

A READ THIS MANUAL CAREFULLY!

It contains important safety information.

**A 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



3B5-28199-65





A READ THIS MANUAL CAREFULLY! It contains important safety information.

# **OWNER'S MANUAL**

YFZ350A

3B5-28199-65-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 2006/42/EC

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

YFZ350 (YFZ350) (JY43GG000A0299021- )

(Make, model)

to which this declaration applies, conforms to the essential health and safety requirements of Directive 2006/42/EC

(If applicable)

and to the other relevant Directives of EEC

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:

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

#### Authorized Representative

YAMAHA MOTOR EUROPE N.V.

Koolhovenlaan 101, 1119 NC Schiphol-Rijk, The Netherlands

Signature

5. Shimada

Shinya Shimada

General Manager RV Engineering Division MC Operations

Date of Issue 6 January, 2010

# INTRODUCTION

EBU17322

Congratulations on your purchase of the Yamaha YFZ350A. 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 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

EBU17342

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:

$\triangle$	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> WARNING	A WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.
NOTICE	A NOTICE indicates special precautions that must be taken to avoid damage to the vehicle or other property.
TIP	A TIP provides key information to make procedures easier or clearer.

<sup>\*</sup> Product and specifications are subject to change without notice.

### IMPORTANT NOTICE

EBU17372

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.

FBU17390

YFZ350A
OWNER'S MANUAL
©2010 by Yamaha Motor Co., Ltd.
1st edition, April 2010
All rights reserved.
Any reprinting or unauthorized use without the written permission of Yamaha Motor Co., Ltd.
is expressly prohibited.
Printed in Japan.

# **TABLE OF CONTENTS**

LOCATION OF THE WARNING AND	Fuel cock	4-9
SPECIFICATION LABELS1-1	Starter (choke)	4-11
	Seat	
SAFETY INFORMATION2-1	Adjusting the front shock absorber assemblies	4-12
DESCRIPTION	Adjusting the rear shock absorber assembly	4-13
Right view	PRE-OPERATION CHECKS Fuel and 2-stroke engine oil mixing r Transmission oil	atio 5-3
INSTRUMENT AND CONTROL FUNCTIONS4-1	Coolant	5-3
Main switch 4-1	Front and rear brakes Throttle lever	
Handlebar switches	Drive chain	5-4
Throttle OverRide System 4-2	Tires Chassis fasteners	
Speed limiter	Instruments, lights and switches	5-7
Brake lever 4-4	OPERATION	
Brake pedal 4-5	Starting a cold engine	6-1
Parking brake	Starting a warm engine	
Shift pedal	Shifting	
Kickstarter	Engine break-in	
Fuel tank cap	Parking	
Fuel 4-8	Parking on a slope	6-6

Accessories and loading 6-6	Cleaning the spark arrester 8-2
	Changing the carburetor settings 8-2
RIDING YOUR ATV7-1	Adjusting the engine idling speed 8-3
GETTING TO KNOW YOUR ATV 7-2	Adjusting the throttle lever free play 8-3
RIDE WITH CARE AND GOOD	Brakes 8-3
JUDGMENT7-2	Checking the front and rear brake
BE CAREFUL WHERE YOU RIDE 7-8	pads 8-3
TURNING YOUR ATV 7-11	Checking the brake fluid level 8-3
CLIMBING UPHILL 7-12	Changing the brake fluid 8-3
RIDING DOWNHILL7-15	Checking the front brake lever free
CROSSING A SLOPE	play 8-3
CROSSING THROUGH SHALLOW	Checking the brake pedal height 8-3
WATER 7-17	Adjusting the parking brake free play 8-3
RIDING OVER ROUGH TERRAIN 7-18	Brake light switches 8-4
SLIDING AND SKIDDING7-19	Adjusting the clutch lever free play 8-4
WHAT TO DO IF	Drive chain slack 8-4
WHAT TO DO	Lubricating the drive chain 8-4
77777 70 00	Checking and lubricating the cables 8-4
PERIODIC MAINTENANCE AND	Checking and lubricating the brake and
ADJUSTMENT8-1	clutch levers 8-4
	Checking the shift pedal 8-4
Owner's manual and tool kit 8-1	Checking and lubricating the brake
Periodic maintenance chart for the	pedal 8-4
emission control system 8-3	Checking the wheel hub bearings 8-4
General maintenance and lubrication	Lubricating the rear suspension relay
chart 8-5	arm and connecting arm pivoting
Checking the spark plugs 8-9	points 8-4
Transmission oil 8-10	Lubricating the upper and lower arm
Coolant 8-13	pivots 8-4
Cleaning the air filter element 8-18	p

Replacing a headlight bulb	8-5 <sup>2</sup> 8-5 <sup>2</sup> 8-5 <sup>4</sup> 8-5 <sup>4</sup>
CLEANING AND STORAGE	9- <sup>.</sup> 9-
SPECIFICATIONS	. 10-
CONSUMER INFORMATIONIdentification numbers	

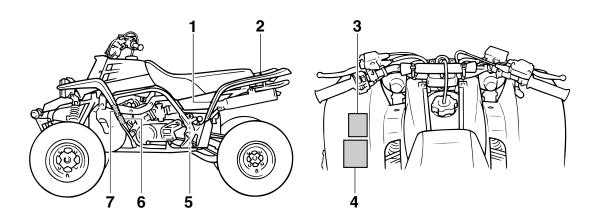
# LOCATION OF THE WARNING AND SPECIFICATION LABELS

EBU29991

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

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.

#### For Europe



1

30.0 kPa 0.30 kgf/cm² 4.4 psi 30.0 kPa 0.30 kgf/cm² 4.4 psi

2





4 5





6 C € 201

YAMAHA MOTOR CO., LTD. 2500 SHINGAI, IWATA, JAPAN 8AC-2817L-00

7

YFZ350 36.2kW 187kg

3B5-2156A-10

Familiarize yourself with the following pictograms and read the explanatory text, then make sure to check the pictograms that apply to your model.



Read the Owner's manual.



ALWAYS use an approved helmet and protective gear.



NEVER permit children under age 6 to operate this ATV.

Operation of this ATV by children under the age of 6 increases the risk of severe injury or death.

Adult supervision required for children under age 16.



NEVER permit children under age 10 to operate this ATV.

Operation of this ATV by children under the age of 10 increases the risk of severe injury or death.

Adult supervision required for children under age 16.



NEVER permit children under age 12 to operate this ATV.

Operation of this ATV by children under the age of 12 increases the risk of severe injury or death.

Adult supervision required for children under age 16.



NEVER operate this ATV if you are under age 16.

Operating this ATV if you are under the age of 16 increases your chance of severe injury or death.



NEVER use on paved roads.



NEVER carry passengers.



NEVER use with drugs or alcohol.



NEVER store fuel or flammable liquids.



This unit contains high-pressure nitrogen gas.

Mishandling can cause an explosion. Do not incinerate, puncture or open.



Use unleaded gasoline only.



Measure the tire pressure when the tires are cold.



Adjust the tire pressure.

Improper tire pressure can cause loss of control.

Loss of control can result in severe injury or death.



Turning the ATV in 4WD-LOCK ("DIFF.LOCK") takes more effort.

Operate at a slow speed and allow extra time and distance for maneuvers to avoid loss of control.



This pictogram shows the loading limits and/or maximum load capacity for this ATV. Follow all load limits and other loading guidelines in this manual.

Load may include the driver, passenger, human protective gear, accessories, goods, luggage, and all other load related items. Make sure you do not exceed the load limits. Overloading can cause loss of control. Loss of control can result in severe injury or death.



This pictogram shows trailer Hitch Tow weight limit. (Combined weight of the trailer and all cargo in the trailer.)

Overloading can cause loss of control.

Loss of control can result in severe injury or death.



This pictogram shows trailer Hitch Tongue weight limit. (Weight on the trailer tongue.) Overloading can cause loss of control. Loss of control can result in severe injury or death.

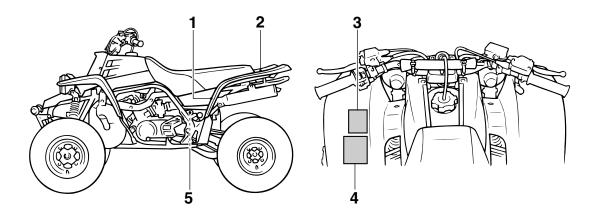


1) Model Name

- ② Max. Power
- ③ Mass In Running Order



Year of construction



1

#### **A** WARNING

Improper tire pressure or overloading can cause loss of control.

Loss of control can result in severe injury or death.

**OPERATING TIRE PRESSURE**: Set with tires cold • Recommended: Front: 30.0 kPa (4.4 psi)

Rear : 30.0 kPa (4.4 psi)

Minimum : Front : 27.0 kPa (4.0 psi)

Rear : 27.0 kPa (4.0 psi)

Never set tire pressure below minimum.
 It could cause the tire to dislodge from the rim.

#### LOADING

Maximum weight capacity: 100 kg (220 lbs.)
 Includes weight of operator, cargo and accessories.

3B5-2816M-00

2

# **A WARNING**



NEVER ride as a passenger.

Passengers can cause a loss of control, resulting in SEVERE INJURY or DEATH.

5FE-2151H-01

3

# **WARNING**



Operating this ATV if you are under the age of 16 increases your chance of severe injury or death.

**NEVER** operate this ATV if you are under age **16**.

4D3-2816L-00

4

## WARNING

Improper ATV use can result in SEVERE INJURY or DEATH.









AN APPROVED HELMET AND PROTECTIVE GEAR

ON PUBLIC ROADS

NEVER USE NEVER CARRY NEVER USE PASSENGERS WITH DRUGS

OR ALCOHOL

**NEVER** operate:

- · without proper training or instruction.
- at speeds too fast for your skills or the conditions.
- on public roads -a collision can occur with another vehicle.
- with a passenger-passengers affect balance and steering and increase risk of losing control.

#### ALWAYS:

- · use proper riding techniques to avoid vehicle overturns on hills and rough terrain and in turns.
- avoid paved surfaces-pavement may seriously affect handling and control.

LOCATE AND READ OWNER'S MANUAL. FOLLOW ALL INSTRUCTIONS AND WARNINGS.

5FE-21568-11



# **SAFETY INFORMATION**

EBU17593

#### AN ATV IS NOT A TOY AND CAN BE HAZARD-OUS TO OPERATE.

An ATV handles differently from other vehicles, including motorcycles and cars. A collision or rollover 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.

EWB00071

# **WARNING**

**Avoid Carbon Monoxide Poisoning** 

All engine exhaust contains carbon monoxide, a deadly gas. Breathing carbon monoxide can cause headaches, dizziness, drowsiness, nausea, confusion, and eventually death.

Carbon Monoxide is a colorless, odorless, tasteless gas which may be present even if you do not see or smell any engine exhaust. Deadly levels of carbon monoxide can collect rapidly and you can quickly be overcome and unable to save yourself. Also, deadly levels of carbon monoxide can linger for hours or days in enclosed or poorly ventilated areas. If you experi-

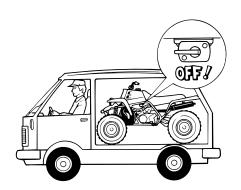
ence any symptoms of carbon monoxide poisoning, leave the area immediately, get fresh air, and SEEK MEDICAL TREATMENT.

- Do not run engine indoors. Even if you try to ventilate engine exhaust with fans or open windows and doors, carbon monoxide can rapidly reach dangerous levels.
- Do not run engine in poorly ventilated or partially enclosed areas such as barns, garages, or carports.
- Do not run engine outdoors where engine exhaust can be drawn into a building through openings such as windows and doors.

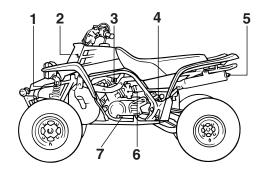
EWB02591

# **WARNING**

When transporting the ATV in another vehicle, 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.

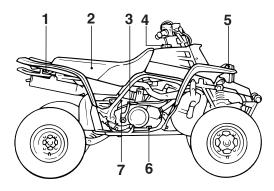


Left view



- 1. Front shock absorber assembly
- 2. Radiator
- 3. Fuel cock
- 4. Rear shock absorber assembly
- 5. Spark arrester
- 6. Starter (choke)
- 7. Shift pedal

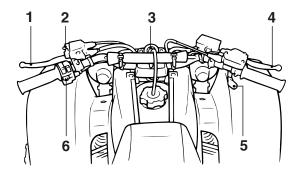
# Right view



- 1. Tail/brake light
- 2. Seat
- 3. Kickstarter
- 4. Fuel tank cap
- 5. Headlight
- 6. Brake pedal
- 7. Brake light switch

#### ,

# **Controls and instruments**



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

#### TIP\_

The ATV you have purchased may differ slightly from the figures shown in this manual.

