Venture

XVZ13TF

OWNER'S MANUAL

YAMAHA

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

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

IMPORTANT MANUAL INFORMATION

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

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

NOTE:

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

IMPORTANT MANUAL INFORMATION

⚠ WARNING

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

XVZ13TFL
OWNER'S MANUAL

1st Edition, January 1999

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⚠ SAFETY INFORMATION

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

HE OR SHE SHOULD:

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

Safe riding

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

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

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

Protective apparel

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

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

Modification

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

Loading and accessories

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

Loading

The total weight of the operator, passenger, accessories and cargo must not exceed the maximum load limit of 190 kg.
When loading within these weight limits, keep the following in mind:

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

Accessories

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

1. Never install accessories or carry cargo that would impair the performance of your motorcycle. Carefully inspect the accessory before using it to make sure it does not in any way reduce ground clearance or cornering clearance, limit suspension travel, steering travel or control operation, or obscure lights or reflectors.

a. Accessories fitted to the handlebar or the front fork area can create instability due to improper weight distribution or aerodynamic changes. If accessories are added to the handlebar or front fork area, they must be as lightweight as possible and should be kept to a minimum.
b. Bulky or large accessories may seriously affect the stability of the motorcycle due to aerodynamic effects. Wind may attempt to lift the motorcycle, or the motorcycle may become unstable in cross winds. These accessories may also cause instability when being passed by or passing large vehicles.
c. Certain accessories can displace the operator from his or her normal riding position. This improper position limits the freedom of movement of the operator and may limit control ability. Therefore such accessories are not recommended.

2. Caution must be used if adding electrical accessories. If these accessories exceed the capacity of the motorcycle's electrical system, an electric failure could result, which could cause a dangerous loss of lights or engine power.

Gasoline and exhaust gas

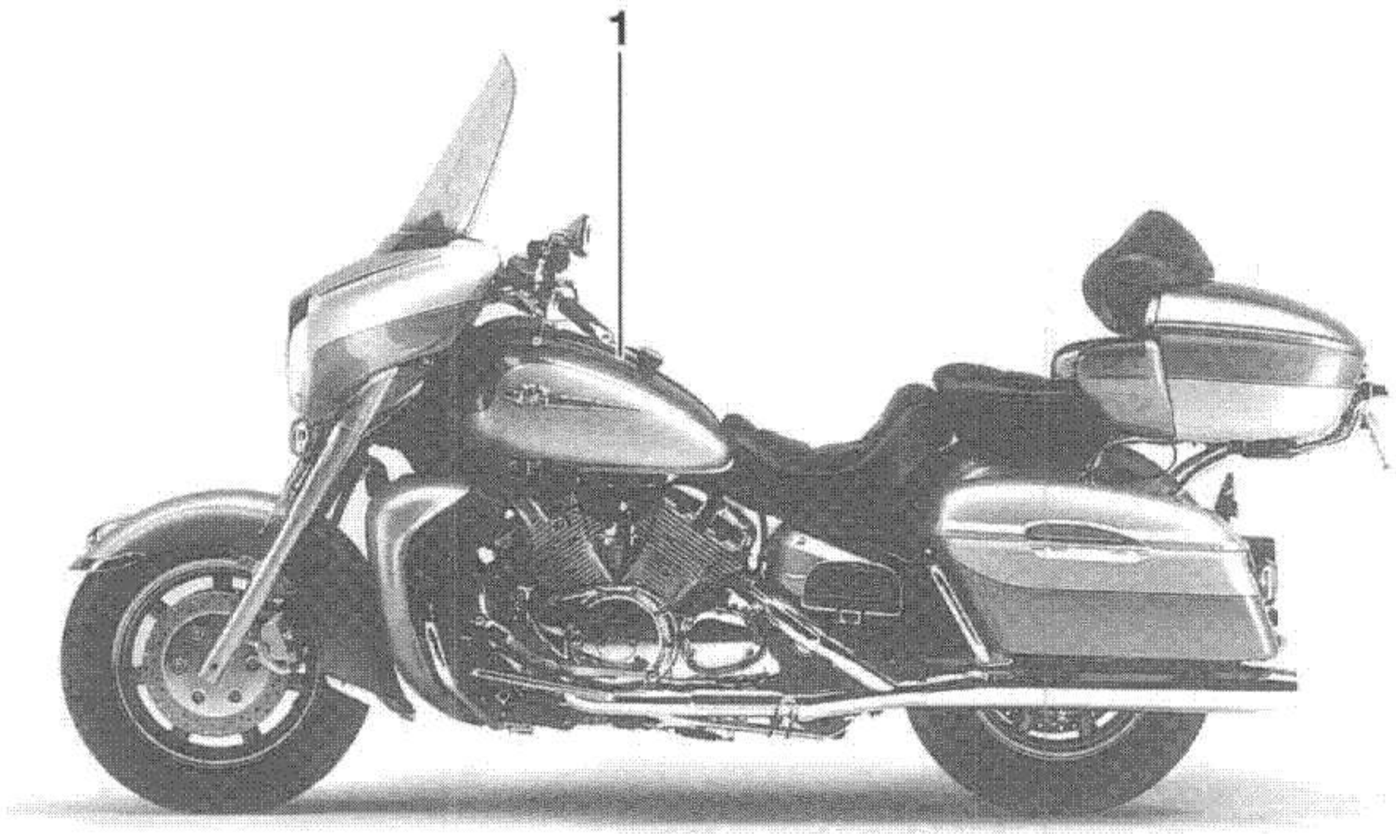
1. GASOLINE IS HIGHLY FLAMMABLE:
   a. Always turn off the engine when refueling.
   b. Take care not to spill any gasoline on the engine or exhaust system when refueling.
   c. Never refuel while smoking or in the vicinity of an open flame.
2. Never start the engine or let it run for any length of time in a closed area. The exhaust fumes are poisonous and may cause loss of consciousness and death within a short time. Always operate your motorcycle in an area that has adequate ventilation.
3. Always turn off the engine before leaving the motorcycle unattended and remove the ignition key. When parking the motorcycle, note the following:

a. The engine and exhaust system may be hot. Park the motorcycle in a place where pedestrians or children are not likely to touch these hot areas.
b. Do not park the motorcycle on a slope or soft ground; the motorcycle may fall over.
c. Do not park the motorcycle near a flammable source, e.g. a kerosene heater, or near an open flame. The motorcycle could catch fire.

4. When transporting the motorcycle in another vehicle, be sure it is kept upright and that the fuel cock is turned to "ON" or "RES" (for vacuum type) / "OFF" (for manual type). If it should lean over, gasoline may leak out of the carburetor or fuel tank.
5. If you should swallow any gasoline, inhale a lot of gasoline vapor, or allow gasoline to get in your eyes, see your doctor immediately. If any gasoline spills on your skin or clothing, immediately wash it off with soap and water and change your clothes.

Location of the important label

Please read the following label carefully before operating this motorcycle.



1

WARNING

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

English 3HP-21568-00

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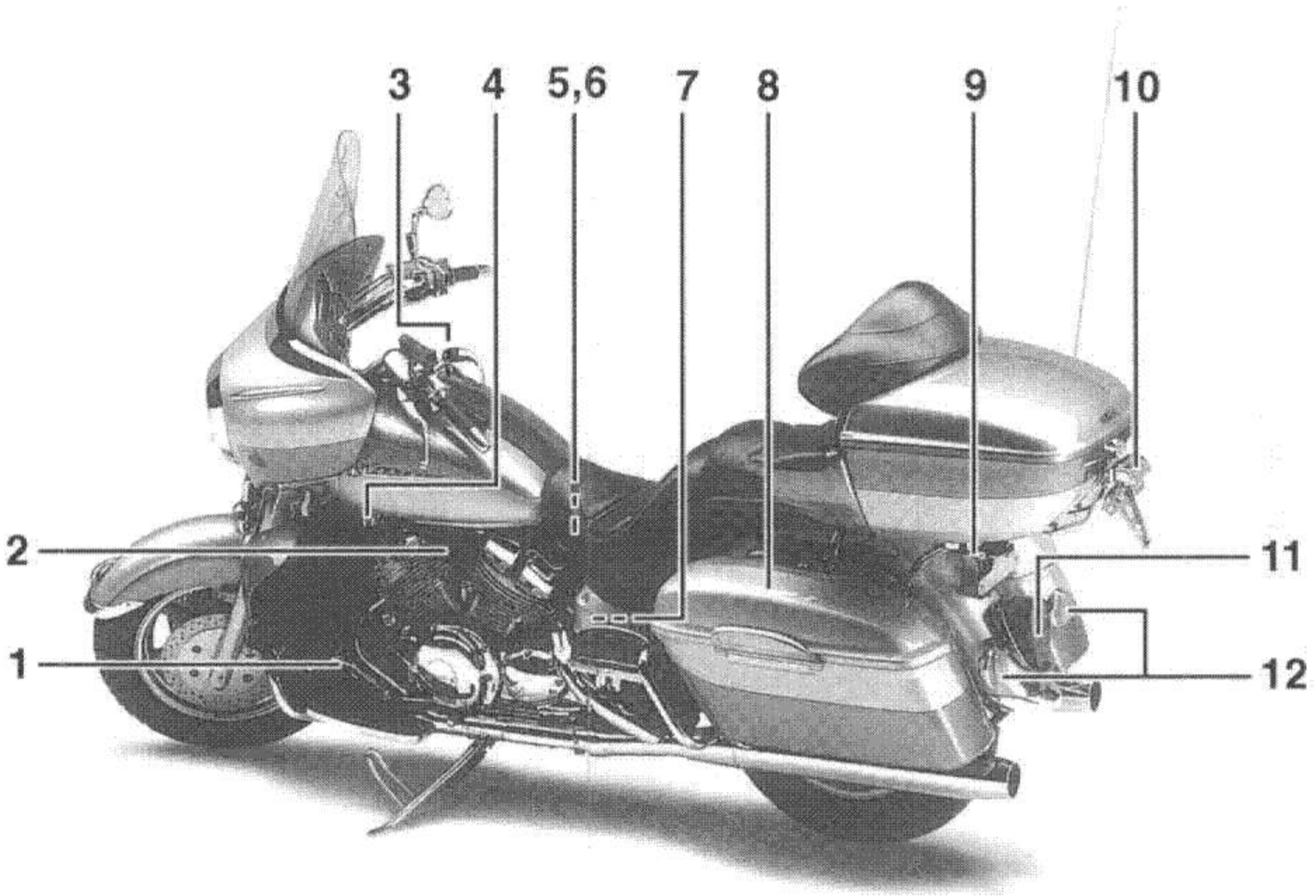
Right view 2-2
Controls/Instruments 2-3

