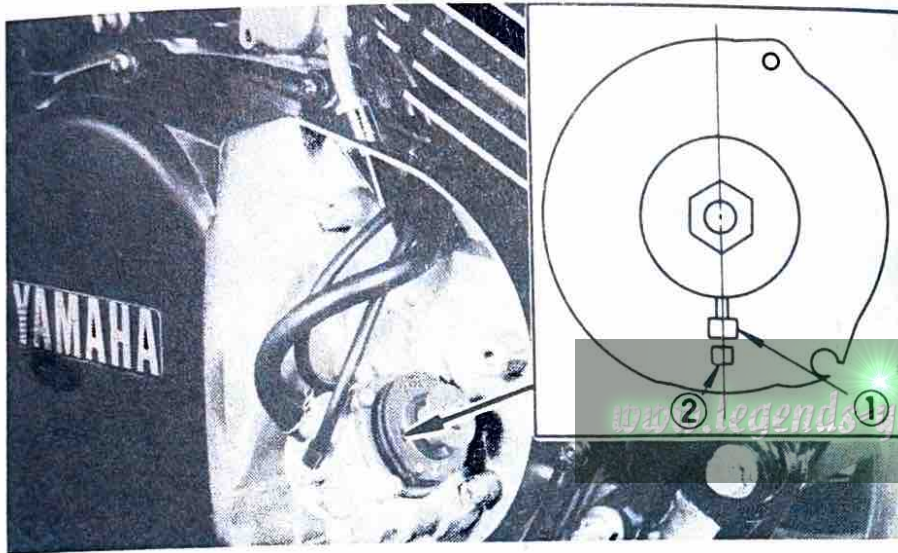
2. Locknut

Autolube pump cable adjustment

NOTE: _____

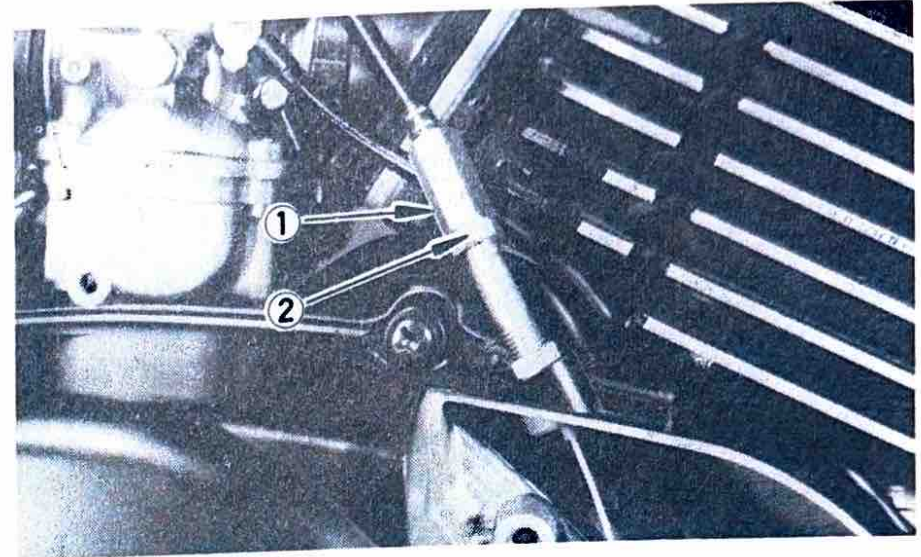
Prior to this adjustment, make sure that the throttle valve can be opened to the full-open position.

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.



1. Guide pin 2. Mark

- a. Loosen the locknuts.
- b. By turning the adjuster in or out, adjust so that the pump marks are correctly aligned.
- c. Tighten the locknuts.

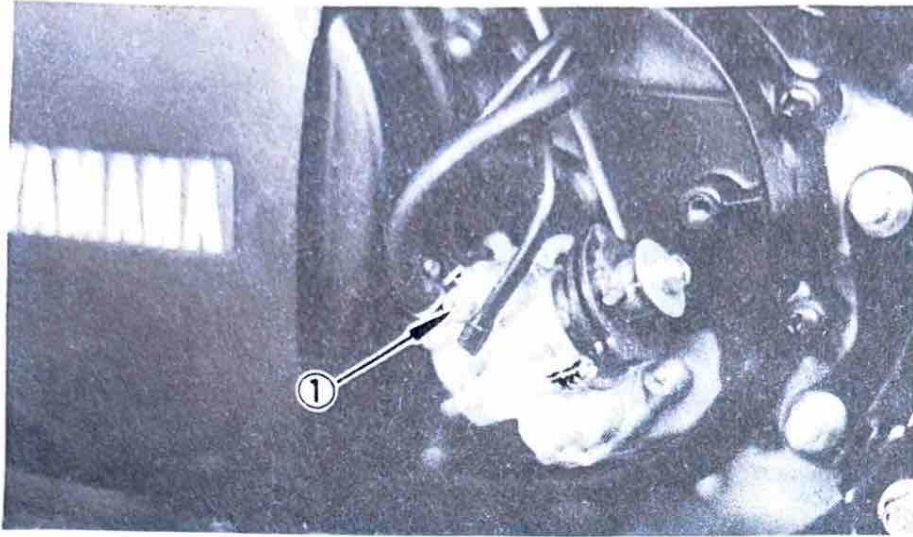


1. Adjuster 2. Locknut

2. Back off the throttle grip once, and fully open it again. Make sure that the pump cable is correctly adjusted.

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 until only oil comes out the bleed hole (air stops coming out with the oil). Reinstall and tighten the bleed screw.