# **INSTRUMENT AND CONTROL FUNCTIONS**

EBU29810

#### Main switch

The positions of the main switch are as follows:

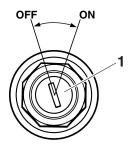
#### ON

The engine can be started and the key cannot be removed.

The headlights and taillight come on when the engine is started.

#### OFF

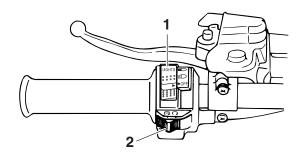
All electrical systems are off. The key can be removed.



1. Main switch

#### FBU18061

#### Handlebar switches



- 1. Light switch " ≣O / ≣O /OFF"

#### EBU18080

#### Engine stop switch " $\boxtimes / \bigcirc$ "

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 " (X)".

FBU29780

## Light switch " ≣○ / ≣○ /OFF"

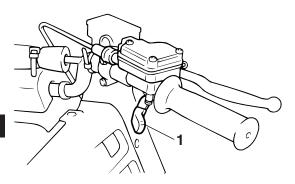
Set this switch to " $\lessgtr$ O" to turn on the low beams and the taillight. Set the switch to " $\lessapprox$ O" to turn on the high beams and the taillight. Set the switch to "OFF" to turn off all the lights.

FBU18282

#### Throttle lever

Once the engine is running, pushing the throttle 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 throttle lever is released.



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.

EBU18300

# **Throttle OverRide System**

If during operation, the carburetor or the throttle cable should malfunction and will not close fully, take your thumb off the throttle lever.

The throttle override system immediately cuts off the ignition.

FWB00260

# **WARNING**

Riding with a malfunction increases the chance for an accident and injury. Make sure that the cause of the malfunction is corrected before restarting the engine or have the ATV inspected by a Yamaha dealer.

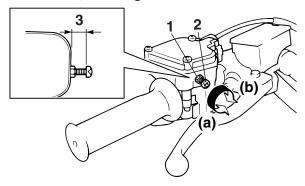
EBU18323

# Speed limiter

Your ATV is equipped 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). 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 4.0–6.0 mm (0.16–0.24 in). (See page 8-34.) WARNING! Improper ad-

justment of the speed limiter and throttle could cause throttle cable damage or improper throttle operation. You could lose control, resulting in an accident.[EWB00241]



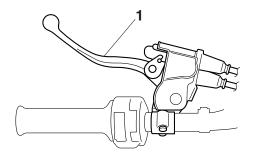
- 1. Locknut
- 2. Adjusting screw
- 3. No more than 12 mm (0.47 in)
- 3. Tighten the locknut.

EBU18372

#### Clutch lever

The clutch lever is located on the left handlebar. 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.

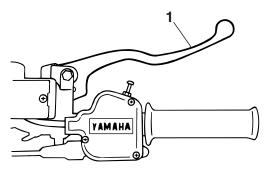


1. Clutch lever

EBU18411

#### **Brake lever**

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

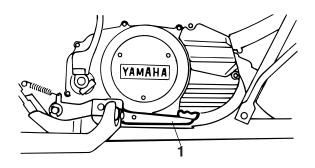


1. Brake lever

#### EBU18432

# 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

#### EBU18500

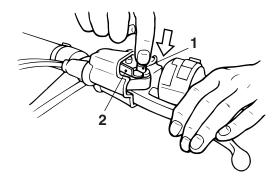
# Parking brake

Use the parking brake before starting the engine or parking the ATV, especially on a slope. Squeeze the clutch lever while pushing the button, then push in the lock plate to apply the parking brake. Squeeze the clutch lever to release the parking brake.

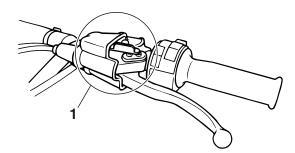
#### TIP\_

When the parking brake is used, engine speed is limited to 2300 r/min. Be sure the parking brake is released before moving the throttle lever. Other-

wise, the engine will misfire, preventing normal operation.



- 1. Button
- 2. Parking brake lock plate



1. Locked position

EWB00220

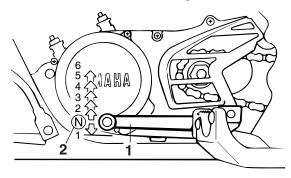
# **WARNING**

- 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

EBU18530

# Shift pedal

This ATV is equipped with a constant-mesh 6speed transmission. The shift pedal is located on the left side of the engine and is used in combination with the clutch when shifting.



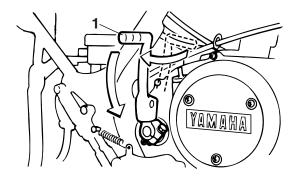
- 1. Shift pedal
- 2. Neutral position

EBU18650

#### **Kickstarter**

Fold out the kickstarter lever, move it down lightly with your foot until the gears engage, and then

push it down smoothly but forcefully. This model is equipped with a primary kickstarter, allowing the engine to be started in any gear if the clutch is disengaged. However, shifting the transmission into the neutral position before starting is recommended.

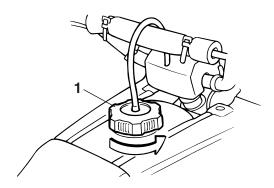


1. Kickstarter

EBU18720

# Fuel tank cap

Remove the fuel tank cap by turning it counterclockwise.



1. Fuel tank cap

EBU18774

#### Fuel

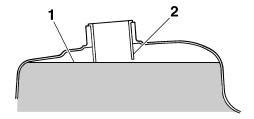
Make sure there is sufficient gasoline in the tank.

# **WARNING**

Gasoline and gasoline vapors are extremely flammable. To avoid fires and explosions and to reduce the risk of injury when refueling, follow these instructions.

 Before refueling, turn off the engine and be sure that no one is sitting on the vehicle. Never refuel while smoking, or while in the vicinity of sparks, open flames, or other sources of ig-

- nition such as the pilot lights of water heaters and clothes dryers.
- Do not overfill the fuel tank. When refueling, be sure to insert the pump nozzle into the fuel tank filler hole. Stop filling when the fuel reaches the bottom of the filler tube. Because fuel expands when it heats up, heat from the engine or the sun can cause fuel to spill out of the fuel tank.



- 1. Maximum fuel level
- 2. Filler tube

Recommended fuel:

PREMIUM UNLEADED GASOLINE ONLY For Europe: PREMIUM UNLEADED GASOLINE ONLY with a research octane number of 95 or higher.

Fuel tank capacity:

12.0 L (3.17 US gal, 2.64 Imp.gal)

Fuel reserve amount:

2.5 L (0.66 US gal, 0.55 Imp.gal)

- 3. Wipe up any spilled fuel immediately. NOTICE: Immediately wipe off spilled fuel with a clean, dry, soft cloth, since fuel may deteriorate painted surfaces or plastic parts.[ECBOO981]
- 4. Turn the fuel tank cap fully clockwise to make sure it is securely closed.

EWB02531

# **WARNING**

Gasoline is poisonous and can cause injury or death. Handle gasoline with care. Never siphon gasoline by mouth. If you should swallow some gasoline or inhale a lot of gasoline vapor, or get some gasoline in your eyes, see your doctor immediately. If gasoline spills on your skin, wash with soap and water. If gasoline

spills on your clothing, change your clothes.

ECB00060

# **NOTICE**

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

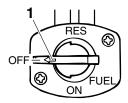
Your Yamaha engine has been designed to use premium unleaded gasoline with a research octane number of 95 or higher. If knocking (or pinging) occurs, use a gasoline of a different brand. Use of unleaded fuel will extend spark plug life and reduce maintenance costs.

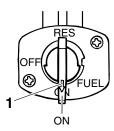
EBU18830

# **Fuel cock**

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

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



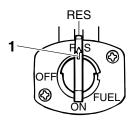


#### 1. Arrow mark positioned over "OFF"

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.

#### 1. Arrow mark positioned over "ON"

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



#### 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"!

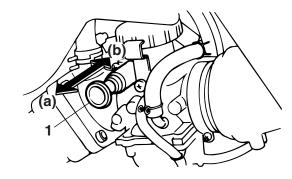
EBU18840

# 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.



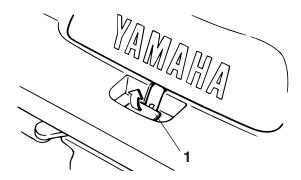
1. Starter (choke)

EBU18871

#### Seat

#### To remove the seat

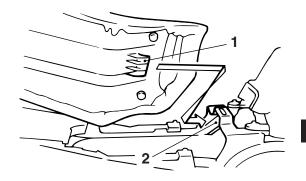
Pull the seat lock lever upward and pull up the seat at the rear.



1. Seat lock lever

#### To install the seat

Insert the projection on the front of the seat into the seat holder and push down on the seat at the rear. Make sure that the seat is securely fitted.



- 1. Projection
- 2. Seat holder

EBU18992

# Adjusting the front shock absorber assemblies

The spring preload can be adjusted to suit the rider's weight and the riding conditions.

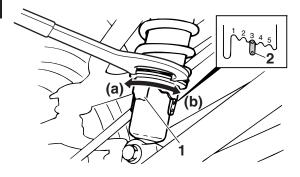
EWB00400



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 ac-

Adjust the spring preload as follows.

Turn the spring preload adjusting ring 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 ring
- 2. Position indicator

#### TIP

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

Spring preload setting:
Minimum (soft):
1
Standard:
3
Maximum (hard):
5

EBU19102

# Adjusting the rear shock absorber assembly

The spring preload, rebound damping and compression damping forces of the rear shock absorber assembly can be adjusted to suit the rider's weight and the riding conditions.

EWB00460

# **WARNING**

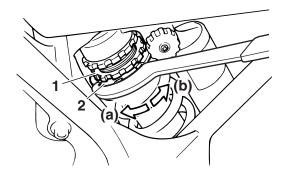
Suspension components become hot during operation. Never touch the compression damping force adjusting knob, the rebound damping force adjusting dial or the oil reservoir with your bare hand or skin until suspension components have cooled.

## NOTICE

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

## **Spring preload**

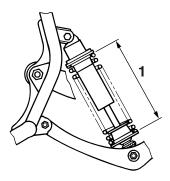
- 1. Loosen the locknut.
- Turn the spring preload adjusting nut in direction (a) to increase the spring preload and thereby harden the suspension, and in direction (b) to decrease the spring preload and thereby soften the suspension.



- 1. Locknut
- 2. Spring preload adjusting nut

#### 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).



1. Distance A

Spring preload setting:

Minimum (soft):

Distance A = 228.5 mm (9.00 in)

Standard:

Distance A = 220.5 mm (8.68 in)

Maximum (hard):

Distance A = 213.5 mm (8.41 in)

3. Tighten the locknut to the specified torque. *NOTICE:* Always tighten the locknut against the adjusting nut, and then tighten it to the specified torque. [ECB000081]

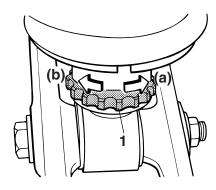
Tightening torque:

Locknut:

54 Nm (5.4 m·kgf, 39 ft·lbf)

### Rebound damping force

Turn the rebound damping force adjusting dial 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 dial

Rebound damping setting:

Minimum (soft):

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

Standard:

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

Maximum (hard):

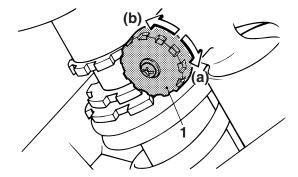
3 click(s) in direction (b)\*

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

#### **Compression damping force**

Turn the compression damping force adjusting

knob in direction (a) to increase the compression damping force and thereby harden the damping, and in direction (b) to decrease the compression damping force and thereby soften the damping.



1. Compression damping force adjusting knob

Compression damping setting:

Minimum (soft):

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

Standard:

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

Maximum (hard):

15 click(s) in direction (a)\*

\* With the adjusting knob fully turned in direction (b)

#### 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.

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.

## PRE-OPERATION CHECKS

EBU19224

Inspect your vehicle each time you use it to make sure the vehicle is in safe operating condition. Always follow the inspection and maintenance procedures and schedules described in the Owner's Manual.



Failure to inspect or maintain the vehicle properly increases the possibility of an accident or equipment damage. Do not operate the vehicle if you find any problem. If a problem cannot be corrected by the procedures provided in this manual, have the vehicle inspected by a Yamaha dealer.