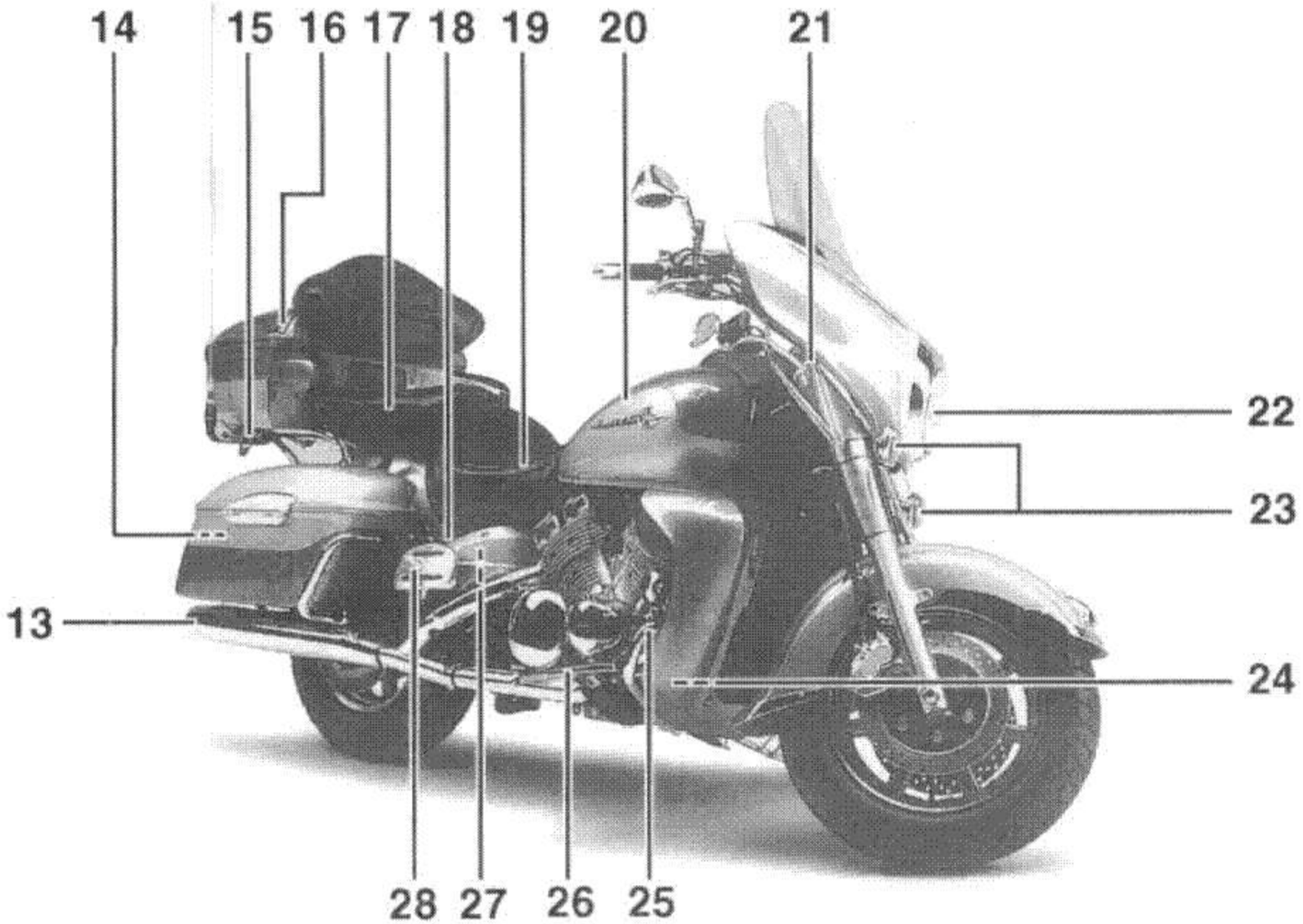
DESCRIPTION

Left view



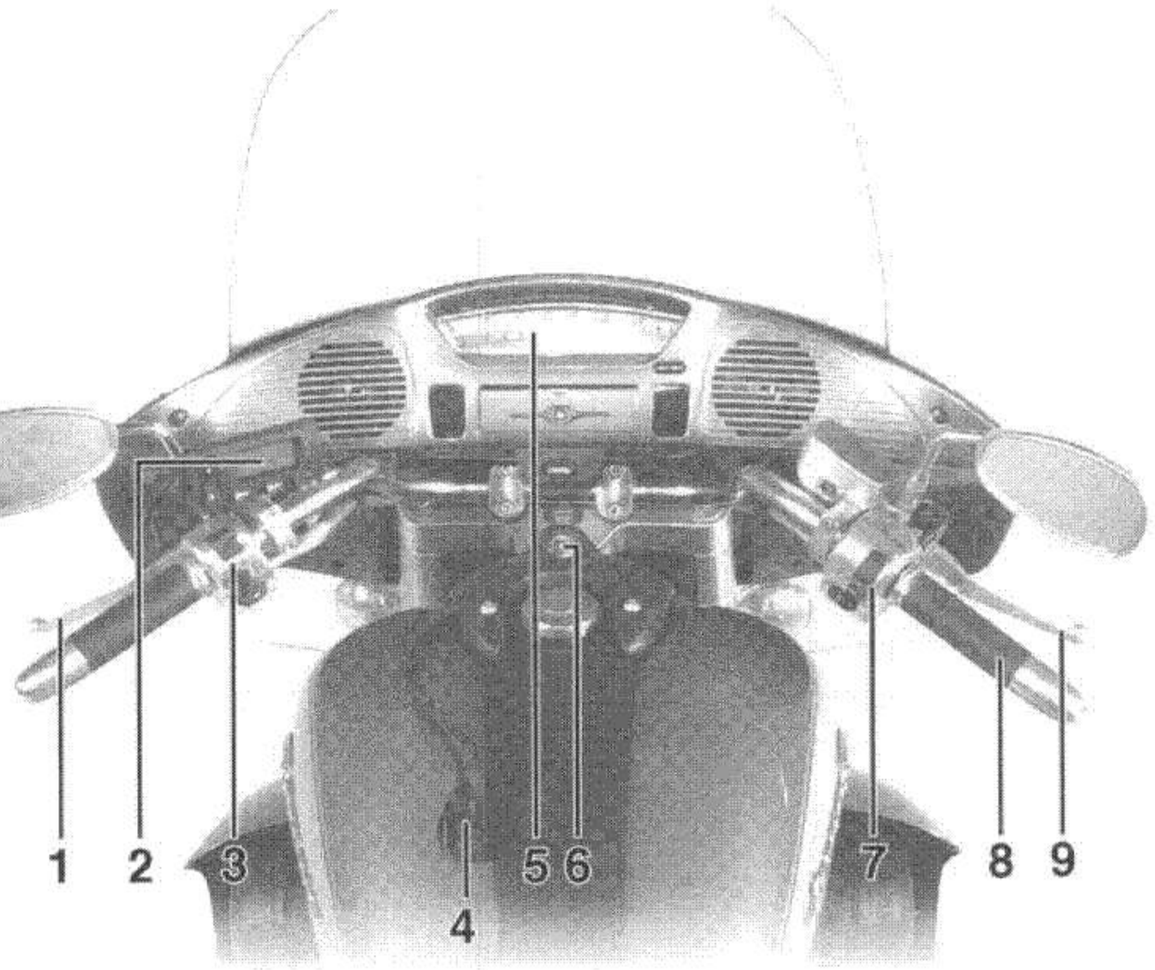
1. Shift pedal	(page 3-9)	7. Fuse box B	(page 7-31)
2. Starter (choke) "⎢↖⎢"	(page 3-12)	8. Saddlebag	(page 3-14)
3. Fuel tank cap	(page 3-10)	9. Helmet holder	(page 3-13)
4. Fuel cock	(page 3-11)	10. Licence light	(page 7-33)
5. Battery	(page 7-29)	11. Tail/brake light	(page 7-33)
6. Coolant reservoir tank cap	(page 7-14)	12. Rear turn signal lights	(page 7-33)

Right view



13. Muffler		21. Front fork adjusting valve	(page 3-17)
14. Tool kit	(page 7-1)	22. Headlight	(page 7-31)
15. Helmet holder	(page 3-13)	23. Front turn signal lights	(page 7-33)
16. Travel trunk	(page 3-14)	24. Fuse box A	(page 7-30)
17. Passenger seat		25. Rear brake pedal	(page 3-10)
18. Rear shock absorber adjusting valve	(page 3-18)	26. Rider footrest	
19. Rider seat	(page 3-13)	27. Coolant reservoir tank	(page 7-14)
20. Fuel tank	(page 3-11)	28. Passenger footrest	

Controls/Instruments



1. Clutch lever	(page 3-9)	5. Speedometer	(page 3-4)
2. Audio system control unit	(page 4-3)	6. Main switch	(page 3-1)
3. Left handlebar switches	(page 3-7)	7. Right handlebar switches	(page 3-8)
4. Rider headset jack	(page 4-2)	8. Throttle grip	(page 7-18)
		9. Front brake lever	(page 3-9)

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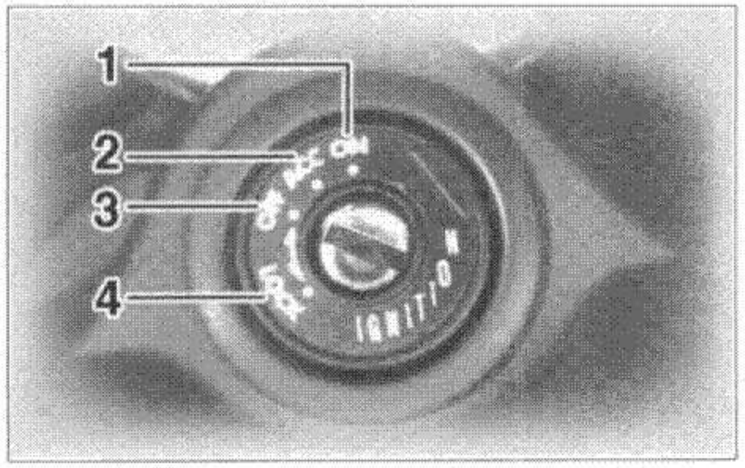


1. ON
2. ACC (Accessory)
3. OFF
4. LOCK

Main switch/Steering lock

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

ON

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

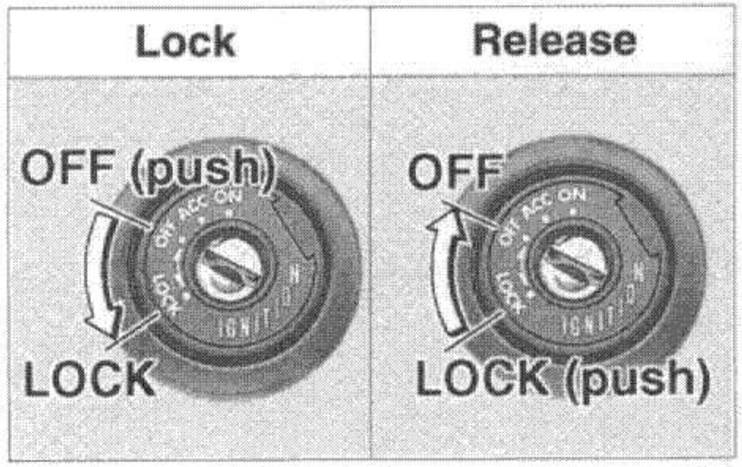
ACC (Accessory)

The audio system, auxiliary DC terminal and jack can be used in this position.

The key cannot be removed in this position. Do not use the accessory position for an extended period of time as the battery may discharge.

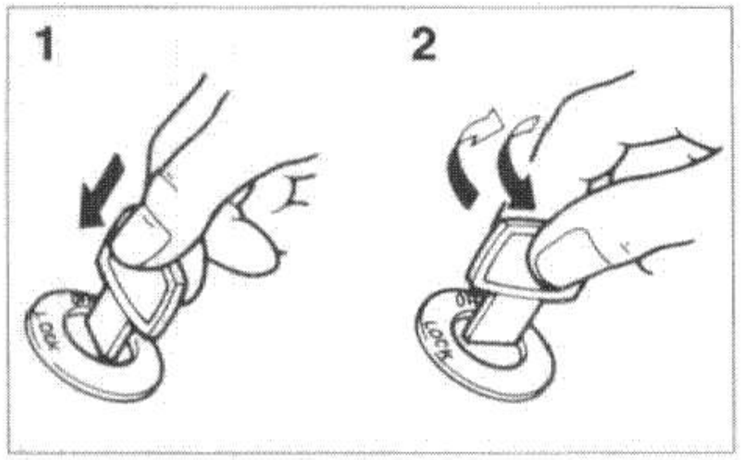
OFF

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



LOCK

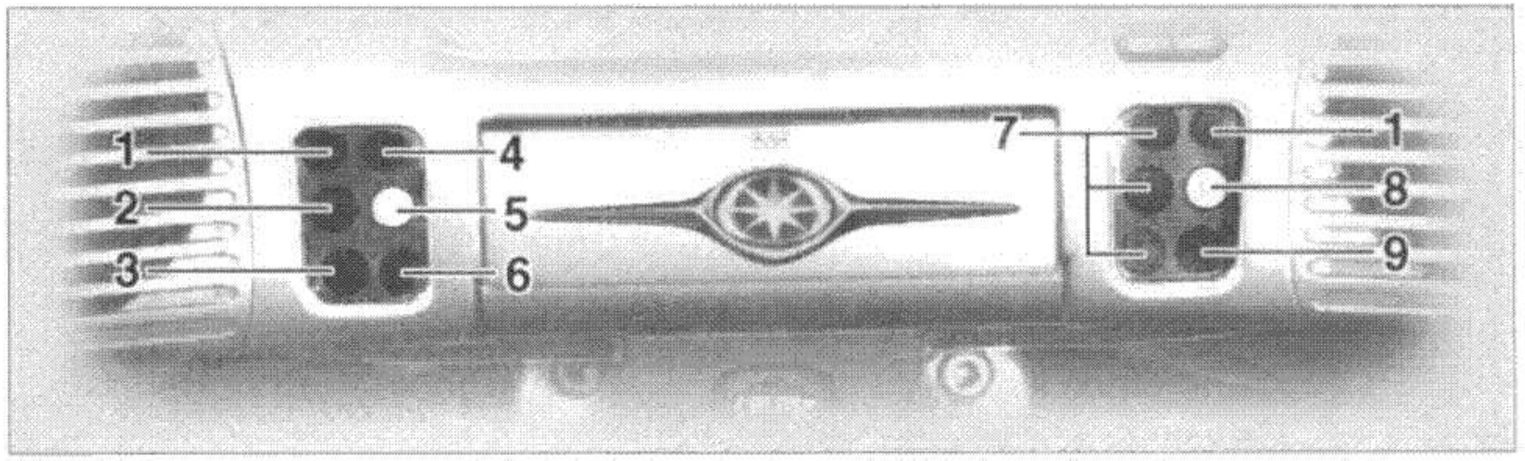
The steering is locked in this position and all electrical circuits are switched off. The key can be removed in this position. To lock the steering, turn the handlebars all the way to the left. While pushing the key into the main switch, turn it from "OFF" to "LOCK" and remove it. To release the lock, turn the key to "OFF" while pushing.



1. Push
2. Turn

⚠ WARNING

Never turn the key to "OFF" or "LOCK" when the motorcycle is moving. The electrical circuits will be switched off which may result in loss of control or an accident. Be sure the motorcycle is stopped before turning the key to "OFF" or "LOCK".



Indicator lights

1. Turn indicator lights " ⇦ ⇨ "
The corresponding indicator flashes when the turn switch is moved to the left or right.

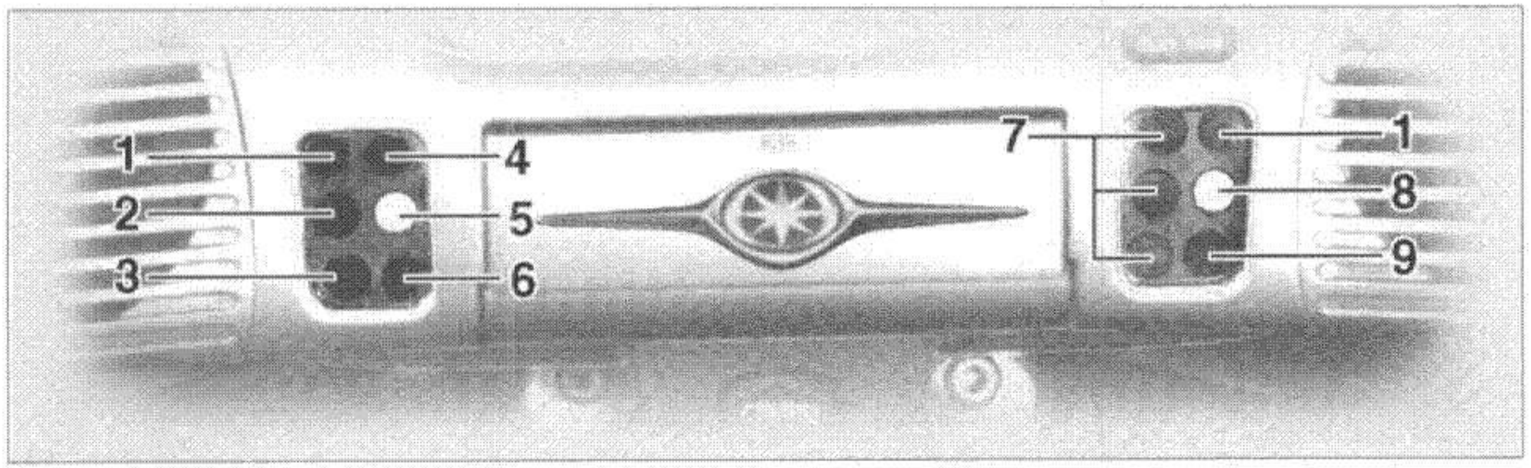
2. High beam indicator light " ≡D "
This indicator comes on when the headlight high beam is used.

