

A close-up, low-angle shot of the front of a Yamaha Royal Star XVZ1300A motorcycle. The image is dominated by the chrome headlight assembly, which is illuminated, casting a warm glow. The fuel tank is visible on the left, featuring a red and chrome finish with the 'Royal Star' logo. The background is dark, with a large, faint, stylized star graphic. The overall mood is dramatic and emphasizes the motorcycle's design and lighting.

Royal Star

XVZ1300A

OWNER'S MANUAL



YAMAHA

Welcome to the Yamaha world of motorcycling!

As the owner of a XVZ1300A, you are benefiting from Yamaha's vast experience in and newest technology for the design and the manufacture of high-quality products, which have earned Yamaha a reputation for dependability.

Please take the time to read this manual thoroughly, so as to enjoy all your XVZ1300A's advantages. The owner's manual does not only instruct you in how to operate, inspect and maintain your motorcycle, but also in how to safeguard yourself and others from trouble and injury.

In addition, the many tips given in this manual will help to keep your motorcycle in the best possible condition. If you have any further questions, do not hesitate to contact your Yamaha dealer.

The Yamaha team wishes you many safe and pleasant rides. So, remember to put safety first!

IMPORTANT MANUAL INFORMATION

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



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



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

CAUTION:

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

NOTE:

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

NOTE:

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

IMPORTANT MANUAL INFORMATION



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

IMPORTANT MANUAL INFORMATION

XVZ1300A

OWNER'S MANUAL

© 1999 by Yamaha Motor Co., Ltd.

1st Edition, August 1999

**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

1 GIVE SAFETY THE RIGHT OF WAY	1
2 DESCRIPTION	2
3 INSTRUMENT AND CONTROL FUNCTIONS	3
4 PRE-OPERATION CHECKS	4
5 OPERATION AND IMPORTANT RIDING POINTS	5
6 PERIODIC MAINTENANCE AND MINOR REPAIR	6
7 MOTORCYCLE CARE AND STORAGE	7
8 SPECIFICATIONS	8
9 CONSUMER INFORMATION	9
INDEX	



GIVE SAFETY THE RIGHT OF WAY

GIVE SAFETY THE RIGHT OF WAY 1-1



GIVE SAFETY THE RIGHT OF WAY

Motorcycles are fascinating vehicles, which can give you an unsurpassed feeling of power and freedom. However, they also impose certain limits, which you must accept; even the best motorcycle does not ignore the laws of physics.

Regular care and maintenance are essential for preserving your motorcycle's value and operating condition. Moreover, what is true for the motorcycle is also true for the rider: good performance depends on being in good shape. Riding under the influence of medication, drugs and alcohol is, of course, out of the question. Motorcycle riders - more than car drivers - must always be at their mental and physical best. Under the influence of even small amounts of alcohol, there is a tendency to take dangerous risks.

Protective clothing is as essential for the motorcycle rider as seat belts are for car drivers and passengers. Always wear a complete motorcycle suit (whether made of leather or tear-resistant synthetic materials with protectors), sturdy boots, motorcycle gloves and a properly fitting helmet. Optimum protective wear, however, should not encourage carelessness. Though full-coverage helmets and suits, in particular, create an illusion of total safety and protection, motorcyclists will always be vulnerable. Riders who lack critical self-control run the risk of going too fast and are apt to take chances. This is even more dangerous in wet weather. The good motorcyclist rides safely, predictably and defensively - avoiding all dangers, including those caused by others.

Enjoy your ride!

Left view 2-1

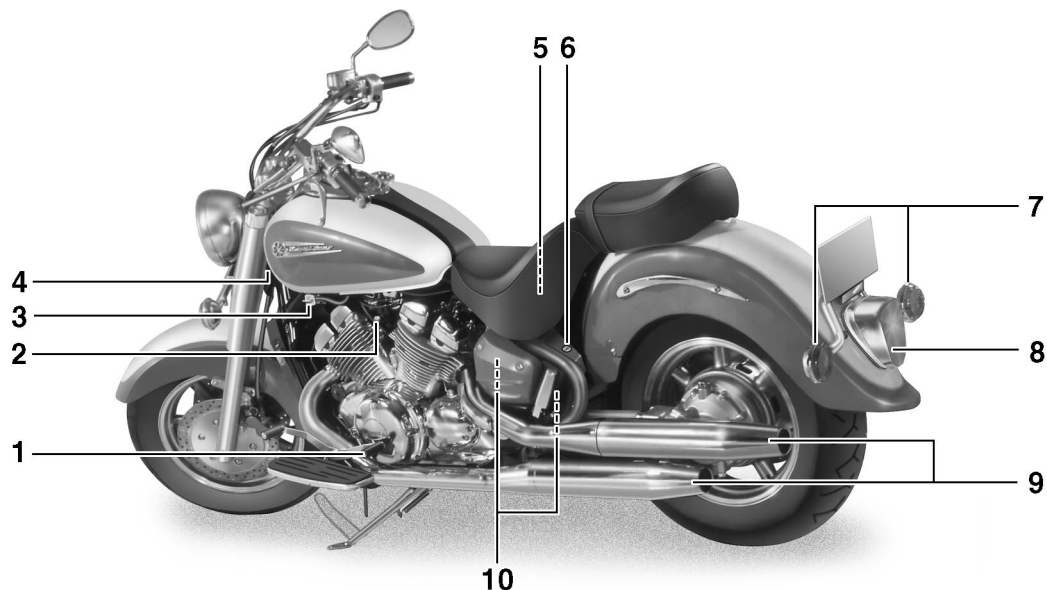
Right view..... 2-2

Controls/Instruments 2-3

DESCRIPTION

Left view

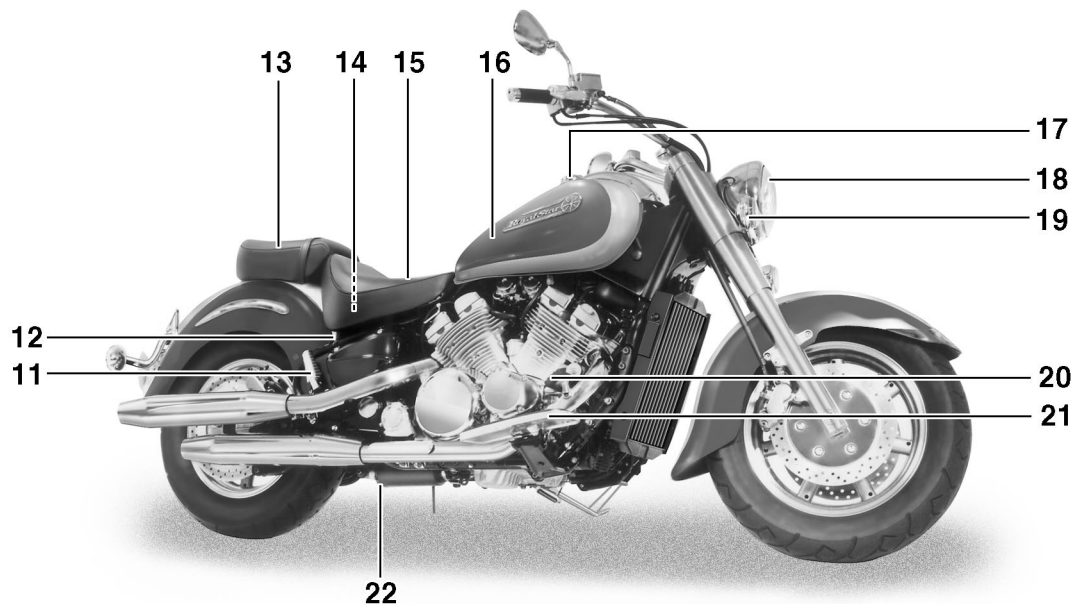
2



- 1. Shift pedal (page 3-6)
- 2. Starter (choke) knob (page 3-9)
- 3. Fuel cock (page 3-8)
- 4. Steering lock (page 3-9)
- 5. Tool kit (page 6-1)

- 6. Seat lock (page 3-10)
- 7. Rear turn signal lights (page 6-28)
- 8. Tail/brake light (page 6-28)
- 9. Mufflers
- 10. Fuses (page 6-25)

Right view



11. Passenger footrest

12. Main switch

13. Passenger seat

14. Helmet holders

15. Rider seat

16. Fuel tank

17. Fuel tank cap

(page 3-1)

(page 3-11)

(page 3-10)

(page 3-7)

(page 3-7)

18. Headlight

19. Front turn signal light

20. Rear brake pedal

21. Rider footrest

22. Rear shock absorber spring

preload adjusting nut

(page 6-27)

(page 6-28)

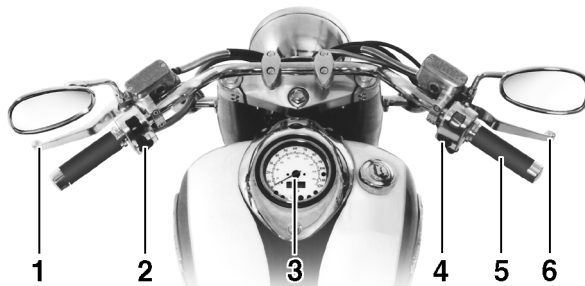
(page 3-6)

(page 3-13)

DESCRIPTION

Controls/Instruments

2



- 1. Clutch lever
- 2. Left handlebar switches
- 3. Speedometer

(page 3-5)
(page 3-4)
(page 3-3)

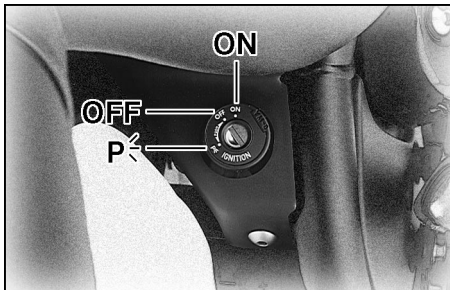
- 4. Right handlebar switches
- 5. Throttle grip
- 6. Front brake lever

(page 3-5)
(page 6-12)
(page 3-6)

INSTRUMENT AND CONTROL FUNCTIONS

Main switch.....	3-1
Indicator lights	3-1
Speedometer.....	3-3
Antitheft alarm (optional)	3-3
Handlebar switches.....	3-4
Clutch lever	3-5
Shift pedal	3-6
Front brake lever.....	3-6
Rear brake pedal.....	3-6
Fuel tank cap.....	3-7
Fuel	3-7
Fuel cock.....	3-8
Starter (choke) knob.....	3-9
Steering lock	3-9
Rider seat.....	3-10
Helmet holders	3-11
Adjusting front fork preload	3-12
Adjusting rear shock absorber preload	3-13
Sidestand	3-15
Sidestand/clutch switch operation check.....	3-15

INSTRUMENT AND CONTROL FUNCTIONS



P (Parking)

The taillight and auxiliary light come on but all other circuits are off. With the key at “OFF”, push it into the main switch, turn it counterclockwise to “P”, and remove it. To cancel the parking, turn the key clockwise.



Main switch

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

ON

Electrical circuits are switched on. The engine can be started. The key cannot be removed in this position.

OFF

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

Indicator lights

1. High beam indicator light “ ”

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

2. Fuel level indicator light “ ”

When the fuel level drops below approximately 3.5 L, this light will come on. When this light comes on, switch the fuel cock to “RES”. Then, fill the tank at the first opportunity.

3. Neutral indicator light “**N**”

This indicator comes on when the transmission is in neutral.

4. Turn indicator light “↵ ↶”

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

5. Oil level indicator light “ ”

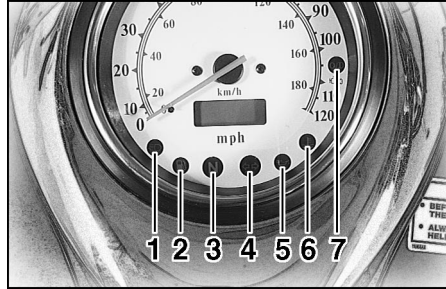
This indicator light will come on if the oil level is low. To check that the indicator light is working properly:

- Turn the engine stop switch to “○” and the main switch to “ON”.
- Put the transmission in neutral or apply the clutch lever.
- Push the start switch.

If the indicator light does not come on while pushing the start switch, have a Yamaha dealer inspect the electrical circuit.

NOTE:

Even if the oil is filled to the specified level, the indicator light may flicker when riding on a slope or during sudden acceleration or deceleration, but this is normal.



6. Engine overheat indicator light “ ”

This indicator light will come on if the engine overheats. If the light comes on, stop the engine immediately and allow the engine to cool. To check that the indicator light is working properly:

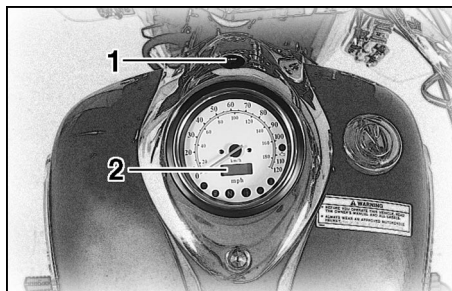
- Turn the engine stop switch to “○” and the main switch to “ON”.
- Put the transmission in neutral or apply the clutch lever.
- Push the start switch.