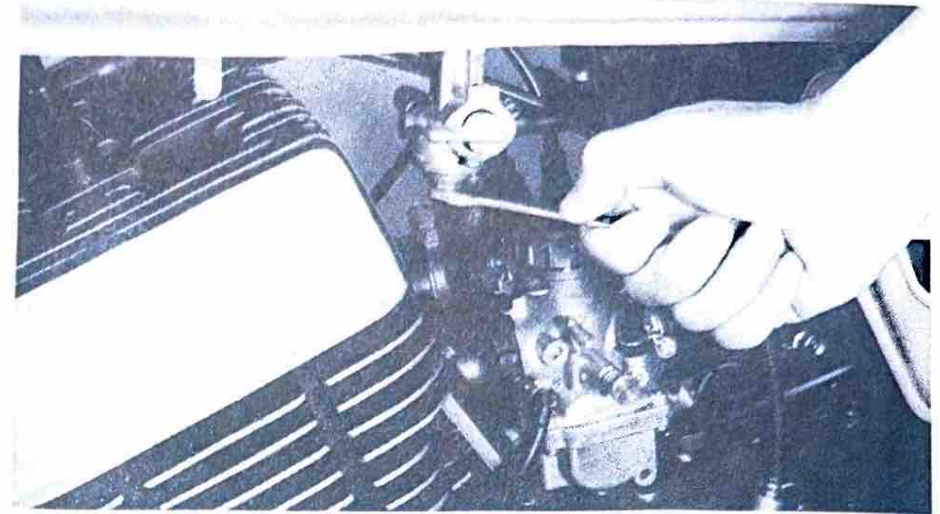


1. Bleed screw

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.

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



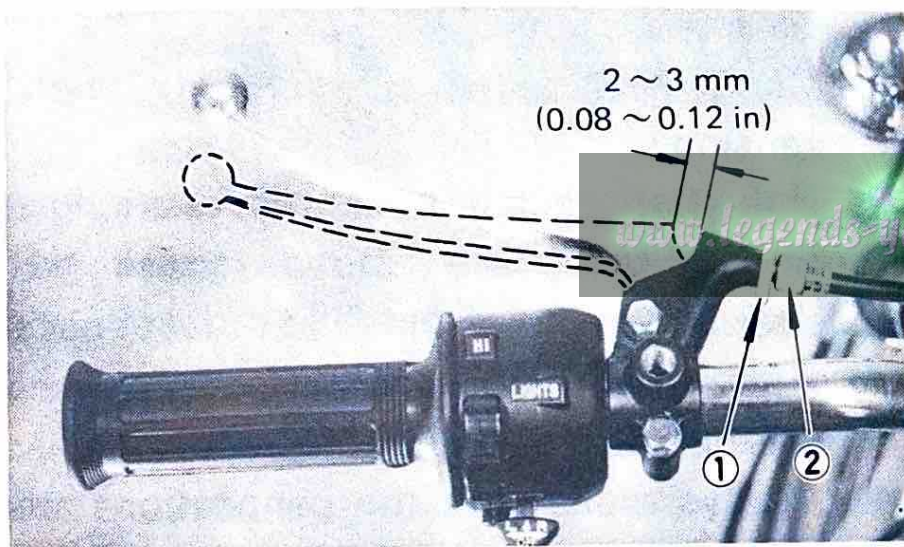
Clutch adjustment

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.



1. Locknut

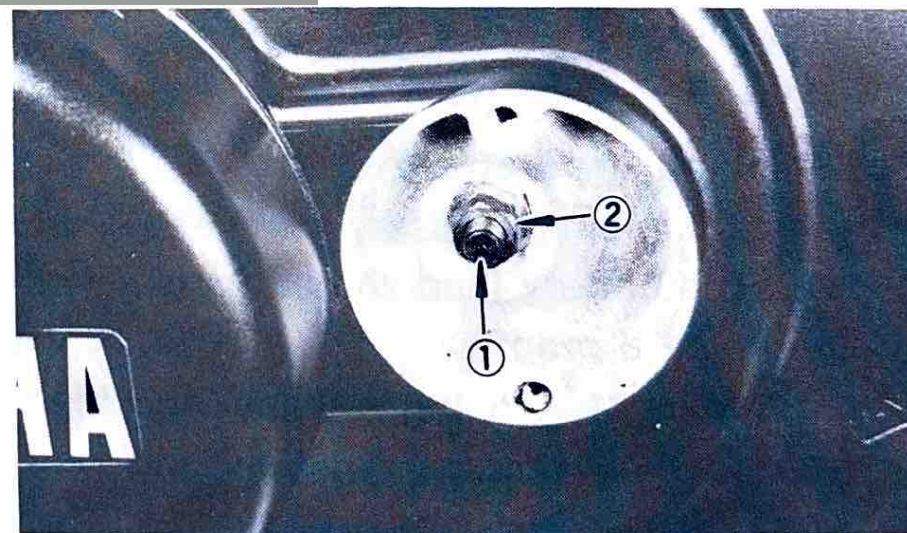
2. Adjuster

2. Mechanical adjustment

The second adjustment is located behind the adjusting cover. Removing the cover will expose the adjusting set

screw and 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.