3. 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.



4. Overdrive indicator light "O/D"
This indicator light will come on when the transmission is in overdrive (5th gear).

5. Engine trouble indicator light "⚙"
This indicator light will come on or flash if trouble occurs in a monitoring circuit. In such a case, take the motorcycle to a Yamaha dealer to have the self-diagnostic systems checked.

6. 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.

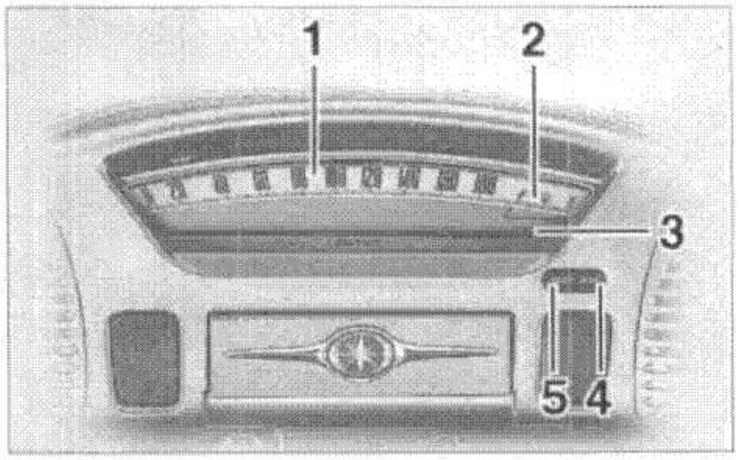
7. Cruise control indicator lights
See page 3-6 for an explanation of the functions of these indicator lights.

8. Neutral indicator light "N"
This indicator comes on when the transmission is in neutral.

9. 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.



1. Speedometer
2. Fuel gauge
3. Odometer/Trip meter/Clock
4. "RESET" button
5. "SELECT" button

Fuel gauge

The fuel gauge indicates the quantity of the remaining gasoline in the tank. The segments in the fuel gauge disappear towards "E" (Empty) as the fuel level decreases. When only one segment is left near "E", add fuel as soon as possible.
This fuel gauge is equipped with a self-diagnosis system. If there is a problem in an electric circuit, first the segments and then either "E" or "F" flash. In this case, be sure to consult a Yamaha dealer as soon as possible.

Speedometer

This speedometer is equipped with:

- an odometer
- two trip odometers
- a fuel reserve trip meter
- a clock

Odometer and trip meter modes

Use the trip meters to estimate how far you can ride on a tank of fuel.
Use the fuel reserve trip meter to see the distance traveled from when the fuel level dropped to the reserve level.

Selecting a mode

Push the "SELECT" button to change between the odometer mode "ODO" and the trip odometer modes "TRIP 1" and "TRIP 2" in the following order:
"ODO" → "TRIP 1" → "TRIP 2" → "ODO"

If the fuel level indicator light comes on (see page 3-3), the odometer display will automatically change to the fuel reserve trip meter mode "TRIP F" and start counting the distance traveled from that point. Push the "SELECT" button to change between the fuel reserve trip meter, trip odometers and odometer modes in the following order:
"TRIP F" → "TRIP 1" → "TRIP 2" → "ODO" → "TRIP F"

Resetting a meter

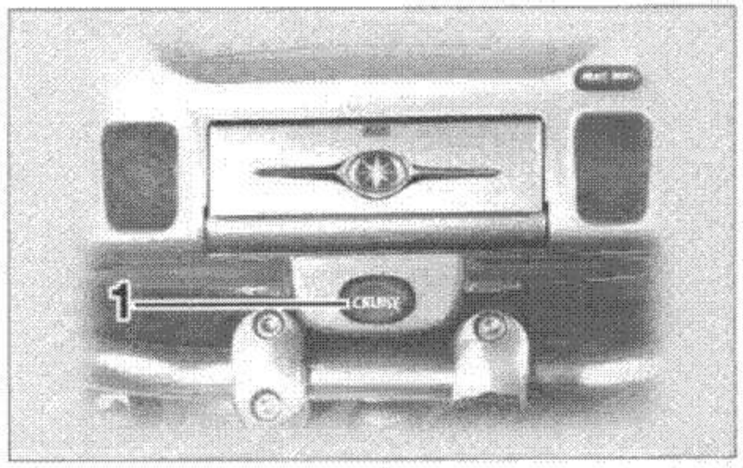
To reset a trip odometer to 0.0, select it by pushing the "SELECT" button and push the "RESET" button. To reset the fuel reserve trip meter, select it by pushing the "SELECT" button and push the "RESET" button. The display will return to "TRIP 1". If you do not reset the fuel reserve trip meter manually, it will automatically reset and return to "TRIP 1" after refueling and traveling 5 km.

NOTE:
After resetting the fuel reserve trip meter, the display always returns to the "TRIP 1" mode, unless a different mode had been previously selected; in that case, the display automatically returns to the prior mode.

Clock mode
To change the display to the clock mode, push both the "SELECT" and "RESET" buttons.
To change the display back to the odometer modes, push the "RESET" button.

To set the clock
1. Push both the "SELECT" and "RESET" buttons for at least two seconds.
2. When the hour digits start flashing, push the "RESET" button to set the hours.
3. Push the "SELECT" button and the minute digits will start flashing.
4. Push the "RESET" button to set the minutes.
5. Push the "SELECT" button to start the clock.

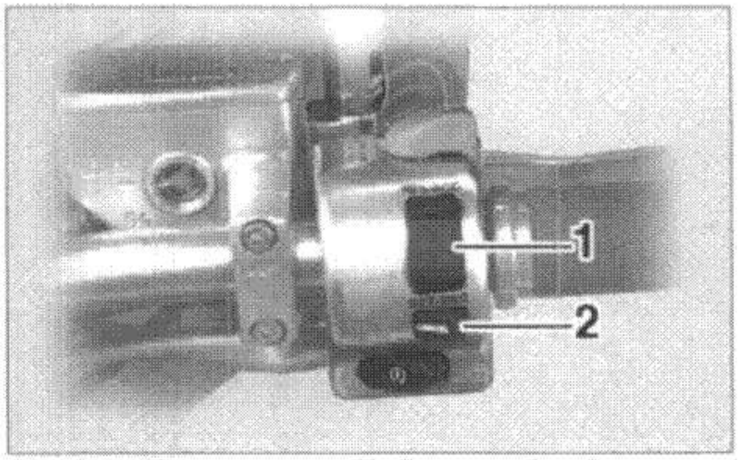
NOTE:
After setting the clock, be sure to push the "SELECT" button before turning the main switch to "OFF", otherwise the clock will not be set.



1. Cruise control switch "CRUISE"

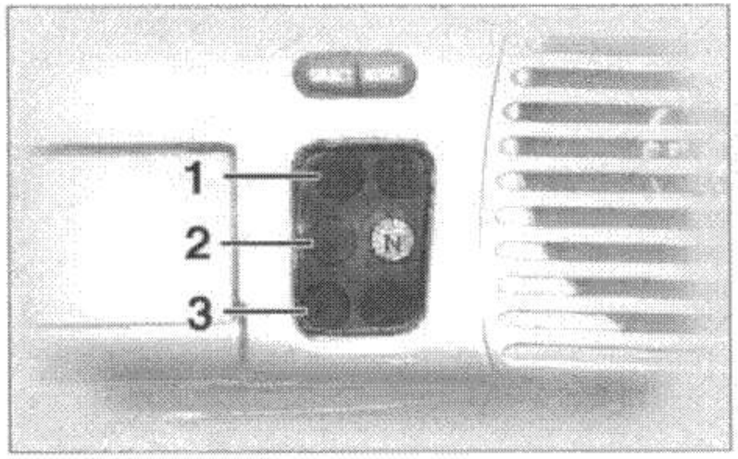
Cruise control system
This motorcycle is equipped with a cruise control system designed to maintain a set traveling speed.

Activating and setting cruise control
Cruise control can only be activated when riding in 4th or 5th gear at speeds between 50 km/h and 130 km/h.



1. Cruise control switch
2. "CANCEL" switch

1. Push the "CRUISE" switch to the left to turn on the cruise control system. The "ON" indicator light will come on.
2. Press the "SET/DEC" (set/decelerate) side of the cruise control switch to activate cruise control. The "SET" indicator light will come on.
3. Set the desired traveling speed as follows. Press the "RES/ACC" (resume/accelerate) side of the cruise control switch to increase the set speed or the "SET/DEC" side to decrease the speed.



1. "SET" indicator light
2. "RES" indicator light
3. "ON" indicator light

NOTE:

Pressing the switch once will change the speed by 1.6 km/h. Holding the switch down will increase or decrease the speed continuously until the switch is released.

The traveling speed can be set to maximum 130 km/h and minimum 50 km/h.

When cruise control is activated and the throttle grip is turned to increase the traveling speed by up to 8 km/h, the cruise control system will return to the set speed after the throttle grip is released. However, if the speed is increased by more than 8 km/h, cruise control will be deactivated until the traveling speed returns to within 8 km/h of the set speed.

Deactivating cruise control

Applying the front or rear brake or disengaging the clutch will automatically deactivate cruise control.

Push the "CANCEL" switch to manually deactivate cruise control and return to normal throttle operation.

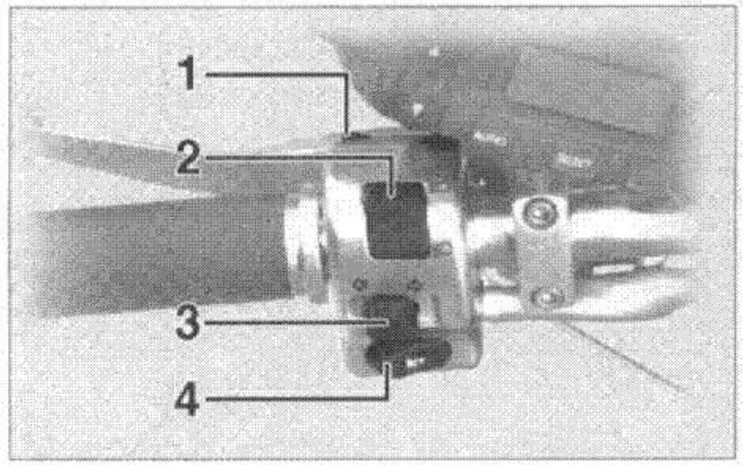
NOTE:

- When cruise control is deactivated, the "RES" (resume) indicator light will come on.
- The traveling speed starts decreasing as soon as cruise control is deactivated, unless the throttle grip is turned.

Push the "RES/ACC" side of the cruise control button to reactivate cruise control. The traveling speed will return to the previously set speed. The "RES" indicator light will flash during this time and then go off. Finally, the "SET" indicator light will come on.
Push the "CRUISE" switch to the right to turn the cruise control system off completely.

⚠ WARNING

If some trouble occurs in the cruise control system, the "SET" and "RES" indicator lights will flash simultaneously. If this occurs, turn off the cruise control system and have a Yamaha dealer check it.



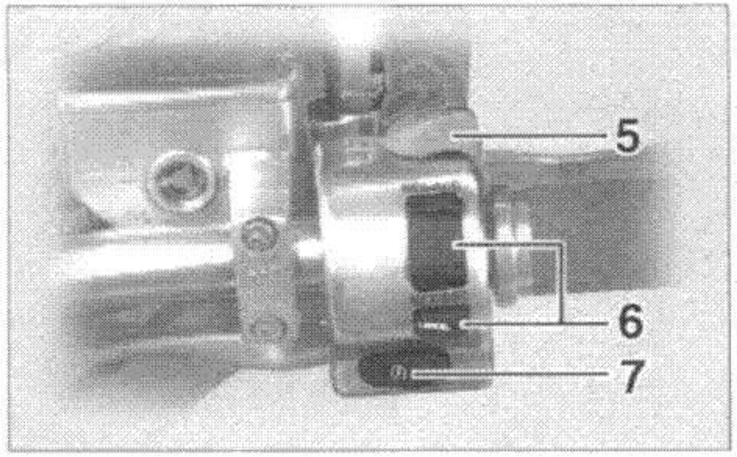
Handlebar switches

1. Pass switch "≡D"
Press the switch to operate the passing light.

2. Dimmer switch
Turn the switch to "≡D" for the high beam and to "≡D" for the low beam.

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.

4. Horn switch "📯"
Press the switch to sound the horn.



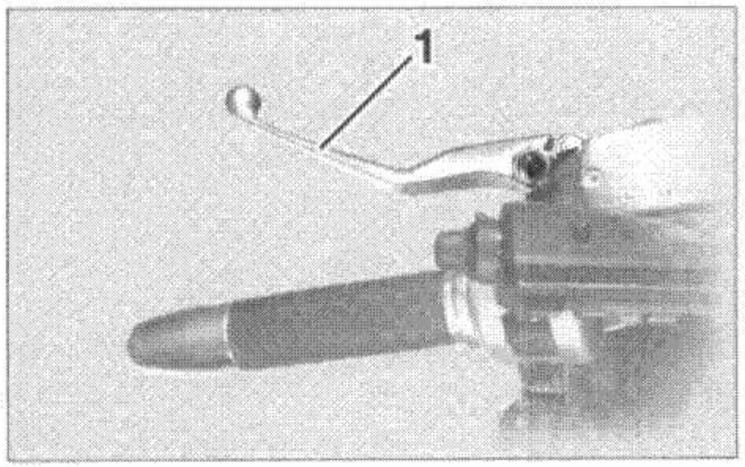
5. Engine stop switch
The engine stop switch is a safety device for use in an emergency such as when the motorcycle overturns or if trouble occurs in the throttle system. Turn the switch to "🔄" to start the engine. In case of emergency, turn the switch to "⊗" to stop the engine.

