



**YAMAHA**

# **DT100H**

**OWNER'S MANUAL**

LIT-11626-02-44

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

3A3-28199-11

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

**DT100H OWNER'S MANUAL**

**© 1980 Yamaha Motor Corporation, U.S.A.**

**1st. Edition, April 1980**

**All rights reserved. Any reprinting or  
unauthorized use without the written  
permission of Yamaha Motor Corporation,  
U.S.A., is expressly prohibited**

**Printed in Japan**

**P/No. LIT-11626-02-44**

**IMPORTANT:**

**PLEASE READ THIS MANUAL CAREFULLY AND COMPLETELY BEFORE OPERATING THIS MOTORCYCLE.**

**DO NOT ATTEMPT TO OPERATE THIS MOTORCYCLE UNTIL YOU HAVE ATTAINED A SATISFACTORY KNOWLEDGE OF ITS CONTROLS AND OPERATING FEATURES AND HAVE BEEN TRAINED IN SAFE AND PROPER RIDING TECHNIQUES.**

**REGULAR INSPECTIONS AND CAREFUL MAINTENANCE ARE REQUIRED IN ADDITION TO RIDING SKILL IN ORDER TO ENJOY THE CAPABILITIES AND RELIABILITY OF THIS MOTORCYCLE SAFELY.**

Particularly important information is distinguished in this manual by the following notations:

**NOTE:** A NOTE provides key information to make procedures easier or clearer.

**CAUTION:** A CAUTION indicates special procedures that must be followed to avoid damage to the motorcycle.

**WARNING:** A WARNING indicates special procedures that must be followed to avoid injury to a motorcycle operator or person inspecting or repairing the motorcycle.

## **NOTE:**

This manual should be considered a permanent part of this motorcycle and should remain with it even if the motorcycle is subsequently sold.

## **SAFETY WARNINGS:**

- 1. Traffic regulations vary from state to state. Study the regulations in your state before riding this motorcycle.**
- 2. GASOLINE IS HIGHLY FLAMMABLE:**
  - \* Always turn off the engine when refuelling.**
  - \* Take care not to spill any gasoline on the engine or exhaust pipe(s)/muffler(s) when refuelling.**
  - \* Never refuel while smoking or in the vicinity of an open flame.**
- 3. If you should swallow some gasoline, or inhale a lot of gasoline vapor, or allow some gasoline to get in your eye(s), see your doctor immediately. If any gasoline spills on your skin or clothing, immediately wash it with soap and water and change your clothes.**
- 4. Always turn off the engine before leaving motorcycle unattended and do not forget to remove the ignition key. When parking the motorcycle, note the following:**

- \* The engine and exhaust pipe(s)/muffler(s) may be hot. Park the motorcycle in a place where pedestrians or children are not likely to touch the motorcycle.**
  - \* Do not park the motorcycle on a slope or soft ground; the motorcycle can easily overturn.**
- 5. When transporting the motorcycle in another vehicle, be sure it is kept upright and that fuel petcock(s) is turned to the "OFF" position (for manual type)/"ON" or "RES" position (for vacuum type). If it should lean over, gasoline may leak out of the carburetor or fuel tank.**
  - 6. Never start your engine or let it run for any length or time in a closed area. The exhaust fumes are poisonous and may cause loss of consciousness and death within a short time. Always operate your motorcycle in an area with adequate ventilation.**
  - 7. Always wear a helmet, gloves, trousers (tapered around the cuff and ankle so they do not flap), and a bright colored jacket.**
  - 8. This motorcycle is designed for use as a two-wheeled vehicle capable of carrying two passengers not exceeding the maximum load limits. (See page 16.)**

# INTRODUCTION

Congratulations on your purchase of the Yamaha DT100H. This model represents the product of many years of Yamaha experience in the production of fine sporting, touring, and pace-setting racing motorcycles. You can now appreciate the high degrees of craftsmanship and reliability that have made Yamaha a leader in these fields.

**PLEASE READ THIS MANUAL CAREFULLY AND COMPLETELY BEFORE OPERATING YOUR NEW MOTORCYCLE.** This manual will provide you with a good basic understanding of the features, operation, and basic maintenance and inspection items of this vehicle. If you have any questions regarding the operation or maintenance of your motorcycle, please consult your Yamaha dealer.

## NOTICE:

Some data in this manual may become outdated due to improvements made to this model in the future. If there is any question you have regarding this manual or your motorcycle, please consult your Yamaha dealer.

This Yamaha motorcycle in its design and manufacture fully complies with the emissions standards for clean air applicable at the time of manufacture.

Yamaha has met these standards without reducing the motorcycle's performance or economy of operation. To maintain these high standards, it is important that you and your dealer pay close attention to the recommended maintenance schedules and operating instructions contained within this manual.

**SERVICE DEPT.  
INTERNATIONAL DIVISION  
YAMAHA MOTOR COMPANY, LTD.**

# CONTENTS

	PAGE
LOCATION OF THE "CAUTION AND SPECIFICATION LABELS" .....	1
DESCRIPTION .....	2
MACHINE IDENTIFICATION .....	3
CONTROL FUNCTIONS.....	4
PRE-OPERATION CHECKS .....	13
OPERATION AND IMPORTANT RIDING POINTS.....	18
PERIODIC MAINTENANCE AND MINOR REPAIR .....	22
CLEANING AND STORAGE .....	52
MISCELLANEOUS.....	55
SPECIFICATIONS .....	57
WARRANTY INFORMATION .....	60
MAINTENANCE RECORD .....	61
WIRING DIAGRAM.....	63

# LOCATION OF THE "CAUTION AND SPECIFICATION LABELS"

VEHICLE EMISSION  
CONTROL INFORMATION  
LABEL

BATTERY CAUTION  
LABEL

PLATE SC



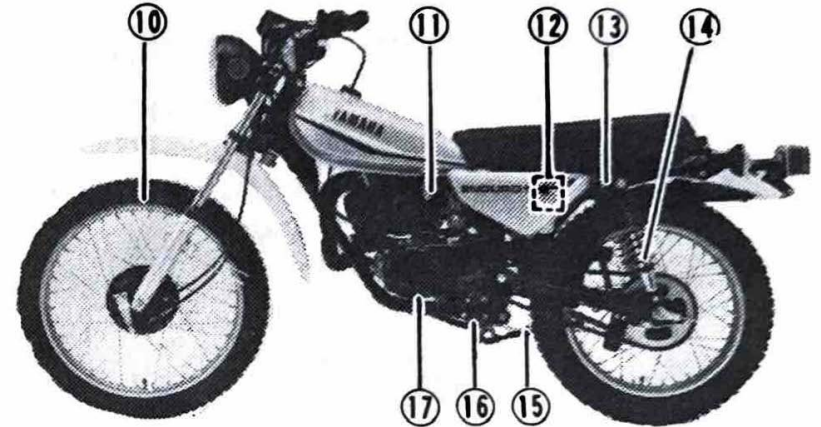
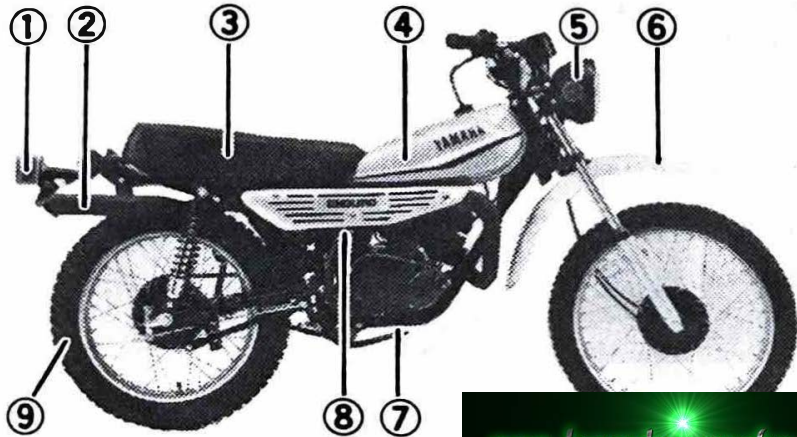
[www.legends-yamaha-enduro6.com](http://www.legends-yamaha-enduro6.com)



# DESCRIPTION

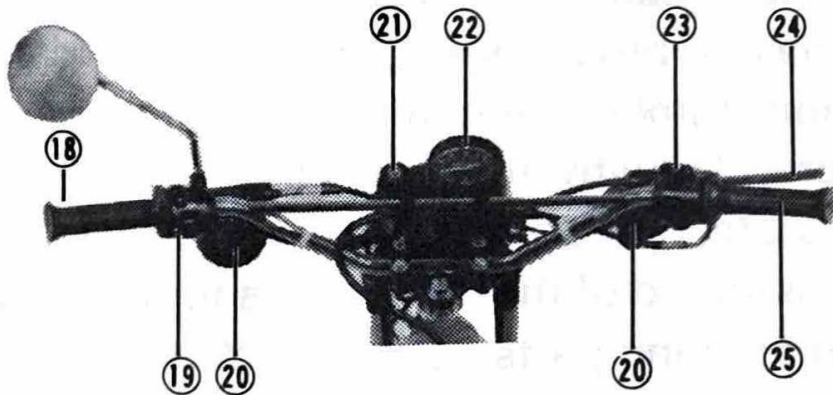
RIGHT SIDE

LEFT SIDE



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

## INSTRUMENTS

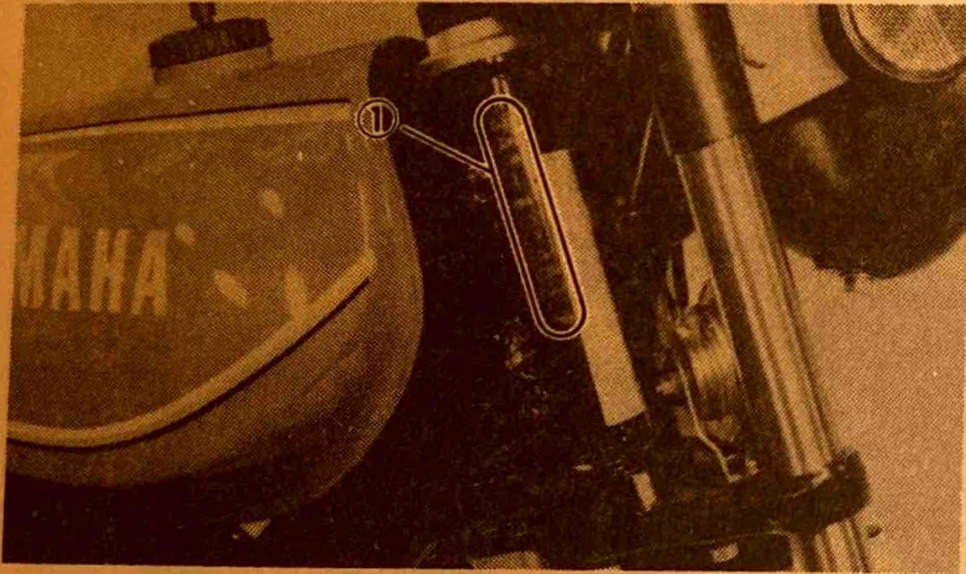


- |                    |                            |
|--------------------|----------------------------|
| 1. Tail/stop light | 14. Rear shock absorber    |
| 2. Muffler         | 15. Side stand             |
| 3. Seat            | 16. Footrest               |
| 4. Fuel tank       | 17. Change pedal           |
| 5. Headlight       | 18. Clutch lever           |
| 6. Front fender    | 19. Left handlebar switch  |
| 7. Brake pedal     | 20. Flasher light          |
| 8. Kick crank      | 21. Main switch            |
| 9. Rear wheel      | 22. Speedometer            |
| 10. Front wheel    | 23. Right handlebar switch |
| 11. Fuel petcock   | 24. Brake lever            |
| 12. Oil tank       | 25. Throttle grip          |
| 13. Helmet holder  |                            |

# MACHINE IDENTIFICATION

## Frame serial number

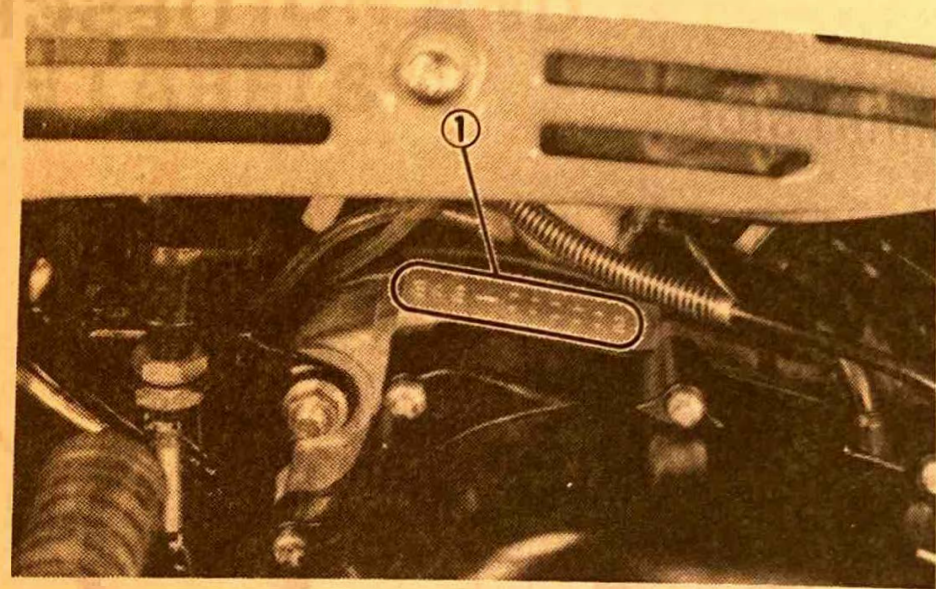
The frame serial number is stamped on the right side of the steering head pipe.



1. Frame serial number

## Engine serial number

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



1. Engine serial number

## NOTE:

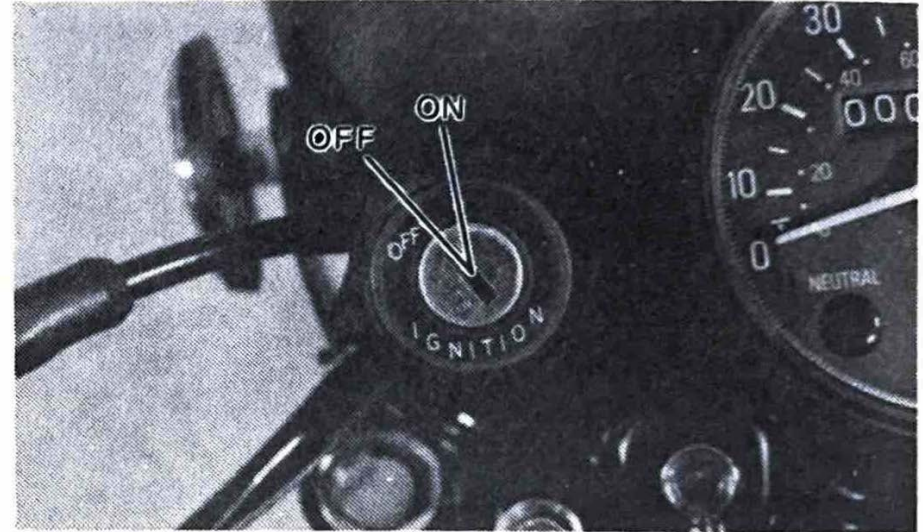
The first three digits of these numbers are for model identification; the remaining digits are the unit production number. These identification numbers are used to register your motorcycle with the licensing authority in your state as well as with the manufacturer. Keep a record of these numbers for reference when ordering parts from your Yamaha dealer. In case of theft, the authorities will need these numbers and your model name for identification.