If the indicator light does not come on while pushing the start switch, have a Yamaha dealer inspect the electrical circuit.

7. Overdrive / Engine trouble indicator light “O/D / ”

- This indicator light will come on when the transmission is in overdrive (5th gear).
- This indicator light will also come on or flash if trouble occurs in an engine monitoring circuit. In such a case, take the motorcycle to a Yamaha dealer to have the self-diagnostic systems checked.

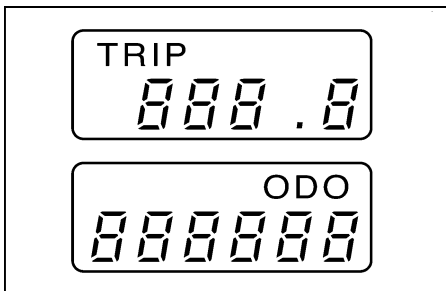
INSTRUMENT AND CONTROL FUNCTIONS



1. "TRIP" button
2. Odometer/Trip meter

Speedometer

This speedometer is equipped with an odometer and a trip meter. Pushing the "TRIP" button will change the display from one to the other. When set to "ODO", it indicates the motorcycle's total mileage. When set to "TRIP", it indicates the motorcycle's mileage since the trip meter was last reset. Use the trip meter to estimate how far you can ride on a tank of fuel. This information will enable you to plan fuel stops in the future.

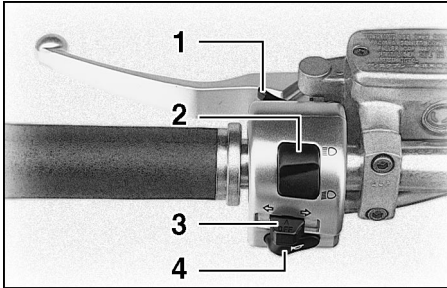


To reset the trip meter to "0", push the "TRIP" button until it displays "TRIP", then push it once again and hold it down for at least one second.

NOTE: _____
This motorcycle does not have a tachometer. However, it is equipped with an engine speed limiter, which prevents the engine speed from exceeding approximately 6,000 r/min and the vehicle from exceeding a top riding speed of approximately 180 km/h.

Antitheft alarm (optional)

An antitheft alarm can be equipped to this motorcycle. Consult your Yamaha dealer to obtain and install the alarm.



3. Turn signal switch

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

Handlebar switches

1. Pass switch “”

Press the switch to operate the passing light.

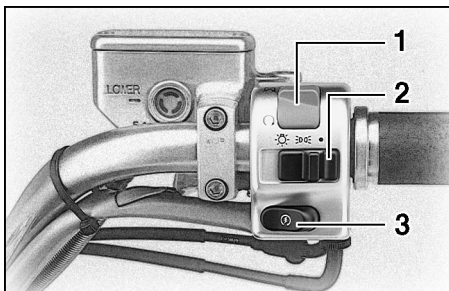
2. Dimmer switch

Turn the switch to “” for the high beam and to “” for the low beam.

4. Horn switch “”

Press the switch to sound the horn.

INSTRUMENT AND CONTROL FUNCTIONS



1. Engine stop switch

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

2. Lights switch

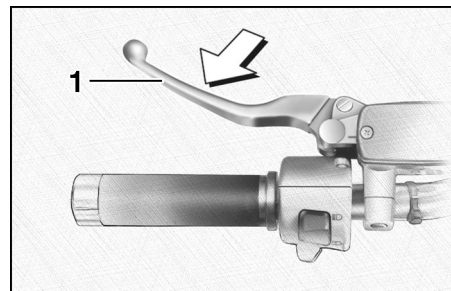
Turning the light switch to “≧D ≦”, turns on the auxiliary light, meter lights and taillight. Turning the light switch to “☀” turns the headlight on also.

3. Start switch “➡”

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

CAUTION:

See starting instructions prior to starting the engine.

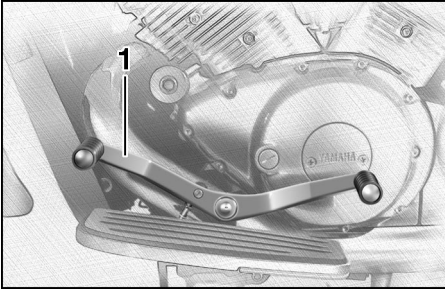


1. Clutch lever

Clutch lever

The clutch lever is located on the left handlebar, and the ignition circuit cut-off system is incorporated in the clutch lever holder. Pull the clutch lever to the handlebar to disengage the clutch, and release the lever to engage the clutch. The lever should be pulled rapidly and released slowly for smooth clutch operation. (Refer to the engine starting procedures for a description of the ignition circuit cut-off system.)

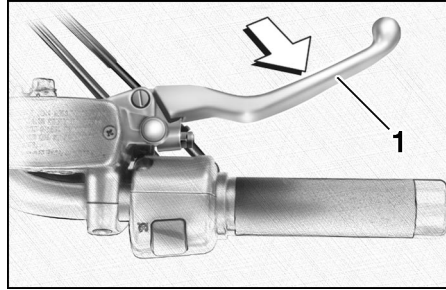
INSTRUMENT AND CONTROL FUNCTIONS



1. Shift pedal

Shift pedal

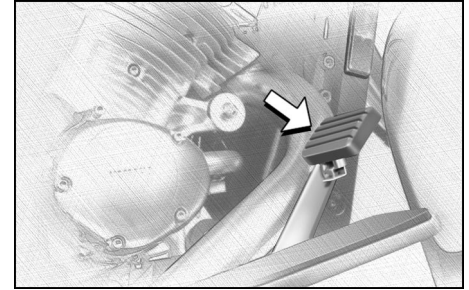
The shift pedal is located on the left side of the engine and is used in combination with the clutch when shifting. Use your toe or heel to shift up and your toe to shift down.



1. Front brake lever

Front brake lever

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

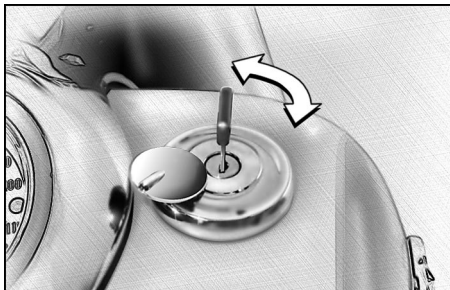


Rear brake pedal

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

INSTRUMENT AND CONTROL FUNCTIONS

3



Fuel tank cap

To remove

Slide the lock cover open, insert the key and turn it 1/4 turn clockwise. The lock will be released and the cap can be removed.

To install

Make sure the arrow mark on the tank cap is facing forward, then push the tank cap into position. Turn the key counterclockwise to the original position and remove it. Close the lock cover.

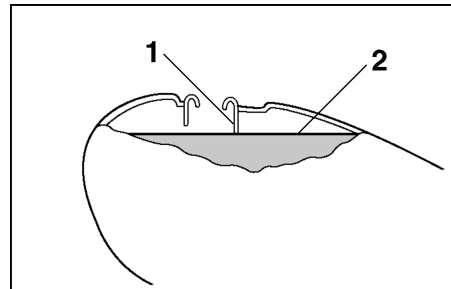
NOTE:

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



WARNING

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



1. Filler tube

2. Fuel level

Fuel

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



WARNING

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

INSTRUMENT AND CONTROL FUNCTIONS

CAUTION:

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

Recommended fuel:

Regular unleaded gasoline with a research octane number of 91 or higher.

Fuel tank capacity:

Total:

18 L

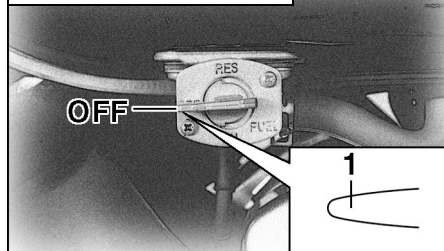
Reserve:

3.5 L

NOTE:

If knocking or pinging occurs, use a different brand of gasoline or higher octane grade.

OFF: closed position



1. Pointed end positioned over "OFF"

Fuel cock

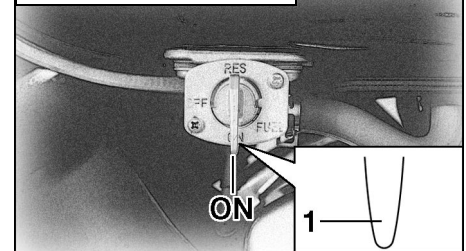
The fuel cock supplies fuel from the tank to the carburetors while filtering it also.

The fuel cock has three positions, which should be set as shown in the illustrations.

OFF

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

ON: normal position



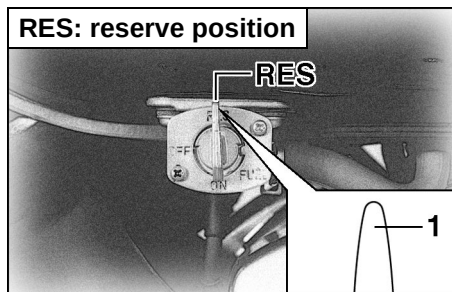
1. Pointed end positioned over "ON"

ON

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

INSTRUMENT AND CONTROL FUNCTIONS

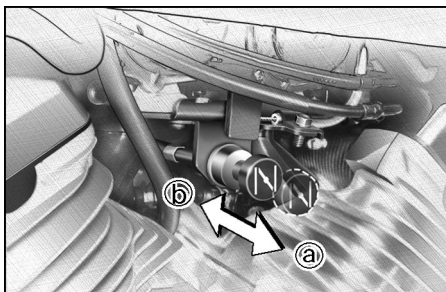
3



1. Pointed end positioned over "RES"

RES

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

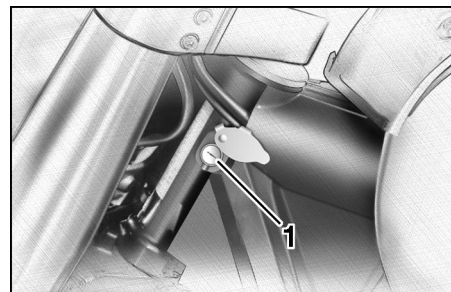


Starter (choke) knob

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

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

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



1. Steering lock

Steering lock

The steering lock is located on the left side of the head pipe.

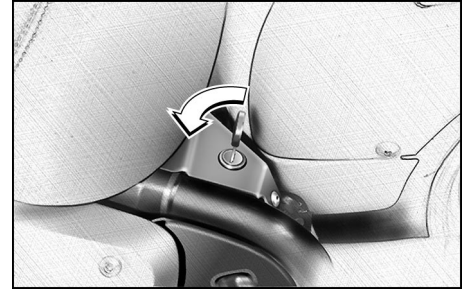
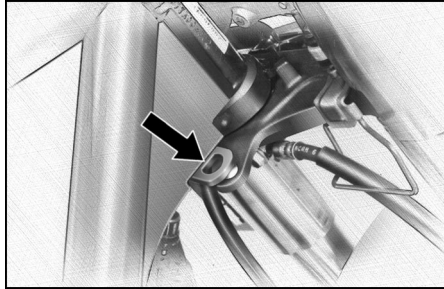
To lock the steering

1. Turn the handlebars all the way to the right.
2. Open the steering lock cover.
3. Insert the key and turn it counter-clockwise 1/8 turn.
4. Push the key in and turn it back 1/8 turn clockwise.
5. Check that the steering is locked.
6. Remove the key and close the steering lock cover.

INSTRUMENT AND CONTROL FUNCTIONS

To unlock the steering

1. Open the steering lock cover.
2. Insert the key, turn it counterclockwise $1/8$ turn, and let go of it. (It automatically moves to where it can be removed.)
3. Remove the key and close the steering lock cover.



On the right side of the headpipe, there is also a place to lock the steering with a padlock. Turn the handlebars to align the holes in the two brackets and lock the steering with a suitable padlock.

Rider seat

The rider seat lock is located behind the rider seat on the left side.

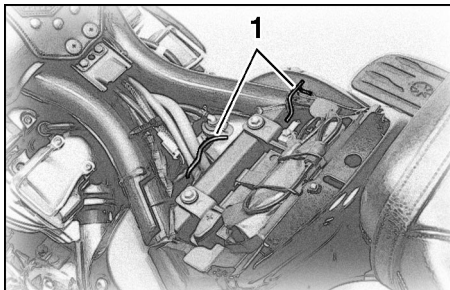
To open the seat, insert the key in the seat lock and turn it counterclockwise. Then, remove the seat.

To reinstall the seat, insert the projection on the front of the seat into the seat holder on the frame, then push down on the rear of the seat. Turn the key to the center position and remove it.

NOTE: _____
Make sure that the seat is securely fitted.

