YAMAHA *Master Copy*

OWNER'S MANUAL

FZX250

3YX-28199-E0

EAU00000

Congratulations on your purchase of the Yamaha FZX250. This model is the result of Yamaha's vast experience in the production of fine sporting, touring, and pacesetting racing machines. It represents the high degree of craftsmanship and reliability that have made Yamaha a leader in these fields.

This manual will give you an understanding of the operation, inspection, and basic maintenance of this motorcycle. If you have any questions about the operation or maintenance of your motorcycle, please consult a Yamaha dealer.

IMPORTANT MANUAL INFORMATION

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

⚠	The Safety Alert Symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!
⚠WARNING	Failure to follow WARNING instructions could result in severe injury or death to the motorcycle operator, a bystander or a person inspecting or repairing the motorcycle.
CAUTION:	A CAUTION indicates special precautions that must be taken to avoid damage to the motorcycle.
NOTE:	A NOTE provides key information to make procedures easier or clearer.

NOTE:

- This manual should be considered a permanent part of this motorcycle and should remain with it even if the motorcycle is subsequently sold.
- Yamaha continually seeks advancements in product design and quality. Therefore, while this manual contains the most current product information available at the time of printing, there may be minor discrepancies between your motorcycle and this manual. If there is any question concerning this manual, please consult your Yamaha dealer.

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⚠WARNING

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

EAU00008

FZX250
OWNER'S MANUAL

1st Edition, October 1997

Printed in Japan

EAU00009

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⚠ SAFETY INFORMATION

TWO-WHEELED MOTORCYCLES ARE SINGLE TRACK VEHICLES. THEIR SAFE USE AND OPERATION ARE DEPENDENT UPON THE USE OF PROPER RIDING TECHNIQUES AS WELL AS THE EXPERTISE OF THE OPERATOR. EVERY OPERATOR SHOULD KNOW THE FOLLOWING REQUIREMENTS BEFORE RIDING.
HE OR SHE SHOULD:

1. OBTAIN THOROUGH INSTRUCTIONS FROM A COMPETENT SOURCE ON ALL ASPECTS OF MOTORCYCLE OPERATION.
2. OBSERVE THE WARNINGS AND MAINTENANCE REQUIREMENTS IN THE OWNER'S MANUAL.
3. OBTAIN QUALIFIED TRAINING IN SAFE AND PROPER RIDING TECHNIQUES.
4. OBTAIN PROFESSIONAL TECHNICAL SERVICE AS INDICATED BY THE OWNER'S MANUAL AND/OR WHEN MADE NECESSARY BY MECHANICAL CONDITIONS.

Safe riding

1. Always make pre-operation checks. Careful checks may help prevent an accident.
2. This motorcycle is designed to carry the operator and a passenger.
3. The failure of motorists to detect and recognize motorcycles in traffic is the predominating cause of automobile/motorcycle accidents. Many accidents have been caused by an automobile driver who did not see the motorcycle. Making yourself conspicuous appears to be very effective in reducing the chance of this type of accident.

Therefore:

a. Wear a brightly colored jacket.
b. Use extra caution when you approach and pass through intersections, since intersections are the most likely places for motorcycle accidents.
c. Ride where other motorists can see you. Avoid riding in another motorist's "blind spot".

4. Many accidents involve inexperienced operators. In fact, many operators who have been involved in accidents do not even have a current motorcycle license.
   a. Make sure you are qualified. Also, only lend your motorcycle to experienced operators.
   b. Know your skills and limits. Staying within your limits may help you to avoid an accident.
   c. We recommend that you practice riding your motorcycle where there is no traffic until you have become thoroughly familiar with your motorcycle and all of its controls.
5. Many motorcycle accidents have been caused by motorcycle operator errors. A typical error made by the operator is veering wide on a turn due to EXCESSIVE SPEED or undercornering (insufficient lean angle for the speed).
   a. Always obey the speed limits and never travel faster than warranted by road and traffic conditions.
   b. Always signal before turning or changing lanes. Make sure other motorists see you.
6. The operator's and passenger's posture are important for proper control.
   a. The operator should keep both hands on the handlebars and both feet on the operator footrests during operation to maintain control of the motorcycle.
   b. The passenger should always hold on to the operator, or the seat strap or grab bar if the motorcycle is so equipped, with both hands and keep both feet on the passenger footrests.
   c. Never carry a passenger unless he or she can firmly place both feet on the passenger footrests.
7. Never ride under the influence of alcohol or drugs.
8. This motorcycle is designed for on-road use only. It is not suitable for off-road use.

Protective apparel

The majority of fatalities from motorcycle accidents are the result of head injuries. The use of a safety helmet is the single most critical factor in the prevention or reduction of head injuries.

1. Always wear an approved helmet.
2. Wear a face shield or goggles. Wind on your unprotected eyes could contribute to an impairment of vision which could delay seeing a hazard.
3. The use of heavy boots, jacket, trousers, gloves, etc. is effective in preventing or reducing abrasions or lacerations.
4. Never wear loose fitting clothing. It could catch on the control levers, footrests, or wheels and cause injury or accident.
5. Never touch the engine or exhaust system during or after operation. They become very hot and can cause burns. Always wear protective clothing that covers your legs, ankles, and feet.
6. A passenger should also observe the above precautions.

Modification

Modifications made to the motorcycle not approved by Yamaha, or the removal of original equipment, may render your motorcycle unsafe for use and may cause severe personal injury. Modifications may also make your motorcycle illegal to use.

Loading and accessories

Adding accessories or cargo to your motorcycle can adversely affect stability and handling if the weight distribution of the machine is changed. To avoid the possibility of an accident, extreme caution should be used if adding cargo or accessories to your motorcycle. Use extra care if riding a motorcycle which has added cargo or accessories. Here are some general guidelines to follow if loading cargo or adding accessories to your motorcycle:

Loading

The total weight of the operator, passenger, accessories and cargo must not exceed the maximum load limit of 110 kg.
When loading within these weight limits, keep the following in mind:

1. Cargo and accessory weight should be kept as low and close to the motorcycle as possible. Be sure to distribute the weight as evenly as possible on both sides of the machine to minimize imbalance or instability.
2. Shifting weights can create a sudden imbalance. Make sure that accessories and cargo are securely attached to the motorcycle before riding. Recheck accessory mounts and cargo restraints frequently.
3. Never attach any large or heavy items to the handlebars, front forks, or front fender. These items, including such cargo as sleeping bags, duffle bags, or tents, can create unstable handling or slow steering response.

Accessories

Genuine Yamaha accessories have been specifically designed for use on this motorcycle. Since Yamaha cannot test all other accessories which may be available, you must personally be responsible for the proper selection, installation and use of non-Yamaha accessories. You should use extreme caution when selecting and installing any accessories.
Keep in mind these guidelines for mounting accessories in addition to those provided under "LOADING".

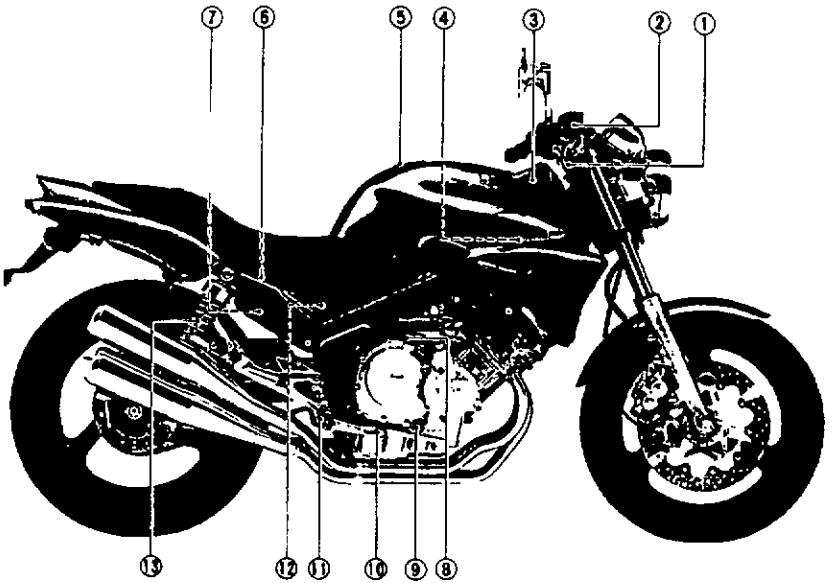
1. Never install accessories or carry cargo that would impair the performance of your motorcycle. Carefully inspect the accessory before using it to make sure it does not in any way reduce ground clearance or cornering clearance, limit suspension travel, steering travel or control operation, or obscure lights or reflectors.
   a. Accessories fitted to the handlebar or the front fork area can create instability due to improper weight distribution or aerodynamic changes. If accessories are added to the handlebar or front fork area, they must be as lightweight as possible and should be kept to a minimum.
   b. Bulky or large accessories may seriously affect the stability of the motorcycle due to aerodynamic effects. Wind may attempt to lift the motorcycle, or the motorcycle may become unstable in cross winds. These accessories may also cause instability when being passed by or passing large vehicle.
   c. Certain accessories can displace the operator from his or her normal riding position. This improper position limits the freedom of movement of the operator and may limit control ability. Therefore such accessories are not recommended.
2. Caution must be used if adding electrical accessories. If these accessories exceed the capacity of the motorcycle's electrical system, an electric failure could result, which could cause a dangerous loss of lights or engine power.

Gasoline and exhaust gas

1. GASOLINE IS HIGHLY FLAMMABLE:
   a. Always turn off the engine when refueling.
   b. Take care not to spill any gasoline on the engine or exhaust system when refueling.
   c. Never refuel while smoking or in the vicinity of an open flame.

2. Never start the engine or let it run for any length of 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 that has adequate ventilation.
3. Always turn off the engine before leaving the motorcycle unattended and remove the ignition key. When parking the motorcycle, note the following:
   a. The engine and exhaust system may be hot. Park the motorcycle in a place where pedestrians or children are not likely to touch these hot areas.
   b. Do not park the motorcycle on a slope or soft ground; the motorcycle may fall over.
   c. Do not park the motorcycle near a flammable source, e.g. a kerosene heater, or near an open flame. The motorcycle could catch fire.
4. When transporting the motorcycle in another vehicle, be sure it is kept upright and that the fuel cock is turned to "ON" or "RES" (for vacuum type)/"OFF" (for manual type). If it should lean over, gasoline may leak out of the carburetor or fuel tank.
5. If you should swallow any gasoline, inhale a lot of gasoline vapor, or allow gasoline to get in your eyes, see your doctor immediately. If any gasoline spills on your skin or clothing, immediately wash it off with soap and water and change your clothes.

