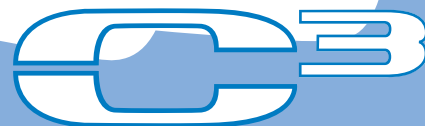




**OWNER'S MANUAL**



***XF50W***

**LIT-11626-20-58**

**3B3-F8199-10**

EAU10041

## **WARNING**

**The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.**

YAMAHA

LIT-CALIF-65-01

# INTRODUCTION

---

EAU10090

Congratulations on your purchase of the Yamaha XF50W. 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 scooter. If you have any questions concerning the operation or maintenance of your scooter, please consult a Yamaha dealer.

The design and manufacture of this Yamaha scooter fully comply with the emissions standards for clean air applicable at the date of manufacture. Yamaha has met these standards without reducing the performance or economy of operation of the scooter. To maintain these high standards, it is important that you and your Yamaha dealer pay close attention to the recommended maintenance schedules and operating instructions contained within this manual.

# IMPORTANT MANUAL INFORMATION

---

EAU35821

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



**The Safety Alert Symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



Failure to follow **WARNING** instructions could result in severe injury or death to the scooter operator, a bystander, or a person inspecting or repairing the scooter.

## **CAUTION:**

A **CAUTION** indicates special precautions that must be taken to avoid damage to the scooter.

## **NOTE:**

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

## **NOTE:**

- This manual should be considered a permanent part of this scooter and should remain with it even if the scooter 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 scooter and this manual. If you have any questions concerning this manual, please consult your Yamaha dealer.

EWA12580



**PLEASE READ THIS MANUAL AND THE “YOU AND YOUR MOTORCYCLE: RIDING TIPS” BOOKLET CAREFULLY AND COMPLETELY BEFORE OPERATING THIS SCOOTER. DO NOT ATTEMPT TO OPERATE THIS SCOOTER UNTIL YOU HAVE ATTAINED ADEQUATE KNOWLEDGE OF ITS CONTROLS AND OPERATING FEATURES AND UNTIL YOU HAVE BEEN TRAINED IN SAFE AND PROPER RIDING TECHNIQUES. REGULAR INSPECTIONS AND CAREFUL MAINTENANCE, ALONG WITH GOOD RIDING SKILLS, WILL ENSURE THAT YOU SAFELY ENJOY THE CAPABILITIES AND THE RELIABILITY OF THIS SCOOTER.**

\*Product and specifications are subject to change without notice.

# IMPORTANT MANUAL INFORMATION

---

AFFIX DEALER

LABEL HERE

EAUT1390

**XF50W**

**OWNER'S MANUAL**

**©2006 by Yamaha Motor Taiwan Co., Ltd.**

**1st edition, September 2006**

**All rights reserved.**

**Any reprinting or unauthorized use  
without the written permission of  
Yamaha Motor Taiwan Co., Ltd.  
is expressly prohibited.  
Printed in Taiwan.**

# TABLE OF CONTENTS

---

## **SAFETY INFORMATION ..... 1-1**

Further safe-riding points ..... 1-4

Location of important labels ..... 1-5

## **DESCRIPTION ..... 2-1**

Left view ..... 2-1

Right view ..... 2-2

Controls and instruments ..... 2-3

## **INSTRUMENT AND CONTROL FUNCTIONS ..... 3-1**

Main switch/steering lock ..... 3-1

Keyhole cover ..... 3-2

Indicator and warning lights ..... 3-2

Speedometer unit ..... 3-3

Fuel gauge ..... 3-3

Handlebar switches ..... 3-4

Front brake lever ..... 3-5

Rear brake lever ..... 3-5

Fuel tank cap ..... 3-5

Fuel ..... 3-6

Catalytic converter ..... 3-7

Kickstarter ..... 3-7

Seat ..... 3-8

Luggage hook ..... 3-8

Helmet holder ..... 3-8

Storage compartment ..... 3-9

## **PRE-OPERATION CHECKS ..... 4-1**

Pre-operation check list ..... 4-2

## **OPERATION AND IMPORTANT RIDING POINTS ..... 5-1**

Starting a cold engine ..... 5-1

Starting off ..... 5-2

Acceleration and deceleration ..... 5-2

Braking ..... 5-2

Engine break-in ..... 5-3

Parking ..... 5-3

## **PERIODIC MAINTENANCE AND MINOR REPAIR ..... 6-1**

PERIODIC MAINTENANCE ..... 6-1

Periodic maintenance chart for the

emission control system ..... 6-2

General maintenance and lubrication

chart ..... 6-3

Removing and installing panels ..... 6-6

Checking the spark plug ..... 6-7

Engine oil and oil strainer ..... 6-8

Final transmission oil ..... 6-10

Coolant ..... 6-11

Replacing the air filter element ..... 6-13

Checking the throttle cable free

play ..... 6-13

Valve clearance ..... 6-13

Tires ..... 6-14

Cast wheels ..... 6-15

Adjusting the brake lever free play ..... 6-15

Adjusting the rear brake lever free

play ..... 6-16

Checking the front and rear brake shoes ..... 6-17

Checking and lubricating the throttle grip and cable ..... 6-17

Lubricating the front and rear brake levers ..... 6-18

Checking and lubricating the centerstand ..... 6-18

Checking the front fork ..... 6-18

Checking the steering ..... 6-19

Checking the wheel bearings ..... 6-20

Battery ..... 6-20

Replacing the fuse ..... 6-21

Replacing the headlight bulb ..... 6-22

Replacing the tail/brake light bulb ..... 6-23

Replacing a turn signal light bulb ..... 6-24

Troubleshooting ..... 6-25

Troubleshooting charts ..... 6-26

## **SCOOTER CARE AND STORAGE ... 7-1**

Care ..... 7-1

Storage ..... 7-3

## **SPECIFICATIONS ..... 8-1**

## **CONSUMER INFORMATION ..... 9-1**

Identification numbers ..... 9-1

Reporting safety defects ..... 9-3

Motorcycle noise regulation ..... 9-4

Maintenance record ..... 9-5

# TABLE OF CONTENTS

---

YAMAHA MOTOR CORPORATION, U.S.A. RIVA LIMITED WARRANTY .....	9-7
YAMAHA EXTENDED SERVICE (Y.E.S.) .....	9-9

# SAFETY INFORMATION

---

EAU10240

SCOOTERS 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 THIS SCOOTER.

HE OR SHE SHOULD:

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

## Safe riding

- Always make pre-operation checks. Careful checks may help prevent an accident.
- This scooter is designed to carry the operator only. No passengers.
- The failure of motorists to detect and recognize scooters in traffic is the predominating cause of automobile/scooter accidents. Many accidents have been caused by an automobile driver who did not see the scooter. Making yourself conspicuous appears to be very effective in reducing the chance of this type of accident.

## Therefore:

- Wear a brightly colored jacket.
- Use extra caution when approaching and passing through intersections, since intersections are the most likely places for scooter accidents to occur.
- Ride where other motorists can see you. Avoid riding in another motorist's blind spot.

- Many accidents involve inexperienced operators. In fact, many operators who have been involved in accidents do not even have a current driver's license.
  - Make sure that you are qualified and that you only lend your scooter to other qualified operators.
  - Know your skills and limits. Staying within your limits may help you to avoid an accident.
  - We recommend that you practice riding your scooter where there is no traffic until you have become thoroughly familiar with the scooter and all of its controls.
- Many accidents have been caused by error of the scooter operator. 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).
  - Always obey the speed limit and never travel faster than warranted by road and traffic conditions.



- Always signal before turning or changing lanes. Make sure that other motorists can see you.
- The posture of the operator is important for proper control. The operator should keep both hands on the handlebar and both feet on the footboard during operation to maintain control of the scooter.
- Never ride under the influence of alcohol or other drugs.
- This scooter is designed for on-road use only. It is not suitable for off-road use.

### **Protective apparel**

The majority of fatalities from scooter 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.

- Always wear an approved helmet.
- Wear a face shield or goggles. Wind in your unprotected eyes could contribute to an impairment of vision that could delay seeing a hazard.
- The use of a jacket, substantial

shoes, trousers, gloves, etc., is effective in preventing or reducing abrasions or lacerations.

- Never wear loose-fitting clothes, otherwise they could catch on the control levers or wheels and cause injury or an accident.
- 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.

### **Modifications**

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

### **Loading and accessories**

Adding accessories or cargo to your scooter can adversely affect stability and handling if the weight distribution of the scooter is changed. To avoid the

possibility of an accident, use extreme caution when adding cargo or accessories to your scooter. Use extra care when riding a scooter that has added cargo or accessories. Here are some general guidelines to follow if loading cargo or adding accessories to your scooter:

#### Loading

The total weight of the operator, accessories and cargo must not exceed the maximum load limit of 85 kg (187 lb). When loading within this weight limit, keep the following in mind:

- Cargo and accessory weight should be kept as low and close to the scooter as possible. Make sure to distribute the weight as evenly as possible on both sides of the scooter to minimize imbalance or instability.
- Shifting weights can create a sudden imbalance. Make sure that accessories and cargo are securely attached to the scooter before riding. Check accessory mounts and cargo restraints frequently.

# SAFETY INFORMATION

---

1

- Never attach any large or heavy items to the handlebar, front fork, or front fender. Such items can create unstable handling or a slow steering response.

## Accessories

Genuine Yamaha accessories have been specifically designed for use on this scooter. Since Yamaha cannot test all other accessories that may be available, you must personally be responsible for the proper selection, installation and use of non-Yamaha accessories. Use extreme caution when selecting and installing any accessories.

Keep the following guidelines in mind, as well as those provided under “Loading” when mounting accessories.

- Never install accessories or carry cargo that would impair the performance of your scooter. Carefully inspect the accessory before using it to make sure that 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.

- 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.
- Bulky or large accessories may seriously affect the stability of the scooter due to aerodynamic effects. Wind may attempt to lift the scooter, or the scooter may become unstable in cross winds. These accessories may also cause instability when passing or being passed by large vehicles.
- 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.

- Use caution when adding electrical accessories. If electrical accessories exceed the capacity of the scooter’s electrical system an electric failure could result, which could cause a dangerous loss of lights or engine power.

## **Gasoline and exhaust gas**

- **GASOLINE IS HIGHLY FLAMMABLE:**
  - Always turn the engine off when refueling.
  - Take care not to spill any gasoline on the engine or exhaust system when refueling.
  - Never refuel while smoking or in the vicinity of an open flame.
- 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 scooter in an area that has ad-



equate ventilation.

- Always turn the engine off before leaving the scooter unattended and remove the key from the main switch. When parking the scooter, note the following:
  - The engine and exhaust system may be hot, therefore, park the scooter in a place where pedestrians or children are not likely to touch these hot areas.
  - Do not park the scooter on a slope or soft ground, otherwise it may fall over.
  - Do not park the scooter near a flammable source (e.g., a kerosene heater, or near an open flame), otherwise it could catch fire.
- 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 the affected area with soap and water and change your clothes.

EAUT2030

## Further safe-riding points

- Make sure to signal clearly when making turns.
- Braking can be extremely difficult on a wet road. Avoid hard braking, because the scooter could slide. Apply the brakes slowly when stopping on a wet surface.
- Slow down as you approach a corner or turn. Once you have completed a turn, accelerate slowly.
- Be careful when passing parked cars. A driver might not see you and open a door in your path.
- Railroad crossings, streetcar rails, iron plates on road construction sites, and manhole covers become extremely slippery when wet. Slow down and cross them with caution. Keep the scooter upright, otherwise it could slide out from under you.
- The brake lining could get wet when you wash the scooter. After washing the scooter, check the brakes before riding.
- Always wear a helmet, gloves, trousers (tapered around the cuff and ankle so they do not flap), and a

bright colored jacket.

- Do not carry too much luggage on the scooter. An overloaded scooter is unstable.

# SAFETY INFORMATION

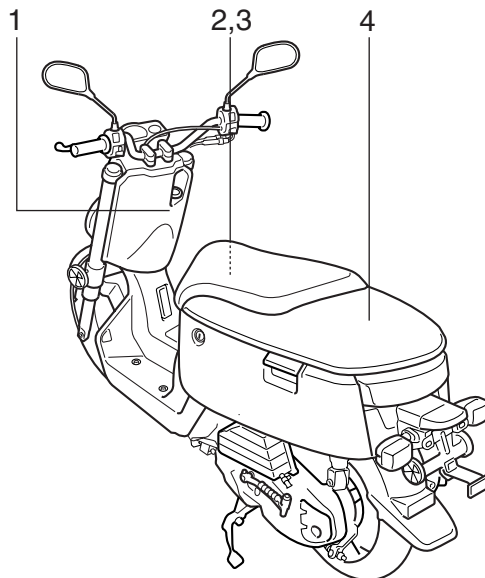
---

EAU10381


## Location of important labels

Please read the following important labels carefully before operating this vehicle.

1



- 1



•BEFORE YOU OPERATE THIS VEHICLE, READ THE OWNER'S MANUAL AND ALL LABELS.  
•NEVER CARRY A PASSENGER. You increase your risk of losing control if you carry a passenger.  
•ALWAYS WEAR AN APPROVED MOTORCYCLE HELMET, eye protection, and protective clothing.  
•LIRE LE MANUEL DU PROPRIETAIRE AINSI QUE TOUTES LES ETIQUETTES AVANT D'UTILISER CE VEHICULE.  
•NE JAMAIS TRANSPORTER DE PASSAGER. La conduite avec passager augmente les risques de perte de contrôle.  
•TOUJOURS PORTER UN CASQUE DE MOTOCYCLISTE APPROUVE, des lunettes et des vêtements de protection.

3D1-F118K-00
- 3

**TIRE INFORMATION**

Cold tire normal pressure should be set as follows.

FRONT : 175 kPa. {1.75 kg f/cm<sup>2</sup>}. 25 psi.  
REAR : 175 kPa. {1.75 kg f/cm<sup>2</sup>}. 25 psi.