6. Cruise control switches
See page 3-5 for operation procedures.

7. Start switch "🔄"
The starter motor cranks the engine when pushing the start switch.

CAUTION:

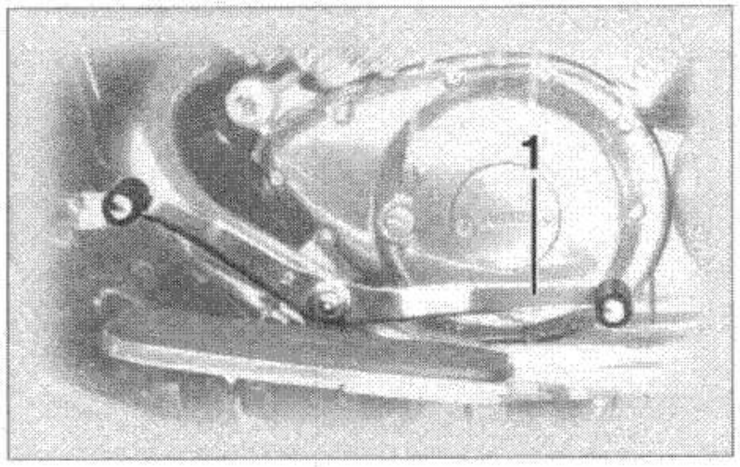
See starting instructions prior to starting the engine.



1. Clutch lever

Clutch lever

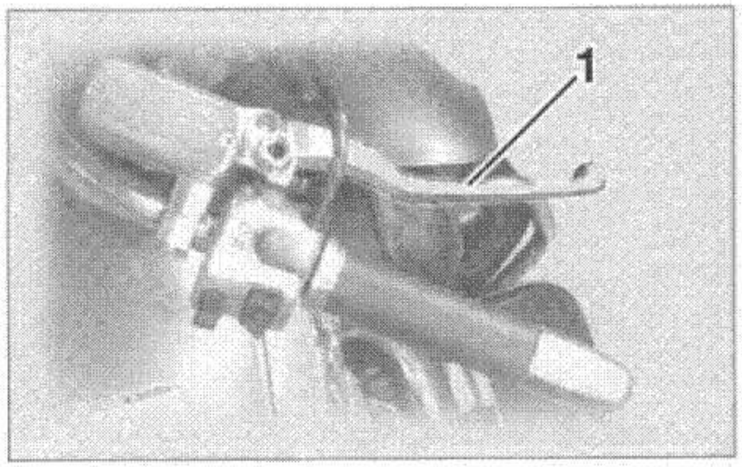
The clutch lever is located on the left handlebar, and the ignition circuit cut-off system is incorporated in the clutch lever holder. Pull the clutch lever to the handlebar to disengage the clutch, and release the lever to engage the clutch. The lever should be pulled rapidly and released slowly for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



1. Shift pedal

Shift pedal

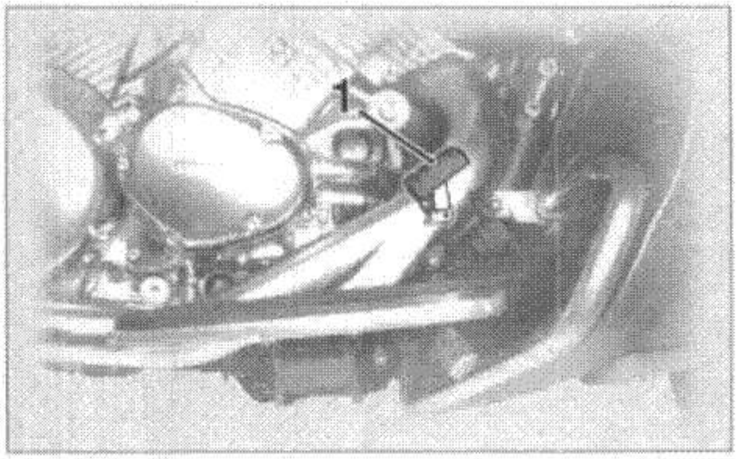
The shift pedal is located on the left side of the engine and is used in combination with the clutch when shifting. Use your toe or heel to shift up and your toe to shift down.



1. Front brake lever

Front brake lever

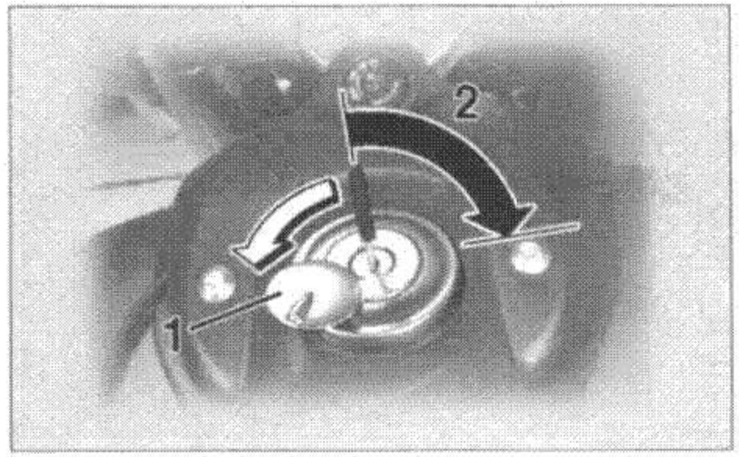
The front brake lever is located on the right handlebar. Pull it toward the handlebar to apply the front brake.



1. Rear brake pedal

Rear brake pedal

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



1. Lock cover
2. Open

Fuel tank cap

To remove

Slide the 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

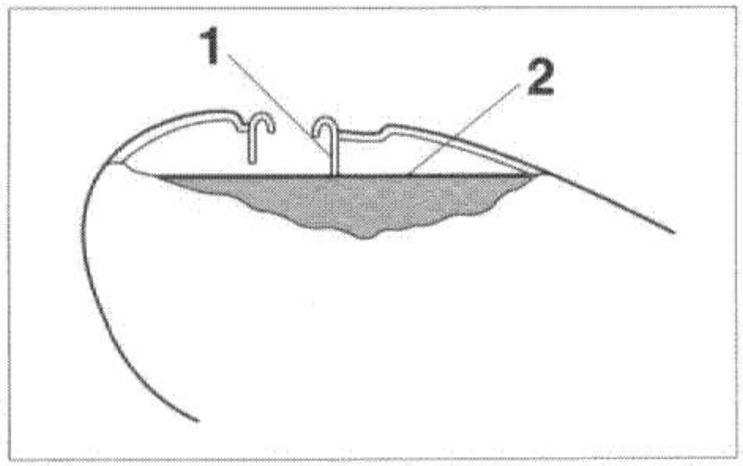
Make sure the arrow mark on the tank cap is facing forward, then push the tank cap into position. Turn the key counterclockwise to the original position and remove it. Close the lock cover.

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.

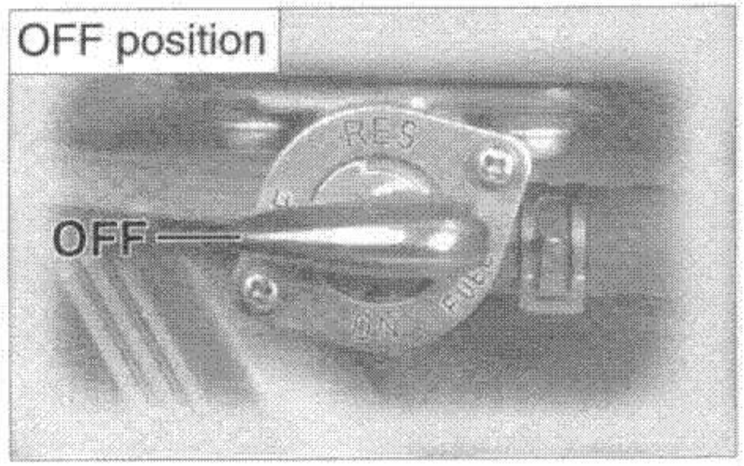
⚠ WARNING

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.

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 gasoline
For Australia:
Unleaded fuel only
Fuel tank capacity:
Total:
22.5 L
Reserve:
3.5 L

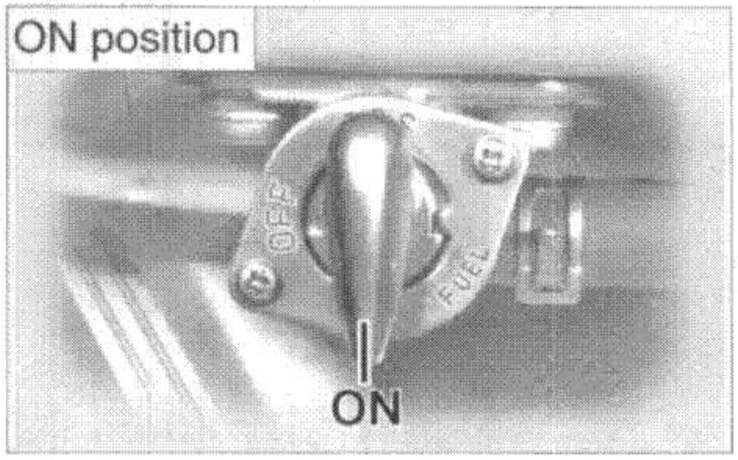


Fuel cock

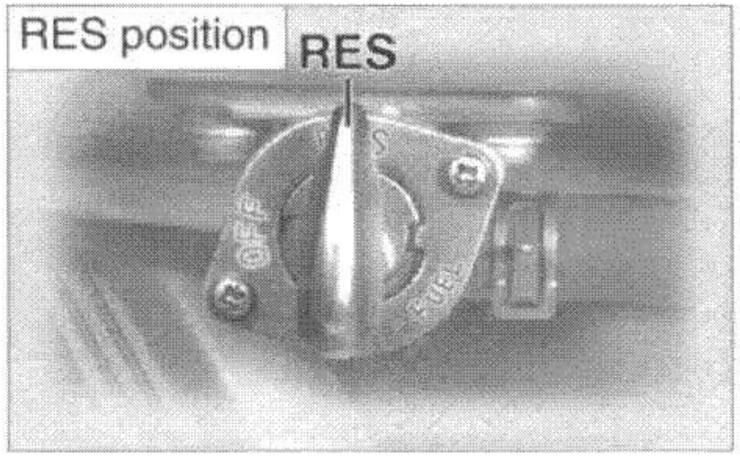
The fuel cock supplies fuel from the tank to the carburetors while filtering it also.
The fuel cock has three positions:

OFF

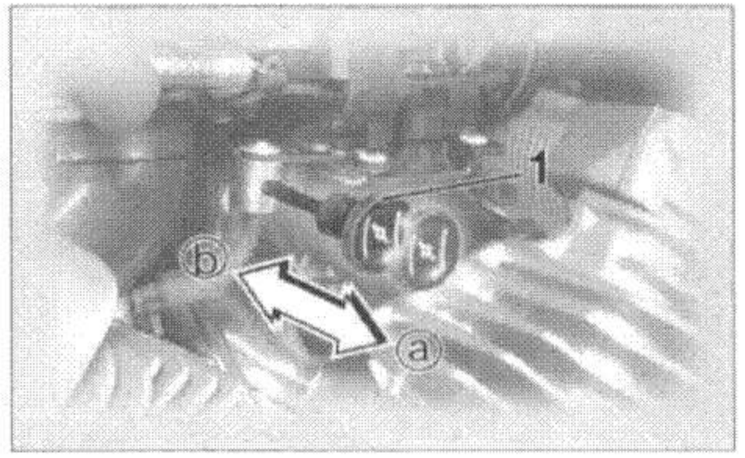
With the fuel cock in this position, fuel will not flow. Always set the fuel cock to this position when the engine is not running.



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



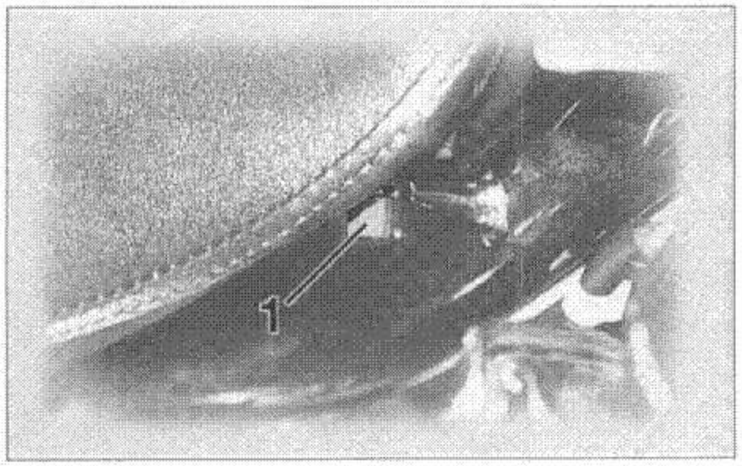
RES
This indicates reserve. If you run out of fuel while riding, move the fuel cock to this position. Fill the tank at the first opportunity. Be sure to set the fuel cock back to "ON" after refueling!



1. Starter (choke) "|↘|"

Starter (choke) "|↘|"

Starting a cold engine requires a richer air-fuel mixture. A separate starter circuit supplies this mixture.
Move in direction ⓐ to turn on the starter (choke).
Move in direction ⓑ to turn off the starter (choke).

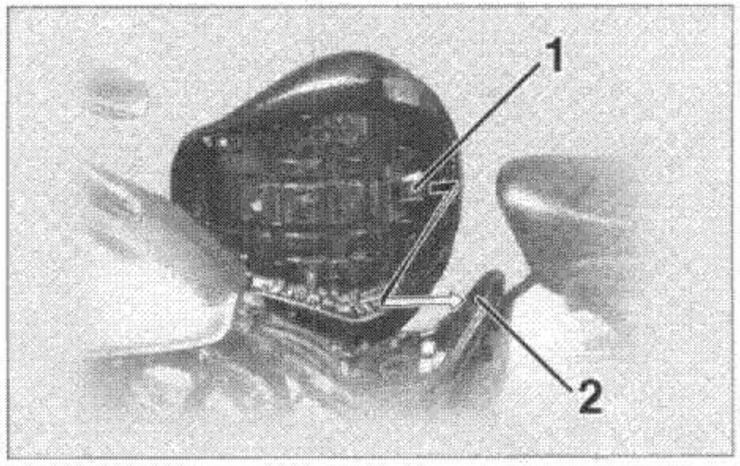


1. Nut (× 2)

Rider seat

To remove

Remove the nuts and lift up the rider seat.