Before using this vehicle, check the following points:

ITEM	ROUTINE	PAGE
Fuel	<ul> <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
Transmission oil	<ul> <li>Check oil level in transmission case, and add recommended oil to specified level if necessary.</li> <li>Check ATV for oil leakage. Correct if necessary.</li> </ul>	5-3, 8-10
Coolant	<ul> <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, 8-13
Front brake	<ul> <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, 8-35, 8-36, 8-38

ITEM	ROUTINE	PAGE
Rear brake	<ul> <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, 8-35, 8-36, 8-38
Clutch	<ul> <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>	8-41
Throttle lever	<ul> <li>Make sure that operation is smooth. Lubricate cable and lever housing if necessary.</li> <li>Check lever free play, and adjust if necessary.</li> </ul>	5-4, 8-34
Control cables	Make sure that operation is smooth. Lubricate if necessary.	8-45
Drive chain	Check chain slack, and adjust if necessary.     Check chain condition. Lubricate if necessary.	5-4, 8-43, 8-45
Wheels and tires	Check wheel condition, and replace if damaged. Check tire condition and tread depth. Replace if necessary. Check air pressure. Correct if necessary.	5-4
Shift pedal	Make sure that operation is smooth.     Correct if necessary.	8-46
Brake pedal	Make sure that operation is smooth. Lubricate pedal pivoting point if necessary.	8-46
Brake and clutch levers	Make sure that operation is smooth. Lubricate lever pivoting points if necessary.	8-46
Chassis fasteners	Make sure that all nuts, bolts and screws are properly tightened.	5-6
Instruments, lights and switches	Check operation, and correct if necessary.	5-7

FBU19550

# Fuel and 2-stroke engine oil mixing ratio

Recommended 2-stroke engine oil:

Yamalube "R" (Yamalube Racing 2-cycle oil) Mixing ratio:

24:1

If Yamalube "R" oil is not available, select an oil from the following list.

Recommended 2-stroke engine oil	Mixing ratio
Castrol R30	
Castrol A545	20:1
Castrol A747	

ECB00140

#### **NOTICE**

Never mix two types of 2-stroke engine oil in the same batch. Always use the same type of oil to ensure maximum engine performance.

EBU19580

### Transmission oil

Make sure that the transmission oil is at the specified level. Add oil as necessary. (See page 8-10.)

EBU19631

#### Coolant

Make sure that the coolant is at the specified level. Add coolant as necessary. (See page 8-13.)

#### TII

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

EBU19711

### 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 8-38.) 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 8-36.)

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 8-35.)

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. (See page 8-43.)

EBU19794

#### Tires

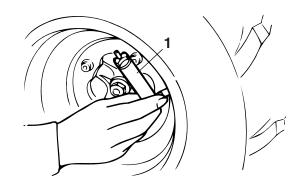
Check tire pressure regularly to make sure it is at the recommended specifications. Also check for wear and damage.

## Tire pressure

Use the low-pressure tire gauge to check and adjust tire pressures when the tires are cold. Tire pressures must be equal on both sides. WARNING! Operation of this vehicle with improper tire pressure may cause severe injury or death from loss of control or rollover. Tire pressure below the minimum specified could also cause the tire to dislodge from the rim under severe riding conditions. [EWB02541] Set tire pressures to the following specifications:

```
Recommended tire pressure:
   Front
     30.0 kPa (0.300 kgf/cm<sup>2</sup>, 4.4 psi)
   Rear
     30.0 kPa (0.300 kgf/cm<sup>2</sup>, 4.4 psi)
Minimum tire pressure:
   Front
     27.0 kPa (0.270 kgf/cm<sup>2</sup>, 4.0 psi)
   Rear
     27.0 kPa (0.270 kgf/cm<sup>2</sup>, 4.0 psi)
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)
```

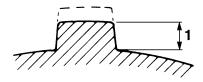
The low-pressure tire gauge is included as standard equipment. Make two measurements of the tire pressure and use the second reading. Dust or dirt in the gauge could cause the first reading to be incorrect.



1. Low-pressure tire gauge

#### Tire wear limit

When the tire groove decreases to 3 mm (0.12 in) due to wear, replace the tire.



#### 1. Tire wear limit

#### Tire information

This ATV is equipped with tubeless tires with valves.

EWB02551

# **WARNING**

Use of improper tires on this ATV may cause loss of control, increasing your risk of an accident.

After extensive tests, only the tires listed below have been approved for this model by Yamaha Motor Co., Ltd.

Front:

Manufacturer/model:

DUNLOP/KT851B
Size:

AT21 x 7-10
Type:

Tubeless
Rear:

Manufacturer/model:

DUNLOP/KT877A
Size:

AT20 x 10-9
Type:

Tubeless

#### Aftermarket tires and rims

The tires and rims that came with your ATV were designed to match the performance capabilities and to provide the best combination of handling, braking, and comfort. Other tires, rims, sizes, and combinations may not be appropriate.

EBU19840

#### Chassis fasteners

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

ı

# Instruments, lights and switches

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

## **OPERATION**

EBU19901

Read the Owner's Manual carefully before riding the ATV. If there is a control or function you do not understand, ask your Yamaha dealer.

EWB00631

# **⚠** 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.

EBU29343

# Starting a cold engine

ECB00150

#### NOTICE

See the "Engine break-in" section on page 6-4 prior to operating the engine for the first time.

- 1. Set the parking brake.
- 2. Turn the fuel cock to "ON".
- Turn the key to "ON" and the engine stop switch to "○".
- 4. Shift the transmission into neutral.

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

### Position (1):

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

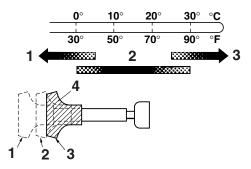
## Position (2):

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  $25 \,^{\circ}\text{C}$  (80  $^{\circ}\text{F}$ ).

### 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 kicking the kickstarter.
- 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.
- 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 quickly to the throttle with the starter (choke) turned off.
- When the parking brake is applied, engine speed is limited to 2300 r/min. Make sure the parking brake is released before moving the throttle lever; otherwise, the engine will misfire, preventing normal operation.

ECB00163

### **NOTICE**

For maximum engine life, never accelerate hard when the engine is cold!

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.

EBU20522

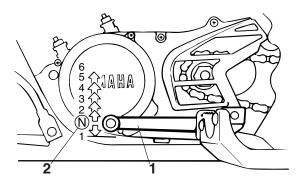
# Shifting

This ATV has a 6-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, release the throttle lever, 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, and then release the clutch.



- 1. Shift pedal
- 2. Neutral position

#### EBU20592

#### To start out and accelerate

1. Release the throttle lever, apply the front or

rear brake, 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, and then release the brake.
- 4. Open the throttle gradually and at the same time, release the clutch lever slowly. 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.[EWB00731]
- Once the ATV has attained adequate speed, release the throttle, and at the same time, quickly pull in the clutch lever.
- 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.

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.

# **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 prop-

- erly 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 clear-

ances. 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

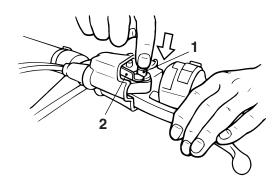
## **NOTICE**

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

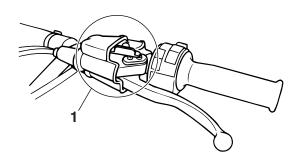
EBU20722

## **Parking**

When parking the ATV, shift into first gear, stop the engine, apply the parking brake, and then turn the fuel cock to "OFF".



- 1. Button
- 2. Parking brake lock plate



1. Locked position

FBU20865

## Parking on a slope

EWB00851

## **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. Never park the ATV on hills that are too steep

## to walk up easily.

- Bring the ATV to a stop by applying the front brake, shift into first gear, and then stop the engine.
- 2. With the front and rear brakes applied, apply the parking brake.
- 3. Release the front and rear brakes.
- 4. Turn the fuel cock to "OFF".



EBU20910

# Accessories and loading

EBU20921

### **Genuine Yamaha Accessories**

Choosing accessories for your ATV is an important decision. Genuine Yamaha Accessories, which

are available only from a Yamaha dealer, have been designed, tested, and approved by Yamaha for use on your ATV. Many companies with no connection to Yamaha manufacture parts and accessories or offer other modifications for Yamaha vehicles. Yamaha is not in a position to test the products that these aftermarket companies produce. Therefore, Yamaha can neither endorse nor recommend the use of accessories not sold by Yamaha or modifications not specifically recommended by Yamaha, even if sold and installed by a Yamaha dealer.

# Aftermarket parts, accessories, and modifications

While you may find aftermarket products similar in design and quality to genuine Yamaha Accessories, recognize that some aftermarket accessories or modifications are not suitable because of potential safety hazards to you or others. Installing aftermarket products or having other modifications performed to your ATV that change any of the vehicle's design or operation characteristics can put you and others at greater risk of serious injury or death. You are responsible for injuries related to changes in the vehicle.

Keep the following in mind when considering an

accessory or operating an ATV which has accessories.

- 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.

EBU20941

## Loading

WB00820

## **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.

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.

#### 1

# **RIDING YOUR ATV**















#### **GETTING TO KNOW YOUR ATV**

This ATV is intended for recreational use by experienced operators only. This section, Riding your ATV, provides general ATV riding instructions for recreational riding. The skills and techniques described in this section, however, are appropriate for all types of riding. Riding your ATV requires special skills acquired through practice over a period of time. Take the time to learn the basic techniques well 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 2-1–2-4. Also read all warning and notice labels on your ATV.

#### RIDE WITH CARE AND GOOD JUDGMENT

Get training if you are inexperienced.

EWB01381

# **WARNING**

- Do not operate this ATV or allow anyone else to operate it without proper instruction. 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.
- Do not operate this ATV at speeds too fast for your skills or the conditions, as this increases your chances of losing control of the ATV and an accident. Always go at a speed that is proper for the terrain, visibility and operating conditions, and your experience.

Beginning and inexperienced operators should regularly practice the skills and the operating techniques described in this Owner's Manual.

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

Do not attempt to operate at maximum performance until you are totally familiar with the ATV's

handling and performance characteristics. Take the time to learn the basic techniques well before attempting more difficult maneuvers. Become familiar with this ATV at slow speeds first, even if you are an experienced operator.

Not recommended for children under 16 years of age.

EWB01390

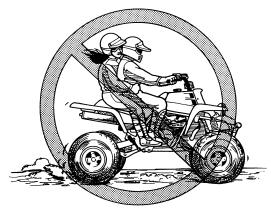
# **WARNING**

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 the operator only – passengers prohibited.

The long seat is to allow the operator to shift position as needed during operation. It is not for carrying passengers. WARNING! Never carry a passenger. Carrying a passenger on this ATV greatly reduces your ability to balance and control this ATV. You could have an accident, resulting in severe injury or death to you and/or your passenger. [EWB01401]



# **Apparel**

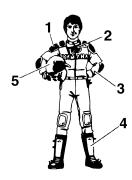
Always wear the following to reduce risk of injury in an accident:

- Approved motorcycle helmet that fits properly
- Eye protection (goggles, helmet face shield, or protective eyewear)
- Over-the-ankle boots, gloves, long-sleeved shirt or jacket, and long pants

An approved helmet and other personal protective equipment can reduce the severity of injuries in an accident. WARNING! Operating without an approved motorcycle helmet increases your chances of a severe head injury or death in the event of an accident. [EWB01411]

Wear eye protection when operating your ATV to reduce the risk of a serious accident or injury. Eye protection, such as a face shield or goggles, may reduce the risk of foreign material getting in your eyes and help prevent loss of vision. WARNING!

Operating without eye protection can result in an accident and increases your chances of a severe injury in the event of an accident. [EWB02811]



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

# Do not operate after or while consuming alcohol or drugs.

The operator's performance capability is reduced by the influence of alcohol or drugs. Consuming alcohol or drugs could seriously affect your judgment, cause you to react more slowly, and affect your balance and perception. WARNING! Never consume alcohol or drugs before or while driving this ATV. You increase your chance of an accident. [FWB01421]

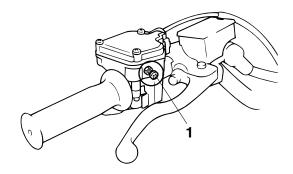


## **Pre-operation checks**

Always inspect your ATV each time you use it to make sure the ATV is in safe operating condition. Perform the pre-operation checks listed on page 5-1. Always follow the inspection and maintenance procedures and schedules described in the Owner's Manual. WARNING! Failure to inspect the ATV before operating it and to maintain it properly increases the possibility of an accident or equipment damage. [EWB01431]

## 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 4-3.)



1. Adjusting screw

## Loading and accessories

EWB00972

# **WARNING**

Improper loading or towing can increase the risk of loss of control, an overturn, or other accident. To reduce the risk of an accident:

Do not exceed the maximum loading limits

for the vehicle (see "MAXIMUM LOADING LIMIT" below or vehicle labeling).

- Make sure the load does not interfere with your control or ability to see where you are going.
- Reduce speed and allow more room to stop.
   A heavier vehicle takes longer to stop.
- Avoid hills and rough terrain. Choose terrain carefully. Use extreme caution when towing or carrying a load on inclines.
- Turn gradually and go slowly.