# CONTROL FUNCTION

## Main switch

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

Key position	Description	Key removal
OFF	All the electrical systems inoperative. Engine cannot be started. Lights and horn with not function.	Possible
ON	Engine can be operated. Turn, brake and horn circuits can be operated. Taillight and meter lights always on and, with the engine running, the headlight comes on automatically. Headlight functions only when the engine is running.	Not possible



## Indicator lights

“TURN” indicator light (orange):

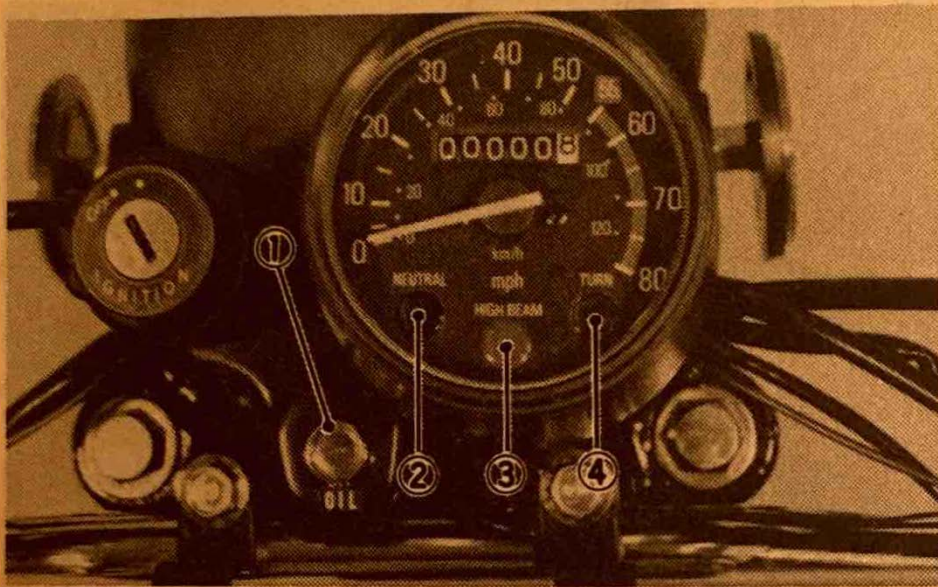
This light flashes while either turn signal is ON.

“NEUTRAL” light (green):

This light comes on when the transmission is in neutral.

“HIGH BEAM” indicator light (blue):

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



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

**“OIL” warning 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 by putting the machine in neutral. Both the neutral light and the oil warning light should come on.

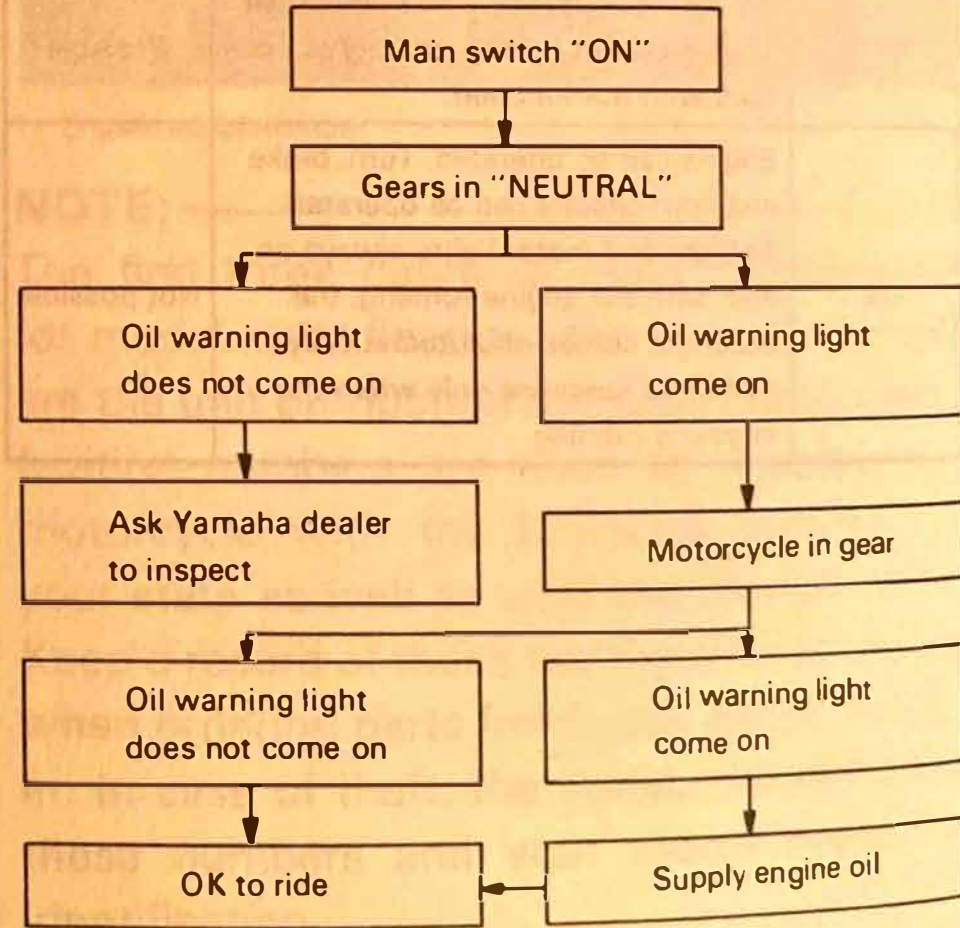


**NOTE:**

If the oil warning light will not light up during this test, have your Yamaha dealer or other

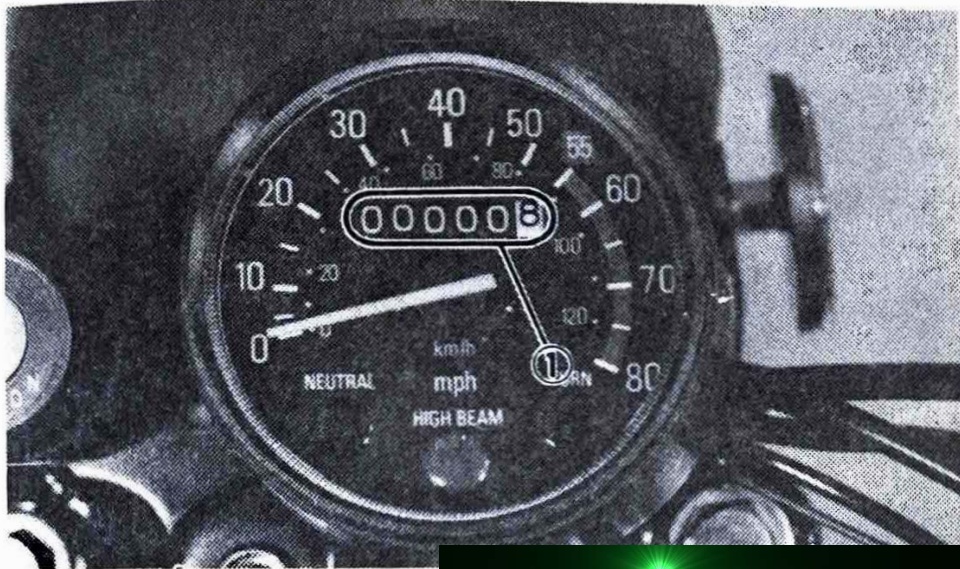
qualified mechanic check it. Of course, check the oil level first.

**CAUTION:**  
Do not run the motorcycle until you know the motorcycle has enough oil.



## Speedometer

Use the odometer to estimate how far you can ride on a tank of fuel before going to "RESERVE". This information will enable you to plan fuel stops in the future.

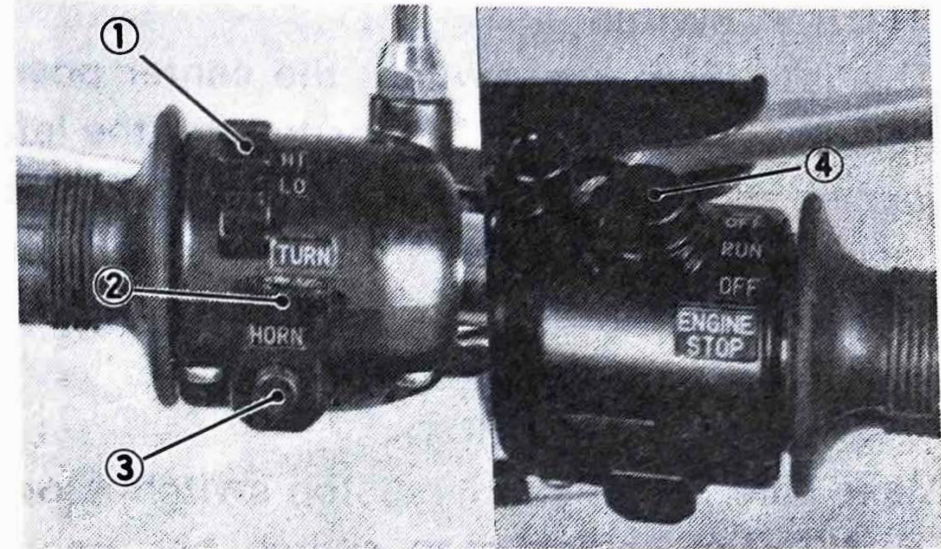


1. Odometer

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

## Handlebar switches

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



1. "LIGHTS" (dimmer) switch
2. "TURN" switch

3. "HORN" switch
4. "ENGINE STOP" switch

### "LIGHTS" switch (dimmer)

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

### "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. Be sure to turn the switch off after completing a turn.

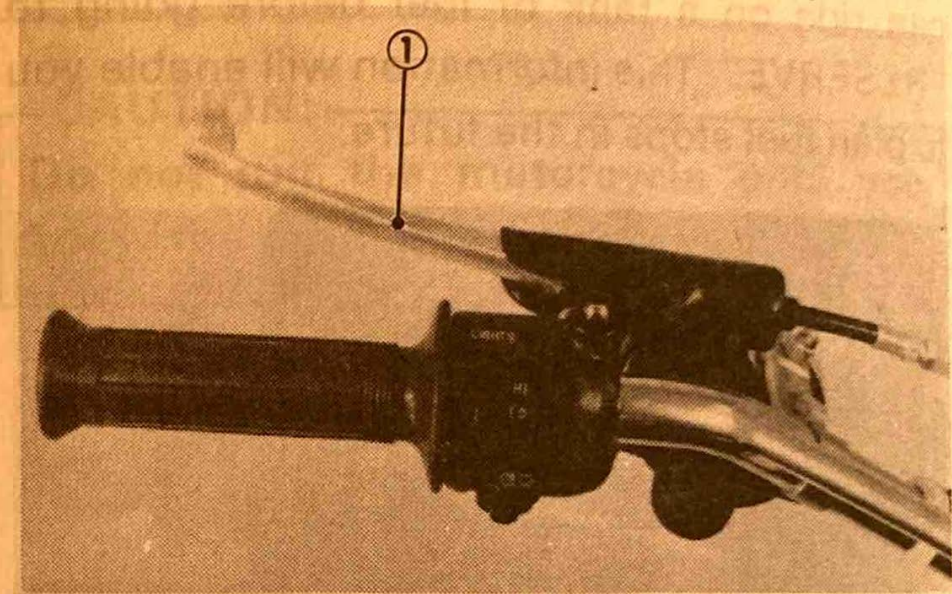
## “ENGINE STOP” switch

Make sure that the engine stop switch is on “RUN”. The engine stop switch has been equipped to ensure safety in an emergency such as when the motorcycle is upset or trouble takes place in the throttle system. The engine will not start when the engine switch is turned to “OFF”. In case of an emergency, turn the switch to “OFF”.

## 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

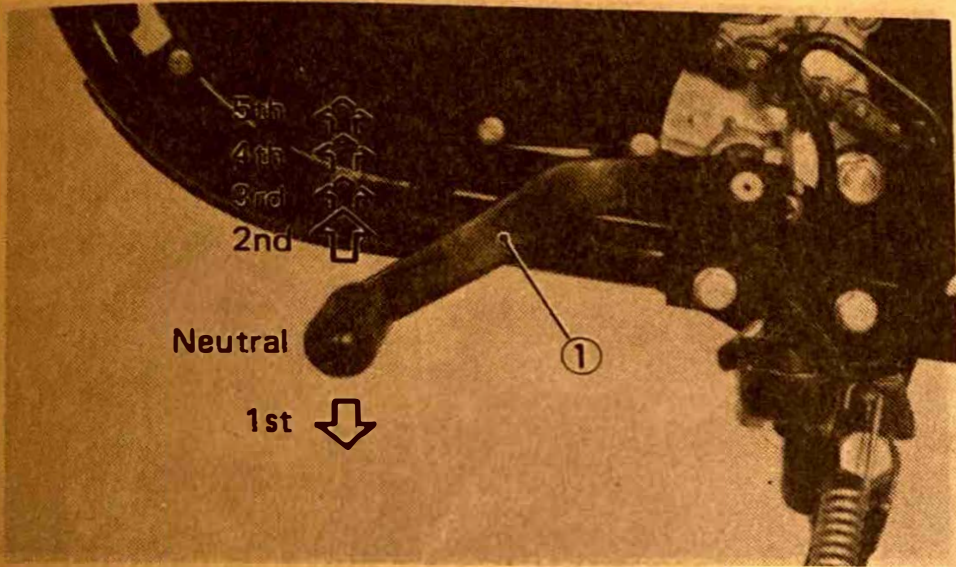
engage the clutch. The lever should be pulled rapidly and released slowly for smooth starts.



1. Clutch lever

## Change pedal

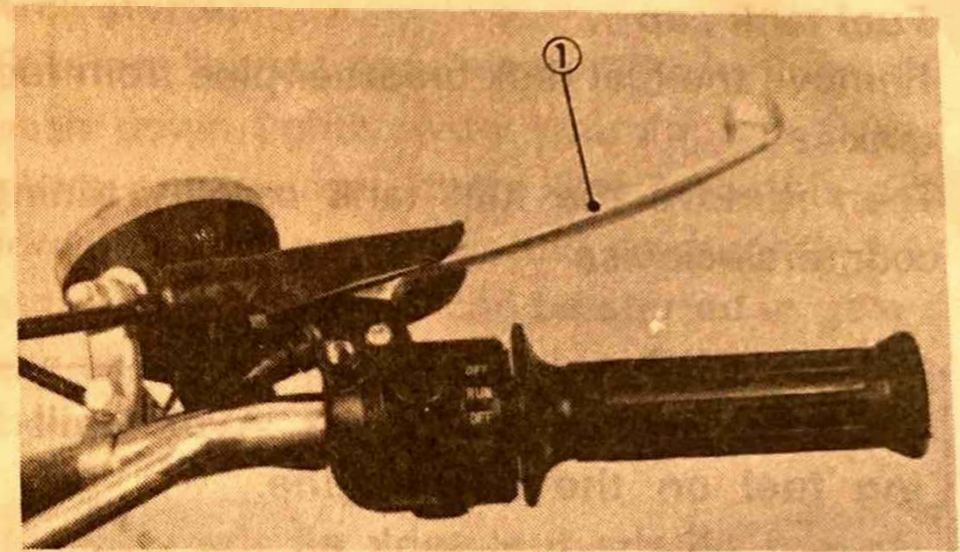
The gear ratios of the constant mesh 5 speed transmission are ideally spaced. The gears are shifted by using the change pedal on the left side of the engine.



1. Change pedal

### Front brake lever

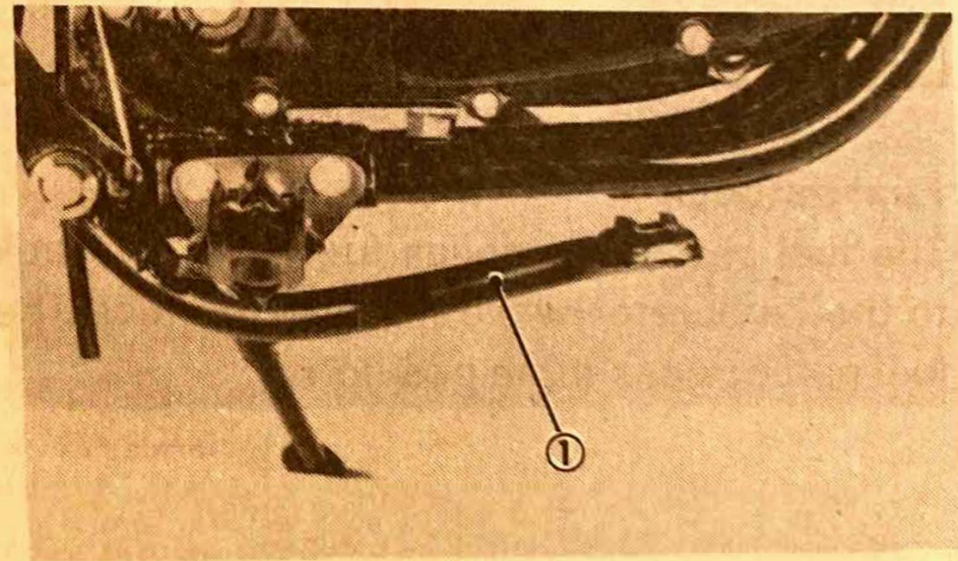
The front brake lever is located on the right handlebar. Pull it toward the handlebar to activate the front brake.



1. Front brake lever

### Rear brake pedal

The rear brake pedal is in front of the right footrest. Press down on the brake pedal to activate the rear brake.



1. Rear brake pedal

## Fuel tank cap

Remove the fuel tank breather pipe from fuel tank cap.