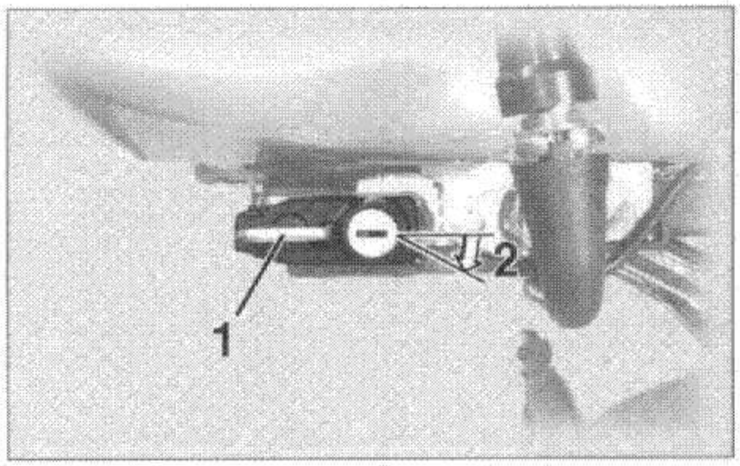
1. Projection
2. Seat holder

To install

Insert the projection on the rear of the rider seat into the seat holder, then tighten the nuts.

NOTE:

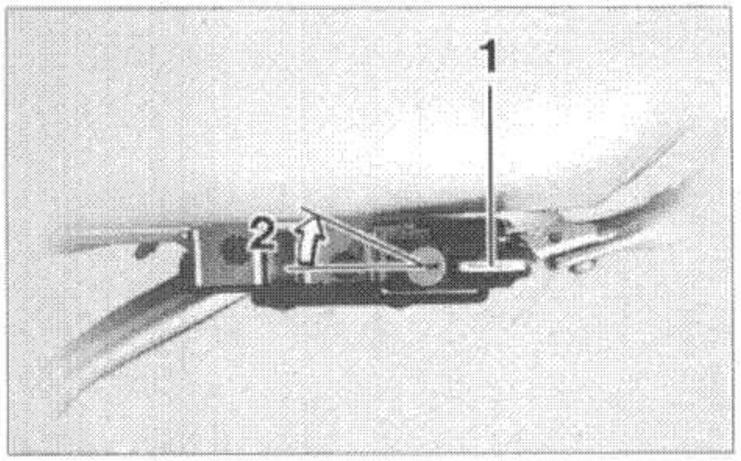
Make sure that the rider seat is securely fitted.



1. Helmet holder (right)
2. Open

Helmet holders

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



1. Helmet holder (left)
2. Open

⚠ WARNING

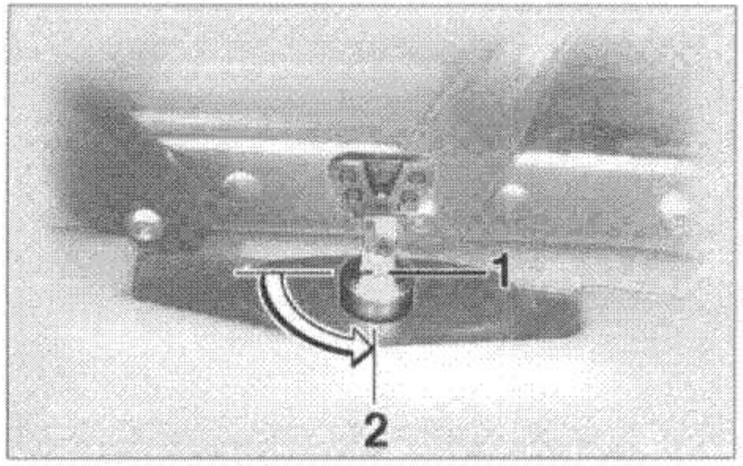
Never ride with a helmet in either helmet holder. The helmet may hit objects, causing loss of control and possibly an accident.

Saddlebags and travel trunk

⚠ WARNING

- **Always be sure to close and lock the saddlebags and travel trunk securely before operating the motorcycle.**
- **Distribute weight evenly on each side of the motorcycle.**
- **Never exceed the maximum loading limit of 9 kg in each saddlebag and the travel trunk. Improper loading or overloading can cause vehicle handling problems leading to an accident or personal injury.**
- **Read the Owner's manual for important loading and tire pressure information.**
- **Total weight of rider, passenger, accessories and cargo must not exceed the motorcycle load capacity shown in the Owner's Manual.**
- **Never ride above 120 km/h with travel trunk and/or saddlebags because handling could be affected. This maximum speed may be reduced by such factors as improper loading, poor tire or overall motorcycle conditions, poor road surfaces or adverse weather conditions.**

3



1. Saddlebag lock
2. Open

Saddlebags

To open

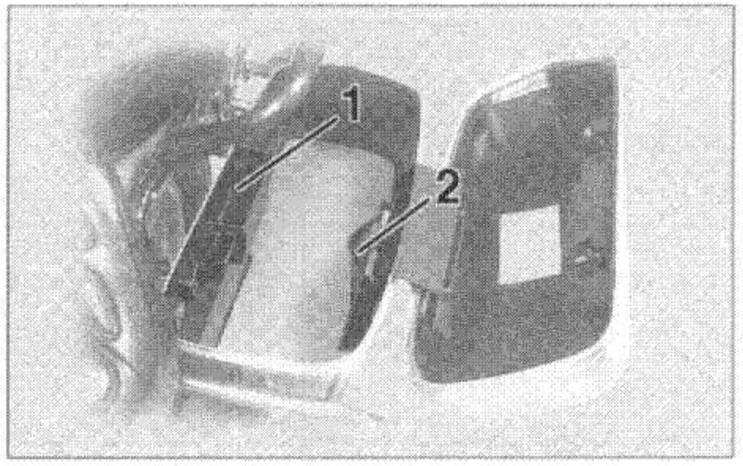
Insert the key into the lock, turn it counterclockwise, and then push it in.

To lock

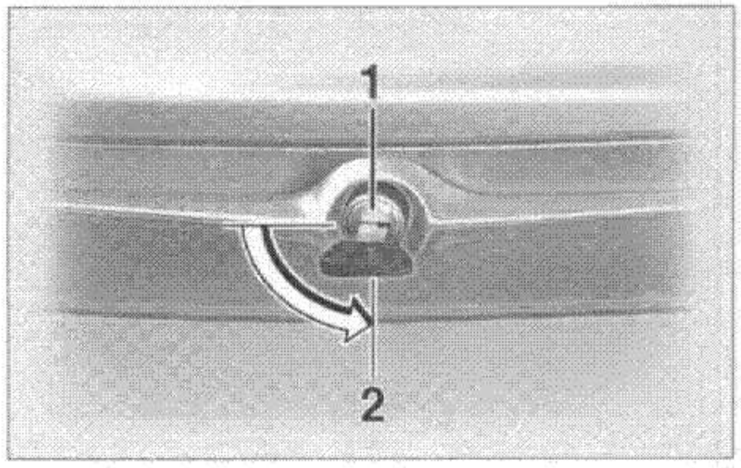
Close the lid. Then, turn the key clockwise and remove it.

NOTE:

Be sure to push down on both sides of the lid so that each latch snaps into place.



1. Storage compartment
2. Storage pouch

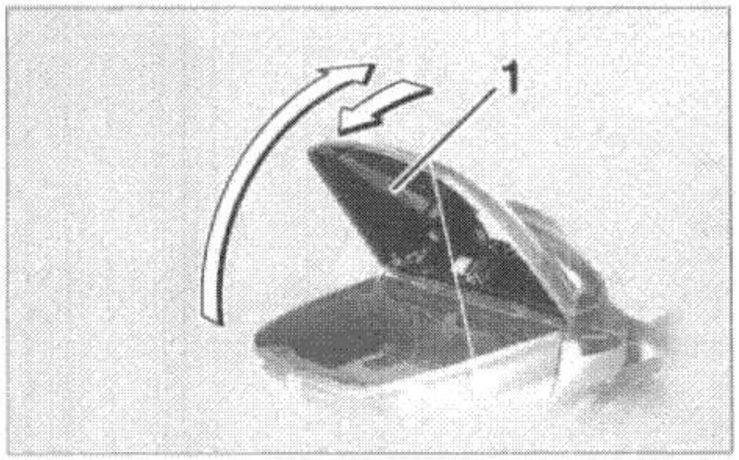


1. Travel trunk lock
2. Open

Travel trunk

To open

1. Insert the key into the lock, turn it counterclockwise, and then push it in.

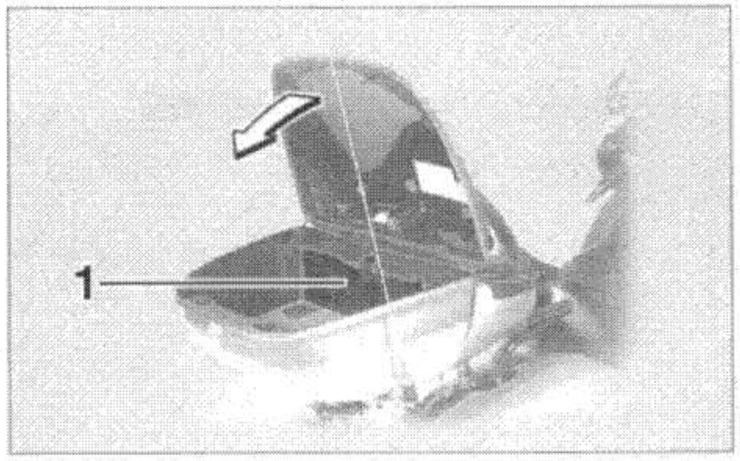


1. Lid resting in opened position

2. Lift up the lid so that it will rest in place as shown when it is released.

CAUTION:

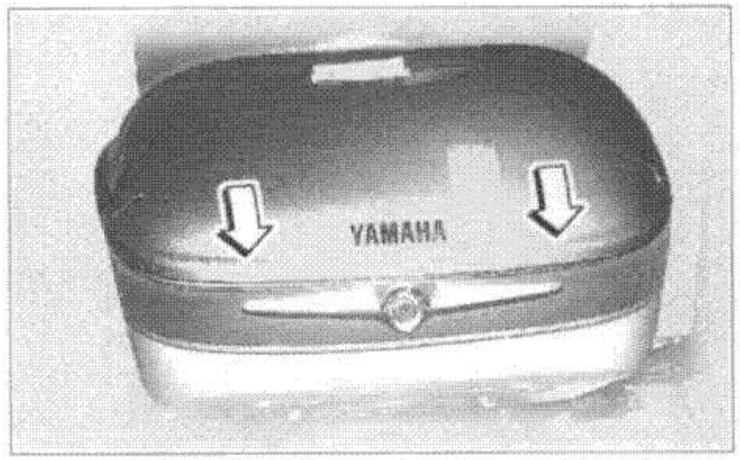
Do not apply excessive pressure on the travel trunk lid when it is open.



1. Storage pouch

To lock

1. Lift up the lid completely, and then close it.



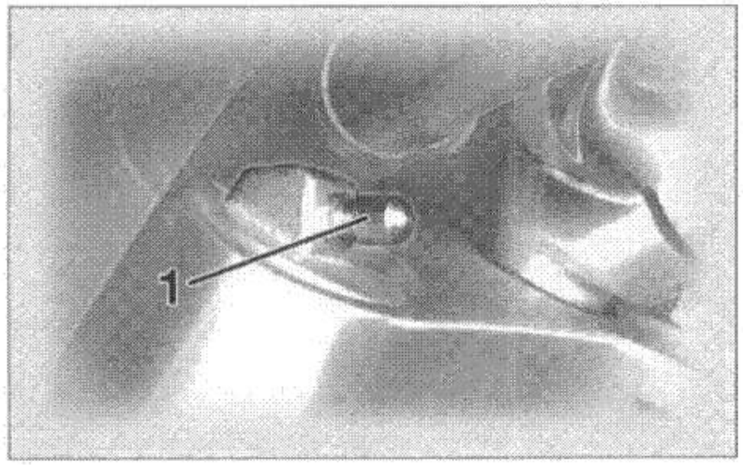
NOTE:

Be sure to push down on both sides of the lid so that each latch snaps into place.

2. Turn the key clockwise and remove it.

CAUTION:

Be sure not to lock the key inside either saddlebag or the travel trunk.



1. Front fork shock absorber air valve cap

Front fork adjustment

This front fork is equipped with a spring preload adjuster.

⚠ WARNING

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

Adjust spring preload as follows.

1. Put the motorcycle on the sidestand.

NOTE:

There should be no weight on the motorcycle when performing this job.

2. Remove the valve cap from each fork leg.
3. Check the air pressure using the air pressure gauge in the owner's tool kit, and adjust it if necessary. Increasing the air pressure increases the spring preload, decreasing the air pressure decreases the spring preload.

To increase the air pressure, use an air pump or compressed air.

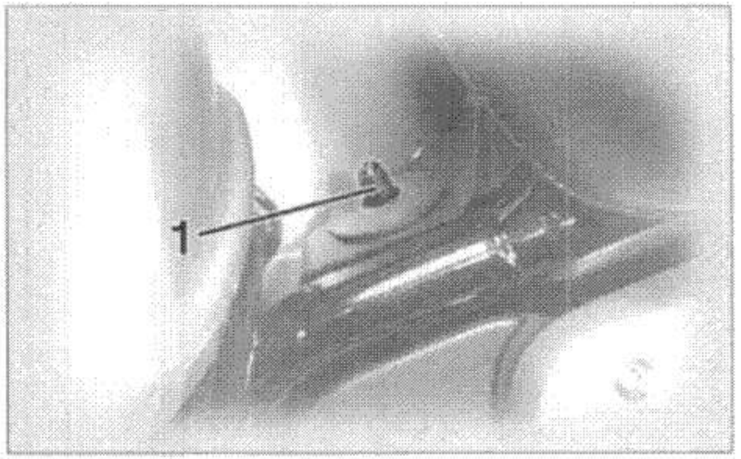
To decrease the air pressure, release the air by pushing the valve.