As originally equipped, this ATV is not designed to carry cargo or tow a trailer. If you choose to add accessories to carry cargo, 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

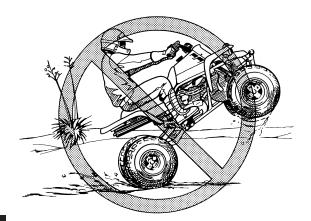
ATV loading limit (total weight of cargo, rider, accessories, and tongue): 100.0 kg (220 lb)

During operation

Always keep your feet on the footrests during operation; otherwise, they may contact the rear wheels. WARNING! 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 footrest, your foot or leg may come into contact with the rear wheels, which could injure you or cause an accident. [EWB02860]



Avoid wheelies and jumping. WARNING! Attempting wheelies, jumps, and other stunts increases the chance of an accident, including an overturn. Never attempt stunts, such as wheelies or jumps. Don't try to show off. [EWB01481]



#### Modifications and accessories

Never modify this ATV through improper installation or use of accessories or other modification. 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 ATV dealer. WARNING! Operating this ATV with improper modifications may cause changes in handling which in some situations could lead to an accident. [EWB01491]

#### Exhaust system

FWR01501

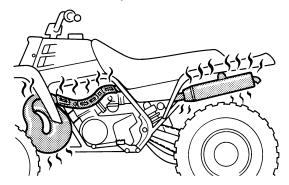
## **WARNING**

- Dry grass or brush or other combustible material accumulated around the engine area could catch fire. Do not operate, idle, or park the ATV in dry grass or other dry ground cover. Keep the engine area free of dry grass, brush, or other combustible material.
- Someone touching the exhaust system during or after operation could be burned. Do not touch the hot exhaust system. Do not park the ATV in a place where others might be likely to touch it.

The muffler and other engine parts become extremely hot during operation and remain hot after the engine has stopped. To reduce the risk of fire during operation or after leaving the ATV, do not let brush, grass and other materials collect under the vehicle, near the muffler or exhaust pipe, or next to other hot parts. Check under the vehicle after operating in areas where combustible materials may have collected. Do not idle or park the vehicle in long dry grass or other dry ground cover.

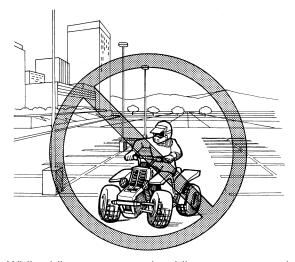
To prevent burns, avoid touching the exhaust system. Park the ATV in a place where pedestrians or

children are not likely to touch it.

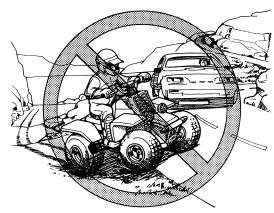


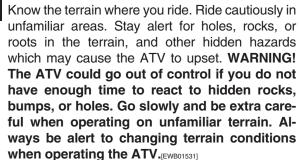
#### **BE CAREFUL WHERE YOU RIDE**

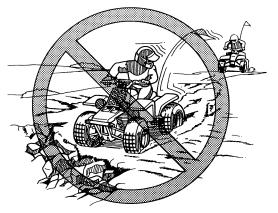
This ATV is designed for use on unpaved surfaces only. WARNING! Paved surfaces may seriously affect handling and control of the ATV, and may cause the ATV to go out of control. Always avoid paved surfaces, including sidewalks, driveways, parking lots and streets.[EWB01511]



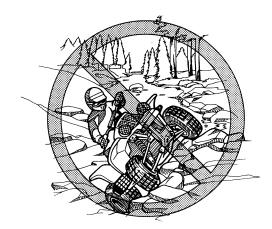
While riding on unpaved public streets or roads may be legal in your area, such operation can increase the risk of collision with other vehicles. Watch carefully for other vehicles. Make sure you know your country's laws and regulations before you ride on unpaved public streets or roads. Do not ride on any paved public street, road or motorway. WARNING! Never operate this ATV on any paved street, paved road or motorway. You can collide with another vehicle. IEWB015211



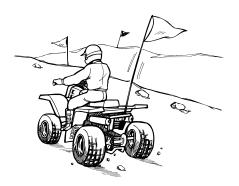




Do not operate on rough, slippery, or loose terrain until you have learned and practiced the skills necessary to control the ATV on such terrain. Always be especially cautious on these kinds of terrain. WARNING! Failure to use extra care when operating on excessively rough, slippery, or loose terrain could cause loss of traction or ATV control, which could result in an accident, including an overturn. [EWB01541]

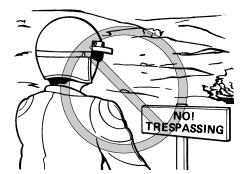


When riding in an area where you might not easily be seen, such as desert terrain, mount a caution flag on the ATV. DO NOT use the flag pole bracket as a trailer hitch. WARNING! You could collide with another vehicle if operating in areas where you cannot easily be seen. Mount a caution flag on the ATV to make you more visible. Watch carefully for other vehicles.[EMBO1551]



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 famil-

iar 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.

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. 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. WARNING! 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.[EWB02631] NOTICE: Do not shift gears without releasing the throttle. Damage to the engine or drive train may occur.[ECB01071]

Use this same procedure as you move into the higher gears. Be sure to coordinate the use of the throttle and shift pedal properly.

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

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.

#### **TURNING YOUR ATV**

EWB01771

# **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. ATV could go out of control, causing a collision or overturn.

To achieve maximum traction on unpaved surfaces, the two rear wheels 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.

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 footrest 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**

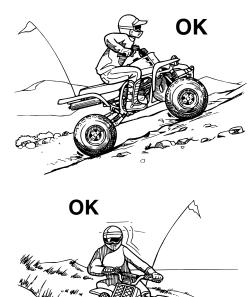
EWB01591

# **A** WARNING

Climbing hills improperly can cause overturns or loss of control. Use proper riding tech-

niques described in this Owner's Manual.

- 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.
- 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.
- 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, shift vour weight to the uphill side of the ATV.





Do not attempt to climb hills until you have mastered basic maneuvers on flat ground. Always check the terrain carefully before attempting any hill. In all cases avoid inclines with slippery or loose surfaces, or obstacles that might cause you to lose control.

To climb a hill, you need traction, momentum, and steady throttle. Travel fast enough to maintain momentum, but not so fast that you cannot react to changes in the terrain as you climb.

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 footrests and leaning forward over the handlebars. Whenever possible, ride straight up hills.

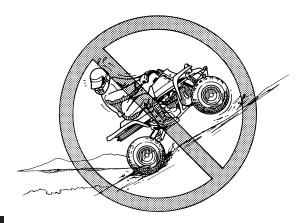
Slow down when you reach the crest of the hill if you cannot see clearly what is on the other side – there could be another person, an obstacle, or a sharp drop-off. Use common sense and remember that some hills are too steep for you to climb or descend.

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.

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, and apply the front brake gradually. The ATV could easily tip over backwards. When fully stopped, apply the rear brake as well, and then lock the parking brake. Dismount the ATV immediately on the uphill side or to a side if pointed straight uphill. Turn the ATV around and remount, following the procedure described in the Owner's Manual. WARNING! Stalling, rolling backwards or improperly dismounting while climbing a hill could result in ATV overturning. If you cannot control the ATV, dismount immediately on the uphill side. [EWBO1802]



### RIDING DOWNHILL

EWB01131

# **WARNING**

Going down a hill improperly could cause overturns or loss of control. Always follow proper procedures for going down hills as described in this Owner's Manual.

- Always check the terrain carefully before you start down any hill.
- 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.

- Shift your weight backward and to the up side of the hill.
- 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.
- Improper braking can cause the wheels on the uphill side to come off the ground or cause loss of traction. Gradually apply only the rear brake when going 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.

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. Gradually apply only the rear brake.

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.



#### **CROSSING A SLOPE**

EWB01632

# **MARNING**

Improperly crossing hills or turning on hills could cause loss of control or cause the ATV to overturn.

- Always follow proper procedures as described in the Owner's Manual.
- Avoid hills with excessively slippery or loose surfaces.
- Avoid crossing the side of a steep hill.
- 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 as described in the Owner's Manual on level ground. Be very careful when turning on any hill.

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.



### **CROSSING THROUGH SHALLOW WATER**

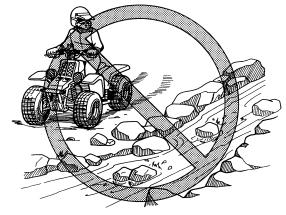
EWB01641

# **WARNING**

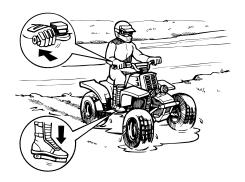
Operating this vehicle through deep or fastflowing water can lead to loss of control or an overturn. To reduce your risk of drowning or other injuries, use care when crossing through water. Never operate this ATV water deeper than the depth specified in your Owner's Manual, as tires may float, increasing the risk of an overturn.

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.

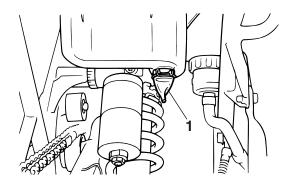


Test your brakes after leaving the water. If necessary, apply them several times to let friction dry out the linings. Do not continue to ride your ATV without verifying that you have regained proper braking ability. WARNING! Wet brakes may have reduced stopping ability, which could cause loss of control.[EWB02621]



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. *NOTICE:* Undrained water can cause damage or improper operation. [ECBO0841]

Wash the ATV in fresh water if it has been operated in salt water or muddy conditions.



1. Air filter case check hose

#### RIDING OVER ROUGH TERRAIN

EWB01651

# **A** WARNING

Riding improperly over obstacles could cause loss of control or a collision. 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.

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 footrests at all times. Avoid jumping the ATV as loss of control and damage to the ATV may result.

#### **SLIDING AND SKIDDING**

EWB01662

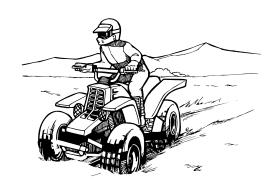
# **WARNING**

Skidding or sliding improperly may cause you to lose control of this ATV. You may also regain traction unexpectedly, which may cause the ATV to overturn.

- 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.

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.

#### 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 footrest to the outside of the turn. Position your weight over the front wheels for better control. (See page 7-11.)

- 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 7-11.)
- 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 7-19.)
- 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 7-12.)

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 7-16.)

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 7-17.)

## PERIODIC MAINTENANCE AND ADJUSTMENT

EBU21673

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

## **A** WARNING

Failure to properly maintain the vehicle or performing maintenance activities incorrectly may increase your risk of injury or death during service or while using the vehicle. If you are not familiar with vehicle service, have a Yamaha dealer perform the service.

EWB02561

## **WARNING**

Turn off the engine when performing maintenance unless otherwise specified.

 A running engine has moving parts that can catch on body parts or clothing and electrical parts that can cause shocks or fires.  Running the engine while servicing can lead to eye injury, burns, fire, or carbon monoxide poisoning - possibly leading to death. See page 2-1 for more information about carbon monoxide.

EWB02690

# **WARNING**

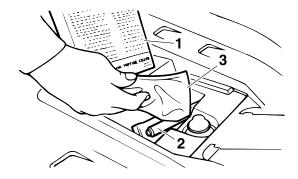
Brake discs, calipers, drums, and linings can become very hot during use. To avoid possible burns, let brake components cool before touching them.

The intervals given in the periodic maintenance charts 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.

EBU21691

### Owner's manual and tool kit

Be sure to put this owner's manual and the lowpressure tire gauge in the plastic bag and always carry them along with the owner's tool kit under the seat.



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

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.