Then remove the fuel tank cap by turning counterclockwise.

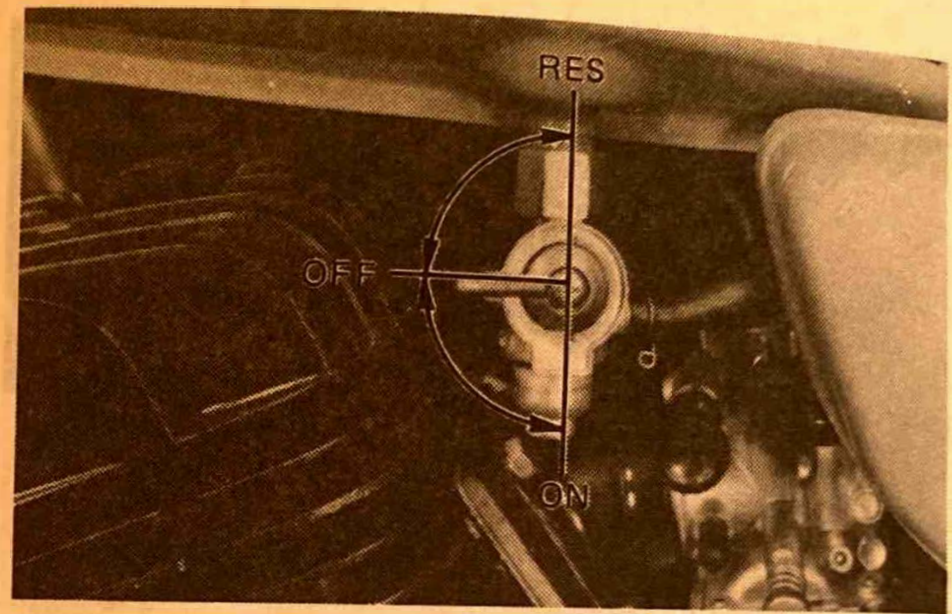
### **WARNING:**

**Do not overfill the fuel tank. Avoid spilling fuel on the hot engine.**

**Do not fill the fuel tank all the way to the top or it may overflow when the fuel heats up later and expands.**

## Fuel petcock

The fuel petcock supplies fuel from the tank to the carburetor while filtering the fuel. The fuel petcock has three positions:



**OFF:** With the lever in this position fuel will not flow. Always 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.

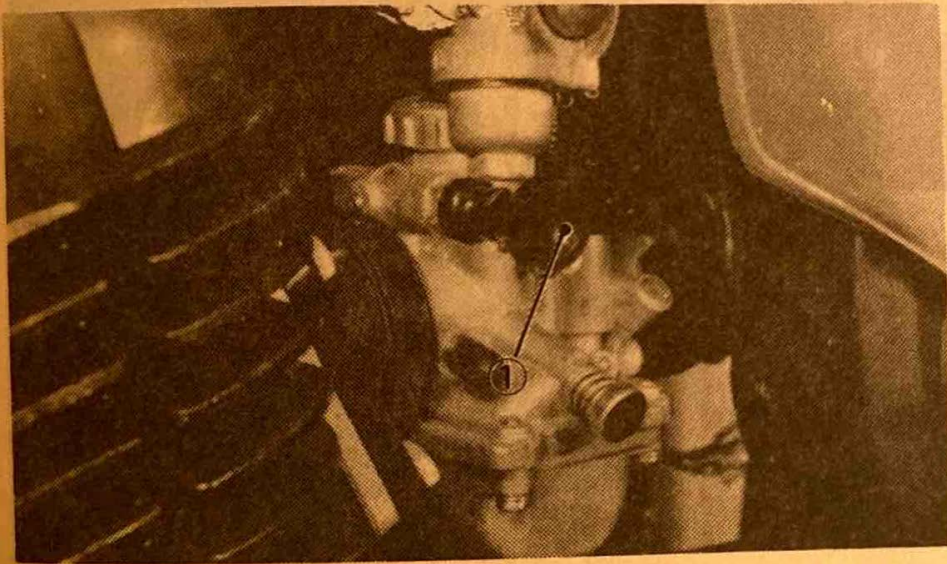
**RES:** This indicates "RESERVE". If you run out of fuel while riding, move the lever to this position. THEN, FILL THE TANK AT THE FIRST OPPORTUNITY.



## Starter knob (CHOKE)

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.

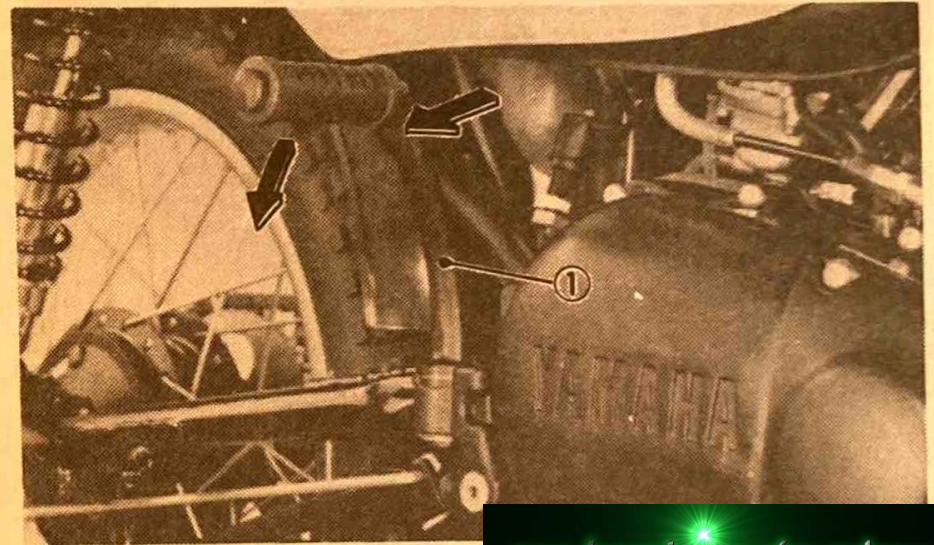
Pull the knob out to open the circuit for starting. When the engine has warmed up push the knob in to close the circuit before riding. See "Starting Instructions" before attempting to start the engine.



1. Starter knob

## Kick starter

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

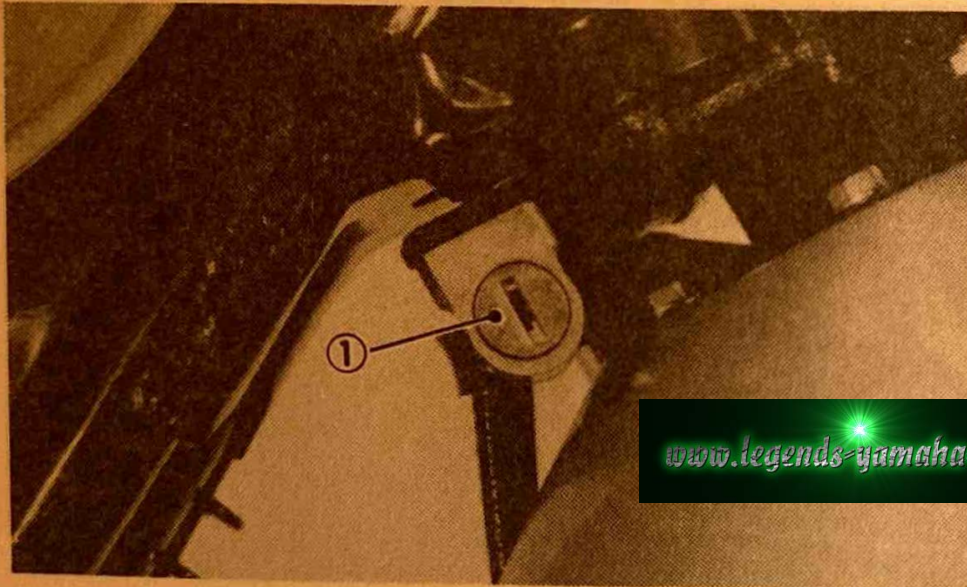


1. Kick starter

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

## 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

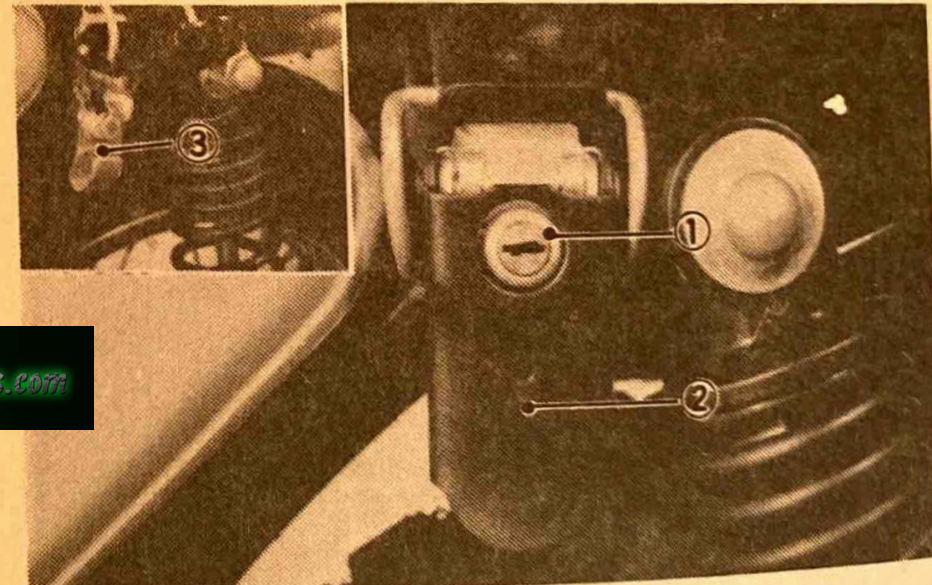
To open the seat lock, insert the key in the lock and turn it clockwise.

## Helmet holder

Unlock the helmet holder using the main switch key, hang your helmet or the hook, and lock the holder.

### CAUTION:

To avoid damage to the battery, do not store anything under the seat.



1. Seat lock

2. Seat latch

3. Helmet holder

**WARNING:**

Never ride with a helmet in the helmet holder. It could interfere with rear wheel movement, causing loss of control and possibly an accident.

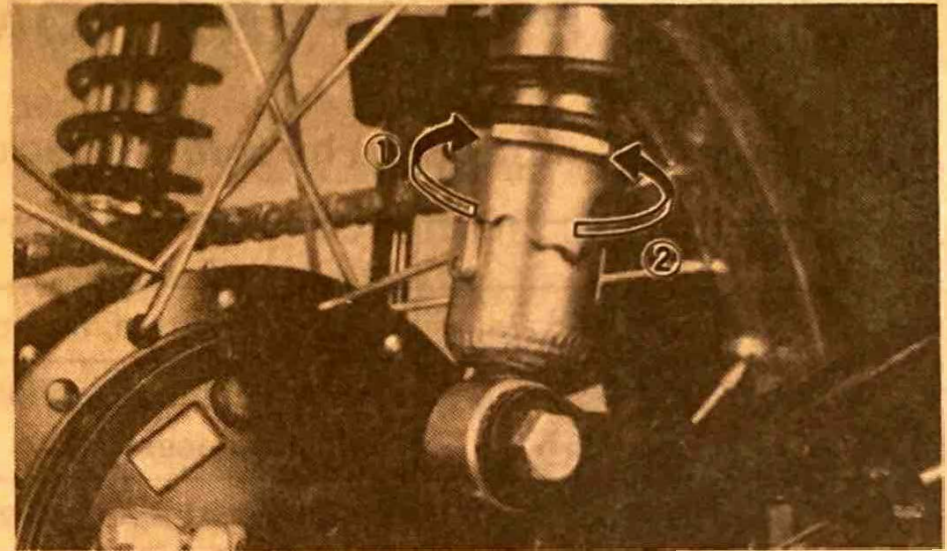
**Rear shock absorber**

The spring preload of the rear shock absorber can be adjusted to suit rider preference and riding conditions.

If the spring seat is raised, by turning it in one direction the spring becomes stiffer and if lowered, the spring becomes softer.

**WARNING:**

Always adjust the shock absorbers on each side to the same position. Uneven adjustment can cause poor handling and loss of stability.



1. Stiffer
2. Softer

# PRE-OPERATION CHECKS (DAILY)

Before using this motorcycle be sure to check the following points.

No.	ITEM	REMARKS	PAGE
1.	Brake (Front and Rear)	Check operation, free play. Adjust if necessary.	36 ~ 38
2.	Clutch	Check operation, condition and free play. Adjust if necessary.	35
3.	Engine Oil	Check Autolube tank oil level, top-up with Yamalube 2-cycle oil or 2-cycle oil with "BIA certified for service TC-W" if necessary.	34
4.	Transmission Oil	Check oil level. Top-up with Yamalube 4-cycle oil or SAE 10W/30 "SE" motor oil or "GL" gear oil, if necessary.	32, 33
5.	Drive Chain	Check chain tension and condition. Adjust/Lubricate, if necessary.	39 ~ 41
6.	Throttle	Check for smooth operation. Adjust if necessary.	38, 40
7.	Battery	Check fluid level, top-up with distilled water if necessary.	44 ~ 46
8.	Lights/Signals	Check operation.	15
9.	Wheels/Tires	Check/Adjust tire pressure, wear, damage and tightness of spokes.	15 ~ 17
10.	Fittings/Fasteners	Check all chassis fittings and fasteners. Retighten if necessary.	17

**NOTE:** \_\_\_\_\_

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

**WARNING:** \_\_\_\_\_

1. The engine, exhaust pipe(s), and muffler(s) will be very hot after the engine has been run. Be careful not to touch them or to allow any clothing item to contact them during inspection or repair.
2. If any item in the **PRE-OPERATION CHECK** is not working properly, have it inspected and repaired before operating the motorcycle.

**Brake (Front and Rear)**

Check for correct play in the brake lever and pedal and make sure they are working properly. Check the brakes at low speed shortly after starting out. If the play is incorrect, make an adjustment.

**Clutch**

Check for correct play in the clutch lever and make sure the lever operates properly. If the play is incorrect, make an adjustment.

**Engine oil (oil tank)**

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

**Recommended oil:**

Yamalube 2-cycle oil or 2-cycle oil with "BIA certified for service TC-W"

## Transmission oil

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

Recommended oil:

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

To check level, screw the dip stick completely out and then just rest the stick in the hole. The oil level should be between the two marks on the dipstick. (See page 32)

## Drive chain

Check the chain tension and condition. Adjust if necessary.

## Throttle

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

## Battery

Check the fluid level and top-up if necessary. Use only distilled water if refilling is necessary.

## Lights/Signals

Check the headlight, flasher light, taillight, brake light, meter lights and all the indicator lights to make sure they are in working condition.

## Wheels/Tires

Check the tire pressure and check the tires for wear.

### —WARNING: —

1. This motorcycle is not designed to pull a trailer or to be attached to a side car. The accessories you choose for your motorcycle should be designed specifically for it and should be securely mounted in such a fashion as to maintain the inherent stability of the original design as

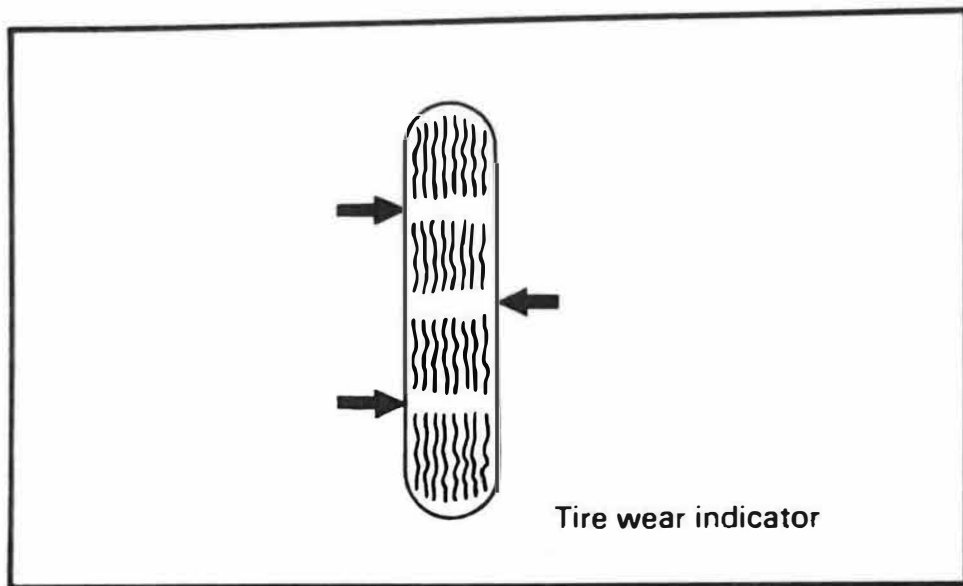
much as possible. Yamaha has a full line of sport and touring accessories designed specially for this motorcycle. Please consider them before making a purchase. Use of non-approved accessories may cause loss of handling stability and riding safety. Consult your Yamaha dealer or other qualified mechanic regarding the consequences of using such items.