INSTRUMENT AND CONTROL FUNCTIONS

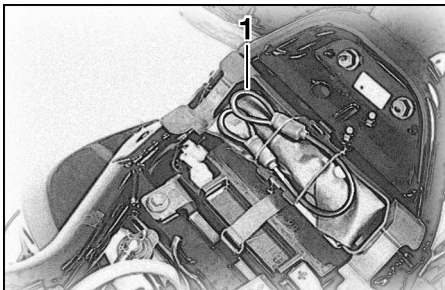
3



1. Helmet holder (× 2)

Helmet holders

There are two helmet holders under the rider seat. To secure a helmet on the right side holder, simply hook the buckle of the helmet strap over the holder and close the seat securely.



1. Helmet holding cable

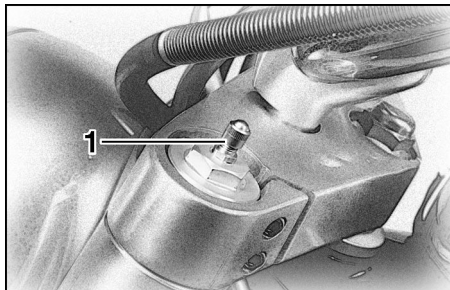
To secure a helmet on the left side holder, use the helmet holding cable located beside the tool kit. Pass the cable through the buckle on the helmet strap, then place both cable loops over the holder and close the seat securely.



WARNING

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

INSTRUMENT AND CONTROL FUNCTIONS



1. Air valve

Adjusting front fork preload

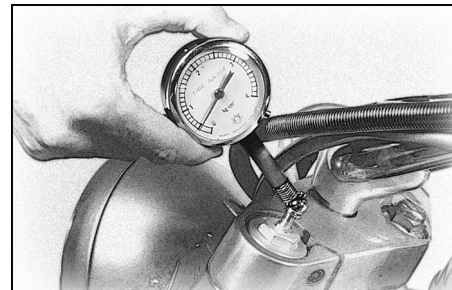
Each fork leg is equipped with an air valve to adjust the spring preload. The spring preload is adjusted by changing the air pressure in each fork leg. Increasing the air pressure increases the spring preload, decreasing air pressure decreases spring preload. Special equipment is required to adjust the air pressure in the front fork. Have your Yamaha dealer make this adjustment.

NOTE:

In order to check or adjust the air pressure, the motorcycle must be elevated so the front wheel is not in contact with the ground.

WARNING

Each fork leg must be set to the same pressure. Uneven setting can cause poor handling and loss of stability.



Minimum/standard air pressure setting:

Zero

Maximum air pressure setting:

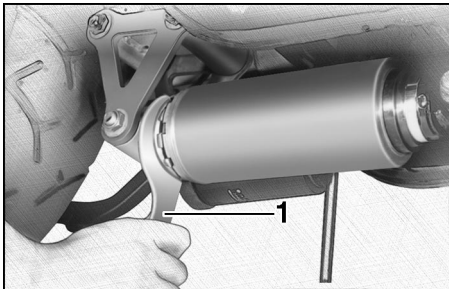
50 kPa (0.50 kg/cm², 0.50 bar)

CAUTION:

Never exceed the maximum pressure, or oil seal damage may occur.

INSTRUMENT AND CONTROL FUNCTIONS

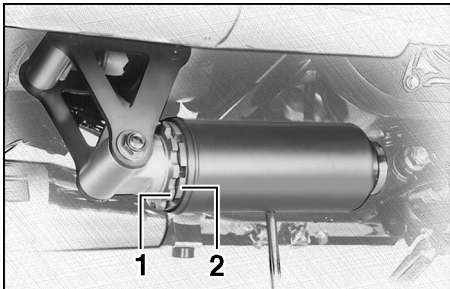
3



1. Special wrench

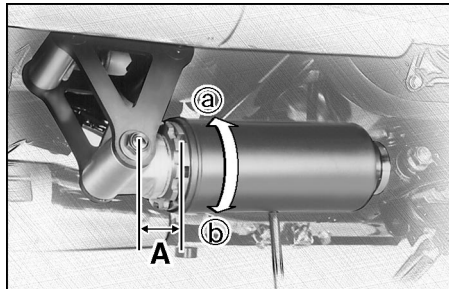
Adjusting rear shock absorber preload

This shock absorber is equipped with a spring preload adjusting nut. Use the special wrench located in the owner's tool kit to adjust the spring preload.



1. Locknut
2. Adjusting nut

1. Loosen the locknut.



A. Distance "A"

2. Turn the adjusting nut in direction ① to increase spring preload and in direction ② to decrease spring preload. The spring preload is determined by the spring set length. Shortening the spring set length increases spring preload, lengthening the spring set length decreases spring preload.

INSTRUMENT AND CONTROL FUNCTIONS

Spring preload:

Minimum (soft):

Distance "A" = 48.5 mm

Standard:

Distance "A" = 45.5 mm

Maximum (hard):

Distance "A" = 40.5 mm



- Do not deform or damage the cylinder in any way. Cylinder damage will result in poor damping performance.
- Take your shock absorber to a Yamaha dealer for any service.

CAUTION:

Never attempt to turn an adjuster beyond the maximum or minimum setting.

3. Tighten the locknut to the specified torque.

Tightening torque:

Locknut:

25 Nm (2.5 m·kg)

CAUTION:

Always tighten the locknut against the spring adjusting nut and tighten the locknut to the specified torque.

WARNING

This shock absorber contains highly pressurized nitrogen gas. Read and understand the following information before handling the shock absorber. The manufacturer cannot be held responsible for property damage or personal injury that may result from improper handling.

- Do not tamper with or attempt to open the cylinder assembly.
- Do not subject the shock absorber to an open flame or other high heat source. This may cause the unit to explode due to excessive gas pressure.

INSTRUMENT AND CONTROL FUNCTIONS

Sidestand

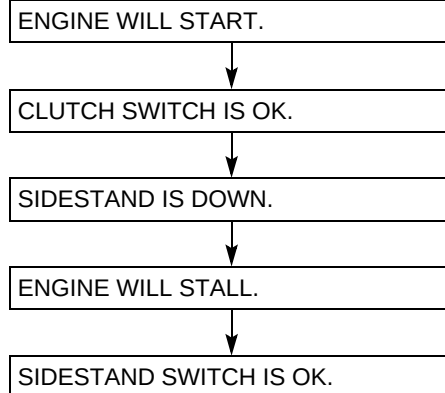
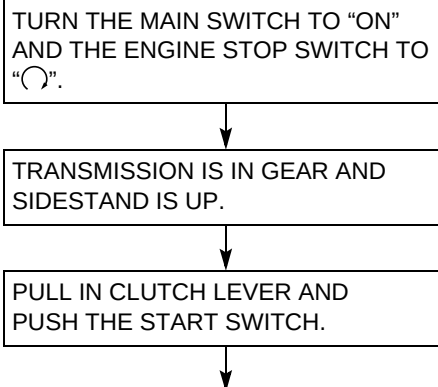
This model is equipped with an ignition circuit cut-off system. The motorcycle must not be ridden when the sidestand is down. The sidestand is located on the left side of the frame. (Refer to page 5-1 for an explanation of this system.)

WARNING

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

Sidestand/clutch switch operation check

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



WARNING

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

Pre-operation check list.....	4-1
-------------------------------	-----

PRE-OPERATION CHECKS

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

PRE-OPERATION CHECK LIST

ITEM	CHECKS	PAGE
Front brake	• Check operation, fluid level and vehicle for fluid leakage. • Fill with DOT 4 brake fluid if necessary.	6-17 ~ 6-21
Rear brake	• Check operation, fluid level and vehicle for fluid leakage. • Fill with DOT 4 brake fluid if necessary.	
Clutch	• Check operation, fluid level and vehicle for fluid leakage. • Fill with DOT 4 brake fluid if necessary.	6-16
Throttle grip and housing	• Check for smooth operation. • Lubricate if necessary.	6-12
Engine oil	• Check oil level. • Fill with oil if necessary.	6-7 ~ 6-9
Coolant reservoir tank	• Check coolant level. • Fill with coolant if necessary.	6-10 ~ 6-11
Final gear oil	• Check vehicle for leakage.	6-10
Wheels and tires	• Check tire pressure, wear and for damage.	6-13 ~ 6-16
Brake and shift pedal shafts	• Check for smooth operation. • Lubricate if necessary.	6-21
Brake and clutch lever pivots	• Check for smooth operation. • Lubricate if necessary.	6-22
Sidestand pivot	• Check for smooth operation. • Lubricate if necessary.	6-22

PRE-OPERATION CHECKS

ITEM	CHECKS	PAGE
Chassis fasteners	• Make sure that all nuts, bolts and screws are properly tightened. • Tighten if necessary.	—
Fuel	• Check fuel level. • Fill with fuel if necessary.	3-7 ~ 3-8
Lights, signals and switches	• Check for proper operation.	6-27 ~ 6-28

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

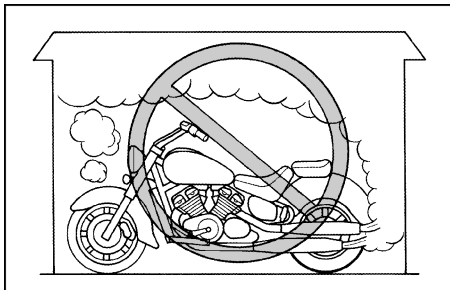
WARNING

If any item in the PRE-OPERATION CHECK is not working properly, have it inspected and repaired before operating the motorcycle.

OPERATION AND IMPORTANT RIDING POINTS

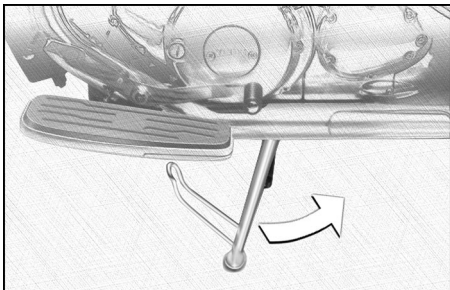
Starting the engine	5-1
Starting a warm engine	5-3
Shifting	5-3
Tips for reducing fuel consumption	5-4
Engine break-in	5-5
Parking	5-6

OPERATION AND IMPORTANT RIDING POINTS



⚠ WARNING

- Before riding this motorcycle, become thoroughly familiar with all operating controls and their functions. Consult a Yamaha dealer regarding any control or function that you do not thoroughly understand.
- Never start your engine or let it run for any length of time in a closed area. The exhaust fumes are poisonous and can cause loss of consciousness and death within a short time. Always operate your motorcycle in an area with adequate ventilation.



- Before starting out, always be sure the sidestand is up. Failure to retract the sidestand completely can result in a serious accident when you try to turn a corner.

Starting the engine

NOTE:

This motorcycle is equipped with a starting and an ignition circuit cut-off switch.

The engine can be started only under one of the following conditions:

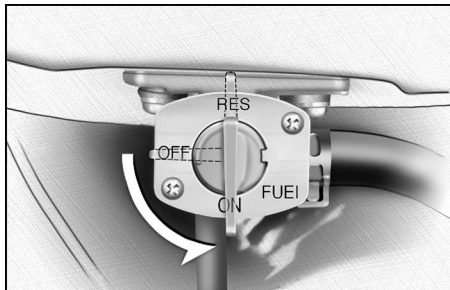
- The transmission is in neutral.
- The sidestand is up, the transmission is in gear, and the clutch is disengaged.

The motorcycle must not be ridden when the sidestand is down.

⚠ WARNING

Before going through the following steps, check the function of the sidestand switch and clutch switch. (Refer to page 3-15.)

OPERATION AND IMPORTANT RIDING POINTS



1. Turn the fuel cock to "ON".
2. Turn the main switch to "ON" and the engine stop switch to "○".

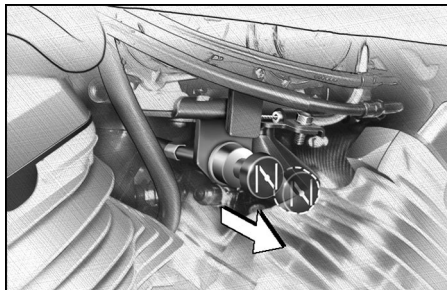
CAUTION:

If the fuel level indicator light comes on, check the fuel level. If necessary, add fuel.

3. Shift transmission into neutral.

NOTE:

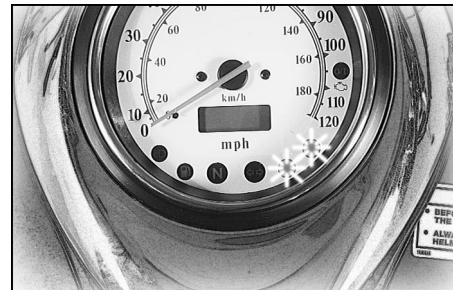
When the transmission is in neutral, the neutral indicator light should be on. If the light does not come on, ask a Yamaha dealer to inspect it.



