



**⚠ READ THIS MANUAL CAREFULLY!**  
It contains important safety information.

**⚠ LIRE ATTENTIVEMENT CE MANUEL!**  
Il comprend d'importantes informations de sécurité.

**⚠ ¡LEA ESTE MANUAL ATENTAMENTE!**  
Contiene indicaciones importantes acerca de la seguridad.

**OWNER'S MANUAL  
MANUEL DU PROPRIÉTAIRE  
MANUAL DEL PROPIETARIO**

**YZF**  
**YFZ450Y**

**5D3-28199-63**

PRINTED ON RECYCLED PAPER  
IMPRIMÉ SUR PAPIER RECYCLÉ  
IMPRESO EN PAPEL RECICLADO



YAMAHA MOTOR CO., LTD.

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(E,F,S)



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It contains important safety information.

**OWNER'S MANUAL**

***YZF***

***YFZ450Y***

**5D3-28199-63-E0**



**Read this manual carefully before operating this vehicle. This manual should stay with this vehicle if it is sold.**

### **EC Declaration of Conformity**

conforming to Directive 98/37/EC

**We, YAMAHA MOTOR CO., LTD. 2500 Shingai, Iwata, Japan,  
declare in sole responsibility, that the product**

**YFZ450 (JY4AJ20W080008601 ~ )**

(Make, model)

to which this declaration applies, conforms to the essential health and safety requirements of Directive 98/37/EC,

(If applicable)

and to the other relevant Directives of EEC

89/336/EEC or 2004/108/EC

(Title and/or number and date of issue of the other Directives of EEC)

(If applicable)

To effect correct application of the essential health and safety requirements stated in the Directives of EEC, the following standards and/or technical specifications were consulted:

EN292 ANSI/SVIA 1-2007

(Title and/or number and date of issue of standards and/or specifications)

### **Authorized Representative**

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Signature

*S. Shimada*

Shinya Shimada

General Manager

RV Engineering Division

RV Company

Date of Issue 2 March, 2008

# INTRODUCTION

Congratulations on your purchase of the Yamaha YFZ450Y. This ATV represents the result of many years of Yamaha experience in the production of fine sporting, touring, and pacesetting racing machines. With the purchase of this Yamaha, you can now appreciate the high degree of craftsmanship and reliability that have made Yamaha a leader in these fields.

This manual will provide you with a good basic understanding of the features and operation of this ATV. **This manual includes important safety information. It provides information about special techniques and skills necessary to ride the ATV.** It also includes basic maintenance and inspection procedures. If you have any questions regarding the operation or maintenance of your ATV, please consult a Yamaha dealer.




## **AN IMPORTANT SAFETY MESSAGE:**

- READ THIS MANUAL COMPLETELY BEFORE OPERATING YOUR ATV. MAKE SURE YOU UNDERSTAND ALL INSTRUCTIONS.
- PAY CLOSE ATTENTION TO THE WARNING AND NOTICE LABELS ON THE ATV.
- THIS ATV, AND ANY OTHER ATV OVER 90 cc, SHOULD NOT BE RIDDEN BY ANYONE UNDER 16 YEARS OF AGE.
- THIS ATV IS A HIGH-PERFORMANCE ATV FOR OFF-ROAD USE ONLY, FOR SPORT-TYPE RECREATIONAL AND COMPETITIVE USE BY EXPERIENCED OPERATORS.

## IMPORTANT MANUAL INFORMATION

FAILURE TO FOLLOW THE WARNINGS CONTAINED IN THIS MANUAL CAN RESULT IN SERIOUS INJURY OR DEATH.

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

	<b>This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.</b>
	<b>A WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.</b>
	<b>A NOTICE indicates special precautions that must be taken to avoid damage to the vehicle or other property.</b>
<b>TIP</b>	A TIP provides key information to make procedures easier or clearer.

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

EBU17350

## IMPORTANT NOTICE

EBU17370

Welcome to the Yamaha world of motor sports!

This ATV is designed and manufactured for use on UNPAVED surfaces only. It is unsafe to operate this ATV on any paved surface, paved street, paved road or motorway.

Please check your local riding laws and regulations before operating this ATV.

EBU17390

**YFZ450Y  
OWNER'S MANUAL  
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## SAFETY INFORMATION

EBU17592

### **AN ATV IS NOT A TOY AND CAN BE HAZARDOUS TO OPERATE.**

An ATV handles differently from other vehicles, including motorcycles and cars. A collision or roll-over can occur quickly, even during routine maneuvers such as turning and riding on hills or over obstacles, if you fail to take proper precautions.

SEVERE INJURY OR DEATH can result if you do not follow these instructions:

- Read this manual and all labels carefully and follow the operating procedures described.
- Never operate an ATV without proper training or instruction.
- Always follow the age recommendation:
  - A child under 16 years old should never operate an ATV with engine size greater than 90 cc.
- Never allow a child under age 16 to operate an ATV without adult supervision, and never allow

continued use of an ATV by a child if he or she does not have the abilities to operate it safely.

- Never carry a passenger on an ATV.
- Always avoid operating an ATV on any paved surfaces, including sidewalks, driveways, parking lots and paved streets.
- Never operate an ATV on any paved street, paved road or motorway.
- Watch carefully for other vehicles when operating on unpaved public streets or roads. Make sure you know your country's laws and regulations before you ride on unpaved public streets or roads.
- Never operate an ATV without wearing an approved motorcycle helmet that fits properly. You should also wear eye protection (goggles or face shield), gloves, boots, a long-sleeved shirt or a jacket, and long pants.
- Never consume alcohol or drugs before or while operating this ATV.
- Never operate at speeds too fast for your skills

or the riding conditions. Always go at a speed that is proper for the terrain, visibility, operating conditions, and your experience.

- Never attempt wheelies, jumps, or other stunts.
- Always inspect your ATV each time you use it to make sure it is in safe operating condition. Always follow the inspection and maintenance procedures and schedules described in this manual.
- Always keep both hands on the handlebars and both feet on the footrests of the ATV during operation.
- Always go slowly and be extra careful when operating on unfamiliar terrain. Always be alert to changing terrain conditions when operating the ATV.
- Never operate on excessively rough, slippery or loose terrain until you have learned and practiced the skills necessary to control the ATV on such terrain. Always be especially cautious on these kinds of terrain.
- Always follow proper procedures for turning as described in this manual. Practice turning at low speeds before attempting to turn at faster speeds and never turn at excessive speeds.
- Never operate the ATV on hills too steep for the

ATV or for your abilities. Practice on smaller hills before attempting larger hills.

- Always follow proper procedures for climbing hills as described in this manual. Check the terrain carefully before you start up any hill. Never climb hills with excessively slippery or loose surfaces. Shift your weight forward. Never open the throttle suddenly or make sudden gear changes. Never go over the top of a hill at high speed.
- Always follow proper procedures for going down hills and for braking on hills as described in this manual. Check the terrain carefully before you start down any hill. Shift your weight backward. Never go down a hill at high speed. Avoid going down a hill at an angle that would cause the vehicle to lean sharply to one side. Go straight down the hill where possible.
- Always follow proper procedures for crossing the side of a hill as described in this manual. Avoid hills with excessively slippery or loose surfaces. Shift your weight to the uphill side of the ATV. Never attempt to turn the ATV around on any hill until you have mastered the turning technique described in this manual on level ground. Avoid crossing the side of a steep hill if possible.
- Always use proper procedures if you stall or roll

backwards when climbing a hill. To avoid stalling, use the proper gear and maintain a steady speed when climbing a hill. If you stall or roll backwards, follow the special procedure for braking described in this manual. Dismount on the uphill side or to a side if pointed straight uphill. Turn the ATV around and remount, following the procedure described in this manual.

- Always check for obstacles before operating in a new area.
- Never attempt to operate over large obstacles, such as large rocks or fallen trees. Always follow proper procedures when operating over obstacles as described in this manual.
- Always be careful when skidding or sliding. Learn to safely control skidding or sliding by practicing at low speeds and on level, smooth terrain. On extremely slippery surfaces, such as ice, go slowly and be very cautious in order to reduce the chance of skidding or sliding out of control.
- Never operate an ATV in fast flowing water or in water deeper than that recommended in this manual. Remember that wet brakes may have reduced stopping ability. Test your brakes after leaving water. If necessary, apply them several

times to let friction dry out the linings.

- Always use the size and type of tires specified in this manual.
- Always maintain proper tire pressure as described in this manual.
- Never modify an ATV through improper installation or use of accessories.
- Never exceed the stated load capacity for an ATV. Cargo should be properly distributed and securely attached. Reduce speed and follow instructions in this manual for carrying cargo or pulling a trailer. Allow greater distance for braking.

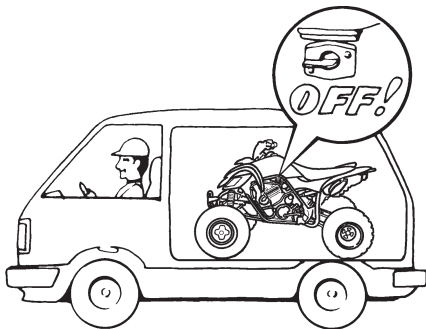
EWB00061

### **WARNING**

- **Always turn off the engine when refueling.**
- **Do not refuel right after the engine has been running and is still very hot.**
- **Do not spill gasoline on the engine or exhaust pipe/muffler when refueling. Never refuel while smoking, or in the vicinity of sparks, open flames, or other sources of ignition such as the pilot lights of water heaters and clothes dryers. Gasoline can catch fire and you could be burned.**
- **When transporting the ATV in another vehi-**

cle, be sure it is kept upright and that the fuel cock is in the “OFF” position. Otherwise, fuel may leak out of the carburetor or fuel tank.

- Gasoline is poisonous. If you should swallow some gasoline or inhale a lot of gasoline vapor, or get some gasoline in your eyes, seek medical help immediately. If gasoline spills on your skin, wash with soap and water. If gasoline spills on your clothing, change your clothes.
- 



EWB00070

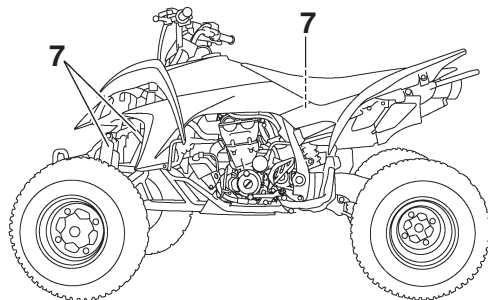
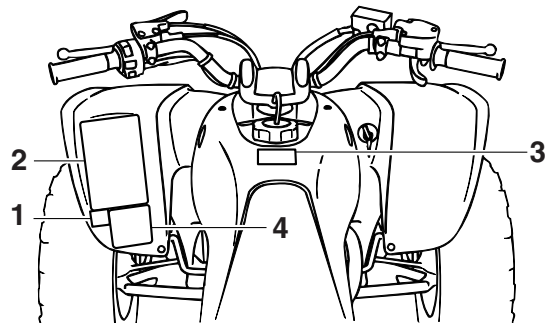
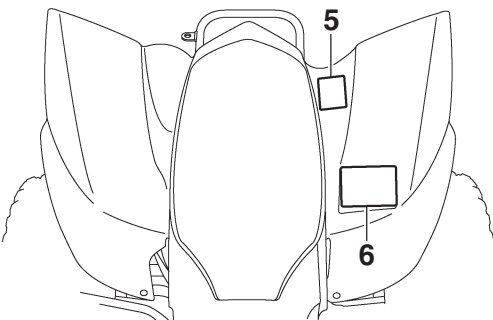
**⚠ WARNING**

Always operate your ATV in an area with adequate ventilation. Never start or run the engine

in a closed area. Exhaust fumes are poisonous and may cause loss of consciousness and death within a short time.

---

# LOCATION OF THE WARNING AND SPECIFICATION LABELS



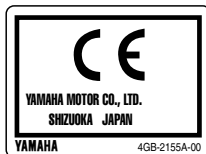
Read and understand all of the labels on your ATV. These labels contain important information for safe and proper operation.

**2**

Never remove any labels from your ATV. If a label becomes difficult to read or comes off, request a replacement label from your Yamaha dealer.



1



2

**GB** Before you operate this vehicle, read the owner's manual.

**D** Lesen Sie die Bedienungsanleitung bevor Sie dieses Fahrzeug fahren.

**E** Antes de conducir este vehículo, lea el Manual del Propietario.

**F** Lire le manuel du propriétaire avant d'utiliser ce véhicule.

**I** Prima di usare il veicolo, leggete il manuale di istruzioni.

**NL** Voor het gebruik van dit voertuig de handleiding met aandacht lezen.

**P** Antes de utilizar este vehículo, lea o manual do proprietário.

**S** Innan du kör detta fordon, läs handboken.

SFK-2156B-00

2

3

- Use PREMIUM unleaded gasoline with min. 97 octane (RON).
- Nur Super Bleifrei mit Mindestoktanzahl 97 (ROZ) tanken.
- Utilice gasolina sin plomo que tenga como mínimo 97 octanos (RON).
- Utiliser une essence SUPER sans plomb d'un indice d'octane (RON) de min. 97.
- Utilizzare benzina PREMIUM super senza piombo con almeno 97 ottani (RON).
- Gebruik loodvrije SUPERBENZINE met een octaangetal (RON) van minstens 97.
- Utilize gasolina sem chumbo com índice de octano mínimo de 97 (RON).
- Använd blyfri PREMIUMBENSIN av 97 oktan (RON) eller mer.

5TG-2415E-00

5



4



6

27.5 kPa 0.275 kgf/cm <sup>2</sup> 4.0 psi		30 kPa 0.30 kgf/cm <sup>2</sup> 4.4 psi
--	--	---

(GB) Set with tires cold.    (I) Impostare a pneumatici freddi.  
 (D) Bei kalten Reifen.    (NL) Wanneer de banden koud zijn.  
 (E) Ajuste con los neumáticos an frío.    (P) Regular com pneus frios.  
 (F) Pneus à froid.    (S) Ställ in med kalla däck.

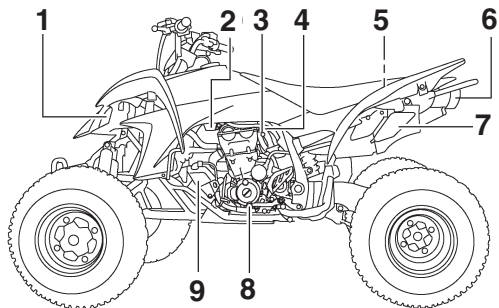
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7



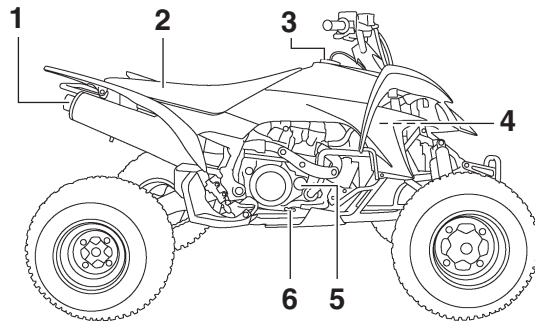
## DESCRIPTION

### Left view



1. Headlights
2. Fuel cock
3. Starter (choke)
4. Throttle stop screw
5. Fuse
6. Tail/brake light
7. Coolant reservoir
8. Shift pedal
9. Engine oil tank

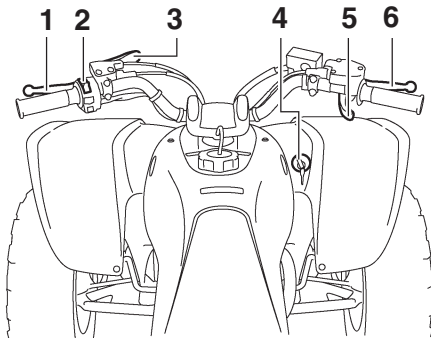
### Right view



1. Spark arrester
2. Seat
3. Fuel tank cap
4. Radiator cap
5. Oil filter element
6. Brake pedal

from the figures shown in this manual.

---

**3**

1. Clutch lever
2. Handlebar switches
3. Parking brake
4. Main switch
5. Throttle lever
6. Brake lever

**TIP** \_\_\_\_\_  
The ATV you have purchased may differ slightly

# INSTRUMENT AND CONTROL FUNCTIONS

EBU17740

## Main switch

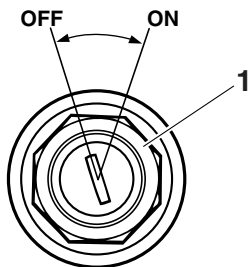
The positions of the main switch are as follows:

### ON

All electrical systems are supplied with power, and the engine can be started. The key cannot be removed.

### OFF

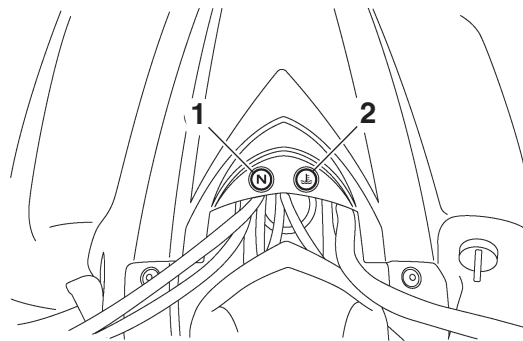
All electrical systems are off. The key can be removed.



1. Main switch

EBU17803

## Indicator light and warning light



1. Neutral indicator light "N"
2. Coolant temperature warning light "🌡️"

EBU17860

### Neutral indicator light "N"

This indicator light comes on when the transmission is in the neutral position.

EBU17930

### Coolant temperature warning light "🌡️"

This warning light comes on when the engine over-

heats. When this occurs during operation, stop the engine as soon as it is safe to do so and allow it to cool down for about 10 minutes.

The electrical circuit of the warning light can be checked according to the following procedure.

1. Set the engine stop switch to “○” and turn the key to “ON”.
2. Shift the transmission into the neutral position or pull the clutch lever.
3. Push the start switch. If the warning light does not come on while the start switch is pushed, have a Yamaha dealer check the electrical circuit.

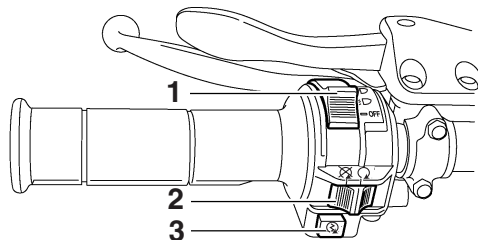
ECB00010

## NOTICE

- **The engine may overheat if the ATV is overloaded. In this case, reduce the load to specification.**
- **Start the engine after making sure that the warning light is out. Continuous use while the warning light is on may cause damage to the engine.**

EBU18061

## Handlebar switches



1. Light switch “≡○ / ≡○ / OFF”
2. Engine stop switch “⊗ / ○”
3. Start switch “(⊗)”

EBU18080

## Engine stop switch “⊗ / ○”

Set this switch to “○” before starting the engine. The engine stop switch controls the ignition and stops the engine when it is running. Use this switch to stop the engine in an emergency situation. The engine will not start or run when this switch is set to “⊗”.

EBU18100

### Start switch “☹”

Push this switch to crank the engine with the starter.

ECB00050

#### **NOTICE**

**See the starting instructions on page 6-1 prior to starting the engine.**

EBU18151

### Light switch “☹ / ☹ / OFF”

Set this switch to “☹” to turn on the low beams and the taillight. Set the switch to “☹” to turn on the high beams and the taillight. Set the switch to “OFF” to turn off all the lights.

ECB00040

#### **NOTICE**

**Do not use the headlights with the engine turned off for an extended period of time, otherwise the battery may discharge to the point that the starter motor will not operate properly. If this should happen, remove the battery and recharge it.**

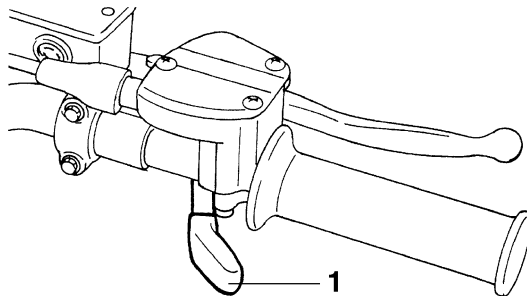
EBU18280

### Throttle lever

Once the engine is running, movement of the throt-

tle lever will increase the engine speed.

Regulate the speed of the ATV by varying the throttle position. Because the throttle is spring-loaded, the ATV will decelerate, and the engine will return to an idle any time the hand is removed from the throttle lever.



1. Throttle lever

Before starting the engine, check the throttle to be sure it is operating smoothly. Make sure it returns to the idle position as soon as the lever is released.

EWB00250

#### **⚠ WARNING**

**Malfuction of the throttle could make it difficult to speed up or slow down when you need**

to. This could cause an accident. Check the operation of the throttle lever before you start the engine. If the throttle does not work smoothly, check for the cause. Correct the problem before riding the ATV or consult a Yamaha dealer.

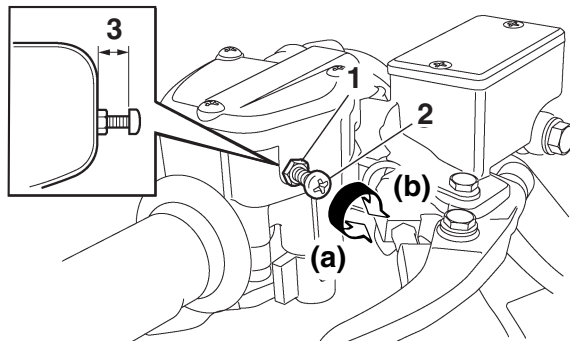
EBU18321

4

## Speed limiter

Your ATV was delivered with an adjustable speed limiter. The speed limiter keeps the throttle from fully opening, even when the throttle lever is pushed to the maximum.

1. Loosen the locknut.
2. To increase the maximum engine power available and the maximum speed of the ATV, turn the adjusting screw in direction (a). To decrease the maximum engine power available and the maximum speed of the ATV, turn the adjusting screw in direction (b).



1. Locknut
  2. Adjusting screw
  3. No more than 12 mm (0.47 in)
- 
3. Tighten the locknut.

EWB00240

### **⚠ WARNING**

**Improper adjustment of the speed limiter and throttle could cause throttle cable damage or improper throttle operation. You could lose control, have an accident or be injured. Do not turn the adjusting screw out more than 12 mm (0.47 in) or the throttle cable could be damaged. Always make sure the throttle lever free play is adjusted to 2.0–4.0 mm (0.08–0.16 in).**

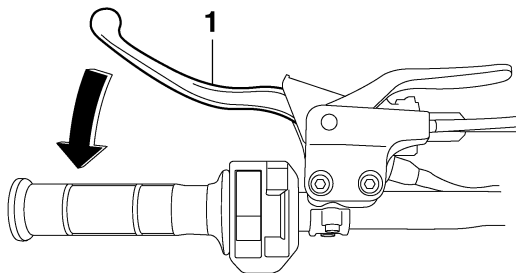


(See page 8-30.)

EBU18382

## Clutch lever

The clutch lever is located on the left handlebar and the ignition circuit cut-off system is incorporated in the clutch lever holder. To disengage the clutch, pull the clutch lever toward the handlebar grip. To engage the clutch, release the clutch lever. The clutch lever should be pulled rapidly and released slowly for smooth clutch operation. (See page 6-1 for a description of the ignition circuit cut-off system.)



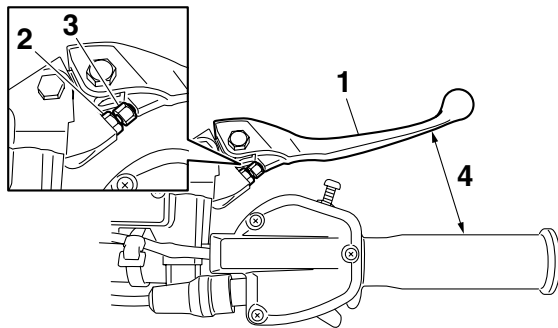
1. Clutch lever

EBU18421

## Brake lever

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

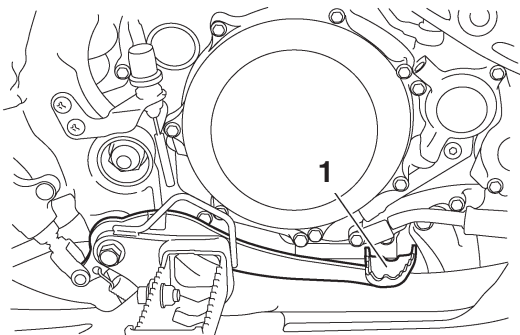
The brake lever is equipped with a position adjusting bolt. To adjust the distance between the brake lever and the handlebar grip, hold the brake lever away from the handlebar so it does not contact the adjusting bolt, loosen the locknut, turn the adjusting bolt, and then tighten the locknut.