1. Adjusting screw

2. Locknut

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

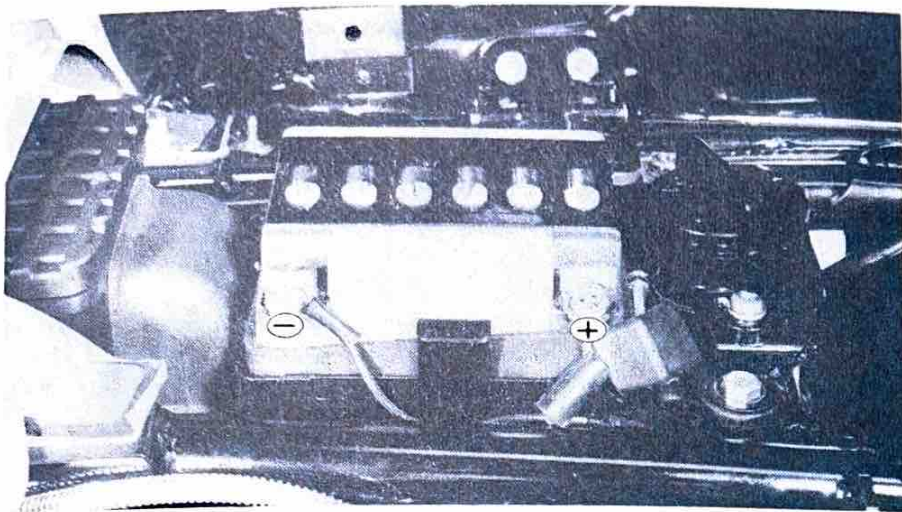
A poorly maintained battery will deteriorate quickly. The battery fluid should be checked at least once a month.

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 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.

CAUTION:

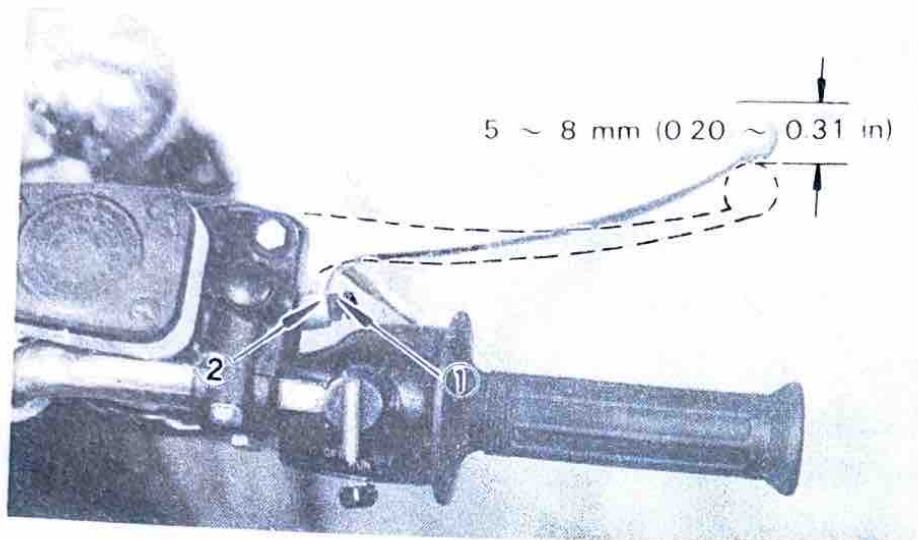
For the brake adjustment, be sure to proceed as follows:

It is advisable to have your Yamaha dealer make this adjustment.

A. Front brake

The front brake lever should be so adjusted that it has a free play of 5 ~ 8 mm (0.20 ~ 0.31 in) from when the brake lever is pulled to when the adjusting screw is just touched the master cylinder.

1. Loosen the adjusting screw locknut at the brake lever.
2. Turn in the adjusting screw until it lightly touches the master cylinder, then turn it out by approx. 3/4 turns (for proper freeplay).
3. After adjusting, tighten the locknut.