Spring preload (air pressure):
Minimum/Standard:
0 kPa (0 kgf/cm^2, 0 bar)
Maximum:
50 kPa (0.5 kgf/cm^2, 0.5 bar)

CAUTION:

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

4. Install the valve caps securely.



1. Rear shock absorber air valve cap

Rear shock absorber adjustment

This rear shock absorber is equipped with a spring preload adjuster.
Adjust spring preload as follows.

1. Put the motorcycle on the sidestand.

NOTE:
There should be no weight on the motorcycle when performing this job.

2. Remove the valve cap.
3. Check the air pressure using the air pressure gauge in the owner's tool kit, and adjust it if necessary. Increasing the air pressure increases the spring preload, decreasing the air pressure decreases the spring preload.

To increase the air pressure, use an air pump or compressed air.
To decrease the air pressure, release the air by pushing the valve.

Spring preload (air pressure):
Minimum/Standard:
0 kPa (0 kgf/cm^2, 0 bar)
Maximum:
400 kPa (4.0 kgf/cm^2, 4.0 bar)

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

4. Install the valve cap securely.

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 6-1 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.

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

↓

TRANSMISSION IS IN GEAR AND SIDESTAND IS UP.

↓

PULL IN CLUTCH LEVER AND PUSH THE START SWITCH.

↓

ENGINE WILL START.

↓

CLUTCH SWITCH IS OK.

↓

SIDESTAND IS DOWN.

↓

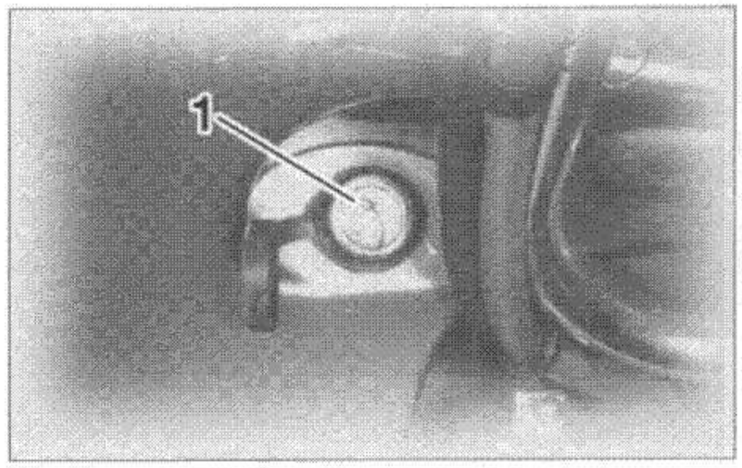
ENGINE WILL STALL.

↓

SIDESTAND SWITCH IS OK.

⚠ WARNING

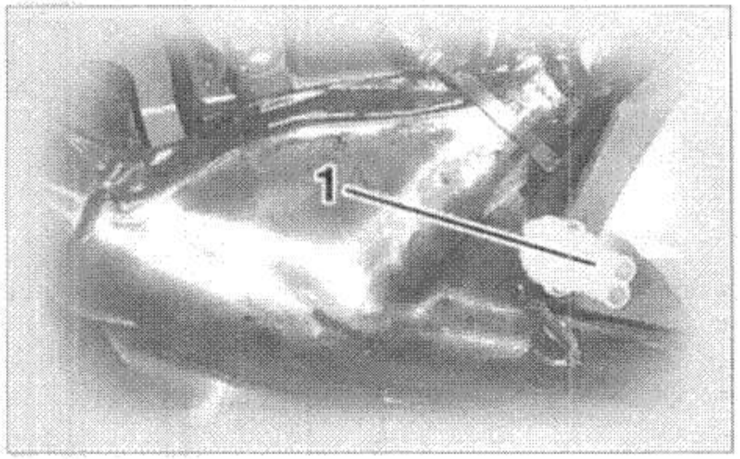
If improper operation is noted, consult a Yamaha dealer immediately.



1. Auxiliary DC jack

Auxiliary DC jack and terminal

This motorcycle is equipped with two 12 V DC auxiliary outlets: a jack in the front and a terminal under the rider seat. These outlets can be used when the main switch is in the "ACC" or "ON" position. The combined load on these auxiliary outlets should never exceed 5 A or 60 W.



1. Auxiliary DC terminal

If accessories are used in excess of the specified consumption limit or with the engine turned off, the battery may discharge.

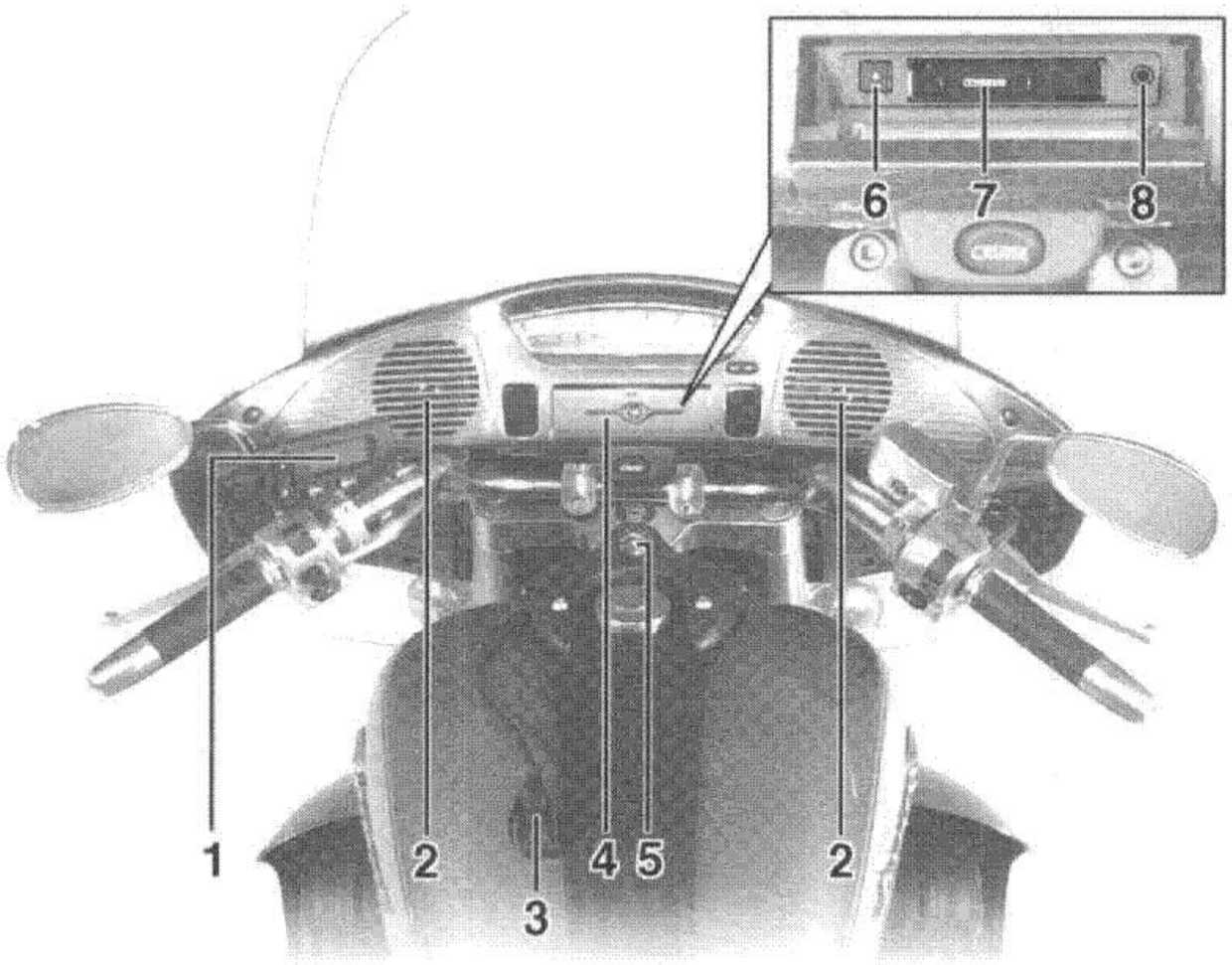
⚠ WARNING

When the accessory outlets are not being used, be sure the caps are installed to prevent electrical shock or short-circuiting.

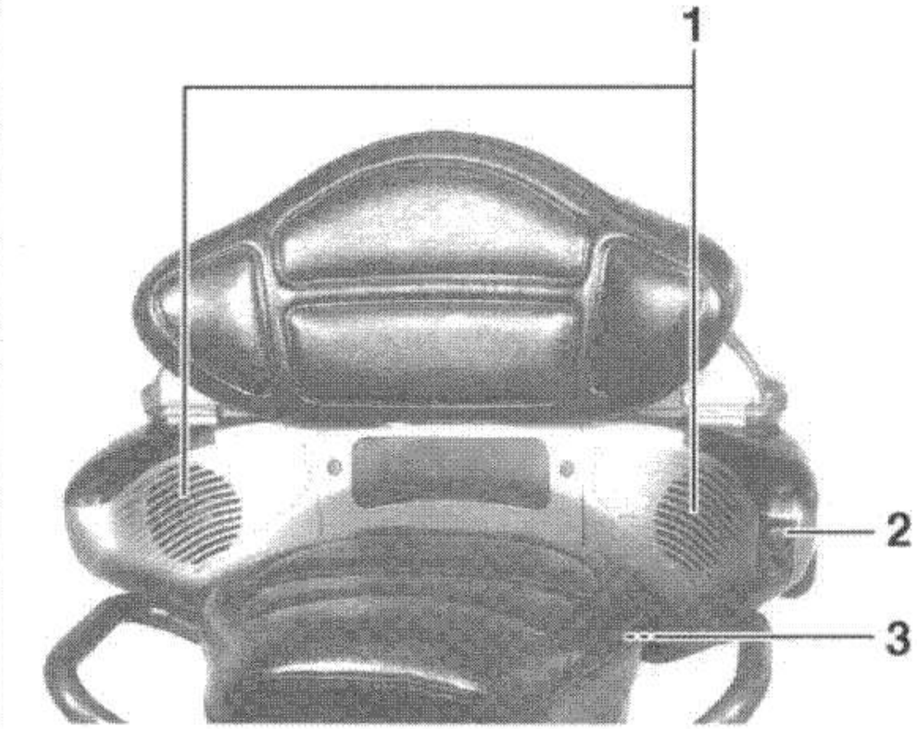
Location of parts 4-1
Headsets (optional) 4-2
Control unit 4-3
Making basic settings 4-4
Making mode settings 4-5
Cassette deck operation 4-8
Radio operation 4-12
Optional CD changer operation 4-15
Auxiliary audio source operation 4-17

AUDIO SYSTEM

Location of parts



1. Audio system control unit
2. Front speaker (× 2)
3. Rider headset jack
4. Cassette deck lid
5. Main switch
6. Eject ("⏏") button
7. Cassette deck compartment
8. Auxiliary audio input jack



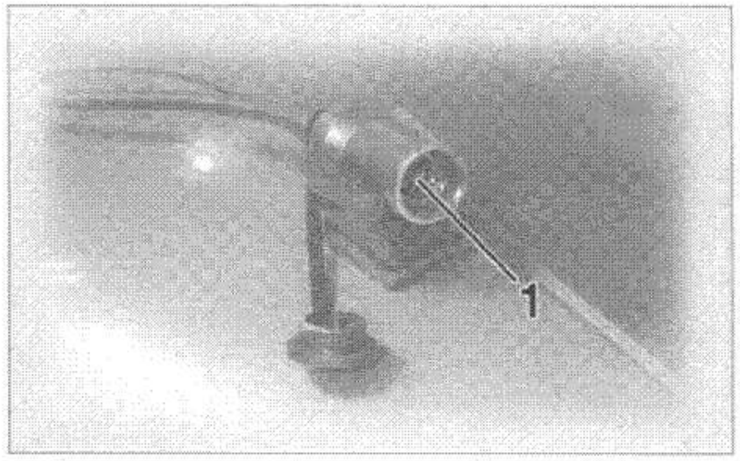
1. Rear speaker (× 2)
2. Passenger volume control knob
3. Passenger headset jack

⚠ WARNING

- **It is dangerous to operate the audio system controls while riding. Never take your hands off the handlebars while riding.**
- **Keep the volume at a low enough level to be aware of traffic conditions and ensure safety.**

CAUTION:

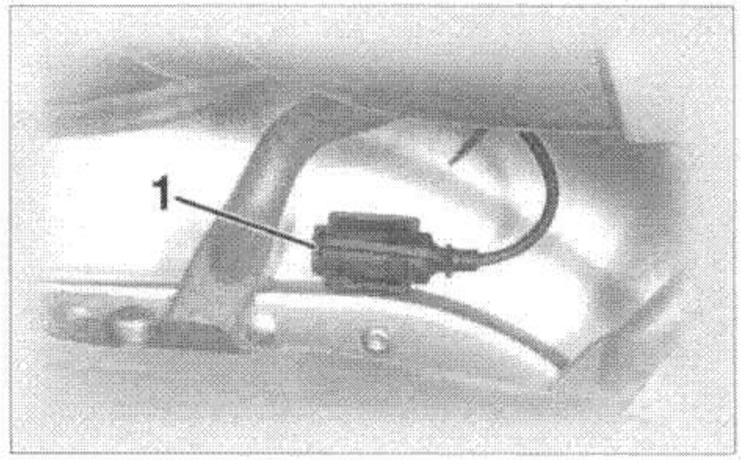
- **Do not use the audio system for a long period of time when the engine is not running as the battery may discharge.**
- **The control unit, cassette deck and speakers are water-resistant; however, it is good practice to cover them with plastic bags when washing the motorcycle.**
- **When cleaning the control unit display, use a neutral detergent. Never use strong abrasive cleaning products, fuel (gasoline), thinner, etc.**



1. Rider headset jack

Headsets (optional)

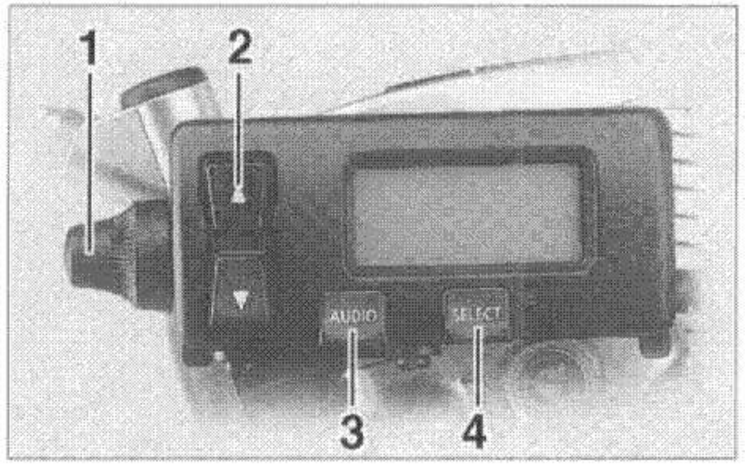
For intercom use, two headsets are necessary. Consult a Yamaha dealer if you wish to obtain headsets.