## 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.

							INITIAL		EVE	ERY
			CHECK OR MAINTENANCE	Whichev-	month	1	3	6	6	12
NO.		ITEM	JOB	er comes first	km (mi)	320 (200)	1300 (800)	2500 (1600)	2500 (1600)	5000 (3200)
					hours	20	80	160	160	320
1	*	Fuel line	Check fuel hoses for cracks or other damage, and replace if necessary.					√	√	<b>V</b>
2		Spark plugs	Replace.		<b>√</b>	<b>V</b>	1	√	<b>√</b>	
3	*	Carburetors	Check starter (choke) operati essary.     Check engine idling speed ar and adjust if necessary.			V	V	V	V	
4	*	Crankcase breather system	<ul> <li>Check breather hose for crac and replace if necessary.</li> </ul>	amage,			√	√	√	
5	*	Exhaust system	<ul> <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>					V	V	V

0		
v		

	ITEM	JOB er c			INITIAL			EVERY	
NO.			Whichev- er comes first	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	Spark arrester	Clean.		•			√	<b>√</b>	√

### General maintenance and lubrication chart

### 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.

INITIAL						INITIAL		EVERY		
NO.		ITEM	CHECK OR MAINTENANCE	Whichev-	month	1	3	6	6	12
			JOB	er comes first	km (mi)	320 (200)	1300 (800)	2500 (1600)	2500 (1600)	5000 (3200)
					hours	20	80	160	160	320
1		Air filter element	Clean and replace if necessar		Every 20–40 hours (more often in wet or dusty areas)					
2	*	Clutch	Check operation and adjust if necessary.					√	√	√
3	*	Front brake	Check operation and correct     Check fluid level and ATV for correct if necessary.		√	√	√	<b>V</b>	√	
			Replace brake pads.			,	Wheneve	er worn to	the limi	t
4	*	Rear brake	<ul> <li>Check operation and correct</li> <li>Check brake pedal free play sary.</li> <li>Check fluid level and ATV for correct if necessary.</li> </ul>	V	V	V	V	V		
			Replace brake pads.		'	Wheneve	er worn to	the limi	t	

							INITIAL		EVE	ERY
		ITEM	CHECK OR MAINTENANCE	Whichev-	month	1	3	6	6	12
N	0.		JOB	er comes first	km (mi)	320 (200)	1300 (800)	2500 (1600)	2500 (1600)	5000 (3200)
					hours	20	80	160	160	320
5	*	Brake hoses	<ul> <li>Check for cracks or other dan necessary.</li> </ul>	nage, and rep	place if		√	√	√	√
			Replace.				Ev	ery 4 yea	ars	
6	*	Parking brake	<ul> <li>Check operation and adjust if</li> </ul>	necessary.		√	√	√	√	$\sqrt{}$
7	*	Wheels	<ul> <li>Check runout and for damage essary.</li> </ul>	e if nec-	√	√	√	√	<b>√</b>	
8	*	Tires	Check tread depth and for da necessary.     Check air pressure and balan necessary.	•	V	V	V	V	<b>V</b>	
9	*	Wheel hub bearings	<ul> <li>Check for looseness or dama necessary.</li> </ul>	ice if	√		√	√	√	
10	*	Upper and lower arm pivots	Lubricate with lithium-soap-ba				√	<b>V</b>	√	
11		Drive chain	Check chain slack and adjust     Check rear wheel alignment a sary.     Clean and lubricate.		V		V	V	<b>V</b>	
12	*	Drive chain roller	Check for wear and replace if				√	√	1	
13	*	Chassis fasteners	<ul> <li>Make sure that all nuts, bolts, properly tightened.</li> </ul>	are	√	√	<b>V</b>	√	√	
14	*	Shock absorber assemblies	Check operation and correct     Check for oil leakage and rep		sary.			√	√	√

						INITIAL			EVERY		
			CHECK OR MAINTENANCE	Whichev-	month	1	3	6	6	12	
N	0.	ITEM	JOB	er comes first	km (mi)	320 (200)	1300 (800)	2500 (1600)	2500 (1600)	5000 (3200)	
					hours	20	80	160	160	320	
15	*	Rear suspension relay arm and con- necting arm pivot- ing points	Check operation and correct if necessary.     Lubricate with lithium-soap-based grease.				V	V	V	V	
16	*	Steering system	Check operation and repair or replace if damaged.     Check toe-in and adjust if necessary.				√	√	√	√	
17		Transmission oil	Change.     Check ATV for oil leakage, and correct if necessary.					√	<b>V</b>	√	
18		Cooling system	Check coolant level and ATV for coolant leakage, and correct if necessary.			<b>V</b>	√	√	<b>V</b>	V	
			Replace coolant.				Ev	ery 2 yea	ars		
19	*	Moving parts and cables	• Lubricate.				√	√	√	√	
20	*	Throttle lever housing and cable	<ul> <li>Check operation and correct if necessary.</li> <li>Check throttle lever free play and adjust if necessary.</li> <li>Lubricate throttle lever housing and cable.</li> </ul>			V	V	V	V	V	
21	*	Front and rear brake switches	Check operation and correct if necessary.			<b>V</b>	√	√	√	√	
22	*	Lights and switches	Check operation and correct     Adjust headlight beams.		V	√	√	V	√		

#### TIP\_

- Some maintenance items need more frequent service if you are riding in unusually wet, dusty, sandy or muddy areas, or at full-throttle.
- 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.

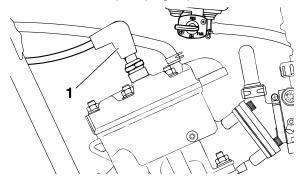
FBU28321

## **Checking the spark plugs**

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

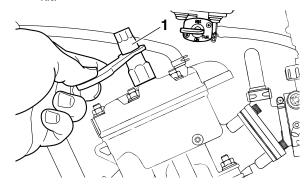
## To remove a spark plug

1. Remove the spark plug cap.



- 1. Spark plug cap
- 2. 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 plugs

- Check that the porcelain insulator around the center electrode of each spark plug is a medium-to-light tan (the ideal color when the ATV is ridden normally).
- 2. Check that all spark plugs installed in the engine have the same color.

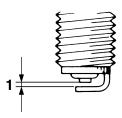
#### TIP

If any 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.

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

Specified spark plug: NGK/BR8ES

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



1. Spark plug gap

Spark plug gap:

0.7-0.8 mm (0.028-0.031 in)

### To install a spark plug

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

Tightening torque:

Spark plug:

20 Nm (2.0 m·kgf, 14 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.

3. Install the spark plug cap.

EBU23346

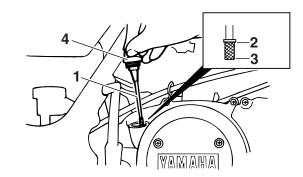
### Transmission oil

The transmission oil level should be checked be-

fore each ride. In addition, the transmission oil must be changed at the intervals specified in the periodic maintenance and lubrication chart.

#### To check the transmission oil level

- 1. Place the ATV on a level surface.
- 2. Start the engine, warm it up for several minutes, and then turn it off.
- Wait a few minutes until the oil settles, remove the transmission oil filler cap, wipe the dipstick off with a clean rag, insert it back into the oil filler hole (without screwing it in), and then remove it again to check the oil level.



- 1. Dipstick
- 2. Maximum level mark
- 3. Tip of the dipstick
- 4. Transmission oil filler cap

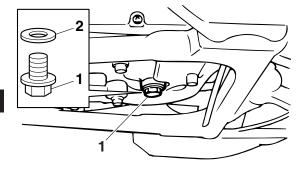
#### TIP

The transmission oil should be between the tip of the dipstick and the maximum level mark.

- 4. If the oil is at or below the tip of the dipstick, add sufficient oil of the recommended type to raise it to the correct level.
- 5. Insert the dipstick into the oil filler hole, and then tighten the oil filler cap.

### To change the transmission oil

- 1. Place the ATV on a level surface.
- Start the engine, warm it up for several minutes, and then turn it off.
- 3. Place an oil pan under the transmission case to collect the used oil.
- Remove the oil filler cap, the transmission oil drain bolt and its gasket to drain the oil from the transmission case.



- 1. Transmission oil drain bolt
- 2. Gasket
- Install the transmission oil drain bolt and its new gasket, and then tighten the bolt to the specified torque.

Tightening torque:

Transmission oil drain bolt: 20 Nm (2.0 m·kgf, 14 ft·lbf)

6. Refill with the specified amount of the recommended transmission oil, and then install and tighten the oil filler cap.

Recommended transmission oil:

See page 10-1.

Oil quantity:

1.5 L (1.59 US qt, 1.32 Imp.qt)

#### TIP.

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

ECB00430

### **NOTICE**

- In order to prevent clutch slippage (since the transmission 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.

- 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.
- 8. Turn the engine off, and then check the oil level and correct it if necessary.

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.

EBU23502

#### To check the coolant level

1. Place the ATV on a level surface.

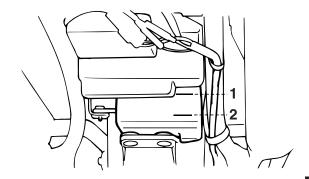
#### TIP

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

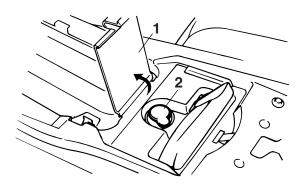
Check the coolant level in the coolant reservoir.

#### TIP\_

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



- 1. Maximum level mark
- 2. Minimum level mark
- 3. If the coolant is at or below the minimum level mark, remove the seat. (See page 4-11.)
- 4. Open the coolant reservoir cover.



- 1. Coolant reservoir cover
- 2. Coolant reservoir cap
- 5. Remove the coolant reservoir cap, add coolant or distilled water to the maximum level mark, and then install the reservoir cap. NOTICE: If coolant is not available, use distilled water or soft tap water instead. Do not use hard water or salt water since they are 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. IECBO10111

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

0.28 L (0.30 US qt, 0.25 Imp.qt)

- 6. Close the coolant reservoir cover.
- 7. Install the seat.

#### TIP \_\_\_\_

If the engine overheats, see page 8-56 for further instructions.

EBU23525

To change the coolant

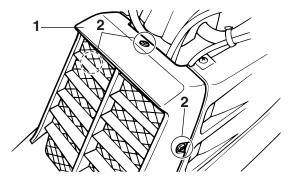
EWB01890

## **WARNING**

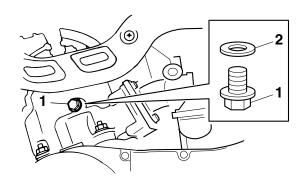
Wait for the engine and radiator to cool before removing the radiator cap. You could be burned by hot fluid and steam blown out under pressure. Always place a thick rag over the cap when opening. Allow any remaining pressure to escape before completely removing the cap.

Place the ATV on a level surface.

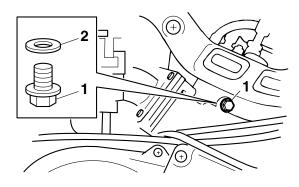
2. Remove the radiator cover by removing the screws.



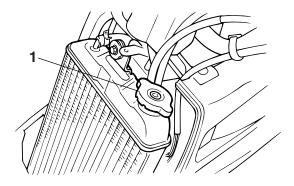
- 1. Radiator cover
- 2. Screw
- 3. Place a container under the engine, and then remove the coolant drain bolts and their gasket.



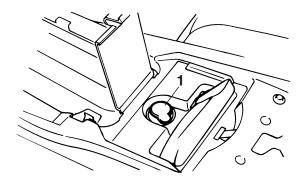
- 1. Coolant drain bolt
- 2. Gasket



- 1. Coolant drain bolt
- 2. Gasket
  - 4. Remove the radiator cap.

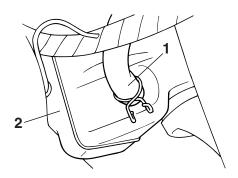


- 1. Radiator cap
- 5. Remove the coolant reservoir cap.



1. Coolant reservoir cap

Disconnect the hose on the coolant reservoir side and drain the coolant from the coolant reservoir.



- 1. Coolant reservoir hose
- 2. Coolant reservoir
- 7. After draining the coolant, thoroughly flush the cooling system with clean tap water.
- 8. Install the coolant drain bolts and their new gasket, and then tighten the bolts to the specified torque.

Tightening torque:

Coolant drain bolt:

14 Nm (1.4 m·kgf, 10 ft·lbf)

- 9. Connect the coolant reservoir hose.
- 10. Pour the recommended coolant into the reser-

voir to the maximum level mark, and then install the reservoir cap. *NOTICE:* Mix antifreeze with distilled water only. However, if distilled water is not available, soft water may be used for refilling. Do not use hard water or salt water since they are harmful to the engine. [ECB00991]

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):

1.50 L (1.59 US qt, 1.32 Imp.qt)

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

0.28 L (0.30 US qt, 0.25 Imp.qt)

- 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.

#### TIP

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

Install the radiator cover by installing the screws.

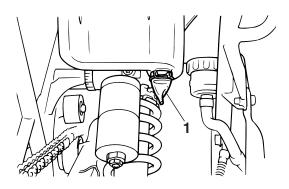
EBU23624

## Cleaning the air filter element

The air filter element should be cleaned at the intervals specified in the periodic maintenance and lubrication chart. Clean or, if necessary, replace the air filter element more frequently if you are riding in unusually wet or dusty areas.

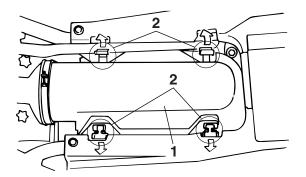
## TIP \_\_\_\_\_

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

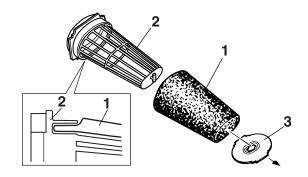
- 1. Place the ATV on a level surface.
- 2. Remove the seat. (See page 4-11.)
- Remove the air filter case cover by unhooking the holders.