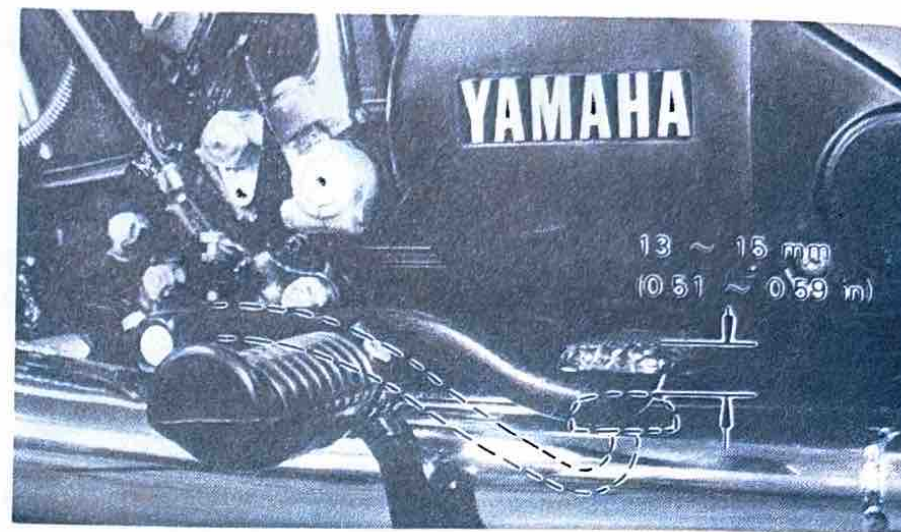


1. Adjusting screw

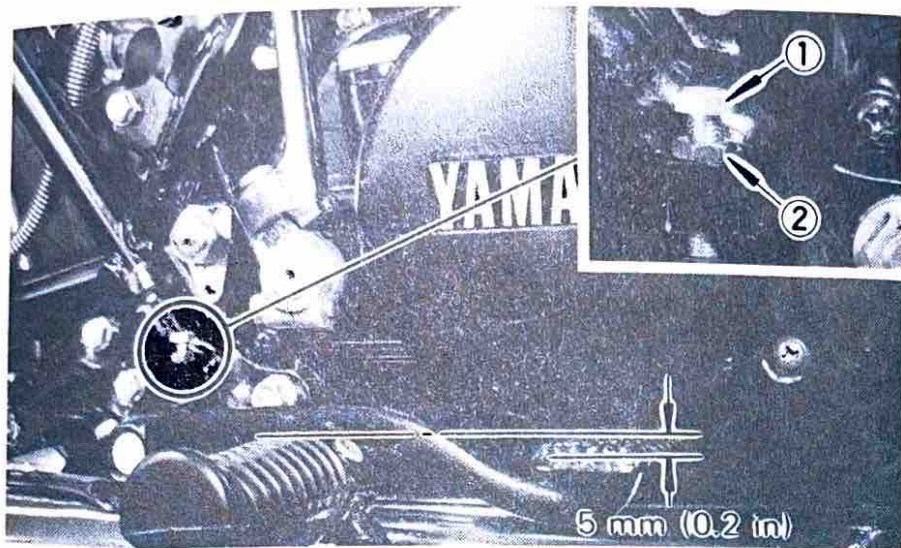
2. Locknut

B. Rear brake

The rear brake pedal should be so adjusted that it has a free play of 13 ~ 15 mm (0.51 ~ 0.59 in) from when the brake pedal is trod to when the brake begins to be effected.

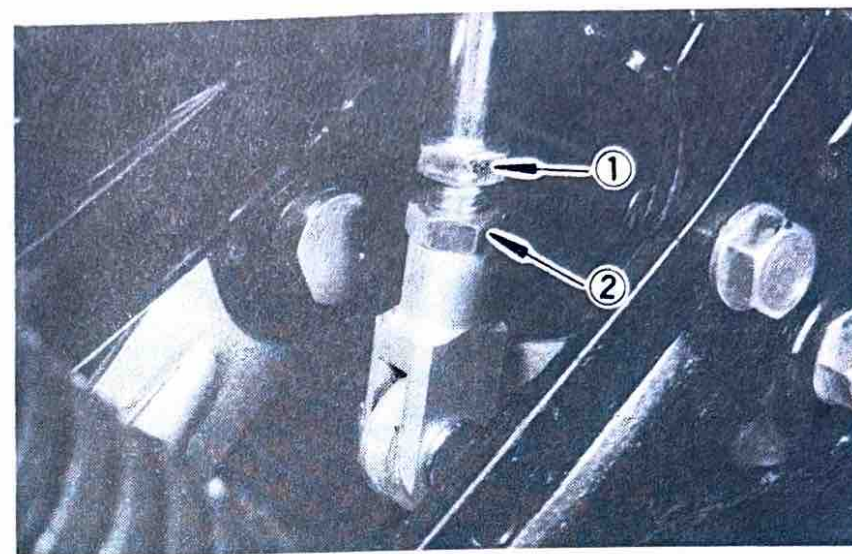


1. Loosen the adjuster locknut (for pedal height).
2. By turning the adjuster bolt clockwise or counterclockwise, adjust the brake pedal position so that its top end is approx. 5 mm (0.2 in) below the foot rest top end.
3. Tighten the adjuster locknut.



1. Adjuster bolt

2. Locknut



1. Brake rod

2. Locknut

4. Loosen the brake rod adjuster locknut and screw brake rod downward until there is noticeable freeplay between rod and master cylinder.
5. Turn in the brake rod until it lightly touches the master cylinder, then turn it out by approx. 1-1/2 turns (for proper freeplay).
6. Tighten the brake rod adjuster locknut.

CAUTION:

The pin hole mark on brake rod must not show above locknut.

Brake fluid level (Front and Rear)

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.

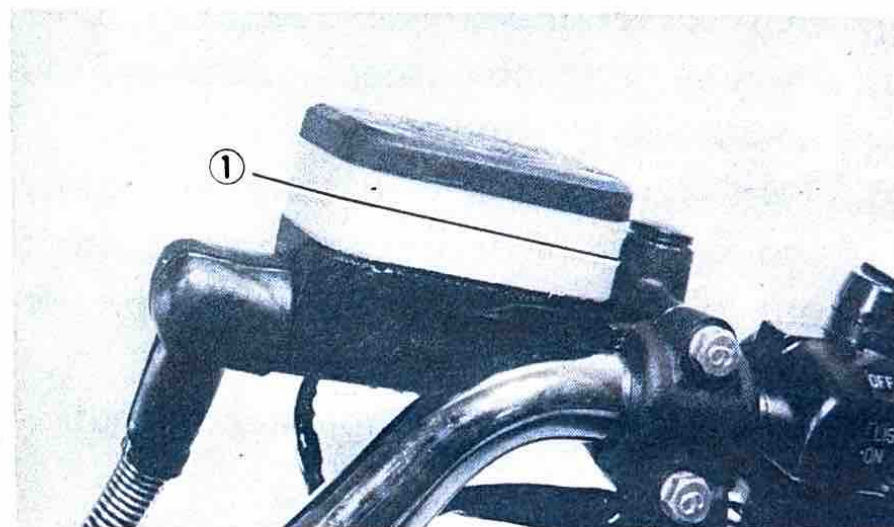
1. Use only the designated quality brake fluid; otherwise, the rubber seals may deteriorate causing leakage and poor brake performance.

Recommended brake fluids:
DOT #3 with 240°C
(464°F) boiling point.