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

NOTE:

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



CAUTION:

The oil level indicator light and engine overheat indicator light should come on when the start switch is pushed and should go off when the start switch is released. If the oil level indicator light flickers or remains on, immediately stop the engine and check the engine oil level and for oil leakage. If necessary, fill the engine with oil and check to see that the oil level indicator light goes off. If not, consult a Yamaha dealer.

OPERATION AND IMPORTANT RIDING POINTS

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

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

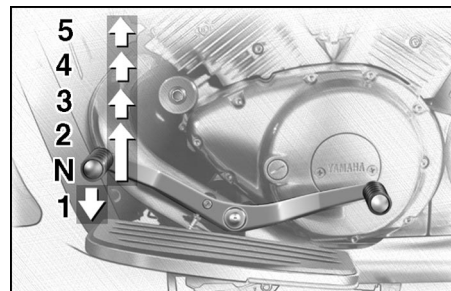
7. After the engine is warm, turn off the starter (choke) completely.

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

Starting a warm engine

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

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



Shifting

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

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

CAUTION:

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

Tips for reducing fuel consumption

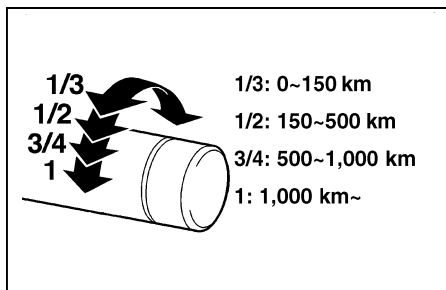
Your motorcycle's fuel consumption depends to a large extent on your riding style. The following tips can help reduce fuel consumption:

- Warm up the engine before riding.
- Turn off the starter (choke) as soon as possible.
- Shift up swiftly and avoid high engine speeds during acceleration.
- Do not double-clutch or rev the engine while shifting down and avoid high engine speeds with no load on the engine.
- Turn off the engine instead of letting it idle for an extended length of time, i.e. in traffic jams, at traffic lights or railroad crossings.

OPERATION AND IMPORTANT RIDING POINTS

Engine break-in

There is never a more important period in the life of your motorcycle than the period between zero and 1,000 km. For this reason we ask that you carefully read the following material. Because the engine is brand new, you must not put an excessive load on it for the first 1,000 km. The various parts in the engine wear and polish themselves to the correct operating clearances. During this period, prolonged full throttle operation, or any condition which might result in excessive heating of the engine, must be avoided.



0 ~ 150 km

Avoid operation above 1/3 throttle. Stop the engine and let it cool for 5 to 10 minutes after every hour of operation. Vary the speed of the motorcycle from time to time. Do not operate it at one set throttle position.

150 ~ 500 km

Avoid prolonged operation above 1/2 throttle. Rev the motorcycle freely through the gears, but do not use full throttle at any time.

500 ~ 1,000 km

Avoid cruising speeds in excess of 3/4 throttle.

CAUTION:

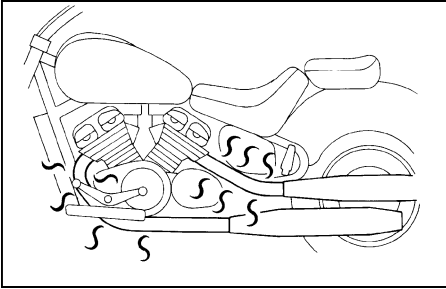
After 1,000 km of operation, be sure to replace the engine oil, oil filter and final gear oil.

1,000 km and beyond

Avoid prolonged full-throttle operation. Vary speed occasionally.

CAUTION:

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



Parking

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

WARNING

The exhaust system is hot. Park the motorcycle in a place where pedestrians or children are not likely to touch the motorcycle. Do not park the motorcycle on a slope or soft ground; the motorcycle may overturn.

PERIODIC MAINTENANCE AND MINOR REPAIR

Tool kit.....	6-1	Brake light switch adjustment.....	6-18
Periodic maintenance and lubrication	6-3	Checking the front and rear brake pads.....	6-19
Spark plugs.....	6-6	Inspecting the brake fluid level	6-19
Engine oil	6-7	Brake fluid replacement	6-21
Final gear oil	6-10	Brake and shift pedal lubrication	6-21
Coolant	6-10	Brake and clutch lever lubrication	6-22
Carburetor adjustment	6-11	Sidestand lubrication.....	6-22
Idle speed adjustment	6-11	Front fork inspection.....	6-23
Throttle cable free play inspection	6-12	Battery.....	6-23
Valve clearance adjustment.....	6-12	Fuse replacement	6-25
Tires.....	6-13	Headlight bulb replacement	6-27
Wheels.....	6-15	Turn signal and taillight bulb replacement	6-28
Clutch lever free play adjustment.....	6-16	Troubleshooting	6-28
Front brake lever free play adjustment.....	6-17	Troubleshooting chart.....	6-29
Rear brake pedal height adjustment.....	6-17		

PERIODIC MAINTENANCE AND MINOR REPAIR

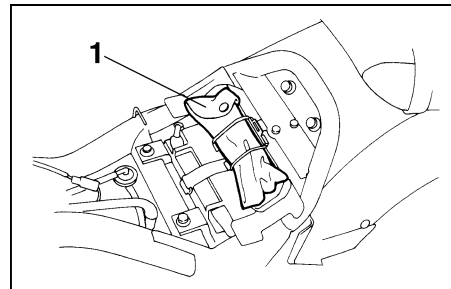


ENVIRONMENT. The most important points of motorcycle inspection, adjustment, and lubrication are explained in the following pages.

WARNING

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

Periodic inspection, adjustment and lubrication will keep your motorcycle in the safest and most efficient condition possible. Safety is an obligation of the motorcycle owner. The maintenance and lubrication schedule chart should be considered strictly as a guide to general maintenance and lubrication intervals. **YOU MUST TAKE INTO CONSIDERATION THAT WEATHER, TERRAIN, GEOGRAPHICAL LOCATIONS, AND A VARIETY OF INDIVIDUAL USES ALL TEND TO DEMAND THAT EACH OWNER ALTER THIS TIME SCHEDULE TO SHORTER INTERVALS TO MATCH THE ENVI-**



1. Tool kit

Tool kit

The service information included in this manual is intended to provide you, the owner, with the necessary information for completing some of your own preventive maintenance and minor repairs. The tools provided in the owner's tool kit are to assist you in the performance of periodic maintenance. However, some other tools such as a torque wrench are also necessary to perform the maintenance correctly.

PERIODIC MAINTENANCE AND MINOR REPAIR

NOTE:

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

WARNING

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

PERIODIC MAINTENANCE AND MINOR REPAIR

PERIODIC MAINTENANCE AND LUBRICATION

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

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

PERIODIC MAINTENANCE AND MINOR REPAIR

NO.	ITEM	CHECKS AND MAINTENANCE JOBS	INITIAL (1,000 km)	EVERY	
				6,000 km or 6 months (whichever comes first)	12,000 km or 12 months (whichever comes first)
10	* Tires	• Check tread depth and for damage. • Replace if necessary. • Check air pressure. • Correct if necessary.		√	√
11	* Wheel bearings	• Check bearing for looseness or damage. • Replace if necessary.		√	√
12	* Swingarm	• Check swingarm pivoting point for play. • Correct if necessary. • Lubricate with molybdenum disulfide grease every 24,000 km or 24 months (whichever comes first).		√	√
13	* Steering bearings	• Check bearing play and steering for roughness. • Correct accordingly. • Lubricate with lithium soap base grease every 24,000 km or 24 months (whichever comes first).		√	√
14	* Chassis fasteners	• Make sure that all nuts, bolts and screws are properly tightened. • Tighten if necessary.		√	√
15	Sidestand	• Check operation. • Lubricate and repair if necessary.		√	√
16	* Sidestand switch	• Check operation. • Replace if necessary.	√	√	√
17	* Front fork	• Check operation and for oil leakage. • Correct accordingly.		√	√
18	* Rear shock absorber assembly	• Check operation and shock absorber for oil leakage. • Replace shock absorber assembly if necessary.		√	√
19	* Rear suspension relay arm and connecting arm pivoting points	• Check operation. • Lubricate with molybdenum disulfide grease every 24,000 km or 24 months (whichever comes first).		√	√

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

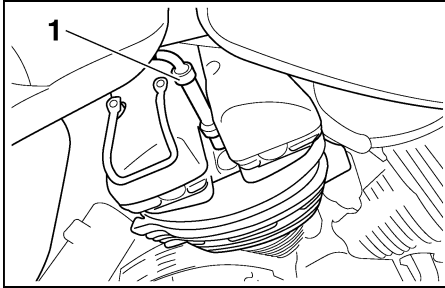
PERIODIC MAINTENANCE AND MINOR REPAIR

NO.	ITEM	CHECKS AND MAINTENANCE JOBS	INITIAL (1,000 km)	EVERY	
				6,000 km or 6 months (whichever comes first)	12,000 km or 12 months (whichever comes first)
20	* Carburetors	• Check engine idling speed, synchronization and starter operation. • Adjust if necessary.	√	√	√
21	Engine oil	• Check oil level and vehicle for oil leakage. • Correct if necessary. • Change. (Warm engine before draining.)	√	√	√
22	Engine oil filter cartridge	• Replace.	√		√
23	* Cooling system	• Check coolant level and vehicle for coolant leakage. • Correct if necessary. • Change coolant every 24,000 km or 24 months (whichever comes first).		√	√
24	Final gear oil	• Check oil level and vehicle for oil leakage. • Change oil at initial 1,000 km and thereafter every 24,000 km or 24 months (whichever comes first).	√	√	√

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

NOTE:

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

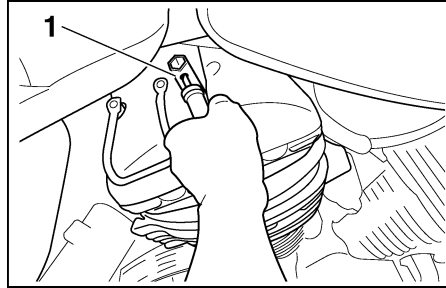


1. Spark plug cap

Spark plugs

Removal

1. Remove the spark plug cap.



1. Spark plug wrench

2. Use the spark plug wrench in the tool kit to remove the spark plug as shown.

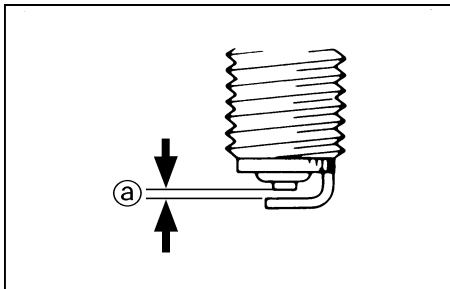
Inspection

The spark plug is an important engine component and is easy to inspect. The condition of the spark plug can indicate the condition of the engine. Normally, all spark plugs from the same engine should have the same color on the white insulator around the center electrode. The ideal color at this point is a medium-to-light tan color for a motorcycle that is being ridden normally. If one spark plug shows a distinctly differ-

ent color, there could be something wrong with the engine. Do not attempt to diagnose such problems yourself. Instead, take the motorcycle to a Yamaha dealer. You should periodically remove and inspect the spark plugs because heat and deposits will cause any spark plug to slowly break down and erode. If electrode erosion becomes excessive, or if carbon and other deposits are excessive, you should replace the spark plug with the specified plug.

Specified spark plug:
DPR7EA-9/NGK or
X22EPR-U9/DENSO

PERIODIC MAINTENANCE AND MINOR REPAIR



a. Spark plug gap

Installation

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

Spark plug gap:
0.8 ~ 0.9 mm

2. Clean the gasket surface. Wipe off any grime from the threads.

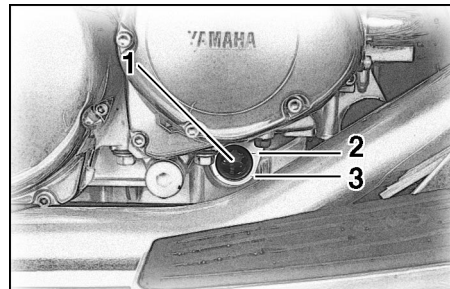
3. Install the spark plug and tighten it to the specified torque.

Tightening torque:

Spark plug:
17.5 Nm (1.75 m·kg)

NOTE:

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



1. Oil level window
2. Maximum level mark
3. Minimum level mark

Engine oil

Oil level inspection

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

NOTE:

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

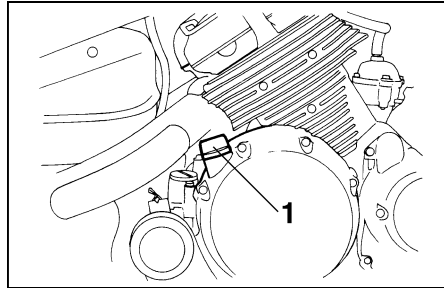
PERIODIC MAINTENANCE AND MINOR REPAIR

2. Stop the engine and wait for a few minutes. Check the oil level through the level window located at the lower part of the right side crankcase cover.

NOTE: _____

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

3. The oil level should be between the maximum and minimum marks. If the level is low, fill the engine with sufficient recommended oil to reach the specified level.