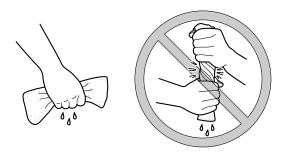
- 1. Air filter case cover
- 2. Air filter case cover holder
- 4. Pull the air filter element out of the air filter case.
- 5. Remove the lock plate by turning it, and then remove the sponge material from the air filter element frame.



1. Air filter element lock plate



- 1. Sponge material
- 2. Air filter element frame
- 3. Air filter element lock plate
- 6. Wash the sponge material gently but thoroughly in solvent. 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.[EWB01941]
- Squeeze the excess solvent out of the sponge material and let it dry. NOTICE: Do not twist the sponge material when squeezing it.[ECB00441]



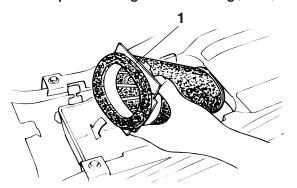
- Check the sponge material and replace it if damaged.
- 9. Apply Yamaha foam air filter oil or other quality foam air filter oil to the sponge material.

#### TIP \_\_\_\_\_

The sponge material should be wet but not dripping.

- Pull the sponge material over the air filter element frame, and then install the lock plate by turning it.
- Insert the air filter element into the air filter case, and then install the air filter case cover by hooking the holders onto the air filter case.
   NOTICE: Make sure that the air filter ele-

ment 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, [ECBO0461]



- 1. Air filter element
- 12. Install the seat.

#### TIP

The air filter element should be cleaned every 20-

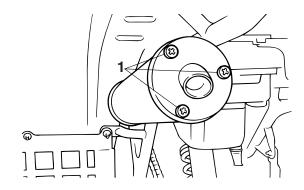
40 hours. It should be cleaned and lubricated more often if the ATV is operated in extremely dusty areas. Each time the air filter element maintenance is performed, check the air inlet of the air filter case for obstructions. Check the air filter case rubber joint to the carburetor fittings and the rubber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

EBU28311

## Cleaning the spark arrester

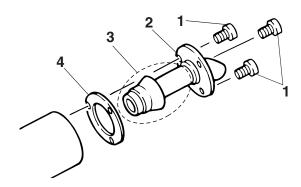
Be sure the exhaust pipe and muffler are cool before cleaning the spark arrester.

1. Remove the screws.



1. Screw

- Remove the tailpipe by pulling it out of the muffler.
- 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. Screw
- 2. Tailpipe
- 3. Spark arrester
- 4. Gasket
- Make sure the gasket is properly positioned, then insert the tailpipe into the muffler and align the screw holes.
- 5. Install the screws and tighten them to the specified torque.

Tightening torque:

Screw:

7 Nm (0.7 m·kgf, 5.1 ft·lbf)

FWR02340



Do not start the engine when cleaning 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.

EBU23994

## **Changing the carburetor settings**

In extremely cold weather, it is necessary to change the carburetor settings to maintain optimum engine performance and to prevent engine damage.

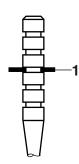
EWB01990

# **M** WARNING

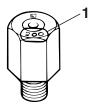
- Improperly servicing or adjusting the carburetors could cause them to malfunction with the possibility of an accident, or the carburetors could leak fuel, which would be a fire hazard.
- Carburetor adjustments should only be performed by a Yamaha dealer. Do not attempt to perform these procedures unless you have mechanical knowledge and the neces-

- sary tools.
- Do not perform this procedure while the engine is hot. Place a rag under each carburetor to catch any fuel. Wipe up any spilled fuel completely.
- After servicing the carburetors, always check the throttle lever operation before operating the ATV to make sure it is working correctly.

Standard settings							
Main jet	#200						
Jet needle clip position	3rd groove						
Pilot air screw	2.0 turns out						



1. Standard position: Groove 3



#### Carburetor setting chart

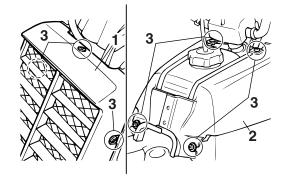
	Altitude								
Temperature	0–1500 m (5000 ft)			Above 1500 m (5000 ft)					
	Main jet	Jet needle	Pilot air screw	Main jet	Jet needle	Pilot air screw			
Above 0 °C (32 °F)	#200	3rd groove	2.0 turns out	#190	3rd groove	2 1/2 turns out			
from +5 °C (41 °F) to -15 °C (5 °F)	#220	3rd groove	1 1/2 turns out	#200	3rd groove	2.0 turns out			
from -10 °C (14 °F) to -30 °C (-22 °F)	#240	4th groove	1 1/2 turns out	#220	3rd groove	1 1/2 turns out			

## Changing the settings of the carburetors

To change the settings of the carburetors, you need to disassemble and remove them. Follow the procedures for both carburetors.

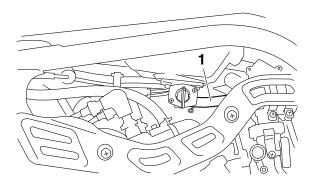
### Disassembling and removing the carburetors

- 1. Turn the fuel cock to the "OFF" position.
- 2. Turn out the carburetor drain screw to drain the fuel.
- 3. Remove the seat.
- 4. Remove the radiator cover and side cover by removing the screws.

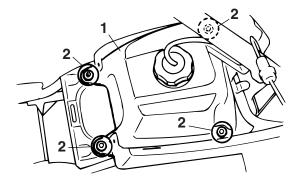


- 1. Radiator cover
- 2. Side cover
- 3. Screw
- 5. Remove the fuel hose from the fuel cock.

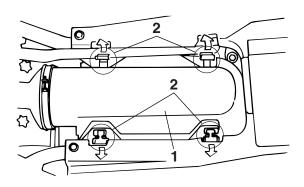




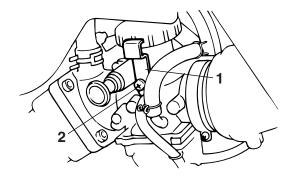
- 1. Fuel hose
- 6. Remove the fuel tank by removing the bolts.



- 1. Fuel tank
- 2. Bolt
- 7. Remove the air filter case cover by unhooking the holders.

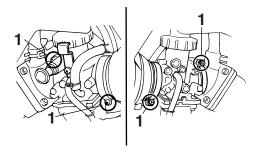


- 1. Air filter case cover
- 2. Air filter case cover holder
- 8. Remove the mixing chamber cap securing plate by removing the screw.



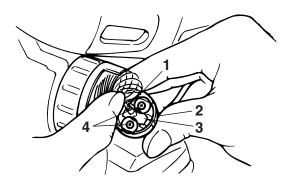
- 1. Mixing chamber cap securing plate
- 2. Screw
- 9. Loosen the carburetor joint screws.



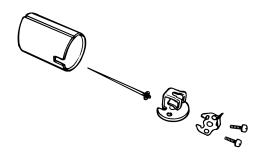


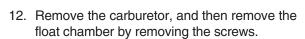


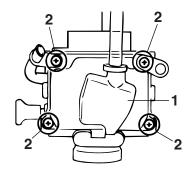
- 10. Remove the mixing chamber cap.
- 11. Remove the throttle cable from the throttle valve, and then remove the throttle cable holder by removing the screws.



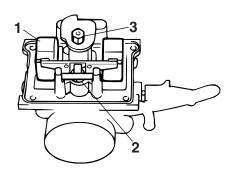
- 1. Throttle cable
- 2. Throttle valve
- 3. Throttle cable holder
- 4. Screw







- 1. Float chamber
- 2. Screw
- 13. Remove the float and needle valve.



- 1. Float
- 2. Needle valve
- 3. Main jet
- 14. Change the main jet and the jet needle clip position.

#### TIP\_

- Optional main jets can be obtained at a Yamaha dealer.
- After the jet needle clip position is changed, the throttle cables may need to be adjusted.

<u>Assembling and installing the carburetors</u>
Assemble and install both carburetors by the fol-

### lowing steps.

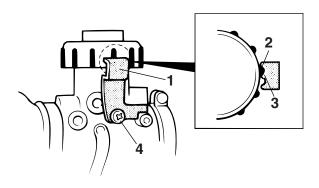
- 1. Install the needle valve and float.
- Install the float chamber by installing the screws.
- Install the carburetor and tighten the joint screws.
- 4. Assemble the throttle valve.
- 5. Install the mixing chamber cap, and then tighten it securely to the specified torque.

## Tightening torque:

Mixing chamber cap:

4 Nm (0.40 m·kgf, 2.9 ft·lbf)

6. Install the mixing chamber cap securing plate by installing the screw. NOTICE: Be sure to match one of the projections on the carburetor cap with one of the slots on the securing plate. If the securing plate does not match a projection, tighten the carburetor cap until they align. Do not loosen the carburetor cap.[ECBO0502]



- 1. Mixing chamber cap securing plate
- 2. Projection
- 3. Slot
- 4. Screw
- 7. Tighten the mixing chamber cap securing plate screw to the specified torque.

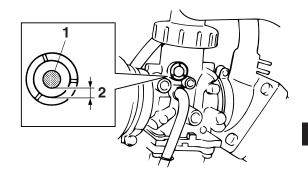
# Tightening torque:

Mixing chamber cap securing plate screw: 3.5 Nm (0.35 m·kgf, 2.5 ft·lbf)

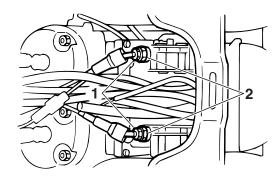
8. Tighten the carburetor joint screws.

## Adjusting the throttle cables

- 1. Move the throttle lever a few times.
- 2. Push the throttle lever forward until it stops and hold it in this position.
- 3. Check through each carburetor window to see if the punch mark on the throttle valve is at the specified position.



- 1. Punch mark
- 2. Specified position: 0-1mm
- 4. If not, loosen the locknut and turn the adjusting nut until the specified position is obtained.



- 1. Adjusting nut
- 2. Locknut
- Move the throttle lever a few times and recheck the position.
- 6. Install the fuel tank, side cover, radiator cover and air filter case cover.
- 7. Connect the fuel hose to the fuel cock.
- 8. Install the seat.

#### EBU24020

# Adjusting the engine idling speed

The engine idling speed must be checked and, if necessary, adjusted as follows at the intervals specified in the periodic maintenance and lubrication chart.

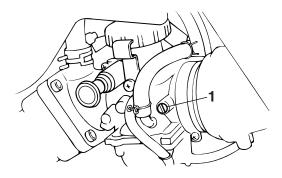
#### TIP\_

- A diagnostic tachometer is needed to make this adjustment.
- The carburetor synchronization and the throttle cable free play must be checked, and adjusted if necessary, before adjusting the engine idling speed.
- 1. Start the engine and warm it up.

#### TIP \_\_\_\_

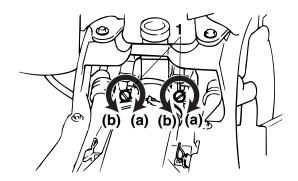
The engine is warm when it quickly responds to the throttle.

- 2. Attach the tachometer to the spark plug lead.
- 3. Turn in both pilot air screws until they lightly seat.
- 4. Turn out both pilot air screws to specification. (See the "Changing the carburetor settings" section on the page 8-23.)



1. Pilot air screw

- 5. Remove the seat. (See page 4-11.)
- Check the engine idling speed and, if necessary, adjust it to specification by turning the throttle stop screws at the carburetors. To increase the engine idling speed, turn the throttle stop screws in direction (a), and to decrease it, turn the screws in direction (b).



1. Throttle stop screw

Engine idling speed: 1450–1550 r/min

ECB00510

#### **NOTICE**

- The throttle stop screws were preset at the factory. When adjusting the idling speed, turn both throttle stop screws the same amount, otherwise the carburetor synchronization will be incorrect.
- Adjusting the pilot air screws and the idling speed are separate procedures, but they must be adjusted at the same time to achieve

#### optimum engine performance.

#### TIP\_\_

If the specified idling speed cannot be obtained as described above, have a Yamaha dealer make the adjustment.

7. Install the seat.

#### EBU24047

# Adjusting the throttle lever free play

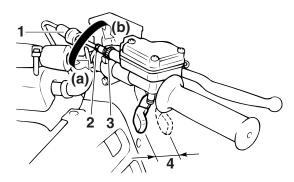
The throttle lever free play should be checked and, if necessary, adjusted at the intervals specified in the periodic maintenance and lubrication chart. The throttle lever free play should measure 4.0–6.0 mm (0.16–0.24 in) as shown. Periodically check the throttle lever free play and, if necessary, adjust it as follows.