3B3-F1668-00
- 2

**LOAD LIMIT**

5kg{11lbs}

5PJ-F4877-00
- 4

**▲ WARNING**

NEVER sit here

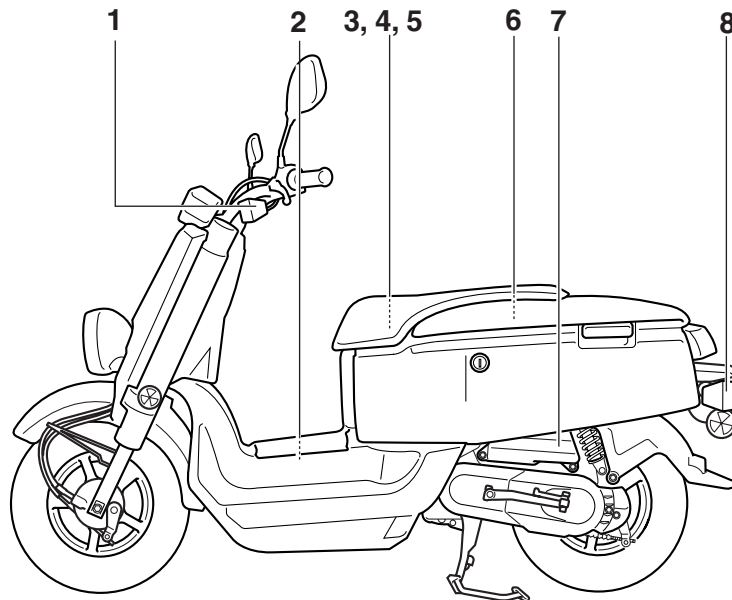
5PJ-F4875-00

# DESCRIPTION

EAU10410

## Left view

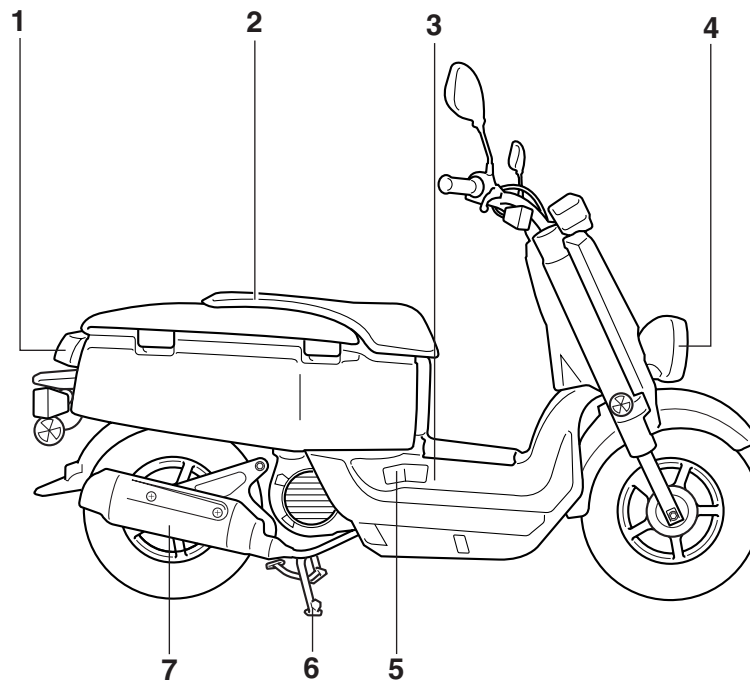
2



1. Front turn signal light (page 6-24)
2. Fuel tank cap (page 3-5)
3. Luggage hook (page 3-8)
4. Helmet holder (page 3-8)
5. Battery (page 6-20)
6. Storage compartment (page 3-9)
7. Air filter (page 6-13)
8. Rear turn signal light (page 6-24)

EAU10420

## Right view



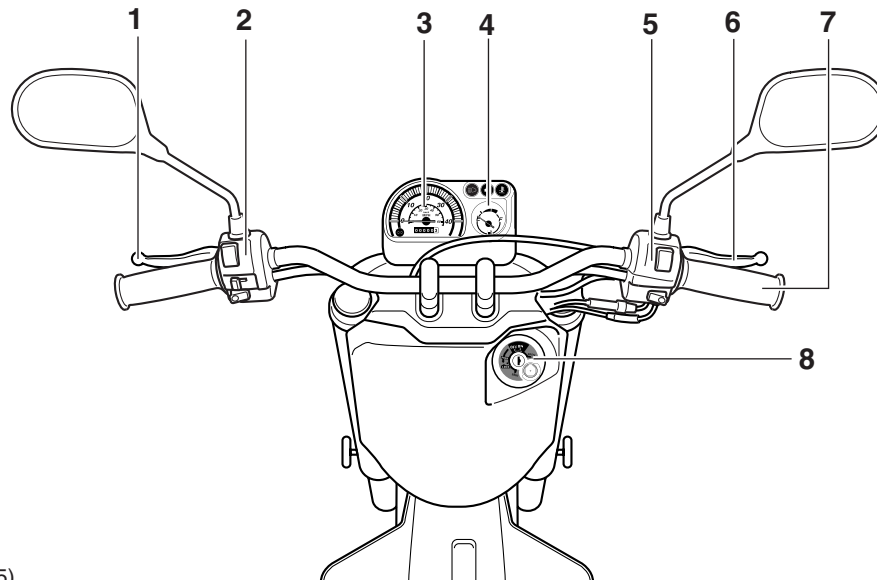
- 1. Tail/brake light (page 6-23)
- 2. Seat (page 3-8)
- 3. Coolant reservoir (page 6-11)
- 4. Headlight (page 6-22)
- 5. Spark plug (page 6-7)
- 6. Centerstand (page 6-18)
- 7. Muffler (page 3-7)

# DESCRIPTION

EAU10430

## Controls and instruments

2



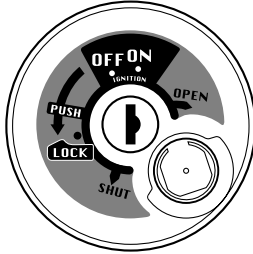
1. Rear brake lever (page 3-5)
2. Left handlebar switches (page 3-4)
3. Speedometer unit (page 3-3)
4. Fuel gauge (page 3-3)
5. Right handlebar switches (page 3-4)
6. Front brake lever (page 3-5)
7. Throttle grip (page 6-17)
8. Main switch/steering lock (page 3-1)



# INSTRUMENT AND CONTROL FUNCTIONS

## Main switch/steering lock

EAU10460



ZAUM001

The main switch/steering lock controls the ignition and lighting systems, and is used to lock the steering. The various positions are described below.

### ON

EAUT2060

All electrical circuits are supplied with power, and the meter lighting, taillight, and license plate light come on, and the engine can be started. The key cannot be removed.

### NOTE:

The headlight comes on automatically when the engine is started and stays on until the key is turned to "OFF", even if the engine stalls.

### OFF

EAU10660

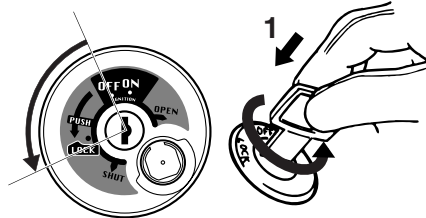
All electrical systems are off. The key can be removed.

### LOCK

EAU10680

The steering is locked, and all electrical systems are off. The key can be removed.

### To lock the steering

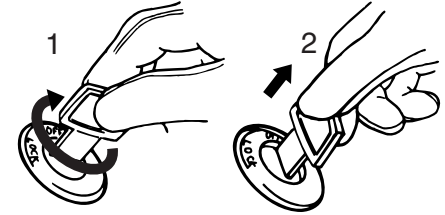


ZAUM001

#### 1. Push.

1. Turn the handlebars all the way to the left.
2. Push the key in from the "OFF" position, and then turn it to "LOCK" while still pushing it.
3. Remove the key.

### To unlock the steering



ZAUM001

1. Turn.
2. Release.

Push the key in, and then turn it to "OFF" while still pushing it.

EWA10060

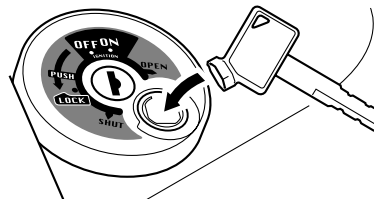
### **WARNING**

Never turn the key to "OFF" or "LOCK" while the vehicle is moving, otherwise the electrical systems will be switched off, which may result in loss of control or an accident. Make sure that the vehicle is stopped before turning the key to "OFF" or "LOCK".

# INSTRUMENT AND CONTROL FUNCTIONS

## Keyhole cover

EAUT2120



ZAUM00\*\*

### To open the keyhole cover

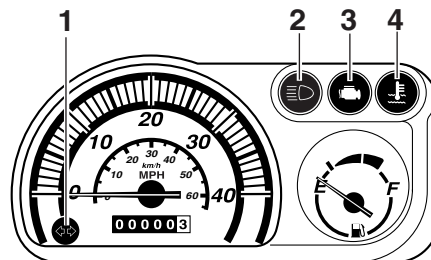
Insert the key bow into the keyhole cover receptacle as shown, and then turn the key to "OPEN" to open the cover.

### To close the keyhole cover

Insert the key bow into the keyhole cover receptacle as shown, and then turn the key to "SHUT" to close the cover.

## Indicator and warning lights

EAU11003



ZAUM00\*\*

1. Turn signal indicator light "↔"
2. High beam indicator light "≡"
3. Engine trouble warning light "🔧"
4. Coolant temperature warning light "🌡"

EAU11020

### Turn signal indicator light "↔"

This indicator light flashes when the turn signal switch is pushed to the left or right.

EAU11080

### High beam indicator light "≡"

This indicator light comes on when the high beam of the headlight is switched on.

EAU11440

## Coolant temperature warning light "🌡"

This warning light comes on when the engine overheats. When this occurs, stop the engine immediately and allow the engine to cool.

The electrical circuit of the warning light can be checked by turning the key to "ON".

If the warning light does not come on for a few seconds, then go off, have a Yamaha dealer check the electrical circuit.

ECA10020

### CAUTION:

**Do not operate the engine if it is overheated.**

# INSTRUMENT AND CONTROL FUNCTIONS

## Engine trouble warning light “”

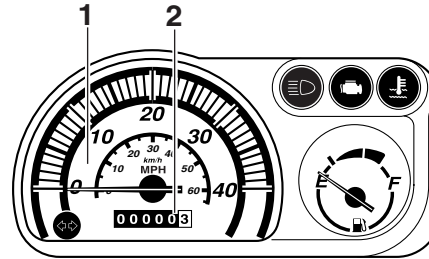
EAUT1930

This warning light flashes when an electrical circuit monitoring the engine is defective. When this occurs, have a Yamaha dealer check the self-diagnosis system.

The electrical circuit of the warning light can be checked by turning the key to “ON”. If the warning light does not come on for a few seconds, then go off, have a Yamaha dealer check the electrical circuit.

## Speedometer unit

EAUT1820



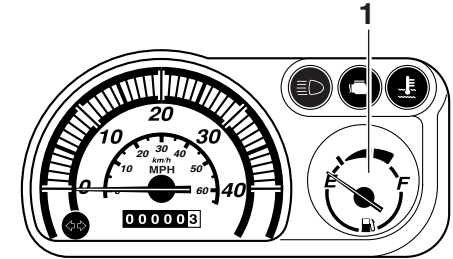
ZAUM001

1. Speedometer
2. Odometer

The speedometer unit is equipped with a speedometer and an odometer. The speedometer shows the riding speed. The odometer shows the total distance traveled.

## Fuel gauge

EAU12150



ZAUM001

1. Fuel gauge

The fuel gauge indicates the amount of fuel in the fuel tank. The needle moves towards “E” (Empty) as the fuel level decreases. When the needle reaches the red line, refuel as soon as possible.

### NOTE:

Do not allow the fuel tank to empty itself completely.

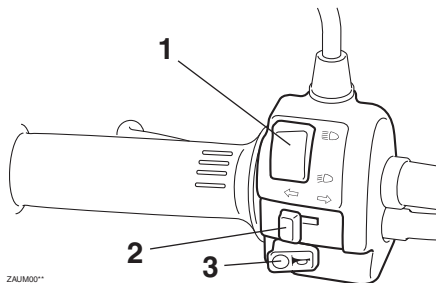
# INSTRUMENT AND CONTROL FUNCTIONS

## Handlebar switches

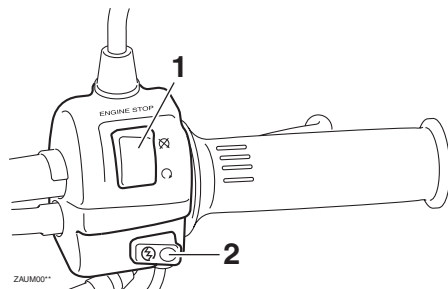
EAU12347

EAU12400

ECA10050



1. Dimmer switch "☰☷☷"
2. Turn signal switch "↵↶↷"
3. Horn switch "🔔"



1. Engine stop switch "⊗"
2. Start switch "⚡"

### Dimmer switch "☰☷☷"

Set this switch to "☷☷" for the high beam and to "☰☷" for the low beam.

EAU12460

### Turn signal switch "↵↶↷"

To signal a right-hand turn, push this switch to "↶". To signal a left-hand turn, push this switch to "↷". When released, the switch returns to the center position. To cancel the turn signal lights, push the switch in after it has returned to the center position.

EAU12500

### Horn switch "🔔"

Press this switch to sound the horn.

EAU12660

### Engine stop switch "⊗"

Set this switch to "⊗" before starting the engine. Set this switch to "⊙" to stop the engine in case of an emergency, such as when the motorcycle overturns or when the throttle cable is stuck.

EAUM1131

### Start switch "⚡"

Push this switch while applying the front or rear brake to crank the engine with the starter.

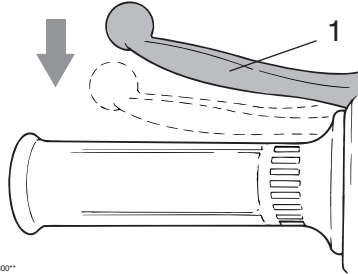
## CAUTION:

See page 5-1 for starting instructions prior to starting the engine.

# INSTRUMENT AND CONTROL FUNCTIONS

## Front brake lever

EAU12900

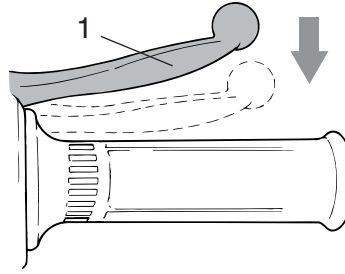


### 1. Front brake lever

The front brake lever is located on the right handlebar grip. To apply the front brake, pull this lever toward the handlebar grip.

## Rear brake lever

EAU12950

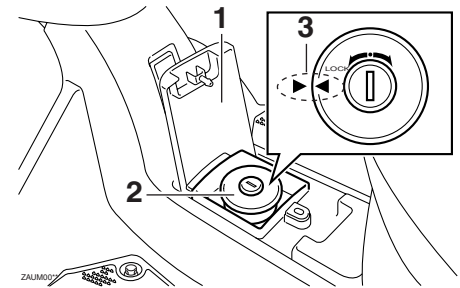


### 1. Rear brake lever

The rear brake lever is located on the left handlebar grip. To apply the rear brake, pull this lever toward the handlebar grip.