1. Brake lever
2. Locknut
3. Brake lever position adjusting bolt
4. Distance between brake lever and handlebar grip

## Brake pedal

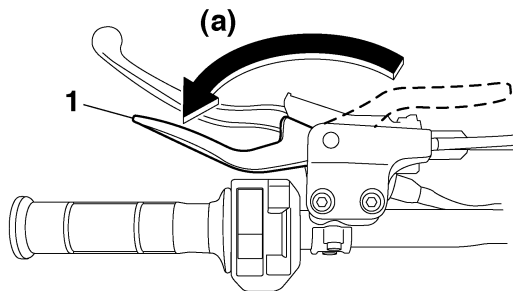
The brake pedal is located on the right side of the ATV. To apply the rear brake, push down on the brake pedal.



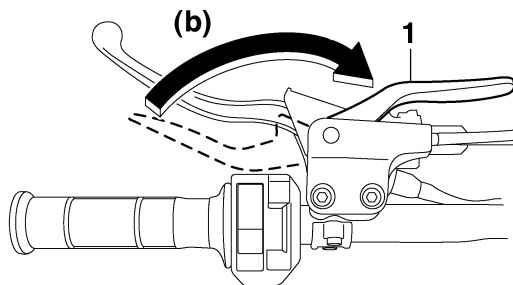
1. Brake pedal

## Parking brake lever

Use the parking brake before starting the engine or parking the ATV, especially on a slope. To apply the parking brake, move the parking brake lever in direction (a). To release the parking brake, move the parking brake lever in direction (b).



1. Parking brake lever (locked position)



1. Parking brake lever (unlocked position)

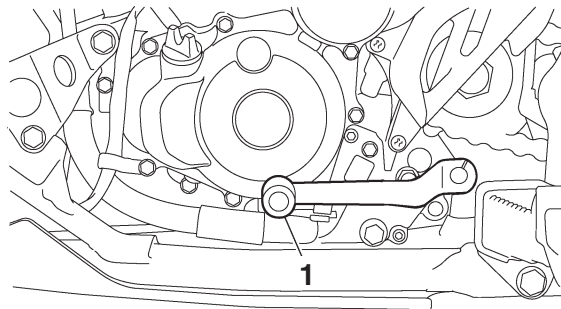
## **! WARNING**

- Always set the parking brake before starting the engine. The ATV could start moving unexpectedly if the parking brake is not applied. This could cause loss of control or a collision.
- Always be sure you have released the parking brake before you begin to ride. The brake could overheat if you ride the ATV without releasing the parking brake. You could lose braking performance which could cause an accident. You could also wear out the brakes prematurely.

EBU18530

### **Shift pedal**

This ATV is equipped with a constant-mesh 5-speed transmission. The shift pedal is located on the left side of the engine and is used in combination with the clutch when shifting.

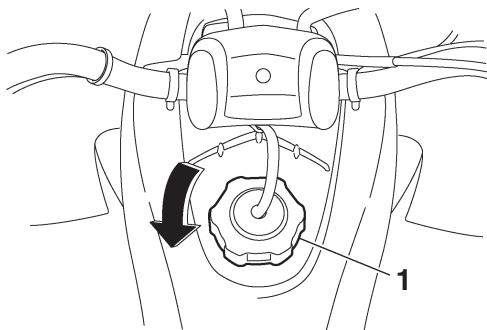


1. Shift pedal

EBU18720

### **Fuel tank cap**

Remove the fuel tank cap by turning it counter-clockwise.

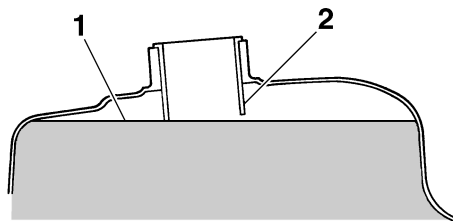


1. Fuel tank cap

EBU18812

## Fuel

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



1. Fuel level
2. Filler tube

Recommended fuel:

**PREMIUM UNLEADED GASOLINE ONLY**  
 For Europe: **PREMIUM UNLEADED GASOLINE ONLY** with a research octane number of 97 or higher

Fuel tank capacity:

10.0 L (2.64 US gal, 2.20 Imp.gal)

Fuel reserve amount:

1.9 L (0.50 US gal, 0.42 Imp.gal)

## TIP

If knocking or pinging occurs, use a different brand

of gasoline or higher octane grade.

ECB00070

## NOTICE

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.

EWB00310

## WARNING

- Do not overfill the fuel tank. Fuel expands when it heats up. If the fuel tank is overfilled, fuel could spill out due to heat from the engine or the sun.
- Be careful not to spill fuel, especially on the engine or exhaust pipe which can cause a fire and severe injury. Wipe up any spilled fuel immediately.
- Do not refuel right after the engine has been running and is still very hot.
- Be sure the fuel tank cap is closed securely.

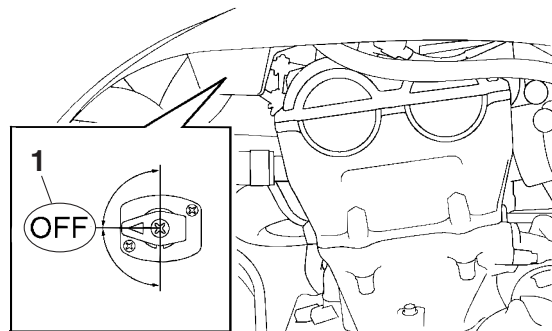
EBU18820

## Fuel cock

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

The fuel cock lever positions are explained as follows and shown in the illustrations.

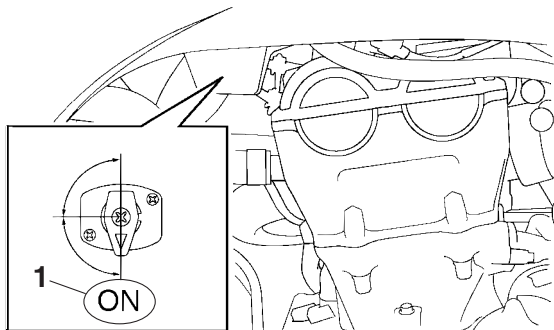
## OFF



1. Arrow mark positioned over "OFF"

With the fuel cock lever in this position, fuel will not flow. Always turn the fuel cock lever to this position when the engine is not running.

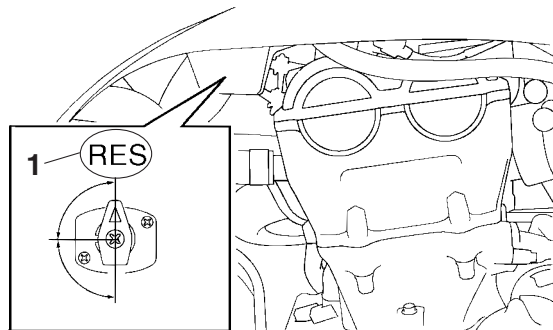
ON



1. Arrow mark positioned over "ON"

With the fuel cock lever in this position, fuel flows to the carburetor. Turn the fuel cock lever to this position when starting the engine and riding.

RES



1. Arrow mark positioned over "RES"

This indicates reserve. With the fuel cock lever in this position, the fuel reserve is made available. Turn the fuel cock lever to this position if you run out of fuel while riding. When this occurs, refuel as soon as possible and be sure to turn the fuel cock lever back to "ON"!

EBU18850

### **Starter (choke) “”**

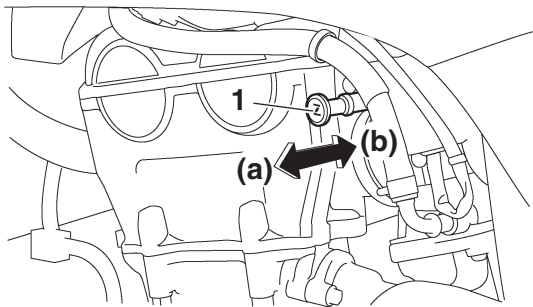
Starting a cold engine requires a richer air-fuel mixture, which is supplied by the starter (choke).

Move the starter (choke) in direction (a) to turn on

the starter (choke).

Move the starter (choke) in direction (b) to turn off the starter (choke).

See the “Starting a cold engine” section on page 6-1 for proper operation.



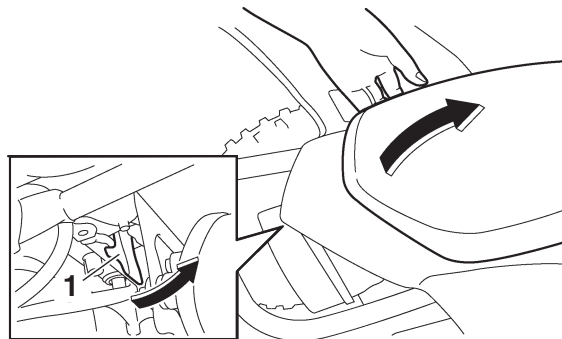
1. Starter (choke) “|”

EBU18890

## Seat

### To remove the seat

Insert your hand between the rear of the seat and the rear fender, pull the seat lock lever upward and pull up the seat at the rear.



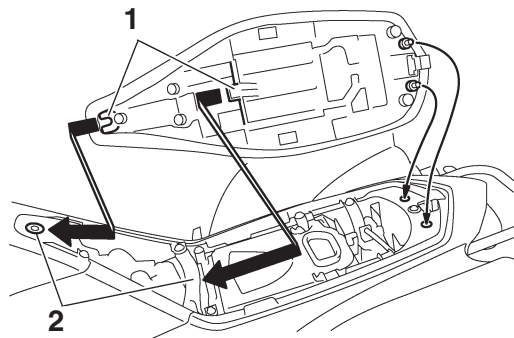
1. Seat lock lever

### To install the seat

Insert the projections on the front of the seat into the seat holders and push down on the seat at the rear.

### TIP

Make sure that the seat is securely fitted.



1. Projection
2. Seat holder

EBU27903

## Adjusting the front shock absorber assemblies

These shock absorber assemblies are equipped with a spring preload adjusting nut, a rebound damping force adjusting screw, with a compression damping force adjusting bolt (for fast compression damping), and a compression damping force adjusting screw (for slow compression damping).

EWB00410

### **WARNING**

These shock absorber assemblies contain highly pressurized nitrogen gas. Read and understand the following information before handling the shock absorber assemblies.

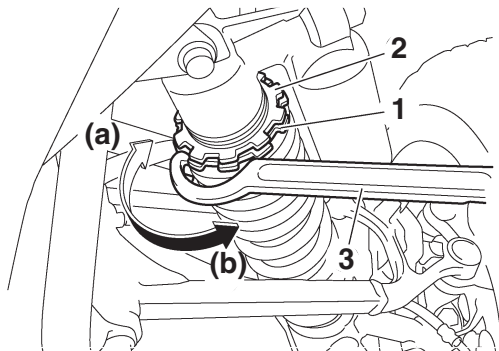
- Do not tamper with or attempt to open the cylinder assemblies.
- Do not subject the shock absorber assemblies to an open flame or other high heat source. This may cause the unit to explode due to excessive gas pressure.
- Do not deform or damage the cylinders in any way. Cylinder damage will result in poor damping performance.
- Do not dispose of a damaged or worn out shock absorber assembly yourself. Take the shock absorber assembly to a Yamaha dealer for any service.

### Spring preload

1. Loosen the locknut.
2. Turn the adjusting nut in direction (a) to increase the spring preload and thereby harden the suspension, and in direction (b) to decrease the spring preload and thereby soften



the suspension.



1. Spring preload adjusting nut
2. Locknut
3. Special wrench

### TIP

- A special wrench can be obtained at a Yamaha dealer to make this adjustment.
- The spring preload setting is determined by measuring distance A, shown in the illustration. The shorter distance A is, the higher the spring preload; the longer distance A is, the lower the spring preload. With each complete turn of the adjusting nut, distance A is changed by 1.5 mm

(0.06 in).

Spring preload setting:

Minimum (hard):

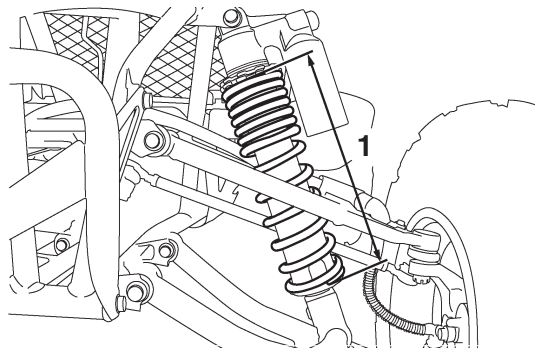
Distance A = 246.5 mm (9.70 in)

Standard:

Distance A = 255.0 mm (10.04 in)

Maximum (soft):

Distance A = 261.5 mm (10.30 in)



1. Distance A

3. Tighten the locknut to the specified torque.

Tightening torque:

Locknut:

30 Nm (3.0 m·kgf, 22 ft·lbf)

ECB00080

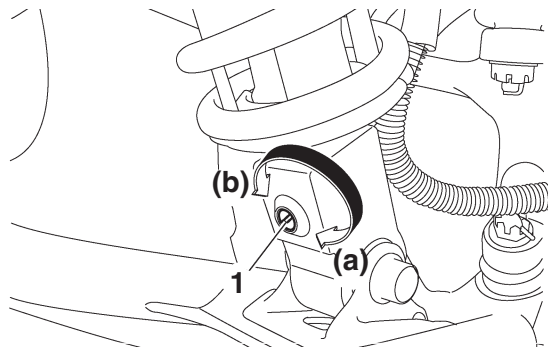
## NOTICE

4

**Always tighten the locknut against the adjusting nut, and then tighten it to the specified torque.**

### Rebound damping force

Turn the adjusting screw in direction (a) to increase the rebound damping force and thereby harden the damping, and in direction (b) to decrease the rebound damping force and thereby soften the damping.



1. Rebound damping force adjusting screw

Rebound damping setting:

Minimum (soft):

20 click(s) in direction (b)\*

Standard:

10 click(s) in direction (b)\*

Maximum (hard):

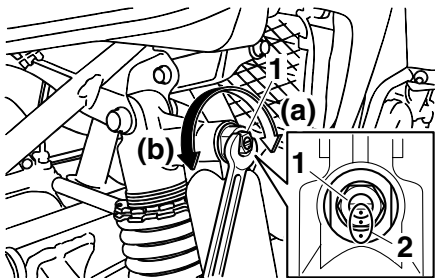
1 click(s) in direction (b)\*

\*With the adjusting screw fully turned in direction (a)

## Compression damping force

### Compression damping force (for fast compression damping)

1. To increase the compression damping force and thereby harden the compression damping, turn the adjusting bolt in direction (a). To decrease the compression damping force and thereby soften the compression damping, turn the adjusting bolt in direction (b).



1. Compression damping force adjusting bolt (for fast compression damping)
2. Position indicator marks

Compression damping setting (for fast compression damping):

Minimum (soft):

3 turn(s) out from the fully turned in position

Standard:

1 turn(s) out from the fully turned in position

Maximum (hard):

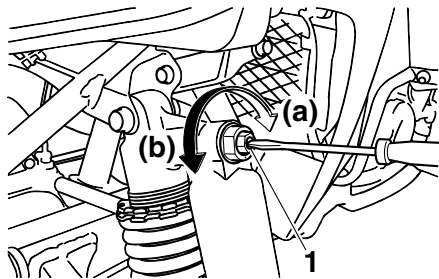
Fully turned in

### **TIP**

Make sure that the position indicator marks are aligned when the shock absorber assembly is set to the standard setting.

### Compression damping force (for slow compression damping)

1. To increase the compression damping force and thereby harden the compression damping, turn the adjusting screw in direction (a). To decrease the compression damping force and thereby soften the compression damping, turn the adjusting screw in direction (b).



4

1. Compression damping force adjusting screw (for slow compression damping)

Compression damping setting (for slow compression damping):

Minimum (soft):

20 click(s) in direction (b)\*

Standard:

10 click(s) in direction (b)\*

Maximum (hard):

1 click(s) in direction (b)\*

\* With the adjusting screw fully turned in direction (a)

ECB00090

## NOTICE

Never turn an adjusting mechanism beyond the minimum and maximum settings.

## TIP

Although the total number of clicks of a damping force adjusting mechanism may not exactly match the above specifications due to small differences in production, the actual number of clicks always represents the entire adjusting range. To obtain a precise adjustment, it would be advisable to check the number of clicks of each damping force adjusting mechanism and to modify the specifications as necessary.

EWB00420

## WARNING

- Suspension components become hot during operation. Never touch the compression damping force adjusting screw, the rebound damping force adjusting screw or the oil reservoir with your bare hand or skin until suspension components have cooled.
- Always adjust the shock absorber assemblies on the left and right side to the same

setting.

---

EWB00400

**! WARNING**

Always adjust the shock absorber assemblies on the left and right side to the same setting. Uneven adjustment can cause poor handling and loss of stability, which could lead to an accident.

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EBU27923

## Adjusting the rear shock absorber assembly

This shock absorber assembly is equipped with a spring preload adjusting nut, a rebound damping force adjusting screw, with a compression damping force adjusting bolt (for fast compression damping), and a compression damping force adjusting screw (for slow compression damping).

EWB00430

**! WARNING**

This shock absorber assembly contains highly pressurized nitrogen gas. Read and understand the following information before handling the shock absorber assembly.

- Do not tamper with or attempt to open the

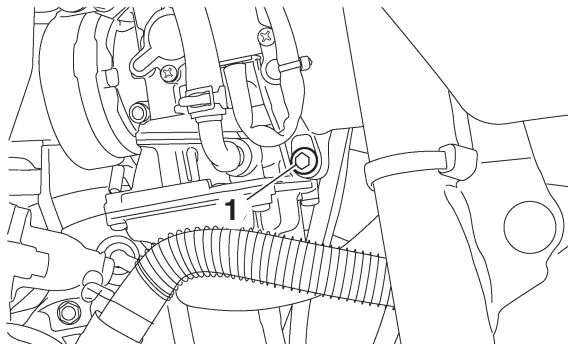
cylinder assembly.

- Do not subject the shock absorber assembly to an open flame or other high heat source. This may cause the unit to explode due to excessive gas pressure.
  - Do not deform or damage the cylinder in any way. Cylinder damage will result in poor damping performance.
  - Do not dispose of a damaged or worn out shock absorber assembly yourself. Take the shock absorber assembly to a Yamaha dealer for any service.
- 

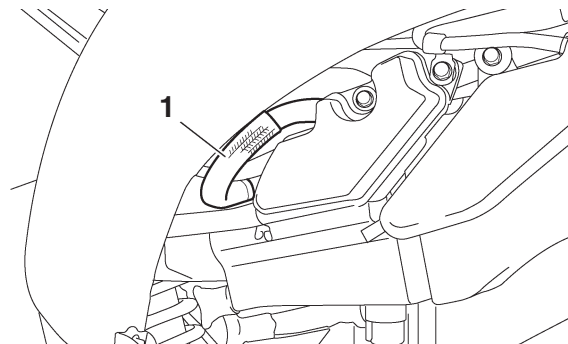
### Spring preload

1. Remove the seat. (See page 4-11.)
2. Loosen the clamp screw at the carburetor side, and then disconnect the air intake duct.

4

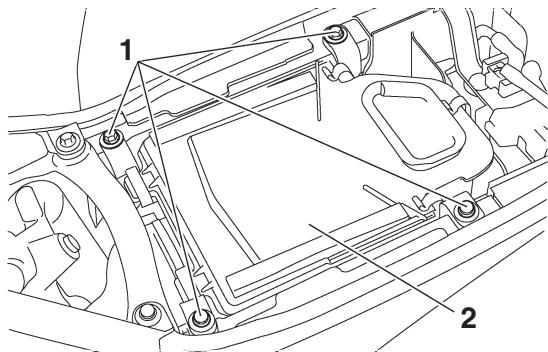


1. Clamp screw



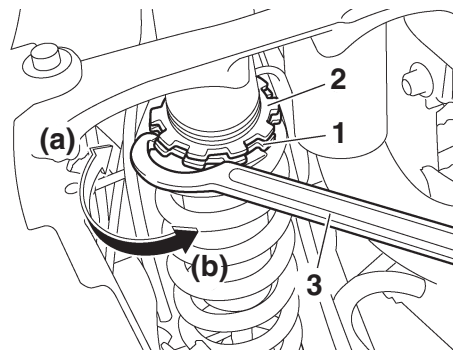
1. Hose

3. Disconnect the hose, and then remove the air filter case by removing the bolts.



1. Bolt
2. Air filter case

4. Loosen the locknut.
5. Turn the adjusting nut in direction (a) to increase the spring preload and thereby harden the suspension, and in direction (b) to decrease the spring preload and thereby soften the suspension.



1. Spring preload adjusting nut
2. Locknut
3. Special wrench

**TIP** \_\_\_\_\_

- A special wrench can be obtained at a Yamaha dealer to make this adjustment.
- The spring preload setting is determined by measuring distance A, shown in the illustration. The shorter distance A is, the higher the spring preload; the longer distance A is, the lower the spring preload. With each complete turn of the adjusting nut, distance A is changed by 1.5 mm

(0.06 in).

Spring preload setting:

Minimum (hard):

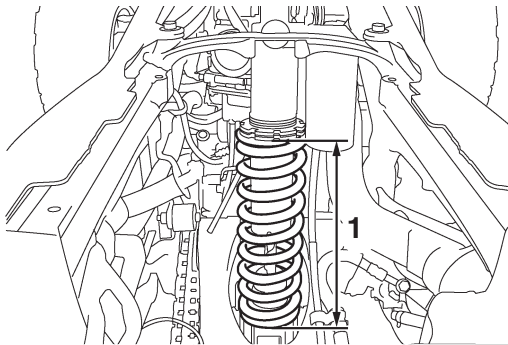
Distance A = 250.0 mm (9.84 in)

Standard:

Distance A = 257.0 mm (10.12 in)

Maximum (soft):

Distance A = 265.0 mm (10.43 in)



1. Distance A

6. Tighten the locknut to the specified torque.

Tightening torque:

Locknut:

44 Nm (4.4 m·kgf, 33 ft·lbf)

ECB00080

**NOTICE**

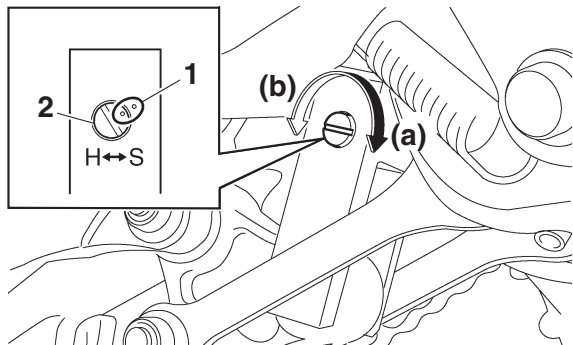
**Always tighten the locknut against the adjusting nut, and then tighten it to the specified torque.**

7. Place the air filter case in the original position, connect the air intake duct, and then tighten the clamp screw at the carburetor side.
8. Install the bolts, and then connect the hose.
9. Install the seat.

**Rebound damping force**

Turn the adjusting screw in direction (a) to increase the rebound damping force and thereby harden the damping, and in direction (b) to decrease the rebound damping force and thereby soften the damping.





1. Position indicator marks
2. Rebound damping force adjusting screw

#### Rebound damping setting:

Minimum (soft):

3 turn(s) out from the fully turned in position

Standard:

1 1/2 turn(s) out from the fully turned in position

Maximum (hard):

Fully turned in

#### TIP

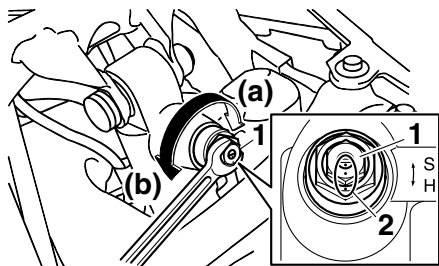
Make sure that the position indicator marks are aligned when the shock absorber assembly is set

to the standard setting.

#### Compression damping force

##### Compression damping force (for fast compression damping)

1. Remove the seat. (See page 4-11.)
2. To increase the compression damping force and thereby harden the compression damping, turn the adjusting bolt in direction (a). To decrease the compression damping force and thereby soften the compression damping, turn the adjusting bolt in direction (b).



4

1. Compression damping force adjusting bolt (for fast compression damping)
2. Position indicator marks

Compression damping setting (for fast compression damping):

Minimum (soft):

3 turn(s) out from the fully turned in position

Standard:

2 turn(s) out from the fully turned in position

Maximum (hard):

Fully turned in

3. Install the seat.

## TIP

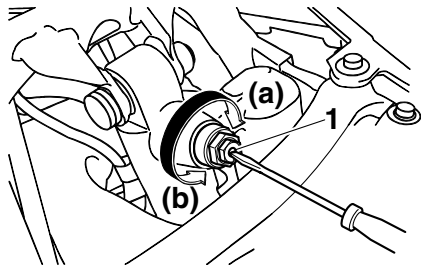
Make sure that the position indicator marks are aligned when the shock absorber assembly is set to the standard setting.