2. Proper loading of your motorcycle is important for the handling, braking, and other performance and safety characteristics of your motorcycle. **NEVER OVERLOAD YOUR MOTORCYCLE.** Make sure the total weight of the accessories, etc., do not exceed the maximum load limits. Operation of an overload motorcycle could cause tire damage, an accident, and injury.

	FRONT	REAR
DT100H BASIC WEIGHT with oil and full fuel tank.	38 kg (84 lb)	49 kg (108 lb)
Standard tire	INOUE 2.50-18-4PR	INOUE 3.00-16-4PR
Maximum load limit*	85.7 kg (145 lb)	147.4 kg (325 lb)
Cold tire pressure Normal riding	1.6 kg/cm <sup>2</sup> (22 psi)	2.0 kg/cm <sup>2</sup> (28 psi)
Off road riding	1.0 kg/cm <sup>2</sup> (14 psi)	1.2 kg/cm <sup>2</sup> (18 psi)
Minimum tire tread depth	0.8 mm (0.03 in)	0.8 mm (0.03 in)

\* Total weight of the motorcycle with accessories, etc.





If a tire tread shows cross-wise lines (wear indicator), 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 or other qualified mechanic replace the tire immediately.**

Check the wheel damage and check the tightness of spokes.

**WARNING:**

**Patching a punctured tube is not recommended. If it is absolutely necessary to do so, use great care and replace the tube as soon as possible with a good quality replacement.**

**Fittings/Fasteners**

Always check the tightness of chassis fittings and fasteners before riding.

**Fuel**

Make sure there is sufficient fuel in the tank.

Recommended fuel: Regular gasoline  
Fuel tank capacity: 4.5 lit (1.2 U.S. gal)

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



# OPERATION AND IMPORTANT RIDING POINTS

## CAUTION:

1. Before riding this motorcycle, become thoroughly familiar with all operating controls and their function. Consult your Yamaha dealer or other qualified mechanic regarding any control or function you do not thoroughly understand.
2. Be careful not to put anything near the battery. Electrical failure and acid corrosion may result.
3. Be careful where you store personal items on the motorcycle. Avoid blocking the air cleaner intake or performance will suffer.

## WARNING:

1. Never start your engine or let it run for any length of time in a closed area. The exhaust fumes are poisonous and can cause loss of consciousness and death within a short time. Always operate your motorcycle in an area with adequate ventilation.
2. Before starting out, always be sure the side stand is up. Failure to retract the side stand completely can result in a serious accident when you try to turn a left corner.

## Starting a cold engine

1. Shift the transmission into neutral position.
2. Turn the fuel petcock to "ON" position.
3. Turn the ignition key to "ON" position.
4. Turn the engine stop switch to "RUN" position.

5. Pull the starter knob to ON, place the throttle grip in the fully closed or slightly opened position.
6. Kick the kick crank to start the engine.
7. After the engine has started, adjust the throttle grip opening to keep up the proper idling speed (1,300 ~ 1,450 r/min).
8. After recommended seconds\* push the starter knob to OFF.

\*Recommended seconds for the starter operation.

Above 20°C	Approx. 5 sec.
20°C to 10°C	5 to 20 sec.
10°C to 0°C	20 to 60 sec.
Below 0°C	Approx. 60 sec.

Adjust the duration of time for using the starter according to ambient temperatures.

### Starting a warm engine

To start 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 push off.

#### CAUTION:

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

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

### Engine break-in

There is never a more important period, in the life of your motorcycle, than the period between zero and 1,000 km (600 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 1,000 km (600 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 cylinder, must be avoided.

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

#### **CAUTION:**

**If any engine trouble should occur during the break-in period, consult your Yamaha dealer or other qualified mechanic immediately.**

#### **1. 0 ~ 150 km (0 ~ 90 mi):**

Avoid operation above 40 km/h (25 mi/h) 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 constant throttle position.

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

#### **2. 150 ~ 500 km (90 ~ 300 mi):**

Avoid prolonged operation above 50 km/h (31 mi/h) in 5th gear. Allow the motorcycle to rev freely through the gears but do not use full throttle at any time.

#### **3. 500 ~ 1,000 km (300 ~ 600 mi):**

Avoid prolonged full throttle operation. Avoid cruising speeds in excess of 60 km/h (37 mi/h) in 5th gear.

#### **4. 1,000 km (600 mi) and beyond:**

Avoid prolonged full throttle operation. Vary speeds occasionally.

### **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, rapidly 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:

1. Pull the clutch lever to disengage the clutch.
2. Shift into FIRST gear. The green neutral indicator light should go out.
3. Open the throttle gradually, and at the same time, release the clutch lever slowly.
4. At the recommended shift point speed in the table below, close the throttle, and at the same time, pull in the clutch lever quickly.
5. Shift into SECOND gear. (Be careful not to shift into NEUTRAL.)
6. Open the throttle part way and gradually release the clutch lever.
7. To accelerate, use the same procedure to shift into the next higher gear according to the Recommended Shift Point Chart below.

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

### To decelerate:

1. Apply front and/or rear brakes to slow the motorcycle.
2. When the motorcycle reaches 20 km/h (12.5 mi/h), shift into the lower gear. Anytime the engine appears about to stall or runs very roughly, pull in the clutch and use the brakes to stop.
3. When the motorcycle is almost completely stopped, shift into neutral. The green neutral indicator light should come on.

### Recommended shift point

Acceleration modes		Deceleration km/h (mi/h)
Speed range km/h (mi/h)	Shift position	
0 ~ 15 (9)	1st	20 (12)
15 (9) ~ 25 (16)	2nd	20 (12)
25 (16) ~ 35 (22)	3rd	20 (12)
35 (22) ~ 45 (28)	4th	20 (12)
45 (28) or more	5th	20 (12)

## **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.

### **WARNING:**

**The muffler and exhaust pipe are heated up. Park the motorcycle in a place where pedestrians or children are not likely to touch the motorcycle.**

**Do not park the motorcycle on a slope or soft ground; the motorcycle can easily overturn.**

### **NOTE:**

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

[www.legends-yamaha-enduro.com](http://www.legends-yamaha-enduro.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 on the following pages.

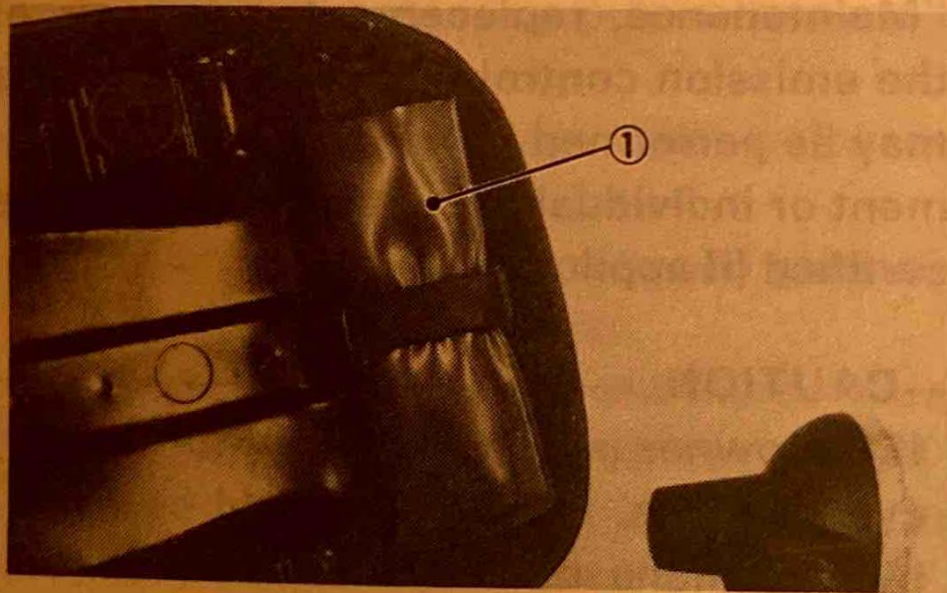
**"Maintenance, replacement, or repair of the emission control devices and systems may be performed by any repair establishment or individual using any part which is certified (if applicable)."**

### **CAUTION:**

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

## Tool Kit

The service information included in this manual is intended to provide you, the owner, with the necessary information for completing some of 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

## NOTE:

If you do not have a torque wrench available during a service operation requiring one, take your motorcycle to your Yamaha dealer or other qualified mechanic to check the torque settings and adjust them as necessary.

## WARNING:

Modifications to this motorcycle not approved by Yamaha may cause loss of performance, excessive emissions, and render it unsafe for use. Consult your Yamaha dealer or other qualified mechanic before attempting any changes.

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

## PERIODIC MAINTENANCE

PROPER PERIODIC MAINTENANCE OF YOUR MOTORCYCLE IS IMPORTANT TO ITS GIVING YOU LONG, PLEASURABLE SERVICE. ESPECIALLY IMPORTANT ARE THE MAINTENANCE SERVICES RELATED TO EMISSIONS CONTROL. THESE CONTROLS NOT ONLY FUNCTION TO ENSURE CLEANER AIR BUT ARE ALSO VITAL TO PROPER ENGINE OPERATION AND MAXIMUM PERFORMANCE. IN THE FOLLOWING TABLES OF PERIODIC MAINTENANCE, THE SERVICES RELATED TO EMISSIONS CONTROL ARE GROUPED SEPARATELY.

THESE SERVICES REQUIRE SPECIALIZED DATA, KNOWLEDGE, AND EQUIPMENT. YAMAHA DEALERS ARE TRAINED AND EQUIPPED TO PERFORM THESE PARTICULAR SERVICES.

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

# PERIODIC MAINTENANCE EMISSION CONTROL SYSTEM

No.	ITEM	REMARKS	INITIAL BREAK-IN		THEREAFTER EVERY
			1,000 km or 1 month (600 mi)	4,000 km or 7 months (2,500 mi)	3,000 km or 6 months (2,000 mi)
1	Spark plug	Check spark plug condition and plug gap. Replace plug every 3,000 km (2,000 mi).		Replace	Replace
2.*	Fuel Line	Check fuel hose for cracks and damage. Replace if necessary.		○	○
3.*	Fuel petcock	Check fuel filter screen. Clean it, if necessary.	○	○	○
4.*	Exhaust System	Check for leakage, retighten if necessary. Replace gasket(s) if necessary.		○	○
5.*	Idle Speed	Check and adjust engine idle speed.		○	○

\* It is recommended that these items be serviced by your Yamaha dealer or other qualified mechanic.

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



## Spark plug inspection

The spark plug is an important engine component and is easy to inspect.

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.

The condition of the spark plug reflects the running condition of the engine. For example, a very white center electrode porcelain color could indicate an intake tract air leak or carburetion problem.

Do not attempt diagnose such problems yourself. Instead, take the motorcycle to your Yamaha dealer or other qualified mechanic.

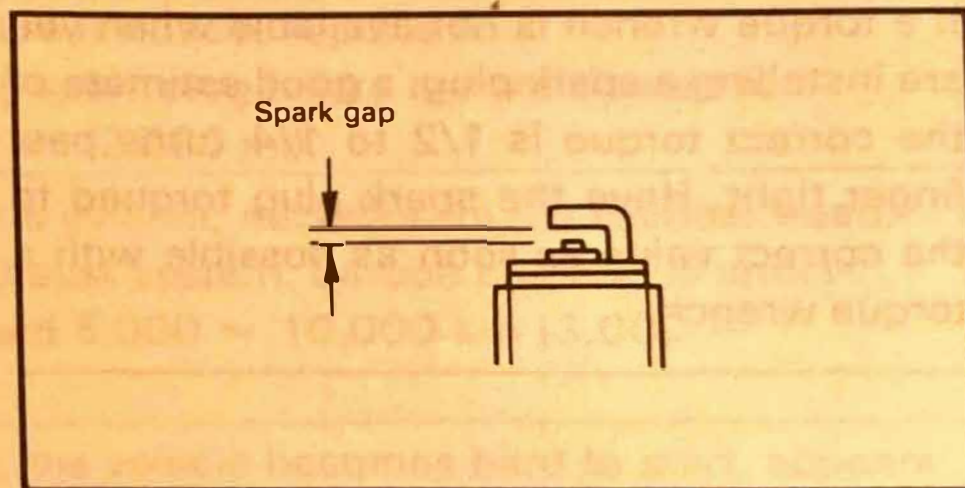
Standard spark plug: B7ES (NGK)

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

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

Spark gap:

0.6 ~ 0.8 mm (0.024 ~ 0.031 in)



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

Spark plug torque: 2.5 m-kp (18 ft-lb)

**NOTE:** -

If you will start out the long distance trip with your motorcycle, it is advisable to bring the spare spark plug for ignition trouble.

**NOTE:** -

If a torque wrench is not available when you are installing a spark plug, a good estimate of the correct torque is 1/2 to 1/4 turns past finger tight. Have the spark plug torqued to the correct value as soon as possible with a torque wrench.

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

## ANTICIPATED MAINTENANCE

The maintenance items in this table are set apart from the regular periodic maintenance items because of their anticipated need for irregular service intervals. The service interval is dependent upon variable factors such as the severity of use, operating conditions, etc. Therefore, perform this maintenance when the described symptoms warrant it.

No.	ITEM	REMARKS
1	Spark plug	If any spark plug failure is noticed replace it. Symptoms indicating spark plug failure are anticipated to occur around 3,000 km (2,000 mi).
2*	Decarbonization	If heavy power loss is evident, decarbonize the cylinder head, piston head, and exhaust system. Carbon build-up is anticipated to occur around 5,000 ~ 10,000 km (3,000 ~ 6,000 mi).
3*	Piston	If the piston rattles, the vehicle becomes hard to start, appears to be lacking power, or becomes inoperative, repair as follows: replace the piston and piston rings, clean, hone, or replace the cylinder. These symptoms are anticipated to occur mainly below 500 km (300 mi).

\*It is recommended that these items be serviced by your Yamaha dealer or other qualified mechanic.

# GENERAL MAINTENANCE/LUBRICATION

No.	ITEM	REMARKS	TYPE	INITIAL BREAK-IN		THEREAFTER EVERY	
				1,000 km or 1 month (600 mi)	4,000 km or 7 months (2,500 mi)	3,000 km or 6 months (2,000 mi)	15,000 km or 24 months (9,500 mi)
1	Transmission oil	Warm-up engine before draining.	Yamalube 4-cycle oil or SAE 10W/30 "SE" motor oil or "GL" gear oil.	Replace	Replace	Replace	
2*	Autolube pump	Check and adjust pump cable and minimum pump stroke.	—	○	○	○	
3*	Air filter	Check for clogging. If necessary clean and dampen with oil.	—	○	○	○	
4	Control and meter cables	Inspect and lubricate thoroughly.	Yamaha chain and cable lube or SAE 10W/30 motor oil	○	○	○	
5*	Clutch	Adjust free play.	—	○	○	○	
6	Brake system	Inspect and adjust. Replace shoes if necessary.	—	○	○	○	
7	Throttle	Adjust as necessary. Lightly lubricate.	Lithium base grease		○	○	
8	Brake/Clutch pivot shaft	Apply chain lube lightly.	Yamaha chain and cable lube or SAE 10W/30 motor oil.		○	○	
9	Drive Chain	Check chain condition. Adjust chain tension. Lubricate chain thoroughly.	Yamaha chain and cable lube or SAE 10W/30 motor oil.	Every 500 km (300 mi)			

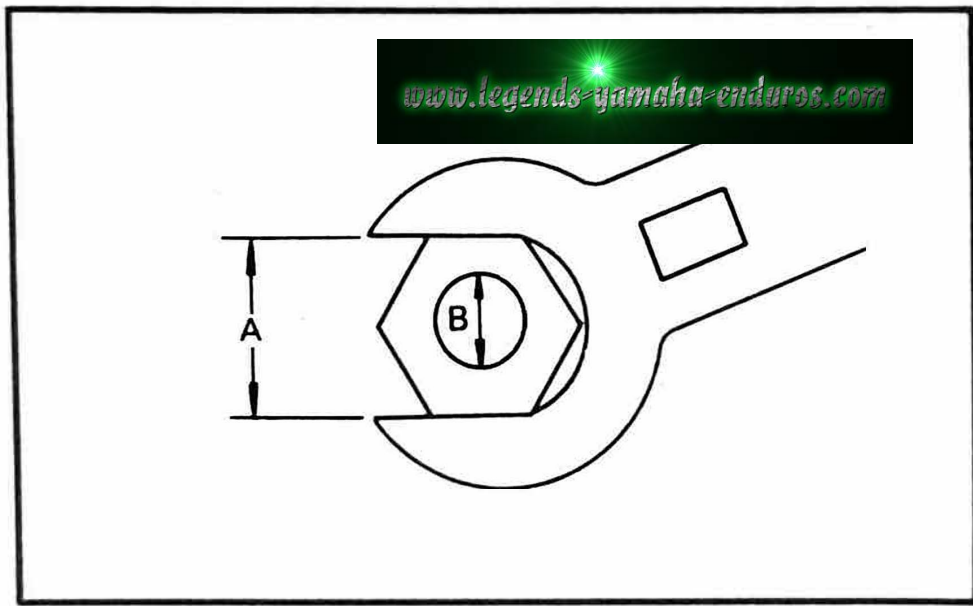
No.	ITEM	REMARKS	TYPE	INITIAL BREAK-IN		THEREAFTER EVERY	
				1.000 km or 1 month (600 mi)	4.000 km or 7 months (2.500 mi)	3.000 km or 6 months (2.000 mi)	15.000 km or 24 months (9.500 mi)
10	Side stand pivot shaft	Apply chain lube lightly.	Yamaha chain and cable lube or SAE 10W/30 motor oil		○	○	
11	Front fork oil	Drain completely. Fill to specification.	Yamaha fork oil 10wt or equivalent				Replace
12*	Steering bearing	Check steering assembly for looseness. Moderately repack every 15,000 km (9,500 mi).	Medium weight wheel bearing grease		○	○	Repack
13*	Wheel bearings	Check bearings for smooth rotation. Moderately repack every 15,000 km (9,500 mi).	Medium weight wheel bearing grease		○	○	Repack
14*	Battery	Check specific gravity and breather pipe for proper function.	—		○	○	

\*It is recommended that these items be serviced by your Yamaha dealer or other qualified mechanic.

