



YAMAHA

DT 100D

OWNER'S MANUAL

www.legends-yamaha-enduros.com

1T9-28199-10

INTRODUCTION

Thank you for buying the Yamaha DT100D.

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 operation, maintenance and inspection of this vehicle. 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.

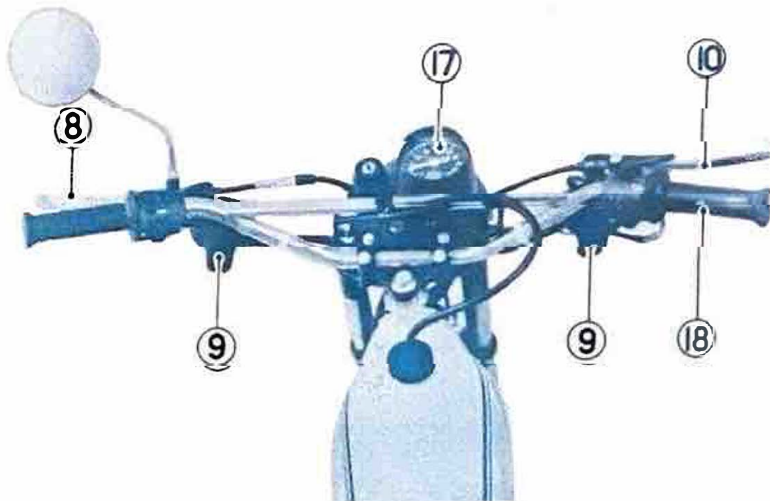
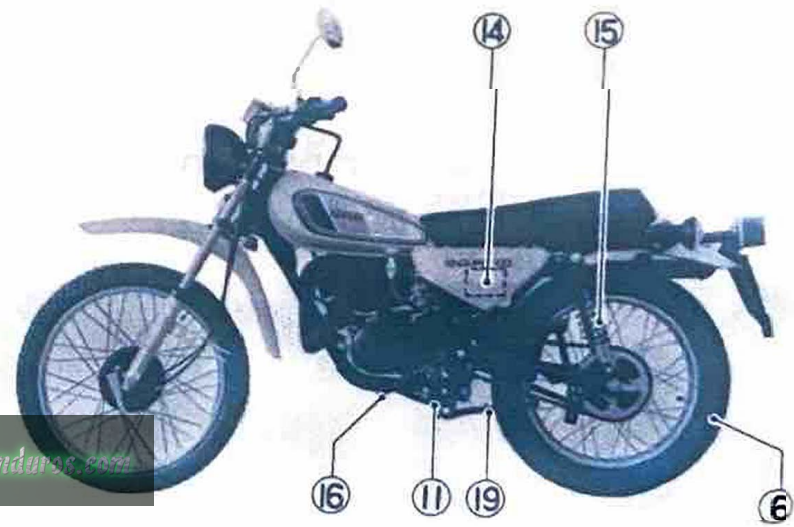
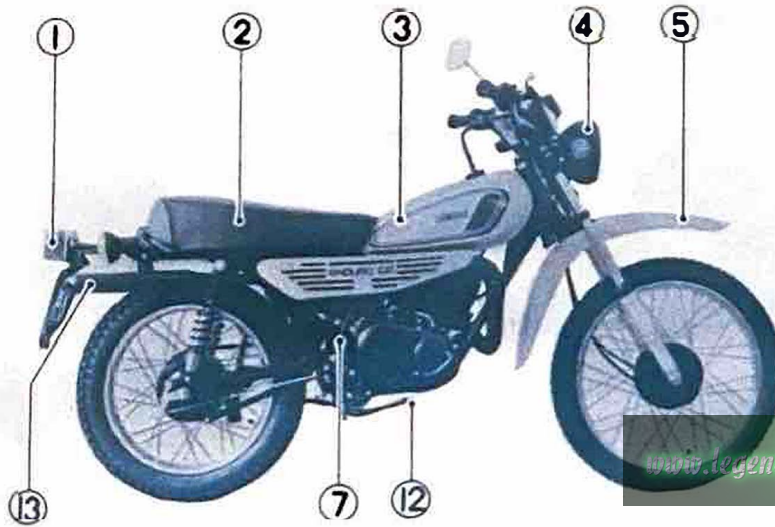
NOTICE: _____

Some data in this manual may become outdated due to improvements made to the machine in the future.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

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NOMENCLATURE

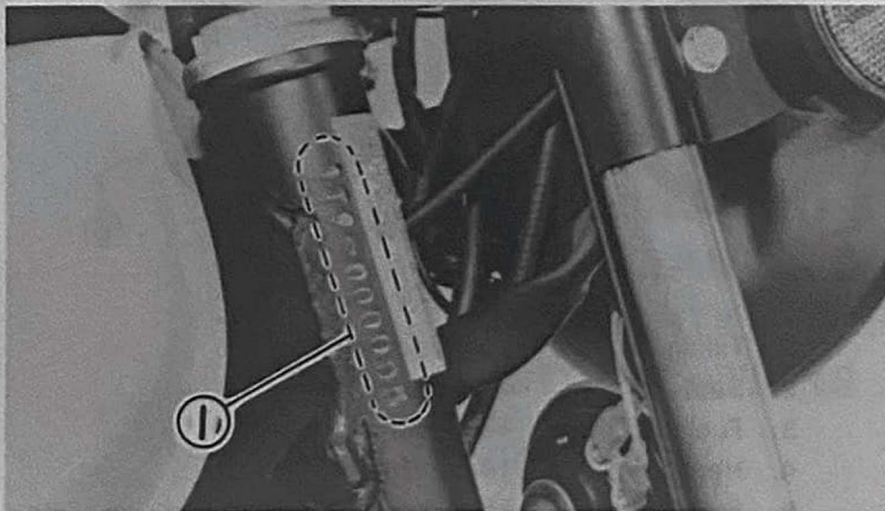


- | | |
|------------------|-------------------------|
| 1. Taillight | 11. Footrest |
| 2. Seat | 12. Brake pedal |
| 3. Fuel tank | 13. Muffler |
| 4. Headlight | 14. Oil tank |
| 5. Front fender | 15. Rear shock absorber |
| 6. Rear wheel | 16. Change pedal |
| 7. Kick crank | 17. Speedometer |
| 8. Clutch lever | 18. Throttle grip |
| 9. Flasher light | 19. Side stand |
| 10. Brake lever | |

MACHINE IDENTIFICATION

Frame number

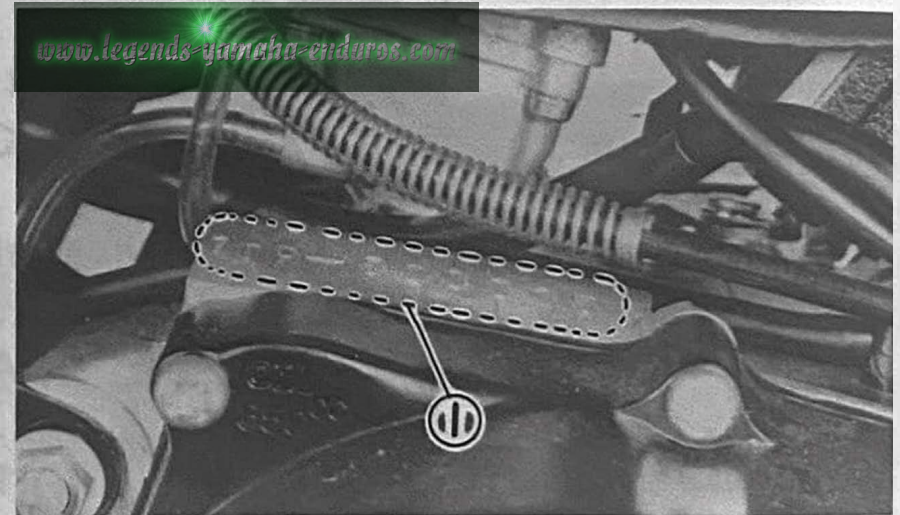
The frame number is stamped on the right side of the steering head stock.



1. Frame number

Engine number

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



1. Engine number

NOTE:

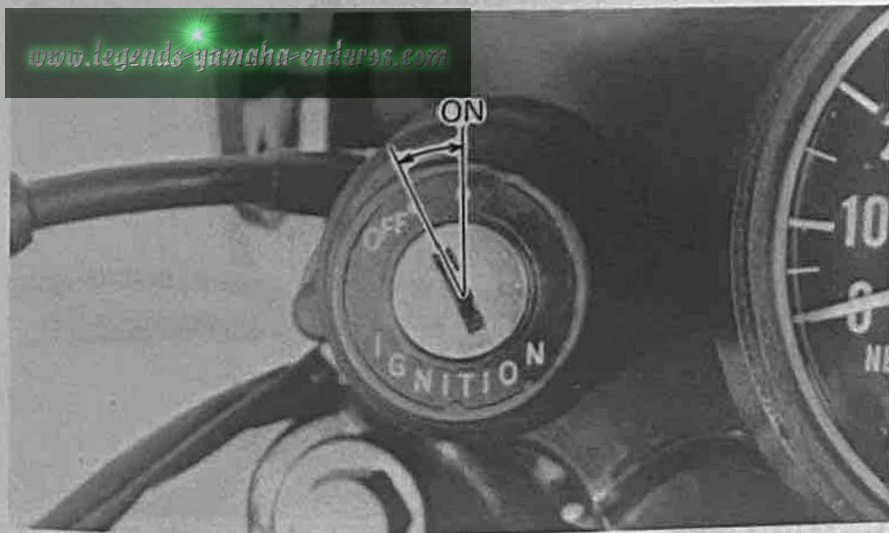
The first three digits of these numbers are for model identifications; the remaining digits are the unit production number. The engine and frame serial numbers are usually identical but they may sometimes be 2 or 3 numbers apart.

CONTROL FUNCTIONS

Main switch

According to the main key position, the ignition and lighting systems can be used as follows:

Key position	Description	Key removal
OFF	Engine cannot be started. Lights and horn cannot be operated.	Possible
ON	Engine can be started. Lights and horn can be operated.	Not

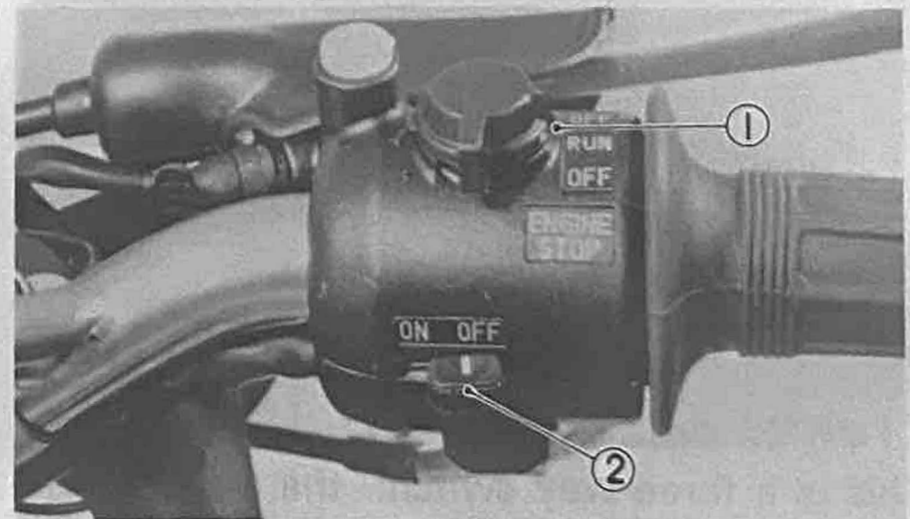


Handlebar switches

The handlebar switches are located near the right and left handle grips and are used for the following functions:

“ENGINE STOP” switch

Make sure that the engine stop switch is positioned to “RUN” position. 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 or run when the engine stop switch is turned to “OFF”.