## Compression damping force (for slow compression damping)

1. Remove the seat. (See page 4-11.)
2. To increase the compression damping force and thereby harden the compression damping, turn the adjusting screw in direction (a). To decrease the compression damping force and thereby soften the compression damping, turn the adjusting screw in direction (b).

**NOTICE**

**Never turn an adjusting mechanism beyond the minimum and maximum settings.**



1. Compression damping force adjusting screw (for slow compression damping)

Compression damping setting (for slow compression damping):

Minimum (soft):

20 click(s) in direction (b)\*

Standard:

11 click(s) in direction (b)\*

Maximum (hard):

1 click(s) in direction (b)\*

\* With the adjusting screw fully turned in direction (a)

**TIP**

Although the total number of clicks of a damping force adjusting mechanism may not exactly match the above specifications due to small differences in production, the actual number of clicks always represents the entire adjusting range. To obtain a precise adjustment, it would be advisable to check the number of clicks of each damping force adjusting mechanism and to modify the specifications as necessary.

3. Install the seat.

**WARNING**

**Suspension components become hot during operation. Never touch the compression damping force adjusting screw, the rebound damping force adjusting screw or the oil reservoir with your bare hand or skin until suspension components have cooled.**

## PRE-OPERATION CHECKS

EBU19222

### Pre-operation check list

Before operating this ATV, be sure to check the items listed in the following table.

EWB00480



**Always inspect your ATV each time you use it to make sure it is in safe operating condition. Always follow the inspection and maintenance procedures and schedules described in the Owner's Manual. Failure to inspect increases the possibility of an accident or equipment damage.**

5

### TIP

The maintenance of some items in the table has to be performed by a Yamaha dealer. Refer to the periodic maintenance charts on page 8-3 to determine which service should be performed by a Yamaha dealer.

ITEM	ROUTINE	PAGE
<b>Fuel</b>	<ul style="list-style-type: none"> <li>• Check fuel level in fuel tank, and add recommended fuel if necessary.</li> <li>• Check fuel line for leakage. Correct if necessary.</li> </ul>	4-8, 5-3
<b>Engine oil</b>	<ul style="list-style-type: none"> <li>• Check oil level in engine, and add recommended oil to specified level if necessary.</li> <li>• Check ATV for oil leakage. Correct if necessary.</li> </ul>	5-3, 8-14
<b>Coolant</b>	<ul style="list-style-type: none"> <li>• Check coolant level in reservoir, and add recommended coolant to specified level if necessary.</li> <li>• Check cooling system for leakage. Correct if necessary.</li> </ul>	5-3, 8-20

ITEM	ROUTINE	PAGE
<b>Front brake</b>	<ul style="list-style-type: none"> <li>• Check operation. If soft or spongy, have Yamaha dealer bleed hydraulic system.</li> <li>• Check brake pads for wear, and replace if necessary.</li> <li>• Check brake fluid level in reservoir, and add recommended brake fluid to specified level if necessary.</li> <li>• Check hydraulic system for leakage. Correct if necessary.</li> </ul>	5-3, 8-31, 8-32, 8-36
<b>Rear brake</b>	<ul style="list-style-type: none"> <li>• Check operation. If soft or spongy, have Yamaha dealer bleed hydraulic system.</li> <li>• Check brake pads for wear, and replace if necessary.</li> <li>• Check brake fluid level in reservoir, and add recommended brake fluid to specified level if necessary.</li> <li>• Check hydraulic system for leakage. Correct if necessary.</li> </ul>	5-3, 8-31, 8-32, 8-36
<b>Clutch</b>	<ul style="list-style-type: none"> <li>• Check operation, and correct if necessary.</li> <li>• Lubricate cable if necessary.</li> <li>• Check lever free play, and adjust if necessary.</li> </ul>	8-39
<b>Throttle lever</b>	<ul style="list-style-type: none"> <li>• Make sure that operation is smooth. Lubricate cable and lever housing if necessary.</li> <li>• Check cable free play, and adjust if necessary.</li> </ul>	5-4, 8-30
<b>Control cables</b>	<ul style="list-style-type: none"> <li>• Make sure that operation is smooth. Lubricate if necessary.</li> </ul>	8-43
<b>Drive chain</b>	<ul style="list-style-type: none"> <li>• Check chain slack, and adjust if necessary.</li> <li>• Check chain condition. Lubricate if necessary.</li> </ul>	5-4, 8-43
<b>Wheels and tires</b>	<ul style="list-style-type: none"> <li>• Check wheel condition, and replace if damaged.</li> <li>• Check tire condition and tread depth. Replace if necessary.</li> <li>• Check air pressure. Correct if necessary.</li> </ul>	5-4, 5-5, 5-6
<b>Brake and shift pedals</b>	<ul style="list-style-type: none"> <li>• Make sure that operation is smooth. Lubricate pedal pivoting points if necessary.</li> </ul>	8-45
<b>Brake and clutch levers</b>	<ul style="list-style-type: none"> <li>• Make sure that operation is smooth. Lubricate lever pivoting points if necessary.</li> </ul>	8-44
<b>Chassis fasteners</b>	<ul style="list-style-type: none"> <li>• Make sure that all nuts, bolts and screws are properly tightened.</li> </ul>	5-7
<b>Instruments, lights and switches</b>	<ul style="list-style-type: none"> <li>• Check operation, and correct if necessary.</li> </ul>	5-7

EBU19540

## Fuel

Make sure that there is sufficient fuel in the tank. (See page 4-8.)

EWB00520

### WARNING

- Do not overfill the fuel tank. Fuel expands when it heats up. If the fuel tank is overfilled, fuel could spill out due to heat from the engine or the sun.
- Be careful not to spill fuel, especially on the engine or exhaust pipe which can cause a fire and severe injury. Wipe up any spilled fuel immediately.
- Do not refuel right after the engine has been running and is still very hot.
- Be sure the fuel tank cap is closed securely.

EBU19560

## Engine oil

Make sure that the engine oil is at the specified level. Add oil as necessary. (See page 8-14.)

EBU19630

## Coolant

Make sure that the coolant is at the specified level. Add coolant as necessary. (See page 8-20.)

## TIP

The coolant level must be checked on a cold engine since the level varies with engine temperature.

EWB00510

### WARNING

Wait for the engine and radiator to cool before removing the radiator cap. You could be burned by hot fluid and steam blown out under pressure. Always put a thick rag over the cap when opening. Allow any remaining pressure to escape before completely removing the cap.

EBU19710

## Front and rear brakes

### Brake lever and brake pedal

- Check that there is no free play in the brake lever. If there is free play, have a Yamaha dealer check the brake system.
- Check for correct brake pedal height. (See page 8-36.) If the pedal height is incorrect, have a Yamaha dealer adjust it.
- Check the operation of the lever and pedal. They should move smoothly and there should be a firm feeling when the brakes are applied. If not,

have a Yamaha dealer check the brake system.

### Brake fluid level

Check the brake fluid level. Add fluid if necessary. (See page 8-32.)

Recommended brake fluid:  
DOT 4

### Brake fluid leakage

Check to see if any brake fluid is leaking out of the pipe joints or brake fluid reservoirs. Apply the brakes firmly for one minute. If there is any leakage, have a Yamaha dealer check the brake system.

### Brake operation

Test the brakes at slow speed after starting out to make sure they are working properly. If the brakes do not provide proper braking performance, check the brake pads for wear. (See page 8-31.)

EWB00580

### WARNING

**Always check the brakes at the start of every ride. Do not ride the ATV if you find any problem with the brakes or you could lose braking ability, which could lead to an accident. If a**

**problem cannot be corrected by the adjustment procedures provided in this manual, have a Yamaha dealer check for the cause.**

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EBU19761

### Throttle lever

Check the operation of the throttle lever. It must open smoothly and spring back to the idle position when released. Have a Yamaha dealer correct if necessary.

EBU19770

### Drive chain

Check the condition of the drive chain and check the drive chain slack. Lubricate and adjust the drive chain as necessary.

EBU19792

### Tires

EWB00602

### WARNING

**Use of improper tires on this ATV, or operation of this ATV with improper or uneven tire pressure, may cause loss of control, increasing your risk of accident.**

**Pay attention to the following.**

- The tires listed below have been approved

by Yamaha Motor Co., Ltd. for this model. Other tire combinations are not recommended.

Front:

Manufacturer/model:

DUNLOP/KT341 Radial

Size:

AT21 x 7-10

Type:

Tubeless

Rear:

Manufacturer/model:

DUNLOP/KT355A Radial

Size:

AT20 x 10-9

Type:

Tubeless

- The tires should be set to the recommended pressure:

Recommended tire pressure:

Front:

27.5 kPa (0.275 kgf/cm<sup>2</sup>, 4.0 psi)

Rear:

30.0 kPa (0.300 kgf/cm<sup>2</sup>, 4.4 psi)

- Check and adjust tire pressures when the tires are cold.

- Tire pressures must be equal on both sides.
- Tire pressure below the minimum specified could cause the tire to dislodge from the rim under severe riding conditions.

Minimum tire pressure:

Front:

24.5 kPa (0.245 kgf/cm<sup>2</sup>, 3.6 psi)

Rear:

27.0 kPa (0.270 kgf/cm<sup>2</sup>, 4.0 psi)

- Use no more than the following pressures when seating the tire beads.

Maximum tire seating pressure:

Front:

250 kPa (2.5 kgf/cm<sup>2</sup>, 36 psi)

Rear:

250 kPa (2.5 kgf/cm<sup>2</sup>, 36 psi)

Higher pressures and fast inflation may cause a tire to burst. Inflate the tires very slowly and carefully.

EBU19820

## Measuring the tire pressure

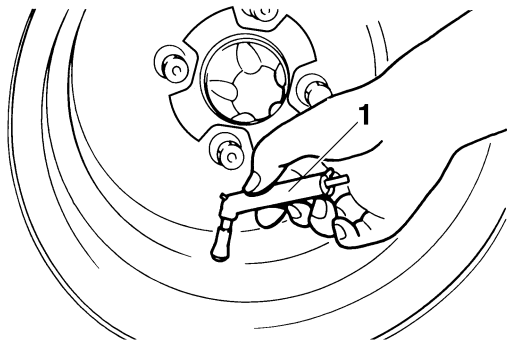
Use the low-pressure tire gauge.

### TIP

The low-pressure tire gauge is included as stan-



standard equipment. Make two measurements of the tire pressure and use the second reading. Dust or dirt in the gauge could cause the first reading to be incorrect.



1. Low-pressure tire gauge

Set the tire pressure when the tires are cold. Set the tire pressures to the following specifications:

Recommended pressure:

Front

27.5 kPa (0.275 kgf/cm<sup>2</sup>, 4.0 psi)

Rear

30.0 kPa (0.300 kgf/cm<sup>2</sup>, 4.4 psi)

Minimum:

Front

24.5 kPa (0.245 kgf/cm<sup>2</sup>, 3.6 psi)

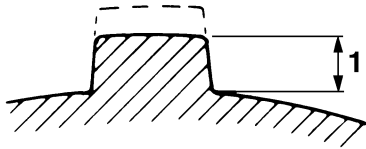
Rear

27.0 kPa (0.270 kgf/cm<sup>2</sup>, 4.0 psi)

EBU19830

### **Tire wear limit**

Replace the tire when the tire groove decreases to 3 mm (0.12 in).



5

#### 1. Tire wear limit

EBU19840

### **Chassis fasteners**

Make sure that all nuts, bolts and screws are properly tightened.

EBU19850

### **Instruments, lights and switches**

Check that all instruments, lights and switches are working properly. Correct if necessary.

# OPERATION

Read the Owner's Manual carefully before riding the ATV.

## WARNING

**Read the Owner's Manual carefully to become familiar with all controls in order to help prevent any loss of control, which could cause an accident or injury. If there is a control or function you do not understand, ask your Yamaha dealer.**

## Starting a cold engine

## WARNING

**Always make sure all control cables work smoothly before you begin riding in cold weather. If the control cables are frozen or do not work smoothly, you could be unable to control the ATV, which could lead to an accident or collision.**

## NOTICE

**See the "Engine break-in" section on page 6-5 prior to operating the engine for the first time.**

1. Set the parking brake.
2. Turn the fuel cock to "ON".
3. Turn the main switch to "ON" and the engine stop switch to "○".
4. Shift the transmission into neutral. The neutral indicator light should come on. If the indicator light does not come on, have a Yamaha dealer check the electrical circuit.

## TIP

This model is equipped with an ignition circuit cut-off system. The engine can be started under the following conditions.

- The transmission is in neutral.
- The clutch is disengaged with the transmission in gear. However, it is recommended to shift into neutral before starting the engine.

5. Use the starter (choke) in reference to the figure:

### Position (1):

- Cold engine start with ambient temperature below 5 °C (40 °F).

### Position (2):

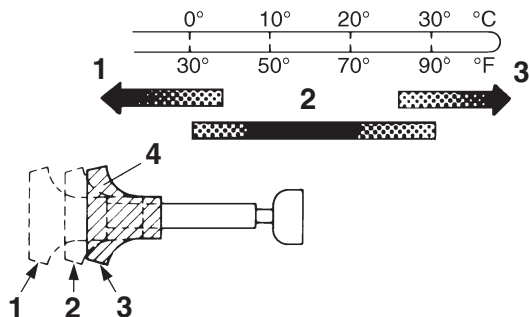
- Cold engine start with ambient temperature between 0 °C (30 °F) and 30 °C (90 °F).

### Position (3):

- Cold engine start with ambient temperature above 25 °C (80 °F).

### Ambient temp./starter (choke) position

AMBIENT TEMP./STARTER (CHOKE) POSITION



1. Fully open
2. Half open
3. Closed
4. Starter (choke)

6. Completely close the throttle lever and start the engine by pushing the start switch.

### TIP

If the engine fails to start, release the start switch, then push it again. Pause a few seconds before the next attempt. Each cranking should be as short as possible to preserve battery energy. Do not

crank the engine more than 10 seconds on each attempt.

7. If the engine is started with the starter (choke) in position (1), the starter (choke) should be returned to position (2) to warm up the engine. If the engine is started with the starter (choke) in position (2), keep the starter (choke) in this position to warm up the engine.

ECB00160

## NOTICE

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

8. Continue warming up the engine until it idles smoothly, then return the starter (choke) to position (3) before riding.

## TIP

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

EBU20291

## Starting a warm engine

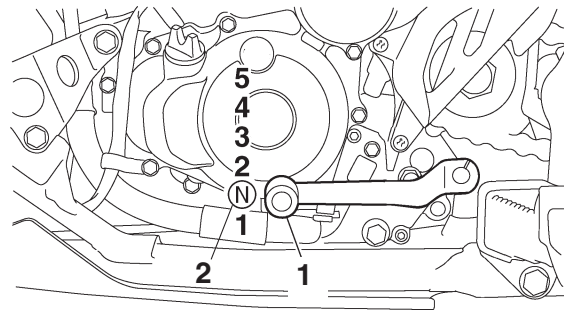
Follow the same procedure as for starting a cold engine, with the exception that the starter (choke) is not required when the engine is warm. Instead,

start the engine with the throttle slightly open.

EBU20520

## Shifting

This ATV has a 5-speed forward transmission. The transmission allows you to control the amount of power you have available at a given speed or for starting, accelerating, climbing hills, etc. To shift into neutral, return the throttle lever to the closed position, apply the clutch, and then repeatedly depress the shift pedal until it stops. When it stops, it will be in first gear. Raise the pedal slightly to reach the neutral position.



1. Shift pedal
2. Neutral position

EBU20590

### To start out and accelerate

1. Release the throttle lever, and then release the parking brake.

ECB00200

### **NOTICE**

**Always close the throttle before shifting gears, otherwise damage to the engine and drive train may result.**

2. Pull the clutch lever to disengage the clutch.
3. Shift into first gear.
4. Open the throttle gradually and at the same time, release the clutch lever slowly.
5. Once the ATV has attained adequate speed, release the throttle, and at the same time, quickly pull in the clutch lever.
6. Shift the transmission into second gear. (Make sure not to shift the transmission into neutral)
7. Open the throttle part way and gradually release the clutch lever.
8. Follow the same procedure when shifting to the next higher gear.

EWB00730

### **WARNING**

**Opening the throttle abruptly or releasing the**

**clutch lever too quickly could make the ATV wheelie, which would increase the chance of an accident, including an overturn.**

---

EBU20650

### To decelerate

When slowing down or stopping, release the throttle and apply the brakes smoothly and evenly. As you slow down, shift to a lower gear. Be sure that the engine has sufficiently slowed before engaging a lower gear. Improper use of the brakes or shifting can cause the tires to lose traction, reducing control and increasing the possibility of an accident.

EWB00710

### **WARNING**

**Make sure the engine has sufficiently slowed before shifting to a lower gear. Engaging a lower gear when the engine speed is too high could make the wheels stop rotating and lose traction. This could cause loss of control, an accident and injury. It could also cause engine or drive train damage.**

---

ECB00180

### **NOTICE**

- **Even with the transmission in the neutral position, do not coast for long periods of time**

with the engine off, and do not tow the ATV for long distances. The transmission is properly lubricated only when the engine is running. Inadequate lubrication may damage the transmission.

- Always use the clutch when changing gears. The engine, transmission and drive train are not designed to withstand the shock of forced shifting and can be damaged by shifting without using the clutch.

EBU20672

## Engine break-in

### TIP

- For ATVs equipped with an odometer or an hour meter, follow the figures given in km (mi) or the figures given in hours.
- For ATVs not equipped with an odometer or hour meter, follow the figures given in hours.

There is never a more important period in the life of your engine than the first 320 km (200 mi) or 20 hours of riding. 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 320 km (200 mi) or 20

hours. 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.

### 0–160 km (0–100 mi) or 0–10 hours

Avoid prolonged operation above 1/2 throttle. Vary the speed of the ATV regularly. Do not operate it at one set throttle position.

### 160–320 km (100–200 mi) or 10–20 hours

Avoid prolonged operation above 3/4 throttle. Rev the engine through the gears freely, but do not use full throttle at any time.

### 320 km (200 mi) or 20 hours and beyond

The ATV can now be operated normally.

ECB00220

### NOTICE

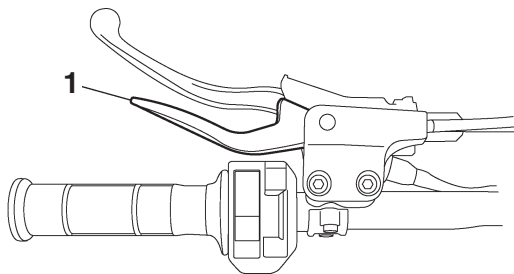
**If any engine trouble should occur during the engine break-in period, immediately have a Yamaha dealer check the ATV.**

EBU20721

## Parking

When parking the ATV, stop the engine, shift into

first gear, apply the parking brake, and then turn the fuel cock to “OFF”.



6

1. Locked position

EBU20860

## Parking on a slope

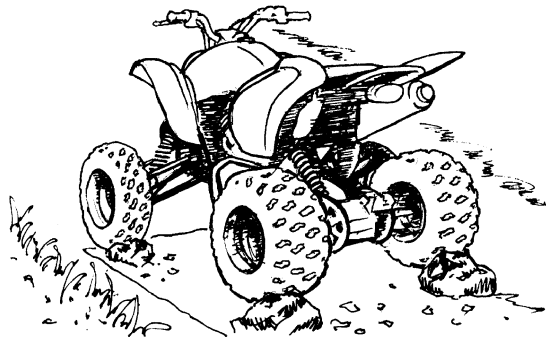
EWB00850

### WARNING

**Avoid parking on hills or other inclines. Parking on a hill or other incline could cause the ATV to roll out of control, increasing the chance of an accident. If you must park on an incline, place the ATV transversely across the incline, shift into first gear, stop the engine, apply the parking brake, and then block the front**

**and rear wheels with rocks or other objects. Do not park the ATV at all on hills that are so steep you could not walk up them easily.**

1. Bring the ATV to a stop by applying the brakes in first gear.
2. Stop the engine and release the clutch lever.
3. With the rear brake applied, apply the parking brake and slowly release the brake pedal.



EBU20910

## Accessories and loading

EBU20920

### Accessories

Accessories can affect the handling and control of your ATV. Keep the following in mind when consid-



ering an accessory or operating an ATV which has accessories.

- Choose only accessories designed for your ATV. Your Yamaha dealer has a variety of genuine Yamaha accessories. Other accessories may also be available on the market. However, it is not possible for Yamaha to test all non-Yamaha accessories, nor control over their quality or suitability. Choose a genuine Yamaha accessory, or one that is equivalent in design and quality.
- Accessories should be rigidly and securely mounted. An accessory which can shift position or come off while you are riding could affect your ability to control the ATV.
- Do not mount an accessory where it could interfere with your ability to control the ATV. Examples include (but are not limited to) a heavy or bulky object attached to the handlebars which could make steering difficult, an accessory that limits your ability to move around on the seat, or one that limits your view.
- Use extra caution when riding an ATV with accessories. The ATV may handle differently than it does without accessories.

EBU20940

## Loading

As originally equipped, this ATV is not designed to carry cargo or tow a trailer. If you choose to add accessories so that you can carry cargo or tow a trailer, you must use common sense and good judgment as the stability and handling of an ATV can be changed. When adding accessories, keep the following points in mind:

- Never exceed the weight limits shown. An overloaded ATV can be unstable.

### MAXIMUM LOADING LIMIT

ATV loading limit (total weight of rider, cargo, accessories, and tongue):  
100.0 kg (220 lb)

- If you are carrying cargo and towing a trailer, include the tongue weight in the maximum ATV load limit.
- Load cargo on the carriers as close to the center of the ATV as possible. Put cargo at the rear of the front carrier, at the front of the rear carrier, and center it.
- Tie down cargo securely to the carriers. Make sure cargo in the trailer cannot move around. A shifting load can cause an accident.

- Make sure the load does not interfere with controls or your ability to see where you are going.
- Ride more slowly than you would without a load. The more weight you carry, the slower you should go. Although conditions vary, it is good practice not to exceed 2nd gear whenever you are carrying heavier loads or when towing a trailer.
- Allow more braking distance. A heavier ATV takes longer to stop.
- Avoid making sharp turns unless at very slow speeds.
- Avoid hills and rough terrain. Choose terrain carefully. Added weight affects the stability and handling of the ATV.

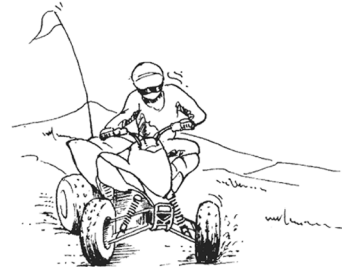
EWB00820

 **WARNING**

**Never exceed the stated load capacity for this ATV. Overloading this ATV or carrying or towing cargo improperly could cause changes in ATV handling which could lead to an accident. Cargo should be properly distributed and securely attached. Reduce speed when carrying cargo or pulling a trailer. Allow greater distance for braking.**

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# RIDING YOUR ATV



## GETTING TO KNOW YOUR ATV

This ATV is intended for recreational use by experienced operators only. Even if you are an experienced operator of all other all terrain ATVs or motorcycles, riding the ATV requires special skills acquired through practice. Take your time to fully learn techniques before attempting more difficult maneuvers.

Riding your new ATV can be a very enjoyable activity, providing you with hours of pleasure. But it is essential to familiarize yourself with the operation of the ATV to achieve the skill necessary to enjoy riding safely. Before you begin to ride, be sure you have read this Owner's Manual completely and understand the operation of the controls. Pay particular attention to the safety information on pages 1-1–1-4. Please also read all notice and warning labels on your ATV.

## RIDE WITH CARE AND GOOD JUDGEMENT

### Get training if you are inexperienced.

Beginners should get training from a certified instructor.

Become familiar with this ATV at slow speeds first, even if you are an experienced operator. Do not attempt to operate at maximum performance until you are totally familiar with the ATV's handling and performance characteristics.

EWB01380

### WARNING

**Never operate this ATV without proper instruction. Beginning and inexperienced operators should regularly practice the skills and the operating techniques described in this Owner's Manual. The risk of an accident is greatly increased if the operator does not know how to operate the ATV properly in different situations and on different types of terrain.**

**Riding your ATV requires skills acquired through practice over a period of time.**

Take the time to learn the basic techniques well before attempting more difficult maneuvers.

**Not recommended for children under 16 years of age.**

EWB01390

### WARNING

**A child under 16 should never operate an ATV**

with engine size greater than 90 cc. Use by children of ATVs that are not recommended for their age can lead to severe injury or death of the child.

---



This ATV is designed to carry operator only – passengers prohibited.

EWB01400

**⚠ WARNING**

Never carry a passenger. The long seat is to allow the operator to shift position as needed during operation. It is not for carrying passengers. Carrying a passenger on this ATV greatly reduces your ability to balance and control this ATV. It could cause an accident, resulting in

harm to you and/or your passenger.

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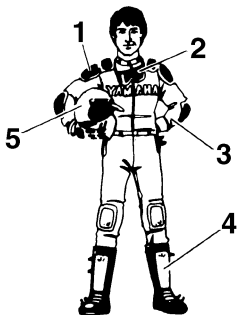
7

**Apparel**

Always wear an approved motorcycle helmet that fits properly.