Left view



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3. Pouch
4. Air filter (page 6-9)
5. Fuel tank cap (page 3-7)
6. Battery (page 6-22)
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8. Oil filler cap (page 6-7)
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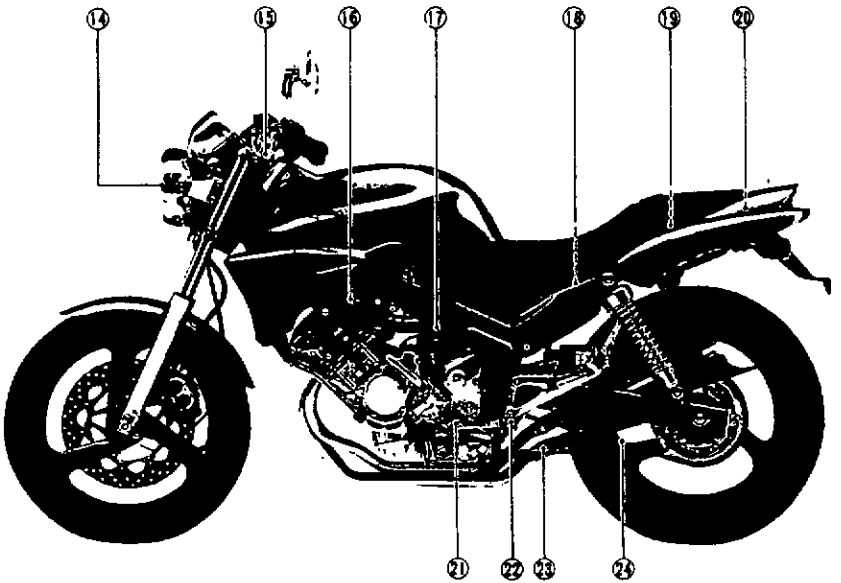
Right view



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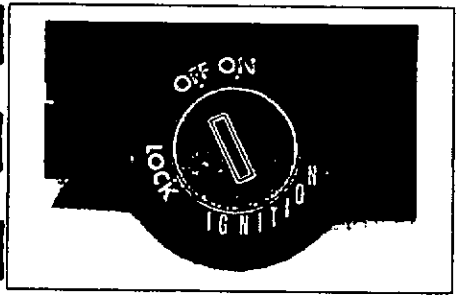

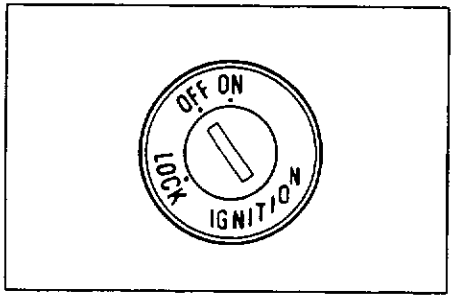

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⚠WARNING

Never turn the key to "LOCK" when the motorcycle is moving.

EAU00029

Main switch/Steering lock

The main switch controls the ignition and lighting systems. Its operation is described below.

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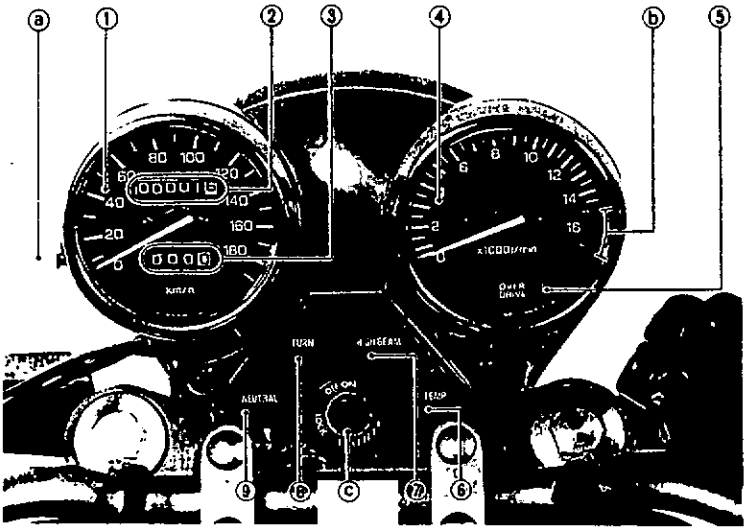
ON:
Electrical circuits are switched on, and the headlight, meter light, and taillight come on. The engine can be started. The key cannot be removed in this position.

EAU00038

OFF:
All electrical circuits are switched off. The key can be removed in this position.

EAU00043

LOCK:
The steering is locked in this position and all electrical circuits are switched off.
The key can be removed in this position.
To lock the steering, turn the handlebars all the way to the left or right. With the key at "OFF", push it into the main switch and release it, turn it counterclockwise to "LOCK" and remove it. To release the lock, turn the key to "OFF".



1. Speedometer
2. Odometer
3. Trip odometer
4. Tachometer
5. Overdrive indicator light "OVER DRIVE"
6. Coolant temp. indicator light "TEMP"
7. High beam indicator light "HIGH BEAM"
8. Turn indicator light "TURN"
9. Neutral indicator light "NEUTRAL"
a. Knob
b. Red zone
c. Main switch

EAU00058

Indicator lights

Overdrive indicator light "OVER DRIVE"

This indicator light will come on when the transmission is in 6th gear with the main switch in the "ON" position.

EAU00089

Coolant temperature indicator light "TEMP"

This indicator light comes on when the engine overheats. If the light comes on, stop the engine immediately and allow the engine to cool.

This light can be checked by the following procedure.

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CAUTION:

When the engine is overheated, do not continue riding.

EAU00064

High beam indicator light "HIGH BEAM"

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

EAU00059

Turn indicator light "TURN"

This indicator flashes when the turn switch is moved to the left or right.

EAU00062

Neutral indicator light "NEUTRAL"

This indicator comes on when the transmission is in neutral.

EAU00095

Speedometer

The speedometer shows riding speed. This speedometer is equipped with an odometer and trip odometer. The trip odometer can be reset to "0" with the reset knob. Use the trip odometer to estimate how far you can ride on a tank of fuel. This information will enable you to plan fuel stops in the future.

EAU00101

Tachometer

This model is equipped with an electric tachometer so the rider can monitor the engine speed and keep it within the ideal power range.

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CAUTION:

Do not operate in the red zone.
Red zone: 15,000 r/min and above

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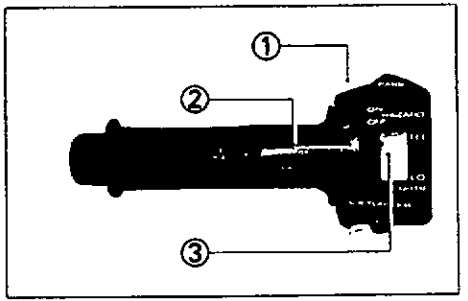


1. Pass switch "PASS"
2. Hazard switch
3. Dimmer switch "LIGHTS"

EAU00118

Handlebar switches

EAU00120

Pass switch "PASS"

Press the switch to operate the passing light.

EAU00146

Hazard switch "HAZARD"

The hazard switch should be turned on under emergency or hazardous conditions. All turn signal lights will flash simultaneously when this switch is turned on with the main switch in the "ON" position.

EC000006

CAUTION:

The battery can discharge from extended use, making it difficult to operate the starter.

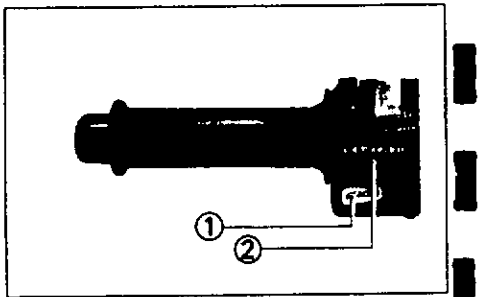
NOTE:

Turn on the hazard switch to warn other drivers if your motorcycle must be stopped where it might be a traffic hazard.

EAU00122

Dimmer switch "LIGHTS"

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



1. Horn switch "HORN"
2. Turn signal switch "TURN"

EAU00130

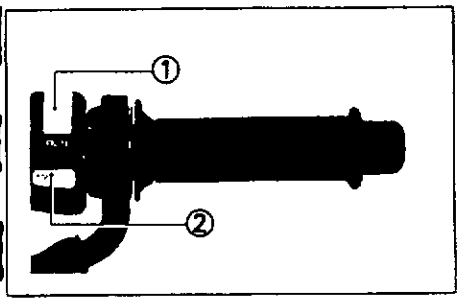
Horn switch "HORN"

Press the switch to sound the horn.

EAU00125

Turn signal switch "TURN"

To signal a right-hand turn, push the switch to the right. To signal a left-hand turn, push the switch to the left. Once the switch is released it will return to the center position. To cancel the signal, push the switch in after it has returned to the center position.



1. Engine stop switch "ENGINE STOP"
2. Start switch "START"

EAU00137

Engine stop switch "ENGINE STOP"

The engine stop switch is a safety device for use in an emergency such as when the motorcycle overturns or if trouble occurs in the throttle system. Turn the switch to "RUN" to start the engine. In case of emergency, turn the switch to "OFF" to stop the engine.

EAU00141

Start switch "START"

The starter motor cranks the engine when pushing the start switch.

EC000005

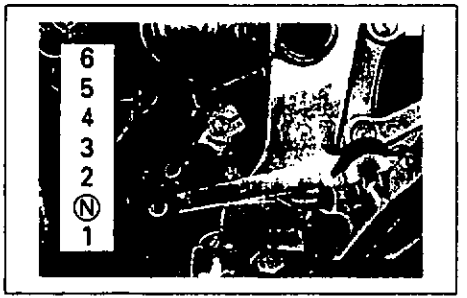
CAUTION:

See starting instructions prior to starting the engine.

EAU00152

Clutch lever

The clutch lever is located on the left handlebar, and the ignition circuit cut-off system is incorporated in the clutch lever holder. 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 clutch operation. (Refer to the engine starting procedures for a description of the ignition circuit cut-off system.)



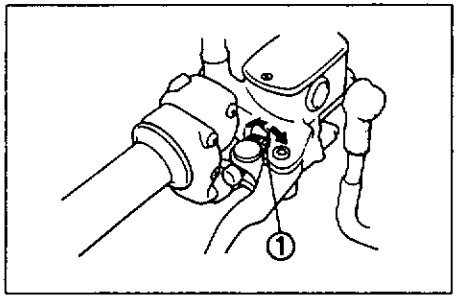
N. Neutral

EAU00157

Shift pedal

This motorcycle is equipped with a constant-mesh 6-speed transmission.

The shift pedal is located on the left side of the engine and is used in combination with the clutch when shifting.