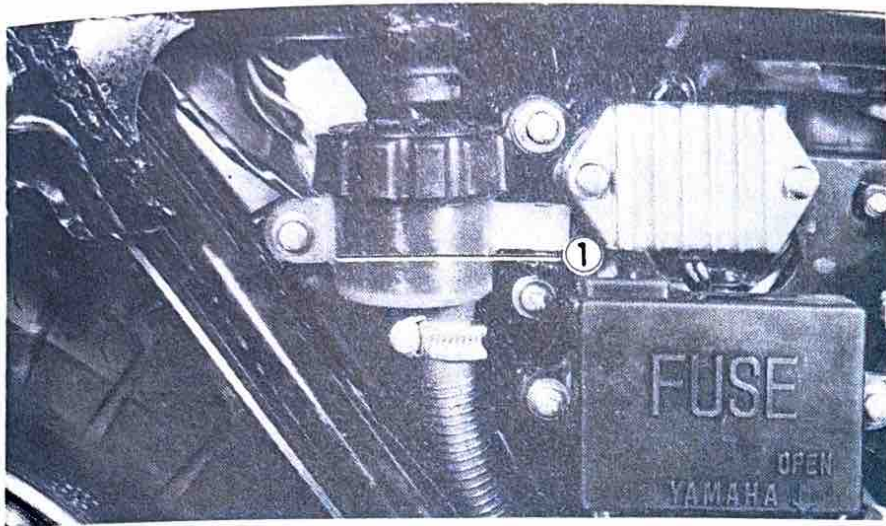
2. Refill with the same type of brake fluid; mixing fluids may result in a harmful chemical reaction and lead to poor performance.
3. Be careful that water or other contamination does not enter the

master cylinder when refilling. Water will significantly lower 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.



1. Low level



1. Low level

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 caliper bracket shaft nut.
4. Loosen the adjusting bolt locknuts on each side. To tighten chain turn chain puller adjusting bolts clockwise and pull wheel backward. To loosen chain turn adjusting 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 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, caliper bracket shaft nut and tension bar locknut.

Caliper bracket shaft nut
torque: 5 ~ 8 m-kG
(36 ~ 58 ft-lb)

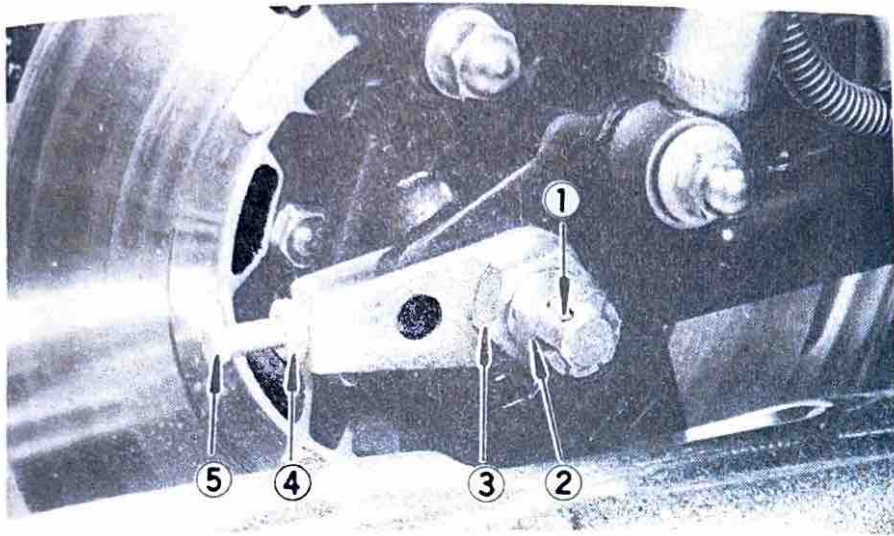
Rear wheel axle nut torque:

12 ~ 18 m-kG
(87 ~ 130 ft-lb)

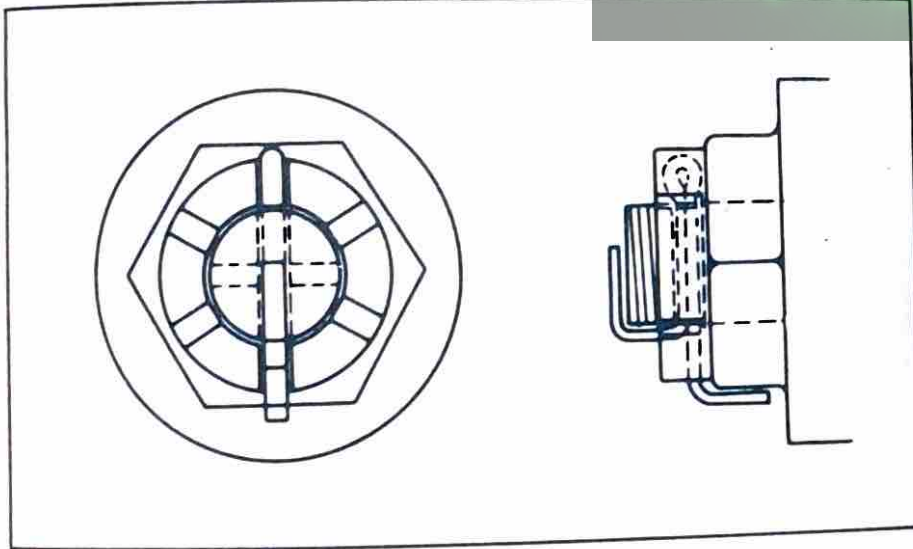
Tension bar locknut torque:

1.4 ~ 2.2 m-kG
(10 ~ 16 ft-lb)

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).



- | | | |
|---------------|------------------------------|-------------------|
| 1. Cotter pin | 3. Caliper bracket shaft nut | 5. Adjusting bolt |
| 2. Axle nut | 4. Locknut | |



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, from 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.