You should also wear:

- eye protection (goggles or face shield)
- gloves
- boots
- long-sleeved shirt or jacket
- long pants



1. Protective clothing
2. Goggles
3. Gloves
4. Boots
5. Helmet

7

EWB01410

**⚠ WARNING**

Never operate this ATV without wearing an approved motorcycle helmet, eye protection and protective clothing. Operating without an approved motorcycle helmet increases your chances of a severe head injury or death in the event of an accident. Operating without eye protection can result in an accident and increases your chances of a severe injury in the

event of an accident. Operating without protective clothing increases your chances of severe injury in the event of an accident.

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**Do not operate after consuming alcohol or drugs.**

The operator's performance capability is reduced by the influence of alcohol or drugs.



EWB01420

**⚠ WARNING**

Never consume alcohol or drugs before or while driving this ATV.

---

**Pre-operation checks**

Always perform the pre-operation checks listed on

page 5-1 before riding for proper care of the ATV and to ensure safety.

EWB01430

### **WARNING**

**Always inspect your ATV each time you use it to make sure the ATV is in safe operating condition. Always follow the inspection and maintenance procedures and schedules described in the Owner's Manual. Failure to inspect the ATV before operating or failure to properly maintain the ATV increases the possibility of an accident or equipment damage.**

EWB01440

### **WARNING**

**Always use the size and type tires specified in the Owner's Manual for this ATV on page 5-4. Always maintain proper tire pressure as described in the Owner's Manual on page 5-5. Use of improper tires on this ATV, or operation of this ATV with improper or uneven tire pressure, may cause loss of control, increasing your risk of an accident.**

**Do not operate at speeds too fast for your skills or the conditions.**

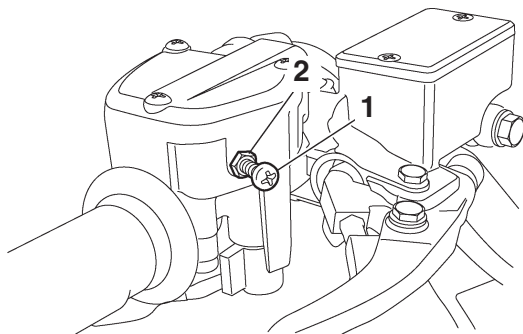
EWB01450

### **WARNING**

**Always go at a speed that is proper for the terrain, visibility and operating conditions, and your experience. Operating this ATV at speeds too fast for your skills or the conditions increases your chances of losing control of the ATV, which can result in an accident.**

### **Speed limiter**

For riders less experienced with this model, the throttle lever housing is equipped with a speed limiter. The speed limiter keeps the throttle from fully opening, even when the throttle lever is pushed to the maximum. Turning in the adjusting screw limits the maximum engine power available and decreases the maximum speed of the ATV. Turning in the adjusting screw decreases top speed, and turning it out increases top speed. (See page 4-4.)



1. Adjusting screw
2. Locknut

7

### Loading and accessories

As originally equipped, this ATV is not designed to carry cargo or tow a trailer. If you choose to add accessories so that you can carry cargo or tow a trailer, you must use common sense and good judgment.

Use extra caution when riding the ATV with additional loads, such as accessories or cargo. The ATV's handling may be adversely affected. Reduce your speed when adding additional loads.

### MAXIMUM LOADING LIMIT

ATV loading limit (total weight of cargo, rider, accessories, and tongue):

100.0 kg (220 lb)

EWB01460

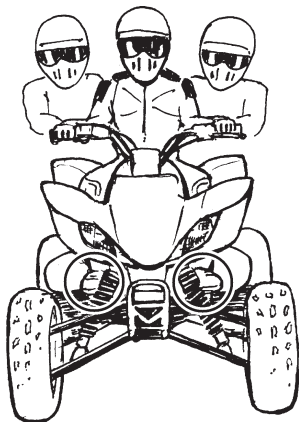
### WARNING

- Never exceed the stated load capacity for this ATV.
- Cargo should be properly distributed and securely attached.
- Reduce speed when carrying cargo or pulling a trailer. Allow greater distance for braking.
- Always follow the instructions in your Owner's Manual for carrying cargo or pulling a trailer.

### During operation

Always keep your feet on the footboards during operation, otherwise they may contact the rear wheels.





EWB01470

**⚠ WARNING**

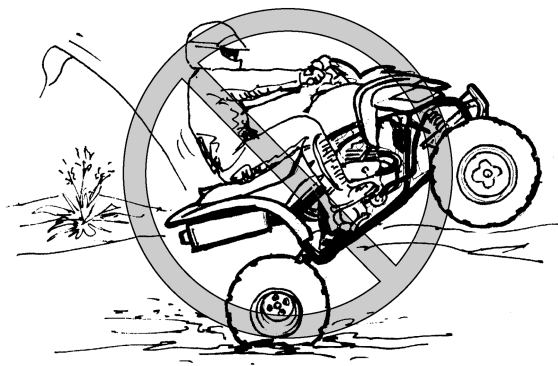
Always keep both hands on the handlebars and both feet on the footboards of your ATV during operation. Removing even one hand or foot can reduce your ability to control the ATV or could cause you to lose your balance and fall off of the ATV. If you remove a foot from a footboard, your foot or leg may come into contact with the rear wheels, which could injure you or cause an accident.

Avoid wheelies and jumping. You may lose control of the ATV or overturn.

EWB01480

**⚠ WARNING**

Never attempt stunts, such as wheelies or jumps. Don't try to show off.



7

**Modifications**

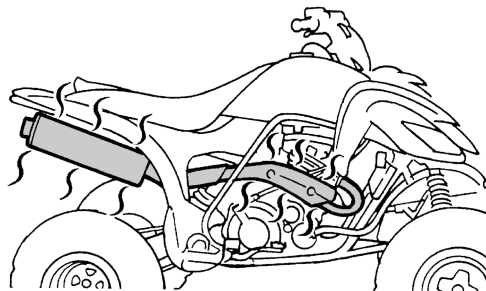
EWB01490

**⚠ WARNING**

Never modify this ATV through improper installation or use of accessories. All parts and accessories added to this ATV should be genuine Yamaha or equivalent components de-

signed for use on this ATV and should be installed and used according to instructions. Improper installation of accessories or modification of this ATV may cause changes in handling which in some situations could lead to an accident. If you have questions, consult an authorized ATV dealer.

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### Exhaust system

The exhaust system on the ATV is very hot during and following operation. To prevent burns, avoid touching the exhaust system. Park the ATV in a place where pedestrians or children are not likely to touch it. Also, avoid parking in or around dry grass, brush or other combustible materials to prevent causing a fire hazard.

7

EWB01500

### **WARNING**

- Do not touch the hot exhaust system.
  - Do not park the ATV during or after operation in a place where others might be likely to touch it.
  - Do not operate, idle, or park the ATV in dry grass, dry ground cover, or combustible materials.
- 

### **BE CAREFUL WHERE YOU RIDE**

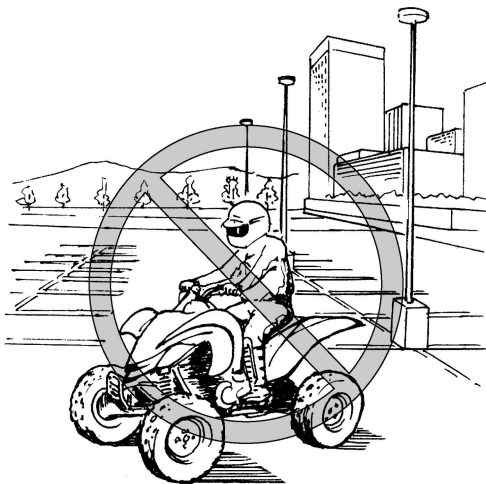
This ATV is designed for use on unpaved surfaces only. Riding on paved surfaces can cause loss of control.

EWB01510

### **WARNING**

Always avoid paved surfaces, including sidewalks, driveways, parking lots and streets. ATVs are designed for use on unpaved surfaces only. Paved surfaces may seriously affect handling and control of the ATV, and may cause the ATV to go out of control.

---



While riding on unpaved public streets or roads may be legal in your area, such operation can increase the risk of collision with other vehicles. Watch carefully for other vehicles. Make sure you know your country's laws and regulations before you ride on unpaved public streets or roads. Do not ride on any paved public street, road or motorway.

EWB01520

**⚠ WARNING**

**Never operate this ATV on any paved street,**

paved road or motorway. You can collide with another vehicle. In many areas, it is illegal to operate ATVs on public streets, roads and highways.

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Know the terrain where you ride. Ride cautiously in unfamiliar areas. Stay alert for **holes, rocks, or roots** in the terrain, and **other hidden hazards** which may cause the ATV to upset.

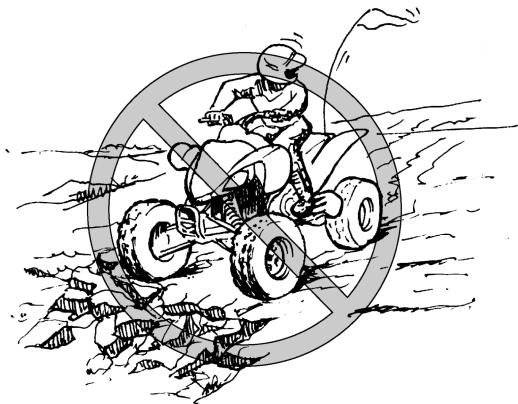
EWB01530

**⚠ WARNING**

**Go slowly and be extra careful when operating**

on unfamiliar terrain. Always be alert to changing terrain conditions when operating the ATV.

---



7

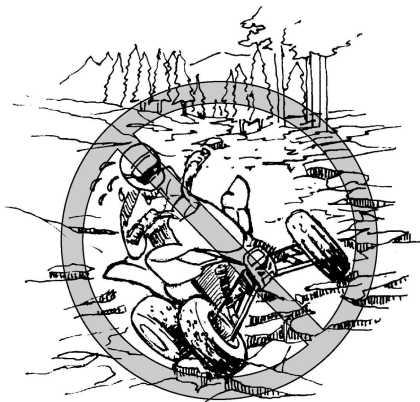
EWB01540

**⚠ WARNING**

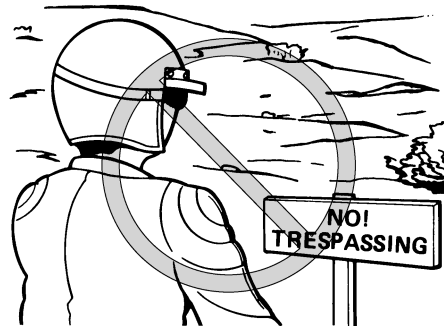
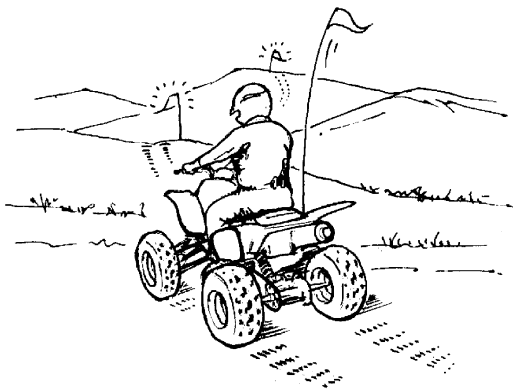
**Do not operate on excessively rough, slippery or loose terrain until you have learned and practiced the skills necessary to control the ATV on such terrain. Failure to use extra care when operating on excessively rough, slippery or loose terrain could cause loss of traction or ATV control, which could result in an accident,**

**including an overturn.**

---



When riding in an area where you might not easily be seen, such as desert terrain, mount a caution flag on the ATV. **DO NOT** use the flag pole bracket as a trailer hitch.



EWB01550

**⚠ WARNING**

**Always mount a caution flag on the ATV to make you more visible when operating in areas where you might not be seen by other vehicles. Watch carefully for other vehicles.**

Do not ride in areas posted “no trespassing”.  
Do not ride on private property without getting permission.

Select a large, flat, unpaved area to become familiar with your ATV. Make sure that this area is free of obstacles and other riders. You should practice control of the throttle, brakes, shifting procedures, and turning techniques in this area before trying more difficult terrain. Always avoid riding on paved surfaces: the ATV is designed for use on unpaved surfaces only, and handling maneuvers are more difficult to perform on pavement.

Set the parking brake and follow the instruction on page 6-1 to start the engine. Once it has warmed up you are ready to begin riding your ATV. As you get on the ATV, be sure not to accidentally move the shift pedal. Remember that the engine and exhaust pipe will be hot when riding and afterwards; do not allow skin or clothing to come in contact with

these components.

With the engine idling, pull the clutch lever to disengage the clutch and shift into 1st gear, and then release the parking brake. Open the throttle gradually, and at the same time, release the clutch lever slowly. Once the ATV has attained adequate speed, release the throttle lever and at the same time, quickly pull in the clutch lever and shift into 2nd gear. Open the throttle part way and gradually release the clutch. Use this same procedure as you move into the higher gears. Be sure to coordinate the use of the throttle and shift pedal properly. If the throttle is applied too abruptly or if the throttle is not released during shifting, or if the shift pedal is not released before applying the throttle, the front wheels may lift off the ground, resulting in a loss of directional control. Avoid higher speeds until you are thoroughly familiar with the operation of your ATV.

EWB01720

 **WARNING**

**Always open the throttle gradually and release the clutch lever slowly. Otherwise, the ATV could wheelie which would increase the chance of an accident.**

ECB00230

**NOTICE**

**Do not shift gears without releasing the throttle. Damage to the engine or drive train may occur.**

When slowing down or stopping, release the throttle and apply the brakes smoothly and evenly. As you slow down, shift to a lower gear. Be sure that the engine has sufficiently slowed before engaging a lower gear. Improper use of the brakes or shifting can cause the tires to lose traction, reducing control and increasing the possibility of an accident.

EWB01560

 **WARNING**

**Make sure the engine has sufficiently slowed before shifting to a lower gear. Engaging a lower gear when the engine speed is too high could cause the wheels to stop rotating.**

### TURNING YOUR ATV

To achieve maximum traction on unpaved surfaces, the two rear wheels are mounted solidly on one axle and turn together at the same speed. Therefore, unless the wheel on the inside of the turn is allowed to slip or lose some traction, the ATV will resist turning. A special turning technique must be

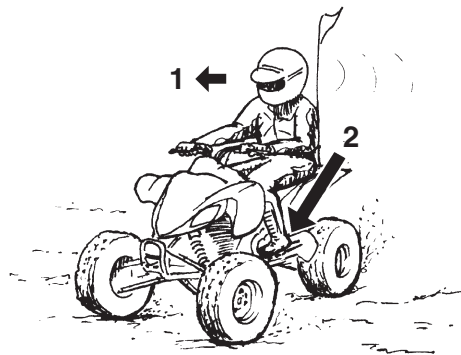
used to allow the ATV to make turns quickly and easily. It is essential that this skill be learned first at low speed.

EWB01570

**WARNING**

**Always follow proper procedures for turning as described in this Owner's Manual. Practice turning at low speeds before attempting to turn at faster speeds. Do not turn at speeds too fast for your skills or the conditions.**

As you approach a curve, slow down and begin to turn the handlebars in the desired direction. As you do so, put your weight on the footboard to the outside of the turn (opposite your desired direction) and lean your upper body into the turn. Use the throttle to maintain an even speed through the turn. This maneuver will let the wheel on the inside of the turn slip slightly, allowing the ATV to make the turn properly.



1. Lean towards inside of turn.
2. Support your weight on the outer footrest.

This procedure should be practiced at slow speed many times in a large unpaved area with no obstacles. If an incorrect technique is used, your ATV may continue to go straight. If the ATV doesn't turn, come to a stop and then practice the procedure again. If the riding surface is slippery or loose, it may help to position more of your weight over the front wheels by moving forward on the seat. Once you have learned this technique, you should be able to perform it at higher speeds or in tighter

curves.

Improper riding procedures such as abrupt throttle changes, excessive braking, incorrect body movements, or too much speed for the sharpness of the turn may cause the ATV to tip. If the ATV begins to tip over to the outside while negotiating a turn, lean more to the inside. It may also be necessary to gradually let off on the throttle and steer to the outside of the turn to avoid tipping over.

Remember: Avoid higher speeds until you are thoroughly familiar with the operation of your ATV.

## CLIMBING UPHILL

7

Use proper riding techniques to avoid ATV over- turns on hills. Be sure that you can maneuver your ATV well on flat ground before attempting any incline and then practice riding first on gentle slopes. Try more difficult climbs only after you have developed your skill. In all cases avoid inclines with slippery or loose surfaces, or obstacles that might cause you to lose control.

EWB01580

### **WARNING**

**Never operate the ATV on hills too steep for the ATV or for your abilities. The ATV can overturn more easily on extremely steep hills than on level surfaces or small hills. Practice on small-**

## **er hills before attempting large hills.**

It is important when climbing a hill to make sure that your weight is transferred forward on the ATV. This can be accomplished by leaning forward and, on steeper inclines, standing on the footboards and leaning forward over the handlebars.

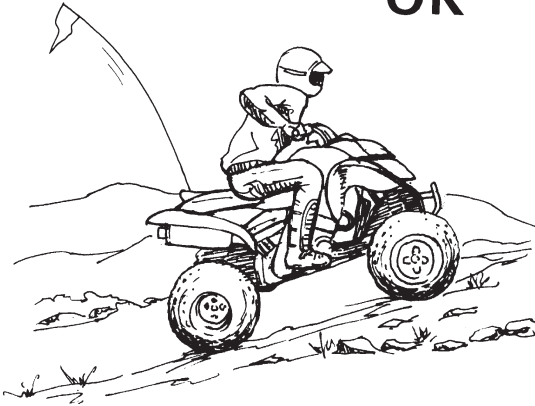
EWB01590

### **WARNING**

- **Always follow proper procedures for climbing hills as described in this Owner's Manual.**
- **Always check the terrain carefully before you start up any hill.**
- **Never climb hills with excessively slippery or loose surfaces.**
- **Shift your weight forward.**
- **Never open the throttle suddenly or make sudden gear changes. The ATV could flip over backwards.**
- **Never go over the top of any hill at high speed. An obstacle, a sharp drop, or another vehicle or person could be on the other side of the hill.**



# OK



If you are climbing a hill and you find that you have not properly judged your ability to make it to the top, you should turn the ATV around while you still have forward motion (provided you have the room to do so) and go down the hill.

EWB01600

## **! WARNING**

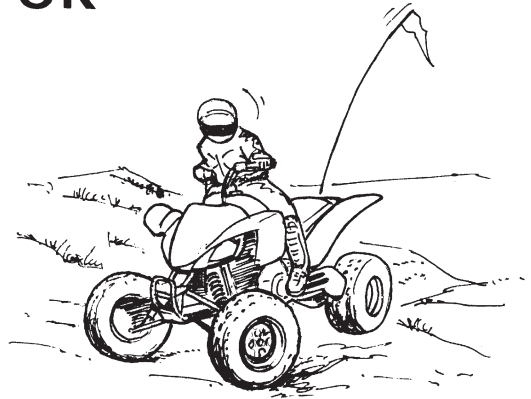
**Never attempt to turn the ATV around on any hill until you have mastered the turning technique as described in the Owner's Manual on level ground. Be very careful when turning on**

any hill. Avoid crossing the side of a steep hill if possible.

**When crossing the side of a hill:**

- Always follow proper procedures as described in the Owner's Manual.
  - Avoid hills with excessively slippery or loose surfaces.
  - Shift your weight to the uphill side of the ATV.
- 

# OK



If your ATV has stalled or stopped and you believe you can continue up the hill, restart carefully to

make sure you do not lift the front wheels which could cause you to lose control. If you are unable to continue up the hill, dismount the ATV on the uphill side. Physically turn the ATV around and then descend the hill.

If you start to roll backwards, DO NOT apply the rear brake to stop or try to put the ATV in gear. The ATV could easily tip over backwards. Instead, apply the front brake gradually, or dismount the ATV immediately on the uphill side.

EWB01731

## **WARNING**

Use the proper gear and maintain a steady speed when climbing a hill.

If you lose all forward speed:

- Keep weight uphill.
- Apply the brakes.
- Lock the parking brake after you are stopped.

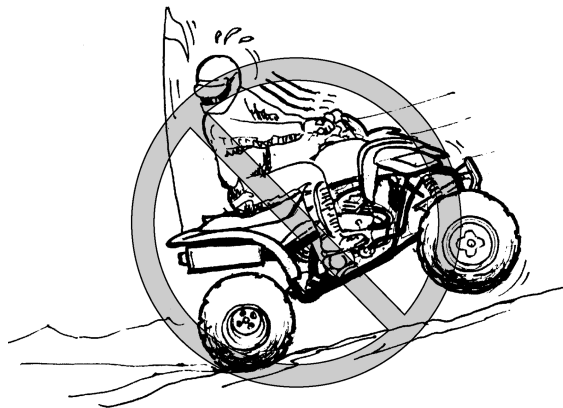
If you begin rolling backwards:

- Keep weight uphill.
- Never apply the rear brake while rolling backwards. Apply the front brake.
- When fully stopped, apply the rear brake as well, and then lock the parking brake.

Dismount on uphill side or to a side if pointed

**straight uphill. Turn the ATV around and re-mount, following the procedure described in the Owner's Manual.**

---



## **RIDING DOWNHILL**

When riding your ATV downhill, shift your weight as far to the rear and uphill side of the ATV as possible. Move back on the seat and sit with your arms straight. Choose a low gear which will allow the engine compression to do most of the braking for you. Improper braking may cause a loss of trac-

tion.

Use caution while descending a hill with loose or slippery surfaces. Braking ability and traction may be adversely affected by these surfaces. Improper braking may also cause a loss of traction.

Whenever possible, ride your ATV straight downhill. Avoid sharp angles which could allow the ATV to tip or roll over. Carefully choose your path and ride no faster than you will be able to react to obstacles which may appear.

EWB01620

## **WARNING**

**Always follow proper procedures for going down hills as described in this Owner's Manual.**

**Note: a special technique is required when braking as you go down a hill.**

- **Always check the terrain carefully before you start down any hill.**
- **Shift your weight backward.**
- **Never go down a hill at high speed.**
- **Avoid going down a hill at an angle that would cause the ATV to lean sharply to one side. Go straight down the hill where possible.**

**OK**



## **CROSSING A SLOPE**

Traversing a sloping surface on your ATV requires you to properly position your weight to maintain proper balance. Be sure that you have learned the basic riding skills on flat ground before attempting to cross a sloping surface. Avoid slopes with slippery surfaces or rough terrain that may upset your balance.

As you travel across a slope, lean your body in the uphill direction. It may be necessary to correct the

steering when riding on loose surfaces by pointing the front wheels slightly uphill. When riding on slopes, be sure not to make sharp turns either up or down hill.

If your ATV does begin to tip over, gradually steer in the downhill direction if there are no obstacles in your path. As you regain proper balance, gradually steer again in the direction you wish to travel.

EWB01631

### **WARNING**

**Never attempt to turn the ATV around on any hill until you have mastered the turning technique as described in the Owner's Manual on level ground. Be very careful when turning on any hill. Avoid crossing the side of a steep hill if possible.**

**When crossing the side of a hill:**

- **Always follow proper procedures as described in the Owner's Manual.**
- **Avoid hills with excessively slippery or loose surfaces.**
- **Shift your weight to the uphill side of the ATV.**

# OK



### **CROSSING THROUGH SHALLOW WATER**

The ATV can be used to cross slow moving, shallow water of up to a maximum of 35 cm (14 in) in depth. Before entering the water, choose your path carefully. Enter where there is no sharp drop off, and avoid rocks or other obstacles which may be slippery or upset the ATV. Drive slowly and carefully.

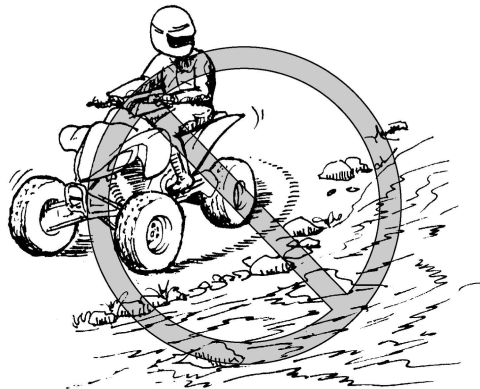
EWB01640

### **WARNING**

**Never operate this ATV in fast flowing water or**

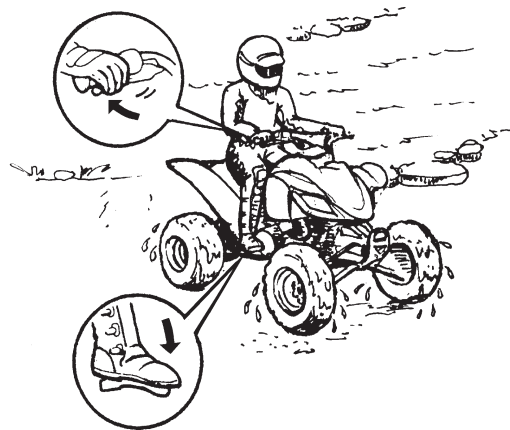
in water deeper than that specified in your Owner's Manual. Remember that wet brakes may have reduced stopping ability. Test your brakes after leaving water. If necessary, apply them several times to let friction dry out the linings. If the ATV is operated through deep or fast flowing water, the tires may float, causing loss of traction and loss of control, which could lead to an accident.