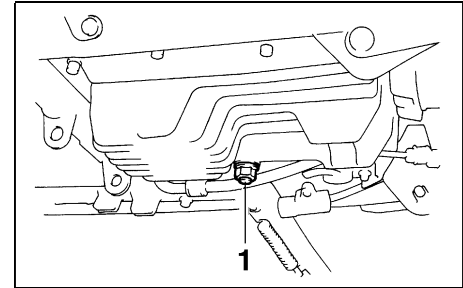
1. Engine oil filler cap

Engine oil and oil filter cartridge replacement

1. Warm up the engine for several minutes.
2. Stop the engine. Place an oil pan under the engine and remove the oil filler cap.
3. Remove the drain bolt and drain the oil.
4. Remove the oil filter by using an oil filter wrench.

NOTE: _____

An oil filter wrench is available at a nearby Yamaha dealer.



1. Engine oil drain bolt

5. Reinstall the drain bolt and tighten it to the specified torque.

Tightening torque:

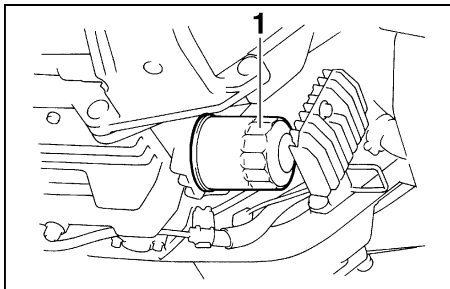
Drain bolt:
43 Nm (4.3 m·kg)

6. Apply a light coat of engine oil to the O-ring of new oil filter.

NOTE: _____

Make sure the O-ring is seated properly.

PERIODIC MAINTENANCE AND MINOR REPAIR



1. Oil filter

7. Install the new oil filter and tighten it to the specified torque with an oil filter wrench.

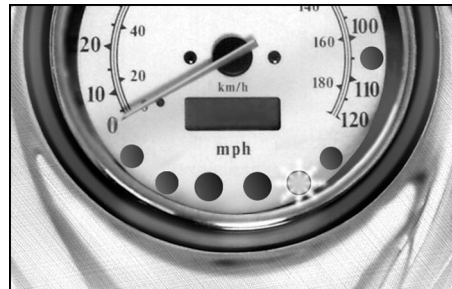
NOTE: _____
When installing the oil filter, tighten it to the proper torque by using a torque wrench.

Tightening torque:
Oil filter:
17 Nm (1.7 m·kg)

8. Fill the engine with sufficient recommended oil. Install the oil filler cap and tighten it.

Recommended oil:
See page 8-1.
Oil quantity:
Total amount:
4.3 L
Periodic oil change:
3.5 L
With oil filter replacement:
3.7 L

CAUTION: _____
● **Do not put in any chemical additives. Engine oil also lubricates the clutch and additives could cause clutch slippage.**
● **Be sure no foreign material enters the crankcase.**

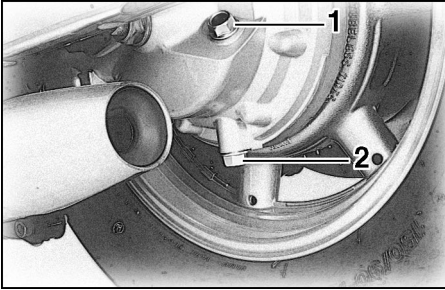


9. Start the engine and warm it up for several minutes. While warming up, check for oil leakage. If oil leakage is found, stop the engine immediately and check for the cause.

NOTE: _____
After the engine is started, the oil level indicator light should go off if the oil is at the specified level.

CAUTION: _____
If the indicator light flickers or remains on, immediately stop the engine and consult with a Yamaha dealer.

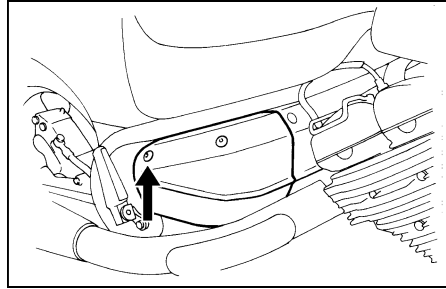
PERIODIC MAINTENANCE AND MINOR REPAIR



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

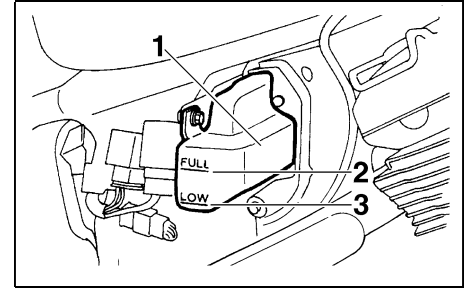
Final gear oil

Check for oil leakage. If any leakage is found, take the motorcycle to a Yamaha dealer for repairs.



Coolant

1. Remove the reservoir tank cover by removing the screw.
2. Check the coolant level in the reservoir tank when the engine is cold as the coolant level will vary with engine temperature. The coolant level should be between the maximum and minimum marks.
3. If the level is low, remove the rider's seat, open the reservoir tank cap and add coolant or distilled water to raise it to the specified level. (See page 3-10 for seat removal procedures.)



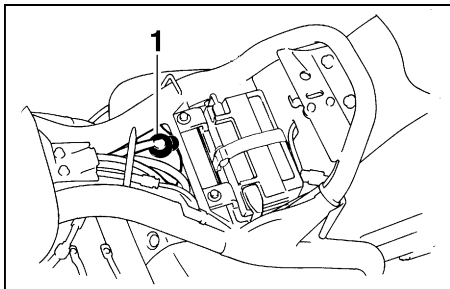
1. Reservoir tank
2. Maximum level mark
3. Minimum level mark
4. Install the reservoir tank cap and rider's seat.
5. Place the reservoir tank cover in the original position and install the screw.

Reservoir tank capacity:
0.84 L

CAUTION:

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

PERIODIC MAINTENANCE AND MINOR REPAIR



1. Reservoir tank cap

NOTE:

- If water is added, have a Yamaha dealer check the antifreeze content of the coolant as soon as possible.
- Have a Yamaha dealer change the coolant every two years.
- The radiator fan operation is completely automatic. It is switched on or off according to the coolant temperature in the radiator.

Carburetor adjustment

The carburetors are important parts of the engine and require very sophisticated adjustment. Most adjustments should be left to a Yamaha dealer who has the professional knowledge and experience to do so. However, the idle speed may be adjusted by the owner as part of routine maintenance.

CAUTION:

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

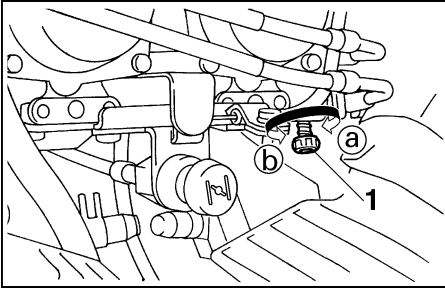
Idle speed adjustment

NOTE:

A diagnostic tachometer must be used for this procedure.

1. Attach the tachometer. Start the engine and warm it up for a few minutes at approximately 1,000 to 2,000 r/min. Occasionally rev the engine to 4,000 to 5,000 r/min. The engine is warm when it quickly responds to the throttle.

PERIODIC MAINTENANCE AND MINOR REPAIR



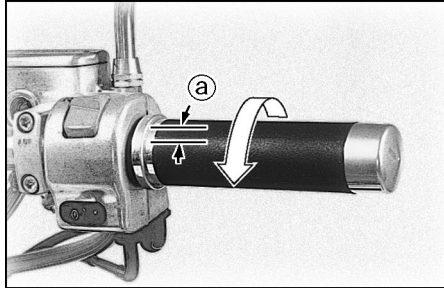
1. Throttle stop screw

2. Set the idle to the specified engine speed by adjusting the throttle stop screw. Turn the screw in direction ① to increase engine speed and in direction ② to decrease engine speed.

Standard idle speed:
950 ~ 1,050 r/min

NOTE:

If the specified idle speed cannot be obtained by performing the above adjustment, consult a Yamaha dealer.



a. Free play

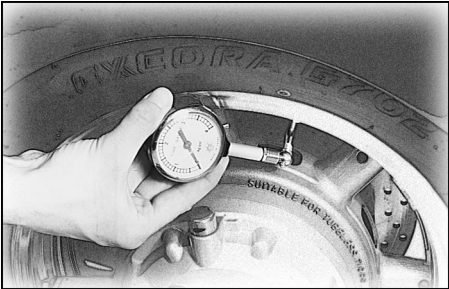
Throttle cable free play inspection

There should be a free play of 4 ~ 6 mm at the throttle grip. If the free play is incorrect, ask a Yamaha dealer to make this adjustment.

Valve clearance adjustment

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

PERIODIC MAINTENANCE AND MINOR REPAIR



Tires

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

Tire air pressure

Always check and adjust the tire pressure before operating the motorcycle.

WARNING

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

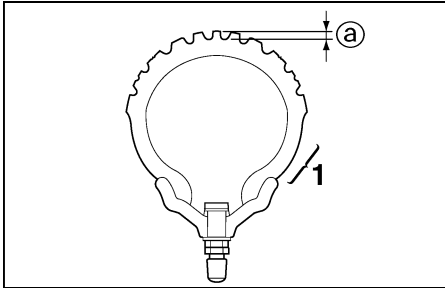
Maximum load*	203 kg	
Cold tire pressure	Front	Rear
Up to 90 kg load*	250 kPa (2.50 kg/cm ² , 2.50 bar)	250 kPa (2.50 kg/cm ² , 2.50 bar)
90 kg load ~ Maximum load*	250 kPa (2.50 kg/cm ² , 2.50 bar)	280 kPa (2.80 kg/cm ² , 2.80 bar)

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

WARNING

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

PERIODIC MAINTENANCE AND MINOR REPAIR



- 1. Sidewall
- a. Tread depth

Tire inspection

Always check the tires before operating the motorcycle. If center tread depth reaches the limit as shown, if the tire has a nail or glass fragments in it, or if the side wall is cracked, contact a Yamaha dealer immediately and have the tire replaced.

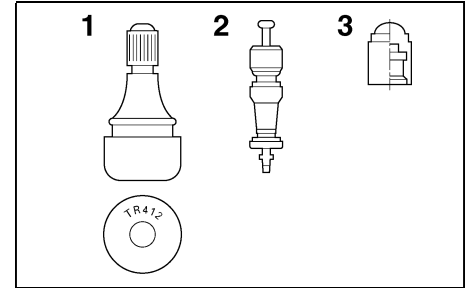
⚠ WARNING

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

Minimum tire tread depth (front and rear)	1.6 mm
---	--------

NOTE:

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



- 1. Tire valve
- 2. Valve core
- 3. Valve cap with seal

Tire information

This motorcycle is equipped with tubeless tires, tire valves and cast wheels.

PERIODIC MAINTENANCE AND MINOR REPAIR

WARNING

After extensive tests, the tires mentioned below have been approved by Yamaha Motor Co., Ltd. for this model. No guarantee for handling characteristics can be given if tire combinations other than what is approved are used on this motorcycle. The front and rear tires should be of the same manufacture and design. Always use the tire valves and valve cores listed below. Be sure to install the valve caps securely, as these are important to prevent air pressure leakage.

FRONT

Manufacturer	Size	Type
Dunlop	150/80-16 71H	D404F

	Type
Tire valve	TR412
Valve core	#9000A

REAR

Manufacturer	Size	Type
Dunlop	150/90B15M/C 74H	D404

	Type
Tire valve	PVR59A
Valve core	#9000

Wheels

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

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

PERIODIC MAINTENANCE AND MINOR REPAIR

- After repairing or replacing the rear tire, tighten the valve stem nut and locknut to the specified torque.

Tightening torque:

Valve stem nut:

1.6 Nm (0.16 m·kg)

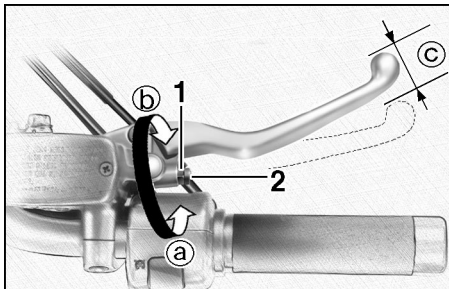
Valve stem locknut:

1.6 Nm (0.16 m·kg)

Clutch lever free play adjustment

This motorcycle has a hydraulic clutch. There are no adjustments to perform but the clutch system must be inspected periodically for proper fluid level and leakage. If the control lever free play becomes excessive and the motorcycle creeps or stalls when shifted into gear, or if the clutch slips, causing acceleration to lag behind engine speed, there is probably air in the clutch system and it must be bled out. Ask a Yamaha dealer to do this service.