#### TIP

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

- 1. Slide the rubber cover back.
- 2. Loosen the locknut.
- 3. To increase the throttle lever free play, turn the throttle lever free play adjusting bolt in di-

rection (a). To decrease the throttle lever free play, turn the adjusting bolt in direction (b).



- 1. Rubber cover
- 2. Throttle lever free play adjusting bolt
- 3. Locknut
- 4. Throttle lever free play
- 4. Tighten the locknut.
- 5. Slide the rubber cover to its original position.

#### EBU29601

#### **Brakes**

Replacement of brake components requires professional knowledge. Brake service should be performed by a Yamaha dealer.

Operating with improperly serviced or adjusted brakes could lead to a loss in braking ability and an accident.

EBU29821

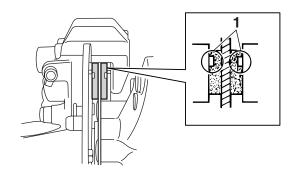
# Checking the front and rear brake pads

The front and rear brake pads must be checked for wear at the intervals specified in the periodic maintenance and lubrication chart. Each brake pad is provided with two 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 a wear indicator groove almost appears, have a Yamaha dealer replace the brake pads as a set.

#### TIP

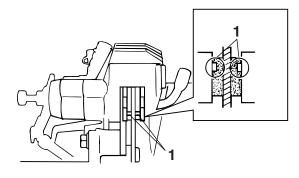
The wheels need to be removed to check the brake pads. (See page 8-53.)

#### Front brake



1. Wear indicator groove

#### Rear brake



1. Wear indicator groove

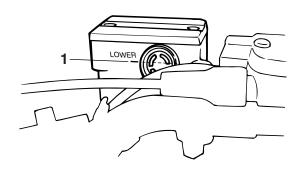
EBU29840

# Checking the brake fluid level

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

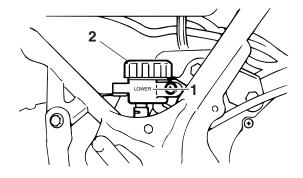
Before riding, check that the brake fluid is above the minimum level mark and replenish if necessary. A low brake fluid level may indicate worn brake pads and/or brake system leakage. If the brake fluid level is low, be sure to check the brake pads for wear and the brake system for leakage.

#### Front brake



1. Minimum level mark

#### Rear brake



- 1. Minimum level mark
- 2. Brake fluid reservoir cap

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

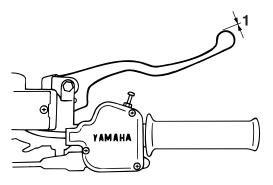
Have a Yamaha dealer change the brake fluid at the intervals specified in the TIP after the periodic maintenance and lubrication chart. In addition, have the oil seals of the master cylinders and calipers as well as the brake hoses replaced at the intervals listed below or whenever they are damaged or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

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

EBU24394

# 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.



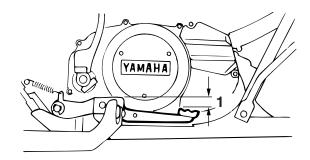
1. No brake lever free play

EBU24613

# Checking the brake pedal height

The brake pedal height 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

10.0 mm (0.39 in) below the top of the footrest as shown. If the brake pedal is not positioned as specified, have a Yamaha dealer adjust it.

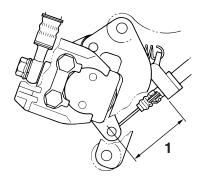


1. Brake pedal height

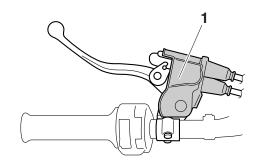
EBU30171

# Adjusting the parking brake free play

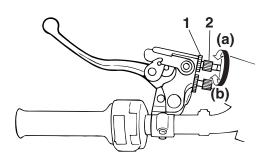
The parking brake free play must be checked and, if necessary, adjusted at the intervals specified in the periodic maintenance and lubrication chart. Cable length "A" should measure 46–50 mm (1.81–1.97 in). Adjust the parking brake free play as follows.



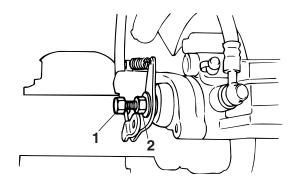
- 1. Cable length "A"
  - 1. Release the parking brake.
- 2. Slide the rubber cover back.



- 1. Rubber cover
- 3. Fully loosen the locknut and the adjusting bolt at the clutch lever.



- 1. Locknut
- 2. Adjusting bolt
- 4. Loosen the locknut and the adjusting bolt at the rear brake caliper.



- 1. Adjusting bolt
- 2. Locknut
- 5. Turn the adjusting bolt at the clutch lever in direction (a) to increase the cable length, and in direction (b) to decrease it.

#### TIP\_

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

- 6. Tighten the locknut at the clutch lever.
- 7. Slide the rubber cover back to its original position.
- 8. Turn in the adjusting bolt at the rear brake caliper by hand until it feels tight, then turn it out

1/8 turn and tighten its locknut to the specified torque. *NOTICE:* When tightening the locknut, hold the adjusting bolt with a wrench so that it does not turn together with the locknut. [ECBRO0521]

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.

EBU24742

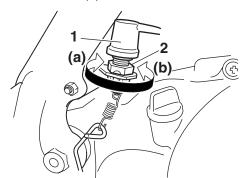
# **Brake light switches**

The brake light, which is activated by the brake pedal and brake lever, should come on just before

braking takes effect.

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

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. Rear brake light switch adjusting nut

EBU24812

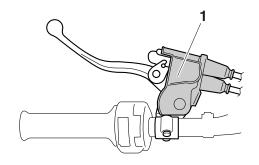
# Adjusting the clutch lever free play

The clutch lever free play must be checked and, if

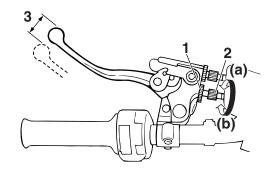
necessary, adjusted at the intervals specified in the periodic maintenance and lubrication chart.

The clutch lever free play should measure 5.0–10.0 mm (0.20–0.39 in) as shown. If the free play is incorrect, adjust it as follows.

1. Slide the rubber cover back.



- 1. Rubber cover
- 2. Loosen the locknut at the clutch lever.
- 3. To increase the clutch lever free play, turn the adjusting bolt in direction (a), and to decrease it, turn the bolt in direction (b).



- 1. Locknut
- 2. Clutch lever free play adjusting bolt
- 3. Clutch lever free play
- 4. Tighten the locknut.
- 5. Slide the rubber cover back to its original position.

#### 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.

FBU24853

#### **Drive chain slack**

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

#### To check the drive chain slack

Place the ATV on a level surface.

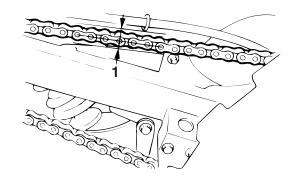
#### TIP \_\_\_\_

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.

Drive chain slack:

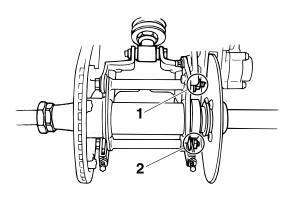
12.0–18.0 mm (0.47–0.71 in)



- 1. Drive chain slack
- 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 axle holding nuts.

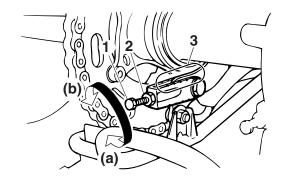


- 1. Axle holding nut (upper)
- 2. Axle holding nut (lower)
- 3. Loosen the locknut on each side of the swingarm. To tighten the drive chain, turn the adjusting bolts in direction (a). To loosen the drive chain, turn the adjusting bolts in direction (b) and push the wheels forward. Turn each adjusting bolt exactly the same amount to maintain correct axle alignment. 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.[ECB00542]

#### TIP\_

There are alignment marks on each side of the swingarm and on the wheel hubs. Use them to check for proper wheel axle alignment.



- 1. Drive chain slack adjusting bolt
- 2. Locknut
- 3. Alignment marks
- 4. Tighten the locknuts and the axle holding nuts to the specified torques.

Tightening torques:

Locknut:

16 Nm (1.6 m·kgf, 12 ft·lbf)

Axle holding nut (upper):

120 Nm (12 m·kgf, 87 ft·lbf)

Axle holding nut (lower):

60 Nm (6.0 m·kgf, 43 ft·lbf)

FBI 124882

# Lubricating the drive chain

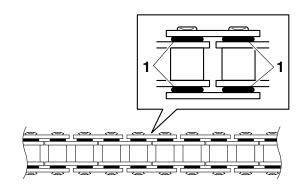
The drive chain must be cleaned and lubricated at the intervals specified in the periodic maintenance and lubrication chart, otherwise it will quickly wear out, especially when riding in dusty or wet areas. Service the drive chain as follows.

ECB00561

# **NOTICE**

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

 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. [ECB00571]



- 1. O-ring
- 2. Wipe the drive chain dry.
- 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 Orings.[ECBO0581]

EBU24901

# 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

EWB02581

# **↑** 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.
- 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.

EBU24922

# 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.

Recommended lubricants:

Brake lever:

Silicone grease

Clutch lever:

Lithium-soap-based grease

EBUM0170

# Checking the shift pedal

The operation of the shift pedal should be checked before each ride. If operation is not smooth, have a Yamaha dealer check the vehicle.

EBU28871

# Checking and lubricating the brake pedal

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

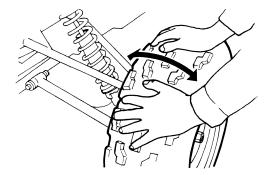
Recommended lubricant:

Lithium-soap-based grease

FBU24963

# 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.



FBU25004

# Lubricating the rear suspension relay arm and connecting arm pivoting points

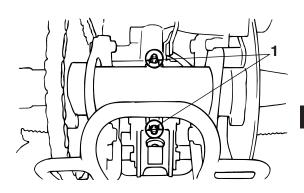
The rear suspension relay arm and connecting arm pivoting points must be lubricated at the intervals specified in the periodic maintenance and lu-

brication chart.

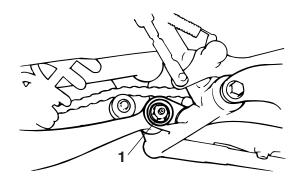
#### TIP.

For parts equipped with a grease nipple, use a grease gun.

Recommended lubricant: Lithium-soap-based grease



1. Grease nipple



1. Grease nipple

EBU25033

# Lubricating the upper and lower arm pivots

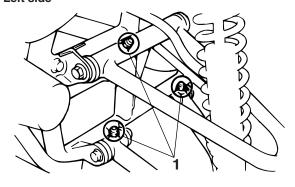
The upper and lower arm pivots must be lubricated at the intervals specified in the periodic maintenance and lubrication chart.

#### TIP \_\_\_\_

For parts equipped with a grease nipple, use a grease gun.

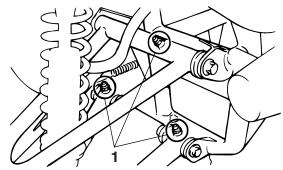
Recommended lubricant: Lithium-soap-based grease

#### Left side



1. Grease nipple

# Right side



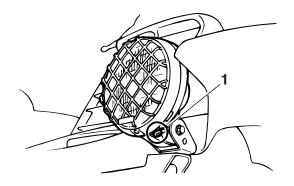
1. Grease nipple

EBU26882

# Replacing a headlight bulb

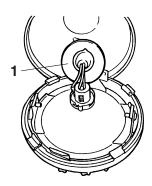
If a headlight bulb burns out, replace it as follows.

1. Remove the headlight unit by removing the screw.

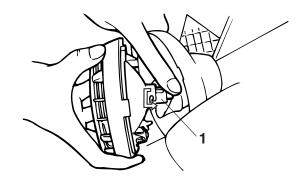


1. Screw

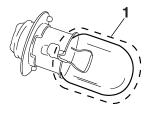
2. Remove the headlight bulb holder cover.



- 1. Headlight bulb holder cover
- Remove the bulb holder by turning it counterclockwise.

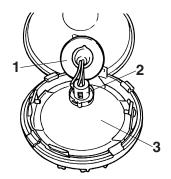


- 1. Headlight bulb holder
- 4. Remove the burnt-out bulb.
- 5. Place a new bulb into position, and then install the bulb holder by turning it clockwise. NOTICE: Do not touch the glass part of the headlight bulb to keep it free from oil, otherwise the transparency of the glass, the luminosity of the 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. IECBO005511









- 1. Headlight bulb holder cover
- 2. Headlight bulb holder
- 3. Headlight unit
- 7. Place the headlight unit in the original position, and then install the screw.
- 8. Adjust the headlight beam if necessary.