# Torque specifications

(For a more complete list, refer to the Service Manual for this model.)

Use a torque wrench to tighten these items. It is recommended that these items should be checked occasionally, especially before a long trip. Always check the tightness of these items whenever they are loosened for any reason



A (Nut)	B (Bolt)	General torque specifications	
		m-kg	ft-lb
10 mm	6 mm	0.6	4.5
12 mm	8 mm	1.5	11
14 mm	10 mm	3.0	22
17 mm	12 mm	5.5	40
19 mm	14 mm	8.5	61
22 mm	16 mm	13.0	94

Item	Torque	
	m-kg	ft-lb
Spark plug	2.5	18.0
Drive sprocket	6.0	43.0
Kick crank	1.5	11.0
Engine mount, upper	2.5	18.0
lower	4.0	29.0
Rear absorber, frame	4.0	29.0
swing arm	2.5	18.0
Handle crown, pinch bolt	2.5	18.0
fitting bolt	7.0	50.0
Handle upper bracket	2.0	14.0
Front axle nut	4.5	32.0
Rear axle nut	4.0	29.0
Sprocket shaft nut	11.0	80.0
Footrest	2.0	14.0
Tension bar	2.0	14.0

## Transmission oil

The only servicing for you to do is to check and fill the transmission with lubricating oil.

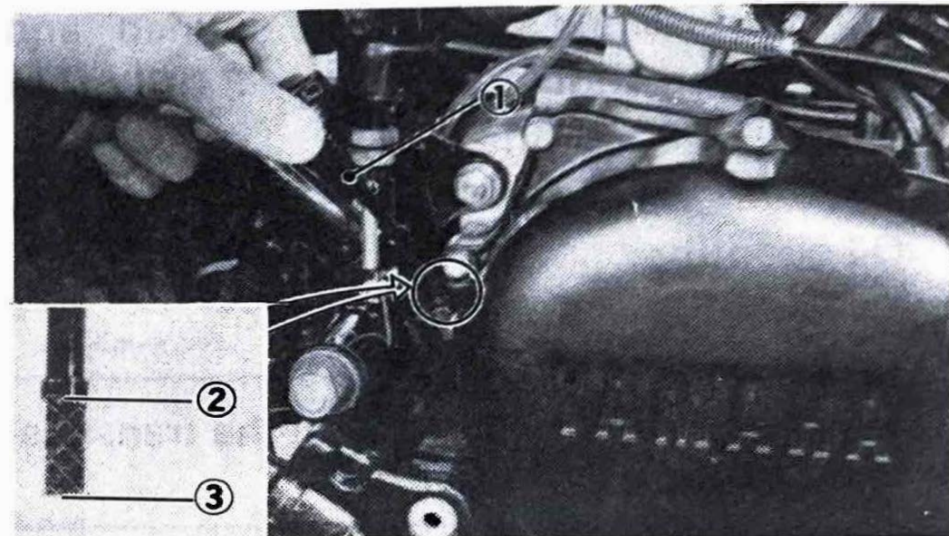
To check the level, warm the engine up for several minutes, screw the dip stick completely out and then just rest the stick in the hole.

### 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 motorcycle is positioned straight up and on both wheels.

---

The dip stick has a minimum and 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.



1. Dip stick      2. Maximum level      3. Minimum level

### Recommended oil:

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

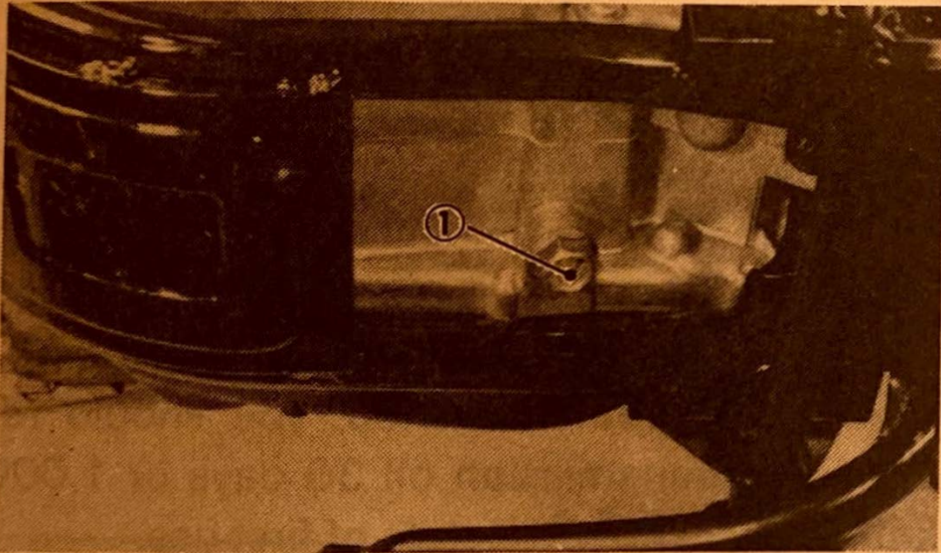
During the break-in period, you should replace the transmission oil 30 days or 1,000 km (600 mi) after the date of first use.

The transmission should be drained and refilled approximately every 3,000 km (2,000 mi) or 6 months.

Oil quantity:

$650 \pm 50$  cc ( $0.7 \pm 0.05$  US. qt)

Remove drain plug and drain all the transmission oil out.



1. Drain plug

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

**NOTE:** \_\_\_\_\_  
Do not add any chemical additives. Transmission oil also lubricates the clutch and additives could cause the clutch to slip.  
\_\_\_\_\_

### Autolube pump

Have your Yamaha dealer or other qualified mechanic check and adjust the Autolube pump cable and the minimum pump stroke. Be sure your oil tank never runs out of oil. If it does, before operating your motorcycle, have your dealer bleed all the air out of the oil injection system.

**WARNING:** \_\_\_\_\_  
Failure to bleed the injection system could result in excessive engine damage and an accident.  
\_\_\_\_\_

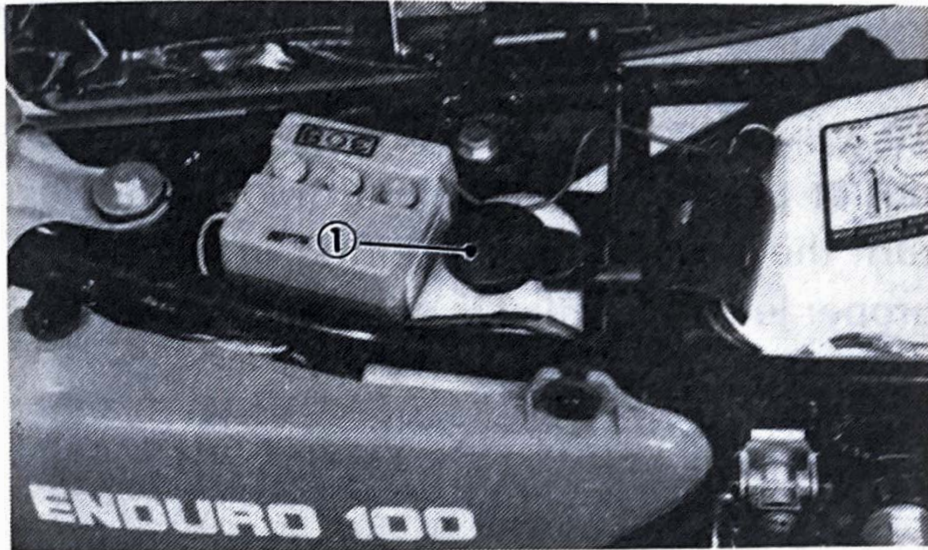
[www.legends-yamaha-enduros.com](http://www.legends-yamaha-enduros.com)



## Engine oil (Autolube oil)

We recommend Yamalube 2-cycle oil (available at most Yamaha dealers) or if unavailable, 2-stroke engine oil labelled "BIA certified for service TC-W".

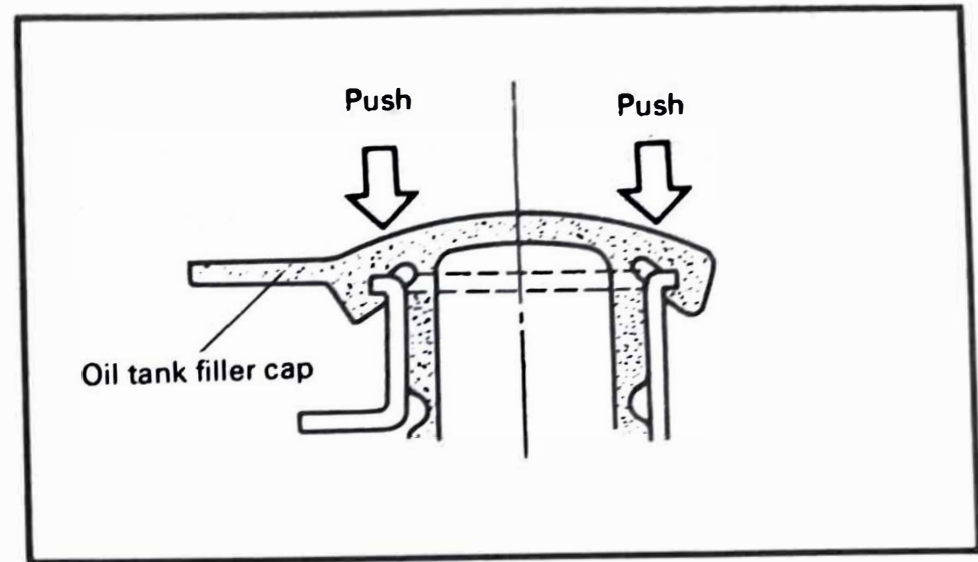
Oil tank capacity: 1.0 lit (1.1 US qt)



1. Oil tank filler cap

### NOTE:

Install the oil tank filler cap and push it fully into the filler.



## Air filter

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.

The air filter element should be cleaned and re-oiled at specified intervals. Ask your Yamaha dealer or other qualified mechanic clean the filter element.

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

## **CAUTION:**

The engine should never be run without the air cleaner element installed; excessive piston and/or cylinder wear may result.

## **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 such cables as soon as possible.
2. If the inner cables do not operate smoothly, lubricate or replace them.

## **Recommended lubricant:**

Yamaha Chain and Cable Lube or  
SAE 10W/30 motor oil

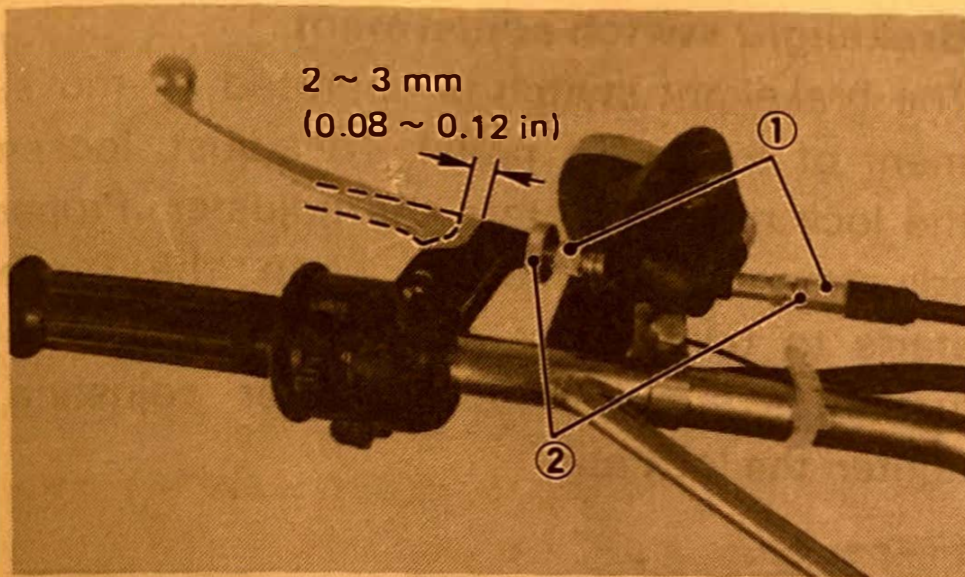
[www.legends-yamaha-enduros.com](http://www.legends-yamaha-enduros.com)

## **Clutch adjustment**

This model has two clutch cable length adjusters and a clutch mechanism adjuster. Normally, once the mechanism is properly adjusted, the only adjustment required is maintenance of free play at the clutch lever holder.

The clutch should be adjusted to suit rider preference within a 2~3 mm free play at the lever pivot side.

To adjust, loosen either the lever holder lock nut or the cable in-line length locknut. Next, turn the length adjuster either in or out until proper lever free play is achieved.



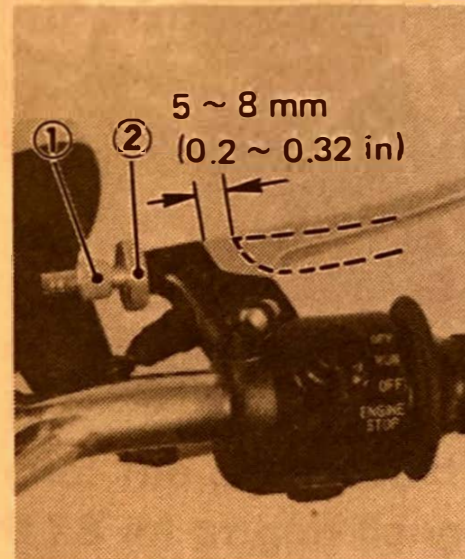
1. Adjuster      2. Lock nut

### Front brake adjustment

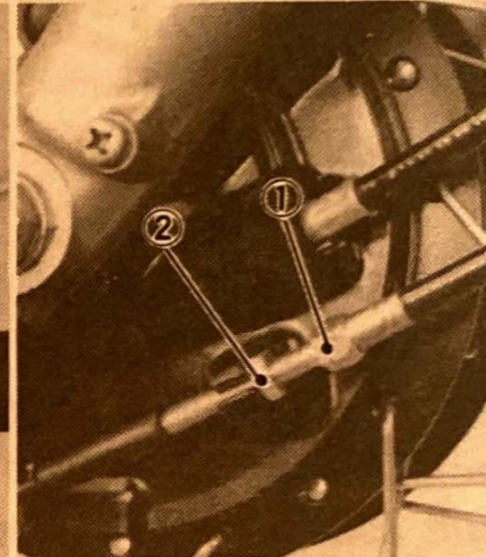
The front brake should be adjusted to suit rider preference within a 5 ~ 8 mm free play at the lever pivot side. Adjustment is accomplished at one of two places; either the lever holder or the front brake hub.