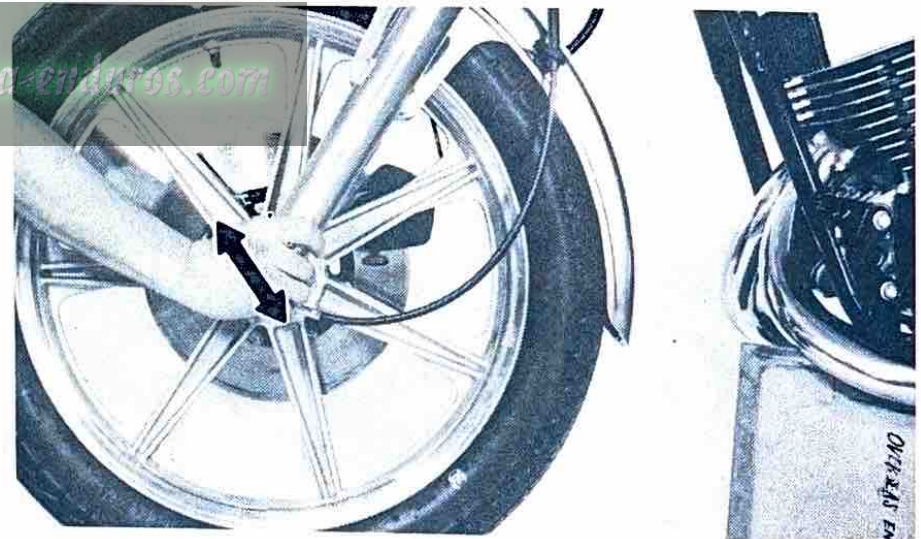
Steering inspection

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.

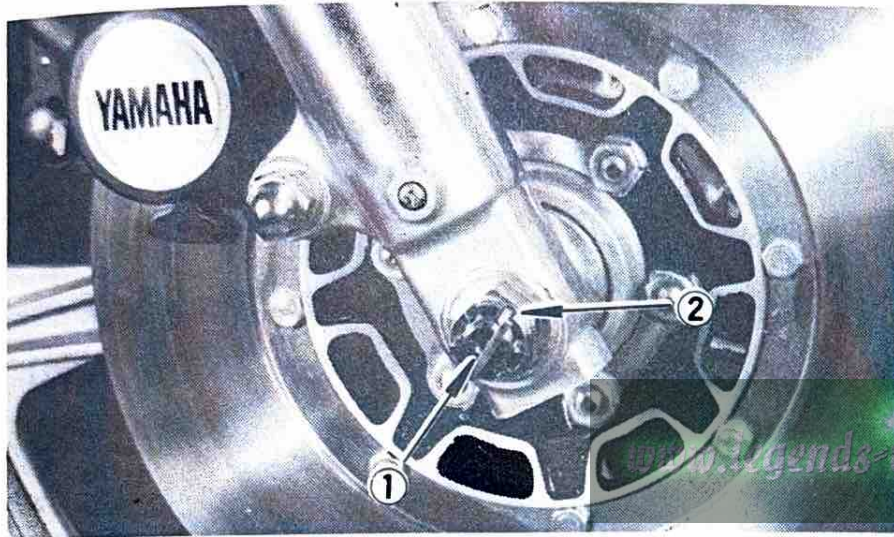
Inspection is easier if the front wheel is removed.



Front wheel removal

1. Place machine on center stand.

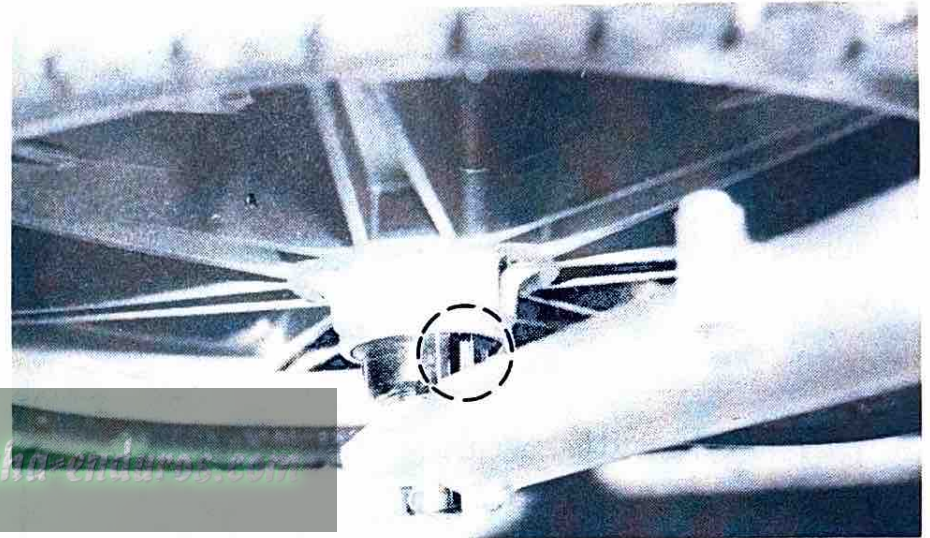
2. Remove the cotter pin and wheel nut.
3. Loosen front wheel axle holder nuts (Do not remove axle holder).