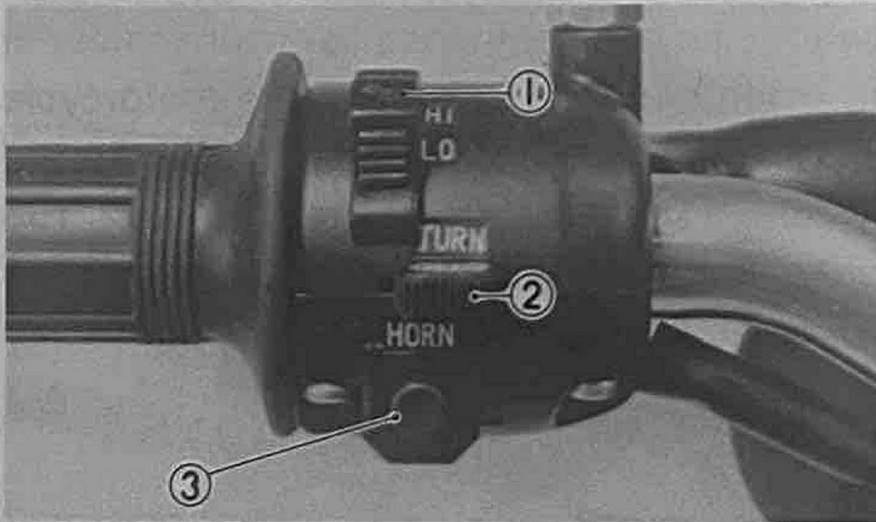
1. “Engine stop” switch 2. Light switch

“Light” switch

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

“LIGHTS” (dimmer) switch

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



1. “LIGHTS” (dimmer) switch
2. “TURN” switch
3. “HORN” switch

“HORN” switch

Press the button to sound the horn.

“TURN” switch

This is a three-way switch: the center position is off; turn to the “L” position for the left

flasher and to the “R” position for the right flasher.

Indicator lights

“TURN” indicator light (orange):

This light flashes when the turn indicator switch is “ON”.

“HIGH BEAM” indicator light (blue):

This indicator comes on when the headlight high beam is used.

“NEUTRAL” light (green):

This light comes on when the transmission is in neutral.

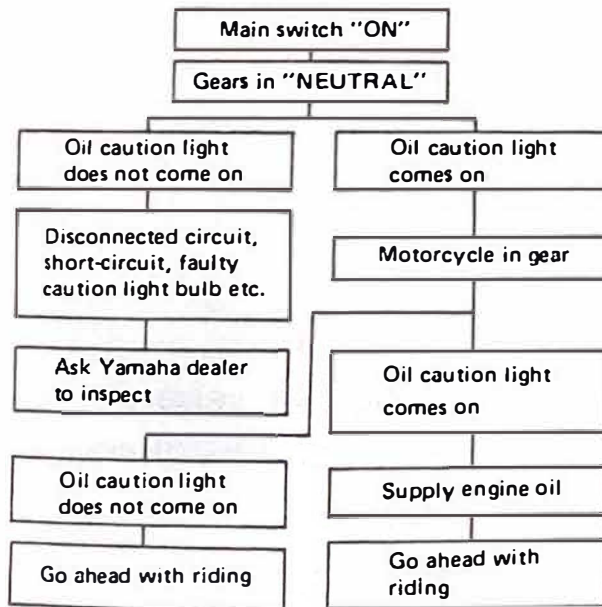


1. TURN light
2. HIGH BEAM light
3. NEUTRAL light
4. OIL light

“OIL” caution light (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.

NOTE: _____
If the oil caution light will not light up, have your Yamaha dealer check it up.

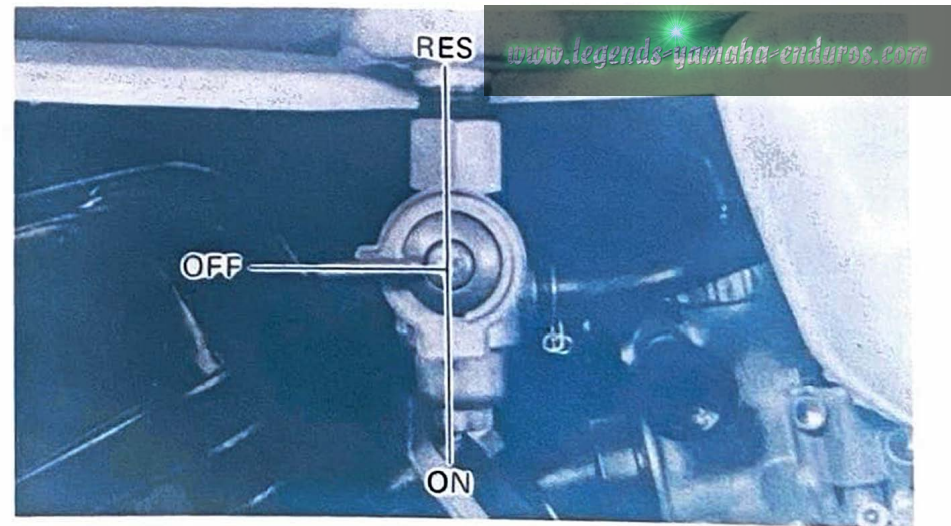


Fuel petcock

The fuel petcock functions to supply fuel from the tank to the carburetor and also to filter 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 riding is done with the lever in this position.



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

Front brake lever

The front brake lever is located on the right handlebar, pull it toward the handlebar to activate the front brake.

Rear brake pedal

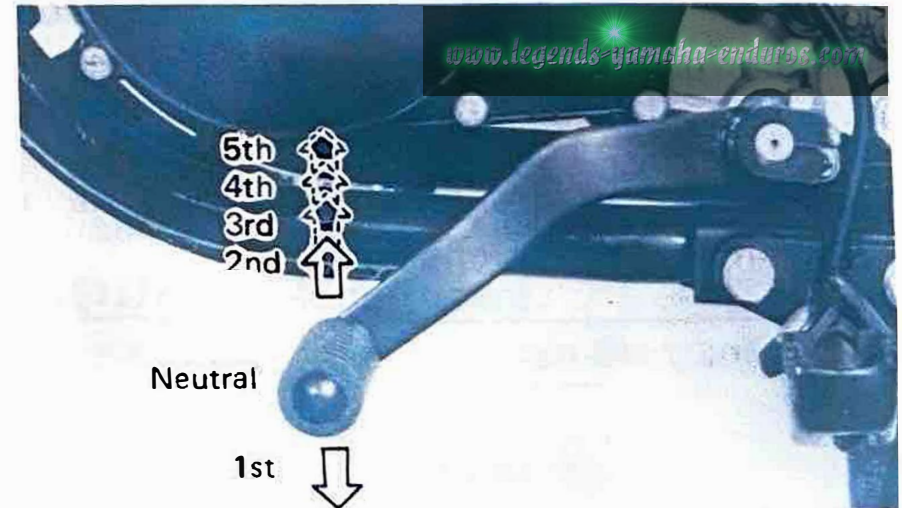
The rear brake pedal is on the right side of the motorcycle. Press down on the brake pedal to activate the rear brake.

Clutch lever

The clutch lever is located on the left handlebar and disengages or engages the clutch. Pull 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

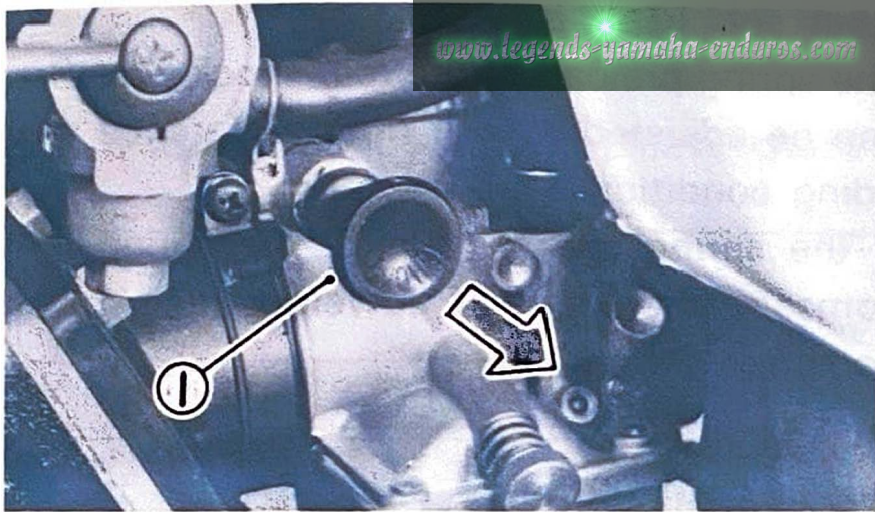
The gear ratios of the constant mesh 5-speed transmission are ideally spaced. The gears can be shifted by using the change pedal on the left side of the engine.



Starter knob

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

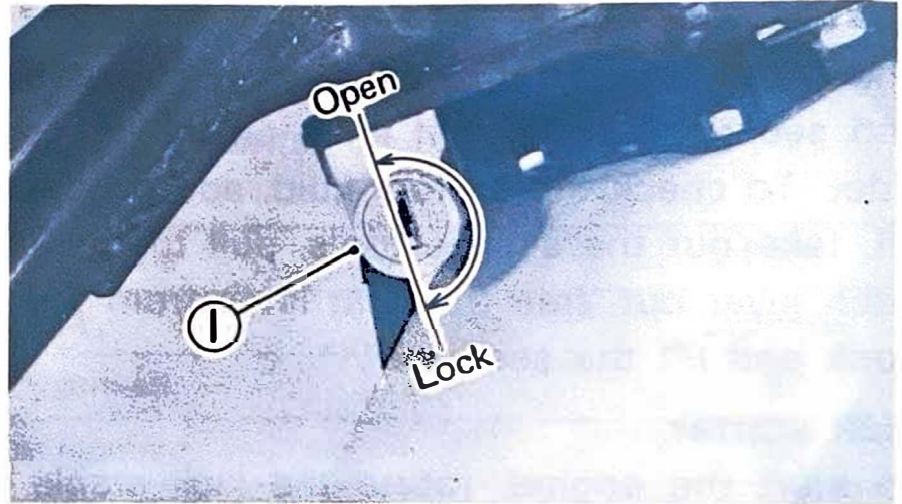
Pull the knob out to open the circuit (for starting) and push the knob in to close the circuit.