1. Loosen the lock nut.
2. Turn the cable length adjuster in or out until adjustment is suitable.
3. Tighten the lock nut.

If proper adjustment cannot be obtained at the lever holder, have a Yamaha dealer or other qualified mechanic make a brake hub adjustment.



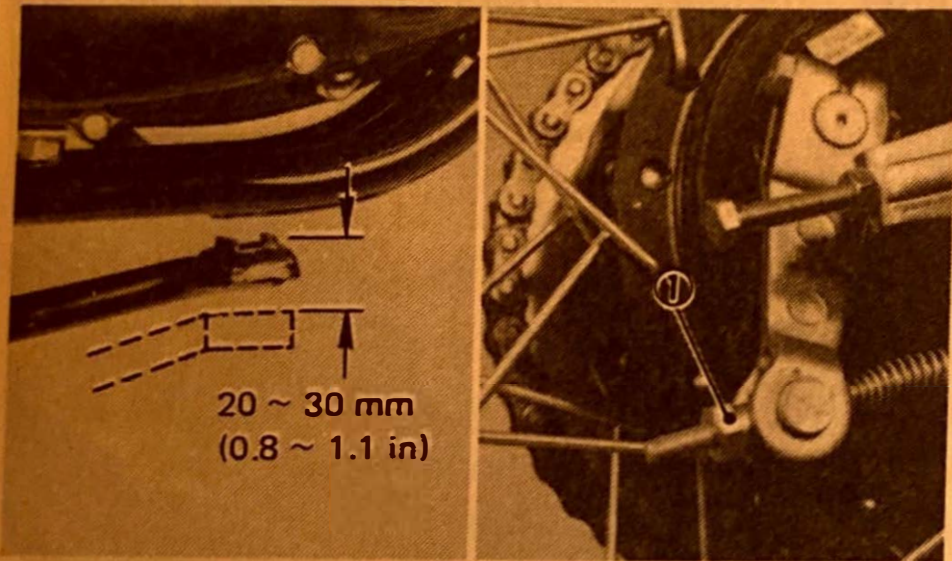
1. Adjuster      2. Lock nut



### Rear brake adjustment

The rear brake should be adjusted to suit rider preference within a 20 ~ 30 mm free play at the brake pedal end. To adjust, turn the adjuster on the brake rod clockwise to reduce play; turn the adjuster counterclockwise to increase play.

After adjusting, be sure the brake light operates correctly.



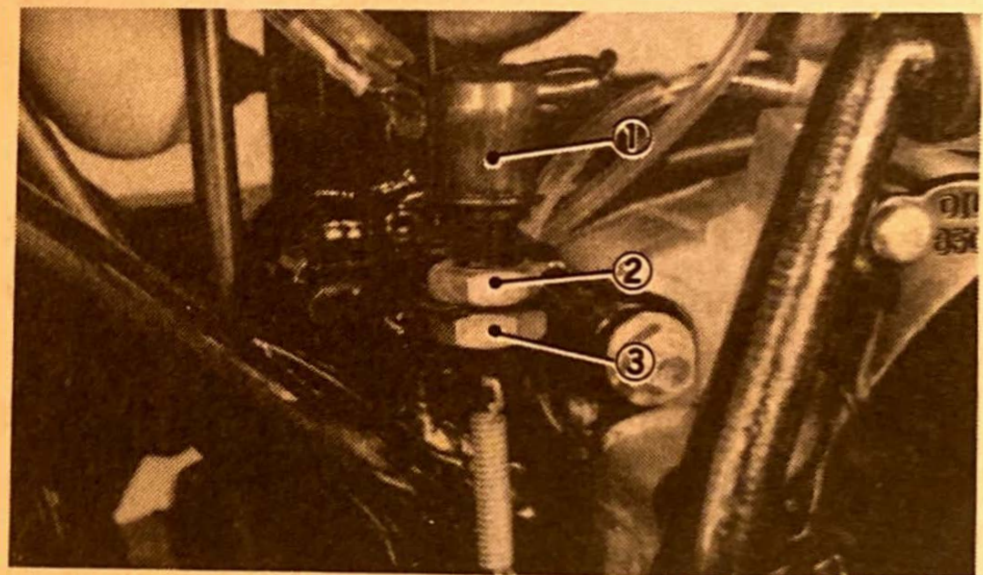
20 ~ 30 mm  
(0.8 ~ 1.1 in)

1. Adjuster

**CAUTION:**  
Always check whether or not the brakelight operates correctly after rear brake adjustment.

### Brakelight switch adjustment

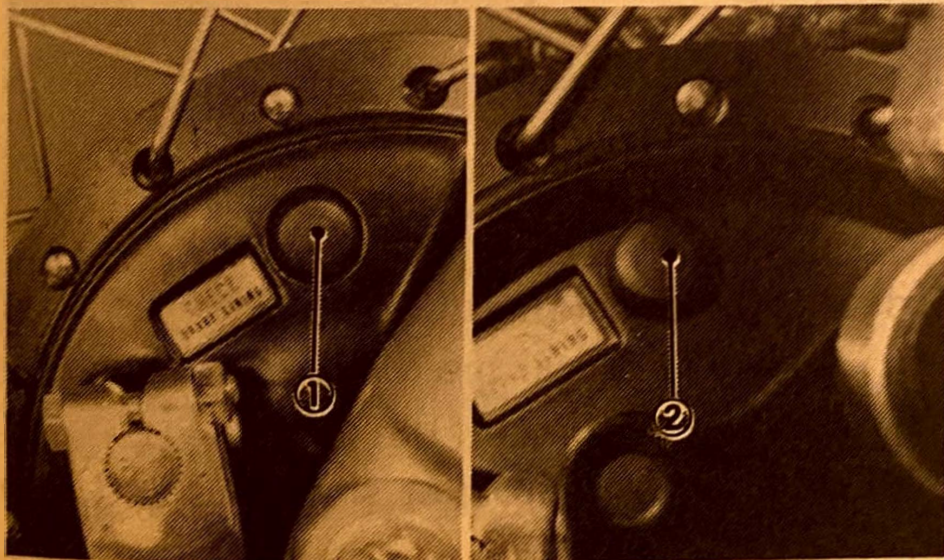
The brakelight switch is operated by movement of the brake pedal. To adjust, loosen the lock nut and rotate the adjuster. Proper adjustment is achieved when the brake starts to take effect and the brakelight illuminates simultaneously. After adjusting, tighten the lock nut.



1. Brakelight switch    2. Adjuster    3. Lock 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 (0.079 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 or other qualified mechanic to install a new set. Be sure to replace the plug carefully so water cannot enter the shoe plate.



1. Inspection hole (Front)

2. Inspection hole (Rear)

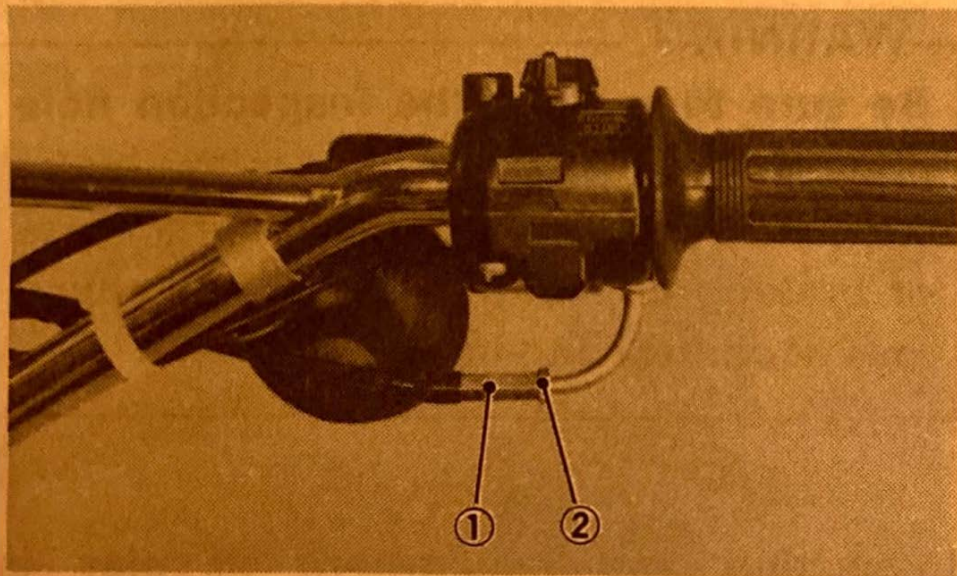
## WARNING:

**Be sure to replace the inspection hole plug securely. If water enters the brake shoe area it can cause a temporary loss of braking capability which may cause loss of control and injury.**

## Inspection and adjustment of play in throttle cable

Check play in turning direction of throttle grip. The play should be 5 ~ 7 mm (0.2 ~ 0.28 in) at grip flange. Loosen the lock nut and turn the wire adjuster to make the necessary adjustment. After adjusting, be sure to tighten the lock nut properly.

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



1. Adjuster      2. Lock nut      3. Grip flange

### Lubrication of levers, pedals, etc.

1. Lubricate the pivoting parts of the brake and clutch levers with spray lubricant.
2. Lubricate the shaft of the brake pedal with lithium base grease.

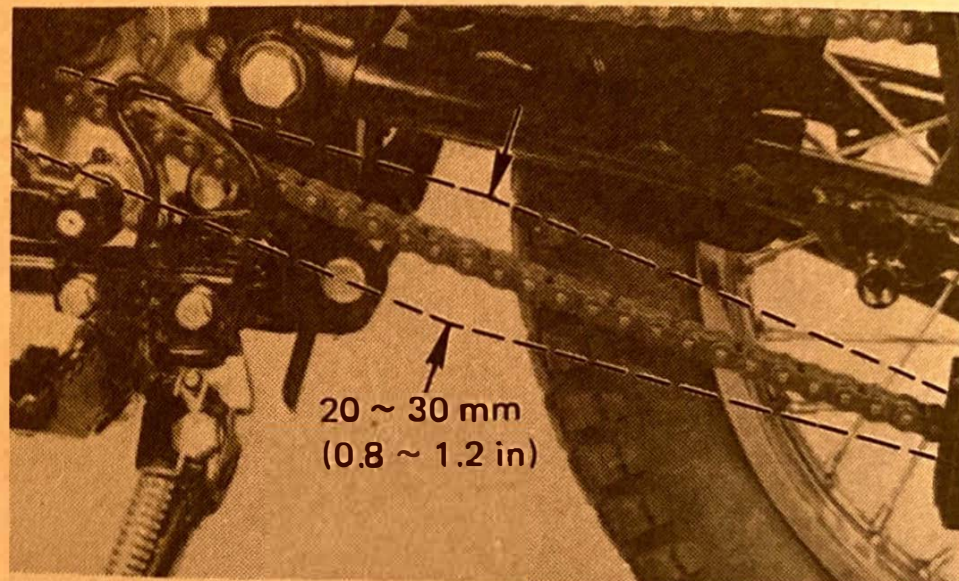
### Drive chain tension check

To check the chain play, the motorcycle must stand vertically with its both wheels on the ground and without passenger on it.

Then measure the play at the bottom of the

chain at a point midway between the drive and driven sprockets.

The normal vertical deflection is approximately 20 ~ 30 mm (0.8 ~ 1.2 in). If the chain deflection is not as specified, adjust the chain tension.

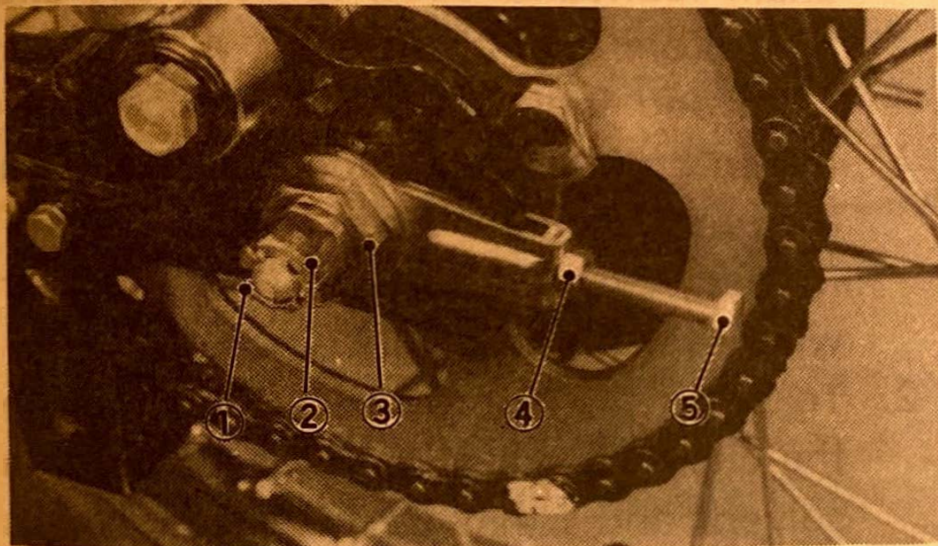


### Drive chain tension adjustment

1. Loosen the rear brake adjuster.
2. Remove the cotter pin.
3. Loosen the sprocket shaft nut and axle nut.
4. Loosen the adjusting bolt lock nuts on

each side. To decrease the deflection, turn chain puller adjusting bolt clockwise. To increase the deflection, turn chain puller adjusting bolts counter-clockwise 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 | 3. Sprocket shaft nut | 5. Adjuster |
| 2. Axle nut   | 4. Lock nut           |             |

### CAUTION:

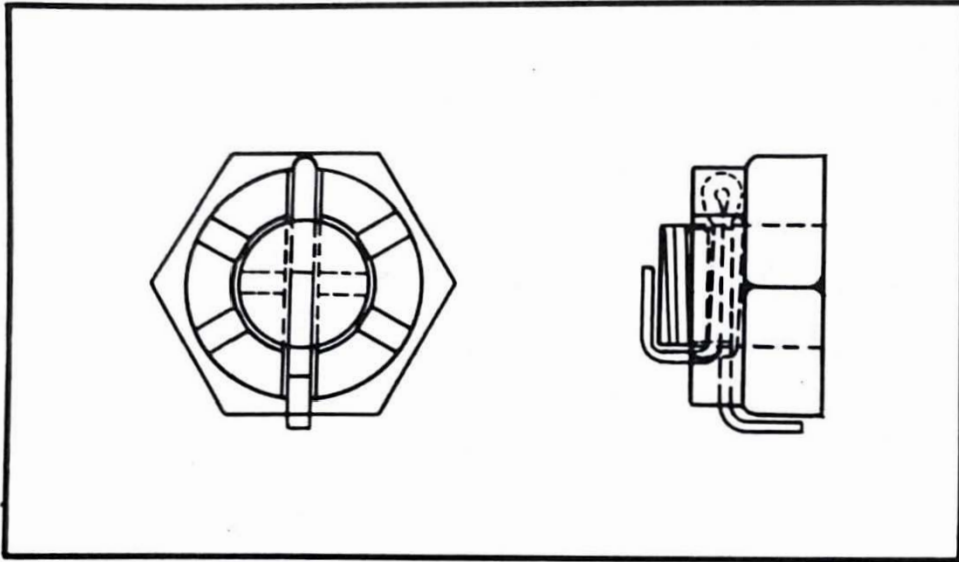
Before adjusting, rotate rear wheel through several revolutions and check tension several times to find the tightest point. Adjust chain tension with rear wheel in this "tight chain" position.

5. After adjusting, be sure to tighten the lock nut, shaft nut and rear wheel axle nut properly.

Rear axle nut torque:  
4.0 m-kg (29.0 ft-lb)

Sprocket shaft nut torque:  
11.0 m-kg (80.0ft-lb)

6. Insert the new cotter pin into the rear wheel axle nut and bend the end of cotter pin. If the nut notch and pin hole do not match, tighten the nut slightly to match.



7. In the final step, adjust the play in the brake pedal and brakelight switch operation.

**CAUTION:**

**Do not overtighten the chain. 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 moving parts. If the chain is not maintained properly, it will wear out rapidly. Without lubrication the chain could wear out very quickly. Therefore, form the habit of periodically servicing the chain. This service is especially necessary when riding in dusty conditions.

1. Use Yamaha Chain and Cable Lube or 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 500 km (300 mi.) or whenever the chain becomes dry.
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.