## Fuel tank cap

EAUT2010



1. Fuel tank cap lid
2. Fuel tank cap
3. Match marks

### To remove the fuel tank cap

Open the lid, insert the key into the lock, and then turn it 1/4 turn clockwise. The lock will be released and the fuel tank cap can be removed.

### To install the fuel tank cap

1. Insert the fuel tank cap into the tank opening with the key inserted in the lock and with the marks on the cap and tank aligned.
2. Turn the key counterclockwise to

# INSTRUMENT AND CONTROL FUNCTIONS

the original position, remove it, and then close the lid.

## NOTE:

The fuel tank cap cannot be installed unless the key is in the lock. In addition, the key cannot be removed if the cap is not properly installed and locked.

3

## ⚠ WARNING

**Make sure that the fuel tank cap is properly installed before riding.**

EWA10130

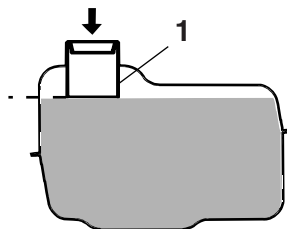
## Fuel

EAU13211

ECA10070

## CAUTION:

**Immediately wipe off spilled fuel with a clean, dry, soft cloth, since fuel may deteriorate painted surfaces or plastic parts.**



ZALIM009

1. Fuel tank filler tube

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

EWA10880

## ⚠ WARNING

- **Do not overfill the fuel tank, otherwise it may overflow when the fuel warms up and expands.**
- **Avoid spilling fuel on the hot engine.**

EAU36080

## Recommended fuel:

**UNLEADED GASOLINE ONLY**

Fuel tank capacity:

4.5 L (1.19 US gal) (0.99 Imp.gal)

ECA11400

## CAUTION:

**Use only unleaded gasoline. The use of leaded gasoline will cause severe damage to internal engine parts, such as the valves and piston rings, as well as to the exhaust system.**

Your Yamaha engine has been designed to use regular unleaded gasoline with a pump octane number  $[(R+M)/2]$  of 86 or higher, or a research octane number of 91 or higher. If knocking (or pinging) occurs, use a gasoline of a different brand or premium unleaded fuel. Use of unleaded fuel will extend spark plug life and reduce maintenance costs.

## Gasohol

There are two types of gasohol: gasohol containing ethanol and that containing methanol. Gasohol containing ethanol can be used if the ethanol content does not exceed 10%. Gasohol containing methanol is not recommended by Yamaha because it can cause damage to the fuel system or vehicle performance problems.

## Catalytic converter

This vehicle is equipped with catalytic converters in the exhaust system.

EAU13441

EWA10860

### **⚠ WARNING**

**The exhaust system is hot after operation. Make sure that the exhaust system has cooled down before doing any maintenance work.**

### **CAUTION:**

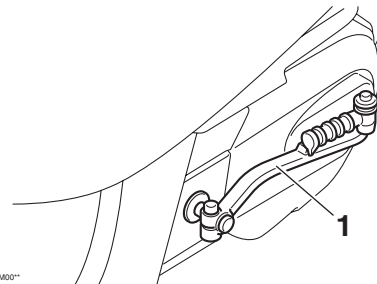
**The following precautions must be observed to prevent a fire hazard or other damages.**

- **Use only unleaded gasoline. The use of leaded gasoline will cause unrepairable damage to the catalytic converter.**
- **Never park the vehicle near possible fire hazards such as grass or other materials that easily burn.**
- **Do not allow the engine to idle too long.**

ECA10700

## Kickstarter

EAU13680



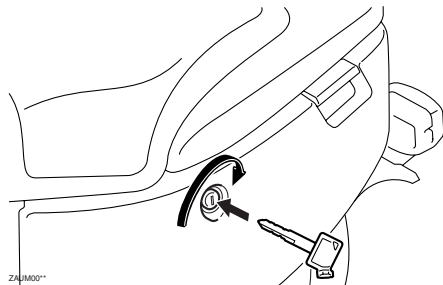
1. Kickstarter

To start the engine, fold out the kickstarter lever, move it down lightly with your foot until the gears engage, and then push it down smoothly but forcefully.

# INSTRUMENT AND CONTROL FUNCTIONS

## Seat

EAU13891



### To open the seat

1. Insert the key in the lock, and then turn it as shown.
2. Fold the seat up.

### To close the seat

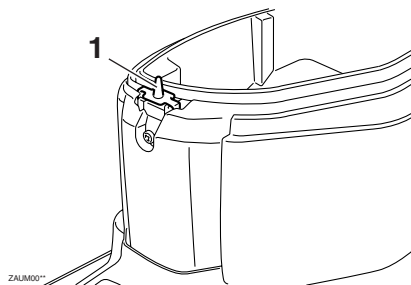
1. Fold the seat down, and then push it down to lock it in place.
2. Remove the key.

### NOTE:

Make sure that the seat is properly secured before riding.

## Luggage hook

EAUT2050



1. Luggage hook

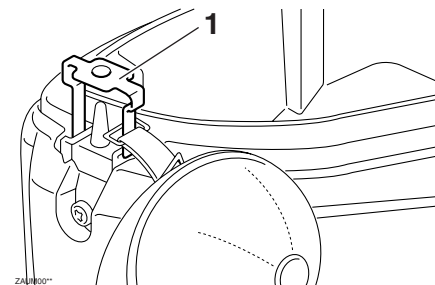
The luggage hook is located under the seat. (see page 3-8)

### **⚠ WARNING**

- Do not exceed the load limit of 1.0 kg (2.2 lb) for the luggage hook.
- Do not exceed the maximum load of 85 kg (187 lb) for the vehicle.

## Helmet holder

EAUT2040



1. Helmet holder

The helmet holder is located under the seat.

### To secure a helmet to the helmet holder

1. Open the seat. (See page 3-8.)
2. Pull the helmet holder up.
3. Attach the helmet to the helmet holder and then push the helmet holder down.
4. Securely close the seat.

EWA10160

### **⚠ WARNING**

Never ride with a helmet attached to the helmet holder, since the helmet



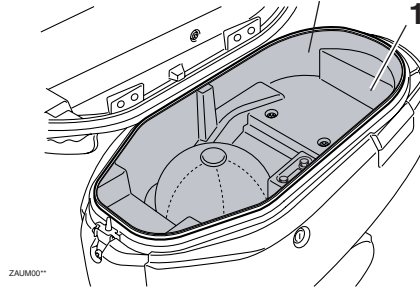
# INSTRUMENT AND CONTROL FUNCTIONS

may hit objects, causing loss of control and possibly an accident.

## To release the helmet from the helmet holder

1. Open the seat, pull the helmet holder up and remove the helmet from the helmet holder, and then push the helmet holder down.
2. Securely close the seat.

## Storage compartment



EAU14451

partment, be sure to wrap them in a plastic bag so that they will not get wet. When washing the vehicle, be careful not to let any water enter the storage compartment.

### 1. Storage compartment

The storage compartment is located under the seat. (See page 3-8.)

EWA10961

## **⚠ WARNING**

- Do not exceed the load limit of 5 kg (11 lb) for the storage compartment.
- Do not exceed the maximum load of 85 kg (187 lb) for the vehicle.

When storing the owner's manual or other documents in the storage com-

# PRE-OPERATION CHECKS

---

EAU15591

The condition of a vehicle is the owner's responsibility. Vital components can start to deteriorate quickly and unexpectedly, even if the vehicle remains unused (for example, as a result of exposure to the elements). Any damage, fluid leakage or loss of tire air pressure could have serious consequences. Therefore, it is very important, in addition to a thorough visual inspection, to check the following points before each ride.

## NOTE:

Pre-operation checks should be made each time the vehicle 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.

---

EWA11150

## WARNING

If any item in the Pre-operation check list is not working properly, have it inspected and repaired before operating the vehicle.

---

## Pre-operation check list

ITEM	CHECKS	PAGE
Fuel	<ul style="list-style-type: none"><li>• Check fuel level in fuel tank.</li><li>• Refuel if necessary.</li><li>• Check fuel line for leakage.</li></ul>	3-6
Engine oil	<ul style="list-style-type: none"><li>• Check oil level in engine.</li><li>• If necessary, add recommended oil to specified level.</li><li>• Check vehicle for oil leakage.</li></ul>	6-8
Final transmission oil	<ul style="list-style-type: none"><li>• Check vehicle for oil leakage.</li></ul>	6-10
Coolant	<ul style="list-style-type: none"><li>• Check coolant level in reservoir</li><li>• If necessary, add recommended coolant to specified level.</li><li>• Check cooling system for leakage.</li></ul>	6-11
Front brake	<ul style="list-style-type: none"><li>• Check operation.</li><li>• Lubricate cable if necessary.</li><li>• Check lever free play.</li><li>• Adjust if necessary.</li></ul>	6-15,6-17
Rear brake	<ul style="list-style-type: none"><li>• Check operation.</li><li>• Lubricate cable if necessary.</li><li>• Check lever free play.</li><li>• Adjust if necessary.</li></ul>	6-16~6-17
Throttle grip	<ul style="list-style-type: none"><li>• Make sure that operation is smooth.</li><li>• Check cable free play.</li><li>• If necessary, have Yamaha dealer adjust cable free play and lubricate cable and grip housing.</li></ul>	6-17
Wheels and tires	<ul style="list-style-type: none"><li>• Check for damage.</li><li>• Check tire condition and tread depth.</li><li>• Check air pressure.</li><li>• Correct if necessary.</li></ul>	6-14~6-15
Brake levers	<ul style="list-style-type: none"><li>• Make sure that operation is smooth.</li><li>• Lubricate lever pivoting points if necessary.</li></ul>	6-18

# PRE-OPERATION CHECKS

ITEM	CHECKS	PAGE
Centerstand	<ul style="list-style-type: none"><li>• Make sure that operation is smooth.</li><li>• Lubricate pivots if necessary.</li></ul>	6-18
Chassis fasteners	<ul style="list-style-type: none"><li>• Make sure that all nuts, bolts and screws are properly tightened.</li><li>• Tighten if necessary.</li></ul>	-
Instruments, lights, signals and switches	<ul style="list-style-type: none"><li>• Check operation.</li><li>• Correct if necessary.</li></ul>	3-2,3-4
Engine stop switch	<ul style="list-style-type: none"><li>• Check operation.</li></ul>	3-4

# OPERATION AND IMPORTANT RIDING POINTS

EAU15980  
EWA10870

## **⚠ WARNING**

- Become thoroughly familiar with all operating controls and their functions before riding. Consult a Yamaha dealer regarding any control or function that you do not thoroughly understand.
- Never start the engine or operate it in a closed area for any length of time. Exhaust fumes are poisonous, and inhaling them can cause loss of consciousness and death within a short time. Always make sure that there is adequate ventilation.
- For safety, always start the engine with the centerstand down.


EAUT2080

ECA10250

## Starting a cold engine

### **CAUTION:**

See page 5-3 for engine break-in instructions prior to operating the vehicle for the first time.

1. Turn the key to “ON” and make sure that the engine stop switch is set to “”.

ECA1070

### **CAUTION:**

The engine trouble warning light and coolant temperature warning light should come on for a few seconds, then go off. If these warning lights do not go off, have a Yamaha dealer check their electrical circuits.

2. Close the throttle completely.
3. Start the engine by pushing the start switch while applying the front or rear brake.

### **NOTE:**

If the engine does not start, release the start switch, wait a few seconds, and then try again. Each starting attempt

should be as short as possible to preserve the battery. Do not crank the engine more than 5 seconds on any one attempt. If the engine does not start with the starter motor, try using the kickstarter.

ECA11130

### **CAUTION:**

For maximum engine life, always warm the engine up before starting off. Never accelerate hard when the engine is cold!

# OPERATION AND IMPORTANT RIDING POINTS

## Starting off

EAU16760

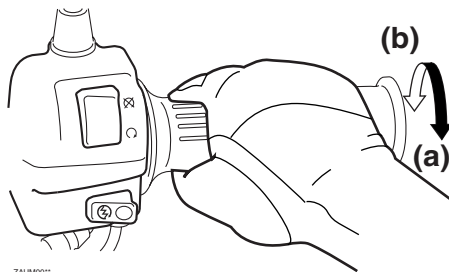
### NOTE:

Before starting off, allow the engine to warm up.

1. While pulling the rear brake lever with your left hand and holding the grab bar with your right hand, push the scooter off the centerstand.
2. Sit astride the seat, and then adjust the rear view mirrors.
3. Switch the turn signal on.
4. Check for oncoming traffic, and then slowly turn the throttle grip (on the right) in order to take off.
5. Switch the turn signal off.

## Acceleration and deceleration

EAU16780



The speed can be adjusted by opening and closing the throttle. To increase the speed, turn the throttle grip in direction (a). To reduce the speed, turn the throttle grip in direction (b).

## Braking

EAU16791

1. Close the throttle completely.
2. Apply both front and rear brakes simultaneously while gradually increasing the pressure.

EWA10300

### ⚠ WARNING

- Avoid braking hard or suddenly (especially when leaning over to one side), otherwise the scooter may skid or overturn.
- Railroad crossings, streetcar rails, iron plates on road construction sites, and manhole covers become extremely slippery when wet. Therefore, slow down when approaching such areas and cross them with caution.
- Keep in mind that braking on a wet road is much more difficult.
- Ride slowly down a hill, as braking downhill can be very difficult.

# OPERATION AND IMPORTANT RIDING POINTS

## Engine break-in

EAU16830

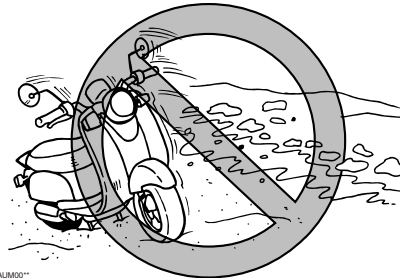
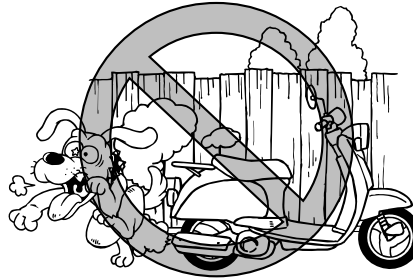
There is never a more important period in the life of your engine than the period between 0 and 1000 km (600 mi). For this reason, you should read the following material carefully.

Since the engine is brand new, do not put an excessive load on it for the first 1000 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 that might result in engine overheating must be avoided.

## Parking

EAU17212

When parking, stop the engine, and then remove the key from the main switch.