1. Adjusting nut

EAU00160

Front brake lever

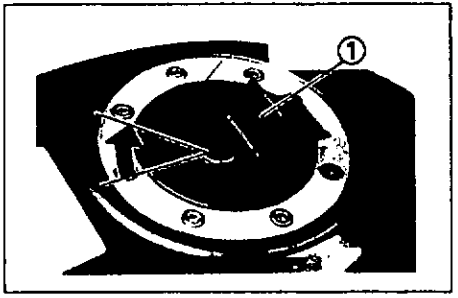
The front brake lever is located on the right handlebar and is equipped with a position aduster. To activate the front brake, pull the lever toward the handlebar.

To adjust the front brake lever position, turn the adusting nut while pulling the lever forward. Make sure the mark "■" on the adjusting nut is aligned with the mark "●" on the lever.

EAU00162

Rear brake pedal

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



1. Key cover

EAU00172

Fuel tank cap

TO OPEN:

Open the key cover. Insert the key and turn it 1/4 turn clockwise. The lock will be released and the cap can be opened.

TO CLOSE:

Push the tank cap into position with the key inserted. To remove the key, turn it counterclockwise to the original position. Then, close the key cover.

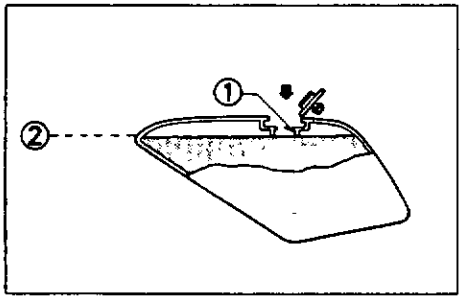
NOTE:

This tank cap cannot be closed unless the key is in the lock. The key cannot be removed if the cap is not locked properly.

EW000023

⚠WARNING

Be sure the cap is properly installed and locked in place before riding the motorcycle.



1. Filler tube
2. Fuel level

EAU01183

Fuel

Make sure there is sufficient fuel in the tank. Fill the fuel tank to the bottom of the filler tube as shown in the illustration.

EW000130

⚠WARNING

Do not overfill the fuel tank. Avoid spilling fuel on the hot engine. Do not fill the fuel tank above the bottom of the filler tube or it may overflow when the fuel heats up later and expands.

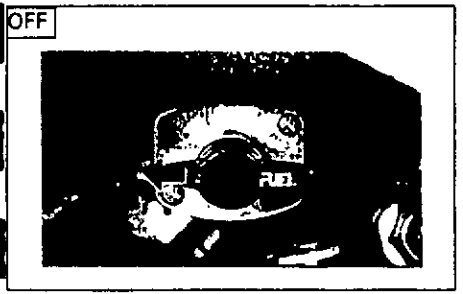
EAU00185

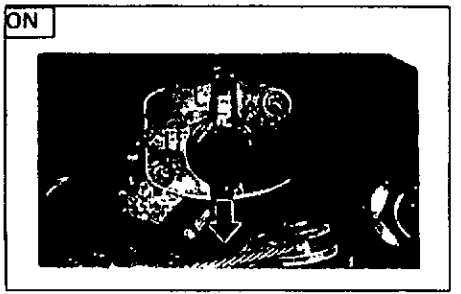
CAUTION:

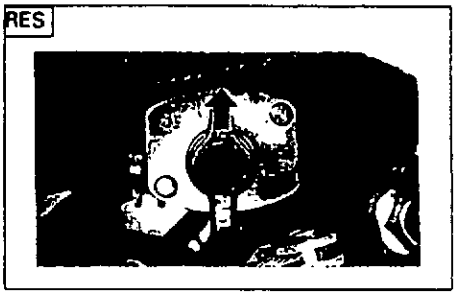
Always wipe off spilled fuel immediately with a dry and clean soft cloth. Fuel may deteriorate painted surfaces or plastic parts.

EAU00192

Recommended fuel:
Regular gasoline
For Australia:
Unleaded fuel only
Fuel tank capacity:
Total:
15 L
Reserve:
2.7 L







EAU00205

Fuel cock

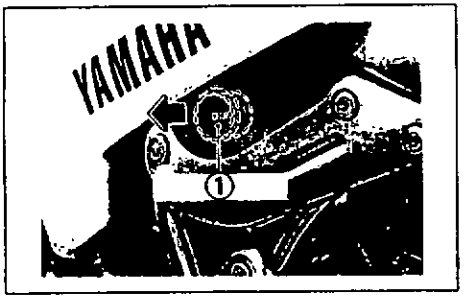
The fuel cock supplies fuel from the tank to the carburetors while filtering it also.

The fuel cock has three positions:

OFF: With the fuel cock in this position, fuel will not flow. Always set the fuel cock to this position when the engine is not running.

ON: With the fuel cock in this position, fuel flows to the carburetors. Set the fuel cock to this position when starting the engine and while riding.

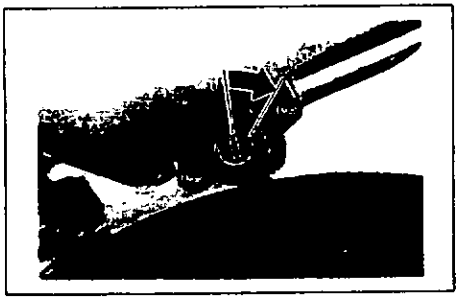
RES: This indicates reserve. If you run out of fuel while riding, move the fuel cock to this position. Fill the tank at the first opportunity. Be sure to set the fuel cock back to "ON" after refueling!



1. Starter (choke)

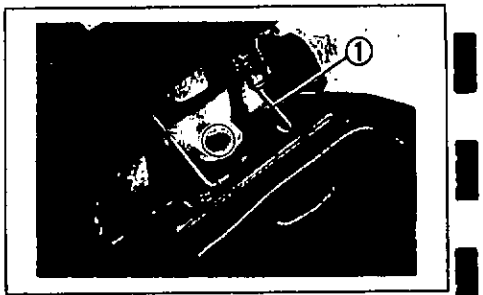
Starter (choke)

Starting a cold engine requires a richer air-fuel mixture. A separate starter circuit supplies this mixture.



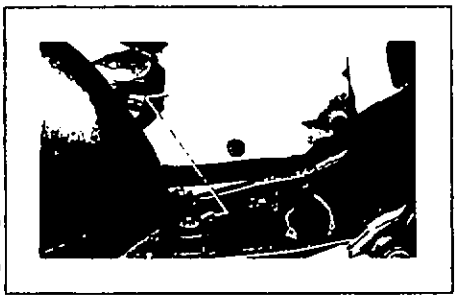
Seat

1. Passenger seat
   a. Insert the key in the lock and turn it clockwise.
   b. Lift the seat slightly upward and unhook the hinge.
   c. When installing the seat, reverse the removal procedures.



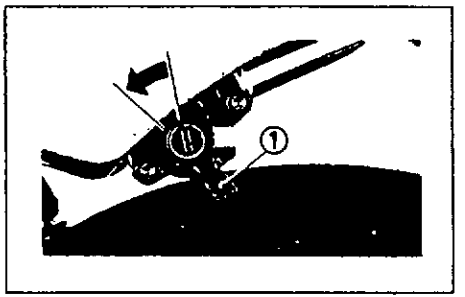
1. Hinge

2. Rider seat
   a. Remove the passenger seat.
   b. Remove the bolt and rider seat.



c. When reinstalling the rider seat, insert the lobe on the seat front into the receptacle on the frame, then tighten the bolt.
d. Reinstall the passenger seat.

NOTE:
Make sure that the seat is securely fitted.



1. Helmet holder

EAU00261

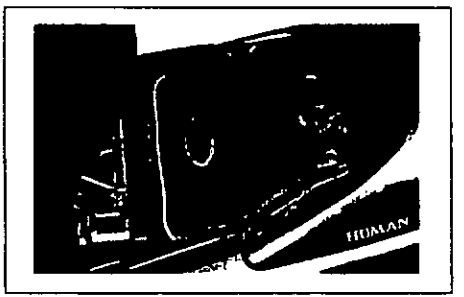
Helmet holder

To open the helmet holder, insert the key in the lock and turn it as shown.
To lock the helmet holder, turn the key to its original position.

EW000030

⚠WARNING

Never ride with a helmet in the helmet holder. The helmet may hit objects, causing loss of control and possibly an accident.



Storage bag

This model is equipped with a storage bag under the passenger seat. It can be fixed to the passenger seat as shown.

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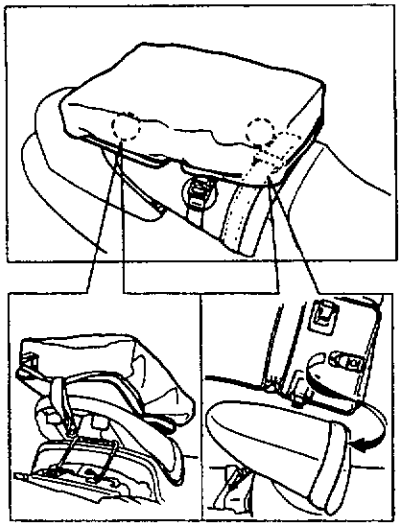
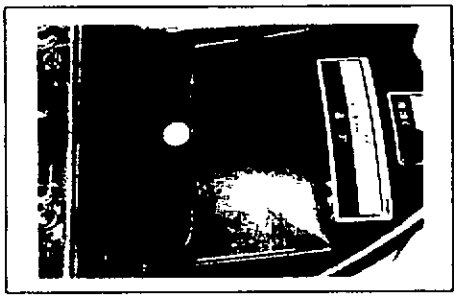
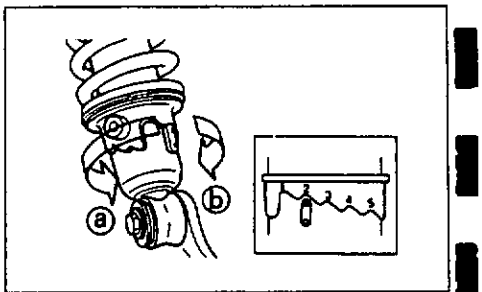






Storage compartment

The storage compartment is located under the passenger seat.

When storing this Owner's manual or other documents in the compartment, be sure to put them in a vinyl bag so they don't get wet. When washing the motorcycle, be careful not to flood this compartment with water.

EAU00300

Rear shock absorber adjustment

Each shock absorber is equipped with a spring preload adjusting ring. Adjust spring preload as follows.

Turn the adjusting ring in direction ⓐ to increase spring preload and in direction ⓑ to decrease spring preload. Make sure that the appropriate notch in the adjusting ring is aligned with the position indicator on the rear shock absorber.