1. Starter knob

Steering lock

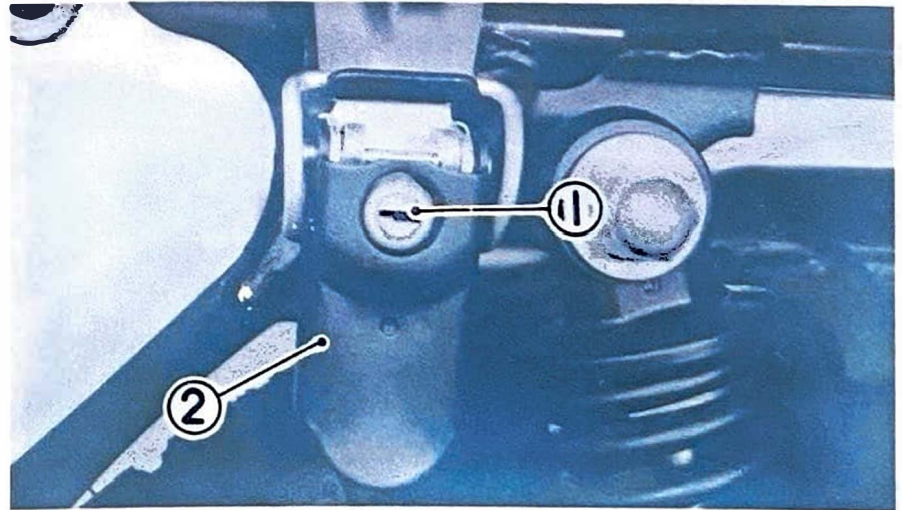
To lock the steering, turn the handlebars fully to the left, insert the key into the steering lock under the head pipe and turn the key 1/2 turn. After checking if the lock is engaged, remove the key from the lock. To release the lock, insert the key and turn it 1/2 turn in either direction.



1. Steering lock

Seat lock

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



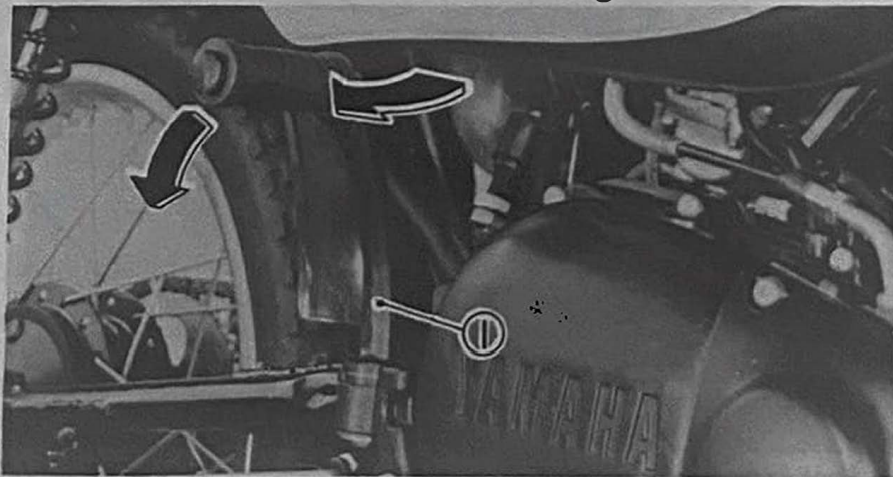
1. Seat lock 2. Seat latch

Seat latch

The seat is hinged to the frame on one side and secured by the seat latch on the other side. To check the battery fluid, add engine oil, take out the service tools, pull the seat latch lever out, free the seat latch from the hook and lift the seat.

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 the primary kick starter so the engine can be started in any gear if the clutch is disengaged. As normal practice, however, shift to neutral before starting.



1. Kick starter

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 stiffer and if lowered the spring becomes softer.

NOTE:

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



PRE-OPERATION CHECKS

Before using this motorcycle please check the following points:

Item	Routine	Page
Brakes	Check operation/adjustment	26 ~ 27
Clutch	Check operation/lever adjustment	26
Fuel tank	Check fuel level/top-up as required	10
Autolube tank	Check oil level/top-up as required	18
Transmission	Check oil level/top-up as required	19 ~ 20
Drive chain	Check alignment/adjustment/lubrication	28 ~ 30
Throttle	Check for proper throttle and Autolube cable operation	24
Wheels and tires	Check tire pressure/wear	10 ~ 11
Fittings/fasteners	Check all — tighten as necessary	—
Lights/signals	Check headlight/tail — stoplights	—

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 fuel:

Regular or low lead gasoline

Fuel tank capacity:

4.5 lit (4.8 US.gal.)

Engine oil

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

Recommended oil:

See page 18 "Engine oil section"

Oil tank capacity:

1.0 lit (1.1 US.gal.)

Transmission oil

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

Recommended oil:

Yamalube 4-cycle or SAE 10W/30
type "SE" motor oil

Oil quantity:

650 ± 50 cc (0.7 ± 0.05 qt)

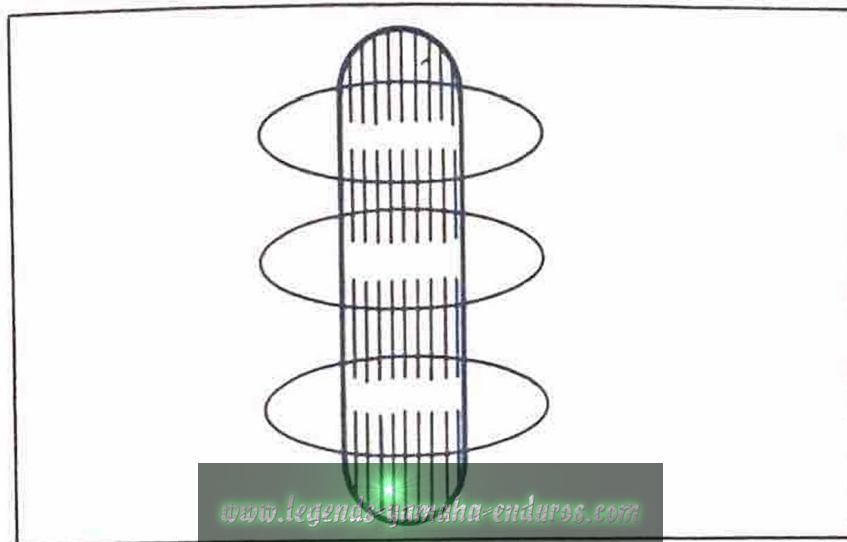
Tires

Check the tire pressure and check the tires for wear.

Tire pressure

	Front tire	Rear tire
Off-road	1.0 kg/cm ² (14 psi)	1.2 kg/cm ² (17 psi)
On paved road	1.6 kg/cm ² (22 psi)	2.0 kg/cm ² (28 psi)

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



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.

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.

Brakes

Check for correct play in the brake lever and pedal and make sure they are working properly. Check the brakes at low speeds shortly after starting out.

Switches and lights

Check for proper operation.

Starting a cold engine

1. Turn the fuel petcock to "ON".
2. Turn the ignition key to the "I" position and turn the engine stop switch to the "RUN" position.
3. Operate the carburetor starter jet (choke) knob and completely close the throttle grip.
4. Kick the kick crank with full strength to start the engine.

5. After the engine starts, warm up for one or two minutes. Make sure the starter jet (choke) knob is returned to the original position before riding.

Starting a warm engine

To start a warm engine, the starter knob is not required.

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 knob turned off.

Shifting and acceleration

This model has a 5-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. 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 10 to 15 mph, 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.

Cruising

A frequently asked question is "What speed 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. 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 running gear could possibly change the operating range most comfortable and most efficient for the engine.

Engine break-in

There is never a more important period, in the life of your motorcycle, than the period between 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 several hours of running. During 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 heat of cylinder, must be avoided.

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

1. 0 ~ 160 km (0 ~ 100 mi):
Avoid operation above 40 km/h when in 5th gear. 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. 160 ~ 400 km (100 ~ 250 mi):
Avoid prolonged operation above 50 km/h when in 5th gear. Allow the

motorcycle to rev freely through the gears but do not use full throttle at any time.

3. 400 ~ 800 km (250 ~ 500 mi):
Avoid prolonged full throttle operation.
Avoid cruising speeds in excess of 60 km/h when in 5th gear.
4. 800 km and beyond (500 mi and beyond):
Avoid prolonged full throttle operation.
Vary speeds occasionally.

CAUTION: _____

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

Parking

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

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

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.

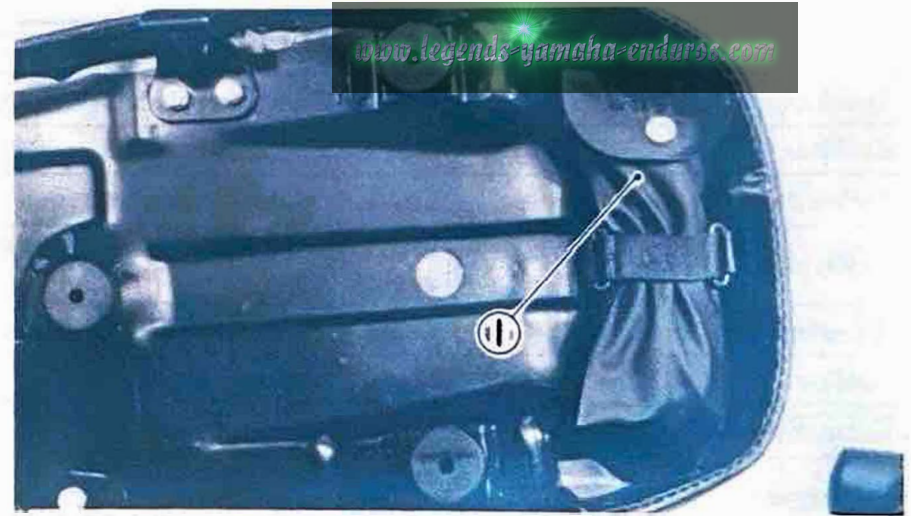
CAUTION: _____

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)	6,400 (4,000)
Cylinder head/Exhaust pipe	Decarbonize			○			○	
Spark plug	Inspect/Clean or replace as required	○	○	○			○	
Air filter	Clean/Replace as required	○		○		Every 1,600 km		
Carburetor	Check operation/Adjust as required		check		○		○	
Brake system (complete)	Check/Adjust as required — Repair as required		○	○			○	
Wheels and tires	Check pressure/Wear/Balance/Runout	○	○	○		○		
Fuel petcock	Clean/Flush tank as required	○		○		○		
Autolube pump	Check/Adjust/Air bleeding		check	○		○		
Battery	Top-up/Check specific gravity and breather pipe	○	○	○		○		
Ignition timing	Adjust/Clean or replace as required		○	check			○	
Lights/Signals	Check operation/Replace as required	○		○		○		
Fittings/Fasteners	Tighten before each trip and/or	○		○		○		
Drive chain	Check tension/Alignment	○		○		○		
Clutch	Check/Adjust		○	○			○	
Suspension system	Check/Adjust/Repair as required		○		○		○	