---



Test your brakes after leaving the water. Do not continue to ride your ATV without verifying that you

have regained proper braking ability.

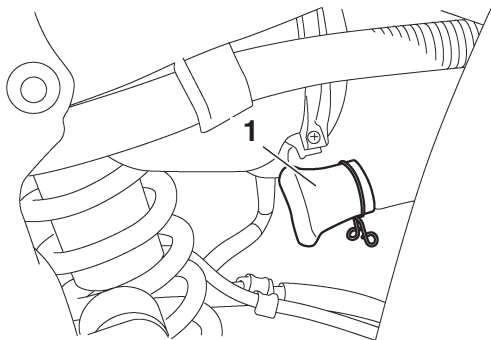


ECB00240

### **NOTICE**

After riding your ATV in water, be sure to drain the trapped water by removing the check hose at the bottom of the air filter case. Wash the ATV in fresh water if it has been operated in salt water or muddy conditions.

---



1. Air filter case check hose

7

## RIDING OVER ROUGH TERRAIN

Riding over rough terrain should be done with caution. Look out for obstacles which could cause damage to the ATV or could lead to an upset or accident. Be sure to keep your feet firmly mounted on the footboards at all times. Avoid jumping the ATV as loss of control and damage to the ATV may result.

EWB01650

### WARNING

**Before operating in a new area, check for obstacles. Never attempt to ride over large obstacles, such as large rocks or fallen trees. When**

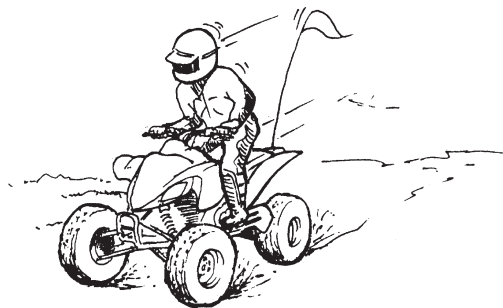
**you go over obstacles, always follow proper procedures as described in the Owner's Manual.**

---

## SLIDING AND SKIDDING

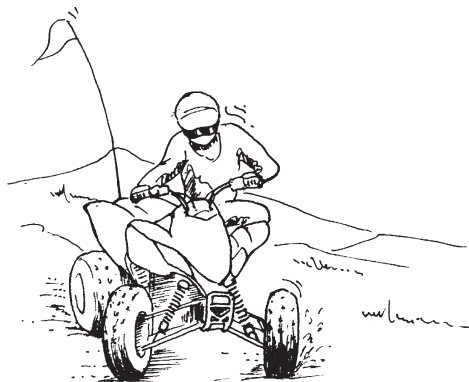
Care should be used when riding on loose or slippery surfaces since the ATV may slide. If unexpected and uncorrected, sliding could lead to an accident.

To reduce the tendency for the front wheels to slide in loose or slippery conditions, positioning your weight over the front wheels will sometimes help.



If the rear wheels of your ATV start to slide sideways, control can usually be regained (if there is room to do so) by steering in the direction of the

slide. Applying the brakes or accelerating is not recommended until you have corrected the slide.



With practice, over a period of time, skill at controlled sliding can be developed. The terrain should be chosen carefully before attempting such maneuvers, since both stability and control are reduced. Bear in mind that sliding maneuvers should always be avoided on extremely slippery surfaces such as ice, since all control may be lost.

EWB01661

## **WARNING**

**Learn to safely control skidding or sliding by practicing at low speeds and on level, smooth**

**terrain.**

**On extremely slippery surfaces, such as ice, go slowly and be very cautious in order to reduce the chance of skidding or sliding out of control.**

---

### **WHAT TO DO IF...**

This section is designed to be a reference guide only. Be sure to read each section on riding techniques completely.

### **WHAT TO DO...**

- If your ATV doesn't turn when you want it to: Bring the ATV to a stop and practice the turning maneuvers again. Be sure you are putting your weight on the footboard to the outside of the turn. Position your weight over the front wheels for better control. (See page 7-12.)
- If your ATV begins to tip while turning: Lean more into the turn to regain balance. If necessary, gradually let off the throttle and/or steer to the outside of the turn. (See page 7-12.)
- If your ATV starts to slide sideways: Steer in the direction of the slide if you have the room. Applying the brakes or accelerating is not recommended until you have corrected the

slide. (See page 7-20.)

- If your ATV can't make it up a hill you are trying to climb:

Turn the ATV around if you still have forward speed. If not, stop, dismount on the uphill side of the ATV and physically turn the ATV around. If the ATV starts to slip backwards, **DO NOT USE THE REAR BRAKE** – the ATV may tip over on top of you. Dismount the ATV on the uphill side. (See page 7-14.)

- If your ATV is traversing a sloping surface:

Be sure to ride with your weight positioned towards the uphill side of the ATV to maintain proper balance. If the ATV starts to tip, steer down the hill (if there are no obstacles in your way) to regain balance. If you discover that the ATV is going to tip over, dismount on the uphill side. (See page 7-17.)

- If your ATV encounters shallow water:

Ride slowly and carefully through slow moving water, watching for obstacles. Be sure to let water drain from the ATV and **CHECK YOUR BRAKES FOR PROPER OPERATION** when you come out of the water. Do not continue to ride your ATV until you have regained adequate braking ability. (See page 7-18.)



## PERIODIC MAINTENANCE AND MINOR REPAIR

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

The intervals given in the periodic maintenance and lubrication chart should be considered as a general guide under normal riding conditions. However, **DEPENDING ON THE WEATHER, TERRAIN, GEOGRAPHICAL LOCATION, AND INDIVIDUAL USE, THE MAINTENANCE INTERVALS MAY NEED TO BE SHORTENED.**

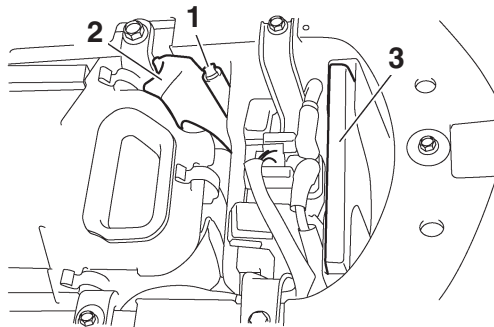
### **! WARNING**

**Never service an engine while it is running. Moving parts can catch clothing or parts of the body, causing injury. Electrical components can cause shocks or start fires. Turn off the engine when performing maintenance unless otherwise specified. Have a Yamaha dealer perform the service if you are not familiar with**

### **maintenance work.**

### **Owner's manual and tool kit**

Be sure to put this owner's manual in the plastic bag and to always carry it as well as the owner's tool kit and the low-pressure tire gauge in their respective compartments under the seat.



1. Low-pressure tire gauge
2. Owner's tool kit
3. Owner's manual

The service information included in this manual and the tools provided in the owner's tool kit are intended to assist you in the performance of preventive maintenance and minor repairs. However, additional tools such as a torque wrench may be necessary to perform certain maintenance work correctly.

**TIP** \_\_\_\_\_

If you do not have the tools or experience required for a particular job, have a Yamaha dealer perform it for you.

EWB01850

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

8

**Never modify this ATV through improper installation or use of accessories, as it may cause changes in handling, which in some situations could lead to an accident. All parts and accessories added to this ATV should be genuine Yamaha or equivalent components designed for use on this ATV and should be installed and used according to instructions. If you have questions, consult an authorized Yamaha ATV dealer.**

## Periodic maintenance chart for the emission control system

### TIP

- For ATVs not equipped with an odometer or an hour meter, follow the month maintenance intervals.
- For ATVs equipped with an odometer or an hour meter, follow the km (mi) or hours maintenance intervals. However, keep in mind that if the ATV isn't used for a long period of time, the month maintenance intervals should be followed.
- Items marked with an asterisk should be performed by a Yamaha dealer as they require special tools, data and technical skills.

NO.	ITEM	CHECK OR MAINTENANCE JOB	Whichever comes first ⇒	INITIAL			EVERY		
				month	1	3	6	6	12
				km (mi)	320 (200)	1300 (800)	2500 (1600)	2500 (1600)	5000 (3200)
				hours	20	80	160	160	320
1	*	<b>Fuel line</b>	<ul style="list-style-type: none"> <li>● Check fuel hoses for cracks or other damage, and replace if necessary.</li> </ul>				√	√	√
2		<b>Spark plug</b>	<ul style="list-style-type: none"> <li>● Check condition and clean, regap, or replace if necessary.</li> </ul>	√	√	√	√	√	√
3	*	<b>Valves</b>	<ul style="list-style-type: none"> <li>● Check valve clearance and adjust if necessary.</li> </ul>	√			√	√	√
4	*	<b>Carburetor</b>	<ul style="list-style-type: none"> <li>● Check starter (choke) operation and correct if necessary.</li> <li>● Check engine idling speed and adjust if necessary.</li> </ul>			√	√	√	√
5	*	<b>Crankcase breather system</b>	<ul style="list-style-type: none"> <li>● Check breather hose for cracks or other damage, and replace if necessary.</li> </ul>				√	√	√

NO.	ITEM	CHECK OR MAINTENANCE JOB	Whichever comes first ⇒	INITIAL			EVERY		
				month	1	3	6	6	12
				km (mi)	320 (200)	1300 (800)	2500 (1600)	2500 (1600)	5000 (3200)
				hours	20	80	160	160	320
6	*	<b>Exhaust system</b>	<ul style="list-style-type: none"> <li>• Check for leakage and replace gasket(s) if necessary.</li> <li>• Check for looseness and tighten all screw clamps and joints if necessary.</li> </ul>			√	√	√	
7		<b>Spark arrester</b>	<ul style="list-style-type: none"> <li>• Clean.</li> </ul>			√	√	√	

## General maintenance and lubrication chart

NO.	ITEM	CHECK OR MAINTENANCE JOB	Whichever comes first ⇒	INITIAL			EVERY		
				month	1	3	6	6	12
				km (mi)	320 (200)	1300 (800)	2500 (1600)	2500 (1600)	5000 (3200)
				hours	20	80	160	160	320
1	Air filter element	<ul style="list-style-type: none"> <li>Clean and replace if necessary.</li> </ul>		Every 20–40 hours (more often in wet or dusty areas)					
2	* Clutch	<ul style="list-style-type: none"> <li>Check operation and adjust if necessary.</li> </ul>		√		√	√	√	
3	* Front brake	<ul style="list-style-type: none"> <li>Check operation and correct if necessary.</li> <li>Check fluid level and ATV for fluid leakage, and correct if necessary.</li> </ul>		√	√	√	√	√	
		<ul style="list-style-type: none"> <li>Replace brake pads.</li> </ul>		Whenever worn to the limit					
4	* Rear brake	<ul style="list-style-type: none"> <li>Check operation and correct if necessary.</li> <li>Check fluid level and ATV for fluid leakage, and correct if necessary.</li> </ul>		√	√	√	√	√	
		<ul style="list-style-type: none"> <li>Replace brake pads.</li> </ul>		Whenever worn to the limit					
5	* Brake hoses	<ul style="list-style-type: none"> <li>Check for cracks or other damage, and replace if necessary.</li> </ul>			√	√	√	√	
		<ul style="list-style-type: none"> <li>Replace.</li> </ul>		Every 4 years					
6	* Parking brake	<ul style="list-style-type: none"> <li>Check operation and adjust if necessary.</li> </ul>		√	√	√	√	√	
7	* Wheels	<ul style="list-style-type: none"> <li>Check runout and for damage, and replace if necessary.</li> </ul>		√		√	√	√	
8	* Tires	<ul style="list-style-type: none"> <li>Check tread depth and for damage, and replace if necessary.</li> <li>Check air pressure and balance, and correct if necessary.</li> </ul>		√		√	√	√	
9	* Wheel hub bearings	<ul style="list-style-type: none"> <li>Check for looseness or damage, and replace if necessary.</li> </ul>		√		√	√	√	

NO.	ITEM	CHECK OR MAINTENANCE JOB	Whichever comes first ⇒	INITIAL			EVERY		
				month	1	3	6	6	12
				km (mi)	320 (200)	1300 (800)	2500 (1600)	2500 (1600)	5000 (3200)
				hours	20	80	160	160	320
10	*	Swingarm pivots	<ul style="list-style-type: none"> <li>• Check operation and for excessive play, and replace bearings if necessary.</li> <li>• Lubricate with lithium-soap-based grease.</li> </ul>			√	√	√	
11	*	Upper and lower arm pivots	<ul style="list-style-type: none"> <li>• Lubricate with lithium-soap-based grease.</li> </ul>			√	√	√	
12		Drive chain	<ul style="list-style-type: none"> <li>• Check chain slack and adjust if necessary.</li> <li>• Check rear wheel alignment and correct if necessary.</li> <li>• Clean and lubricate.</li> </ul>	√	√	√	√	√	
13	*	Drive chain rollers	<ul style="list-style-type: none"> <li>• Check for wear and replace if necessary.</li> </ul>			√	√	√	
14	*	Chassis fasteners	<ul style="list-style-type: none"> <li>• Make sure that all nuts, bolts, and screws are properly tightened.</li> </ul>	√	√	√	√	√	
15	*	Shock absorber assemblies	<ul style="list-style-type: none"> <li>• Check operation and correct if necessary.</li> <li>• Check for oil leakage and replace if necessary.</li> </ul>			√	√	√	
16	*	Rear suspension relay arm and connecting arm pivoting points	<ul style="list-style-type: none"> <li>• Check operation and correct if necessary.</li> <li>• Lubricate with lithium-soap-based grease.</li> </ul>		√	√	√	√	
17	*	Steering shaft	<ul style="list-style-type: none"> <li>• Lubricate with lithium-soap-based grease.</li> </ul>			√	√	√	
18	*	Steering system	<ul style="list-style-type: none"> <li>• Check operation and repair or replace if damaged.</li> <li>• Check toe-in and adjust if necessary.</li> </ul>	√	√	√	√	√	
19	*	Engine mount	<ul style="list-style-type: none"> <li>• Check for cracks or other damage, and replace if necessary.</li> </ul>			√	√	√	

NO.	ITEM	CHECK OR MAINTENANCE JOB	Whichever comes first ⇒	INITIAL			EVERY		
				month	1	3	6	6	12
				km (mi)	320 (200)	1300 (800)	2500 (1600)	2500 (1600)	5000 (3200)
hours	20	80	160	160	320				
20	Engine oil	<ul style="list-style-type: none"> <li>Change.</li> <li>Check ATV for oil leakage, and correct if necessary.</li> </ul>		√		√	√	√	
21	Engine oil filter element	<ul style="list-style-type: none"> <li>Replace.</li> </ul>		√		√		√	
22	Cooling system	<ul style="list-style-type: none"> <li>Check coolant level and ATV for coolant leakage, and correct if necessary.</li> </ul>		√	√	√	√	√	
		<ul style="list-style-type: none"> <li>Replace coolant.</li> </ul>	Every 2 years						
23	* Moving parts and cables	<ul style="list-style-type: none"> <li>Lubricate.</li> </ul>			√	√	√	√	
24	* Throttle lever housing and cable	<ul style="list-style-type: none"> <li>Check operation and correct if necessary.</li> <li>Check throttle cable free play and adjust if necessary.</li> <li>Lubricate throttle lever housing and cable.</li> </ul>		√	√	√	√	√	
25	* Front and rear brake switches	<ul style="list-style-type: none"> <li>Check operation and correct if necessary.</li> </ul>		√	√	√	√	√	
26	* Lights and switches	<ul style="list-style-type: none"> <li>Check operation and correct if necessary.</li> <li>Adjust headlight beams.</li> </ul>		√	√	√	√	√	

**TIP**

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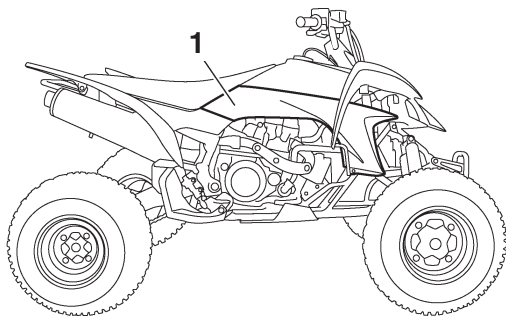
- The air filter needs more frequent service if you are riding in unusually wet or dusty areas.
  - Hydraulic brake service
    - Regularly check and, if necessary, correct the brake fluid level.
    - Every two years replace the internal components of the brake master cylinders and calipers, and change the brake fluid.
    - Replace the brake hoses every four years and if cracked or damaged.
-



EBU23080

## Removing and installing the panel

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



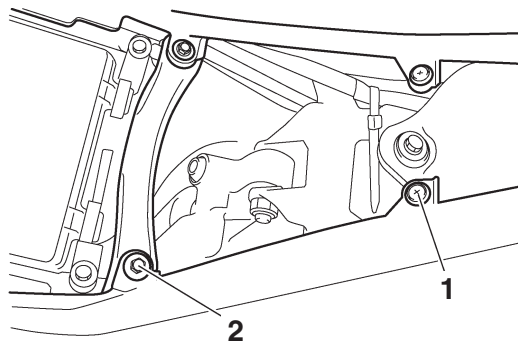
1. Panel A

EBU23180

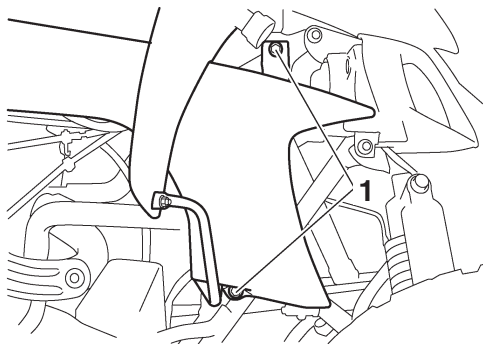
## Panel A

### To remove the panel

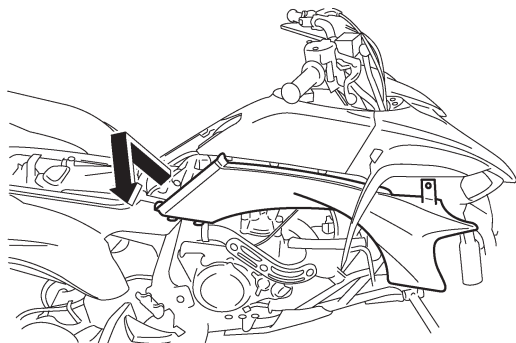
1. Remove the seat. (See page 4-11.)
2. Remove the quick fastener screw and the bolts, and then remove the panel by pulling it out from the front of the ATV.



1. Quick fastener screw
2. Bolt

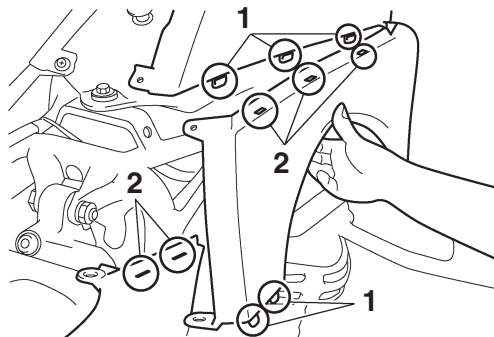


1. Bolt



### To install the panel

1. Place the panel in the original position, and then install the quick fastener screw and the bolts.



1. Projection
2. Slot

2. Install the seat.

EBU23241

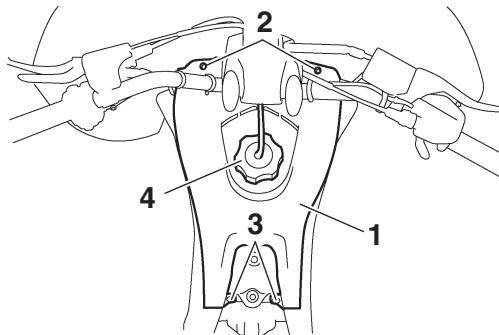
### **Checking the spark plug**

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 accor-

dance 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 the seat. (See page 4-11.)
2. Remove the bolts and the quick fastener screws shown.
3. Remove the fuel tank cap by turning it counterclockwise.



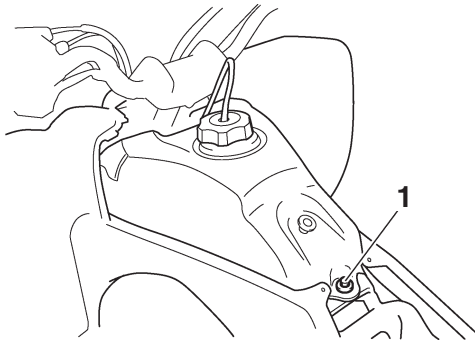
1. Panel
2. Bolt
3. Quick fastener screw
4. Fuel tank cap

EWB01870

### **! WARNING**

- Always turn off the engine before removing the fuel tank cap.
- Do not remove the fuel tank cap immediately after the engine has been running and is still very hot.
- Do not spill gasoline on the engine, exhaust pipe or muffler.
- Never remove the fuel tank cap while smoking, or in the vicinity of sparks, open flames, or other sources of ignition such as the pilot lights of water heaters and clothes dryers.

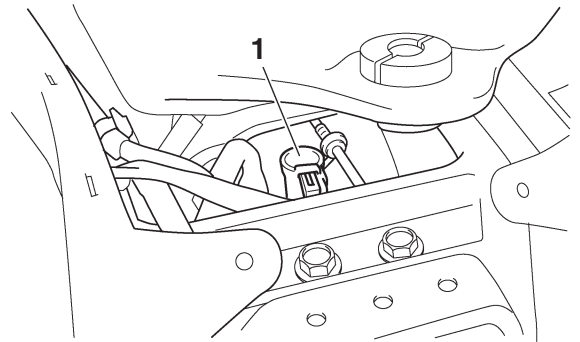
4. Pull the panel backward, and then remove the panel.
5. Install the fuel tank cap by turning it clockwise.
6. Remove the bolt, lift the rear of the fuel tank, and then tilt it back.



1. Bolt

7. Remove the spark plug cap.

8



1. Spark plug cap

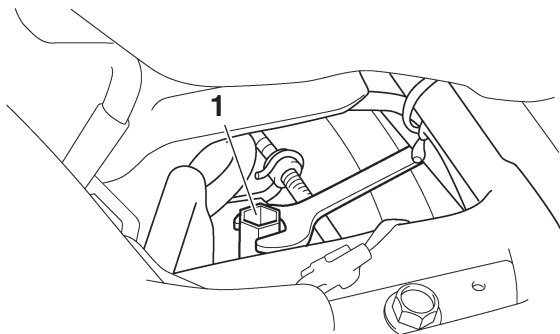
ECB00390

### **NOTICE**

**Do not use any tools to remove or install the spark plug cap, otherwise the ignition coil coupler may be damaged. The spark plug cap may be difficult to remove because the rubber seal on the end of the cap fits tightly. To remove the spark plug cap, simply twist it back and forth while pulling it out; to install it, twist it back and forth while pushing it in.**

8. Remove the spark plug as shown, with the spark plug wrench included in the owner's tool

kit.



1. Spark plug wrench

### 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 ATV is ridden normally).

#### TIP

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 ATV.

2. Check the spark plug for electrode erosion

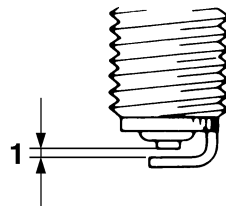
and excessive carbon or other deposits, and replace it if necessary.

Specified spark plug:  
NGK/CR8E

### 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)



1. Spark plug gap

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:

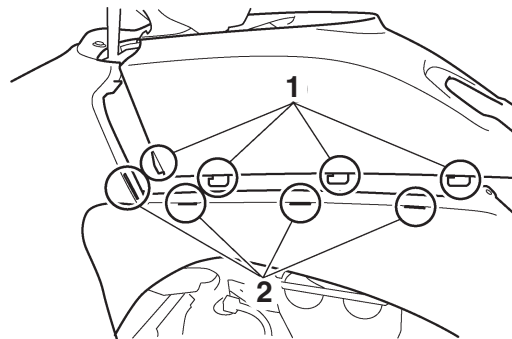
Spark plug:

12.5 Nm (1.25 m-kgf, 9.0 ft-lbf)

### TIP

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. Place the fuel tank in the original position, and then install the bolt.
6. Remove the fuel tank cap by turning it counterclockwise.
7. Place the panel in the original position.



1. Projection
2. Slot

8. Install the fuel tank cap by turning it clockwise.
9. Install the bolts and the quick fastener screws.
10. Install the seat.