	Hard			Standard	Soft
Adjusting position	5	4	3	2	1

EW000040

⚠WARNING

Always adjust each shock absorber to the same setting. Uneven adjustment can cause poor handling and loss of stability.

EAU00330

Sidestand

This model is equipped with an ignition circuit cut-off system. The motorcycle must not be ridden when the sidestand is down. The sidestand is located on the left side of the frame. (Refer to page 5-1 for an explanation of this system.)

EW000044

⚠WARNING

This motorcycle must not be operated with the sidestand in the down position. If the stand is not properly retracted, it could contact the ground and distract the operator, resulting in a possible loss of control. Yamaha has designed into this motorcycle a lockout system to assist the operator in fulfilling the responsibility of retracting the sidestand. Please check carefully the operating instructions listed below and if there is any indication of a malfunction, return the motorcycle to a Yamaha dealer immediately for repair.

EAU00331

Sidestand/clutch switch operation check

Check the operation of the sidestand switch and clutch switch against the information below.

3

TURN THE MAIN SWITCH TO "ON" AND THE ENGINE STOP SWITCH TO "RUN".

↓

TRANSMISSION IS IN GEAR AND SIDESTAND IS UP.

↓

PULL IN CLUTCH LEVER AND PUSH THE START SWITCH.

↓

ENGINE WILL START.

↓

CLUTCH SWITCH IS OK.

↓

SIDESTAND IS DOWN.

↓

ENGINE WILL STALL.

↓

SIDESTAND SWITCH IS OK.

EW000045

⚠WARNING

If improper operation is noted, consult a Yamaha dealer immediately.

PRE-OPERATION CHECKS

Owners are personally responsible for their vehicle's condition. Your motorcycle's vital functions can start to deteriorate quickly and unexpectedly, even if it remains unused (for instance, if it is exposed to the elements). Any damage, fluid leak or loss of tire pressure could have serious consequences. Therefore, it is very important that, in addition to a thorough visual inspection, you check the following points before each ride.

EAU00340

PRE-OPERATION CHECK LIST

ITEM	CHECKS	PAGE
Brakes	• Check operation, free play, fluid level and fluid leakage. • Fill with DOT 4 brake fluid if necessary.	3-6, 6-15 ~ 6-17
Clutch	• Check operation, condition and free play. • Adjust if necessary.	3-5, 6-14
Throttle grip and housing	• Check for smooth operation. • Lubricate if necessary.	6-11, 6-19
Engine oil	• Check oil level. • Fill with oil if necessary.	6-7
Drive chain	• Check chain slack and condition. • Adjust if necessary.	6-17 ~ 6-19
Wheels and tires	• Check tire pressure, wear and damage.	6-12 ~ 6-14
Control and meter cable	• Check for smooth operation. • Lubricate if necessary.	6-19
Brake and shift pedal shafts	• Check for smooth operation. • Lubricate if necessary.	6-20
Brake and clutch lever pivots	• Check for smooth operation. • Lubricate if necessary.	6-20
Sidestand pivot	• Check for smooth operation. • Lubricate if necessary.	6-20
Chassis fasteners	• Check the tightness of all chassis nuts, bolts, and screws. • Tighten if necessary.	—

PRE-OPERATION CHECKS

ITEM	CHECKS	PAGE
Fuel tank	• Check fuel level. • Fill with fuel if necessary.	3-8
Lights, signals and switches	• Check for proper operation.	—

4

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

If any item in the Pre-Operation Check is not working properly, have it inspected and repaired before operating the motorcycle.

EAU00373

⚠WARNING

1. Before riding this motorcycle, become thoroughly familiar with all operating controls and their functions. Consult a Yamaha dealer regarding any control or function that you do not thoroughly understand.
2. 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.
3. Before starting out, always be sure the sidestand is up. Failure to retract the sidestand completely can result in a serious accident when you try to turn a corner.

EAU01123

Starting and warming up a cold engine

NOTE:

This motorcycle is equipped with an ignition circuit cut-off system.

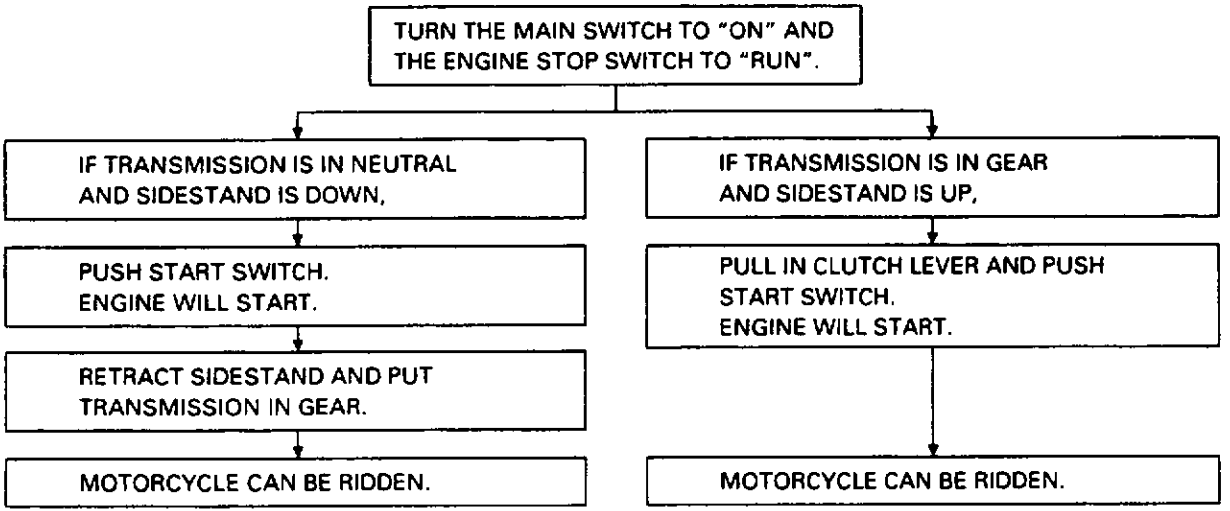
1. The engine can be started only under the following conditions:
   a. The transmission is in neutral.
   b. The sidestand is up, the transmission is in gear and the clutch is disengaged
2. The motorcycle must not be ridden when the sidestand is down.

EW000054

⚠WARNING

Before going through the following steps, check the function of the sidestand switch and clutch switch. (Refer to page 3-14.)

5


TURN THE MAIN SWITCH TO "ON" AND THE ENGINE STOP SWITCH TO "RUN".
IF TRANSMISSION IS IN NEUTRAL AND SIDESTAND IS DOWN,
PUSH START SWITCH. ENGINE WILL START.
RETRACT SIDESTAND AND PUT TRANSMISSION IN GEAR.
MOTORCYCLE CAN BE RIDDEN.
IF TRANSMISSION IS IN GEAR AND SIDESTAND IS UP,
PULL IN CLUTCH LEVER AND PUSH START SWITCH. ENGINE WILL START.
MOTORCYCLE CAN BE RIDDEN.

1. Turn the fuel cock to "ON".
2. Turn the main switch to "ON" and the engine stop switch to "RUN".
3. Shift transmission into neutral.

NOTE:
When the transmission is in neutral, the neutral indicator light should be on. If the light does not come on, ask a Yamaha dealer to inspect it.

4. Turn on the starter (choke) and completely close the throttle grip.
5. Start the engine by pushing the start switch.

NOTE:
If the engine fails to start, release the start switch, wait a few seconds, then try again. Each attempt should be as short as possible to preserve the battery. Do not crank the engine more than 10 seconds on any one attempt.

6. After starting the engine, move the starter (choke) to the halfway position.

NOTE:
For maximum engine life, never accelerate hard with a cold engine!

7. After warming up the engine, turn off the starter (choke) completely.

NOTE:
The engine is warm when it responds normally to the throttle with the starter (choke) turned off.

EAU01258

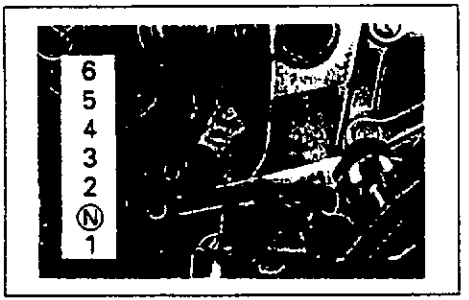
Starting a warm engine

The starter (choke) is not required when the engine is warm.

EC000046

CAUTION:
See the "Engine break-in" section prior to operating the motorcycle for the first time.

5



N. Neutral

EAU00423

Shifting

The transmission lets you control the amount of power you have available at a given speed for starting, accelerating, climbing hills, etc. The use of the shift pedal is shown in the illustration.

To shift into neutral, depress the shift pedal repeatedly until it reaches the end of its travel, then raise the pedal slightly.

EC000048

CAUTION:

1. Do not coast for long periods with the engine off, and do not tow the motorcycle a long distance. Even with gears in neutral, the transmission is only properly lubricated when the engine is running. Inadequate lubrication may damage the transmission.
2. Always use the clutch when changing gears. The engine, transmission, and driveline are not designed to withstand the shock of forced shifting and can be damaged by shifting without using the clutch.

EAU00436

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. 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 1,000 km. The various parts in the engine wear and polish themselves to the correct operating clearances. During this period, prolonged full throttle operation, or any condition which might result in excessive heating of the engine, must be avoided.

EAU00440

1. 0 ~ 150 km:
   Avoid operation above 7,000 r/min. Stop the engine and let it cool for 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. 150 ~ 500 km:
   Avoid prolonged operation above 8,000 r/min. Rev the motorcycle freely through the gears, but do not use full throttle at any time.
3. 500 ~ 1,000 km:
   Avoid prolonged full throttle operation. Avoid cruising speeds in excess of 9,000 r/min.

EC000052

CAUTION:

After 1,000 km of operation, be sure to replace the engine oil and oil filter.

4. 1,000 km and beyond:
   Full throttle can be used.

EC000053

CAUTION:

- **Never let engine speeds enter the red zone.**
- **If any engine trouble should occur during the break-in period, consult a Yamaha dealer immediately.**

EAU00457

Parking

When parking the motorcycle, stop the engine and remove the ignition key. Turn the fuel cock to "OFF" whenever stopping the engine.

EW000058

⚠WARNING

The exhaust system is 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 may overturn.