ZALIM001

EWA10310

## ⚠ WARNING

- Since the engine and exhaust system can become very hot, park in a place where pedestrians or children are not likely to touch them.
- Do not park on a slope or on soft ground, otherwise the vehicle may overturn.

ECA10380

## CAUTION:

Never park in an area where there are fire hazards such as grass or other flammable materials.

# PERIODIC MAINTENANCE AND MINOR REPAIR

---

EAU17271

Safety is an obligation of the owner. Periodic inspection, adjustment and lubrication will keep your vehicle in the safest and most efficient condition possible. The most important points of scooter 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 that is certified (if applicable).**

EWA10320

6

## **⚠ WARNING**

**If you are not familiar with maintenance work, have a Yamaha dealer do it for you.**

EWA10330

## **⚠ WARNING**

**This scooter is designed for use on paved roads only. If this scooter is operated in abnormally dusty, muddy or wet conditions, the air filter element should be cleaned or replaced more frequently, otherwise rapid en-**

**gine wear may result. Consult a Yamaha dealer for proper maintenance intervals.**

---

EAU17301

## PERIODIC MAINTENANCE

PROPER PERIODIC MAINTENANCE OF YOUR VEHICLE IS IMPORTANT IN ORDER TO ENJOY 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 PERIODIC MAINTENANCE CHARTS, 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.



# PERIODIC MAINTENANCE AND MINOR REPAIR

EAU17560

## Periodic maintenance chart for the emission control system

NO.		ITEM	ROUTINE	INITIAL	ODOMETER READING					
				600 mi (1,000 km) or 1 month	2,000 mi (4,000 km) or 6 months	4,000 mi (7,000 km) or 12 months	6,000 mi (10,000 km) or 18 months	8,000 mi (13,000 km) or 24 months	10,000 mi (16,000 km) or 30 months	
1	*	Fuel line	<ul style="list-style-type: none"><li>• Check fuel and vacuum hoses for cracks or damage.</li><li>• Replace if necessary.</li></ul>		√	√	√	√	√	
2		Spark plug	<ul style="list-style-type: none"><li>• Check condition.</li><li>• Adjust gap and clean.</li><li>• Replace at 4000 mi (7000 km) or 12 months and thereafter every 4000 mi (6000 km) or 12 months.</li></ul>		√	Replace.	√	Replace.	√	
3	*	Valve clearance	<ul style="list-style-type: none"><li>• Check and adjust valve clearance when engine is cold.</li></ul>	√	Every 6000 mi (10000 km)					
4	*	Crankcase breather system	<ul style="list-style-type: none"><li>• Check breather hose for cracks or damage.</li><li>• Replace if necessary.</li></ul>		√	√	√	√	√	
5	*	Fuel injection	<ul style="list-style-type: none"><li>• Check engine idle speed.</li></ul>	√	√	√	√	√	√	
6	*	Exhaust system	<ul style="list-style-type: none"><li>• Check for leakage.</li><li>• Tighten if necessary.</li><li>• Replace gasket(s) if necessary.</li></ul>		√	√	√	√	√	
7	*	Air induction system	<ul style="list-style-type: none"><li>• Check the air cut-off valve, reed valve, and hose for damage.</li><li>• Replace any damaged parts.</li></ul>		√	√	√	√	√	

\* Since these items require special tools, data and technical skills, have a Yamaha dealer perform the service.

# PERIODIC MAINTENANCE AND MINOR REPAIR

EAU32123

## General maintenance and lubrication chart

NO.		ITEM	ROUTINE	INITIAL	ODOMETER READING					
				600 mi (1,000 km) or 1 month	2,000 mi (4,000 km) or 6 months	4,000 mi (7,000 km) or 12 months	6,000 mi (10,000 km) or 18 months	8,000 mi (13,000 km) or 24 months	10,000 mi (16,000 km) or 30 months	
1	*	Air filter element	• Replace.		√	√	√	√	√	
2	*	Front brake	• Check operation. • Adjust cable and replace brake shoes if necessary.	√	√	√	√	√	√	
3	*	Rear brake	• Check operation. • Adjust cable and replace brake shoes if necessary.	√	√	√	√	√	√	
4	*	Wheels	• Check runout and for damage. • Replace if necessary.		√	√	√	√	√	
5	*	Tires	• Check tread depth and for damage. • Replace if necessary. • Check air pressure. • Correct if necessary.		√	√	√	√	√	
6	*	Wheel bearings	• Check bearings for smooth operation. • Replace if necessary.		√	√	√	√	√	
7	*	Steering bearings	• Check bearing assemblies for looseness. • Moderately repack with lithium-soap-based grease every 8000 mi (13000 km) or 24 months.	√	√	√	√	Repack.	√	
8	*	Chassis fasteners	• Check all chassis fitting and fasteners. • Correct if necessary.		√	√	√	√	√	

# PERIODIC MAINTENANCE AND MINOR REPAIR

NO.	ITEM	ROUTINE	INITIAL	ODOMETER READING					
			600 mi (1,000 km) or 1 month	2,000 mi (4,000 km) or 6 months	4,000 mi (7,000 km) or 12 months	6,000 mi (10,000 km) or 18 months	8,000 mi (13,000 km) or 24 months	10,000 mi (16,000 km) or 30 months	
9	Front and rear brake lever pivot	• Apply lithium-soap-based grease (all-purpose grease) lightly.		√	√	√	√	√	
10	Centerstand	• Check operation. • Lubricate.		√	√	√	√	√	
11	* Front fork	• Check operation and for oil leakage. • Replace if necessary.		√	√	√	√	√	
12	* Shock absorber assembly	• Check operation and for oil leakage. • Replace if necessary.		√	√	√	√	√	
13	Engine oil	• Change (warm engine before draining). • Check oil level and vehicle for oil leakage.	√	√	√	√	√	√	
14	Engine oil strainer	• Clean.	√		√		√		
15	* Cooling system	• Check coolant level and vehicle for coolant leakage. • Change.		√	√	√	√	√	
16	Final transmission oil	• Check vehicle for oil leakage. • Change.	√		√		√		
17	* V-belt	• Replace.	Every 6250 mi (10000 km)						
18	* Front and rear brake switches	• Check operation.	√	√	√	√	√	√	
19	* Control and meter cables	• Apply Yamaha chain and cable lube or engine oil 10W-30 thoroughly.	√	√	√	√	√	√	

## PERIODIC MAINTENANCE AND MINOR REPAIR

NO.		ITEM	ROUTINE	INITIAL	ODOMETER READING					
				600 mi (1,000 km) or 1 month	2,000 mi (4,000 km) or 6 months	4,000 mi (7,000 km) or 12 months	6,000 mi (10,000 km) or 18 months	8,000 mi (13,000 km) or 24 months	10,000 mi (16,000 km) or 30 months	
20	*	Throttle grip housing and cable	<ul style="list-style-type: none"><li>• Check operation and free play.</li><li>• Adjust the throttle cable free play if necessary.</li><li>• Lubricate the throttle grip housing and cable.</li></ul>		√	√	√	√	√	
21	*	Lights, signals and switches	<ul style="list-style-type: none"><li>• Check operation.</li><li>• Adjust headlight beam.</li></ul>	√	√	√	√	√	√	

\* Since these items require special tools, data and technical skills, have a Yamaha dealer perform the service.

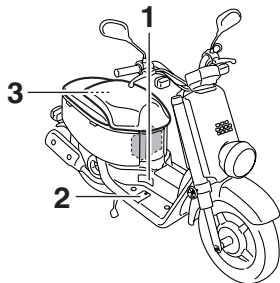
### NOTE:

From 12000 mi ( 19000 km) or 36 months, repeat the maintenance intervals starting from 4000 mi (7000 km) or 12 months.

# PERIODIC MAINTENANCE AND MINOR REPAIR

## Removing and installing panels

EAU18771



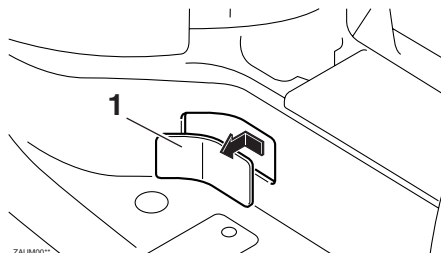
ZAUM00\*\*

1. Panel A
2. Panel B
3. Panel C

The panels shown need to be removed to perform some of the maintenance jobs described in this chapter. Refer to this section each time a panel needs to be removed and installed.

### Panel A

To remove the panel  
Slide the panel backward, and then pull it out as shown.



1. Panel A

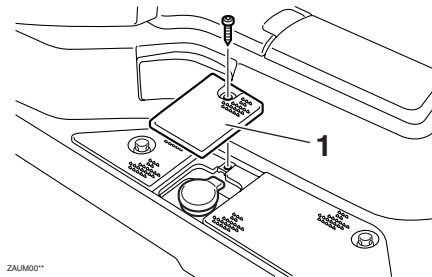
### To install the panel

Place and slide the panel into the original position.

EAUT2100

### Panel B

To remove the panel  
Remove the screw, and then take the panel off.



ZAUM00\*\*

1. Panel B

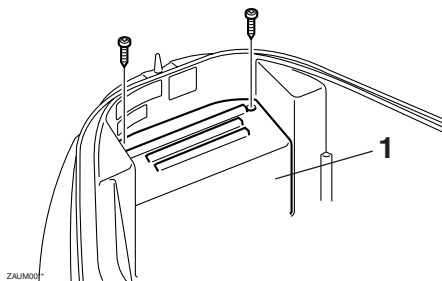
### To install the panel

Place the panel in the original position, and then install the screw.

# PERIODIC MAINTENANCE AND MINOR REPAIR

## Panel C

To remove the panel



1. Panel C

1. Open the seat. (See page 3-8.)
2. Remove the screws, and then take the panel off.

To install the panel

Place the panel in the original position, and then install the screws.

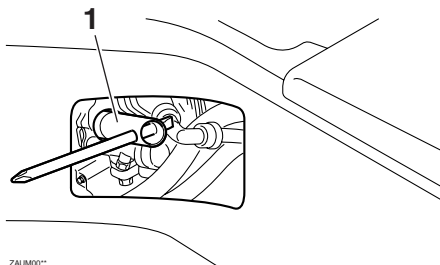
## Checking the spark plug

EAUT2070

The spark plug is an important engine component, which is easy to check. Since heat and deposits will cause any spark plug to slowly erode, the spark plug should be removed and checked in accordance with the periodic maintenance and lubrication chart. In addition, the condition of the spark plug can reveal the condition of the engine.

### To remove the spark plug

1. Remove panel A. (See page 6-6.)
2. Remove the spark plug cap.



1. Spark plug wrench

3. Remove the spark plug as shown, with a spark plug wrench available at a Yamaha dealer.

### To check the spark plug

1. Check that the porcelain insulator around the center electrode of the spark plug is a medium-to-light tan (the ideal color when the vehicle is ridden normally).

### NOTE:

If the spark plug shows a distinctly different color, the engine could be operating improperly. Do not attempt to diagnose such problems yourself. Instead, have a Yamaha dealer check the vehicle.

2. Check the spark plug for electrode erosion and excessive carbon or other deposits, and replace it if necessary.

**Specified spark plug:**  
CR7E (NGK)

# PERIODIC MAINTENANCE AND MINOR REPAIR

## To install the spark plug

1. Measure the spark plug gap with a wire thickness gauge and, if necessary, adjust the gap to specification.

### Spark plug gap:

0.7 ~ 0.8 mm (0.028 ~ 0.031 in)

2. Clean the surface of the spark plug gasket and its mating surface, and then wipe off any grime from the spark plug threads.
3. Install the spark plug with the spark plug wrench, and then tighten it to the specified torque.

### Tightening torque:

Spark plug:

13 Nm (1.3 m • kgf, 9.4ft • lbf)

## NOTE: \_\_\_\_\_

If a torque wrench is not available when installing a spark plug, a good estimate of the correct torque is 1/4<->1/2 turn past finger tight. However, the spark plug should be tightened to the specified torque as soon as possible.

4. Install the spark plug cap.
5. Install the panel.

## Engine oil and oil strainer

EAUT1460

The engine oil level should be checked before each ride. In addition, the oil must be changed and the oil strainer cleaned at the intervals specified in the periodic maintenance and lubrication chart.

## To check the engine oil level

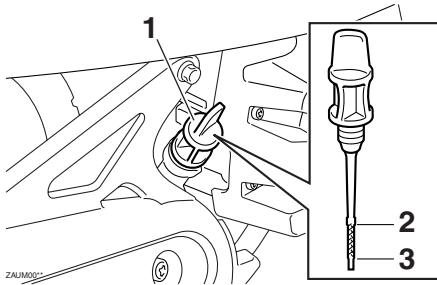
1. Place the vehicle on the centerstand.

### NOTE: \_\_\_\_\_

Make sure that the vehicle is positioned straight up when checking the oil level. A slight tilt to the side can result in a false reading.

2. Start the engine, warm it up for several minutes, and then turn it off.

# PERIODIC MAINTENANCE AND MINOR REPAIR



1. Engine oil filler cap
2. Maximum level mark
3. Minimum level mark

3. Wait a few minutes until the oil settles, remove the oil filler cap, wipe the dipstick clean, insert it back into the oil filler hole (without screwing it in), and then remove it again to check the oil level.

## NOTE:

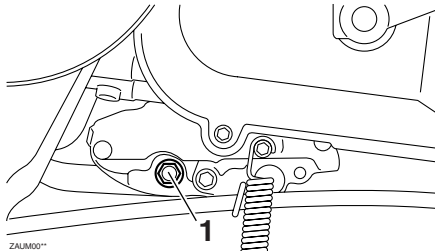
The engine oil should be between the minimum and maximum level marks.

4. If the engine oil is below the minimum level mark, add sufficient oil of the recommended type to raise it to the correct level.

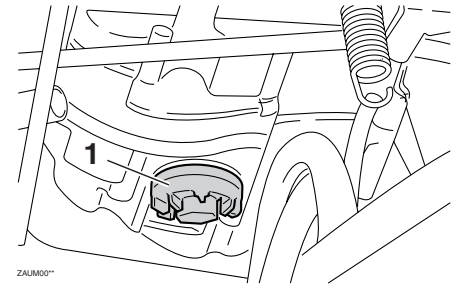
5. Insert the dipstick into the oil filler hole, and then tighten the oil filler cap.

## To change the engine oil and clean the oil strainer

1. Start the engine, warm it up for several minutes, and then turn it off.
2. Place an oil pan under the engine to collect the used oil.
3. Remove the engine oil filler cap and the engine oil drain bolts A and B to drain the oil from the crankcase.