LUBRICATION INTERVALS

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Unit: km (mile)

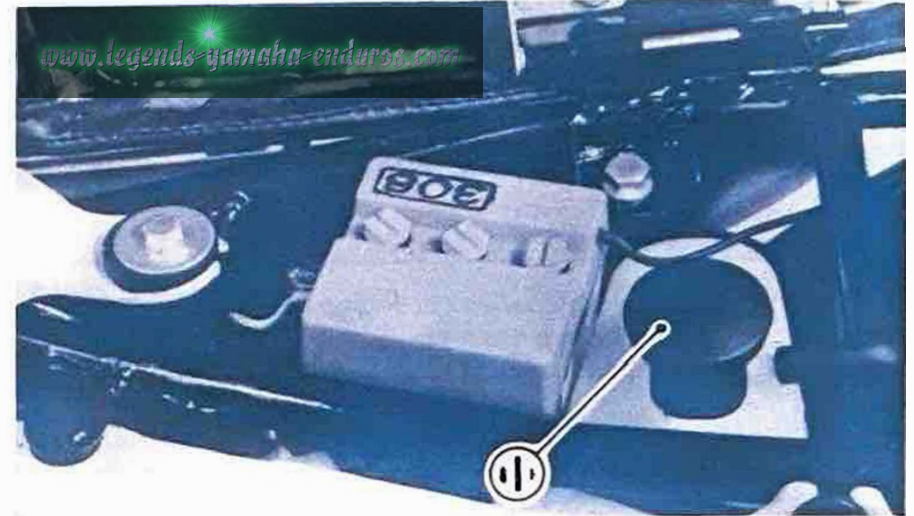
Item	Remarks	Type (Recommended lubricants)	Initial				Thereafter every		
			400 (250)	800 (500)	1,600 (1,000)	3,200 (2,000)	1,600 (1,000)	3,200 (2,000)	6,400 (4,000)
Transmission oil	Replace/Warm engine before draining	1. Yamaha 4-cycle oil 2. SAE 10W/30 type "SE" motor oil	check	○	○		check	○	
Control/Meter cables	Apply thoroughly	Yamaha chain and cable lube or SAE 10W/30 motor oil			○	○		○	
Throttle grip/Housing	Apply lightly	Lithium base grease				○		○	
Front forks	Drain completely — Check specifications	Yamaha fork oil 10W, 20W, 30W		check		○	check		○
Steering bearings	Inspect thoroughly/Pack moderately	Medium-weight wheel bearing grease				check			○
Speedometer gear housing	Inspect thoroughly/Pack moderately	Lithium base grease				○			○
Rear arm pivot shaft	Apply grease fully	Medium-weight wheel bearing grease			○				○
Wheel bearings	Do not over-pack	Medium-weight wheel bearing grease				○	check	○	
Drive chain	Clean and lube	Yamaha chain and cable Lube or SAE 10W/30 motor oil	○	○	○		Every 400 km		
Brake pedal shaft	Apply lightly	Lithium base grease			○			○	
Stand shaft pivot	Apply lightly	Lithium base grease			○			○	
Point cam lubrication wick(s)	Apply very lightly	Light-weight machine oil			○			○	

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

Engine oil

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 30W, 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.



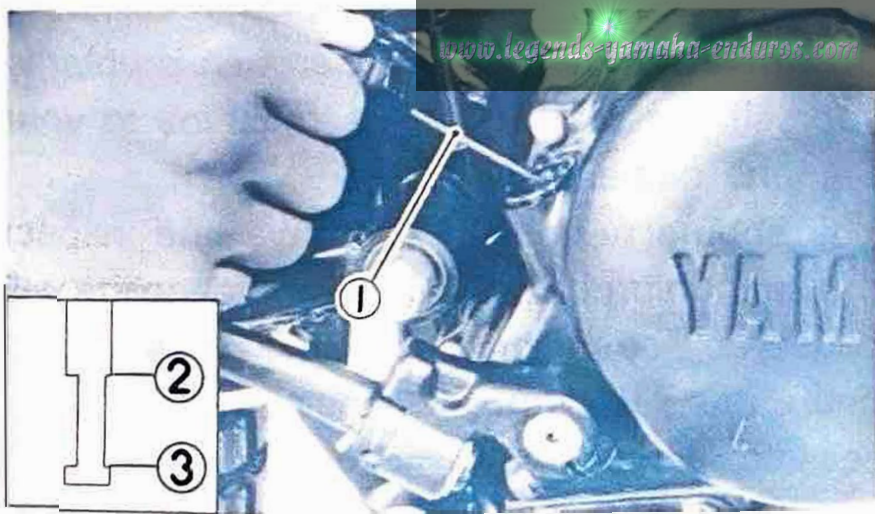
1. Oil tank filler cap

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

Oil tank capacity:
1.0 lit (1.1 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 kick starter. 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. Dip stick 2. Maximum level 3. Minimum level

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 10W/30 motor oil, type "SE"

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.

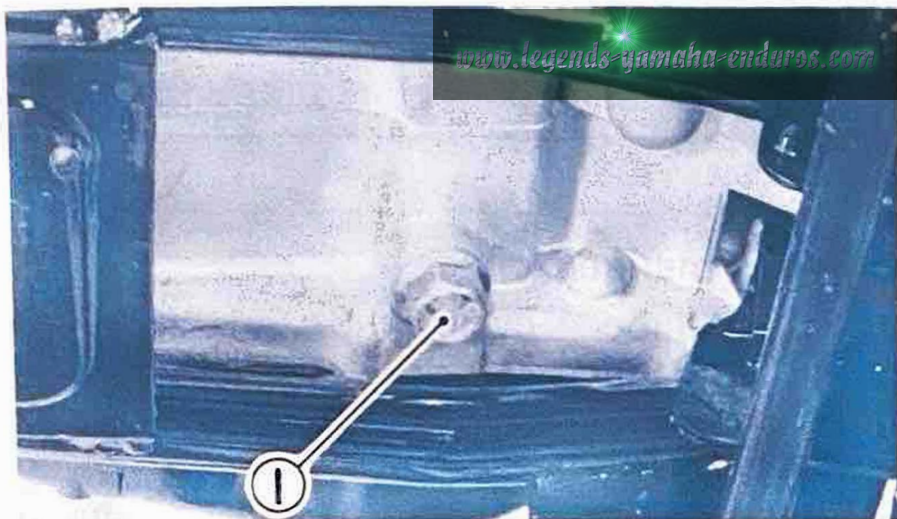
During the break-in period, you should replace the gear oil 30 days or 800 km (500 mi) after the date of purchase.

The transmission should be drained and re-filled approximately every 3,200 km (2,000 mi).

Oil quantity:

650 ± 50cc

(0.7 ± 0.05 US.qt)



1. Drain plug

On the bottom of the engine there is a drain plug. Remove it and drain all the transmission oil out.

Reinstall the drain plug (make sure it is tight). Add oil through the dip stick hole.

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 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 types.

Standard spark plug: B-8ES (NGK)

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 seat 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 (18 ~ 21.6 ft-lb)

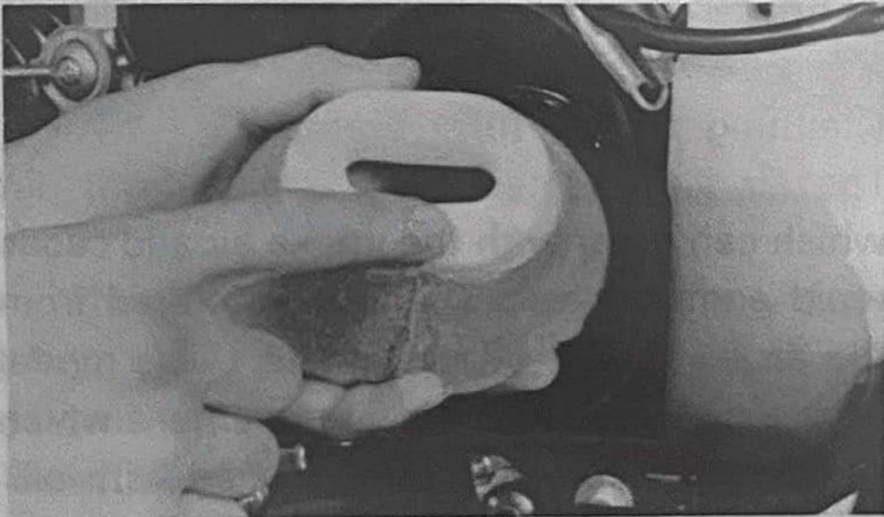
Cleaning the air filter element

The air filter protects the engine from dirt which can enter with the intake air and cause rapid engine wear. This dirt is filtered from the air by the air filter element. This model uses a cartridge type air filter element which consists of foam rubber moistened with oil. When this filter element becomes dirty it should be cleaned with solvent and reoiled.

Cleaning method


1. Remove the air filter element from its case, remove element from core and clean with solvent. After cleaning, remove the remaining solvent by squeezing the foam rubber.

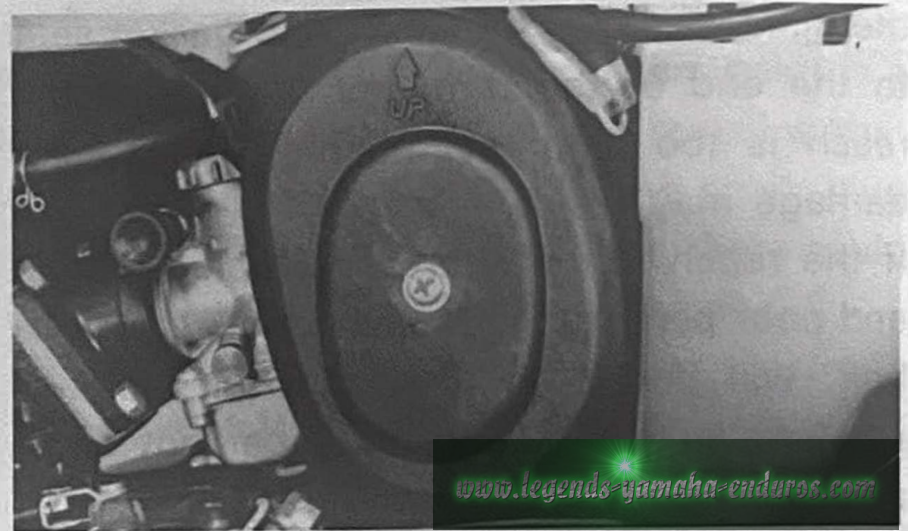
2. Then apply SAE 30W motor oil to the entire surface and squeeze out the excess oil. Foam should be wet but not dripping. Coat the sealing edges of the filter element with lithium base grease.