EBU23304

### Engine oil and oil filter element

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

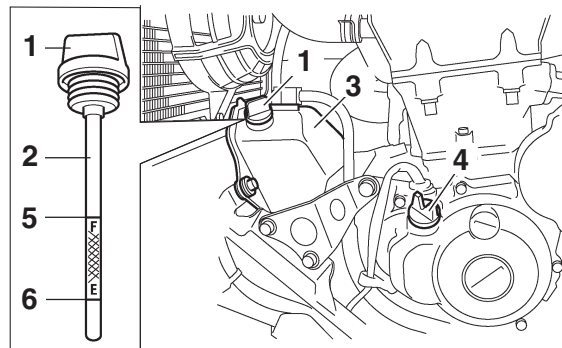
## To check the engine oil level

1. Place the ATV on a level surface.
2. Start the engine, warm it up until the engine oil has reached a normal temperature of 40 °C (104 °F), let it continue to idle for ten seconds or more, and then turn the engine off.

### TIP

To achieve the proper engine oil temperature for an accurate oil level reading, the engine must have first completely cooled down, and then warmed up again for several minutes to normal operating temperature.

3. Remove the engine oil tank filler cap, wipe the dipstick off with a clean rag.
4. Insert the dipstick into the filler hole (without screwing it in), and then remove it again to check the oil level.



1. Engine oil tank filler cap
2. Dipstick
3. Engine oil tank
4. Engine oil filler cap
5. Maximum level mark
6. Minimum level mark

### TIP

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

5. If the engine oil is at or below the minimum level mark, add sufficient oil of the recommended type through the engine oil tank filler hole to raise it to the correct level.

## TIP

When adding oil, be careful not to overfill the engine oil tank; the oil level rises faster starting from the half-level-portion on the dipstick.

6. Insert the dipstick into the engine oil tank filler hole, and then tighten the engine oil tank filler cap.

ECB00360

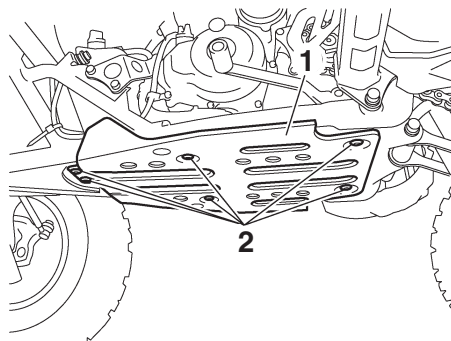
## NOTICE

**Make sure that the engine oil tank filler cap is securely tightened, otherwise oil may seep out when the engine is running.**

8

### To change the engine oil (with or without oil filter element replacement)

1. Place the ATV on a level surface.
2. Remove the engine guard by removing the bolts.

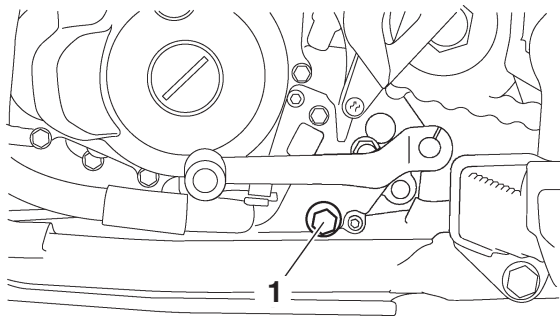


1. Engine guard

2. Bolt

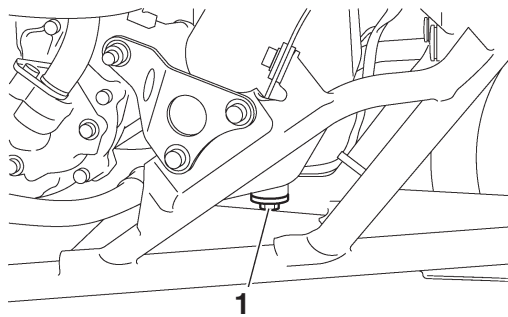
3. Start the engine, warm it up for several minutes, and then turn it off.
4. Place an oil pan under the engine to collect the used oil.
5. Remove the crankcase engine oil filler cap and the crankcase engine oil drain bolt.





1. Crankcase engine oil drain bolt

6. Remove the engine oil tank filler cap and the engine oil tank drain bolt.



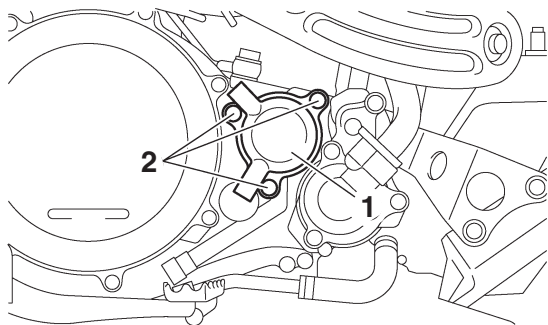
1. Engine oil tank drain bolt

7. Check the washers for damage, and replace if necessary.

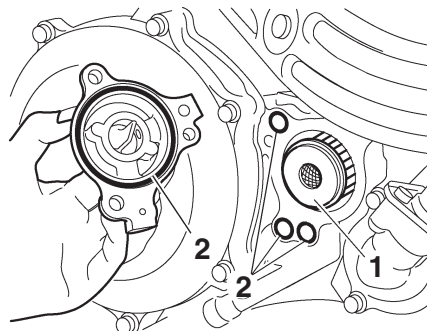
**TIP**

Skip steps 8–11 if the oil filter element is not being replaced.

8. Remove the oil filter element cover by removing the bolts, and then remove the oil filter element.



1. Oil filter element cover
2. Bolt



1. Oil filter element
2. O-ring

10. Install a new oil filter element and the O-rings.

#### **TIP**

Make sure that the O-rings are properly seated.

11. Install the oil filter element cover by installing the bolts, and then tighten them to the specified torque.

Tightening torque:

Oil filter element cover bolt:

10 Nm (1.0 m·kgf, 7.2 ft·lbf)

9. Check the O-rings for damage, and replace them if necessary.

12. Install the crankcase engine oil drain bolt and the engine oil tank drain bolt, and then tighten them to the specified torques.

**Tightening torques:**

Crankcase engine oil drain bolt:

20 Nm (2.0 m·kgf, 14 ft·lbf)

Engine oil tank drain bolt:

19 Nm (1.9 m·kgf, 14 ft·lbf)

13. Pour the specified amount of the recommended engine oil through the engine oil tank filler hole, and then install and tighten the engine oil tank filler cap.
14. Pour the specified amount of the recommended engine oil through the crankcase engine oil filler hole, and then install and tighten the

crankcase engine oil filler cap.

**Recommended oil:**

See page 10-1.

**Oil quantity:**

Without oil filter element replacement:

Quantity in oil tank:

1.55 L (1.64 US qt, 1.36 Imp.qt)

Quantity in crankcase:

0.20 L (0.21 US qt, 0.18 Imp.qt)

With oil filter element replacement:

Quantity in oil tank:

1.55 L (1.64 US qt, 1.36 Imp.qt)

Quantity in crankcase:

0.30 L (0.32 US qt, 0.26 Imp.qt)

**TIP**

Be sure to wipe off spilled oil on any parts after the engine and exhaust system have cooled down.

ECB00300

**NOTICE**

- In order to prevent clutch slippage (since the engine oil also lubricates the clutch), do not mix any chemical additives. 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.**

- **Make sure that no foreign material enters the crankcase.**

15. 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.
16. Turn the engine off, and then check the oil level and correct it if necessary.
17. Install the engine guard by installing the bolts, and then tighten them to the specified torque.

Tightening torque:

Engine guard bolt:

7 Nm (0.7 m·kgf, 5.1 ft·lbf)

8

ECB00370

## **NOTICE**

**Be sure to apply LOCTITE® to the engine guard bolts before installing them.**

EBU23470

## **Coolant**

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.

EBU23491

### **To check the coolant level**

1. Place the ATV on a level surface.

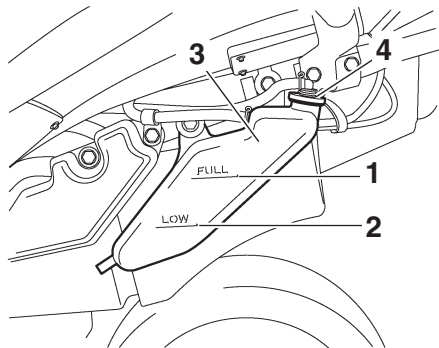
#### **TIP**

The coolant level must be checked on a cold engine since the level varies with engine temperature.

2. Check the coolant level in the coolant reservoir.

#### **TIP**

The coolant should be between the minimum and maximum level marks.



1. Maximum level mark
2. Minimum level mark
3. Coolant reservoir
4. Coolant reservoir cap

3. If the coolant is at or below the minimum level mark, remove panel A. (See page 8-9.)
4. Remove the reservoir cap, add coolant or distilled water to the maximum level mark, install the reservoir cap, and then install the panel.

Coolant reservoir capacity (up to the maximum level mark):

0.29 L (0.31 US qt, 0.26 Imp.qt)

## NOTICE

- 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 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.

## TIP

If the engine overheats, see page 8-55 for further instructions.

EBU23561

## To change the coolant

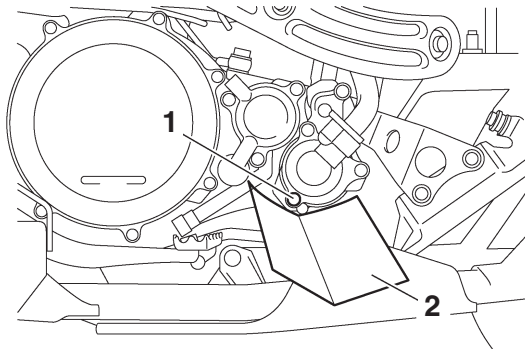
EWB01890

## ⚠ WARNING

Wait for the engine and radiator to cool before removing the radiator cap. You could be

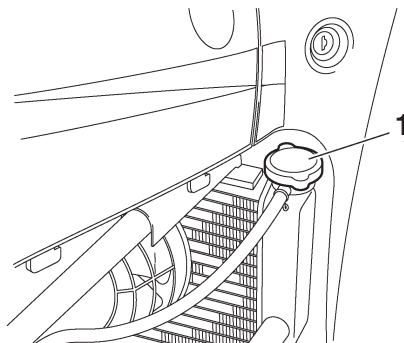
**burned by hot fluid and steam blown out under pressure. Always place a thick rag over the cap when opening. Allow any remaining pressure to escape before completely removing the cap.**

1. Place the ATV on a level surface.
2. Remove panel A. (See page 8-9.)
3. Place a container under the engine, and then remove the coolant drain bolt. (Use a trough or a similar object as shown.)



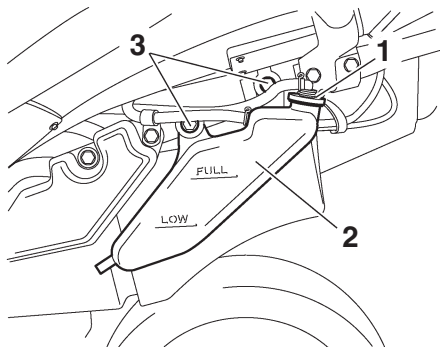
1. Coolant drain bolt
2. Trough

4. Remove the radiator cap.



1. Radiator cap

5. Remove the coolant reservoir by removing the bolts.
6. Remove the coolant reservoir cap, and then turn the coolant reservoir upside down to empty it.



1. Coolant reservoir cap
  2. Coolant reservoir
  3. Bolt
7. After draining the coolant, thoroughly flush the cooling system with clean tap water.
  8. Install the coolant reservoir by installing the bolts.
  9. Replace the coolant drain bolt washer if it is damaged, install the coolant drain bolt, and then tighten it to the specified torque.

Tightening torque:

Coolant drain bolt:

10 Nm (1.0 m·kgf, 7.2 ft·lbf)

10. Pour the recommended coolant into the reservoir to the maximum level mark, and then install the reservoir cap.
11. Pour the recommended coolant into the radiator until it is full.

Antifreeze/water mixture ratio:

1:1

Recommended antifreeze:

High-quality ethylene glycol antifreeze containing corrosion inhibitors for aluminum engines

Coolant quantity:

Radiator capacity (including all routes):

1.30 L (1.37 US qt, 1.14 Imp.qt)

Coolant reservoir capacity (up to the maximum level mark):

0.29 L (0.31 US qt, 0.26 Imp.qt)

ECB00401

### NOTICE

- 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 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.

12. Install the radiator cap, start the engine, let it idle for several minutes, and then turn it off.
13. Remove the radiator cap to check the coolant level in the radiator. If it is low, add sufficient coolant until it reaches the top of the radiator, and then install the radiator cap.
14. Start the engine, and then check for coolant leakage.

8

#### TIP

If any leakage is found, have a Yamaha dealer check the cooling system.

15. Install the panel.

EBU23703

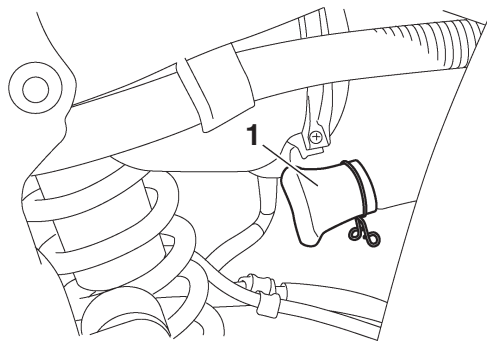
## Cleaning the air filter element

The air filter element should be cleaned at the intervals specified in the periodic maintenance and lubrication chart. Clean the air filter element more

frequently if you are riding in unusually wet or dusty areas.

#### TIP

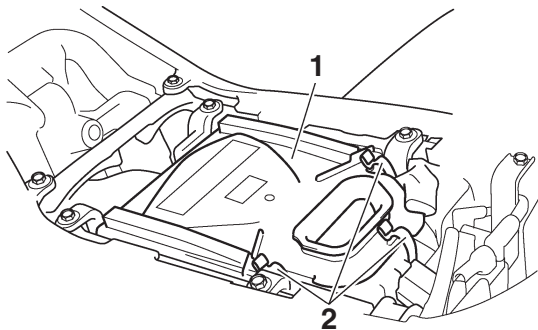
There is a check hose at the bottom of the air filter case. If dust or water collects in this hose, empty the hose and clean the air filter element and air filter case.



1. Air filter case check hose

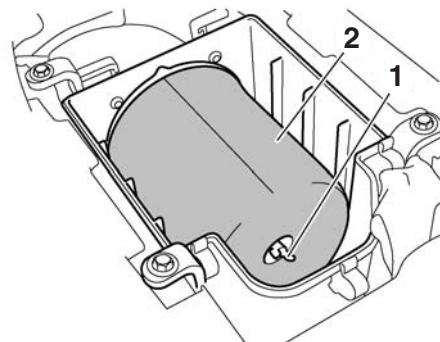
1. Place the ATV on a level surface.
2. Remove the seat. (See page 4-11.)
3. Remove the air filter case cover by unhooking the holders.





1. Air filter case cover
2. Air filter case holder

4. Loosen the wing bolt.
5. Remove the air filter element together with the wing bolt and washer.

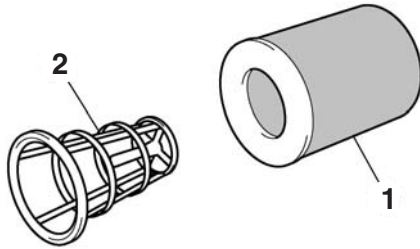


1. Wing bolt
2. Sponge material

6. Remove the wing bolt and washer from the air filter element.
7. Remove the sponge material from the air filter element frame.

**NOTICE**

**Do not twist the sponge material when squeezing it.**



1. Sponge material
2. Air filter element frame

8

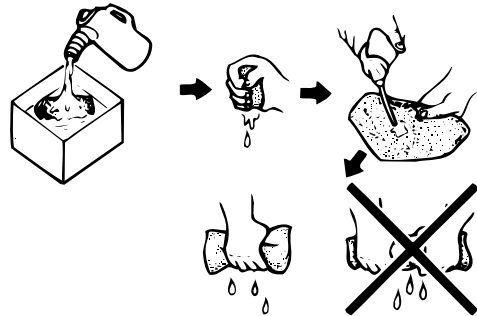
8. Wash the sponge material gently but thoroughly in solvent.

EWB01940

**WARNING**

**Always use parts cleaning solvent to clean the sponge material. Never use low-flash-point solvents or gasoline to clean the sponge material because the engine could catch fire or explode.**

9. Squeeze the excess solvent out of the sponge material and let it dry.



10. Check the sponge material and replace it if damaged.
11. Apply a quality foam air filter oil to the sponge material.

**TIP**

The sponge material should be wet but not dripping.

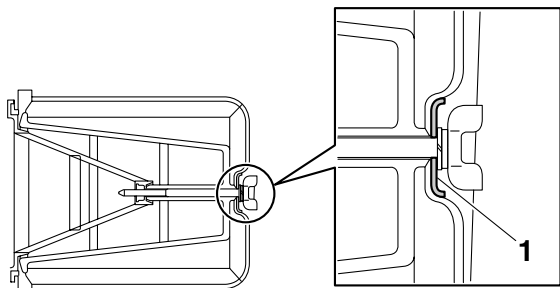
12. Pull the sponge material over the air filter element frame.

13. Install the washer onto the air filter element frame, and then insert the wing bolt into the hole in the air filter element frame.

ECB00451

## NOTICE

**Be sure to install the washer with the bent edge facing outward as shown.**



1. Washer

14. Insert the air filter element into the air filter case, and then tighten the wing bolt.
15. Install the air filter case cover by hooking the holders onto the air filter case.
16. Install the seat.

## TIP

The air filter element should be cleaned every 20–40 hours. It should be cleaned and lubricated more often if the ATV is operated in extremely dusty areas. Each time the air filter element maintenance is performed, check the air inlet of the air filter case for obstructions. Check the air filter case rubber joint to the carburetor fittings and the rubber joint manifold fittings for an air-tight seal. Tighten all fittings securely to avoid the possibility of unfiltered air entering the engine.

ECB00460

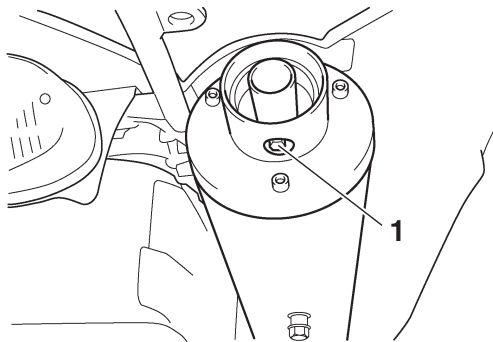
## NOTICE

- **Make sure that the air filter element is properly seated in the air filter case.**
- **Never operate the engine with the air filter element removed. This will allow unfiltered air to enter the engine, causing rapid engine wear and possible engine damage. Additionally, operation without the air filter element will affect carburetor jetting with subsequent poor performance and possible engine overheating.**

## Cleaning the spark arrester

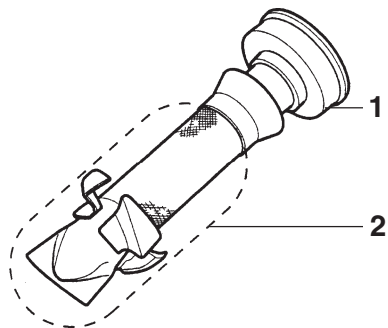
Select a well-ventilated area free of combustible materials and make sure the exhaust and muffler are cool.

1. Remove the bolt.



1. Bolt

2. Remove the tailpipe by pulling it out of the muffler.
3. Tap the tailpipe lightly, and then use a wire brush to remove any carbon deposits from the spark arrester portion of the tailpipe and inside of the tailpipe housing.



1. Tailpipe
2. Spark arrester

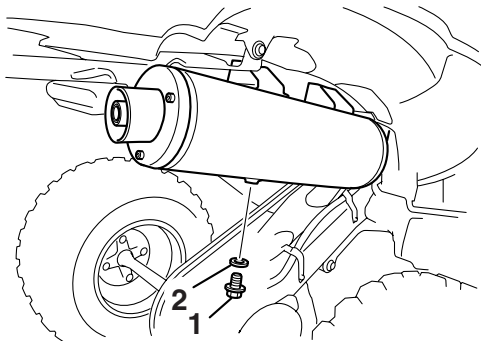
4. Insert the tailpipe into the muffler and align the bolt holes.
5. Install the bolt and tighten it to the specified torque.

Tightening torque:

Tailpipe bolt:

10 Nm (1.0 m·kgf, 7.2 ft·lbf)

6. Remove the purging bolt.



1. Purging bolt
2. Gasket

7. Start the engine and rev it up approximately twenty times while momentarily creating exhaust system back pressure by blocking the end of the muffler with a shop towel.
8. Stop the engine and allow the exhaust pipe to cool.
9. Install the purging bolt and tighten it to the specified torque.

Tightening torque:

Purging bolt:

27 Nm (2.7 m·kgf, 20 ft·lbf)

EWB02380

## **! WARNING**

Never run the engine in an enclosed area when purging the spark arrester, otherwise it could cause injury to the eyes, burns, carbon monoxide poisoning, possibly leading to death, and start a fire.

- Always let the exhaust system cool prior to touching exhaust components.
- Always wear eye protection, and make sure no one is behind the ATV.
- Make sure there are no combustible materials in the area.

EBU23940

## **Adjusting the carburetor**

The carburetor should be checked and, if necessary, adjusted at the intervals specified in the periodic maintenance and lubrication chart. The carburetor is an important part of the engine and requires very sophisticated adjustment. Therefore, most carburetor adjustments should be left to a Yamaha dealer, who has the necessary professional knowledge and experience. The adjustment described in the following section, however, may be performed by the owner as part of routine main-

tenance.

ECB00480

## NOTICE

**The carburetor has been set and extensively tested at the Yamaha factory. Changing these settings without sufficient technical knowledge may result in poor performance or damage to the engine.**

EBU24030

## Checking the engine idling speed

A special tester is needed to check the engine idling speed on this model.

Therefore, take the ATV to a Yamaha dealer to have the engine idling speed checked and adjusted.

8

Engine idling speed:  
1750–1850 r/min

EBU24044

## Adjusting the throttle cable free play

The throttle cable free play should be checked and, if necessary, adjusted at the intervals specified in the periodic maintenance and lubrication chart.

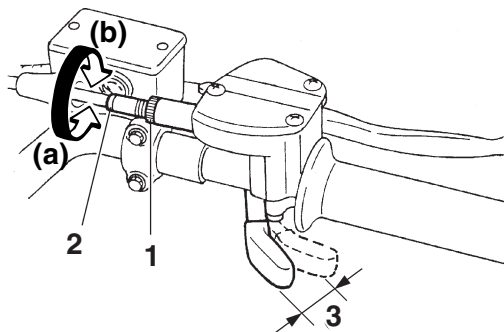
The throttle cable free play should measure 2.0–

4.0 mm (0.08–0.16 in) at the throttle lever. Periodically check the throttle cable free play and, if necessary, adjust it as follows.

## TIP

The engine idling speed must be checked, and adjusted if necessary, before adjusting the throttle cable free play.

1. Loosen the locknut.
2. To increase the throttle cable free play, turn the throttle cable free play adjusting bolt in direction (a). To decrease the throttle cable free play, turn the adjusting bolt in direction (b).



1. Locknut
2. Throttle cable free play adjusting bolt
3. Throttle lever free play

3. Tighten the locknut.

EBU24060

## 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.

EBU24130

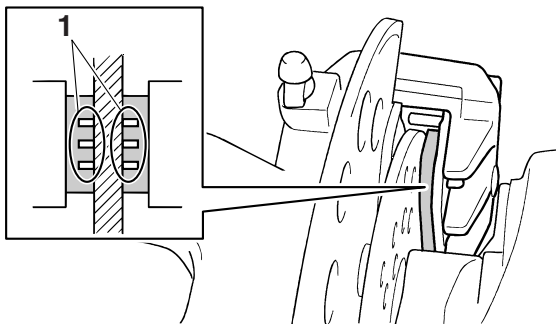
## Checking the front and rear brake pads

The front and rear brake pads must be checked for wear at the intervals specified in the periodic maintenance and lubrication chart.

EBU27711

## Front brake pads

Each brake pad is provided with wear indicator grooves, which allow you to check the brake pad wear without having to disassemble the brake. To check the brake pad wear, check the wear indicator grooves. If a brake pad has worn to the point that the wear indicator grooves are almost in contact with the disc plate, have a Yamaha dealer replace the brake pads as a set.



1. Wear indicator groove

### TIP

8

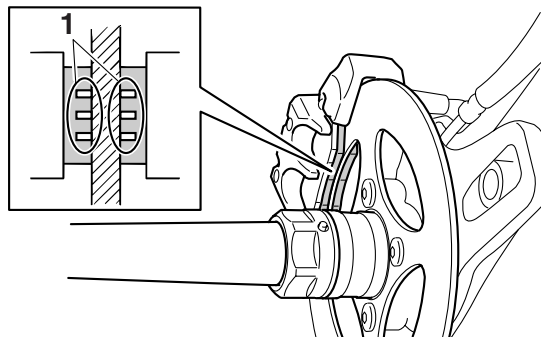
The wheels need to be removed to check the brake pads. (See page 8-53.)