## Side stand pivot

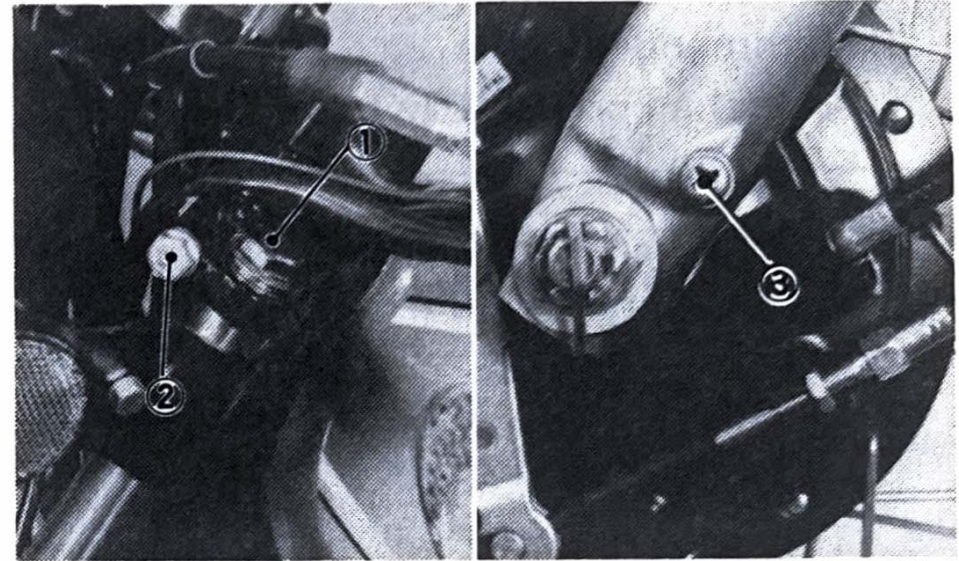
Lubricate the side stand pivot point with Yamaha Chain and Cable Lube or SAE 10W/30 motor oil.

## Front fork oil change

### WARNING:

1. Securely support the motorcycle so there is no danger of it falling over.
2. Fork oil leakage can cause loss of stability and safe handling. Have any problem corrected before operating the motorcycle.

1. Elevate front wheel by placing a suitable stand under the engine.
2. Loosen the pinch bolts and remove cap bolts from inner fork tubes.
3. Place container under each fork tube.  
Remove drain screw from each outer tube.



1. Cap bolt
2. Pinch bolt

3. Drain screw

4. After most of oil has drained, slowly raise and lower outer tubes to pump out remaining oil.
5. Replace drain screw.

### NOTE:

Check gasket, replace if damaged.

6. Measure correct amount of oil and pour into each leg.

Recommended oil:  
Yamaha Fork Oil 10wt or equivalent

Quantity per leg: 116cc (4.0 oz)

7. Inspect O-ring on forkcapbolts and replace if damaged.
8. Tighten the fork cap bolts and pinch bolts.

Fork cap bolt torque: 2.0 m·kg (15ft·lb)

### 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 it forward and backward. If any free play can be felt, ask your Yamaha dealer or other qualified mechanic to inspect and adjust the steering assembly.

Inspection is easier if the front wheel is removed.

### **WARNING:**

**Securely support the motorcycle so there is no danger of it falling over.**

### Wheel Bearings

If the wheel bearings in the front or rear wheel allow play in the wheel hub, or if the wheel does not turn smoothly, have your Yamaha dealer or other qualified mechanic inspect the wheel bearings. The wheel bearings should be inspected according to the General Maintenance/Lubrication (p.29).

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

## Battery

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

### CAUTION:

When inspecting the battery, be sure the breather pipe is routed correctly. If the breather pipe touches the frame or exits in such a way as to cause battery electrolyte or gas to exit onto the frame, structural and cosmetic damage to the motorcycle can occur.

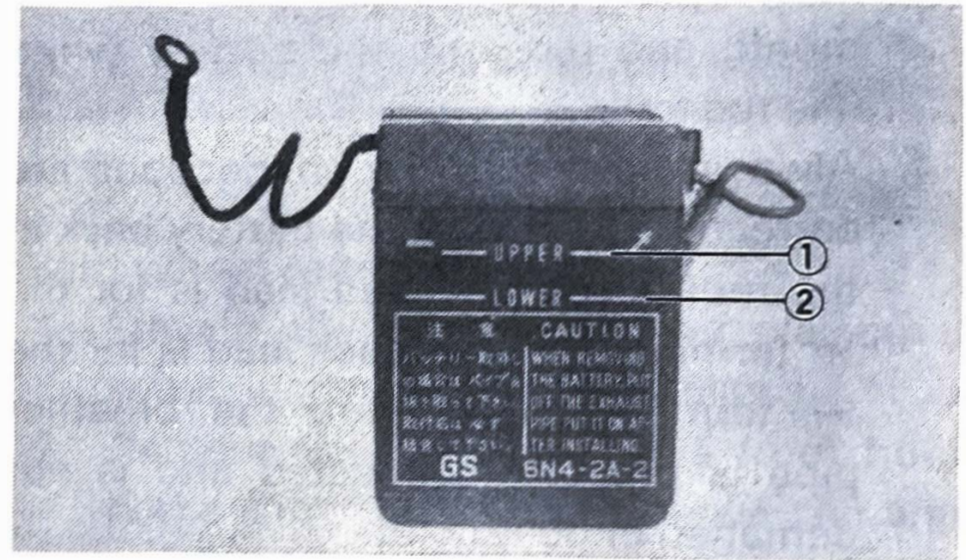
### WARNING:

Battery fluid on the chain can cause premature failure and a possible accident.

## 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 upper and lower level marks. Use only distilled water if refilling is necessary.



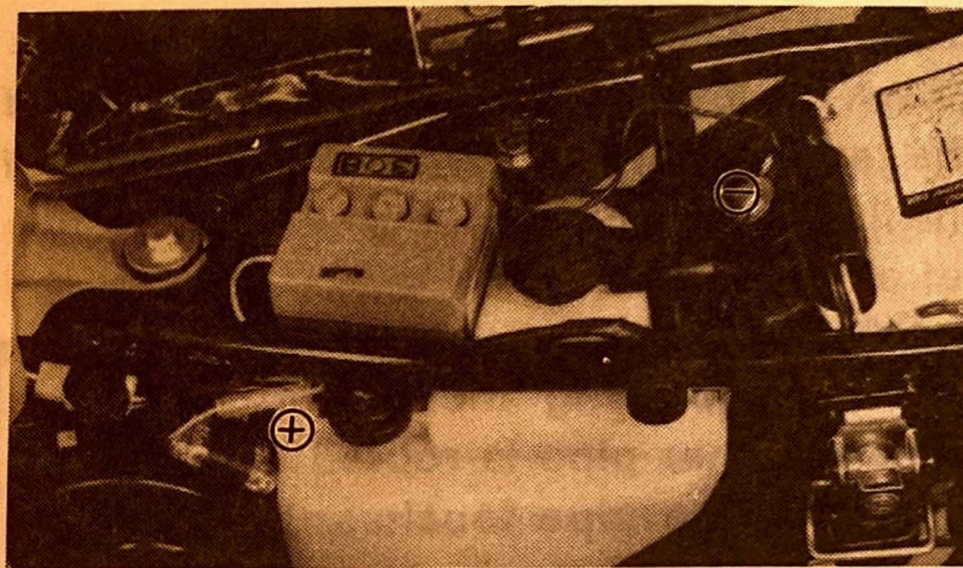
1. Upper level

2. Lower level

### 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.



**—WARNING:—**

**Battery electrolyte is poisonous and dangerous, causing severe burns, etc. Contains sulfuric acid. Avoid contact with skin, eyes or clothing.**

**Antidote:**

**EXTERNAL-Flush with water.**

**INTERNAL-Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Call physician immediately.**

**Eyes:**

**Flush with water for 15 minutes and**

get prompt medical attention. Batteries produce explosive gases. Keep sparks, flame, cigarettes, etc., away. Ventilate when charging or using in enclosed space. Always shield eyes when working near batteries.

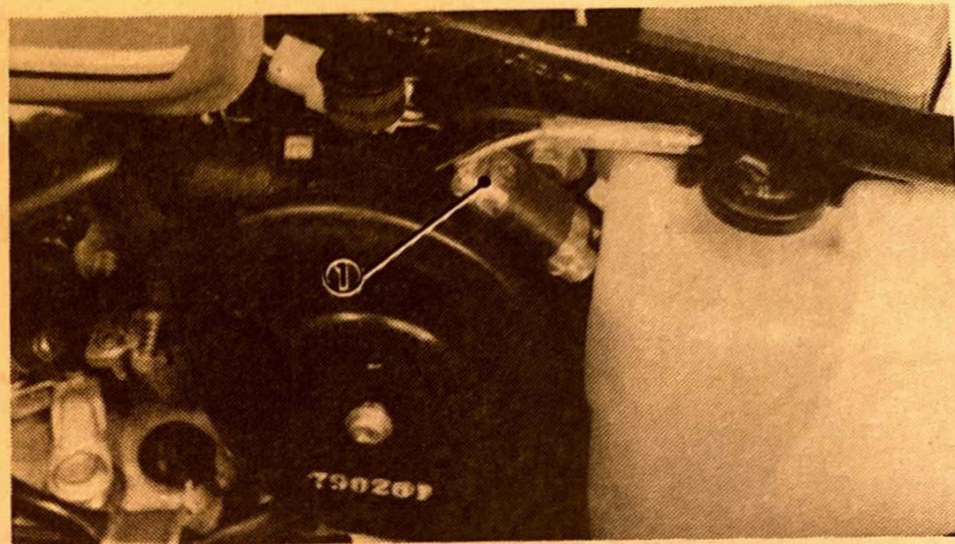
**KEEP OUT OF REACH OF CHILDREN.**

### Fuse replacement

If the 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 or other qualified mechanic.

### WARNING:

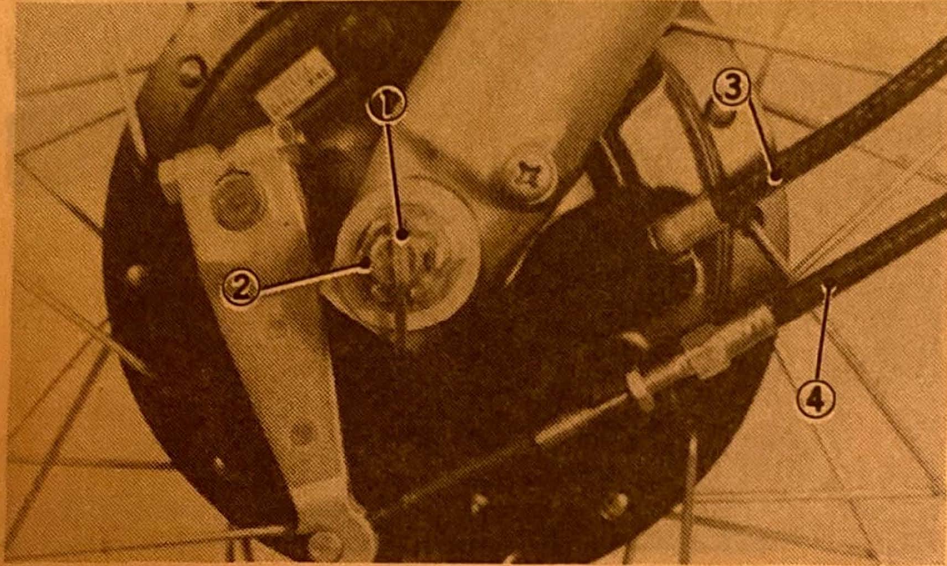
Do not use fuses of a higher amperage rating than those recommended. Substitution of a fuse of improper rating can cause extensive electrical system damage and possible fire.



1. Fuse

### 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 | 3. Speedometer cable |
| 2. Axle nut   | 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 removal procedure taking care of the following points:

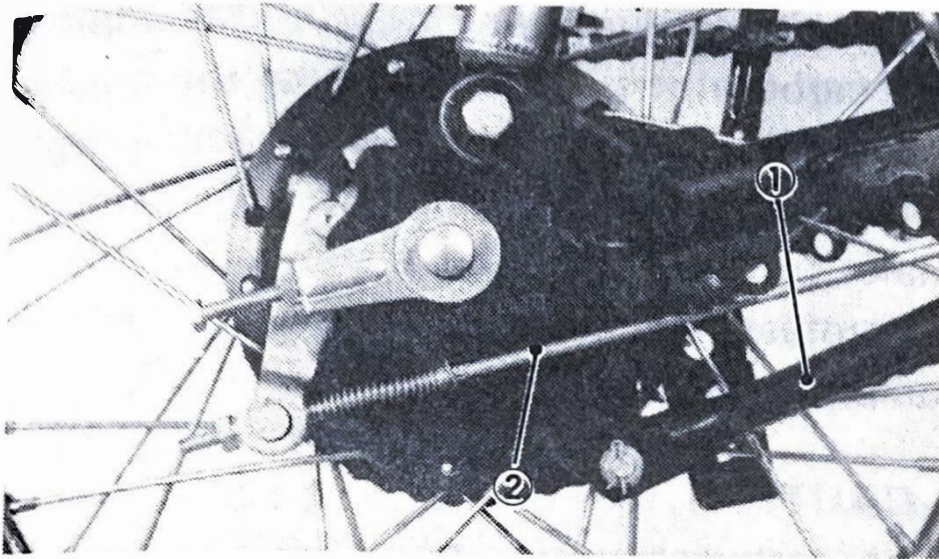
1. Check for proper engagement of the boss on the outer fork tube with the locating slot on the brake shoe plate.
2. Make sure the axle nut is properly torqued and a new cotter pin is installed.

AXle nut torque: 4.5 m-kg (32 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.
2. Loosen the lock nuts of the right and left chain pullers and loosen the adjuster.

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



1. Tension bar      2. Brake rod

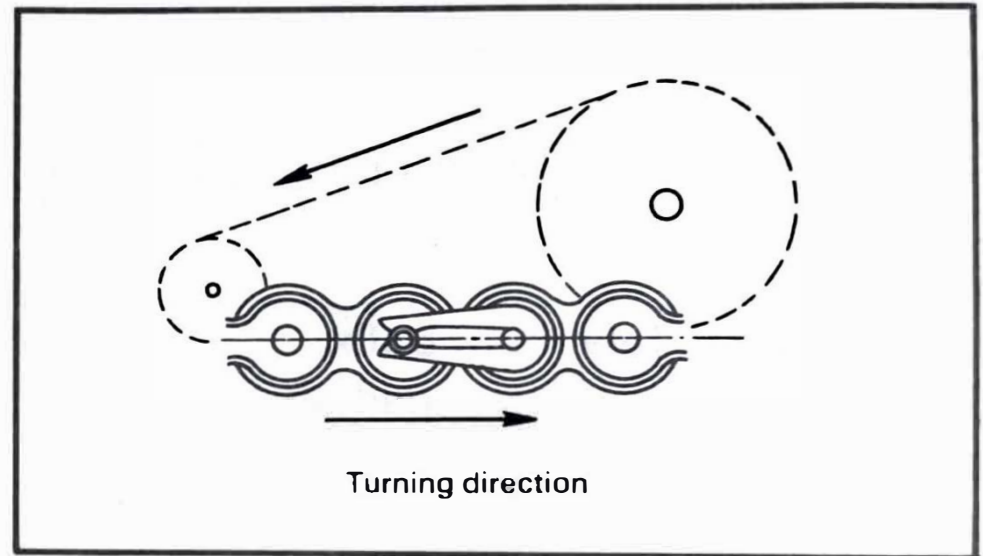
3. Remove the joint link clip and joint link and remove the chain from the rear sprocket.
4. Remove the cotter pin from the wheel axle and remove the sprocket shaft nut and axle nut.
5. The rear wheel assembly, the collar, the chain puller(s), etc., can be removed from the motorcycle by pulling the wheel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



## Rear wheel installation

The rear wheel can be installed by reversing the removal procedure. Note the following:

1. When connecting the chain, make certain the closed end of joint link clip is facing the 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: 4.0 m-kg (29.0 ft-lb)

Sprocket shaft nut torque:

11.0 m-kg (80.0 ft-lb)

Tension bar bolt torque:

2.0 m-kg (14.5 ft-lb)

4. Adjust the brake pedal and brakelight switch.
5. Always use a new cotter pin. Old pins should be discarded.

### Replacing the headlight bulb

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

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

### Carburetor adjustment

The carburetor is a vital part of the engine and requires very sophisticated adjustment. Adjustments should be left to your Yamaha dealer or other qualified mechanic who has the professional knowledge, specialized data, equipment and experience to do so properly.