3. When installing the air filter element in its case, be sure its sealing surface matches perfectly the sealing surface of the case so there is not air leakage.

NOTE: _____

Install the case cap with the mark () place upward.



4. The air filter element should be cleaned once a month or every 1,500 km (1,000 mi). 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 adjustments should be left to a Yamaha dealer who has the professional knowledge and experience to do so. However, the following point may be serviced by the owner as part of his usual maintenance routine.

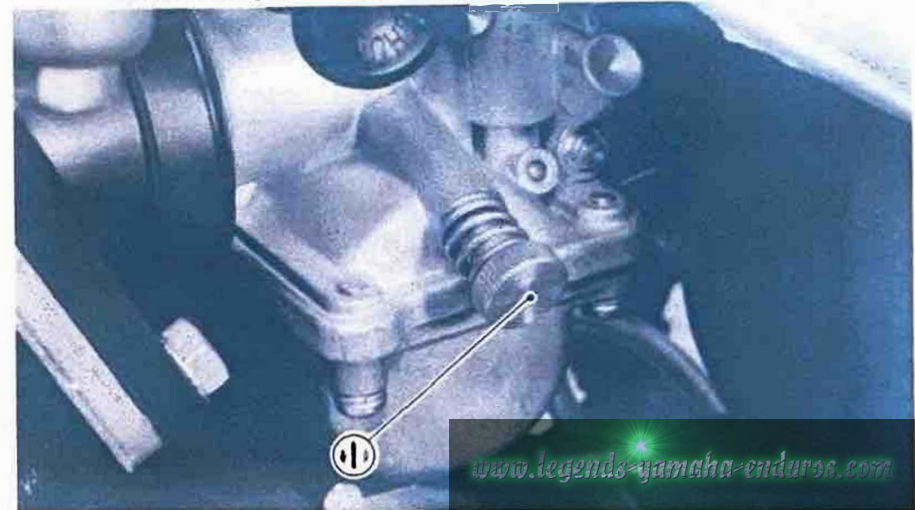
CAUTION: _____

The carburetor was set at the Yamaha factory after many tests. If the settings are disturbed without having technical knowledge, poor engine performance and damage may result.

Idling rpm adjustment

1. 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.

2. Set the engine idle speed to specified rpm by turning the throttle stop screw in to increase the engine speed and back off the throttle stop screw to decrease the engine speed.



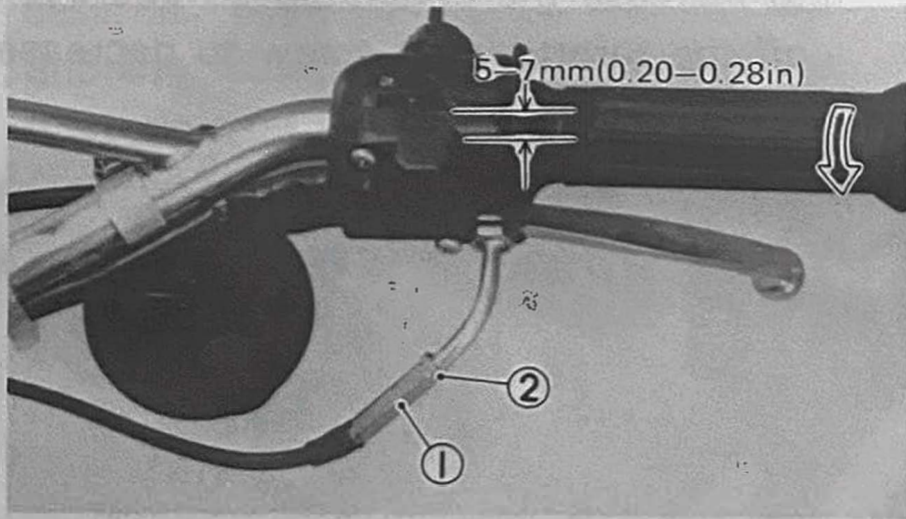
1. Throttle stop screw

Standard idling rpm:
1,250 ~ 1,350 rpm

NOTE: _____

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

Inspection and adjustment of throttle cable play



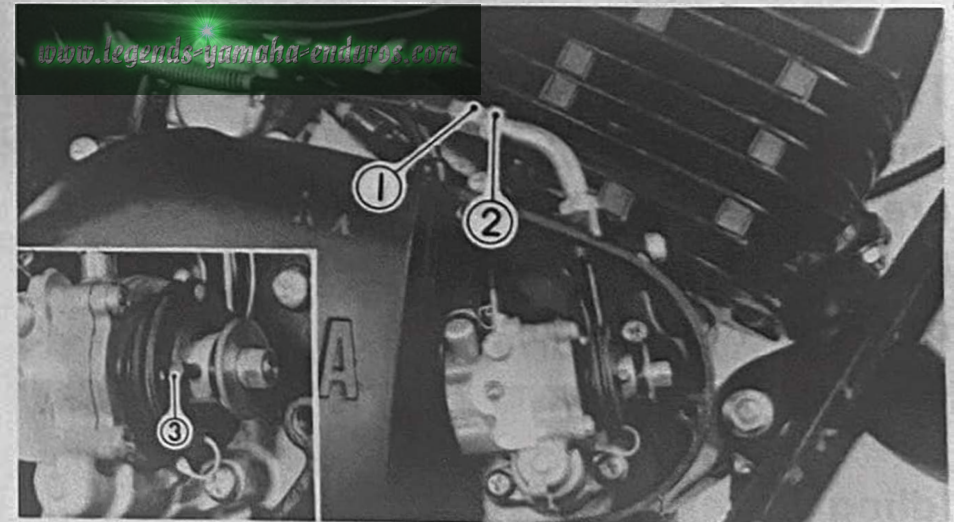
1. Adjuster 2. Locknut

Check play in turning direction of throttle grip. The play should be 5 ~ 7 mm (0.20 ~ 0.28 in) at grip flange. Loosen the locknut and turn the wire adjuster to make the necessary adjustment. After adjustment, be sure to tighten the locknut properly.

Autolube pump cable adjustment

Close the throttle grip completely, then twist it open until all cable slack is removed, but

stop before the slides start to lift. Adjust the pump cable so the mark (▶) on the pump pulley lines up with the "adjust pulley guide pin". The Autolube cable adjuster is located at the bottom end of the cable, screwed into the top of the right case cover.

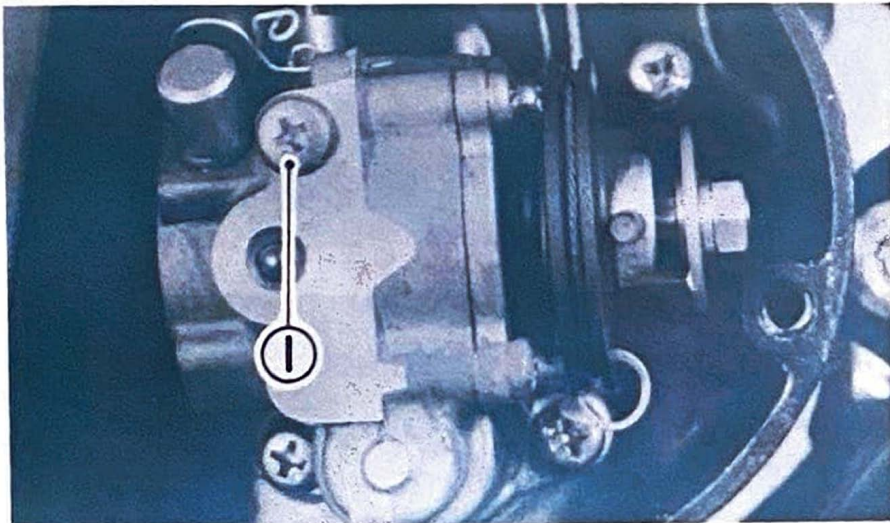


1. Adjuster 2. Locknut 3. Guide pin

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 bleed screw and keep the oil running out until air bubbles disappear.

Tighten the bleed screw. Start the engine and pull the pump wire all the way out to set the pump stroke to a maximum. Keep the engine running at about 2,000 rpm for 2 minutes or so, and Autolube pump can be completely bled.



1. Bleed screw

Fuel petcock inspection and cleaning

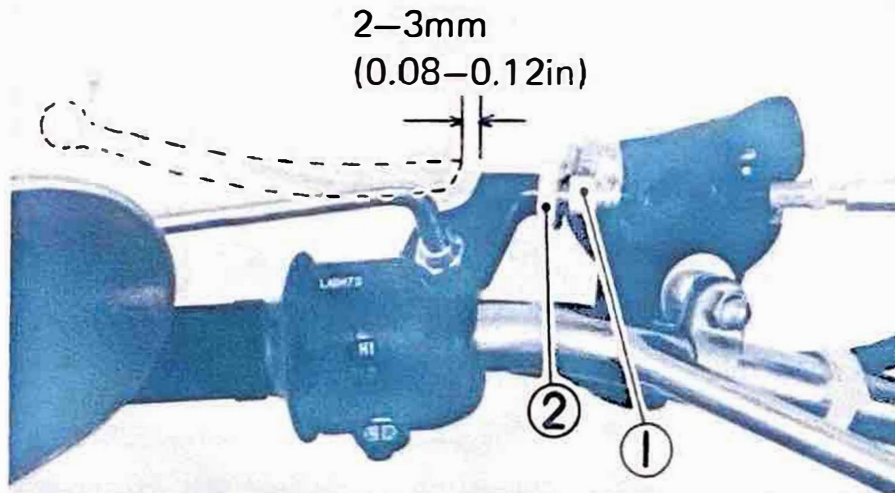
The fuel petcock has a built-in filter to remove any particles before they reach the carburetor. If the filter becomes blocked, the fuel cannot enter the carburetor. To prevent this, inspection and cleaning should be done at recommended intervals.



1. First, turn the petcock lever to the "OFF" position; then remove the filter cup and clean the bottom of the cup with solvent.
2. After removing the filter cup, remove and clean the filter screen. At the same time, you should examine the condition of the filter gasket. Replace if damaged.
3. When reassembling, be careful not to clamp the filter cup too tightly as this may cause the filter gasket to become unseated, resulting in fuel leakage.