EBU27721

### Rear brake pads

Each brake pad is provided with wear indicator grooves, which allow you to check the brake pad wear without having to disassemble the brake. To check the brake pad wear, check the wear indicator grooves. If a brake pad has worn to the point that the wear indicator grooves are almost in contact with the disc plate, have a Yamaha dealer re-

place the brake pads as a set.



1. Wear indicator groove

EBU26831

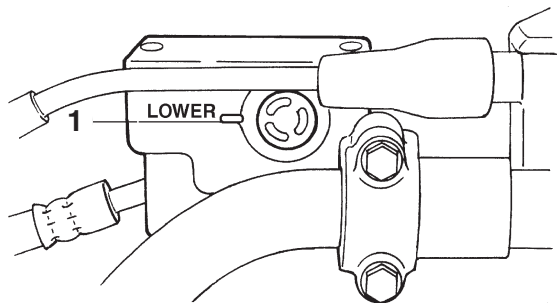
### Checking the brake fluid level

Insufficient brake fluid may allow air to enter the brake system, possibly causing it to become ineffective.

Before riding, check that the brake fluid is above the minimum level mark and replenish if necessary. A low brake fluid level may indicate worn brake pads and/or brake system leakage. If the brake fluid level is low, be sure to check the brake pads for wear and the brake system for leakage.

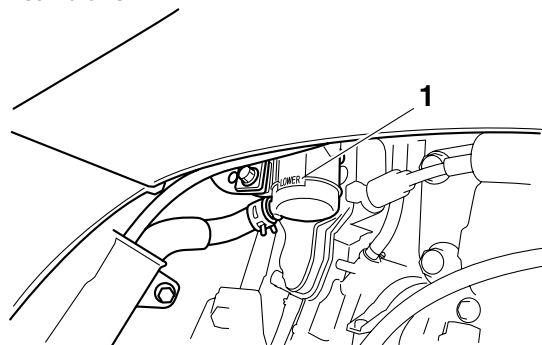


## Front brake



1. Minimum level mark

## Rear brake



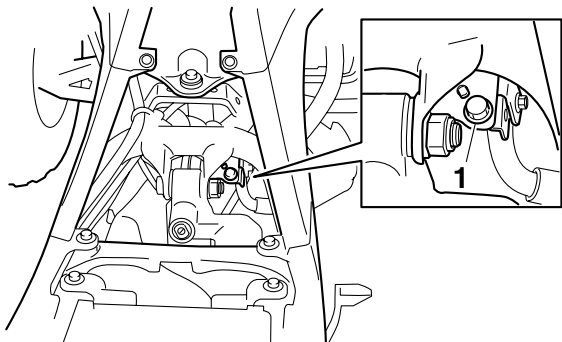
1. Minimum level mark

### TIP

To check the rear brake fluid level, remove the seat. (See page 4-11.)

If the rear brake fluid level is low, replenish as follows.

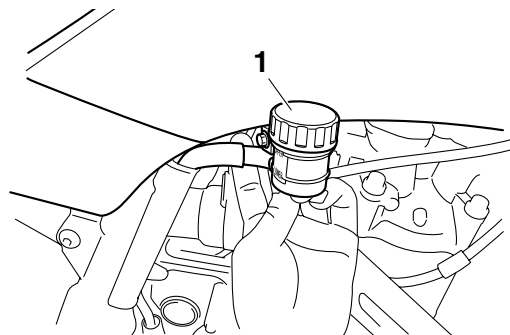
1. Remove the brake fluid reservoir bracket bolt.



1. Bolt

2. Pull the brake fluid reservoir out to the side as shown.

8



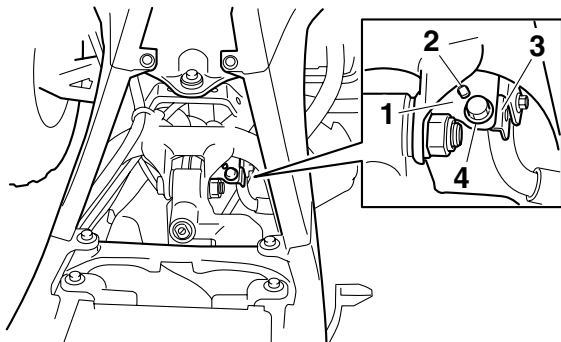
1. Brake fluid reservoir cap

ECB00780

### **NOTICE**

**Do not tilt the rear brake fluid reservoir excessively when removing or installing the rear brake fluid reservoir. Also do not twist or pull the hose of the reservoir.**

3. Remove the brake fluid reservoir cap, and then refill with brake fluid.
4. Install the brake fluid reservoir cap.
5. Insert the projection on the brake fluid reservoir bracket into the hole in the frame.



1. Frame
2. Projection
3. Brake fluid reservoir bracket
4. Bolt

6. Install the brake fluid reservoir bracket bolt.

Observe these precautions:

- When checking the fluid level, make sure that the top of the brake fluid reservoir is level.
- Use only the recommended quality brake fluid, otherwise the rubber seals may deteriorate, causing leakage and poor braking performance.

Recommended brake fluid:  
DOT 4

- Refill with the same type of brake fluid. Mixing fluids may result in a harmful chemical reaction and lead to poor braking performance.
- Be careful that water does not enter the brake fluid reservoir when refilling. Water will significantly lower the boiling point of the fluid and may result in vapor lock.
- Brake fluid may deteriorate painted surfaces or plastic parts. Always clean up spilled fluid immediately.
- As the brake pads wear, it is normal for the brake fluid level to gradually go down. However, if the brake fluid level goes down suddenly, have a Yamaha dealer check the cause.

EBU24291

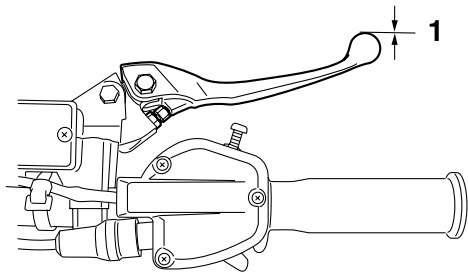
## Changing the brake fluid

Have a Yamaha dealer change the brake fluid at the intervals specified in the TIP after the periodic maintenance and lubrication chart. In addition, have the oil seals of the master cylinders and callipers as well as the brake hoses replaced at the intervals listed below or whenever they are damaged or leaking.

- Oil seals: Replace every two years.
- Brake hoses: Replace every four years.

## Checking the front brake lever free play

The brake lever free play must be checked at the intervals specified in the periodic maintenance and lubrication chart. The brake lever should have no free play as shown. If there is free play, have a Yamaha dealer check the brake system.



- Make sure the brakes operate smoothly and that there is no free play.
- Make sure the brakes do not drag.
- Make sure the brakes are not spongy. All air must be bled from the brake system.

**Replacement of brake components requires professional knowledge. These procedures should be performed by a Yamaha dealer.**

## Checking the brake pedal position

The brake pedal position must be checked and, if necessary, adjusted at the intervals specified in the periodic maintenance and lubrication chart.

The top of the brake pedal should be positioned 11.7 mm (0.46 in) below the top of the footrest as shown. If the brake pedal is not positioned as specified, have a Yamaha dealer adjust it.

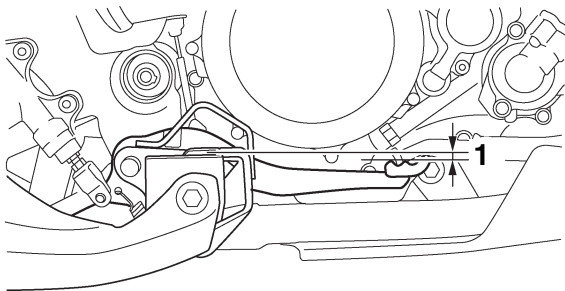
1. Brake lever free play



**WARNING**

**Operating with improperly serviced or adjusted brakes could cause loss of braking ability, which could lead to an accident.**

**After servicing:**



1. Brake pedal position

EWB02110

**⚠ WARNING**

Operating with improperly serviced or adjusted brakes could cause loss of braking ability, which could lead to an accident.

After servicing:

- Make sure the brakes operate smoothly and that the brake pedal position is correct.
- Make sure the brakes do not drag.
- Make sure the brakes are not spongy. All air must be bled from the brake system.

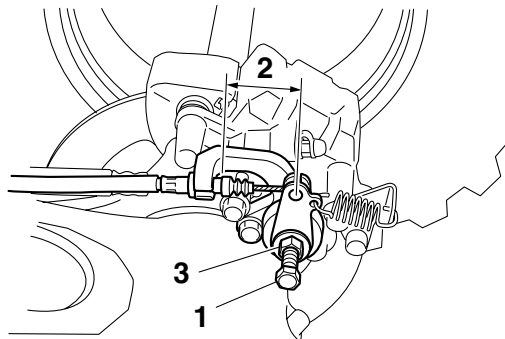
Replacement of brake components requires professional knowledge. These procedures

should be performed by a Yamaha dealer.

EBU24710

## Adjusting the parking brake free play

The parking brake free play must be checked and, if necessary, adjusted at the intervals specified in the periodic maintenance and lubrication chart. Cable length "A" should measure 47–51 mm (1.9–2.0 in). Adjust the parking brake free play as follows.

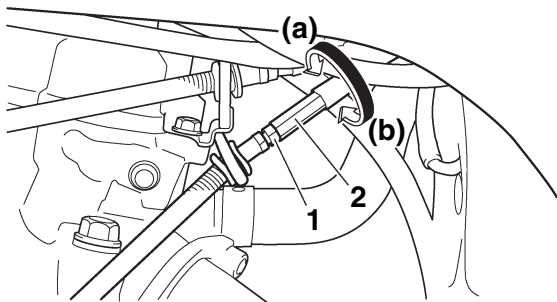


1. Adjusting bolt
2. Cable length "A"
3. Locknut

1. Release the parking brake by moving the

parking brake lever to the right.

2. Fully loosen the locknut and the adjusting bolt at the rear brake caliper.
3. Loosen the locknut on the brake cable.
4. Turn the adjusting nut on the brake cable in direction (a) to increase the cable length, and in direction (b) to decrease it.



1. Locknut
2. Adjusting nut

### TIP

If the cable length cannot be adjusted to specification, consult a Yamaha dealer.

5. Tighten the locknut on the brake cable.

6. Turn in the adjusting bolt at the rear brake caliper until it feels tight, then turn it out 1/8 turn and tighten its locknut to the specified torque.

ECB00520

### NOTICE

**When tightening the locknut, hold the adjusting bolt with a wrench so that it does not turn together with the locknut.**

Tightening torque:

Locknut (rear brake caliper):  
16 Nm (1.6 m·kgf, 12 ft·lbf)

EWB02090

### ⚠ WARNING

**Operating with improperly serviced or adjusted brakes could cause the brakes to malfunction, resulting in reduced braking performance. This could increase the chance of a collision or accident. After adjusting the parking brake free play, block the rear of the ATV off the ground and spin the rear wheels. Check to make sure there is no brake drag. If brake drag is noticed, perform the adjustment again.**

## Brake light switches

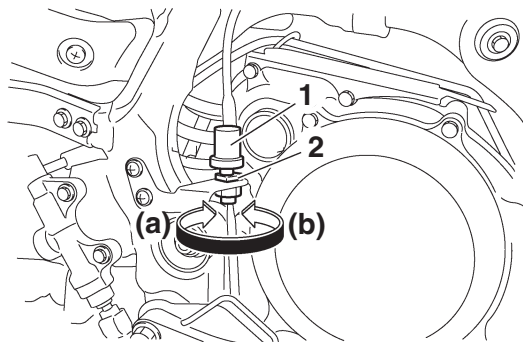
The operation of the brake light switches must be checked and, if necessary, adjusted at the intervals specified in the periodic maintenance and lubrication chart.

The brake light switch for the brake pedal can be adjusted as follows, but the other brake light switches should be adjusted by a Yamaha dealer.

### TIP

The brake light switch is properly adjusted when the brake light comes on just before braking takes effect.

Turn the adjusting nut while holding the brake light switch in place. To make the brake light come on earlier, turn the adjusting nut in direction (a). To make the brake light come on later, turn the adjusting nut in direction (b).

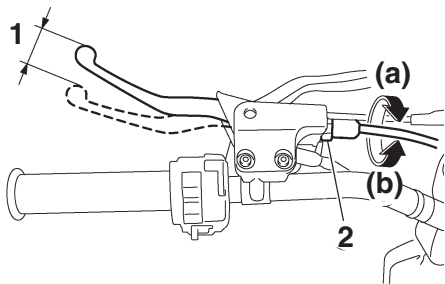


1. Brake light switch
2. Brake light switch adjusting nut

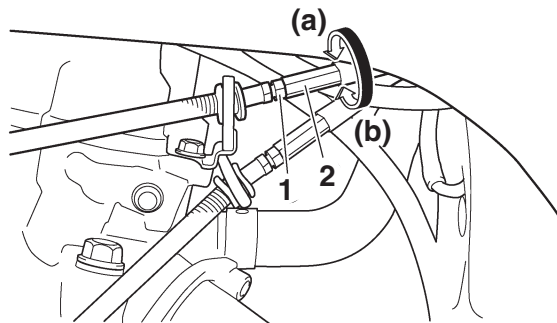
## Adjusting the clutch lever free play

The clutch lever free play must be checked and, if necessary, adjusted at the intervals specified in the periodic maintenance and lubrication chart.

The clutch lever free play should measure 8.0–13.0 mm (0.31–0.51 in) as shown. If the free play is incorrect, adjust it as follows.



1. Clutch lever free play
2. Clutch lever free play adjusting bolt



1. Locknut
2. Clutch lever free play adjusting nut

8

1. To increase the clutch lever free play, turn the adjusting bolt at the clutch lever in direction (a), and to decrease it, turn the bolt in direction (b).

If the specified free play cannot be obtained, proceed with the following steps.

2. Fully turn the adjusting bolt at the clutch lever in direction (a) to loosen the clutch cable.
3. Loosen the locknut.
4. To increase the clutch lever free play, turn the adjusting nut in direction (a), and to decrease it, turn the nut in direction (b).

5. Tighten the locknut.

#### TIP

If the specified free play cannot be obtained as described above or if the clutch does not operate correctly, have a Yamaha dealer check the internal clutch mechanism.



## Drive chain slack

The drive chain slack should be checked before each ride and adjusted if necessary.

### To check the drive chain slack

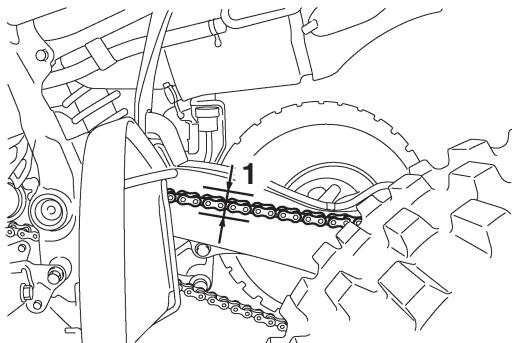
1. Place the ATV on a level surface.

### TIP

When checking and adjusting the drive chain slack, there should be no weight on the ATV and all tires must be touching the ground.

2. Move the ATV back and forth to locate the tightest portion of the drive chain, and then measure the drive chain slack as shown.

<p>Drive chain slack: 25.0–35.0 mm (0.98–1.38 in)</p>
---



1. Drive chain slack

3. If the drive chain slack is incorrect, adjust it as follows.

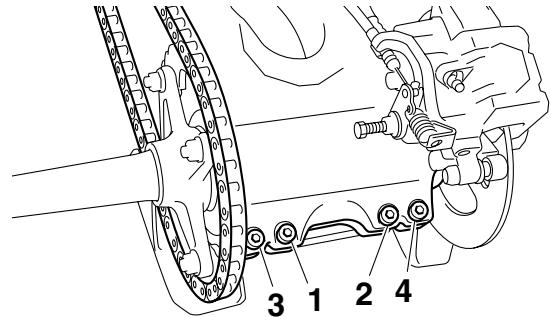
### To adjust the drive chain slack

1. Place the ATV on a level surface.
2. Loosen the rear axle pinch bolts.
3. Insert a rod of a diameter of 8 mm (0.3 in) and a length of 10 cm (4 in) into one of the holes in the drive chain tensioner as shown.

**NOTICE**

Improper drive chain slack will overload the engine as well as other vital parts of the ATV and can lead to drive chain slippage or breakage. To prevent this from occurring, keep the drive chain slack within the specified limits.

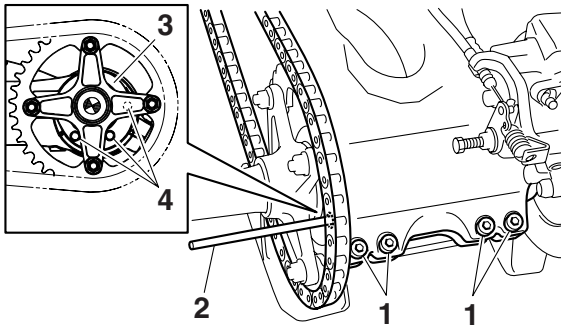
- Pull the rod out, and then tighten the rear axle pinch bolts to the specified torque in the order shown.



Tightening torque:

Rear axle pinch bolt:

21 Nm (2.1 m-kgf, 15.2 ft-lbf)



- Rear wheel axle pinch bolt
- Rod
- Drive chain tensioner
- Hole

8

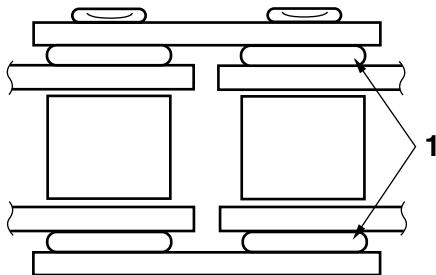
**TIP**

A rod can be obtained at a Yamaha dealer to make this adjustment.

- Shift the transmission into neutral.
- To tighten the drive chain, push the ATV backward. To loosen the drive chain, push the ATV forward.

## Lubricating the drive chain

The drive chain must be cleaned and lubricated at the intervals specified in the periodic maintenance and lubrication chart, otherwise it will quickly wear out, especially when riding in dusty or wet areas. Service the drive chain as follows.



1. O-rings

### NOTICE

**The drive chain must be lubricated after washing the ATV or riding in the rain.**

1. Clean the drive chain with kerosene and a

small soft brush.

### NOTICE

**To prevent damaging the O-rings, do not clean the drive chain with steam cleaners, high-pressure washers or inappropriate solvents.**

2. Wipe the drive chain dry.
3. Thoroughly lubricate the drive chain with a special O-ring chain lubricant.

### NOTICE

**Do not use engine oil or any other lubricants for the drive chain, as they may contain substances that could damage the O-rings.**

## Checking and lubricating the cables

The operation and the condition of all control cables should be checked before each ride, and the cables and cable ends should be lubricated if necessary. If a cable is damaged or does not move smoothly, have a Yamaha dealer check or replace it.

Recommended lubricant:  
Engine oil

**WARNING**

Inspect cables frequently and replace if damaged. Corrosion can result when the cable sheaths become damaged, and cables can also become frayed or kinked, which could restrict the operation of controls and lead to an accident or injury.

## Checking and lubricating the brake and clutch levers

The operation of the brake and clutch levers should be checked before each ride, and the lever pivots should be lubricated if necessary.

8

Recommended lubricants:

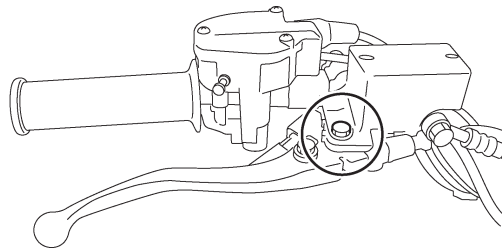
Brake lever:

Silicone grease

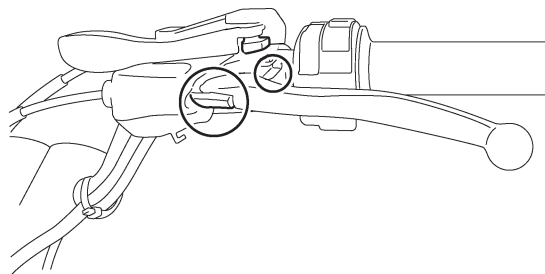
Clutch lever:

Lithium-soap-based grease

### Brake lever



### Clutch lever



EBU24931

## Checking and lubricating the brake and shift pedals

The operation of the brake and shift pedals should be checked before each ride, and the pedal pivots should be lubricated if necessary.

Recommended lubricants:

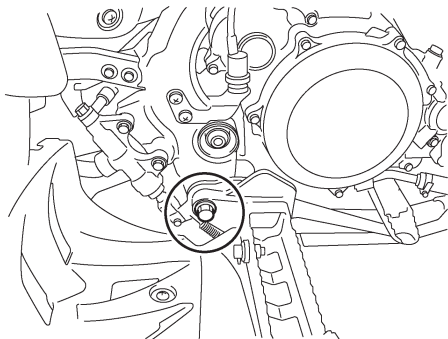
Brake pedal:

Silicone grease

Shift pedal:

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

### Brake pedal



EBU24962

## Checking the wheel hub bearings

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

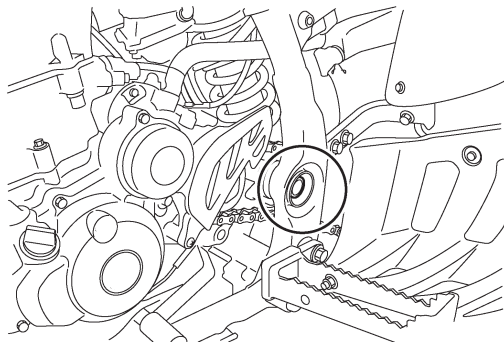
EBU24994

## Lubricating the swingarm pivots

The swingarm pivots must be lubricated at the intervals specified in the periodic maintenance and lubrication chart.

Recommended lubricant:

Lithium-soap-based grease



EBU25032

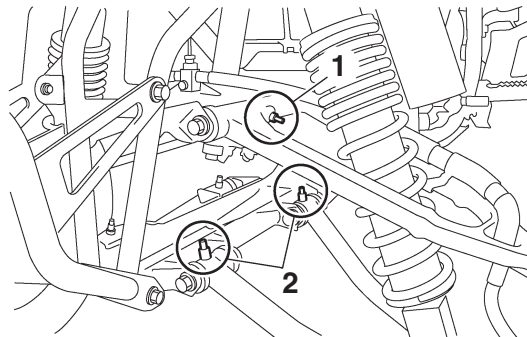
## Lubricating the upper and lower arm pivots

8

The upper and lower arm pivots must be lubricated at the intervals specified in the periodic maintenance and lubrication chart. Lubricate the pivoting points using a grease gun.

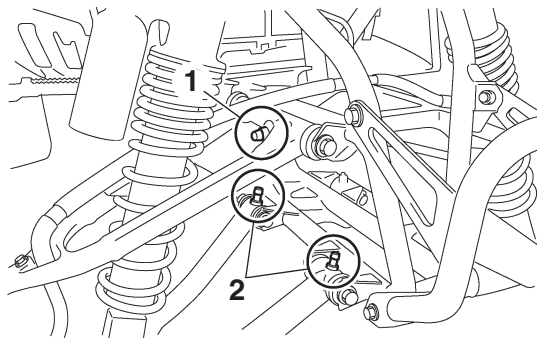
Recommended lubricant:  
Lithium-soap-based grease

Left side



1. Upper grease nipple
2. Lower grease nipple

## Right side



1. Upper grease nipple
2. Lower grease nipple

EBU25224

## Battery

This model is equipped with a VRLA (Valve Regulated Lead Acid) battery. There is no need to check the electrolyte or to add distilled water. However, the battery lead connections need to be checked and, if necessary, tightened.

ECB00620

## NOTICE

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

EWB02160

## WARNING

Battery electrolyte is poisonous and dangerous, as it contains sulfuric acid, which can cause severe burns. Avoid contact with skin, eyes or clothing. Always shield your eyes when working near batteries.

**Antidote:**

**EXTERNAL:** Flush with water.

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

**EYES:** Flush with water for 15 minutes and get prompt medical attention.

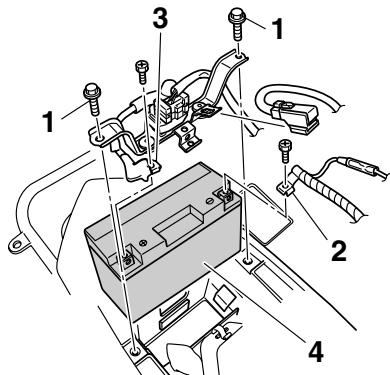
Batteries produce explosive gases. Keep sparks, flame, cigarettes or other sources of ignition away. Ventilate when charging or using in an enclosed space.