#### CAUTION:

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



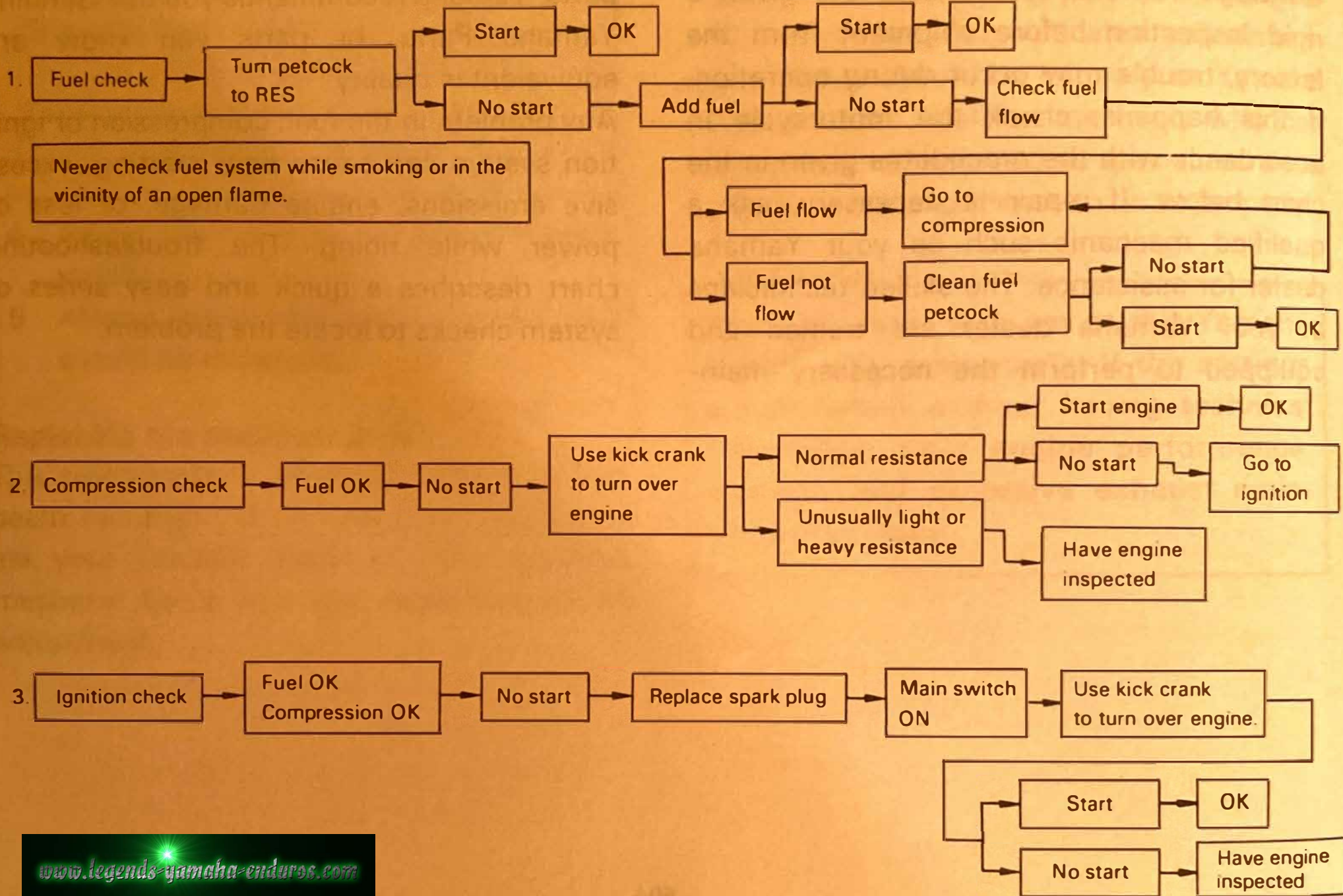
## Troubleshooting:

Although Yamaha motorcycles are given a rigid inspection before shipment from the factory, trouble may occur during operation. If this happens, check the motorcycle in accordance with the procedures given in the chart below. If repair is necessary, ask a qualified mechanic such as your Yamaha dealer for assistance. The skilled technicians at your Yamaha dealer are trained and equipped to perform the necessary main-

tenance and repair work. For replacement parts, Yamaha recommends you use Genuine Yamaha Parts, or parts you know are equivalent in quality.

Any problem in the fuel, compression or ignition system can cause poor starting, excessive emissions, engine damage, or loss of power while riding. The troubleshooting chart describes a quick and easy series of system checks to locate the problem.

# Troubleshooting chart



# 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 motorcycle:
  - a. Block off the end of the exhaust pipe to prevent water entry; a plastic bag and a strong rubber band may be used.
  - b. Make sure the spark plug, fuel tank cap, oil tank cap, and transmission oil filler cap are installed properly.
2. If the engine case is excessively greasy, apply degreaser with a paint brush. Do not apply degreaser to the chain, sprockets, or wheel axles.

3. Rinse the dirt and degreaser off with a garden hose, using only enough hose pressure to do the job.

### **CAUTION:**

**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 applications of high pressure detergents.**

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 the motorcycle off immediately with clean water and dry all its surfaces with compressed air, a chamois, clean towel, or soft absorbent cloth.

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

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

## B. STORAGE

Long term storage (60 days or more) of your motorcycle will require some preventive procedures to insure against deterioration. After cleaning the motorcycle thoroughly, prepare it for storage as follows:

1. Drain the fuel tank, fuel lines, and carburetor float bowl.
2. Remove the 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 the spark plug, pour about one tablespoon of 10W to 30W oil in to the spark plug hole, and re-install the spark plug. Kick the engine over several times (with ignition off) to coat cylinder walls with oil.
4. Lubricate all the control cables.
5. Block up the frame to raise both wheels off ground.

6. Tie a plastic bag over exhaust pipe outlet to prevent moisture from entering.
7. 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 cover.

Remove the battery and charge it. Store it in a dry place and re-charge it once a month. Do not store the battery in an excessively warm or cold place (less than 0°C (32°F) or more than 30°C (90°F)).

**NOTE:** \_\_\_\_\_  
Make any necessary repairs before storing the motorcycle.  
\_\_\_\_\_

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

# MISCELLANEOUS

## Consumer Information

### STOPPING DISTANCE

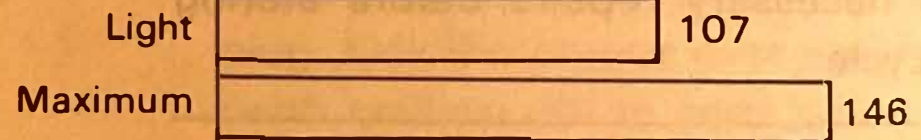
This figure indicates braking performance that can be met or exceeded by the vehicles to which it applies, without locking the wheels, under different conditions of loading and with partial failures of the braking system. The information presented represents results obtainable by skilled drivers under 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 DT100H

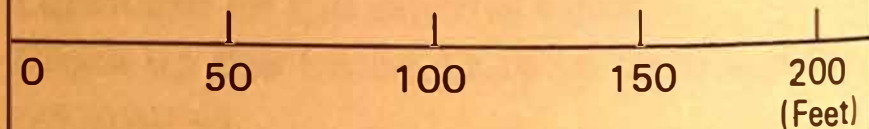
#### A. Fully Operational Service Brake



#### Load



**NOTE:** The statement above is required by U.S. Federal law. "Partial failures" of the braking system do not apply to this chart.



Stopping distance in feet from 50 mi/h

# ACCELERATION AND PASSING ABILITY

This figure indicates passing times and distance 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 DT100H

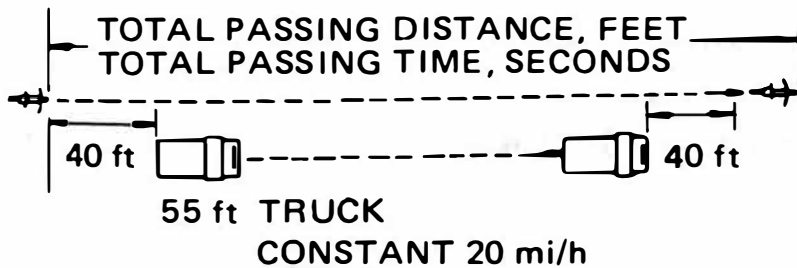
## Summary table

Low-speed pass .....	40.5 feet: 8.5 seconds
High-speed pass .....	Not capable

### LOW-SPEED

INITIAL  
SPEED: 20 mi/h

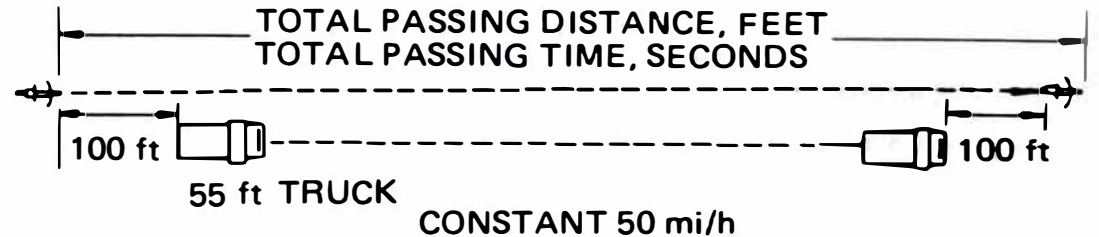
LIMITING  
SPEED: 35 mi/h



### HIGH-SPEED

INITIAL  
SPEED: 50 mi/h

LIMITING  
SPEED: 80 mi/h



# SPECIFICATIONS

MODEL	DT100H
<b>Dimension:</b> Overall length Overall width Overall height Seat height Wheelbase Minimum road clearance	1,880 mm (74.0 in) 800 mm (31.5 in) 990 mm (39.0 in) 730 mm (28.7 in) 1,190 mm (46.8 in) 200 mm ( 7.9 in)
<b>Weight</b> Gross	80 kg (176 lb)
<b>Performance:</b> Minimum turning radius Climbing capacity	1,810 mm (71.3 in) 35°
<b>Engine:</b> Type Engine model Cylinder Displacement Bore x stroke Compression ratio Starting system	2-stroke, gasoline, air cooled, torque induction 3A3 Single, forward inclined 97 cc (5.92 cu. in) 52 x 45.6 mm (2.05 x 1.8 in) 6.7 : 1 (9.7 : 1) Primary kick starter



MODEL	DT100H
<p>Ignition system  Gasoline tank capacity  Oil tank capacity  Lubricating system  Battery type/capacity  Generator  Spark plug  Carburator  Air cleaner  Clutch type</p>	<p>C.D.I.  4.5 lit (1.2 US.gal)  1.0 lit (1.1 US.qt)  Separate lubrication (Yamaha Autolube)  6N4-2A-2/6V, 4AH  Flywheel magneto  B7ES (N.G.K.)  VM22SS  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:</p> <p style="padding-left: 150px;">First  Second  Third  Fourth  Fifth</p>	<p>Gear  74/19 (3.895)  Chain  45/14 (3.214)  Constant mesh, 5-speed forward  Left foot operation, 1 down, 4 up</p> <p style="padding-left: 150px;">35/11 (3.182)  30/15 (2.000)  26/19 (1.368)  23/23 (1.000)  20/25 (0.800)</p>



MODEL	DT100H
<b>Chassis:</b> Frame type Steering: Caster Trail Tire size: Front Rear Braking system: Front Rear Suspension: Front Rear Shock absorber: Front Rear	Tubular, double-cradle 61° 103 mm (4.1 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
<b>Electrical:</b> Headlight Tail/stoplight Meter light Flasher light Pilot lights           Flasher High beam Neutral Oil	6V, 30W/30W 6V, 5.3W (3 cp)/25W (32 cp) 6V, 3W 6V, 17W 6V, 3W 6V, 3W 6V, 3W 6V, 3W

# MAINTENANCE RECORD

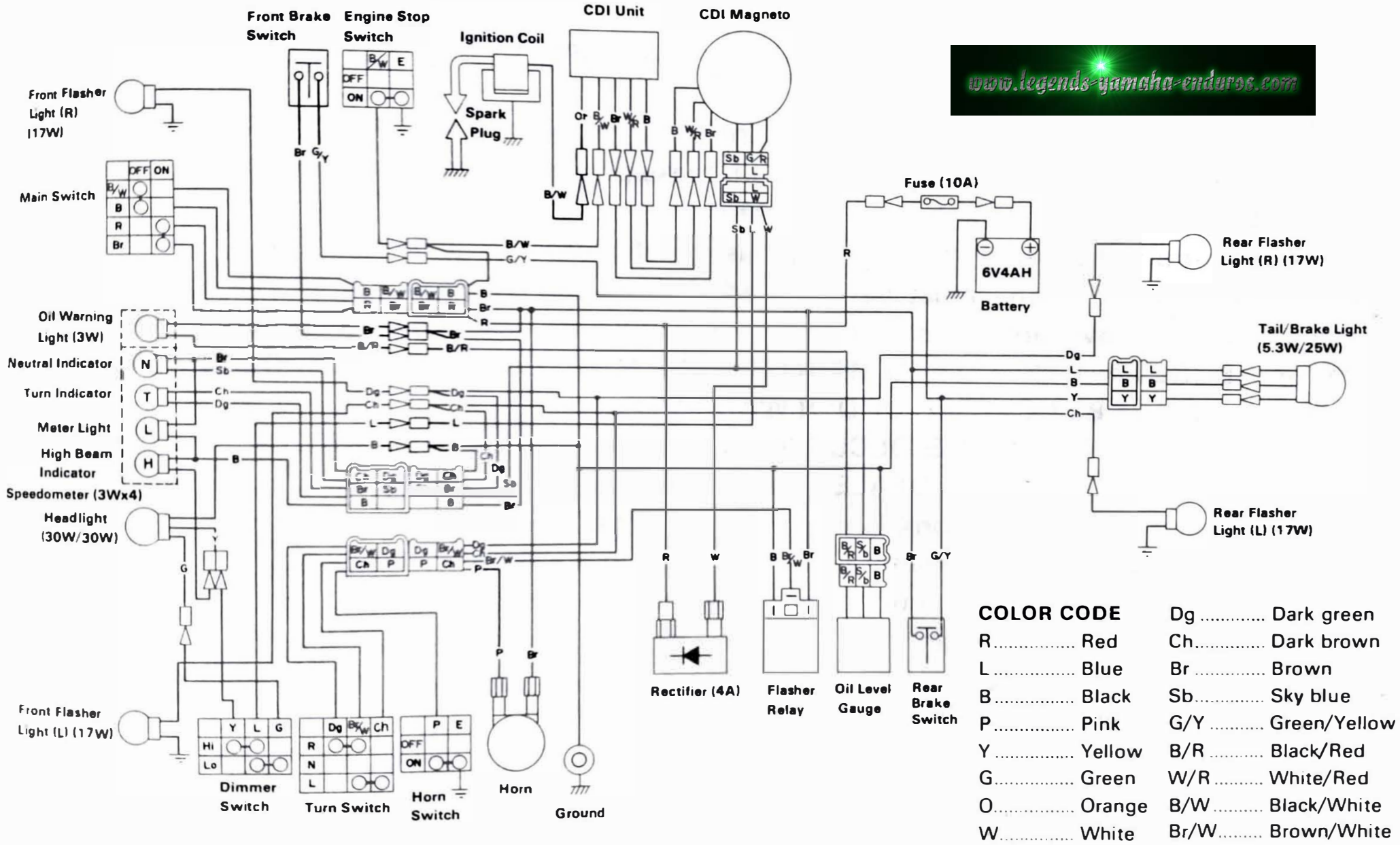
Copies of work orders and/or receipts for parts you purchase and install will be required to document maintenance done in accordance with the emission warranty. The chart below is printed only as a reminder to you that the maintenance work is required. It is not acceptable proof of maintenance work.

MAINTENANCE INTERVAL	DATE OF SERVICE	MILEAGE	SERVICING DEALER NAME AND ADDRESS	SERVICING DEALER SIGNATURE
1,000 km or 600 mi or 1 month				
4,000 km or 2,500 mi or 7 months				
7,000 km or 4,500 mi or 13 months				
10,000 km or 6,200 mi or 19 months				



13,000 km or 8,000 mi or 25 months				
16,000 km or 10,000 mi or 31 months				
19,000 km or 12,000 mi or 37 months				
22,000 km or 13,700 mi or 43 months				
25,000 km or 15,500 mi or 49 months				
28,000 km or 17,400 mi or 55 months				
31,000 km or 19,200 mi or 61 months				

# WIRING DIAGRAM



**COLOR CODE**

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

# 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 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 MOTOR CORPORATION, U.S.A.  
6555 KATELLA AVE. CYPRESS, CALIFORNIA 90630

P.O. Box 6555

ATTN: WARRANTY DEPARTMENT

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



**YAMAHA MOTOR CO., LTD.**

IWATA, JAPAN

PRINTED IN JAPAN  
80 • 4 - 30 x 1 CR  
(英)