1. Cotter pin

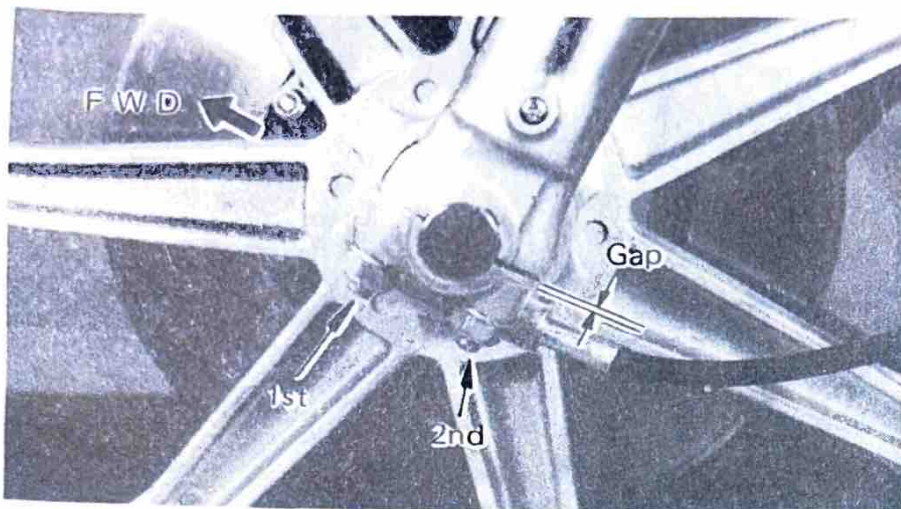
2. Axle nut

- b. Make sure the projecting portion (torque stopper) of the speedometer housing is positioned correctly.



4. Make sure the motorcycle is properly supported. Remove front axle and front wheel.
5. During reassembly, check the following:
 - a. Make sure there is an enough gap between disc pads.

- c. The axle holder nuts should be tightened in the sequence as shown. 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)

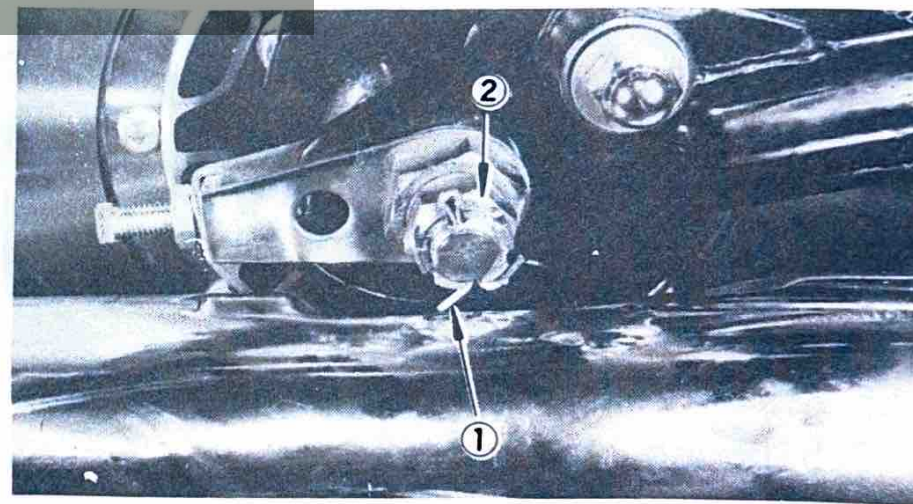
Axle holder nut torque:
1.1 ~ 1.8 m-kG
(8.0 ~ 13.0 ft-lb)

Rear wheel removal

1. Place machine on center stand.
2. Remove drive chain.

CAUTION: _____
It is advisable to have your Yamaha dealer make this removal and reassembly.

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

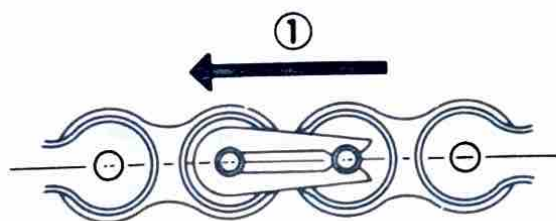
2. Axle nut

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

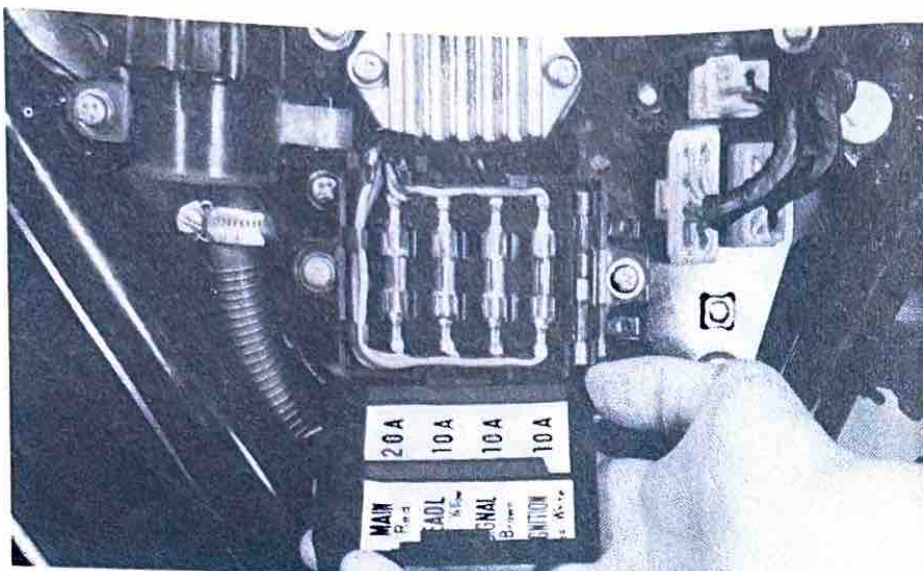
Replacing the headlight bulb

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.

Fuse replacement

If any fuse is blown, turn off the ignition switch and the switch in the circuit in question and install a new fuse of proper amperage.

Then turn on the switches, and see if the electrical device operates. If the fuse immediately blows again, consult your Yamaha dealer.



CAUTION: _____
Do not use fuses of a higher amperage rating than those recommended.