5

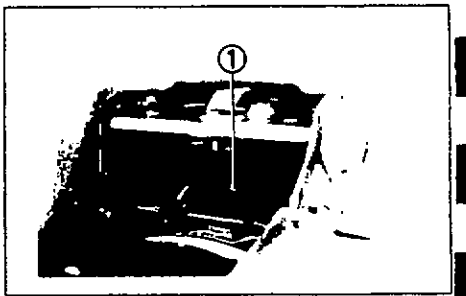
EAU00464

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 maintenance and lubrication schedule chart should be considered strictly as a guide to general maintenance and lubrication intervals. YOU MUST TAKE INTO CONSIDERATION THAT WEATHER, TERRAIN, GEOGRAPHICAL LOCATIONS, AND A VARIETY OF INDIVIDUAL USES ALL TEND TO DEMAND THAT EACH OWNER ALTER THIS TIME SCHEDULE TO SHORTER INTERVALS TO MATCH THE ENVIRONMENT. The most important points of motorcycle inspection, adjustment, and lubrication are explained in the following pages.

EW000060

⚠WARNING

If you are not familiar with motorcycle service, this work should be done by a Yamaha dealer.



1. Tool kit

EAU00470

Tool kit

The tool kit is located inside of the storage compartment. (See page 3-12 for compartment opening procedures.)The tools provided in the owner's tool kit are to assist you in the performance of periodic maintenance. However, some other tools such as a torque wrench are also necessary to perform the maintenance correctly.
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.

NOTE:

If you do not have necessary tools required during a service operation, take your motorcycle to a Yamaha dealer for service.

EW000063

⚠WARNING

Modifications to this motorcycle not approved by Yamaha may cause loss of performance, and render it unsafe for use. Consult a Yamaha dealer before attempting any changes.

EAU00473

PERIODIC MAINTENANCE AND LUBRICATION

No.		ITEM	CHECKS AND MAINTENANCE JOBS	After break-in (1,000 km)	EVERY	
					6,000 km or 6 months (Whichever comes first)	12,000 km or 12 months (Whichever comes first)
1	*	Fuel line	• Check fuel hoses for cracks or damage. • Replace if necessary.		√	√
2		Spark plugs	• Check condition. • Clean, regap or replace if necessary.	√	√	√
3	*	Valves	• Check valve clearance. • Adjust if necessary.	Every 42,000 km or 42 months (whichever comes first)		
4		Air filter	• Clean or replace if necessary.		√	√
5		Clutch	• Check operation. • Adjust or replace cable.		√	√
6	*	Front brake	• Check operation, fluid level and vehicle for fluid leakage. (See NOTE on page 6-5.) • Correct accordingly. • Replace brake pads if necessary.		√	√
7	*	Rear brake	• Check operation, fluid level and vehicle for fluid leakage. (See NOTE on page 6-5.) • Correct accordingly. • Replace brake pads if necessary.		√	√
8	*	Wheels	• Check balance, runout, and for damage. • Rebalance or replace if necessary.		√	√
9	*	Tires	• Check tread depth and for damage. • Replace if necessary. • Check air pressure. • Correct if necessary.		√	√

No.		ITEM	CHECKS AND MAINTENANCE JOBS	After break-in (1,000 km)	EVERY 6,000 km or 6 months (Whichever comes first)	EVERY 12,000 km or 12 months (Whichever comes first)
10	•	Wheel bearings	• Check bearing for looseness or damage. • Replace if necessary.		√	√
11	•	Swingarm	• Check swingarm pivoting point for play. • Correct if necessary.		√	√
12		Drive chain	• Check chain slack. • Adjust if necessary. Make sure that the rear wheel is properly aligned. • Clean and lubricate.	Every 500 km and after washing the motorcycle or riding in the rain		
13	•	Steering bearings	• Check bearing play and steering for roughness. • Correct accordingly. • Lubricate with lithium soap base grease every 24,000 km or 24 months (whichever comes first).	√		√
14	•	Chassis fasteners	• Make sure that all nuts, bolts and screws are properly tightened. • Tighten if necessary.	√	√	√
15		Sidestand	• Check operation. • Lubricate and repair if necessary.	√	√	√
16	•	Sidestand switch	• Check operation. • Replace if necessary.	√	√	√
17	•	Front fork	• Check operation and for oil leakage. • Correct accordingly.		√	√
18	•	Rear shock absorber assemblies	• Check operation and shock absorbers for oil leakage. • Replace shock absorber assembly if necessary.		√	√
19	•	Carburetors	• Check engine idling speed, synchronization and starter operation. • Adjust if necessary.		√	√√

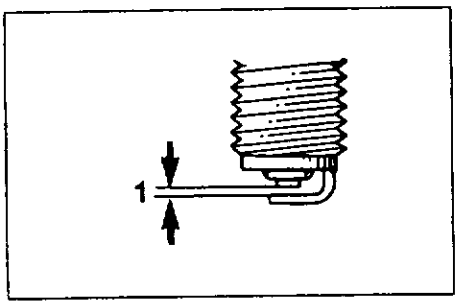
No.		ITEM	CHECKS AND MAINTENANCE JOBS	After break-in (1,000 km)	EVERY 6,000 km or 6 months (Whichever comes first)	EVERY 12,000 km or 12 months (Whichever comes first)
20		Engine oil	• Check oil level and vehicle for oil leakage. • Correct if necessary. • Change. (Warm engine before draining.)	√	√	√
21		Engine oil filter element	• Replace.	√		√
22	*	Cooling system	• Check coolant level and vehicle for coolant leakage. • Correct if necessary. • Change coolant every 24,000 km or 24 months.		√	√

*: Since these items require special tools, data and technical skills, they should be serviced by a Yamaha dealer.

EAU00477

NOTE:

- The air filter needs more frequent service if you are riding in unusually wet or dusty areas.
- Brake fluid replacement
  1. When disassembling the master cylinder or caliper cylinder, always replace the brake fluid. Check the brake fluid level regularly and fill as required.
  2. Replace the oil seals on the inner parts of the master cylinder and caliper cylinder every two years.
  3. Replace the brake hoses every four years or if cracked or damaged.



1. Spark plug gap

EAU00496

Spark plug inspection

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

Normally, all spark plugs from the same engine should have the same color on the white insulator around the center electrode. The ideal color at this point is a medium-to-light tan color for a motorcycle that is being ridden normally. If one spark plug shows a distinctly different color, there could be something wrong with the engine.

Do not attempt to diagnose such problems yourself. Instead, take the motorcycle to a Yamaha dealer. You should periodically remove and inspect the spark plugs 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 the specified plug.

Specified spark plug:
CR8E (NGK) or
U24ESR-N (DENSO)

Before installing any spark plug, measure the electrode gap with a wire thickness gauge. Adjust the gap to specification.

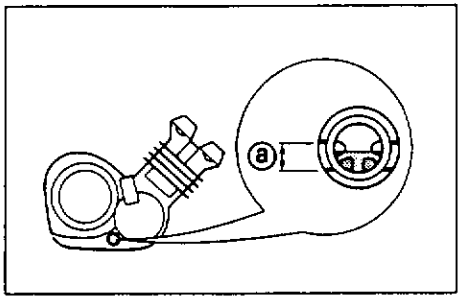
Spark plug gap:
0.7 ~ 0.8 mm

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

Tightening torque:
Spark plug:
13 Nm (1.3 m•kg)

NOTE:

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



a. Specified range

EAU00515

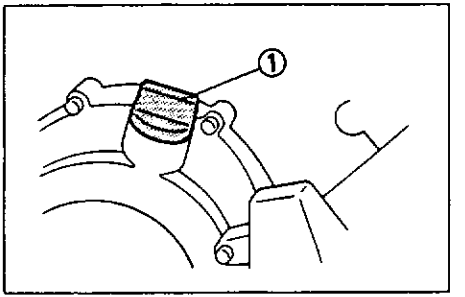
Engine oil

Oil level inspection:

a. Place the motorcycle on a level place and hold it in an upright position. Warm up the engine for several minutes.

NOTE:

Be sure the motorcycle is positioned straight up when checking the oil level. A slight tilt toward the side can result in false readings.



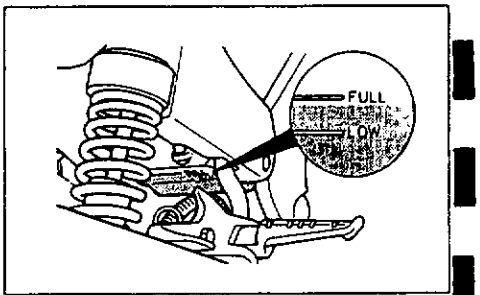
1. Oil filler cap

b. With the engine stopped, check the oil level through the level window located at the lower part of the right side crankcase cover.

NOTE:

Wait a few minutes until the oil level settles before checking.

c. The oil level should be between maximum level and minimum level marks. If the level is low, fill engine with sufficient oil to raise it to the specified level.



EAU01179

Cooling system

Check the coolant level in the reservoir tank when the engine is cold. The coolant level will vary with engine temperature. The coolant level is satisfactory if it is between the minimum and maximum marks on the tank. If the coolant level is at or below the minimum mark, fill with tap water (soft water) to bring the level up to the maximum mark. Change the coolant every two years.

EW000087

⚠WARNING

Do not remove the radiator cap when the engine is hot.

EC000080

CAUTION:

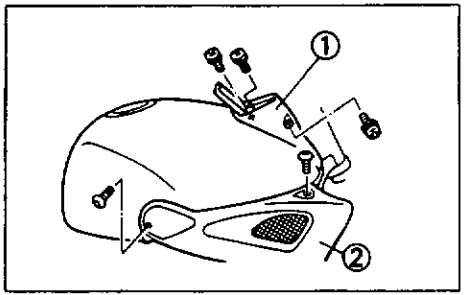
Hard water or salt water is harmful to the engine. You may use distilled water if you can't get soft water.

EAU00566

Radiator fan

Operation

The radiator fan operation is completely automatic. It is switched on or off according to the coolant temperature in the radiator.

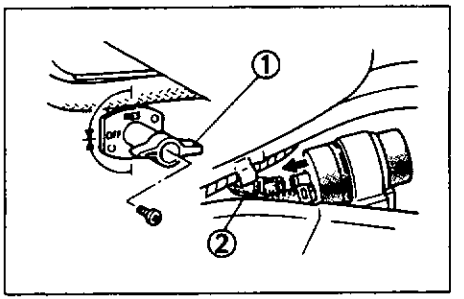


1. Pouch
2. Air scoop

Air filter

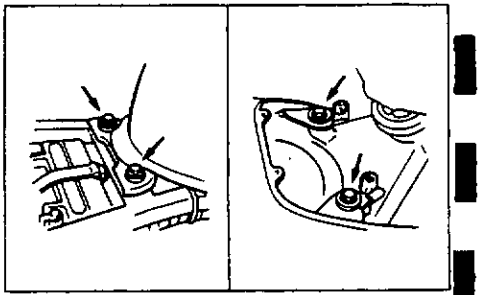
The air filter should be cleaned at the specified intervals. It should be cleaned more frequently if you are riding in unusually wet or dusty areas.