1. Passenger headset jack

Connect the headsets to the jacks shown in the illustrations and be sure that the headsets are selected as the output. (Refer to page 4-5 for instructions.)

AUDIO SYSTEM



1. Volume control knob
2. Up/down ("⏶⏷") switch
3. Audio system button "AUDIO"
4. Selection button "SELECT"

Control unit

Volume control knob

This knob adjusts the audio system volume.

Up/down ("⏶⏷") switch

This switch is used to perform the following operations.

Short push (less than 1 second)

- Skipping songs on the cassette tape
- Selecting a preset radio station
- Selecting a track on the optional CD changer
- Tuning in a radio station manually
- Adjusting the intercom volume
- Changing the settings in a mode

Long push (1 second or more)

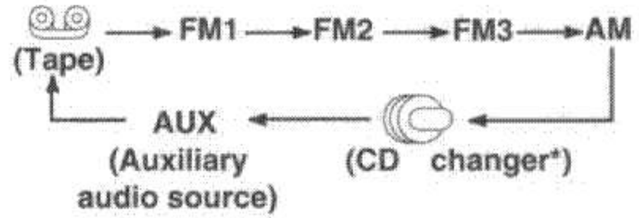
- Changing the cassette deck play direction
- Tuning in a radio station automatically
- Selecting a CD in the optional CD changer

Audio system button "AUDIO"

This button is used to perform the following operations.

Short push (less than 1 second)

- Turning on the audio system
- Changing the audio source in the following sequence



* The CD mode appears in the display only when the optional CD changer is installed.

Long push (1 second or more)

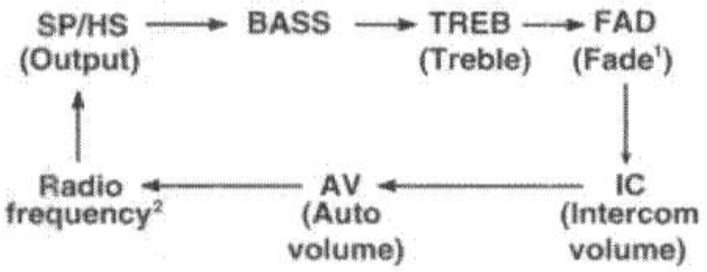
- Turning off the audio system

Selection button "SELECT"

This button is used to perform the following operations.

Short push (less than 2 seconds)

- Changing modes in the following sequence



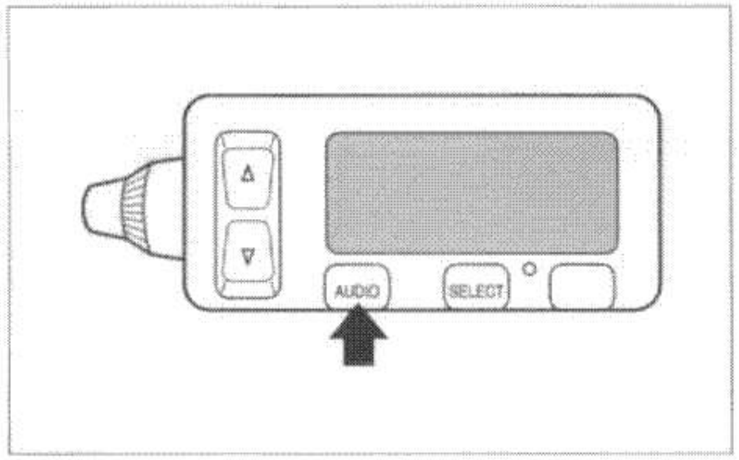
[1] This mode does not appear in the display when the headsets are selected as the output.

[2] This mode appears in the display only when one of the radio frequency bands is selected as the audio source.

- Programing preset radio stations

Long push (2 seconds or more)

- Selecting the preset radio station programming mode



Making basic settings

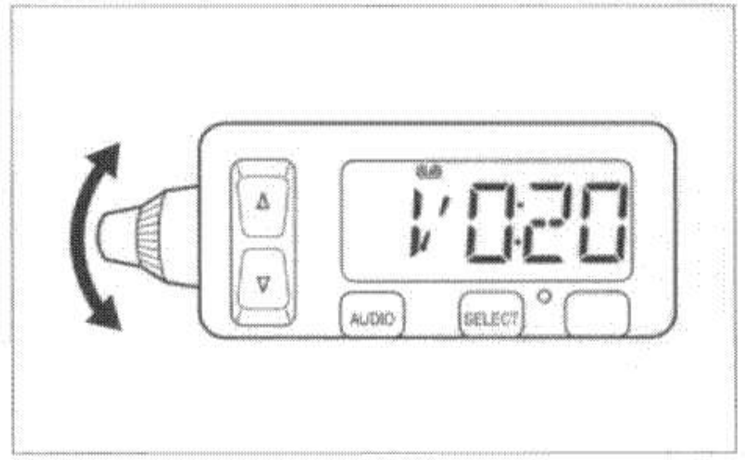
Turning on/off the audio system

To turn the power on

1. Make sure that the main switch is set to the "ACC" or "ON" position.
2. Push the "AUDIO" button once for less than 1 second.

To turn the power off

Push the "AUDIO" button once for 1 second or more.



Adjusting the audio system volume

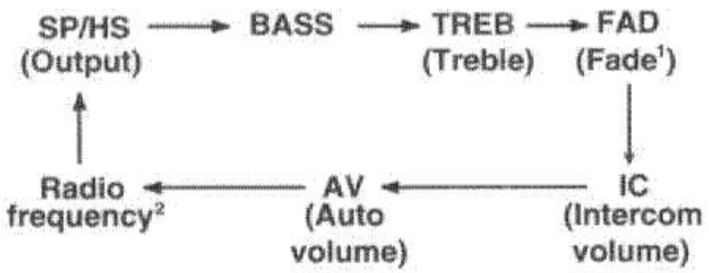
Turn the volume control knob until the desired audio system volume is displayed (e.g., "Vo:10"). The audio system volume can be set between "0" and "30". After the adjustment is made, the audio system returns to normal operation and the current audio mode appears in the display.

Making mode settings

General procedure

The following setting procedure applies to the audio system and optional CD changer.

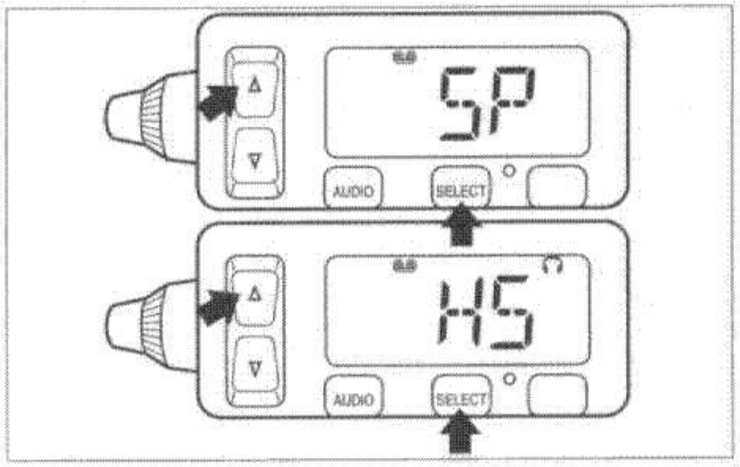
1. Push the "AUDIO" button for less than 1 second.
2. Repeatedly push the "SELECT" button for less than 1 second until the desired mode appears in the display. With each press of the button, the mode changes in the following sequence.



[1] This mode does not appear in the display when the headsets are selected as the output.

[2] This mode appears in the display only when one of the radio frequency bands is selected as the audio source.

3. While the selected mode is displayed (for about 5 seconds), repeatedly push either side of the up/down switch for less than 1 second until the desired setting is displayed.

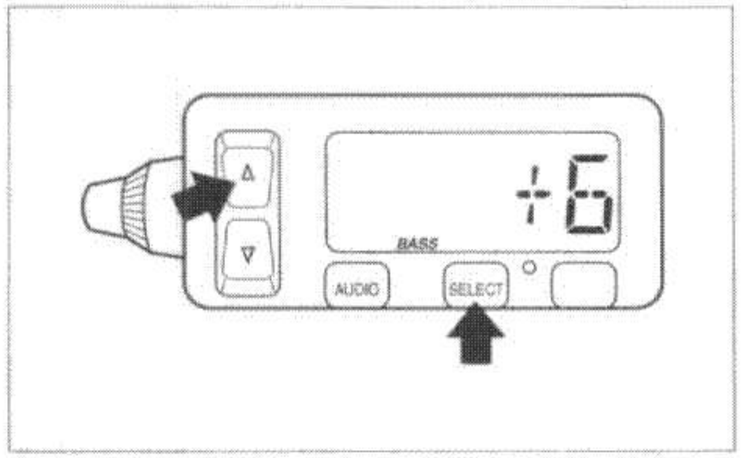


Selecting the output (speakers or headsets)

1. Repeatedly push the "SELECT" button for less than 1 second until either "SP" (speakers) or "HS" and "🎧" (headsets) appear in the display.
2. Push either side of the up/down switch for less than 1 second to change the setting.

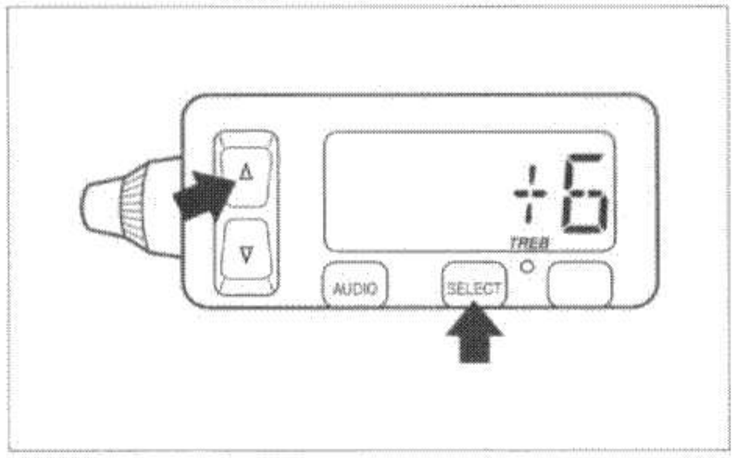
NOTE:

The speakers and headsets cannot be used at the same time.



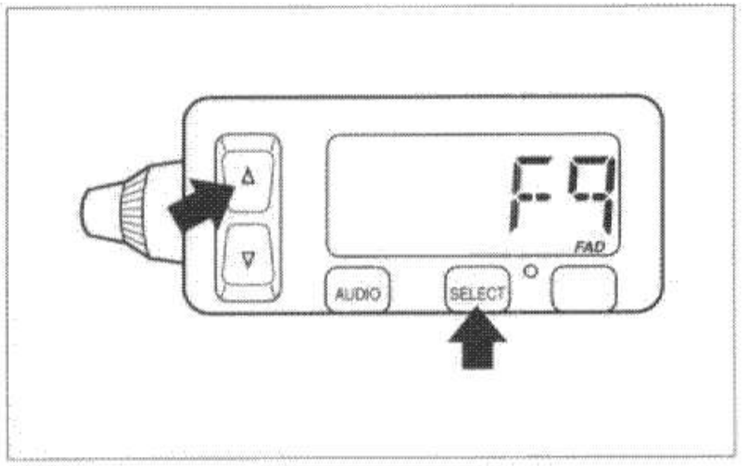
Adjusting the bass level

1. Repeatedly push the "SELECT" button for less than 1 second until "BASS" appears at the bottom of the display.
2. Repeatedly push either side of the up/down switch for less than 1 second until the desired level is displayed. The bass level can be set between "-6" and "+6".

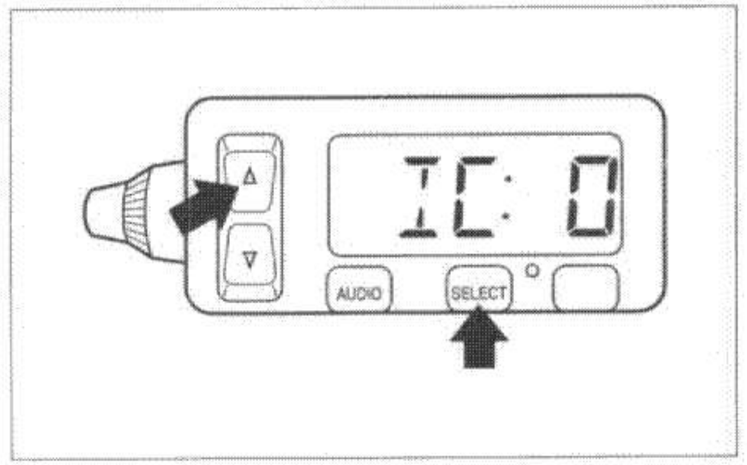


Adjusting the treble level

1. Repeatedly push the "SELECT" button for less than 1 second until "TREB" appears at the bottom of the display.
2. Repeatedly push either side of the up/down switch for less than 1 second until the desired level is displayed. The treble level can be set between "-6" and "+6".



NOTE:
When the fade level is set to "0", the front and rear speaker levels are the same.