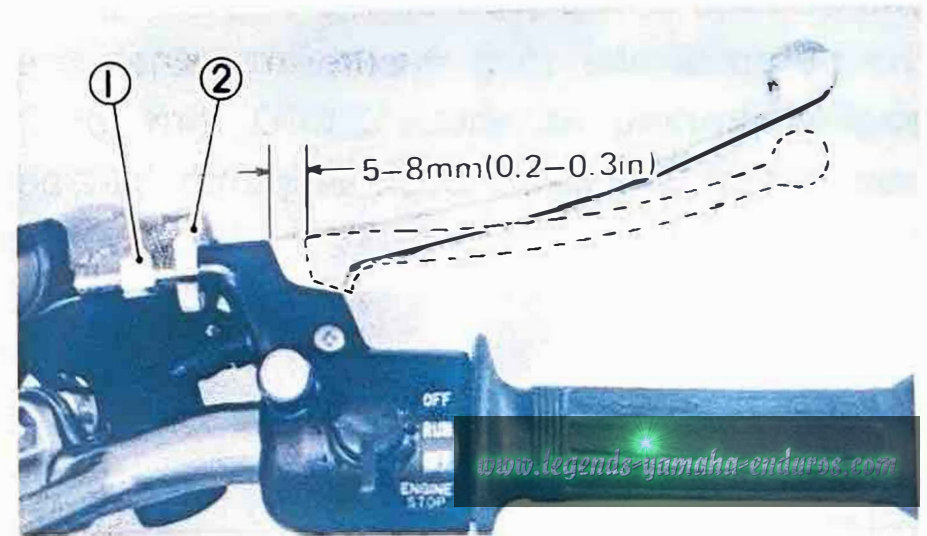
Clutch adjustment

This model has two clutch cable length adjusters and a clutch mechanism adjuster. Adjustment at the clutch lever is normally recommended. Loosen the locknut and turn the adjuster to adjust the clutch lever. The clearance between the clutch lever and lever holder should be 2 ~ 3 mm (0.08 ~ 0.12 in). After adjusting, be sure the locknut is tightened firmly. When it is impossible to make an adjustment at the clutch lever ask a Yamaha dealer for mechanism adjustment.



1. Adjustor
2. Adjustor locknut

Front brake adjustment



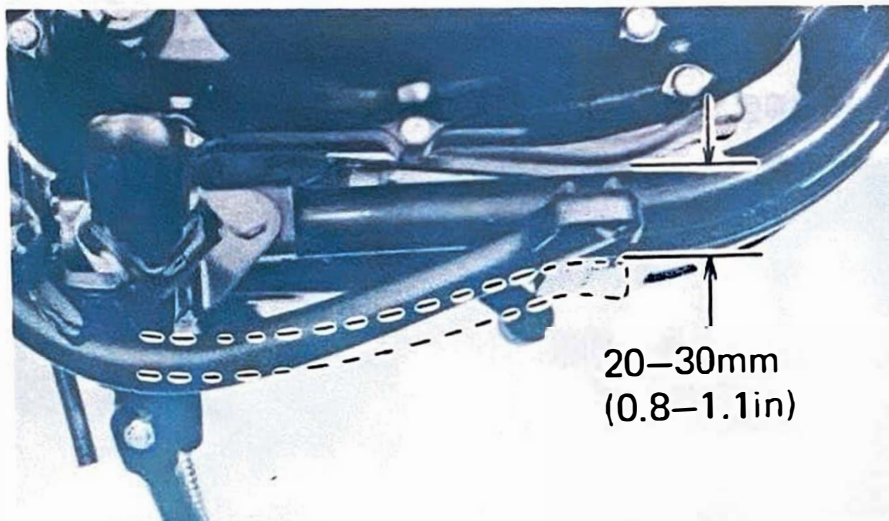
1. Adjuster
2. Locknut

The front brake can be adjusted in two ways; (1) using the adjust screws at the front brake lever or (2) at the front brake shoe plate. Adjustment at the front brake lever is normally recommended. Loosen the locknut and turn the adjuster to adjust the brake lever. As shown in the illustration, the clearance between the brake lever and the brake lever holder should be 5 ~ 8 mm (0.2 ~ 0.3 in). After adjusting, be sure the locknut is tightened firmly. Ask a Yamaha dealer to

make an adjustment at the brake shoe plate when all lever adjustment has been used.

Rear brake adjustment

The rear brake should be adjusted so the end of the brake pedal moves 20 ~ 30 mm (0.8 ~ 1.1 in). To adjust, turn the adjustor nut on the brake rod clockwise to reduce play; turn the nut counterclockwise to increase play. Check whether or not the stop light operates correctly after adjusting.

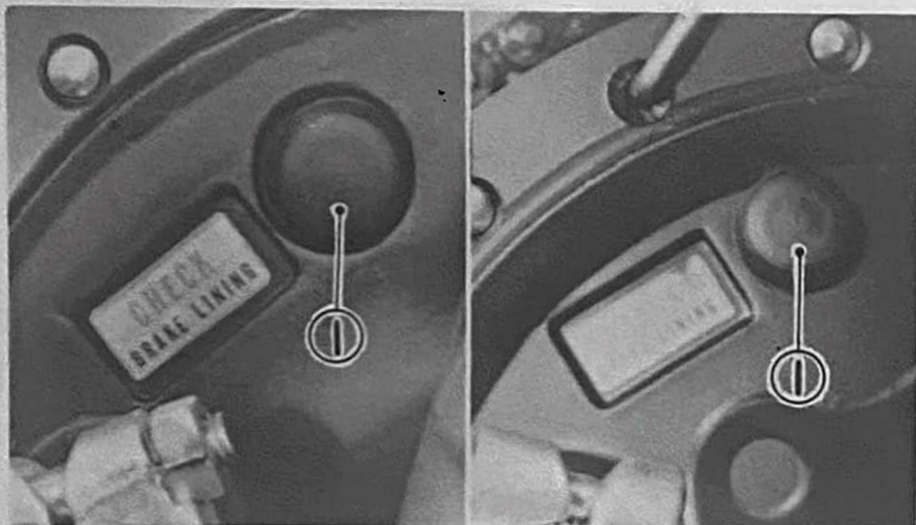


1. Adjusting nut

Brake lining inspection

The specified thickness of the brake lining is 4 mm (0.16 in). The lining should be replaced when it wears to less than 2 mm (0.08 in).

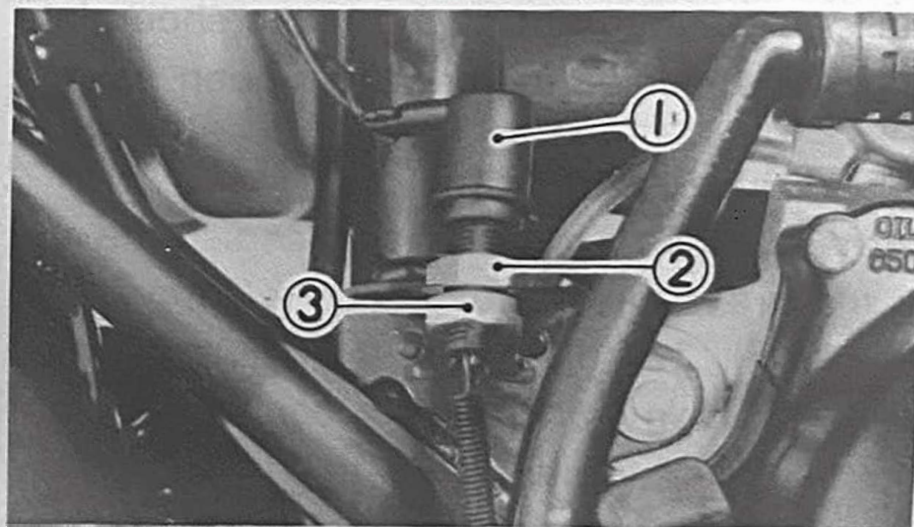
To inspect, remove the plug from the inspection hole on the brake shoe plate and check the thickness of the lining. If worn out, ask your Yamaha dealer to install a new set. Be sure to replace the plug carefully so water cannot enter the shoe plate.



1. Inspection hole

Stoplight switch adjustment

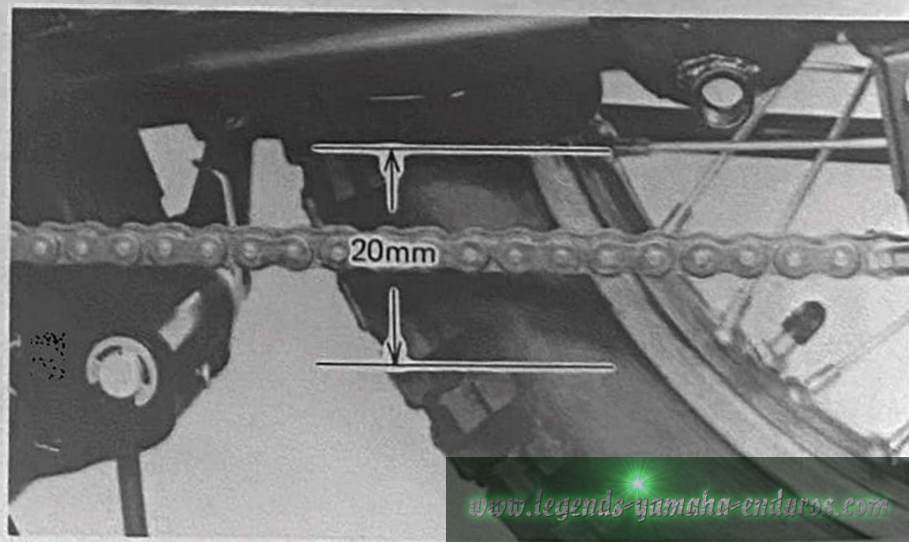
The stoplight switch is operated by movement of the brake pedal. To adjust, loosen the locknut and rotate the adjustor nut. Proper adjustment is achieved when the brake starts to take effect and the stoplight illuminates simultaneously. After adjusting, tighten the locknut.



1. Stop light switch 2. Adjusting nut 3. Locknut

Drive chain tension check

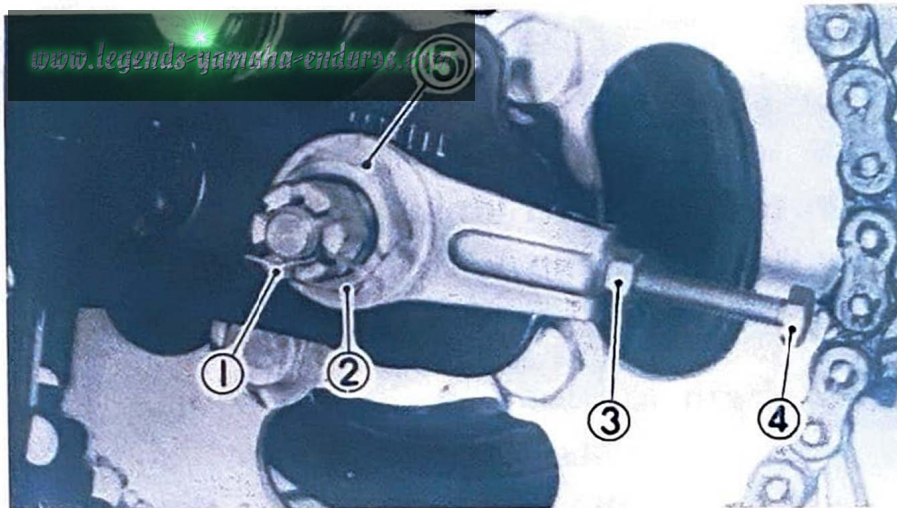
Inspect the drive chain with both tires touching the ground. Check the tension at the



position shown in the illustration. The normal vertical deflection is approximately 20 mm (3/4 in). If the deflection exceeds 20 mm (3/4 in) adjust the chain tension.