1. Remove the seat.
2. Remove the air scoop holding screws (left and right) and remove the air scoop.
3. Remove the pouch holding screws and remove the pouch.

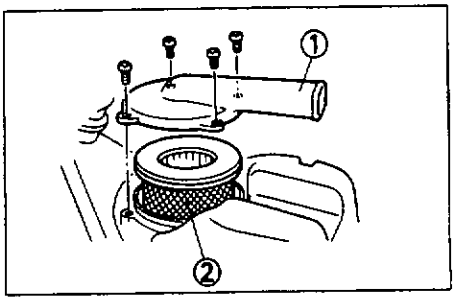


1. Fuel cock lever
2. Fuel hose

4. Turn the fuel cock lever to "OFF", and then remove the fuel cock lever.
5. Disconnect the fuel hose.

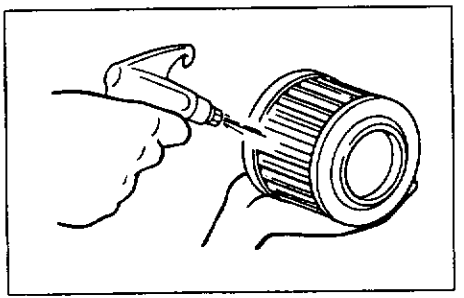


6. Remove the fuel tank holding bolts and the fuel tank.



1. Air filter case cover
2. Air filter element

7. Remove the air filter case cover by removing the screws.
8. Pull out the air filter.



9. Tap the air filter lightly to remove most of the dust and dirt and blow out the remaining dirt with compressed as shown. If the air filter is damaged, replace it.
10. Reassemble by reversing the removal procedure.

EC000082

CAUTION:

- **Make sure the air filter is properly seated in the air filter case.**
- **The engine should never be run without the air filter installed. Excessive piston and/or cylinder wear may result.**

6

Carburetor adjustment

The carburetors are important parts of the engine and require very sophisticated adjustment. Most adjustments should be left to a Yamaha dealer who has the professional knowledge and experience to do so.

EC000095

CAUTION:

The carburetors were set at the Yamaha factory after many tests. If they are changed, poor engine performance and damage may result.

EAU00635

Throttle cable free play inspection

There should be a free play of 3 ~ 7 mm at the throttle grip. If the free play is incorrect, ask a Yamaha dealer to make this adjustment.

EAU00637

Valve clearance adjustment

The correct valve clearance changes with use, resulting in improper fuel/air supply or engine noise. To prevent this, the valve clearance must be adjusted regularly. This adjustment however, should be left to a professional Yamaha service technician.

EAU00648

Tires

To ensure maximum performance, long service and safe operation, note the following:

1. Tire air pressure
   Always check and adjust the tire pressure before operating the motorcycle.

EW000082

⚠WARNING

Tire inflation pressure should be checked and adjusted when the temperature of the tire equals the ambient air temperature. Tire inflation pressure must be adjusted according to total weight of cargo, rider, passenger, and accessories (fairing, saddlebags, etc. if approved for this model), and vehicle speed.

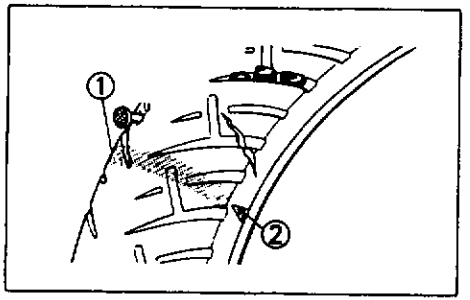
Maximum load*	110 kg	
Cold tire pressure:	Front	Rear
Up to 90 kg load	175 kPa (1.75 kg/cm², 1.75 bar)	200 kPa (2.00 kg/cm², 2.00 bar)
90 kg load - Maximum load*	200 kPa (2.00 kg/cm², 2.25 bar)	225 kPa (2.25 kg/cm², 2.25 bar)
High speed riding	200 kPa (2.00 kg/cm², 2.00 bar)	225 kPa (2.25 kg/cm², 2.25 bar)

* Load is the total weight of cargo, rider, passenger, and accessories.

EW000083

⚠WARNING

Proper loading of your motorcycle is important for several characteristics of your motorcycle, such as handling, braking, performance and safety. Do not carry loosely packed items that can shift. Securely pack your heaviest items close to the center of the motorcycle, and distribute the weight evenly from side to side. Properly adjust the suspension for your load, and check the condition and pressure of your tires. NEVER OVERLOAD YOUR MOTORCYCLE. Make sure the total weight of the cargo, rider, passenger, and accessories (fairing, saddlebags, etc. if approved for this model) does not exceed the maximum load of the motorcycle. Operation of an overloaded motorcycle could cause tire damage, an accident, or even injury.



1. Wear indicator
2. Wear indicator mark

2. Tire inspection

Always check the tires before operating the motorcycle. If a tire tread shows crosswise lines (minimum tread depth), if the tire has a nail or glass fragments in it, or if the side wall is cracked, contact a Yamaha dealer immediately and have the tire replaced.

FRONT:

Manufacturer	Size	Type
YOKOHAMA	110/70-17 54H	F005A
DUNLOP	110/70-17 54H	D102TⒼ

REAR:

Manufacturer	Size	Type
YOKOHAMA	140/70-17 66H	R005A
DUNLOP	140/70-17 66H	D102Ⓖ

Minimum tire tread depth : (front and rear)	1.0 mm

NOTE:

These limits may be different by regulation from country to country. If so, conform to the limits specified by the regulations of your own country.

EAU00683

⚠WARNING

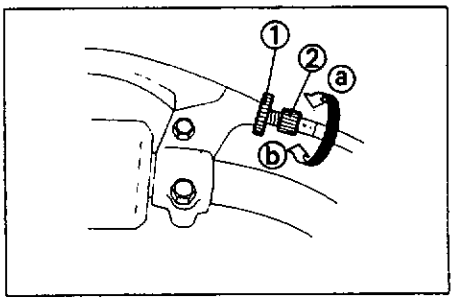
Operating the motorcycle with excessively worn tires decrease riding stability and can lead to loss of control. Have excessively worn tires replaced by a Yamaha dealer immediately. Brakes, tires, and related wheel parts replacement should be left to a Yamaha Service Technician.

EAU00687

Wheels

To ensure maximum performance, long service, and safe operation, note the following:

1. Always inspect the wheels before a ride. Check for cracks, bends, or warpage of the wheels. If any abnormal condition exists in a wheel, consult a Yamaha dealer. Do not attempt even small repairs to the wheel. If a wheel is deformed or cracked, it must be replaced.
2. Tires and wheels should be balanced whenever either one is changed or replaced. Failure to have a wheel balanced can result in poor performance, adverse handling characteristics, and shortened tire life.
3. Ride at moderate speeds after changing a tire since the tire surface must first be broken in for it to develop its optimal characteristics.



1. Locknut
2. Adjusting bolt

EAU00692

Clutch lever free play adjustment

The clutch lever free play should be adjusted to 10 ~ 15 mm. If the free play is incorrect, adjust as follows.

1. Loosen the locknut.
2. Turn the adjusting bolt at the clutch lever in direction ⓐ to increase free play or in direction ⓑ to decrease free play.
3. Tighten the locknut.

NOTE:

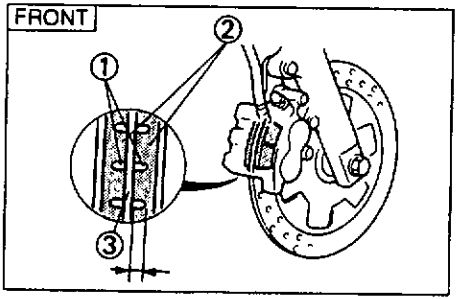
If proper adjustment cannot be obtained or the clutch does not work correctly, ask a Yamaha dealer to inspect the internal clutch mechanism.

6

EAU00713*

Brake light switch adjustment

The rear brake light switch is activated by the brake pedal and is properly adjusted when the brake light comes on just before braking takes effect. To adjust the rear brake light switch, hold the switch body so it does not rotate while turning the adjusting nut.



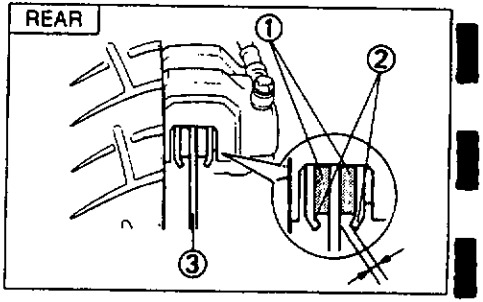
1. Wear indicator
2. Brake pad
3. Brake disc

Checking the front and rear brake pads

EAH81740

FRONT

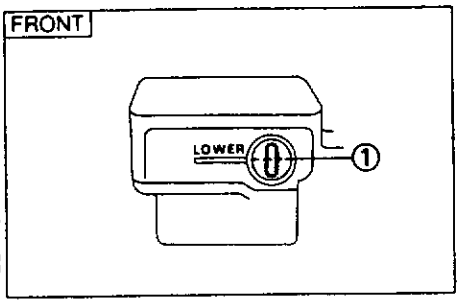
A wear indicator groove is provided on each brake pad. This indicator allows checking of brake pad wear without disassembling the brake. Inspect the groove. If the groove has almost disappeared, ask a Yamaha dealer to replace the pads.



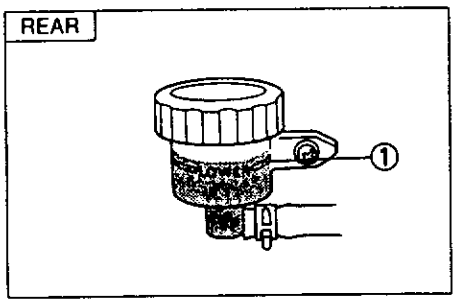
1. Brake pad
2. Wear indicator
3. Brake disc

REAR

Apply the brake and inspect the wear indicator. If the indicator is ALMOST in contact with the disc plate, ask a Yamaha dealer to replace the pads.



1. Minimum level



1. Minimum level

EAU00731

Inspecting the brake fluid level

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

Before riding, check that the brake fluid is above the minimum level and replenish when necessary. Observe these precautions:

1. When checking the fluid level, make sure the top of the master cylinder is level by turning the handlebars.
2. Use only the designated quality brake fluid. Otherwise, the rubber seals may deteriorate, causing leakage and poor brake performance.