PERIODIC MAINTENANCE AND MINOR REPAIR



1. Locknut
2. Adjusting bolt
- c. Free play

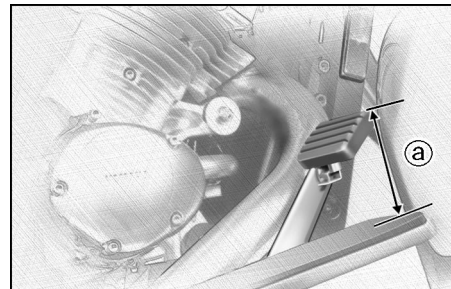
Front brake lever free play adjustment

The free play at the front brake lever should be 2 ~ 5 mm.

1. Loosen the locknut.
2. Turn the adjusting bolt in direction ② to increase free play or in direction ① to decrease free play.
3. After adjusting, tighten the locknut.

WARNING

- Check the brake lever free play. Be sure the brake is working properly.
- A soft or spongy feeling in the brake lever can indicate the presence of air in the brake system. This air must be removed by bleeding the brake system before the motorcycle is operated. Air in the system will cause greatly diminished braking capability and can result in loss of control and an accident. Have a Yamaha dealer inspect and bleed the system if necessary.



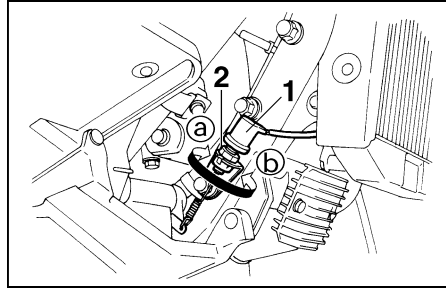
a. Brake pedal height

Rear brake pedal height adjustment

The top of the brake pedal should be positioned 100 mm below the top of the footrest. If not, ask a Yamaha dealer to adjust it.

WARNING

A soft or spongy feeling in the brake pedal can indicate the presence of air in the brake system. This air must be removed by bleeding the brake system before the motorcycle is operated. Air in the system will cause greatly diminished braking capability and can result in loss of control and an accident. Have a Yamaha dealer inspect and bleed the system if necessary.



1. Brake light switch
2. Adjusting nut

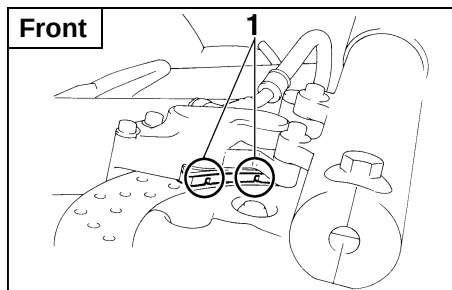
Brake light switch adjustment

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

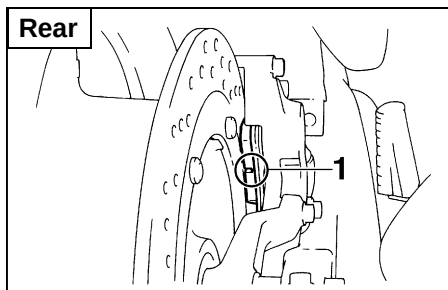
Turn the adjusting nut in direction ① to make the brake light come on earlier.

Turn the adjusting nut in direction ② to make the brake light come on later.

PERIODIC MAINTENANCE AND MINOR REPAIR



1. Wear indicator groove (× 2)



1. Wear indicator groove

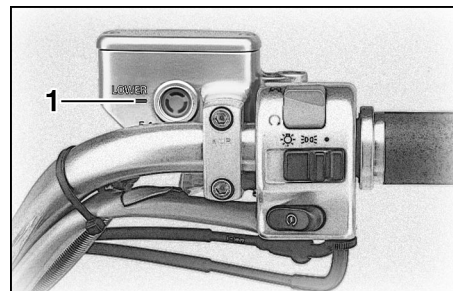
Checking the front and rear brake pads

Front brake

Wear indicator grooves are provided on each brake pad. These indicators allow checking of brake pad wear without disassembling the brake. Inspect the grooves. If they have almost disappeared, ask a Yamaha dealer to replace the pads.

Rear brake

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



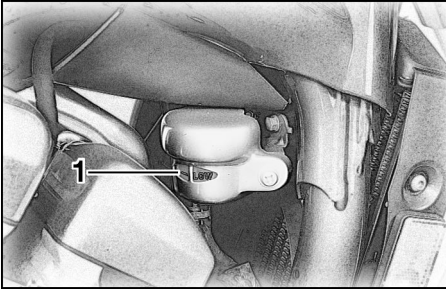
1. Minimum level mark

Inspecting the brake fluid level

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

Before riding, check that the brake fluid is above the minimum level and fill when necessary. Low brake fluid levels may indicate worn brake pads and/or brake system leakage. If the brake level is low, be sure to inspect the brake pads for wear or brake system for leakage.

PERIODIC MAINTENANCE AND MINOR REPAIR



1. Minimum level mark

Observe these precautions:

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

Recommended brake fluid: DOT 4



1. Minimum level mark

- Refill with the same type of brake fluid. Mixing fluids may result in a harmful chemical reaction and lead to poor brake or clutch performance.
- Be careful that water does not enter the master cylinder when refilling. Water will significantly lower the boiling point of the fluid and may result in vapor lock.
- Brake fluid may deteriorate painted surfaces or plastic parts. Always clean up spilled fluid immediately.

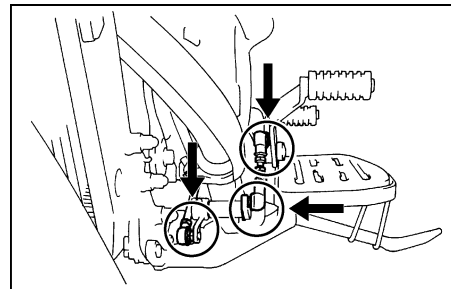
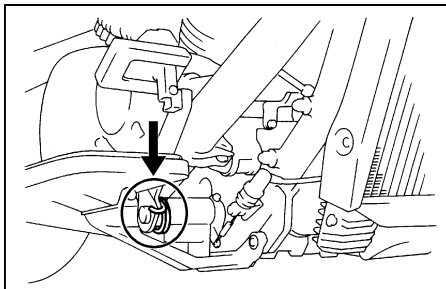
- Have a Yamaha dealer check the cause if the brake fluid level goes down.

PERIODIC MAINTENANCE AND MINOR REPAIR

Brake fluid replacement

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

- oil seals (every two years)
- brake hoses (every four years)

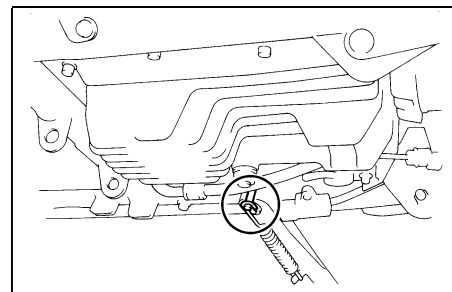
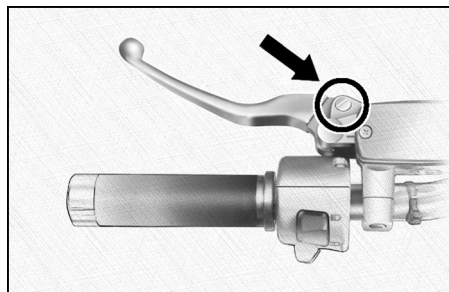
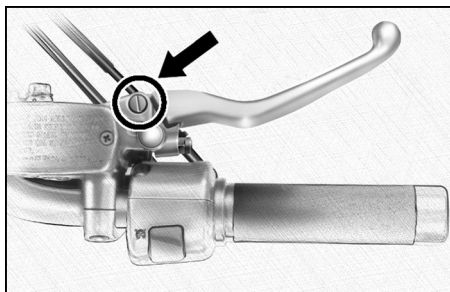


Brake and shift pedal lubrication

Lubricate the pivoting parts.

Recommended lubricant:
Engine oil

PERIODIC MAINTENANCE AND MINOR REPAIR



Brake and clutch lever lubrication

Lubricate the pivoting parts.

Recommended lubricant:
Engine oil

Sidestand lubrication

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

Recommended lubricant:
Engine oil

WARNING

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

PERIODIC MAINTENANCE AND MINOR REPAIR

Front fork inspection

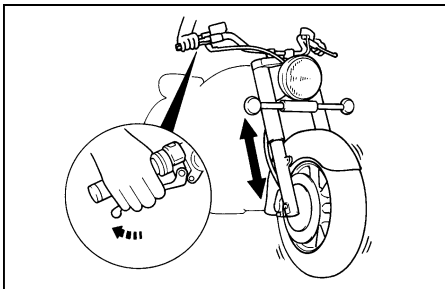
Visual check



WARNING

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

Check for scratches or damage on the inner tube and excessive oil leakage from the front fork.

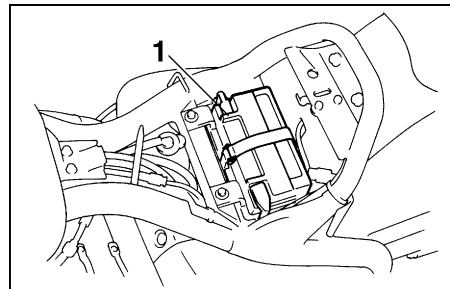


Operation check

1. Place the motorcycle on a level place.
2. Hold the motorcycle in an upright position and apply the front brake.
3. Push down hard on the handlebars several times and check if the fork rebounds smoothly.

CAUTION:

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



1. Battery

Battery

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

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

PERIODIC MAINTENANCE AND MINOR REPAIR

CAUTION:

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

WARNING

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

ANTIDOTE:

- **EXTERNAL:** Flush with water.
- **INTERNAL:** Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg, or vegetable oil. Call a physician immediately.
- **EYES:** Flush with water for 15 minutes and get prompt medical attention.

Batteries produce explosive gases. Keep sparks, flame, cigarettes etc., away. Ventilate when charging or using in an enclosed space. Always shield your eyes when working near batteries. **KEEP OUT OF REACH OF CHILDREN.**

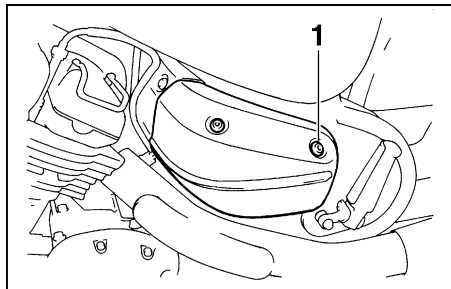
Battery storage

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

CAUTION:

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

PERIODIC MAINTENANCE AND MINOR REPAIR

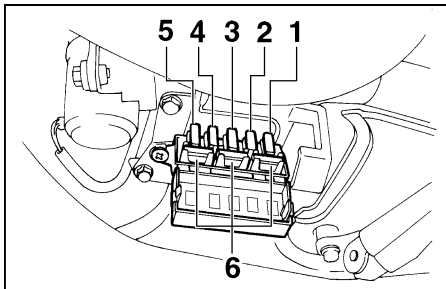


1. Screw

Fuse replacement

Sub fuse box

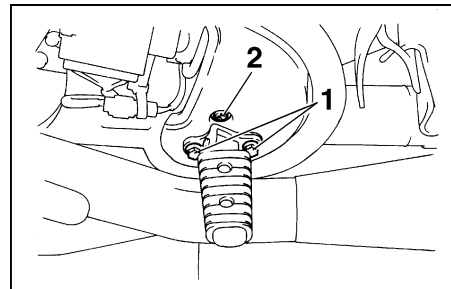
The sub fuse box is located behind the upper left side panel. To remove the panel, remove the screw and pull the panel outward.



1. Ignition fuse
2. Signaling system fuse
3. Headlight fuse
4. Fan fuse
5. Odometer fuse
6. Spare fuse (× 3)

Specified fuses:

Ignition fuse:	10 A
Signaling system fuse:	20 A
Headlight fuse:	20 A
Fan fuse:	10 A
Odometer fuse:	5 A



1. Bolt (× 2)
2. Screw

Main fuse box

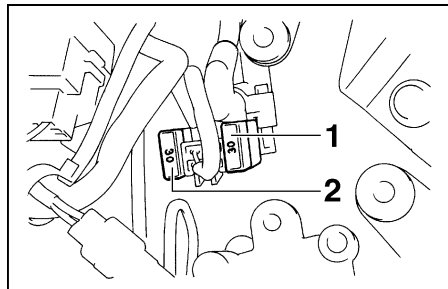
The main fuse box is located behind the lower left side panel.

To remove the panel

1. Remove the upper side panel. (See under "Sub fuse box".)
2. Remove the left passenger foot-rest by removing the bolts.
3. Remove the screw and pull the panel outward.