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. Imitation parts are similar in shape but often inferior in quality of materials and workmanship, consequently, service life is shorter and more expensive repairs may be necessitated.

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

Troubleshooting chart

1. Fuel

Check if there is gasoline in the fuel tank

There is fuel

Turn the fuel petcock to "OFF"

Some fuel

Turn the fuel petcock to "RES"

Restart engine

No fuel

Supply fuel

Remove the fuel petcock filter cup

Full of gasoline

Check gasoline flow

No irregularity up to fuel petcock

Water or dirt mixed in gasoline

Clean filter cup

No gasoline

Fuel petcock clogged

Clean fuel petcock

2. Compression

Kick the kick lever to see if there is compression

There is compression

Compression normal

No compression

Ask Yamaha dealer to inspect

3. Ignition

Remove plug and check electrode

Wet

Wipe clean with dry cloth

Dry

Attach plug cap and ground to chassis

Turn switch on and kick strongly

Spark good

Ignition system normal

Spark weak

No spark

Adjust plug gap or replace plug

Ask Yamaha dealer to inspect

CLEANING AND STORAGE

A. CLEANING

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

1. Before cleaning the machine:
 - a) Block off end of exhaust pipe to prevent water entry; a plastic bag and strong rubber band may be used.
 - b) Remove air cleaner or protect it from water with plastic covering.
 - c) Make sure spark plug(s), 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 1.0 kg/cm² (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.

www.legends-yamaha-enduros.com

MISCELLANEOUS

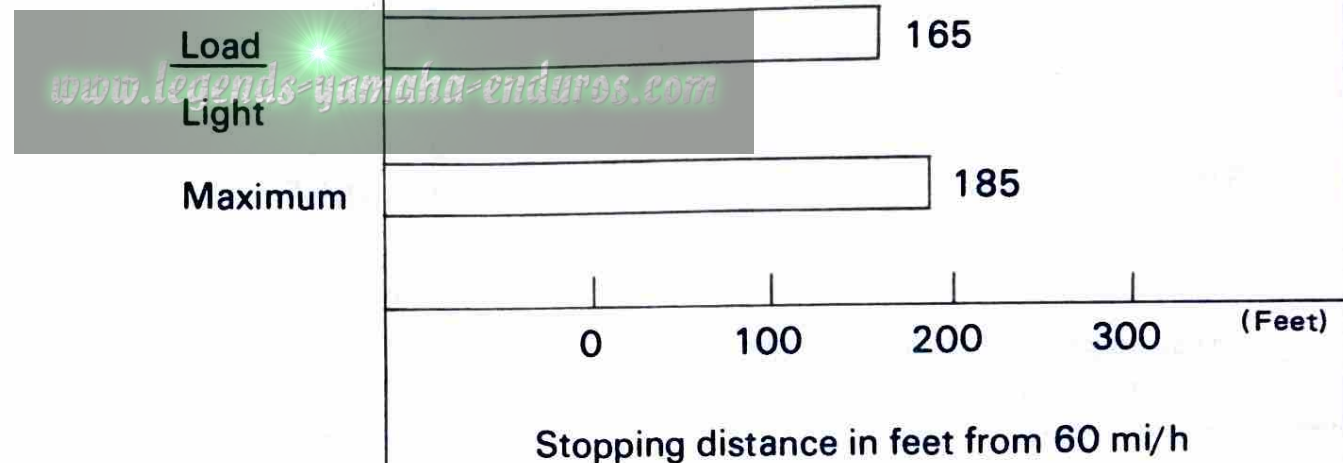
Consumer information

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 RD400D

A. Fully Operational Service Brake



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 RD400D

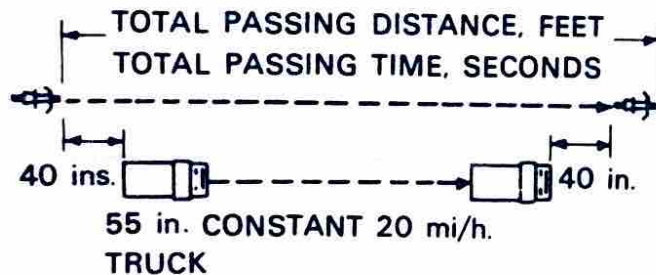
Summary table

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

LOW-SPEED

INITIAL
SPEED: 20 mi/h.

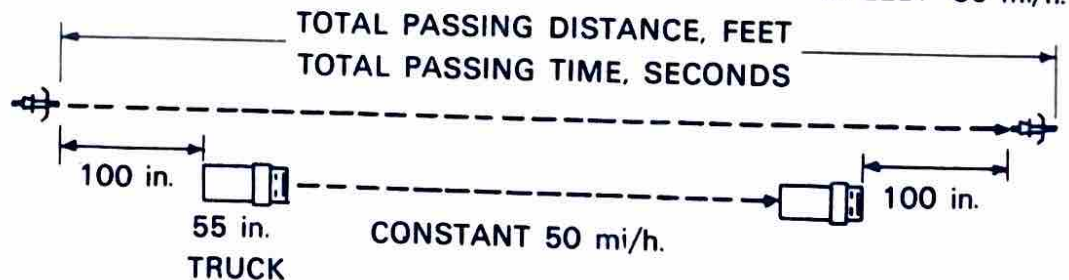
LIMITING
SPEED: 35 mi/h.



HIGH-SPEED

INITIAL
SPEED: 50 mi/h.

LIMITING
SPEED: 80 mi/h.



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

[illegible]

Color Code

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

www.legends-yamaha-enduros.com



YAMAHA MOTOR CO., LTD.

LIT-11626-00-02

SINCE 1887

IWATA, JAPAN

PRINTED IN JAPAN
76 · 5 · 0.5 x 1 ©