Recommended brake fluid:
DOT 4

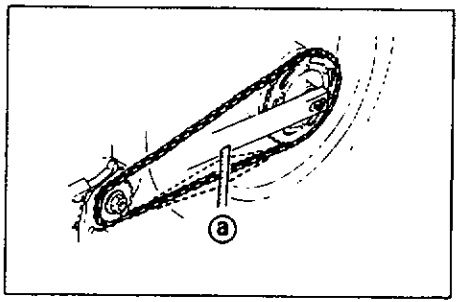
3. Refill with the same type of brake fluid. Mixing fluids may result in a harmful chemical reaction and lead to poor brake performance.
4. Be careful that water does not enter the master cylinder when refilling. Water will significantly lower the boiling point of the fluid and may result in vapor lock.
5. Brake fluid may deteriorate painted surfaces or plastic parts. Always clean up spilled fluid immediately.
6. Have a Yamaha dealer check the cause if the brake fluid level goes down.

Brake fluid replacement

EAU00742

The brake fluid should be replaced only by trained Yamaha service personnel. Have the Yamaha dealer replace the following components during periodic maintenance or when they are damaged or leaking:

a. oil seals (every two years)
b. brake hoses (every four years)



a. 20 ~ 30 mm

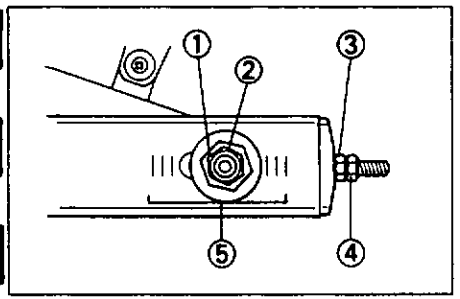
Drive chain slack check

EAU00744

NOTE:

Spin the wheel several times and find the tightest position of the chain. Check and/or adjust the chain slack while it's in this tightest position.

To check the chain slack the motorcycle must be held straight up with both wheels on the ground and without rider. Check the slack at the position shown in the illustration. Normal slack is approximately 20 ~ 30 mm. If the slack exceeds 30 mm, adjust.



1. Axle locknut
2. Axle nut
3. Adjuster
4. Locknut
5. Alignment marks

EAU00782

Drive chain slack adjustment

1. Loosen the axle locknut and the axle nut.
2. Loosen the locknuts on each side. Turn each adjusting nut exactly the same amount to maintain correct axle alignment. There are marks on each side of the swingarm. Use these marks to align the rear wheel.

EC000096

CAUTION:

Too little chain slack will overload the engine and other vital parts. Keep the slack within the specified limits.

3. After adjusting, tighten the locknuts. Then tighten the axle nut and the axle locknut to the specified torque.

Tightening torque:
Axle nut:
104 Nm (10.4 m•kg)
Axle locknut:
46 Nm (4.6 m•kg)

EAU00769

Drive chain lubrication

The chain consists of many parts which work with each other. If the chain is not maintained properly, it will wear out quickly. Therefore, the chain must be serviced regularly. This service is especially necessary when riding in dusty areas. This motorcycle is equipped with a sealed type chain. Steam cleaning, high-pressure washes, and solvents can damage chain so do not use these for cleaning it. Use only kerosene to clean the drive chain. Wipe it dry, and thoroughly lubricate it with SAE 30 ~ 50W motor oil. Do not use any other lubricants on the drive chain. They may contain solvents that could damage the sealed chain.

EC000097

CAUTION:

Be sure to oil the chain after washing the motorcycle or riding in the rain.

EAU00772

Cable inspection and lubrication

EW000112

WARNING

Damage to the outer housing of cables may lead to internal rusting and interfere with the cable movement. Replace damaged cables as soon as possible to prevent unsafe conditions.

Lubricate the cables and cable ends. If a cable does not operate smoothly, ask a Yamaha dealer to replace it.

Recommended lubricant:
Same as engine oil

EAU00773

Throttle cable and grip lubrication

The throttle twist grip assembly should be greased at the time that the cable is lubricated, since the grip must be removed to get at the end of the throttle cable. After removing the screws, hold the end of the cable up in the air and put in several drops of lubricant. With the throttle grip disassembled, coat the metal surface of the grip assembly with a suitable all-purpose grease.

EAU00776

Brake and shift pedal lubrication

Lubricate the pivoting parts.

Recommended lubricant:
Same as engine oil

EAU00778

Brake and clutch lever lubrication

Lubricate the pivoting parts.

Recommended lubricant:
Same as engine oil

EAU00785

Sidestand lubrication

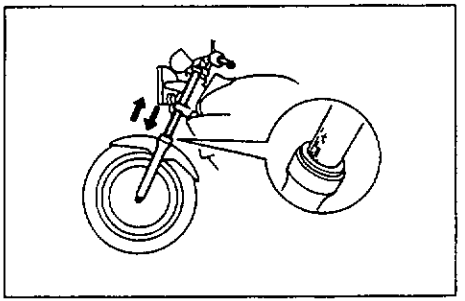
Lubricate the sidestand pivoting point and metal-to-metal contact surfaces. Check that the sidestand moves up and down smoothly.

Recommended lubricant:
Same as engine oil

EW000113

⚠WARNING

If the sidestand does not move smoothly, consult a Yamaha dealer.



EAU00793

Front fork inspection

EW000115

⚠WARNING

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

1. Visual check
   Check for scratches or damage on the inner tube and excessive oil leakage from the front fork.
2. Operation check
   Place the motorcycle on a level place.
   a. Hold the motorcycle in an upright position and apply the front brake.
   b. Push down hard on the handlebars several times and check if the fork rebounds smoothly.

EC000098

CAUTION:

If any damage or unsmooth movement is found with the front fork, consult a Yamaha dealer.

EAU00794

Steering inspection

Periodically inspect the condition of the steering. Worn out or loose steering bearings may be dangerous. Place a stand under the engine to raise the front wheel off the ground. Hold the lower end of the front forks and try to move them forward and backward. If any free play can be felt, ask a Yamaha dealer to inspect and adjust the steering. Inspection is easier if the front wheel is removed.

EW000115

⚠WARNING

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

EAU01144

Wheel bearings

If there is play in the front or rear wheel hub or if the wheel does not turn smoothly, have a Yamaha dealer inspect the wheel bearings.

EAU00800

Battery

This motorcycle is equipped with a sealed-type battery. Therefore it is not necessary to check the electrolyte or fill the battery with distilled water.

- If the battery seems to have discharged, consult a Yamaha dealer.
- If the motorcycle is equipped with optional electrical accessories, the battery tends to discharge more quickly, so be sure to recharge it periodically.

EC000101

CAUTION:

Never try to remove the sealing caps of the battery cells. The battery will be damaged.

EW000116

WARNING

Battery electrolyte is poisonous and dangerous, causing severe burns, etc. It 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 a 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 an enclosed space. Always shield your eyes when working near batteries.
KEEP OUT OF REACH OF CHILDREN.

6

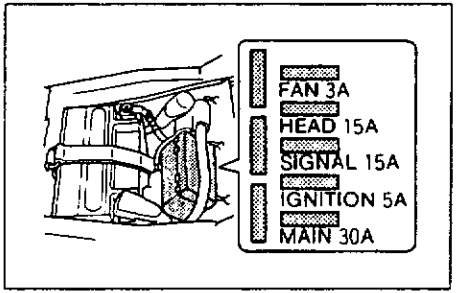
Battery storage

When the motorcycle is not used for a month or longer, remove the battery, fully charge it and store it in a cool, dry place.

EC000102

CAUTION:

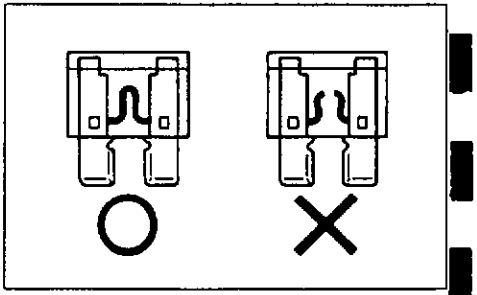
- **Completely recharge the battery before storing. Storing a discharged battery can cause permanent battery damage.**
- **Use a battery charger designed for a sealed-type (MF) battery. Using a conventional battery charger will cause battery damage. If you do not have a sealed-type battery charger, contact your Yamaha dealer.**
- **Always make sure the connections are correct when reinstalling the battery.**



EAU00816*

Fuse replacement

1. The fuse box is located under the seat.
2. If any fuse is blown, turn off the main switch and the switch of the circuit in question. Install a new fuse of specified amperage. Turn on the switches and see if the electrical device operates. If the fuse immediately blows again, consult a Yamaha dealer.



EC000103

CAUTION:

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

Specified fuses:
- Main fuse: 30A
- Ignition fuse: 5A
- Signaling system fuse: 15A
- Headlight fuse: 15A
- Fan motor fuse: 3A

EAU01008

Troubleshooting

Although Yamaha motorcycles receive a rigid inspection before shipment from the factory, trouble may occur during operation.

Any problem in the fuel, compression, or ignition systems can cause poor starting and loss of power. The troubleshooting chart describes a quick, easy procedure for making checks.

If your motorcycle requires any repair, bring it to a Yamaha dealer. The skilled technicians at a Yamaha dealership have the tools, experience, and know-how to properly service your motorcycle. Use only genuine Yamaha parts on your motorcycle. Imitation parts may look like Yamaha parts, but they are often inferior. Consequently, they have a shorter service life and can lead to expensive repair bills.