Drive chain tension adjustment

1. Loosen the rear brake rod adjuster nut.
2. Loosen the sprocket shaft nut and axle nut.
3. Loosen adjustor bolt locknuts on each side. To tighten chain, turn chain puller adjustor bolts clockwise. To loosen chain, turn adjustor bolts counterclockwise and push wheel forward. 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).



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

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.

4. After adjusting, be sure to tighten the locknut, shaft nut and rear wheel axle nut properly.
5. In the final step, adjust the play in the brake pedal.

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 800 km (500 mi); therefore, form the habit of periodically servicing the chain. This service is especially necessary when driving 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).

2. To clean the entire chain, first remove the chain from the motorcycle, dip it in solvent and clean out as much dirt as possible. Then take the chain out of the solvent and dry it. After drying, lubricate the chain to prevent the formation of rust.

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

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Lubrication of levers, pedals, etc.

1. Lubricate the pivoting parts of the brake and clutch levers with motor oil SAE 10W/30.
2. Lubricate the shaft of the brake pedal with lithium base 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 3,200 km (2,000 mi).



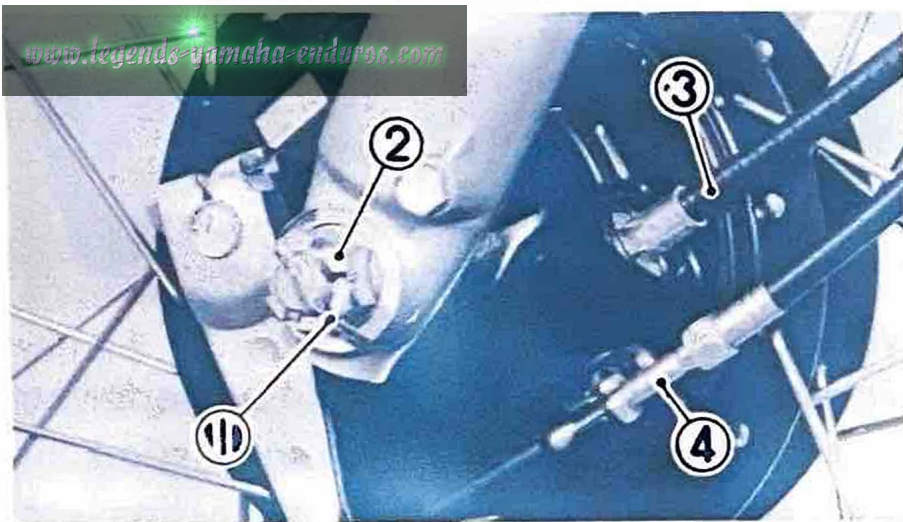
Wheel service

The wheels service that should be performed by the owner is air pressure inspection, tire wear inspection, brake lining inspection, etc. Brake lining replacement, tightening spokes, hub replacement, etc., should be left to a Yamaha service technician.

Front wheel removal

1. Elevate the front wheel by placing a suitable stand under the engine.
2. Remove speedometer cable from front brake shoe plate: First remove clip and then pull cable out.

3. Remove brake cable: Loosen all cable adjuster screws and remove cable from handle lever holder. Then remove cable from cam lever at front brake shoe plate.



1. Cotter pin 2. Axle nut 3. Speedometer cable
4. Brake cable

4. Remove cotter pin from front wheel axle and remove axle nut.
5. Turn and pull out the front wheel axle; the wheel assembly can now be removed.

Front wheel installation

When installing front wheel, reverse the

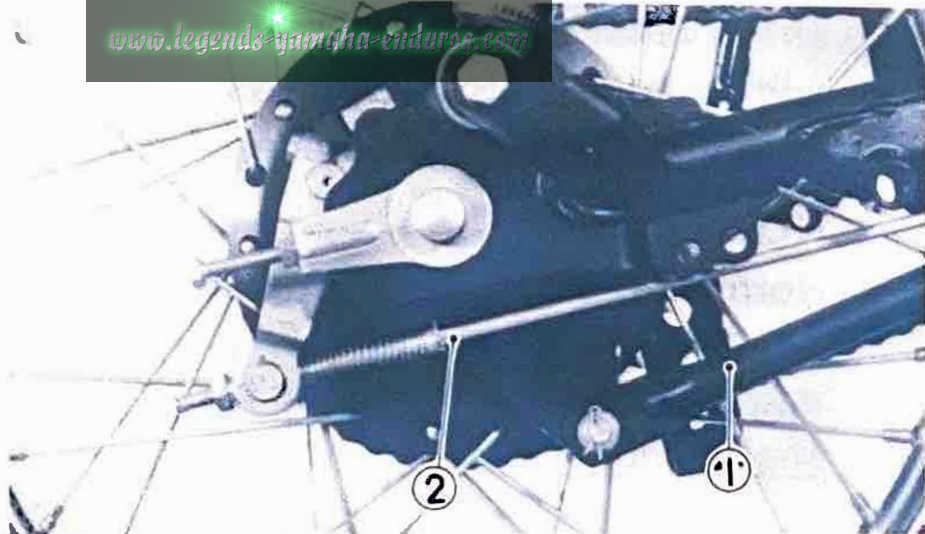
1. Check for proper engagement of the boss on the outer fork tube with the locating slot on the brake shoe plate.
2. Make sure the axle nut is properly torqued and a new cotter pin is installed.

Axle nut torque:

3.5 ~ 5.0 m-kg (25.3 ~ 36.2 ft-lb)

Rear wheel removal

1. Remove the tension bar and the brake rod from the brake shoe plate. The tension bar can be removed by removing the cotter pin and nut from the tension bar bolt. The brake rod can be removed by removing the adjuster nut.
2. Loosen the locknuts of the right and left chain pullers and loosen the adjuster bolts.



1. Tension bar 2. Brake rod

3. Remove the master link clip and master link and remove the chain from the rear sprocket.
4. Remove the cotter pin from the wheel axle and remove the sprocket shaft nut and axle nut.
5. The rear wheel assembly, the collar, the chain puller(s), etc., can be removed from the motorcycle by pulling the wheel axle.

Rear wheel installation

The rear wheel can be installed by reversing the removal procedure. Take the following steps.

1. When connecting the chain, make certain closed end of master link clip is facing, direction of rotation.
2. Be sure to adjust the tension of the chain. (Refer to "Drive chain tension adjustment".)
3. Make sure the nuts and tension bar bolt are properly torqued.

Axle nut torque:

3.0 ~ 4.8 m-k_g (21.7 ~ 34.7 ft-lb)

Sprocket shaft nut torque:

11 ~ 18 m-k_g (79.5 ~ 130 ft-lb)

Tension bar bolt torque:

1.4 ~ 2.2 m-k_g (10.1 ~ 16 ft-lb)

4. Adjust the brake pedal and stoplight switch.

5. Always use a new cotter pin. Old pins should be discarded.

Battery

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

-45400

Replenishing the battery fluid

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



1. Upper level
2. Lower level

1. The level should be between the upper and lower 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.

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.

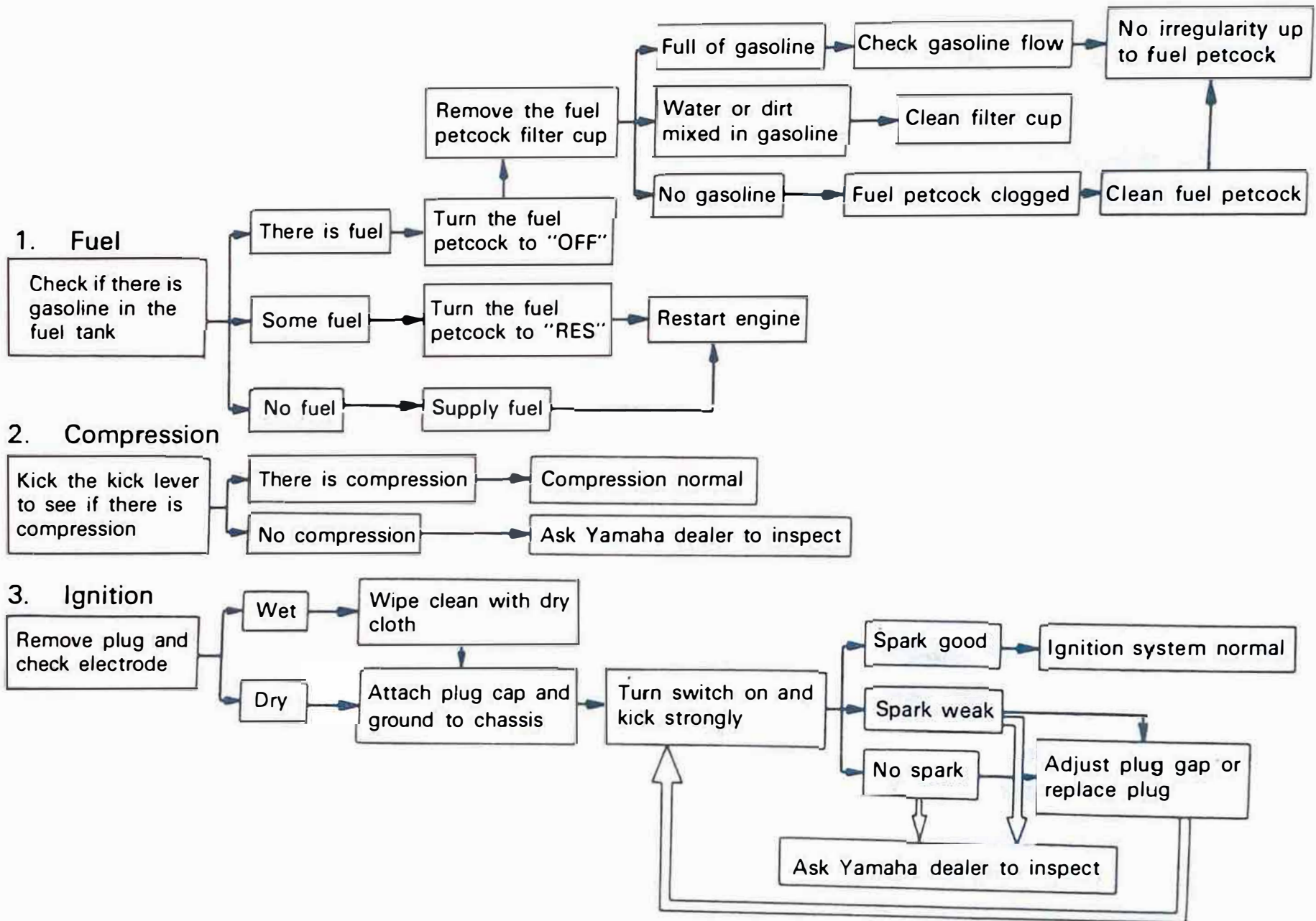
Troubleshooting

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. 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 system can cause poor starting or loss of power while riding. The troubleshooting chart describes quick and easy procedures for checking these systems.