1. Engine oil drain bolt A



1. Engine oil drain bolt B

ECAT1020

## CAUTION:

**When removing the engine oil drain bolt B, the O-ring, compression spring, and oil strainer will fall out. Take care not to lose these parts.**

4. Clean the oil strainer with solvent, and then check it for damage and replace it if necessary.
5. Check the O-ring for damage and replace it if necessary.
6. Install the oil strainer, compression spring, O-ring and engine oil drain bolt B.



# PERIODIC MAINTENANCE AND MINOR REPAIR

**NOTE:** \_\_\_\_\_  
Make sure that the O-ring is properly seated.

7. Install engine oil drain bolt A, and then tighten both drain bolts to their specified torques.

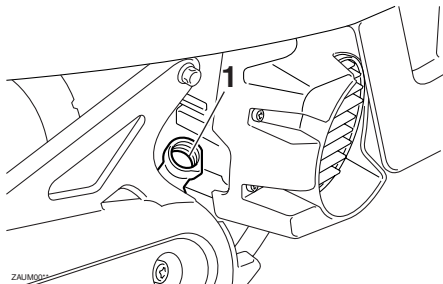
## **Tightening torque:**

Engine oil drain bolt A:

23 Nm (2.3 m • kgf, 16.6 ft • lbf)

Engine oil drain bolt B:

32 Nm (3.2 m • kgf, 23.1 ft • lbf)



1. Oil filler hole

8. Add the specified amount of the recommended engine oil, and then install and tighten the oil filler cap.

## **Recommended engine oil:**

See page 8-1.

Oil change quantity:

0.78 L (0.82 US qt) (0.69 Imp.qt)

ECA11670

## **CAUTION:** \_\_\_\_\_

- **Do not use oils with a diesel specification of "CD" or oils of a higher quality than specified. In addition, do not use oils labeled "ENERGY CONSERVING II" or higher.**
- **Be sure no foreign material enters the crankcase.**

9. Start the engine, and then let it idle for several minutes while checking it for oil leakage. If oil is leaking, immediately turn the engine off and check for the cause.
10. Turn the engine off, and then check the oil level and correct it if necessary.

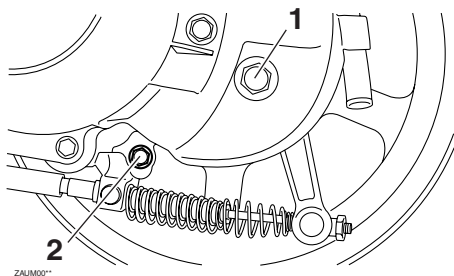
## **Final transmission oil**

EAUT1560

The final transmission case must be checked for oil leakage before each ride. If any leakage is found, have a Yamaha dealer check and repair the scooter. In addition, the final transmission oil must be changed as follows at the intervals specified in the periodic maintenance and lubrication chart.

1. Start the engine, warm it up by riding the scooter for several minutes, and then stop the engine.
2. Place the scooter on the centerstand.
3. Place an oil pan under the final transmission case to collect the used oil.

# PERIODIC MAINTENANCE AND MINOR REPAIR



1. Final transmission oil filler bolt
2. Final transmission oil drain bolt

4. Remove the oil filler bolt and drain bolt to drain the oil from the final transmission case.
5. Install the final transmission oil drain bolt, and then tighten it to the specified torque.

## Tightening torque:

Final transmission oil drain bolt:  
13 Nm (1.3 m • kgf, 9.4 ft • lbf)

6. Add the specified amount of the recommended final transmission oil, and then install the oil filler bolt and tighten it to the specified torque.

## Tightening torque:

Final transmission oil filler bolt:  
23 Nm (2.3 m • kgf, 16.6 ft • lbf)

## Recommended final transmission oil:

See page 8-1.

## Oil quantity:

0.10 L (0.11 US qt) (0.09 Imp.qt)

EWA11310

## ⚠ WARNING

- **Make sure that no foreign material enters the final transmission case.**
- **Make sure that no oil gets on the tire or wheel.**

7. Check the final transmission case for oil leakage. If oil is leaking, check for the cause.

## Coolant

EAU20070

The coolant level should be checked before each ride. In addition, the coolant must be changed at the intervals specified in the periodic maintenance and lubrication chart.

EAUT1521

## To check the coolant level

The coolant level should be checked as follows before each ride. In addition, the coolant must be changed at the intervals specified in the periodic maintenance and lubrication chart.

1. Place the vehicle on the centerstand.

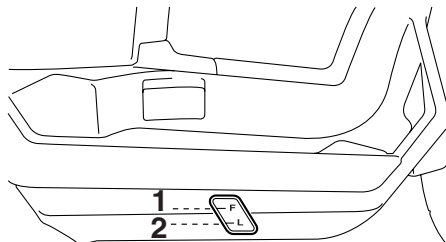
## NOTE:

The coolant level must be checked on a cold engine since the level varies with engine temperature. Make sure that the vehicle is positioned straight up when checking the coolant level. A slight tilt to the side can result in a false reading.

2. Check the coolant level in the coolant reservoir.

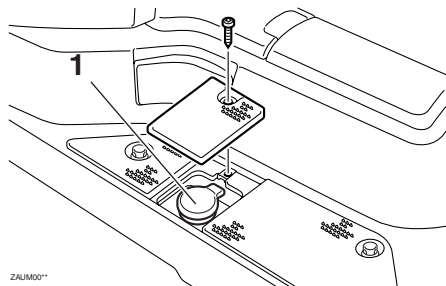
# PERIODIC MAINTENANCE AND MINOR REPAIR

**NOTE:** \_\_\_\_\_  
The coolant should be between the minimum and maximum level marks.



ZALUM00\*\*

1. Maximum level mark
2. Minimum level mark



ZALUM00\*\*

1. Coolant reservoir cap

3. If the coolant is at or below the minimum level mark, remove panel B and the reservoir cap. (See page 6-6.)
4. Add coolant or distilled water to raise the coolant to the maximum level mark, and install the coolant reservoir cap and the panel.

**Coolant reservoir capacity (up to the maximum level mark):**  
0.26 L (0.27 US qt) (0.23 Imp.qt)

ECA10470

## CAUTION:

- If coolant is not available, use distilled water or soft tap water instead. Do not use hard water or salt water since it is harmful to the engine.
- If water has been used instead of coolant, replace it with coolant as soon as possible, otherwise the engine may not be sufficiently cooled and the cooling system will not be protected against frost and corrosion.
- If water has been added to the coolant, have a Yamaha dealer

**check the antifreeze content of the coolant as soon as possible, otherwise the effectiveness of the coolant will be reduced.**

EWA10380

## ⚠ WARNING

**Never attempt to remove the radiator cap when the engine is hot.**

**NOTE:** \_\_\_\_\_  
If the engine overheats, see page 6-27 for further instructions.

# PERIODIC MAINTENANCE AND MINOR REPAIR

---

EAUT1990

## Replacing the air filter element

The air filter element must be replaced and the check hoses must be cleaned at the intervals specified in the periodic maintenance and lubrication chart. Have a Yamaha dealer replace the air filter element.

EAU21381

## Checking the throttle cable free play

The throttle cable free play should measure 1.5 ~ 3.5 mm (0.06 ~ 0.14 in) at the throttle grip. Periodically check the throttle cable free play and, if necessary, have a Yamaha dealer adjust it.

EAU21401

## Valve clearance

The valve clearance changes with use, resulting in improper air-fuel mixture and/or engine noise. To prevent this from occurring, the valve clearance must be adjusted by a Yamaha dealer at the intervals specified in the periodic maintenance and lubrication chart.

# PERIODIC MAINTENANCE AND MINOR REPAIR

## Tires

EAUT2150

To maximize the performance, durability, and safe operation of your scooter, note the following points regarding the specified tires.

### Tire air pressure

The tire air pressure should be checked and, if necessary, adjusted before each ride.

EWA10540

### ⚠ WARNING

Because loading has an enormous impact on the handling, braking, performance and safety characteristics of your scooter, you should keep the following precautions in mind.

- **NEVER OVERLOAD THE SCOOTER!** Operation of an overloaded scooter may result in tire damage, loss of control, or severe injury. Make sure that the total weight of rider, cargo, and accessories does not exceed the specified maximum load for the vehicle.
- Improper tire air pressure greatly affects tire life and handling.

If the tire air pressure is too high, shocks from the road will not be dampened but instead be transmitted to the frame and handlebars, which impairs riding comfort. In addition, the scooter will be unstable in curves.

If the tire air pressure is too low, the tires will be damaged and the tire life shortened. In addition, the tires could slip off the wheel rims during braking, which could result in tube damage. The scooter could also easily turn over in a curve.

#### Tire air pressure\* (measured on cold tires):

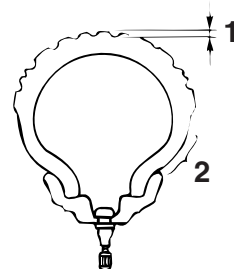
Front:

175 kPa (25 psi) (1.75 kgf/cm<sup>2</sup>)

Rear:

175 kPa (25 psi) (1.75 kgf/cm<sup>2</sup>)

## Tire inspection



ZALIM001

1. Tire tread depth
2. Tire sidewall

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

#### Minimum tire tread depth (front and rear):

0.8 mm (0.03 in)

### Tire information

This scooter is equipped with cast wheels and tubeless tires.

# PERIODIC MAINTENANCE AND MINOR REPAIR

## Front tire:

Size:

120/90-10 57J

Manufacturer/model:

CHENG SHIN / C-6022

## Rear tire:

Size:

120/90-10 57J

Manufacturer/model:

CHENG SHIN / C-6022

EWA10580

## ⚠ WARNING

- It is dangerous to ride with a worn-out tire. When a tire tread begins to show crosswise lines, have a Yamaha dealer replace the tire immediately.
- The replacement of all wheel- and brake-related parts, including the tires, should be left to a Yamaha dealer, who has the necessary professional knowledge and experience.

## Cast wheels

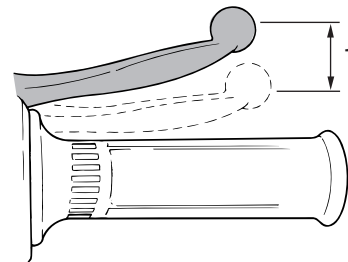
To maximize the performance, durability, and safe operation of your motorcycle, note the following points regarding the specified wheels.

- The wheel rims should be checked for cracks, bends or warpage before each ride. If any damage is found, have a Yamaha dealer replace the wheel. Do not attempt even the smallest repair to the wheel. A deformed or cracked wheel must be replaced.
- The wheel should be balanced whenever either the tire or wheel has been changed or replaced. An unbalanced wheel can result in poor performance, adverse handling characteristics, and a shortened tire life.
- Ride at moderate speeds after changing a tire since the tire surface must first be “broken in” for it to develop its optimal characteristics.

EAU21960

## Adjusting the brake lever free play

EAU22130



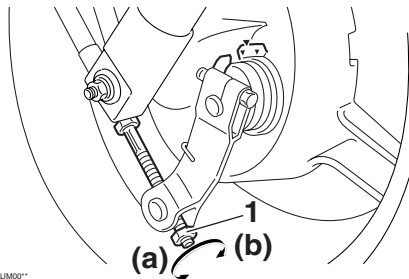
ZAUM001

### 1. Front brake lever free play

The brake lever free play should measure 10 ~ 20 mm (0.4 ~ 0.8 in) as shown. Periodically check the brake lever free play and, if necessary, adjust it as follows.

To increase the brake lever free play, turn the adjusting nut at the brake shoe plate in direction (a). To decrease the brake lever free play, turn the adjusting nut in direction (b).

# PERIODIC MAINTENANCE AND MINOR REPAIR



1. Adjusting nut

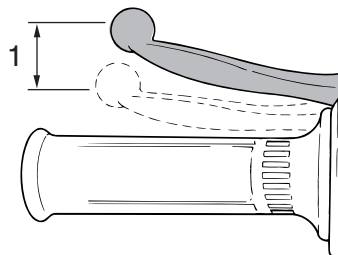
EWA10650

## **⚠ WARNING**

If proper adjustment cannot be obtained as described, have a Yamaha dealer make this adjustment.

## Adjusting the rear brake lever free play

EAU22170

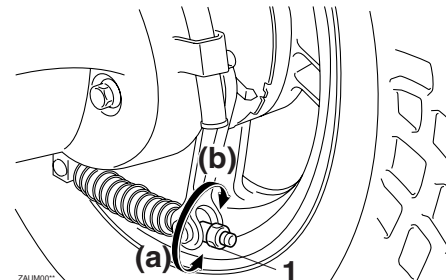


ZALUM00\*\*

1. Rear brake lever free play

The brake lever free play should measure 10 ~ 20 mm (0.4 ~ 0.8 in) as shown. Periodically check the brake lever free play and, if necessary, adjust it as follows.

To increase the brake lever free play, turn the adjusting nut at the brake shoe plate in direction (a). To decrease the brake lever free play, turn the adjusting nut in direction (b).



1. Adjusting nut

EWA10650

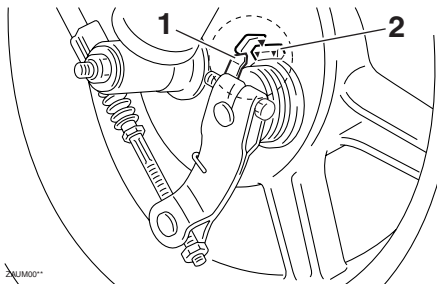
## **⚠ WARNING**

If proper adjustment cannot be obtained as described, have a Yamaha dealer make this adjustment.

# PERIODIC MAINTENANCE AND MINOR REPAIR

## Checking the front and rear brake shoes

EAU22361



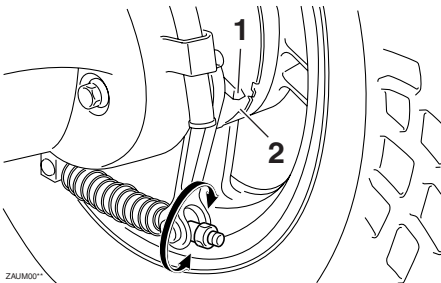
1. Wear indicator
2. Wear limit line

The front and rear brake shoes must be checked for wear at the intervals specified in the periodic maintenance and lubrication chart. Each brake is provided with a wear indicator, which allows you to check the brake shoe wear without having to disassemble the brake. To check the brake shoe wear, check the position of the wear indicator while applying the brake. If a brake shoe has worn to the point that the wear indicator reaches the wear limit line, have a Yamaha dealer replace the brake shoes as a set.