EBU25551

# Adjusting a headlight beam

ECB00690

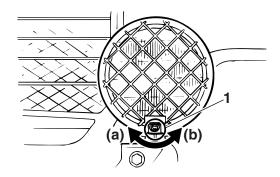
## **NOTICE**

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).



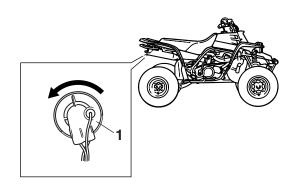
1. Headlight beam adjusting screw

#### EBU25611

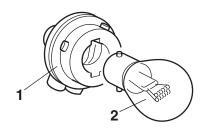
# Replacing the tail/brake light bulb

If the tail/brake light bulb burns out, replace it as follows.

1. Remove the bulb holder (together with the bulb) by turning it counterclockwise.



- 1. Tail/brake light bulb holder
- 2. Remove the burnt-out bulb by pushing it in and turning it counterclockwise.

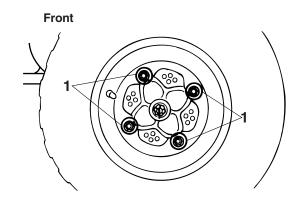


- 1. Tail/brake light bulb holder
- 2. Tail/brake light bulb
- 3. Insert a new bulb into the bulb holder, push it in, and then turn it clockwise until it stops.
- 4. Install the bulb holder (together with the bulb) by turning it clockwise.

#### EBU25651

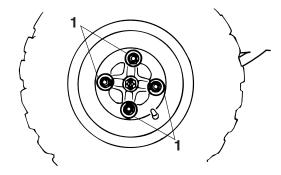
# Removing a wheel

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



1. Wheel nut

#### Rear



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

#### EBU25661

# Installing a wheel

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

### 1. Fuel

Check the fuel level in the fuel tank.

There is enough fuel.

There is enough fuel.

There is no fuel.

Supply fuel.

The engine does not start. Check the compression.

# 2. Compression

Operate the kickstarter.

There is compression.

Check the ignition.

Have a Yamaha dealer check the ATV.

# 3. Ignition

Remove the spark plugs and check the electrodes.

Wet

Wipe off with a dry cloth and correct the spark plug gaps, or replace the spark plugs.

The Have a Yamaha dealer check the ATV.

Open the throttle halfway and operate the kickstarter.

The engine does not start.

Have a Yamaha dealer check the ATV.

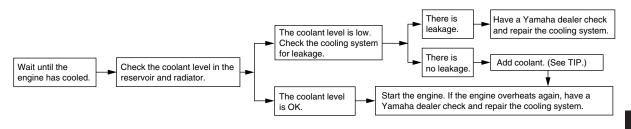
R

# **Engine overheating**

FWB02290

# **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.



#### 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

EBU25921

# 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.
  - Make sure the spark plugs and all filler caps are properly installed.
- 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. WARNING! 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. [EWB02311] NOTICE: Excessive water pres-

- sure may cause water seepage and deterioration of wheel bearings, brakes, transmission seals and electrical devices. Many expensive repair bills have resulted from improper high-pressure detergent applications such as those available in coin-operated car washers. [ECB00711]
- 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.
- 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.

FBU25952

# **Storage**

#### Short-term

Always store your ATV in a cool, dry place and, if necessary, protect it against dust with a porous cover. *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. [ECROO721]

#### 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".
- 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 cylinders, piston rings, etc. from corrosion.
  - a. Remove the spark plug caps and spark plugs.
  - b. Pour a teaspoonful of engine oil into each spark plug bore.
  - c. Install the spark plug caps onto the spark plugs, and then place the spark plugs 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 walls with oil.)
  - e. Remove the spark plug caps from the spark plugs, and then install the spark plugs and the spark plug caps.
- 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. Alternative-

9

- ly, 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.

# TIP \_\_\_\_\_

Make any necessary repairs before storing the ATV.

**Dimensions:** Overall length: 1855 mm (73.0 in)

Overall width:

Seat height:

Wheelbase:

With oil and fuel: 187.0 kg (412 lb) Noise and vibration level: Noise level (77/311/EEC): 82.7 dB(A) (EUR) Vibration on seat (EN1032, I

Weight:

1100 mm (43.3 in) Overall height: 1080 mm (42.5 in)

1280 mm (50.4 in) Ground clearance: 135 mm (5.3 in) Minimum turning radius: 3600 mm (142 in)

Vibration on handlebar (EN1

# **SPECIFICATIONS**

C -- -- !-- - -

	Engine:
rerall length:  1855 mm (73.0 in)  rerall width:  1100 mm (43.3 in)  rerall height:  1080 mm (42.5 in)  real height:  800 mm (31.5 in)  reelbase:  1280 mm (50.4 in)  round clearance:  135 mm (5.3 in)  nimum turning radius:  3600 mm (142 in)  ght:  th oil and fuel:  187.0 kg (412 lb)  re and vibration level:  bise level (77/311/EEC):  82.7 dB(A) (EUR)  pration on seat (EN1032, ISO5008):  Will not exceed 0.5 m/s² (EUR)  pration on handlebar (EN1032, ISO5008):  Will not exceed 2.5 m/s² (EUR)	Engine type: Liquid cooled 2-stroke  Cylinder arrangement: Forward-inclined parallel 2-cylinder  Displacement: 347 cm³  Bore × stroke: 64.0 × 54.0 mm (2.52 × 2.13 in)  Compression ratio: 6.50 :1  Starting system: Kickstarter Lubrication system: Premix  Type: YAMALUBE 2-R, Castrol R30, A545, A747  Engine oil quantity: Premix ratio (1): YAMALUBE R 24:1  Transmission oil:  Type: SAE 10W-30 type SE motor oil (EUR) YAMALUBE 4 (10W-40) or SAE 10W-40 type SE motor oil (AUS)(NZL) Quantity:
Will not exceed 2.5 m/s <sup>-</sup> (EUR)	1.5 L (1.59 US qt, 1.32 Imp.qt)

Cooling system:	Secondary reduction system:
Coolant reservoir capacity (up to the maximum level mark):	Chain drive
0.28 L (0.30 US qt, 0.25 Imp.qt)	Secondary reduction ratio:
Radiator capacity (including all routes):	41/14 (2.929)
1.50 L (1.59 US qt, 1.32 Imp.qt)	Transmission type:
Air filter:	Constant mesh 6-speed
Air filter element:	Operation:
Wet element	Left foot operation
Fuel:	1st:
Recommended fuel:	32/13 (2.461)
Premium unleaded gasoline only	2nd:
Fuel tank capacity:	29/16 (1.812)
12.0 L (3.17 US gal, 2.64 Imp.gal)	3rd:
Fuel reserve amount:	27/18 (1.500)
2.5 L (0.66 US gal, 0.55 lmp.gal)	4th:
Carburetor:	25/20 (1.250)
Type × quantity:	5th:
VM26SS x 2	23/22 (1.045)
Spark plug (s):	6th:
Manufacturer/model:	21/24 (0.875)
NGK/BR8ES	Chassis:
Spark plug gap:	Frame type:
0.7–0.8 mm (0.028–0.031 in)	Steel tube frame
0.7-0.6 mm (0.020-0.03 m)	Caster angle:
	9.0 °
Clutch type:	Trail:
Wet, multiple-disc	40.0 mm (1.57 in)
	Front tire:
Primary reduction system:	Type:
Helical gear	Tubeless
Primary reduction ratio:	Size:
66/23 (2.869)	AT21 x 7-10

Manufacturer/model: Rear wheel: DUNLOP/KT851B Wheel type: Rear tire: Panel wheel Type: Rim size: **Tubeless** 9 x 8.5AT Size: Front brake: AT20 x 10-9 Type: Manufacturer/model: Dual disc brake **DUNI OP/KT877A** Operation: Loading: Right hand operation Maximum loading limit: Recommended fluid: DOT 4 100.0 kg (220 lb) (Total weight of rider, cargo, accessories, and tongue) Rear brake: Tire air pressure (measured on cold tires): Type: Recommended: Single disc brake Front: Operation: 30.0 kPa (0.300 kgf/cm<sup>2</sup>, 4.4 psi) Right foot operation Rear: Recommended fluid: 30.0 kPa (0.300 kgf/cm<sup>2</sup>, 4.4 psi) DOT 4 Minimum: Front suspension: Front: Type: 27.0 kPa (0.270 kgf/cm<sup>2</sup>, 4.0 psi) Double wishbone Rear: Spring/shock absorber type: 27.0 kPa (0.270 kgf/cm<sup>2</sup>, 4.0 psi) Coil spring/oil damper Front wheel: Wheel travel: Wheel type: 230 mm (9.1 in) Panel wheel Rear suspension: Rim size: Type: 10 x 6.0AT Swingarm (link suspension) Spring/shock absorber type: Coil spring/gas-oil damper

Wheel travel:

220 mm (8.7 in)

#### **Electrical system:**

Ignition system:

CDI

Charging system:

AC magneto

#### Headlight:

Bulb type:

Krypton bulb

# Bulb voltage, wattage $\times$ quantity:

Headlight:

12 V, 30.0/30.0 W × 2

Tail/brake light:

12 V, 5.0/21.0 W × 1

#### 1

# CONSUMER INFORMATION

EBU28200

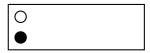
#### Identification numbers

Record the 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.

VEHICLE IDENTIFICATION NUMBER:



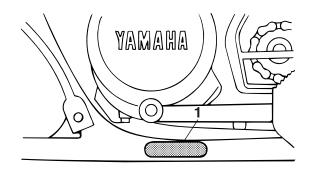
MODEL LABEL INFORMATION:



EBU26041

#### 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

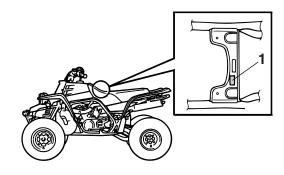
#### TIP

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

# **INDEX**

<i>t</i>	E	
Accessories and loading6-6	Engine break-in	6-4
Air filter element, cleaning 8-18	Engine, cold start	6-1
3	Engine idling speed	8-32
Brake and clutch levers, checking and lubricating 8-46	Engine, starting a warm	6-2
Brake fluid, changing 8-37	Engine stop switch	4-2
Brake fluid level, checking 8-36	F	
Brake lever 4-4	Fuel	4-8
Brake lever free play, checking the front 8-38	Fuel and 2-stroke engine oil mixing ratio	5-3
Brake light switches 8-41	Fuel cock	4-9
Brake pads, checking the front and rear 8-35	Fuel tank cap	4-7
Brake pedal4-5	Н	
Brake pedal, checking and lubricating 8-46	Handlebar switches	4-2
Brake pedal height, checking 8-38	Headlight beam, adjusting	8-51
Brakes 8-34	Headlight bulb, replacing	8-49
Brakes, front and rear5-3	1	
	Identification numbers	11-1
Cables, checking and lubricating 8-45	Instruments, lights and switches	5-7
Carburetor settings, changing 8-23	K	
Chassis fasteners5-6	Kickstarter	4-7
Cleaning9-1	L	
Clutch lever4-4	Label locations	1-1
Clutch lever free play, adjusting 8-41	Light switch	
Coolant 5-3, 8-13	M	–
	Main switch	4-1
Drive chain 5-4	Maintenance and lubrication chart	
Drive chain, lubricating 8-45	Maintenance chart, emission control system	
Drive chain slack 8-43	Model label	

0
Owner's manual and tool kit8-1
P
Parking 6-5
Parking brake 4-5
Parking brake free play, adjusting8-38
Parking on a slope6-6
Part locations 3-1
R
Riding your ATV7-1
S
Safety information2-1
Seat4-11
Shifting 6-2
Shift pedal4-7
Shift pedal, checking8-46
Shock absorber assemblies, adjusting the front 4-12
Shock absorber assembly, adjusting the rear 4-13
Spark arrester, cleaning 8-22
Spark plugs, checking8-9
Specifications 10-1
Speed limiter
Starter (choke)
Storage9-2
Suspension, lubricating the upper and lower arm
pivots 8-48
Suspension relay arm and connecting arm pivoting
points, lubricating the rear 8-47
T
Tail/brake light bulb, replacing8-52
Throttle lever 4-2, 5-4
,

Throttle lever free play, adjusting	8-34
Throttle OverRide System	
Tires	5-4
Transmission oil	5-3, 8-10
Troubleshooting	8-54
Troubleshooting charts	8-56
<i>I</i>	
Vehicle identification number	11-1
N	
Wheel hub bearings, checking	8-47
Wheel, installing	8-54
Wheel, removing	
,	



PRINTED ON RECYCLED PAPER

PRINTED IN JAPAN 2010.05-0.3×1