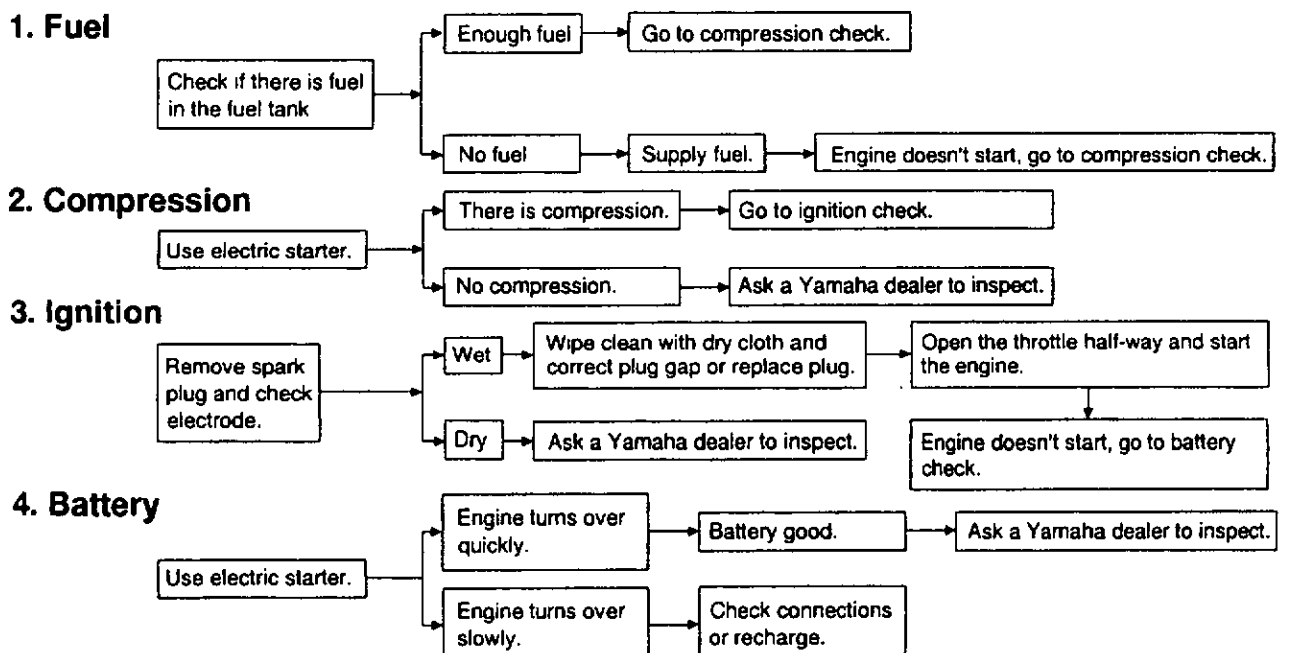
Troubleshooting chart

EAU01263

EW000125

⚠WARNING

Never check the fuel system while smoking or in the vicinity of an open flame.



EAU01018

A. CLEANING

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

1. Before cleaning the motorcycle:
   a. Block off the end of the exhaust pipes to prevent water entry; a plastic bag and strong rubber band may be used.
   b. Make sure the spark plugs and all filler caps are properly installed.
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. Use only enough pressure to do the job.

EC000111

CAUTION:

Excessive hose pressure may cause water seepage and deterioration of wheel bearings, front fork, brakes, transmission seals and electrical parts.
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 toothbrush or bottle brush is handy for hard-to-get-at places.
5. Rinse the motorcycle off immediately with clean water and dry all surfaces with a chamois, clean towel or soft absorbent cloth.
6. Rinse the motorcycle off immediately with clean water and dry all surfaces with a chamois, clean towel, or soft absorbent cloth.
7. Dry the chain and lubricate it to prevent rust.
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 the paint or protective finish.
   When finished, start the engine and let it idle for several minutes.

B. STORAGE

EAU01032

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

1. Fill the fuel tank with fuel and add fuel stabilizer (if available).
2. Remove each spark plug, pour about one tablespoon of engine oil in each spark plug hole and reinstall the spark plugs. Turn the engine over several times (ground spark plug leads) to coat the cylinder walls with oil.

EW000127

⚠WARNING

When using the starter motor to crank the engine, remove the spark plug wires, and ground them to prevent sparking.

3. Clean the chain and lubricate it (refer to "Drive chain lubrication").
4. Lubricate all control cables.
5. Block up the frame to raise both wheels off the ground.
6. Tie a plastic bag over the exhaust pipe outlets to prevent moisture from entering.
7. If storing in a humid or salt-air atmosphere, coat all exposed metal surfaces with a light film of oil. Do not apply oil to any rubber parts or the seat cover.
8. Remove the battery and fully charge it. Store it in a cool, dry place and recharge it once a month. Do not store the battery in an excessively warm or cold place (less than 0°C or more than 30°C). See page 6-23 for battery storage precautions.

NOTE:

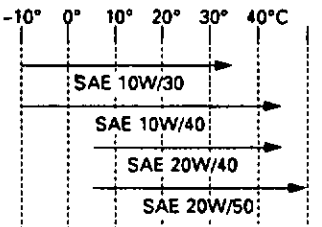
Make any necessary repairs before storing the motorcycle.

Specifications

Model	**FZX250**
Dimensions:	
Overall length	1,990 mm
Overall width	715 mm
Overall height	1,045 mm
Wheel base	1,370 mm
Ground clearance	135 mm
Minimum turning radius	2,500 mm
Basic weight (With oil and full fuel tank):	164 kg
Engine:	
Engine type	Liquid-cooled 4-stroke gasoline, DOHC
Cylinder arrangement	Forward inclined, parallel 4-cylinder
Displacement	249 cm³
Bore × Stroke	48.0 × 34.5 mm
Compression ratio	12.0:1
Starting system	Electric starter
Lubrication system	Wet sump

Engine oil:

Type:



Classification	API Service "SE", "SF" type or equivalent (e.g. "SF-SE", "SF-SE-CC", "SF-SE-SD" etc.)
Capacity:	
Periodic oil change	2.0 L
With oil filter replacement	2.2 L
Total amount	2.7 L
Radiator capacity (including all routes)	1.52 L
Air filter:	Dry type element

8

Fuel:	
Type	Unleaded fuel only (for Australia) Regular gasoline (except for Australia)
Fuel tank capacity	15 L
Reserve amount	2.7 L
Carburetor:	
Type / quantity	BDST26 / 4
Manufacturer	MIKUNI
Spark plug:	
Type / Manufacturer	CR8E / NGK or U24ESR-N / DENSO
Spark plug gap	0.7 ~ 0.8 mm
Clutch type:	Wet, multiple-disc
Transmission:	
Primary reduction system	Spur gear
Primary reduction ratio	2.542
Secondary reduction system	Chain drive
Secondary reduction ratio	3.352
Transmission type	Constant mesh 6-speed
Operation	Left foot operation

Gear ratio	1st	3.090
	2nd	2.214
	3rd	1.684
	4th	1.380
	5th	1.173
	6th	0.956
Chassis:		
Frame type		Diamond
Caster angle		24°
Trail		84 mm
Tire:		
Type		Tubeless
Size:		
Front		110/70-17 54H
Rear		140/70-17 66H
Manufacturer / model:		
Front		YOKOHAMA / F005A DUNLOP / D102F Ⓖ
Rear		YOKOHAMA / R005A DUNLOP / D102 Ⓖ
Maximum load*		110 kg

Air pressure (cold tire):

up to 90 kg load*

Front	175 kPa; 1.75 kg/cm²; 1.75 bar
Rear	200 kPa; 2.00 kg/cm²; 2.00 bar

90 kg load ~ Maximum load*

Front	200 kPa; 2.00 kg/cm²; 2.00 bar
Rear	225 kPa; 2.25 kg/cm²; 2.25 bar

High speed riding

Front	200 kPa; 2.00 kg/cm²; 2.00 bar
Rear	225 kPa; 2.25 kg/cm²; 2.25 bar

*Load is total weight of cargo, rider, passenger and accessories.

Wheels:

Type:

Front	Cast
Rear	Cast

Size:

Front	17 × MT2.75
Rear	17 × MT3.50

Brakes:

Front:

Type	Single disc brake
Operation	Right hand operation
Fluid	DOT 4

Rear:

Type	Single disc brake
Operation	Right foot operation
Fluid	DOT 4

Suspension:

Front

Type	Telescopic fork

Rear

Type	Swingarm

Shock absorber:

Front	Coil spring / oil damper
Rear	Coil spring / oil damper

Wheel travel:

Front	140 mm
Rear	120 mm

Electrical:	
Ignition system:	T.C.I. (digital)
Charging system:	
Type	A.C. magneto
Battery:	
Type	YTX9-BS
Voltage, capacity	12V 8AH
Headlight type	Quartz bulb (Halogen)
Bulb voltage, wattage × quantity:	
Headlight	12V 60W / 55W × 1
Tail / brake light	12V 5W / 21W × 1
Turn signal light	12V 21W × 4
Meter light	12V 1.7W × 4
Neutral indicator light	12N 3.4W × 1
Turn indicator light	12V 3.4W × 1
Coolant temperature indicator light	12V 3.4W × 1
High beam indicator light	12V 3.4W × 1
Overdrive indicator light	12V 3.4W × 1

Fuse:	
Main fuse	30A
Ignition fuse	5A
Signaling system fuse	15A
Headlight fuse	15A
Fan motor fuse	3A

EAU01040*

Identification numbers record

Record the key identification number, vehicle identification number and model label information in the spaces provided for assistance when ordering spare parts from a Yamaha dealer or for reference in case the vehicle is stolen.

1. KEY IDENTIFICATION NUMBER:

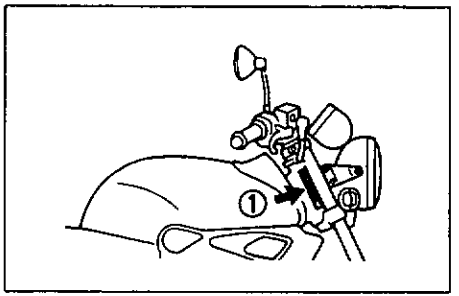
2. VEHICLE IDENTIFICATION NUMBER:

EAU01042

Key identification number

The key identification number is stamped on the key.

Record this number in the space provided and use it for reference when obtaining a new key.



1. Vehicle identification number

EAU01043

Vehicle identification number

The vehicle identification number is stamped into the steering head pipe.

Record this number in the space provided.

NOTE:

The vehicle identification number is used to identify your motorcycle and may be used to register your motorcycle with the licensing authority in your state.

9

EAU01054

NOISE REGULATION (FOR Australia)

"TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED"

Owners are warned that the law may prohibit:

(a) The removal or rendering inoperative by any person other than for purposes of maintenance, repair or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use; and

(b) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

EAU01064

HOW TO USE THE CONVERSION TABLE

All specification data in this manual are listed in SI and METRIC UNITS.
Use this table to convert METRIC unit data to IMPERIAL unit data.

Ex.

METRIC		MULTIPLIER		IMPERIAL
** mm	×	0.03937	=	** in
2 mm	×	0.03937	=	0.08 in

CONVERSION TABLE

METRIC TO IMPERIAL			
	Metric unit	Multiplier	Imperial unit
Torque	m•kg m•kg cm•kg cm•kg	 86.794 0.0723 0.8679	7.233 ft.lb in•lb ft•lb in•lb
Weight	kg g	2.205 0 03527	lb oz
Speed	km/hr	0.6214	mph
Distance	km m m cm mm	0.6214 3.281 1 094 0.3937 0.03937	mi ft yd in in
Volume/ Capacity	cc (cm³) cc (cm³) lt (liter) lt (liter)	0.03527 0.06102 0.8799 0.2199	oz (IMP liq.) cu•in qt (IMP liq.) gal (IMP liq.)
Misc.	kg/mm kg/cm² Centigrade(°C)	55.997 14.2234 9/5 + 32	lb/in psi (lb/in²) Fahrenheit(°F)

9

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