## Checking and lubricating the throttle grip and cable

EAU23111

The operation of the throttle grip should be checked before each ride. In addition, the cable should be lubricated at the intervals specified in the periodic maintenance chart.



1. Wear indicator
2. Wear limit line



# PERIODIC MAINTENANCE AND MINOR REPAIR

## Lubricating the front and rear brake levers

EAU23170

The pivoting points of the front and rear brake levers must be lubricated at the intervals specified in the periodic maintenance and lubrication chart.

### Recommended lubricant:

Lithium-soap-based grease (all-purpose grease)

## Checking and lubricating the centerstand

EAU23191

The operation of the centerstand should be checked before each ride, and the pivots and metal-to-metal contact surfaces should be lubricated if necessary.

EWA11300

### **WARNING**

**If the centerstand does not move up and down smoothly, have a Yamaha dealer check or repair it.**

### Recommended lubricant:

Lithium-soap-based grease (all-purpose grease)

## Checking the front fork

EAU23271

The condition and operation of the front fork must be checked as follows at the intervals specified in the periodic maintenance and lubrication chart.

### To check the condition

EWA10750

### **WARNING**

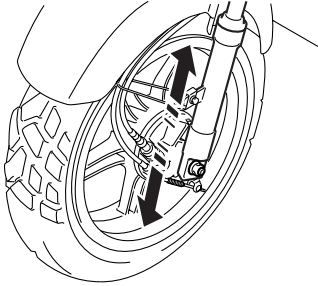
**Securely support the motorcycle so that there is no danger of it falling over.**

Check the inner tubes for scratches, damage and excessive oil leakage.

### To check the operation

1. Place the motorcycle on a level surface and hold it in an upright position.
2. While applying the front brake, push down hard on the handlebars several times to check if the front fork compresses and rebounds smoothly.

# PERIODIC MAINTENANCE AND MINOR REPAIR



ECA10590

## CAUTION:

If any damage is found or the front fork does not operate smoothly, have a Yamaha dealer check or repair it.

## Checking the steering

Worn or loose steering bearings may cause danger. Therefore, the operation of the steering must be checked as follows at the intervals specified in the periodic maintenance and lubrication chart.

1. Place a stand under the engine to raise the front wheel off the ground.

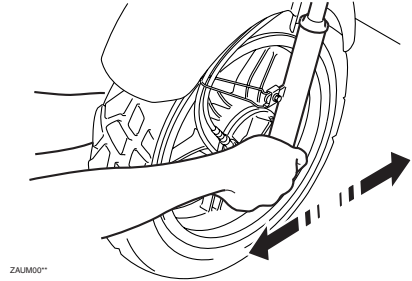
EAU23280

EWA10750

## ⚠ WARNING

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

2. Hold the lower ends of the front fork legs and try to move them forward and backward. If any free play can be felt, have a Yamaha dealer check or repair the steering.



# PERIODIC MAINTENANCE AND MINOR REPAIR

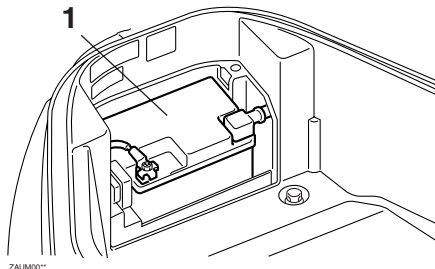
## Checking the wheel bearings

EAU23290

The front and rear wheel bearings must be checked at the intervals specified in the periodic maintenance and lubrication chart. If there is play in the wheel hub or if the wheel does not turn smoothly, have a Yamaha dealer check the wheel bearings.

## Battery

EAUT2001



### 1. Battery

This model is equipped with a sealed-type (MF) battery, which does not require any maintenance. There is no need to check the electrolyte or to add distilled water.

ECA10620

### CAUTION:

Never attempt to remove the battery cell seals, as this would permanently damage the battery.

EWA10760

### ⚠ WARNING

- Electrolyte is poisonous and dangerous since it contains sul-

furic acid, which causes severe burns. Avoid any contact with skin, eyes or clothing and always shield your eyes when working near batteries. In case of contact, administer the following FIRST AID.

- **EXTERNAL:** Flush with plenty of water.
- **INTERNAL:** Drink large quantities of water or milk and immediately call a physician.
- **EYES:** Flush with water for 15 minutes and seek prompt medical attention.
- Batteries produce explosive hydrogen gas. Therefore, keep sparks, flames, cigarettes, etc., away from the battery and provide sufficient ventilation when charging it in an enclosed space.
- **KEEP THIS AND ALL BATTERIES OUT OF THE REACH OF CHILDREN.**

The battery is located under the seat.

# PERIODIC MAINTENANCE AND MINOR REPAIR

Remove panel C to access the battery.  
(See page 6-6.)

## To charge the battery

Have a Yamaha dealer charge the battery as soon as possible if it seems to have discharged. Keep in mind that the battery tends to discharge more quickly if the vehicle is equipped with optional electrical accessories.

## To store the battery

1. If the vehicle will not be used for more than one month, remove the battery, fully charge it, and then place it in a cool, dry place.
2. If the battery will be stored for more than two months, check it at least once a month and fully charge it if necessary.
3. Fully charge the battery before installation.
4. After installation, make sure that the battery leads are properly connected to the battery terminals.

ECAT1051

## CAUTION:

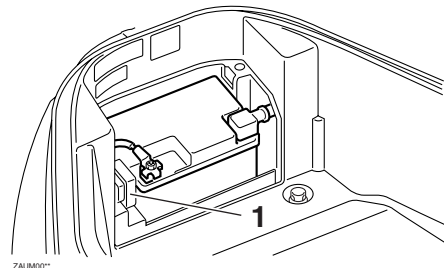
- Always keep the battery

charged. Storing a discharged battery can cause permanent battery damage.

- To charge a sealed-type (MF) battery, a special (constant-voltage) battery charger is required. Using a conventional battery charger will damage the battery. If you do not have access to a sealed-type (MF) battery charger, have a Yamaha dealer charge your battery.
- After installing the battery, be sure to turn the main switch from “ON” to “OFF” three times in 3 seconds intervals to initialize the idle speed control system.

## Replacing the fuse

EAUT2021



1. Fuse

The fuse holder is located beside the battery. Remove panel C to access the fuse. (See page 6-6.)

If the fuse is blown, replace it as follows.

1. Turn the key to “OFF” and turn off all electrical circuits.
2. Remove the blown fuse, and then install a new fuse of the specified amperage.

### Specified fuse:

15 A

# PERIODIC MAINTENANCE AND MINOR REPAIR

ECAT1061

EAU23780

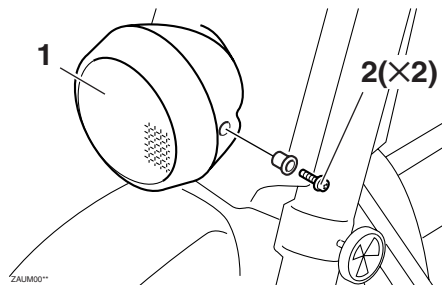
## CAUTION:

- Do not use a fuse of a higher amperage rating than recommended to avoid causing extensive damage to the electrical system and possibly a fire.
  - After removing and installing the main fuse, be sure to turn the main switch from “ON” to “OFF” three times in 3 seconds intervals to initialize the idle speed control system.
3. Turn the key to “ON” and turn on the electrical circuits to check if the devices operate.
  4. If the fuse immediately blows again, have a Yamaha dealer check the electrical system.

## Replacing the headlight bulb

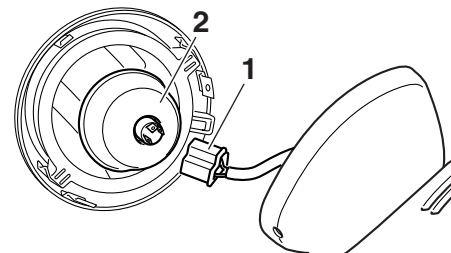
This model is equipped with a quartz bulb headlight. If the headlight bulb burns out, replace it as follows.

1. Remove the headlight unit by removing the screws.



1. Headlight unit
2. Screw

2. Disconnect the headlight coupler, and then remove the bulb cover.

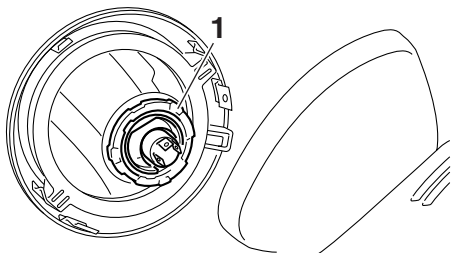


ZAUM001

1. Headlight coupler
2. Bulb cover

3. Remove the headlight bulb holder by turning it counterclockwise, and then remove the defective bulb.

# PERIODIC MAINTENANCE AND MINOR REPAIR



1. Headlight bulb holder

EWA10790

## **⚠ WARNING**

Headlight bulbs get very hot. Therefore, keep flammable products away from a lit headlight bulb, and do not touch the bulb until it has cooled down.

4. Place a new headlight bulb into position, and then secure it with the bulb holder.

ECA10660

## **CAUTION:**

Do not touch the glass part of the headlight bulb to keep it free from oil, otherwise the transparency of the glass, the luminosity of the bulb, and the bulb life will be adversely af-

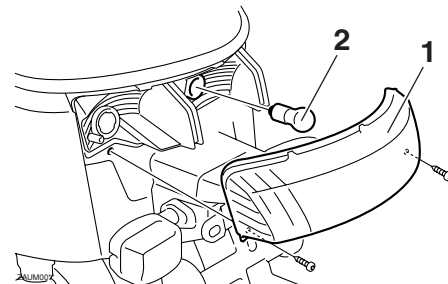
ected. Thoroughly clean off any dirt and fingerprints on the headlight bulb using a cloth moistened with alcohol or thinner.

5. Install the headlight bulb cover, and then connect the coupler.
6. Install the headlight unit by installing the screws.
7. Have a Yamaha dealer adjust the headlight beam if necessary.

## Replacing the tail/brake light bulb

EAU24131

1. Remove the tail/brake light lens by removing the screws.



1. Tail/brake light lens  
2. Bulb

2. Remove the defective bulb by pushing it in and turning it counter-clockwise.
3. Insert a new bulb into the socket, push it in, and then turn it clockwise until it stops.
4. Install the lens by installing the screws.

ECA10680

## **CAUTION:**

Do not overtighten the screws, oth-

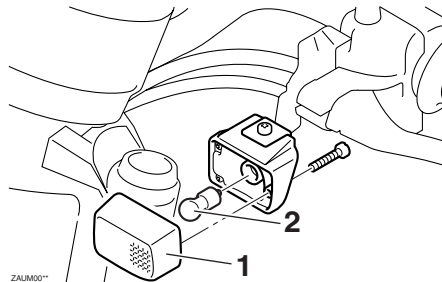
# PERIODIC MAINTENANCE AND MINOR REPAIR

erwise the lens may break.

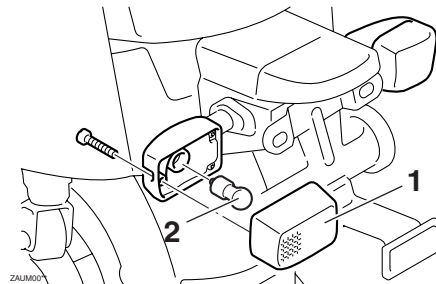
## Replacing a turn signal light bulb

EAU24202

1. Remove the turn signal light lens by removing the screw.



1. Turn signal light lens
2. Bulb



1. Turn signal light lens
2. Bulb

2. Remove the defective bulb by pushing it in and turning it counter-clockwise.
3. Insert a new bulb into the socket, push it in, and then turn it clockwise until it stops.
4. Install the lens by installing the screw.

ECA11190

### CAUTION:

Do not overtighten the screw, otherwise the lens may break.

# PERIODIC MAINTENANCE AND MINOR REPAIR

---

EAU25880

## Troubleshooting

Although Yamaha scooters receive a thorough inspection before shipment from the factory, trouble may occur during operation. Any problem in the fuel, compression, or ignition systems, for example, can cause poor starting and loss of power.

The following troubleshooting charts represent quick and easy procedures for checking these vital systems yourself. However, should your scooter require any repair, take it to a Yamaha dealer, whose skilled technicians have the necessary tools, experience, and know-how to service the scooter properly.

Use only genuine Yamaha replacement parts. Imitation parts may look like Yamaha parts, but they are often inferior, have a shorter service life and can lead to expensive repair bills.



## Troubleshooting charts

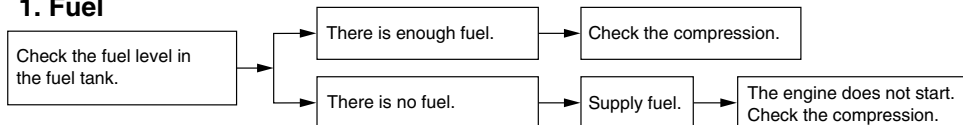
### Starting problems or poor engine performance

EWA10840

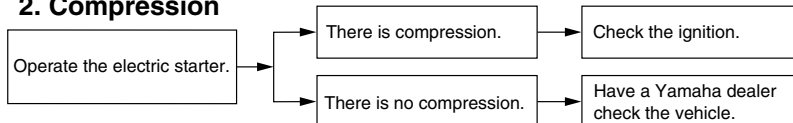
#### **⚠ WARNING**

Keep away open flames and do not smoke while checking or working on the fuel system.