PERIODIC MAINTENANCE AND MINOR REPAIR

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



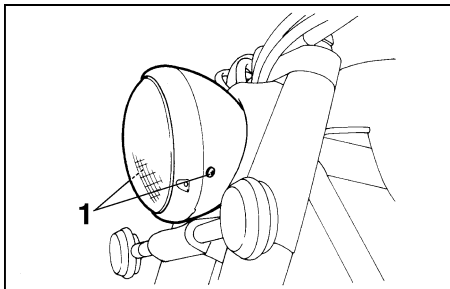
1. Main fuse
2. Spare fuse

CAUTION:

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

Specified fuse:
Main fuse: 30 A

PERIODIC MAINTENANCE AND MINOR REPAIR



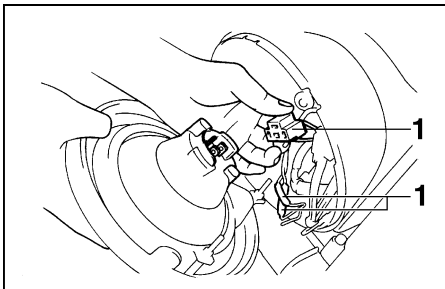
1. Screw (× 2)

Headlight bulb replacement

This motorcycle is equipped with a quartz bulb headlight.

If the headlight bulb burns out, replace the bulb as follows:

1. Remove the headlight unit screws.



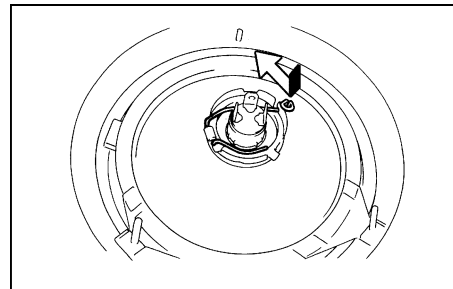
1. Connector (× 3)

2. Remove the connectors, the headlight unit and then the bulb cover.
3. Turn the bulb holder counterclockwise to remove it and remove the defective bulb.



WARNING
Keep flammable products and your hands away from a bulb while it is on, as it is hot. Do not touch a bulb until it cools down.

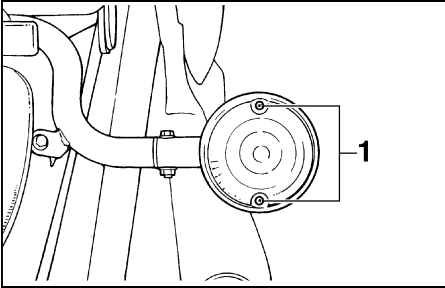
4. Put a new bulb into position and secure it in place with the bulb holder.



CAUTION:

Avoid touching the glass part of a bulb. Keep it free from oil; otherwise, the transparency of the glass, life of the bulb, and luminous flux will be adversely affected. If oil gets on a bulb, thoroughly clean it with a cloth moistened with alcohol or lacquer thinner.

5. Install the bulb cover, connectors and headlight unit. Ask a Yamaha dealer to adjust the headlight beam if necessary.



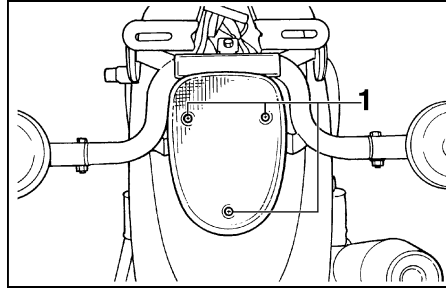
1. Screw (× 2)

Turn signal and taillight bulb replacement

1. Remove the screws and the lens.
2. Push the bulb inward and turn it counterclockwise.
3. Place a new bulb in the socket.
Push the bulb inward and turn it clockwise until it engages into the socket.
4. Install the lens and the screws.

CAUTION:

Do not over-tighten the screws as the lens may break.



1. Screw (× 3)

Troubleshooting

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

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

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

PERIODIC MAINTENANCE AND MINOR REPAIR

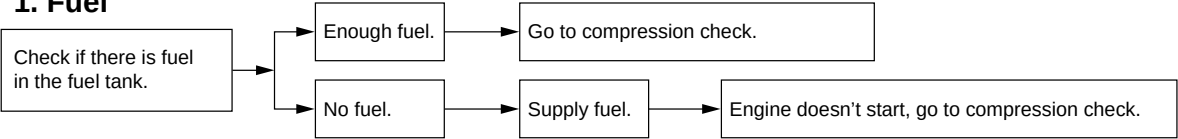
Troubleshooting chart



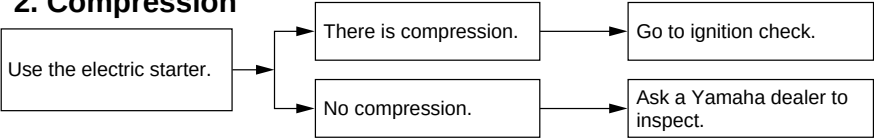
WARNING

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

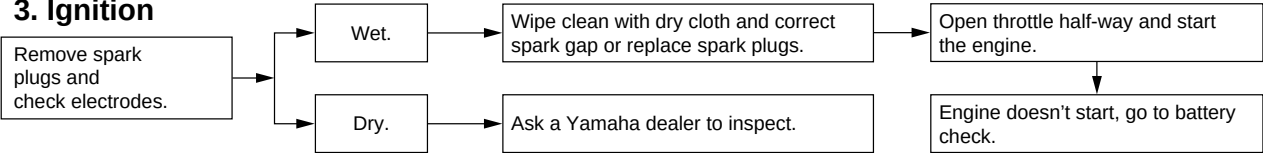
1. Fuel



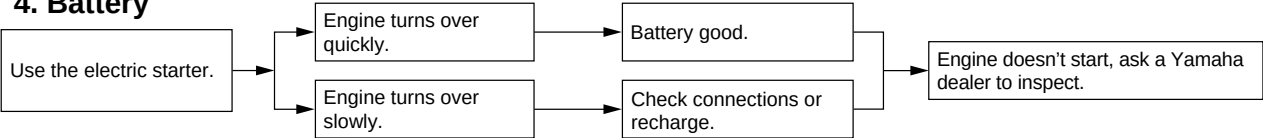
2. Compression



3. Ignition



4. Battery

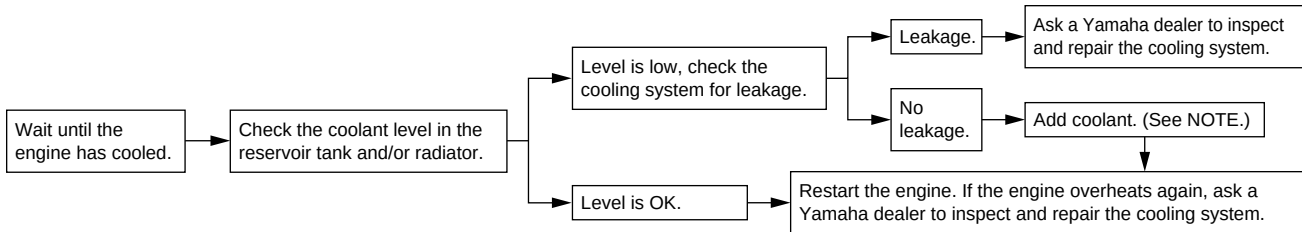


PERIODIC MAINTENANCE AND MINOR REPAIR

5. Engine overheating

WARNING

Do not remove the radiator cap when the engine and radiator are hot. Scalding hot fluid and steam may be blown out under pressure, which could cause serious injury. Open the radiator cap as follows. Wait until the engine has cooled. Remove the radiator cap stopper by removing the screw. Place a thick rag like a towel over the radiator cap and slowly rotate the cap counterclockwise to the detent. This procedure allows any residual pressure to escape. When the hissing sound has stopped, press down on the cap while turning counterclockwise and remove it.



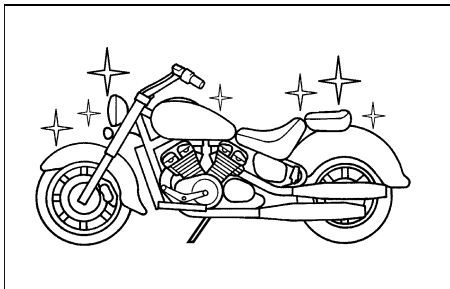
NOTE:

If it is difficult to get the recommended coolant, tap water can be temporarily used, provided that it is changed to the recommended coolant as soon as possible.

MOTORCYCLE CARE AND STORAGE

Care	7-1
Storage	7-4

MOTORCYCLE CARE AND STORAGE



Care

The exposure of its technology makes a motorcycle charming but also vulnerable. Although high-quality components are used, they are not all rust-resistant. While a rusty exhaust pipe may remain unnoticed on a car, it does look unattractive on a motorcycle. Frequent and proper care, however, will keep your motorcycle looking good, extend its life and maintain its performance. Moreover, the warranty states that the vehicle must be properly taken care of. For all these reasons, it is recommended that you observe the following cleaning and storing precautions.

Before cleaning

1. Cover up the muffler outlets with plastic bags.
2. Make sure that all caps and covers as well as all electrical couplers and connectors, including the spark plug caps, are tightly installed.
3. Remove extremely stubborn dirt, like oil burnt onto the crankcase, with a degreasing agent and a brush, but never apply such products onto seals, gaskets and wheel axles. Always rinse the dirt and degreaser off with water.

Cleaning

After normal use

Remove dirt with warm water, a neutral detergent and a soft clean sponge, then rinse with plenty of clean water. Use a tooth or bottle brush for hard-to-reach parts. Tougher dirt and insects will come off more easily if the area is covered with a wet cloth for a few minutes before cleaning.

MOTORCYCLE CARE AND STORAGE

CAUTION:

- Avoid using strong acidic wheel cleaners, especially on spoked wheels. If you do use such products for hard-to-remove dirt, do not leave it on any longer than instructed, then thoroughly rinse it off with water, immediately dry the area and apply a corrosion protection spray.
- Improper cleaning can damage windshields, cowlings, panels and other plastic parts. Use only a soft, clean cloth or sponge with mild detergent and water to clean plastic.
- Do not use any harsh chemical products on plastic parts. Be sure to avoid using cloths or sponges which have been in contact with strong or abrasive cleaning products, solvent or thinner, fuel (gasoline), rust removers or inhibitors, brake fluid, antifreeze or electrolyte.
- Do not use high-pressure washers or steam-jet cleaners since they cause water seepage and deterioration in the following areas: seals (of wheel bearings, swingarm bearings, forks and brakes), electric components (couplers, connectors, instruments, switches and lights), breather hoses and vents.
- For motorcycles equipped with a windshield: Do not use strong cleaners or hard sponges as they will cause dulling or scratching. Some cleaning compounds for plastic may leave scratches on the windshield. Test the product on a small hidden part of the windshield to make sure they do not leave any marks. If the windshield is scratched, use a quality plastic polishing compound after washing.

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

Since sea salt or salt sprayed on the roads in the winter are extremely corrosive in combination with water, carry out the following steps after each ride in the rain, near the sea or on salt-sprayed roads. (Salt sprayed in the winter may remain on the roads well into spring.)

MOTORCYCLE CARE AND STORAGE

1. Clean your motorcycle with cold water and soap after the engine has cooled down.

CAUTION:

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

2. Be sure to apply a corrosion protection spray on all (even chrome- and nickel-plated) metal surfaces to prevent corrosion.

After cleaning

1. Dry the motorcycle with a chamois or an absorbing cloth.
2. Use a chrome polish to shine chrome, aluminum and stainless-steel parts, including the exhaust system. (Even the thermally induced discoloring of stainless-steel exhaust systems can be removed through polishing.)
3. To prevent corrosion, it is recommended to apply a corrosion protection spray on all (even chrome- and nickel-plated) metal surfaces.
4. Use spray oil as a universal cleaner to remove any remaining dirt.
5. Touch up minor paint damage caused by stones, etc.
6. Wax all painted surfaces.
7. Let the motorcycle dry completely before storing it or covering it.

! WARNING

Make sure that there is no oil or wax on the brakes and tires. If necessary, clean the brake discs and linings with a regular brake disc cleaner or acetone, and wash the tires with warm water and mild soap. Then, carefully test the motorcycle for its braking performance and cornering behavior.

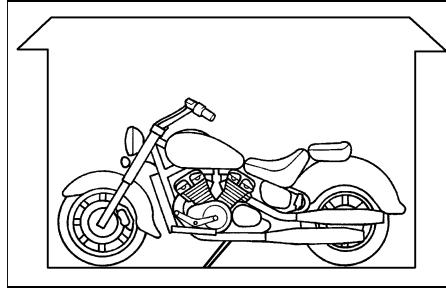
MOTORCYCLE CARE AND STORAGE

CAUTION:

- Apply spray oil and wax sparingly and wipe off any excess.
- Never apply oil or wax on rubber and plastic parts, but treat them with a suitable care product.
- Avoid using abrasive polishing compounds as they wear away the paint.

NOTE:

Consult a Yamaha dealer for advice on what products to use.