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), fuel tank 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, brake drums, and transmission seals. Many expensive repair bills have resulted from improper high pressure detergent applications such as those available in coin-operated car washers.
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, rims, spokes, forks, etc., may be

2. Remove empty fuel tank, pour a cup of SAE 10W/30 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 SAE 10W/30 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 machine.)
7. Tie a plastic bag over exhaust pipe outlet(s) to prevent moisture from entering.
8. 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.

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).

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 0°C (32°F) or more than 32°C (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.

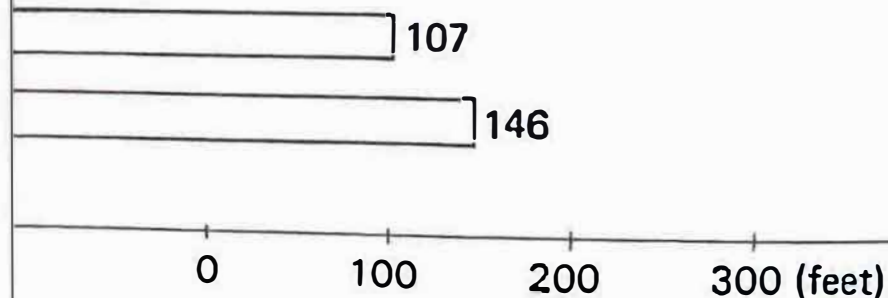
Description of vehicles to which this table applies: Yamaha motorcycle DT 100D

A. Fully Operational Service Brake

Load

Light

Maximum



Stopping distance in feet from 50 mi/h

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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.

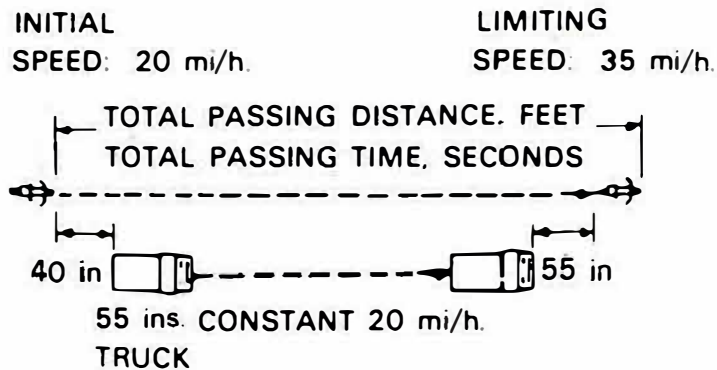
Description of vehicles to which this table applies: Yamaha motorcycle DT100D

Summary table

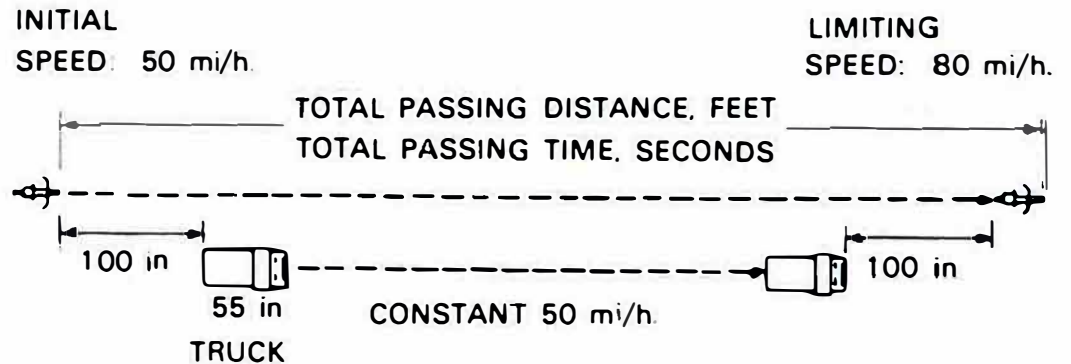
Low-speed pass 405 feet: 8.8 seconds
 High-speed pass Not capable

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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 to by writing to:

YAMAHA INTERNATIONAL CORPORATION

P.O. Box 6600

Buena Park, California 90620

Attn: Warranty Department

SPECIFICATIONS

General specifications

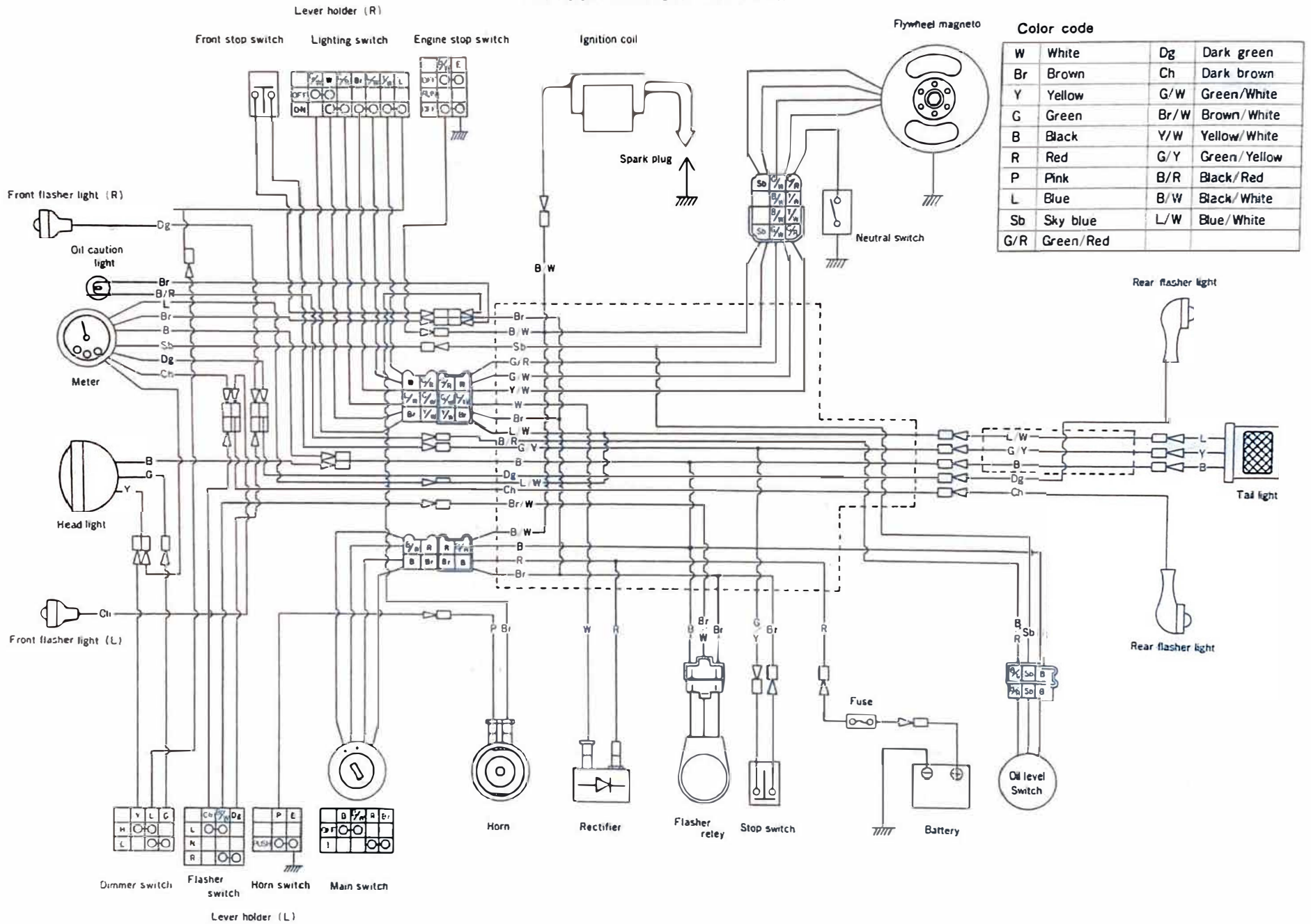
MODEL	DT 100 D
Dimension: Overall length Overall width Overall height Wheelbase Minimum road clearance	1,880 mm (75.20 in) 800 mm (32.0 in) 990 mm (39.6 in) 1,190 mm (47.6 in) 200 mm (8.0 in)
Weight: Net	80 kg (176.4 lb)
Performance: Minimum turning radius Climbing capacity	1,810 mm (72.4 in) 35°
Engine: Type Engine model Cylinder Displacement Bore x stroke Compression ratio Starting system	2-stroke, gasoline, air cooled, torque induction 1T9 Single, Forward inclined 97 cc (5.92 cu. in) 52 x 45.6 mm (2.08 x 1.82 in) 7.4 : 1 Kick starter

MODEL	DT100D
<p>Ignition system Gasoline tank capacity Oil tank capacity Lubricating system Battery type/capacity Generator Spark plug Carburetor Air cleaner Clutch type</p>	<p>Magneto ignition 4.5 lit (1.19 US. gal) 1.0 lit (0.264 US. gal) Separate lubrication (Yamaha Autolube) 6N4B-2A-3 / 6U, 4AH Flywheel magnet B-8ES (N.G.K.) UM22SS Wet, foam rubber Wet, multiple-disc</p>
<p>Transmission: Primary reduction system Primary reduction ratio Secondary reduction system Secondary reduction ratio Gear box type Operation system Gear ratio: First Second Third Fourth Fifth</p>	<p>Gear 74/19 (3.894) Chain 45/14 (3.214) Constant mesh, 5-speed forward Left foot operation 35/11 (3.181) 30/15 (2.000) 26/19 (1.368) 23/23 (1.000) 20/25 (0.800)</p>

MODEL	DT100D
Chassis: Frame type Steering: Caster Trail Tire size: Front Rear Braking system: Front Rear Suspension: Front Rear Shock absorber: Front Rear	Tublar, double-cradle 61° 103 mm (4.12 in) 2.50 – 18 – 4PR 3.00 – 16 – 4PR Drum brake/Right hand operation Drum brake/ Right foot operation Telescopic fork Swing arm Coil spring, oil damper Coil spring, oil damper
Electrical: Headlight Tail/stoplight: Meter light Flasher light Pilot lights: Flasher High beam Neutral Oil	6V, 30W/30W 6V, 5W/21W 6V, 3W 6V, 17W 6V, 3W 6V, 3W 6V, 3W 6V, 3W

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DT100D CIRCUIT DIAGRAM



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