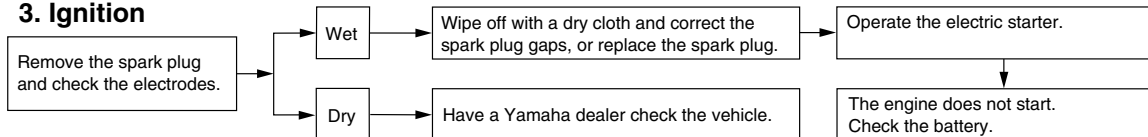
#### 1. Fuel



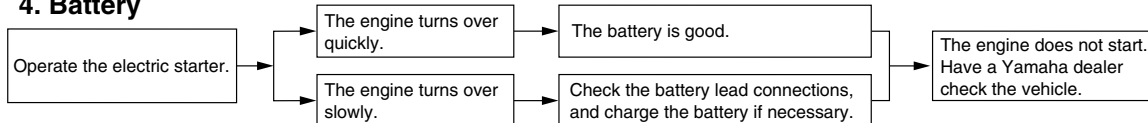
#### 2. Compression



#### 3. Ignition



#### 4. Battery



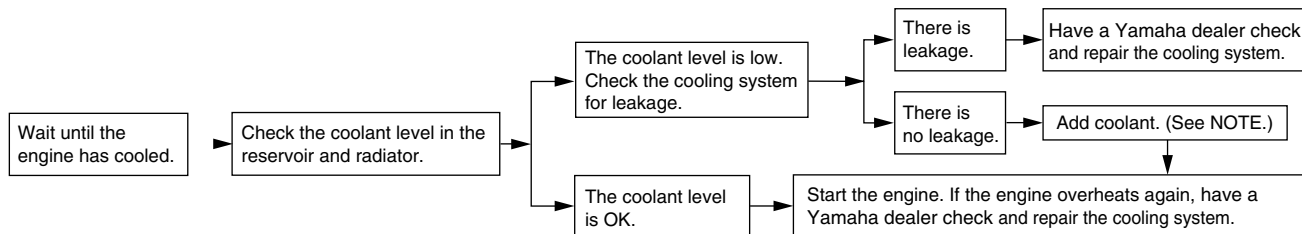
# PERIODIC MAINTENANCE AND MINOR REPAIR

## Engine overheating

EWAT1040

### **⚠ WARNING**

- Do not remove the radiator cap when the engine and radiator are hot. Scalding hot fluid and steam may be blown out under pressure, which could cause serious injury. Be sure to wait until the engine has cooled.
- Place a thick rag, like a towel, over the radiator cap, and then slowly rotate the cap counterclockwise to the detent to allow any residual pressure to escape. When the hissing sound has stopped, press down on the cap while turning it counterclockwise, and then remove the cap.



### **NOTE:**

If coolant is not available, tap water can be temporarily used instead, provided that it is changed to the recommended coolant as soon as possible.

EAU26090

## Care

While the open design of a scooter reveals the attractiveness of the technology, it also makes it more vulnerable. Rust and corrosion can develop even if high-quality components are used. A rusty exhaust pipe may go unnoticed on a car, however, it detracts from the overall appearance of a scooter. Frequent and proper care does not only comply with the terms of the warranty, but it will also keep your scooter looking good, extend its life and optimize its performance.

### Before cleaning

1. Cover the muffler outlet with a plastic bag after the engine has cooled down.
2. Make sure that all caps and covers as well as all electrical couplers and connectors, including the spark plug cap, are tightly installed.
3. Remove extremely stubborn dirt, like oil burnt onto the crankcase, with a degreasing agent and a

brush, but never apply such products onto seals, gaskets and wheel axles. Always rinse the dirt and degreaser off with water.

### Cleaning

ECA10780

#### CAUTION:

- **Avoid using strong acidic wheel cleaners, especially on spoked wheels. If such products are used on hard-to-remove dirt, do not leave the cleaner on the affected area any longer than instructed. Also, thoroughly rinse the area off with water, immediately dry it, and then apply a corrosion protection spray.**
- **Improper cleaning can damage windshields, cowlings, panels and other plastic parts. Use only a soft, clean cloth or sponge with mild detergent and water to clean plastic.**
- **Do not use any harsh chemical products on plastic parts. Be sure to avoid using cloths or sponges which have been in**

contact with strong or abrasive cleaning products, solvent or thinner, fuel (gasoline), rust removers or inhibitors, brake fluid, antifreeze or electrolyte.

- **Do not use high-pressure washers or steam-jet cleaners since they cause water seepage and deterioration in the following areas: seals (of wheel and swingarm bearings, fork and brakes), electric components (couplers, connectors, instruments, switches and lights), breather hoses and vents.**
- **For scooters equipped with a windshield: Do not use strong cleaners or hard sponges as they will cause dulling or scratching. Some cleaning compounds for plastic may leave scratches on the windshield. Test the product on a small hidden part of the windshield to make sure that it does not leave any marks. If the windshield is scratched, use a quality plastic polishing compound after washing.**

# SCOOTER CARE AND STORAGE

## After normal use

Remove dirt with warm water, a mild detergent, and a soft, clean sponge, and then rinse thoroughly with clean water. Use a toothbrush or bottlebrush for hard-to-reach areas. Stubborn dirt and insects will come off more easily if the area is covered with a wet cloth for a few minutes before cleaning.

## After riding in the rain, near the sea or on salt-sprayed roads

Since sea salt or salt sprayed on the roads during winter are extremely corrosive in combination with water, carry out the following steps after each ride in the rain, near the sea or on salt-sprayed roads.

### NOTE:

Salt sprayed on roads in the winter may remain well into spring.

1. Clean the scooter with cold water and a mild detergent after the engine has cooled down.

### CAUTION:

**Do not use warm water since it increases the corrosive action of the salt.**

2. Apply a corrosion protection spray on all metal, including chrome- and nickel-plated, surfaces to prevent corrosion.

## After cleaning

1. Dry the scooter with a chamois or an absorbing cloth.
2. Use a chrome polish to shine chrome, aluminum and stainless-steel parts, including the exhaust system. (Even the thermally induced discoloring of stainless-steel exhaust systems can be removed through polishing.)
3. To prevent corrosion, it is recommended to apply a corrosion protection spray on all metal, including chrome- and nickel-plated, surfaces.
4. Use spray oil as a universal cleaner to remove any remaining dirt.

ECA10790

5. Touch up minor paint damage caused by stones, etc.
6. Wax all painted surfaces.
7. Let the scooter dry completely before storing or covering it.

EWA10940

### ⚠ WARNING

- **Make sure that there is no oil or wax on the brakes or tires. If necessary, clean the brake discs and brake linings with a regular brake disc cleaner or acetone, and wash the tires with warm water and a mild detergent.**
- **Before operating the scooter test its braking performance and cornering behavior.**

ECA10800

### CAUTION:

- **Apply spray oil and wax sparingly and make sure to wipe off any excess.**
- **Never apply oil or wax to any rubber and plastic parts, but treat them with a suitable care product.**
- **Avoid using abrasive polishing**

# SCOOTER CARE AND STORAGE

compounds as they will wear away the paint.

**NOTE:** \_\_\_\_\_  
Consult a Yamaha dealer for advice on what products to use.

EAU36560

## Storage

### Short-term

Always store your scooter in a cool, dry place and, if necessary, protect it against dust with a porous cover.

ECA10820

### CAUTION:

- **Storing the scooter in a poorly ventilated room or covering it with a tarp, while it is still wet, will allow water and humidity to seep in and cause rust.**
- **To prevent corrosion, avoid damp cellars, stables (because of the presence of ammonia) and areas where strong chemicals are stored.**

### Long-term

Before storing your scooter for several months:

1. Follow all the instructions in the “Care” section of this chapter.
2. Fill up the fuel tank and add fuel stabilizer (if available) to prevent the fuel tank from rusting and the fuel from deteriorating.

3. Perform the following steps to protect the cylinder, piston rings, etc. from corrosion.

- a. Remove the spark plug cap and spark plug.
- b. Pour a teaspoonful of engine oil into the spark plug bore.
- c. Install the spark plug cap onto the spark plug, and then place the spark plug on the cylinder head so that the electrodes are grounded. (This will limit sparking during the next step.)
- d. Turn the engine over several times with the starter. (This will coat the cylinder wall with oil.)
- e. Remove the spark plug cap from the spark plug, and then install the spark plug and the spark plug cap.

EWA10950

### **WARNING**

**To prevent damage or injury from sparking, make sure to ground the spark plug electrodes while turning the engine over.**

# SCOOTER CARE AND STORAGE

---

4. Lubricate all control cables and the pivoting points of all levers and pedals as well as of the sidestand/centerstand.
5. Check and, if necessary, correct the tire air pressure, and then lift the scooter so that both of its wheels are off the ground. Alternatively, turn the wheels a little every month in order to prevent the tires from becoming degraded in one spot.
6. Cover the muffler outlet with a plastic bag to prevent moisture from entering it.
7. Remove the battery and fully charge it. Store it in a cool, dry place and charge it once a month. Do not store the battery in an excessively cold or warm place [less than 0 °C (30 °F) or more than 30 °C (90 °F)]. For more information on storing the battery, see page 6-21.

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

Make any necessary repairs before storing the scooter.

---

## Dimensions

Overall length	1905 mm (75.0 in)
Overall width	685 mm (27.0 in)
Overall height	1045 mm (41.1 in)
Seat height	735 mm (28.9 in)
Wheelbase	1280 mm (50.4 in)
Ground clearance	115 mm (4.53 in)
Minimum turning radius	2000 mm (78.7 in)

## Weight

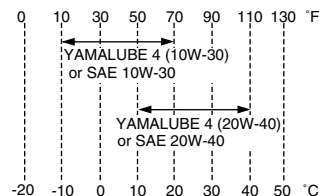
With oil and fuel	90.0 kg (198 lb)
-------------------	------------------

## Engine

Engine type	Liquid cooled 4-stroke, SOHC
Cylinder arrangement	Forward-inclined single cylinder
Displacement	49.0 cm <sup>3</sup>
Bore x stroke	38.0 x 43.5 mm (1.50 x 1.71 in)
Compression ratio	12.00 :1
Starting system	Electric starter and kickstarter
Lubrication system	Wet sump

## Engine oil

Type  
SAE10W30 or SAE10W40



Recommended engine oil grade  
API service SG type or higher, JASO standard MA

Periodic oil change  
0.78 L (0.82 US qt) (0.69 Imp.qt)

## Final transmission oil

Type  
SAE10W30 type SE motor oil

Quantity  
0.10 L (0.11 US qt) (0.09 Imp.qt)

## Cooling system

Coolant reservoir capacity (up to the maximum level mark)  
0.26 L (0.27 US qt) (0.23 Imp.qt)

Radiator capacity (including all routes)  
0.50 L (0.53 US qt) (0.44 Imp.qt)

## Air filter

Air filter element  
Wet element

## Fuel

Recommended fuel  
Unleaded gasoline only

Fuel tank capacity  
4.5 L (1.19 US gal) (0.99 Imp.gal)

## Fuel injector

Manufacturer  
AISAN INDUSTRY

Model/quantity  
3B3 / 1

## Spark plug (s)

Manufacturer/model  
NGK/CR7E

Spark plug gap  
0.7-0.8 mm (0.028-0.031 in)

## Clutch

Clutch type  
Dry, centrifugal automatic

## Transmission

Primary reduction system  
Helical gear

Primary reduction ratio  
50/13 (3.846)

Secondary reduction system  
Helical gear

Secondary reduction ratio  
43/12 (3.583)

Transmission type  
V-belt automatic

Operation  
Centrifugal automatic type

## Chassis

Frame type  
Steel tube backbone

Caster angle  
26.00 degree

# SPECIFICATIONS

Trail  
84.0 mm (3.31 in)

## Front tire

Type  
Tubeless  
Size  
120/90-10 57J  
Manufacturer/model  
CHENG SHIN / C-6022

## Rear tire

Type  
Tubeless  
Size  
120/90-10 57J  
Manufacturer/model  
CHENG SHIN / C-6022  
Maximum load  
85 kg (187 lb)

## Tire air pressure (measured on cold tires)

Loading condition  
0-85 kg (0-187 lb)  
Front  
175 kPa (25 psi) (1.75 kgf/cm<sup>2</sup>) (1.75 bar)  
Rear  
175 kPa (25 psi) (1.75 kgf/cm<sup>2</sup>) (1.75 bar)

## Front wheel

Wheel type  
Cast wheel  
Rim size  
10 x MT 3.00

## Rear wheel

Wheel type  
Cast wheel

Rim size  
10 x MT 3.00

## Front brake

Type  
Drum brake  
Operation  
Right hand operation

## Rear brake

Type  
Drum brake  
Operation  
Left hand operation

## Front suspension

Type  
Telescopic fork  
Spring/shock absorber type  
Coil spring  
Wheel travel  
58.0 mm (2.28 in)

## Rear suspension

Type  
Unit swing  
Spring/shock absorber type  
Coil spring  
Wheel travel  
56.0 mm (2.20 in)

## Electrical system

Ignition system  
Transistorized coil ignition  
Charging system  
AC magneto

## Battery

Model  
GTX5L-BS

Voltage, capacity  
12 V, 4.0 Ah

## Headlight

Bulb type  
Halogen bulb

## Bulb voltage, wattage x quantity

Headlight  
12 V, 35 W/35.0 W x 1  
Tail/brake light  
12 V, 5.0 W/21.0 W x 1  
Front turn signal light  
12 V, 10.0 W x 2  
Rear turn signal light  
12 V, 10.0 W x 2  
License plate light  
12 V, 5.0 W x 1  
Meter lighting  
12 V, 1.7 W x 1  
High beam indicator light  
12 V, 1.7 W x 1  
Turn signal indicator light  
14 V, 3.0 W x 1  
Coolant temperature warning light  
12 V, 1.7 W x 1  
Engine trouble warning light  
12 V, 1.7 W x 1

## Fuses

Main fuse  
15.0 A



## Identification numbers

EAU26351

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

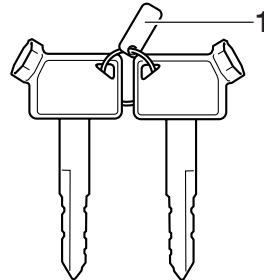
KEY IDENTIFICATION NUMBER:

VEHICLE IDENTIFICATION NUMBER:

MODEL LABEL INFORMATION:

## Key identification number

EAU26381



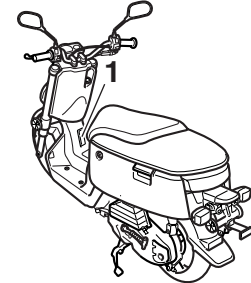
ZAUM001

1. Key identification number

The key identification number is stamped into the key tag. Record this number in the space provided and use it for reference when ordering a new key.

## Vehicle identification number

EAU26410



ZAUM001

1. Vehicle identification number

The vehicle identification number is stamped into the frame.

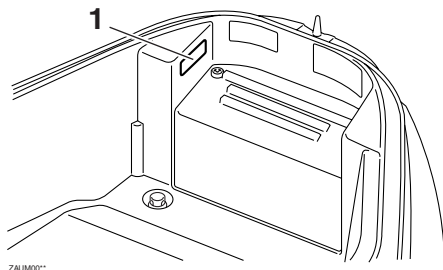
**NOTE:** \_\_\_\_\_  
The vehicle identification number is used to identify your motorcycle and may be used to register your motorcycle with the licensing authority in your area.

# CONSUMER INFORMATION

---

EAUT1440

## Model label



### 1. Model label

The model label is affixed to the inside of the storage compartment. (See page 3-8.) Record the information on this label in the space provided. This information will be needed when ordering spare parts from a Yamaha dealer.