**KEEP OUT OF REACH OF CHILDREN.**

## To remove the battery

1. Remove the seat. (See page 4-11.)
2. Unhook the band securing the owner's tool kit, and then remove the battery holding plate by removing the bolts.
3. Disconnect the negative battery lead first,

then the positive battery lead by removing their bolt.



8

1. Bolt
2. Negative battery lead (black)
3. Positive battery lead (red)
4. Battery

4. Pull the battery out of its compartment.

### 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 ATV is equipped with optional electri-

cal accessories.

### To store the battery

- If the ATV will not be used for more than one month, remove the battery, fully charge it, and then place it in a cool, dry place.
- If the battery will be stored for more than two months, check it at least once a month and fully charge it if necessary.

### To install the battery

#### TIP

Be sure the battery is fully charged.

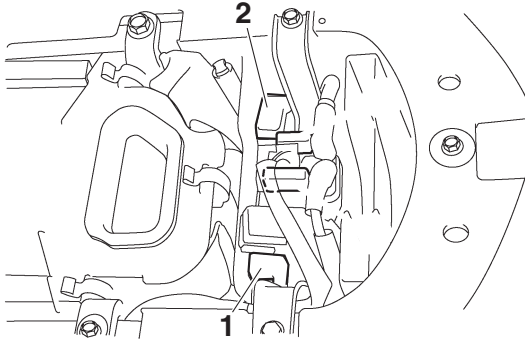
1. Place the battery in its compartment.
2. Connect the positive battery lead first, then connect the negative battery lead by installing their bolt.
3. Install the battery holding plate by installing the bolts, and then hook the band to secure the owner's tool kit.
4. Install the seat. (See page 4-11.)



**Yamaha dealer charge your battery.**

EBU25262

## Replacing the fuse

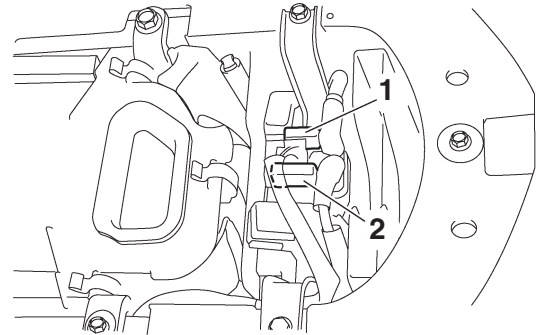


1. Negative battery lead (black)
2. Positive battery lead (red)

ECB00631

### **NOTICE**

- **Always keep the battery charged. Storing a discharged battery can cause permanent battery damage.**
- **To charge a VRLA (Valve Regulated Lead Acid) 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 constant-voltage battery charger, have a**



1. Fuse
2. Spare fuse

The fuse holder is located on the right side of the ATV.

If the fuse is blown, replace it as follows.

1. Turn the key to "OFF" and turn off all electrical circuits.

**NOTICE**

To prevent accidental short-circuiting, turn off the main switch when checking or replacing a fuse.

- Remove the blown fuse, and then install a new fuse of the specified amperage.

Specified fuse:  
15.0 A

**WARNING**

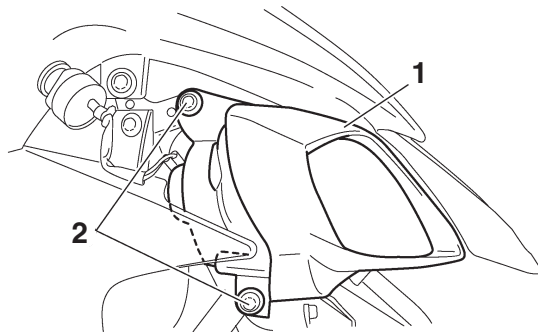
Always use a fuse of the specified rating, and never use a substitute object in place of the proper fuse. An improper fuse or a substitute object can cause damage to the electrical system, which could lead to a fire.

- Turn the key to "ON" and turn on the electrical circuits to check if the devices operate.
- If the fuse immediately blows again, have a Yamaha dealer check the electrical system.

**Replacing a headlight bulb**

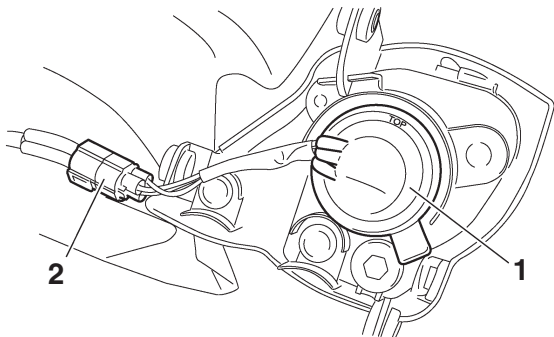
If a headlight bulb burns out, replace it as follows.

- Remove the headlight unit by removing the bolts.



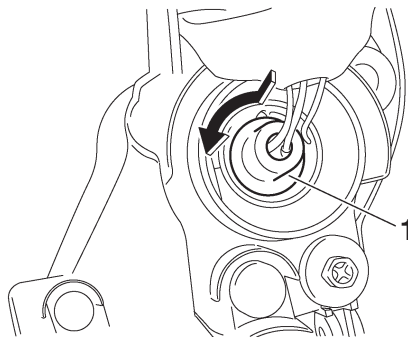
- Headlight assembly
- Bolt

- Disconnect the headlight coupler.
- Remove the headlight bulb holder cover.



1. Headlight bulb holder cover
2. Headlight coupler

4. Remove the headlight bulb holder by pushing it in and turning it counterclockwise, and then remove the defective bulb.



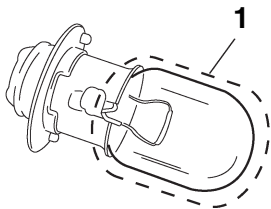
1. Headlight bulb holder

EWB02230

**! WARNING**

**Do not touch a headlight bulb when it is on or immediately after it is turned off. You can be burned or a fire could start if the bulb touches something flammable. Wait for the bulb to cool before touching or removing it.**

5. Place a new headlight bulb into position.



1. Do not touch the glass part of the bulb.

ECB00650

## NOTICE

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

6. Install the headlight bulb holder by pushing it in and turning it clockwise.
7. Install the headlight bulb holder cover.

8. Connect the headlight coupler.
9. Install the headlight unit by installing the bolts.
10. Adjust the headlight beam if necessary.

EBU25551

## Adjusting a headlight beam

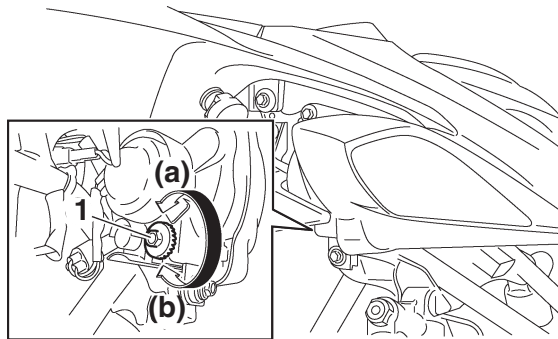
ECB00690

### NOTICE

**It is advisable to have a Yamaha dealer make this adjustment.**

To raise a headlight beam, turn the headlight beam adjusting screw in direction (a).

To lower a headlight beam, turn the adjusting screw in direction (b).



1. Headlight beam adjusting screw

EBU25580

## Replacing the tail/brake light bulb

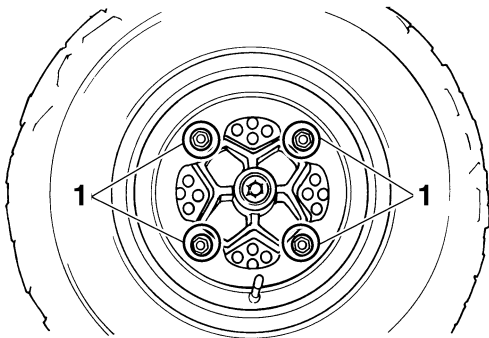
If the tail/brake light bulb burns out, have a Yamaha dealer replace it.

EBU25651

## Removing a wheel

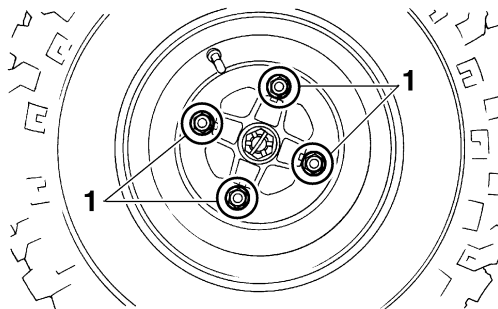
1. Place the ATV on a level surface.
2. Loosen the wheel nuts.

**Front**



1. Nut

**Rear**



1. Nut

3. Elevate the ATV and place a suitable stand under the frame.
4. Remove the nuts from the wheel.
5. Remove the wheel.

EBU25671

## Installing a wheel

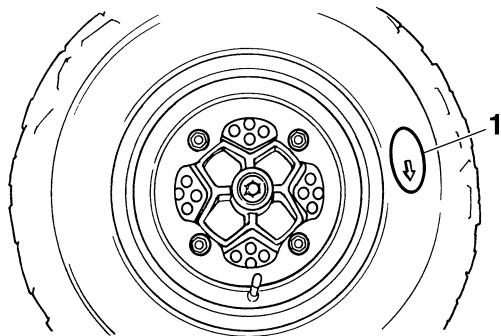
1. Place the ATV on a level surface.
2. Install the wheel and the nuts.

**TIP** \_\_\_\_\_

When installing a front wheel, make sure its arrow mark → points toward the rotating direction of the

wheel.

Front



1. Arrow mark

8

3. Lower the ATV to the ground.
4. Tighten the wheel nuts to the specified torques.

Tightening torques:

Front wheel nut:

45 Nm (4.5 m·kgf, 33 ft·lbf)

Rear wheel nut:

45 Nm (4.5 m·kgf, 33 ft·lbf)

EBU25740

## Troubleshooting

Although Yamaha ATVs 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 ATV require any repair, take it to a Yamaha dealer, whose skilled technicians have the necessary tools, experience, and know-how to service the ATV 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.

EWB02280

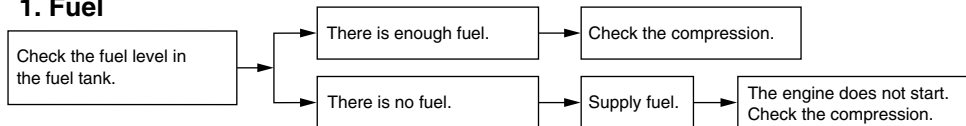
**⚠ WARNING**

**Do not smoke when checking the fuel system. Fuel can ignite or explode, causing severe injury or property damage. Make sure there are no open flames or sparks in the area, including pilot lights from water heaters or furnaces.**

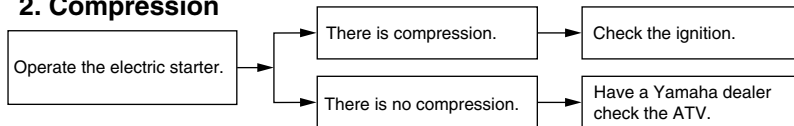
# Troubleshooting charts

## Starting problems or poor engine performance

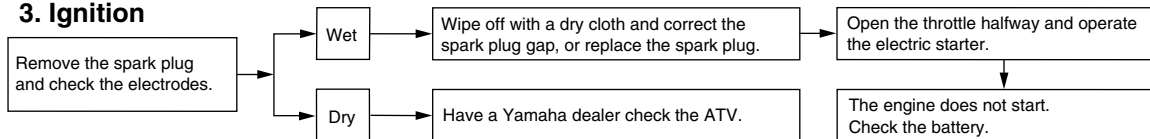
### 1. Fuel



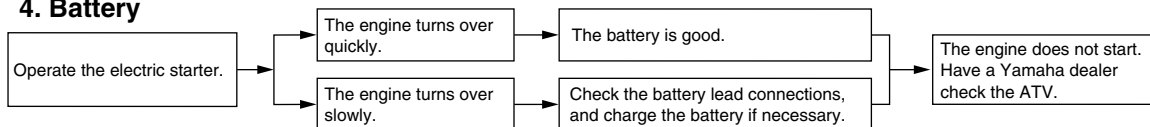
### 2. Compression



### 3. Ignition



### 4. Battery

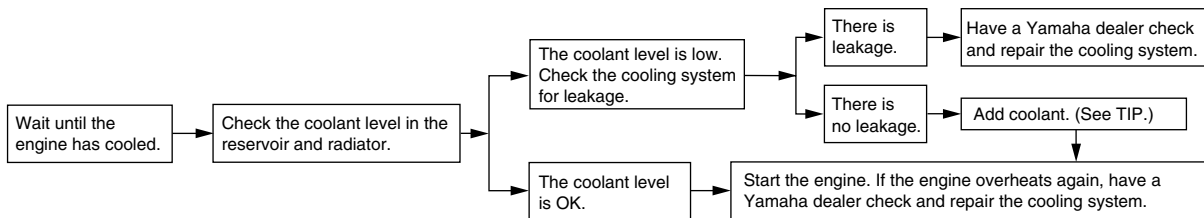


## Engine overheating

EWB02290



**Wait for the engine and radiator to cool before removing the radiator cap. You could be burned by hot fluid and steam blown out under pressure. Always put a thick rag over the cap when opening. Allow any remaining pressure to escape before completely removing the cap.**



8

## TIP

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.



## CLEANING AND STORAGE

EBU25900

### Cleaning

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

1. Before cleaning the ATV:
  - a. Block off the end of the exhaust pipe to prevent water entry. A plastic bag and strong rubber band may be used.
  - b. Make sure the spark plug and all filler caps are properly installed.
2. If the engine case is excessively greasy, apply degreaser with a paint brush. Do not apply degreaser to the chain, sprockets or wheel axles.
3. Rinse the dirt and degreaser off with a garden hose. Use only enough pressure to do the job.

ECB00710

### **NOTICE**

**Excessive water pressure may cause water seepage and deterioration of wheel bearings, brakes, transmission seals and electrical devices. Many expensive repair bills have result-**

**ed from improper high-pressure detergent applications such as those available in coin-operated car washers.**

4. Once most of the dirt has been hosed off, wash all surfaces with warm water and mild, detergent-type soap. An old toothbrush or bottle brush is handy for hard-to-reach places.
5. Rinse the ATV off immediately with clean water and dry all surfaces with a chamois, clean towel or soft absorbing cloth.
6. Dry the chain and lubricate it to prevent it from rusting.
7. Clean the seat with a vinyl upholstery cleaner to keep the cover pliable and glossy.
8. Automotive type wax may be applied to all painted and chrome plated surfaces. Avoid combination cleaner-waxes. Many contain abrasives which may mar the paint or protective finish. When finished cleaning, start the engine and let it idle for several minutes.

EWB02310



**Wet brakes may have reduced stopping ability,**

**increasing the chance of an accident. Test the brakes after washing. Apply the brakes several times at slow speeds to let friction dry out the linings.**

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EBU25932

## Storage

### Short-term

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

ECB00720

### **NOTICE**

- **Storing the ATV 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 ATV for several months:

1. Follow all the instructions in the “Cleaning”

section of this chapter.

2. Turn the fuel cock lever to “OFF”.
3. Drain the carburetor float chamber by loosening the drain bolt; this will prevent fuel deposits from building up. Pour the drained fuel into the fuel tank.
4. Fill up the fuel tank and add fuel stabilizer (if available) to prevent the fuel from deteriorating.

Specified amount:

7.5 ml of stabilizer to each liter of fuel (or 1 oz of stabilizer to each gallon of fuel)

5. 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.
6. Lubricate all control cables and the pivoting points of all levers and pedals.
7. Check and, if necessary, correct the tire air pressure, and then block up the ATV so that all 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.
8. Cover the muffler outlet with a plastic bag to prevent moisture from entering it.
9. 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 8-47.

---

**TIP**

Make any necessary repairs before storing the ATV.

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# SPECIFICATIONS

EBU2597B

## Dimensions:

- Overall length:  
1840 mm (72.4 in)
- Overall width:  
1170 mm (46.1 in)
- Overall height:  
1090 mm (42.9 in)
- Seat height:  
810 mm (31.9 in)
- Wheelbase:  
1280 mm (50.4 in)
- Ground clearance:  
255 mm (10.0 in)
- Minimum turning radius:  
3500 mm (138 in)

## Weight:

- With oil and fuel:  
169.0 kg (373 lb)

## Noise and vibration level:

- Noise level (77/311/EEC):  
84.5 dB(A)
- Vibration on seat (EN1032, ISO5008):  
Will not exceed 0.5 m/s<sup>2</sup>
- Vibration on handlebar (EN1032, ISO5008):  
Will not exceed 2.5 m/s<sup>2</sup>

## Engine:

- Engine type:  
Liquid cooled 4-stroke, DOHC

Cylinder arrangement:

Forward-inclined single cylinder

Displacement:

449.0 cm<sup>3</sup>

Bore × stroke:

95.0 × 63.4 mm (3.74 × 2.50 in)

Compression ratio:

11.40 :1

Starting system:

Electric starter

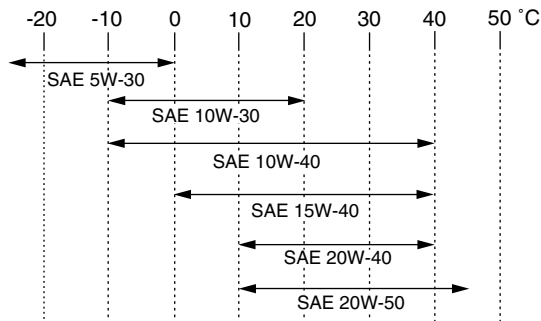
Lubrication system:

Dry sump

## Engine oil:

Type:

SAE 5W-30 or SAE 10W-30 or SAE 10W-40 or SAE 15W-40 or SAE 20W-40 or SAE 20W-50



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

**Engine oil quantity:**

Without oil filter element replacement:

1.75 L (1.85 US qt, 1.54 Imp.qt)

Quantity in oil tank:

1.55 L (1.64 US qt, 1.36 Imp.qt)

Quantity in crankcase:

0.20 L (0.21 US qt, 0.18 Imp.qt)

With oil filter element replacement:

1.85 L (1.96 US qt, 1.63 Imp.qt)

Quantity in oil tank:

1.55 L (1.64 US qt, 1.36 Imp.qt)

Quantity in crankcase:

0.30 L (0.32 US qt, 0.26 Imp.qt)

**Cooling system:**

Coolant reservoir capacity (up to the maximum level mark):

0.29 L (0.31 US qt, 0.26 Imp.qt)

Radiator capacity (including all routes):

1.30 L (1.37 US qt, 1.14 Imp.qt)

**Air filter:**

Air filter element:

Wet element

**Fuel:**

Recommended fuel:

Premium unleaded gasoline only

Fuel tank capacity:

10.0 L (2.64 US gal, 2.20 Imp.gal)

Fuel reserve amount:

1.9 L (0.50 US gal, 0.42 Imp.gal)

**Carburetor:**

Manufacturer:

KEIHIN

Type × quantity:

FCR39H x 1

**Spark plug (s):**

Manufacturer/model:

NGK/CR8E

Spark plug gap:

0.7–0.8 mm (0.028–0.031 in)

**Clutch:**

Clutch type:

Wet, multiple-disc

**Transmission:**

Primary reduction system:

Spur gear

Primary reduction ratio:

62/22 (2.818)

Secondary reduction system:

Chain drive

Secondary reduction ratio:

38/14 (2.714)

Transmission type:

Constant mesh 5-speed

Operation:

Left foot operation

1st:

29/12 (2.416)

2nd:

27/14 (1.928)

- 3rd:  
25/16 (1.562)
- 4th:  
23/18 (1.277)
- 5th:  
21/20 (1.050)

### **Chassis:**

- Frame type:  
Steel tube frame
- Caster angle:  
5.0 °
- Trail:  
21.0 mm (0.83 in)

### **Front tire:**

- Type:  
Tubeless
- Size:  
AT21 x 7-10
- Manufacturer/model:  
DUNLOP/KT341 Radial

### **Rear tire:**

- Type:  
Tubeless
- Size:  
AT20 x 10-9
- Manufacturer/model:  
DUNLOP/KT355A Radial

### **Loading:**

- Maximum loading limit:  
100.0 kg (220 lb)  
(Total weight of rider, cargo, accessories, and tongue)

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

#### **Recommended:**

- Front:  
27.5 kPa (0.275 kgf/cm<sup>2</sup>, 4.0 psi)
- Rear:  
30.0 kPa (0.300 kgf/cm<sup>2</sup>, 4.4 psi)

#### **Minimum:**

- Front:  
24.5 kPa (0.245 kgf/cm<sup>2</sup>, 3.6 psi)
- Rear:  
27.0 kPa (0.270 kgf/cm<sup>2</sup>, 4.0 psi)

### **Front wheel:**

- Wheel type:  
Panel wheel
- Rim size:  
10 x 5.5AT

### **Rear wheel:**

- Wheel type:  
Panel wheel
- Rim size:  
9 x 8.5AT

### **Front brake:**

- Type:  
Dual disc brake
- Operation:  
Right hand operation
- Recommended fluid:  
DOT 4

### **Rear brake:**

- Type:  
Single disc brake

Operation:

Right foot operation

Recommended fluid:

DOT 4

### **Front suspension:**

Type:

Double wishbone

Spring/shock absorber type:

Coil spring/gas-oil damper

Wheel travel:

230 mm (9.1 in)

### **Rear suspension:**

Type:

Swingarm (link suspension)

Spring/shock absorber type:

Coil spring/gas-oil damper

Wheel travel:

270 mm (10.6 in)

### **Electrical system:**

Ignition system:

DC. CDI

Charging system:

AC magneto

### **Battery:**

Model:

GT7B-4

Voltage, capacity:

12 V, 6.5 Ah

### **Headlight:**

Bulb type:

Krypton bulb

### **Bulb voltage, wattage × quantity:**

Headlight:

12 V, 30.0/30.0 W × 2

Tail/brake light:

12 V, 0.5/3.9 W × 1

Neutral indicator light:

12 V, 1.7 W × 1

Coolant temperature warning light:

12 V, 1.7 W × 1

### **Fuses:**

Main fuse:

15.0 A

## CONSUMER INFORMATION

EBU26011

### Identification numbers

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 ATV is stolen.

- KEY IDENTIFICATION NUMBER:

- VEHICLE IDENTIFICATION NUMBER:

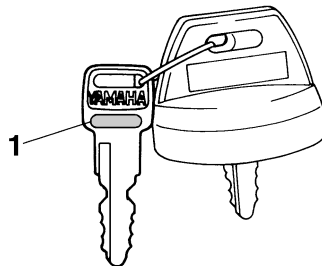
- MODEL LABEL INFORMATION:


EBU26020

### Key identification number

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



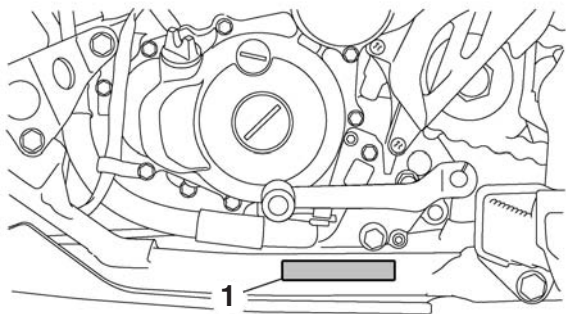
1. Key identification number

EBU26040

### Vehicle identification number

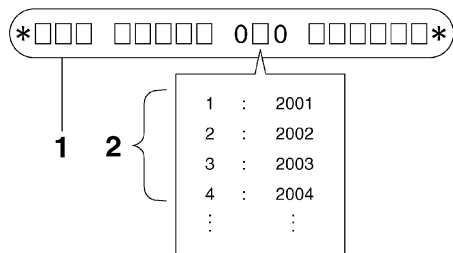
The vehicle identification number is stamped into the frame.





1. Vehicle identification number

The year of manufacture is listed in the vehicle identification number as shown in the illustration.



1. Vehicle identification number

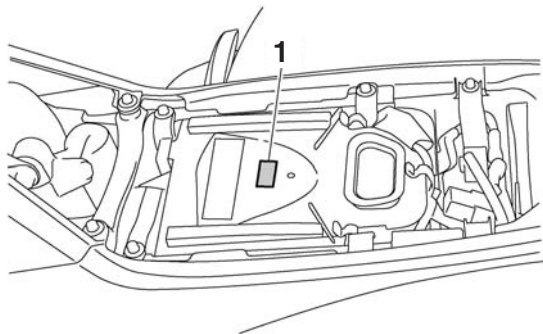
2. Year of manufacture

**TIP** \_\_\_\_\_  
 The vehicle identification number is used to identify your ATV.

EBU26050

**Model label**

The model label is affixed at the location in the illustration. Record the information on this label in the space provided. This information will be needed when ordering spare parts from a Yamaha dealer.



1. Model label

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