Storage

Short-term

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

CAUTION:

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

Long-term

Before storing your motorcycle for several months:

1. Follow all the instructions in the “Care” section of this chapter.
2. Drain the carburetor float chambers by loosening the drain bolts; this will prevent fuel deposits from building up. Pour the drained fuel into the fuel tank.
3. Only for motorcycles equipped with a fuel cock which has an “OFF” position: Turn the fuel cock to “OFF”.
4. Fill up the fuel tank and add fuel stabilizer (if available) to prevent the fuel tank from rusting and the fuel from deteriorating.
5. Perform the following steps to protect the cylinders, piston rings, etc. from corrosion.

MOTORCYCLE CARE AND STORAGE

- 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 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, install the spark plugs and then the spark plug caps.
6. Lubricate all control cables and the pivoting points of all levers and pedals as well as of the sidestand/centerstand.
7. Check and, if necessary, correct the tire air pressure, then raise the motorcycle so that both of its wheels are off the ground. Alternatively, turn the wheels a little every month in order to prevent the tires from becoming degraded in one spot.
8. Cover up the muffler outlets with plastic bags to prevent moisture from entering.
9. Remove the battery and fully charge it. Store it in a cool, dry place and recharge it once a month. Do not store the battery in an excessively cold or warm place (less than 0 °C or more than 30 °C). For more information, see “Battery storage” in the chapter “PERIODIC MAINTENANCE AND MINOR REPAIRS”.

NOTE: _____
Make any necessary repairs before storing the motorcycle.

WARNING

When turning the engine over, be sure to ground the spark plug electrodes to prevent damage or injury from sparking.

Specifications 8-1

How to use the conversion table 8-5

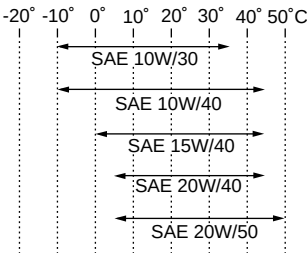
SPECIFICATIONS

Specifications

Model	XVZ1300A
Dimensions	
Overall length	2,480 mm
Overall width	950 mm
Overall height	1,160 mm
Seat height	715 mm
Wheelbase	1,695 mm
Ground clearance	150 mm
Minimum turning radius	3,400 mm
Basic weight (with oil and full fuel tank)	330 kg
Engine	
Engine type	Liquid cooled 4-stroke, DOHC
Cylinder arrangement	V type 4-cylinder
Displacement	1,294 cm ³
Bore × stroke	79 × 66 mm
Compression ratio	10:1
Starting system	Electric starter
Lubrication system	Wet sump

Engine oil

Type



Recommended engine oil classification
API Service SE, SF, SG type or higher

CAUTION: Be sure to use motor oils that do not contain anti-friction modifiers. Passenger car motor oils (often labeled “Energy Conserving”) contain anti-friction additives which will cause clutch and/or starter clutch slippage, resulting in reduced component life and poor engine performance.

Quantity

Periodic oil change	3.5 L
With oil filter replacement	3.7 L
Total amount	4.3 L

Final gear oil

Type	SAE80API "GL-4" Hypoid Gear Oil
Quantity	0.2 L

Radiator

capacity (including all routes)	2.9 L
---------------------------------	-------

Air filter

Dry type element

Fuel

Type	Regular unleaded gasoline
Fuel tank capacity	18 L
Reserve amount	3.5 L

Carburetor

Type × quantity	BDS28 × 4
Manufacturer	MIKUNI

Spark plug

Manufacturer/Type	NGK / DPR7EA-9 or DENSO / X22EPR-U9
Gap	0.8 ~ 0.9 mm

Clutch type

Wet, multiple-disc

Transmission

Primary reduction system	Spur gear
Primary reduction ratio	1.667
Secondary reduction system	Shaft drive
Secondary reduction ratio	2.567

Transmission type

Constant mesh 5-speed

Operation

Left foot operation

Gear ratio

1st	2.438
2nd	1.579
3rd	1.160
4th	0.906
5th	0.750

Chassis

Frame type	Double cradle
Caster angle	30°
Trail	126 mm

Tires

Front

Type	Tubeless
Size	150/80-16 71H
Manufacturer / model	Dunlop / D404F

Rear

Type	Tubeless
Size	150/90B15M/C 74H
Manufacturer / model	Dunlop / D404

SPECIFICATIONS

Maximum load*	203 kg
Air pressure (cold tire)	
Up to 90 kg load*	
Front	250 kPa (2.50 kg/cm ² , 2.50 bar)
Rear	250 kPa (2.50 kg/cm ² , 2.50 bar)
90 kg load ~ maximum load*	
Front	250 kPa (2.50 kg/cm ² , 2.50 bar)
Rear	280 kPa (2.80 kg/cm ² , 2.80 bar)

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

Wheels

Front	
Type	Cast
Size	16 × MT3.50
Rear	
Type	Cast
Size	15M/C × MT4.00

Brakes

Front	
Type	Dual disc brake
Operation	Right hand operation
Fluid	DOT 4

Rear	
Type	Single disc brake
Operation	Right foot operation
Fluid	DOT 4

Suspension

Front	
Type	Telescopic fork
Rear	
Type	Swingarm (link suspension)

Shock absorber

Front	Coil-air spring / oil damper
Rear	Coil spring / gas-oil damper

Wheel travel

Front	140 mm
Rear	95 mm

Electrical sysyem

Ignition system	T.C.I. (digital)
Charging system	
Type	A.C. magneto
Standard output	14 V, 23 A @ 5,000 r/min
Battery	
Type	YTX20L-BS
Voltage, capacity	12 V, 18 AH

Headlight type Quartz bulb (halogen)

Bulb voltage, wattage × quantity

Headlight	12 V, 60/55 W × 1
Auxiliary light	12 V, 4 W × 1
Tail/brake light	12 V, 5/21 W × 1
Turn signal lights	12 V, 21 W × 4
Meter light	14 V, 1.4 W × 2
Neutral indicator light	12 V, 1.7 W × 1
High beam indicator light	12 V, 1.7 W × 1
Oil level indicator light	12 V, 1.7 W × 1
Turn indicator light	12 V, 1.7 W × 1
Fuel level indicator light	14 V, 3 W × 1
Engine overheat indicator light	12 V, 1.7 W × 1
Overdrive / Engine trouble indicator light	12 V, 1.7 W × 1

Fuses

Main fuse	30 A
Ignition fuse	10 A
Signaling system fuse	20 A
Headlight fuse	20 A
Fan fuse	10 A
Odometer fuse	5 A

SPECIFICATIONS

HOW TO USE THE CONVERSION TABLE

All specification data in this manual are listed in SI and METRIC UNITS.

Use this table to convert METRIC unit data to IMPERIAL unit data.

Ex.

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

CONVERSION TABLE

METRIC TO IMPERIAL			
	Metric unit	Multiplier	Imperial unit
Torque	m·kg	7.233	ft·lb
	m·kg	86.794	in·lb
	cm·kg	0.0723	ft·lb
	cm·kg	0.8679	in·lb
Weight	kg	2.205	lb
	g	0.03527	oz
Speed	km/hr	0.6214	mph
Distance	km	0.6214	mi
	m	3.281	ft
	m	1.094	yd
	cm	0.3937	in
	mm	0.03937	in
Volume / Capacity	cc (cm ³)	0.03527	oz (IMP liq.)
	cc (cm ³)	0.06102	cu·in
	lt (liter)	0.8799	qt (IMP liq.)
	lt (liter)	0.2199	gal (IMP liq.)
Misc.	kg/mm ²	55.997	lb/in
	kg/cm ²	14.2234	psi (lb/in ²)
	Centigrade (°C)	9/5 + 32	Fahrenheit (°F)

Identification number records.....	9-1
Key identification number	9-1
Vehicle identification number.....	9-1
Model label.....	9-2

CONSUMER INFORMATION

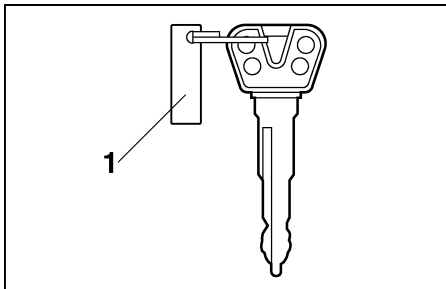
Identification number records

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

1. KEY IDENTIFICATION NUMBER:

2. VEHICLE IDENTIFICATION
NUMBER:

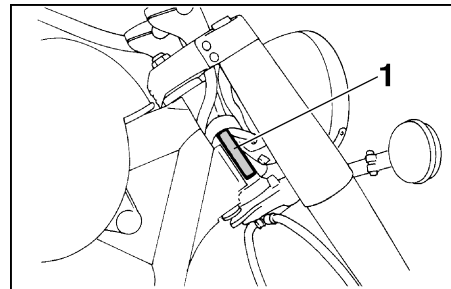
3. MODEL LABEL INFORMATION:



1. Key identification number

Key identification number

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



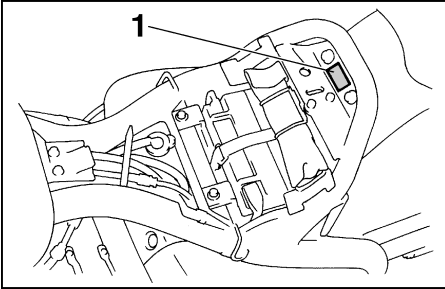
1. Vehicle identification number

Vehicle identification number

The vehicle identification number is stamped into the steering head pipe. Record this number in the space provided.

NOTE: _____

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



1. Model label

Model label

The model label is affixed to the frame under the seat. (See page 3-10 for seat removal procedures.) Record the information on this label in the space provided. This information will be needed to order spare parts from your Yamaha dealer.

INDEX

A

- Adjusting front fork preload 3-12
- Adjusting rear shock absorber
preload 3-13
- Antitheft alarm (optional) 3-3

B

- Battery 6-23
- Brake and clutch lever lubrication 6-22
- Brake and shift pedal lubrication 6-21
- Brake fluid replacement 6-21
- Brake light switch adjustment 6-18

C

- Carburetor adjustment 6-11
- Care 7-1
- Checking the front and
rear brake pads 6-19
- Clutch lever 3-5
- Clutch lever free play adjustment 6-16
- Controls/Instruments 2-3
- Coolant 6-10

D

- Dimmer switch 3-4

E

- Engine break-in 5-5
- Engine oil 6-7
- Engine overheat indicator light 3-2
- Engine stop switch 3-5

F

- Final gear oil 6-10
- Front brake lever 3-6

- Front brake lever free play
adjustment 6-17
- Front fork inspection 6-23
- Fuel 3-7
- Fuel cock 3-8
- Fuel level indicator light 3-1
- Fuel tank cap 3-7
- Fuse replacement 6-25

G

- Give safety the right of way 1-1

H

- Handlebar switches 3-4
 - Dimmer switch 3-4
 - Engine stop switch 3-5
 - Horn switch 3-4
 - Lights switch 3-5
 - Pass switch 3-4
 - Start switch 3-5
 - Turn signal switch 3-4
- Headlight bulb replacement 6-27
- Helmet holders 3-11
- High beam indicator light 3-1
- Horn switch 3-4

I

- Identification number records 9-1
- Idle speed adjustment 6-11
- Indicator lights 3-1
 - Engine overheat indicator light 3-2
 - Fuel level indicator light 3-1
 - High beam indicator light 3-1
 - Neutral indicator light 3-1

- Oil level indicator light 3-2
- Overdrive / Engine trouble
indicator light 3-2
- Turn indicator light 3-2
- Inspecting the brake fluid level 6-19

K

- Key identification number 9-1

L

- Left view 2-1
- Lights switch 3-5

M

- Main switch 3-1
- Model label 9-2

N

- Neutral indicator light 3-1

O

- Oil level indicator light 3-2
- Overdrive / Engine trouble indicator
light 3-2

P

- Parking 5-6
- Pass switch 3-4
- Periodic maintenance and lubrication 6-3
- Pre-operation check list 4-1

R

- Rear brake pedal 3-6
- Rear brake pedal height adjustment 6-17
- Rider seat 3-10
- Right view 2-2

S

Shifting	5-3
Shift pedal	3-6
Sidestand	3-15
Sidestand/clutch switch operation check	3-15
Sidestand lubrication	6-22
Spark plugs	6-6
Specifications	8-1
Speedometer	3-3
Starter (choke) knob	3-9
Starting a warm engine.....	5-3
Starting the engine	5-1
Start switch.....	3-5
Steering lock.....	3-9
Storage.....	7-4

T

Throttle cable free play inspection	6-12
Tips for reducing fuel consumption	5-4
Tires	6-13
Tool kit.....	6-1
Troubleshooting.....	6-28
Troubleshooting chart.....	6-29
Turn indicator light	3-2
Turn signal and taillight bulb replacement	6-28
Turn signal switch.....	3-4

V

Valve clearance adjustment	6-12
Vehicle identification number.....	9-1

W

Wheels.....	6-15
-------------	------



PRINTED ON RECYCLED PAPER
4YP-28199-E3



YAMAHA

YAMAHA MOTOR CO., LTD.

PRINTED IN JAPAN
99 · 7 - 0.3 × 1 CR
(E)