## Reporting safety defects

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Yamaha Motor Corporation, U.S.A. If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Yamaha Motor Corporation, U.S.A.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to <http://www.safercar.gov>; or write to: Administrator, NHTSA, 400 Seventh Street, SW., Washington, DC 20590. You can also obtain other information about motor vehicle safety from <http://www.safercar.gov>.

# CONSUMER INFORMATION

EAU26560

## Motorcycle noise regulation

### TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED:

Federal law prohibits the following acts or the causing thereof: (1) 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 or (2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

“AMONG THOSE ACTS PRESUMED TO CONSTITUTE TAMPERING ARE THE ACTS LISTED BELOW”.

These acts include tampering with the following systems; i.e., modification, removal, etc.

Exhaust system	Muffler Exhaust pipe Silencer
Intake system	Air cleaner case Air cleaner element Intake duct

## Maintenance record

Copies of work orders and/or receipts for parts purchased and installed on your motorcycle will be required to document that maintenance has been completed in accordance with the emissions warranty. The chart below is printed only as a reminder that maintenance work is required. It is not acceptable proof of maintenance work.

Maintenance interval	Date of service	Mileage	Servicing dealer name and address	Remarks
600 mi (1000 km) or 1 month				
2000 mi (4000 km) or 6 months				
4000 mi (7000 km) or 12 months				
6000 mi (10000 km) or 18 months				
8000 mi (13000 km) or 24 months				
10000 mi (16000 km) or 30 months				
12000 mi (19000 km) or 36 months				
14000 mi (22000 km) or 42 months				

# CONSUMER INFORMATION

---

Maintenance interval	Date of service	Mileage	Servicing dealer name and address	Remarks
16000 mi (25000 km) or 48 months				
18000 mi (28000 km) or 54 months				
20000 mi (31000 km) or 60 months				

## YAMAHA MOTOR CORPORATION, U.S.A. RIVA LIMITED WARRANTY

Yamaha Motor Corporation, U.S.A. hereby warrants that each new Yamaha Riva purchased from an authorized Yamaha Riva dealer in the continental United States will be free from defects in material and workmanship for the period of time stated herein, subject to certain stated limitations.

**THE PERIOD OF WARRANTY** for Yamaha Riva shall be one (1) year from the date of purchase, with no mileage limitation.

**MODELS EXCLUDED FROM WARRANTY** include those used for non-Yamaha-authorized renting, leasing, or other commercial purposes.

**DURING THE PERIOD OF WARRANTY** any authorized Yamaha motorcycle dealer will, free of charge, repair or replace any part adjudged defective by Yamaha due to faulty workmanship or material from the factory. Parts used in warranty repairs will be warranted for the balance of the product's warranty period. All parts replaced under warranty become property of Yamaha Motor Corp. U.S.A.

**GENERAL EXCLUSIONS** from this warranty shall include any failures caused by:

- Competition or racing use.
- Installation of parts or accessories that are not qualitatively equivalent to genuine Yamaha parts.
- Abnormal strain, neglect, or abuse.
- Lack of proper maintenance.
- Accident or collision damage.

**SPECIFIC EXCLUSIONS** from this warranty shall include parts replaced due to normal wear or routine maintenance.

**THE CUSTOMER'S RESPONSIBILITY** under this warranty shall be to:

- Operate and maintain the Riva as specified in the appropriate Owner's Manual, and

- Give notice to an authorized Yamaha Riva dealer of any and all apparent defects within ten (10) days after discovery, and make the machine available at that time for inspection and repairs at such dealer's place of business.

**WARRANTY TRANSFER:** To transfer the warranty from the original purchaser to any subsequent purchaser, it is imperative that the machine be inspected and registered for warranty by an authorized Yamaha Riva dealer. In order for this warranty to remain in effect, this inspection and registration must take place within (10) days after transfer. An inspection and registration fee will be charged for this service.

### EMISSIONS CONTROL SYSTEM WARRANTY

Yamaha Motor Corporation, U.S.A. also warrants to the ultimate purchaser and each subsequent purchaser of each 2006 and later model Yamaha Riva covered by this warranty, that the vehicle is designed, built, and equipped so as to conform at the time of sale with all U.S. emissions standards applicable at the time of manufacture and that it is free from defects in materials and workmanship which would cause it not to meet these standards within the periods listed immediately below. Failure other than those resulting from defects in material or workmanship which arise solely as a result of owner abuse and/or lack of proper maintenance are not covered by this warranty.

### ENGINE

#### DISPLACEMENT

	PERIOD
under 50cc	6,000 km (3,750 miles) or five years, whichever occurs first
50cc to 169cc	12,000 km (7,465 miles) or five years, whichever occurs first
170cc to 279cc	18,000 km (11,185 miles) or five years, whichever occurs first
280cc or over	30,000 km (18,641 miles) or five years, whichever occurs first

**YAMAHA MOTOR CORPORATION, U.S.A. MAKES NO OTHER WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED THE OBLIGATIONS AND TIME LIMITS STATED IN THIS WARRANTY ARE HEREBY DISCLAIMED BY YAMAHA MOTOR CORPORATION, U.S.A. AND EXCLUDED FROM THIS WARRANTY.**

**SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. ALSO EXCLUDED FROM THIS WARRANTY ARE ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING LOSS OF USE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU.**

**THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.**

YAMAHA MOTOR CORPORATION, U.S.A.  
P. O. Box 6555  
Cypress, California 90630

# CONSUMER INFORMATION

- Q. What costs are my responsibility during the warranty period?
- A. The customer's responsibility includes all costs of normal maintenance services, non-warranty repairs, accident and collision damages, and oil, oil filters, air filters, spark plugs, and brake shoes.
- Q. What are some examples of "abnormal" strain, neglect, or abuse?
- A. These terms are general and overlap each other in areas. Specific examples include: Running the machine out of oil, sustained high-rpm, full-throttle, operating the machine with a broken or damaged part which causes another part to fail, damage or failure due to improper or careless transportation and or tie down. If you have any specific questions on operation or maintenance, please contact your dealer for advice.
- Q. Does the warranty cover incidental costs such as towing or transportation due to a failure?
- A. No. The warranty is limited to repair of the machine itself.
- Q. May I perform any or all of the recommended maintenance shown in the Owner's Manual instead of having the dealer do them?
- A. Yes, if you are a qualified mechanic and follow the procedures specified in the Owner's and Service Manual. We do recommend, however, that items requiring special tools or equipment be done by a Yamaha Riva dealer.
- Q. Will the warranty be void or cancelled if I do not operate or maintain my new Riva exactly as specified in the Owner's Manual?
- A. No. The warranty on a new Riva cannot be "voided" or "cancelled." **However, if a particular failure is caused by operation or maintenance other than as shown in the Owner's Manual, that failure may not be covered under warranty.**
- Q. What responsibility does my dealer have under this warranty?
- A. Each Yamaha Riva dealer is expected to:
1. Completely set up every new machine before sale.
  2. Explain the operation, maintenance, and warranty requirements to your satisfaction at the time of sale, and upon your request at any later date.
  3. Each Yamaha Riva dealer is held responsible for his setup, service and warranty repair work.
- Q. Is the warranty transferable to second owners?
- A. Yes. The remainder of the existing warranty can be transferred upon request. The unit has to be inspected and re-registered by an authorized Yamaha Riva dealer for the policy to remain effective.

If your machine requires warranty service, you must take it to any authorized Yamaha Riva dealer within the continental United States. Be sure to bring your warranty registration card or other valid proof of the original date of purchase. If a question or problem arises regarding warranty, first contact the owner of the dealership. Since all warranty matters are handled at the dealer level, this person is in the best position to help you. If you are still not satisfied and require additional assistance, please write:

YAMAHA MOTOR CORPORATION U.S.A.  
CUSTOMER RELATIONS DEPARTMENT  
P.O. Box 6555  
Cypress, California 90630

When contacting Yamaha Motor Corporation, U.S.A. don't forget to include any important information such as names, addresses, model, V.I.N (frame number), dates, and receipts.

## CHANGE OF ADDRESS

The federal government requires each manufacturer of a motor vehicle to maintain a complete, up-to-date list of all first purchasers against the possibility of a safety-related defect and recall. This list is compiled from the purchase registrations sent to Yamaha Motor Corporation, U.S.A. by the selling dealer at the time of your purchase.

If you should move after you have purchased your new motorcycle, please advise us of your new address by sending a postcard listing your Riva model name, V.I.N (frame number), dealer number (or dealer's name) as it is shown on your warranty card, your name and new mailing address. Mail to:

YAMAHA MOTOR CORPORATION, U.S.A.  
P.O. Box 6555  
Cypress, California 90630  
Attention: Warranty Department

This will ensure that Yamaha Motor Corporation, U.S.A. has an up-to-date registration record in accordance with federal law.



## YAMAHA EXTENDED SERVICE (Y.E.S.)

Keep your Yamaha protected even after your warranty expires with genuine Yamaha Extended Service (Y.E.S.).

- Y.E.S. is designed and administered by Yamaha Motor Corporation to provide maximum owner satisfaction. You get uninterrupted factory-backed coverage for extra peace of mind.
- Y.E.S. is flexible. You choose the plan that's right for you: 12 months, 24 months, 36 months or, on certain models, even 48 months beyond your warranty period.
- Y.E.S. is designed and administered by the same Yamaha people who handle your warranty – and it shows in the comprehensive coverage benefits. There are no mileage limitations. Coverage isn't limited to "moving parts" or the "drive train" like many other plans. And Y.E.S. covers manufacturing defects just like the warranty. See the sample contract at your Yamaha dealer to see how comforting uninterrupted factory-backed protection can be.
- You don't have to pay anything for covered repairs. There's no deductible to pay, and repairs aren't "pro-rated." You don't have any "out-of-pocket" expenses for covered repairs.

- In addition, Travel and Recreation Interruption Protection (TRIP) is included at no extra cost. TRIP gives you up to \$150 reimbursement per occurrence for any reasonable expenses you incur because your Yamaha needs covered service: replacement vehicle rental, emergency towing, phone calls, even food and lodging when you are away from home. This superb coverage goes into effect when you purchase Y.E.S., so it applies to any warranty repairs as well as covered repairs during your entire Y.E.S. plan period.
- Y.E.S. coverage is honored at any authorized Yamaha dealer nationwide.
- Y.E.S. coverage is transferable to a new owner if you sell or trade-in. That can make your Yamaha much more valuable!

This excellent Y.E.S. plan coverage is only available to Yamaha owners like you, and only while your Yamaha is still within the Yamaha Limited Warranty period. So visit your authorized Yamaha dealer to get all the facts. He can show you how easy it is to protect your investment with Yamaha Extended Service.

## CONSUMER INFORMATION

---

We urge you to act now. You'll get the excellent benefits of TRIP coverage right away, and you'll rest easy knowing you'll have strong factory-backed protection even after your Yamaha Limited Warranty expires.

A special note:

If visiting your dealer isn't convenient, contact Yamaha with your Primary ID number (your frame number). We'll be happy to help you get the Y.E.S. coverage you need.

Yamaha Service Marketing

P.O. Box 6555

Cypress, CA 90630

1-(866)-YES-EXTD (1-866-937-3983)



**YAMAHA**



**EXTENDED**



**SERVICE**

<b>A</b>			
Acceleration and deceleration .....	5-2	Helmet holder .....	3-8
Air filter element, replacing .....	6-13	High beam indicator light .....	3-2
		Horn switch .....	3-4
<b>B</b>		<b>I</b>	
Battery .....	6-20	Identification numbers .....	9-1
Brake lever free play, adjusting .....	6-15	Indicator and warning lights .....	3-2
Brake lever, front .....	3-5	<b>K</b>	
Brake lever, rear .....	3-5	Key identification number .....	9-1
Brake levers, lubricating .....	6-18	Keyhole cover .....	3-2
Brake shoes, checking .....	6-17	Kickstarter .....	3-7
Braking .....	5-2	<b>L</b>	
<b>C</b>		Labels, location of .....	1-5
Care .....	7-1	Luggage hook .....	3-8
Catalytic converter .....	3-7	<b>M</b>	
Centerstand, checking and lubricating ..	6-18	Main switch/steering lock .....	3-1
Coolant .....	6-11	Maintenance and lubrication, periodic ....	6-3
Coolant temperature warning light .....	3-2	Maintenance record .....	9-5
<b>D</b>		Maintenance, emission control system ...	6-2
Dimmer switch .....	3-4	Maintenance, periodic .....	6-1
<b>E</b>		Model label .....	9-2
Engine break-in .....	5-3	<b>N</b>	
Engine oil .....	6-8	Noise regulation .....	9-4
Engine stop switch .....	3-4	<b>P</b>	
Engine trouble warning light .....	3-3	Panels, removing and installing .....	6-6
<b>F</b>		Parking .....	5-3
Final transmission oil .....	6-10	Part locations .....	2-1
Front fork, checking .....	6-18	Pre-operation check list .....	4-2
Fuel .....	3-6	<b>R</b>	
Fuel gauge .....	3-3	Rear brake lever free play, adjusting .....	6-16
Fuel tank cap .....	3-5	<b>S</b>	
Fuse, replacing .....	6-21	Safe-riding points .....	1-4
<b>H</b>		Safety defects, reporting .....	9-3
Handlebar switches .....	3-4	Seat .....	3-8
Headlight bulb, replacing .....	6-22	Spark plug, checking .....	6-7
		Specifications .....	8-1
		Speedometer unit .....	3-3
		Start switch .....	3-4
		Starting a cold engine .....	5-1
		Starting off .....	5-2
		Steering, checking .....	6-19
		Storage .....	7-3
		Storage compartment .....	3-9
		<b>T</b>	
		Tail/brake light bulb, replacing .....	6-23
		Throttle cable free play, checking .....	6-13
		Throttle grip and cable, checking and lubricat- ing .....	6-17
		Tires .....	6-14
		Troubleshooting .....	6-25
		Troubleshooting charts .....	6-26
		Turn signal indicator light .....	3-2
		Turn signal light bulb, replacing .....	6-24
		Turn signal switch .....	3-4
		<b>V</b>	
		Valve clearance .....	6-13
		Vehicle identification number .....	9-1
		<b>W</b>	
		Warranty, extended .....	9-9
		Warranty, limited .....	9-7
		Wheel bearings, checking .....	6-20
		Wheels .....	6-15

# INDEX

---

---









***PROTECT YOUR INVESTMENT***

***Use Genuine YAMAHA Parts And Accessories***

***See your Authorized YAMAHA Dealer for a Genuine YAMAHA  
Service Manual.***



**YAMAHA**

YAMAHA MOTOR TAIWAN CO., LTD

PRINTED IN TAIWAN

2006.09-0.8x1 

(E)