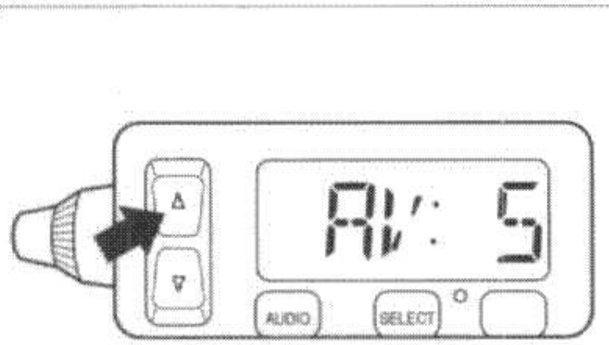


Adjusting the fade level (balance between front and rear speakers)

1. Make sure that the speakers are selected as the output source. (Refer to page 4-5.)
2. Repeatedly push the "SELECT" button for less than 1 second until "FAD" appears at the bottom of the display.
3. Repeatedly push either side of the up/down switch for less than 1 second until the desired level is displayed. The fade level can be set between "F9" (front speakers only) and "R9" (rear speakers only).

Adjusting the intercom volume

1. Repeatedly push the "SELECT" button for less than 1 second until the intercom volume (e.g., "IC:10") appears in the display.
2. Repeatedly push either side of the up/down switch for less than 1 second until the desired volume is displayed. The intercom volume can be set between "0" and "20".



Adjusting the auto volume

When riding the motorcycle, external noise may override the audio system output volume. The audio system features an automatic volume control function which compensates for external noise.

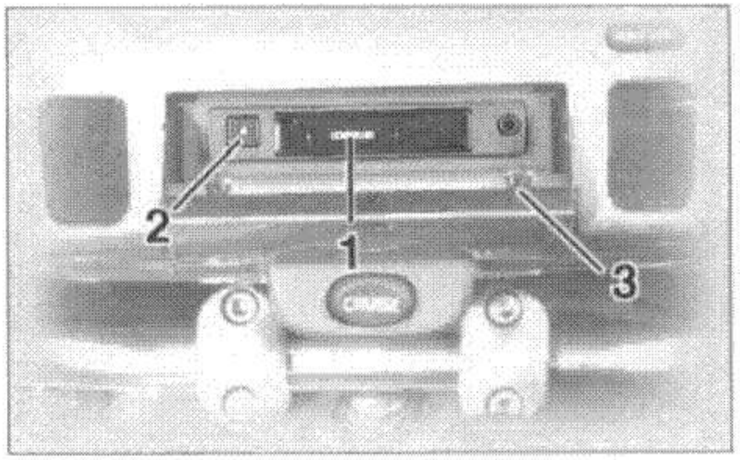
1. Repeatedly push the "SELECT" button for less than 1 second until the auto volume (e.g., "AV: 3") appears in the display.
2. Repeatedly push either side of the up/down switch for less than 1 second until the desired volume is displayed. The auto volume can be set between "0" and "5".

Intercom operation

In order for the rider and passenger to talk to each other through the intercom, the rider must set the audio system to intercom volume mode. Refer to page 4-7 for details on how to select the intercom volume mode and adjust the intercom volume.

NOTE:

The intercom volume can only be adjusted by the rider.



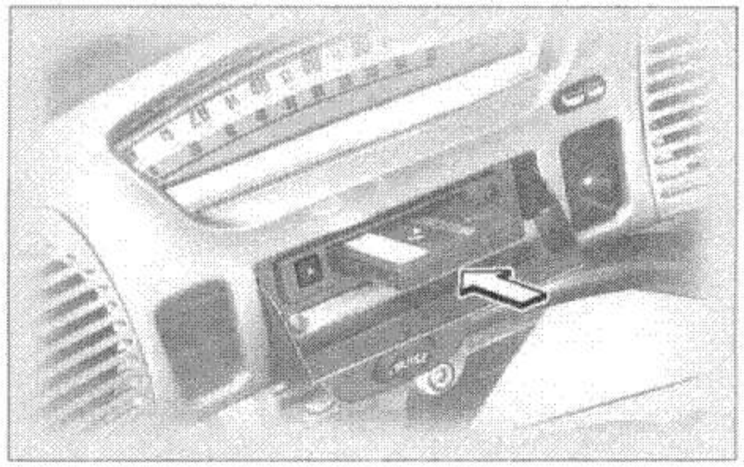
1. Cassette deck compartment
2. Eject ("⏏") button
3. Cassette deck lid

Cassette deck operation

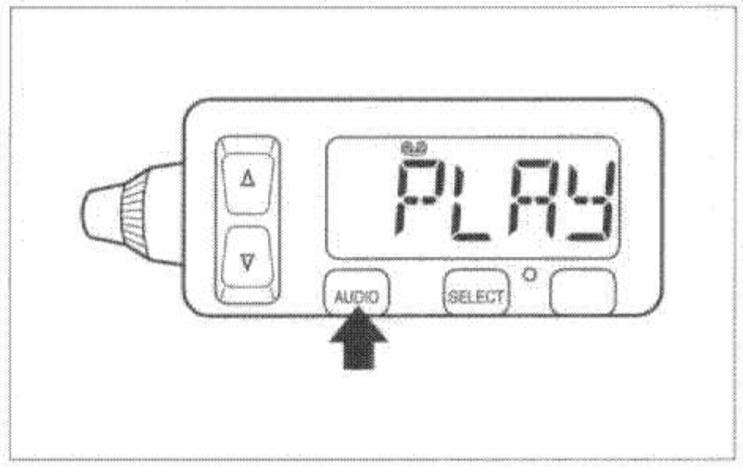
⚠ WARNING

- **It is dangerous to operate the cassette deck while riding. Never take your hands off the handlebars while riding.**
- **Keep the volume at a low enough level to be aware of traffic conditions and ensure safety.**

AUDIO SYSTEM



- **To clean the tape head, use a de-magnetizing cleaning cassette, but be sure to turn the volume all the way down to avoid speaker damage.**



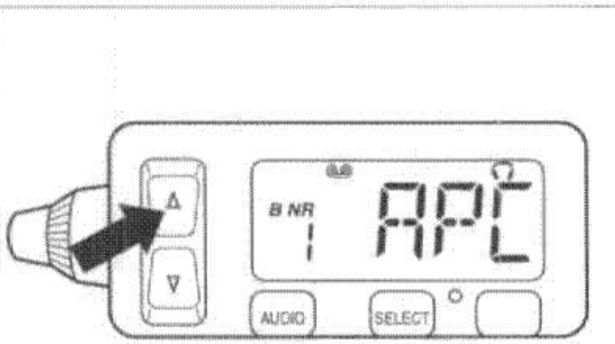
4

CAUTION:

- **Keep the cassette deck lid closed at all times, except when inserting or removing a cassette.**
- **Do not leave cassette tapes in direct sunlight for a long period of time.**
- **Do not allow the inside of the cassette deck to get wet. If this happens, keep the cassette deck lid open and dry out the deck in the shade.**

Playing a cassette tape

1. Make sure that the audio system is turned on. (See page 4-3.)
2. Insert a cassette tape into the cassette compartment as shown. "LOAD", then "PLAY" appears in the display. (If a cassette is already inserted, push the "AUDIO" button until "PLAY" appears in the display.) The tape starts playing.

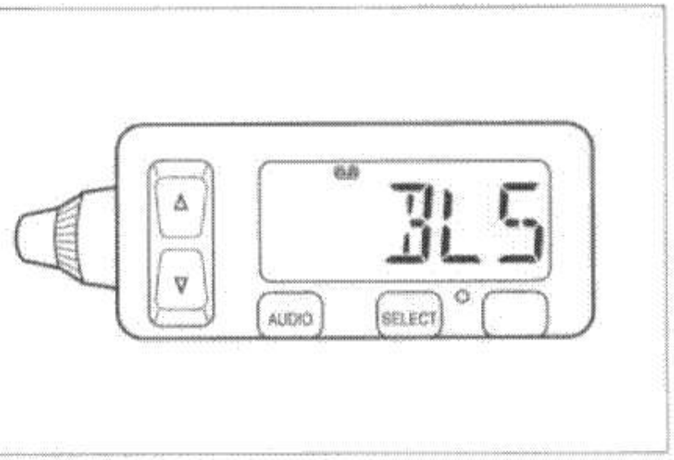


NOTE:

- The maximum number of songs that can be skipped in either direction is 9.
- To stop skipping songs, push the up/down switch in the opposite direction that songs are being skipped.

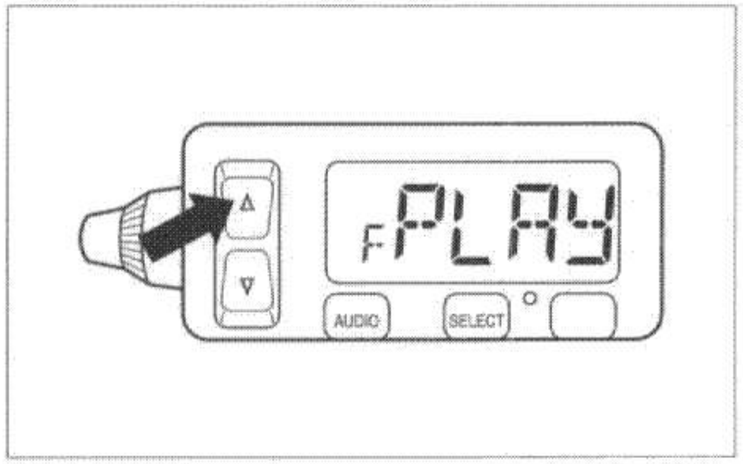
Skipping songs

While a cassette tape is playing, push either side of the up/down switch once for less than one second for each song to be skipped. Pushing "▽" skips songs in the forward direction. Pushing "△" skips songs in the reverse direction. "APC" (auto program control) and the number of songs to be skipped (e.g., "3") appear in the display. When skipping songs in reverse, a minus sign appears in front of the number of songs to be skipped (e.g., "-2"). ("-1" indicates that the current song will be played again.)



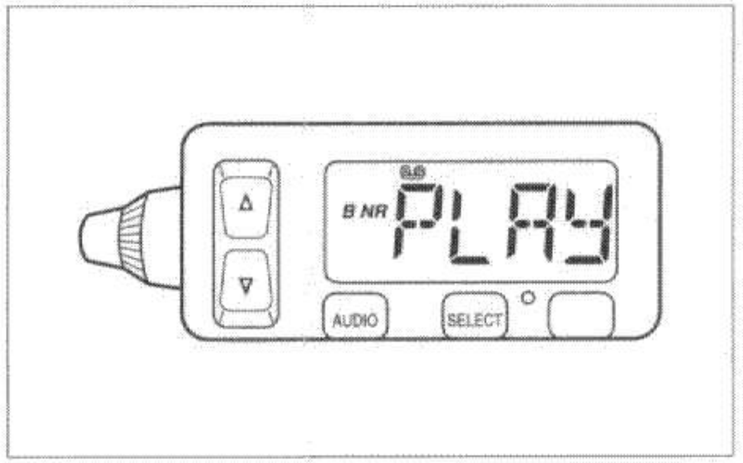
Skipping a blank

When there is a long blank portion of tape on the cassette, "BLS" appears in the display and the cassette deck automatically fast-forwards the tape to the next song.



Changing the tape play direction

While the cassette tape is playing, push either side of the up/down switch for more than one second to reverse the play direction. "F" appears in the display when the tape is played in the forward direction. "R" appears in the display when the tape is played in the reverse direction.

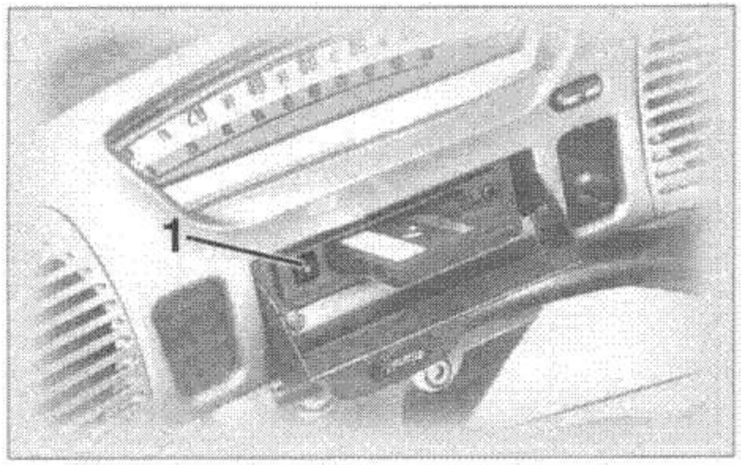


Turning on/off the Dolby noise reduction system

While the cassette tape is playing, push the eject ("⏏") button for more than two seconds to turn the Dolby B noise reduction system on or off. "B NR" appears in the display when the noise reduction system is turned on.

NOTE:

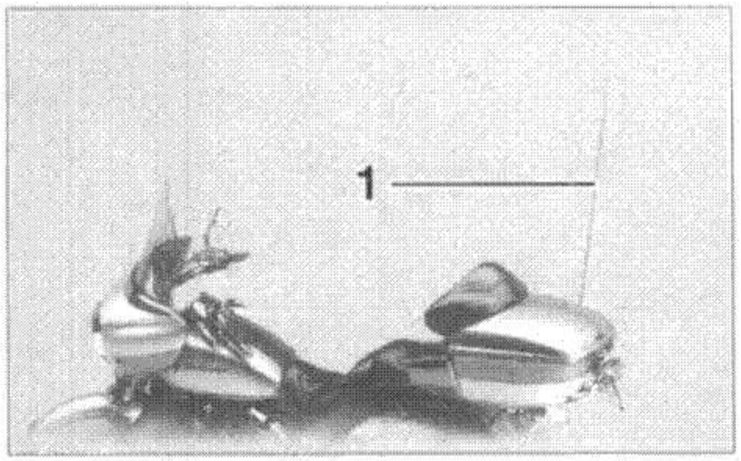
- The Dolby noise reduction system has been manufactured under license from Dolby Laboratories Licensing Corporation.
- Dolby and the double "D" symbol are registered trademarks of Dolby Laboratories Licensing Corporation.



1. Eject ("⏏") button

Ejecting the cassette tape

Push the eject ("⏏") button to eject the tape from the cassette deck. "EJCT" appears in the display, and then "CASS" starts flashing.

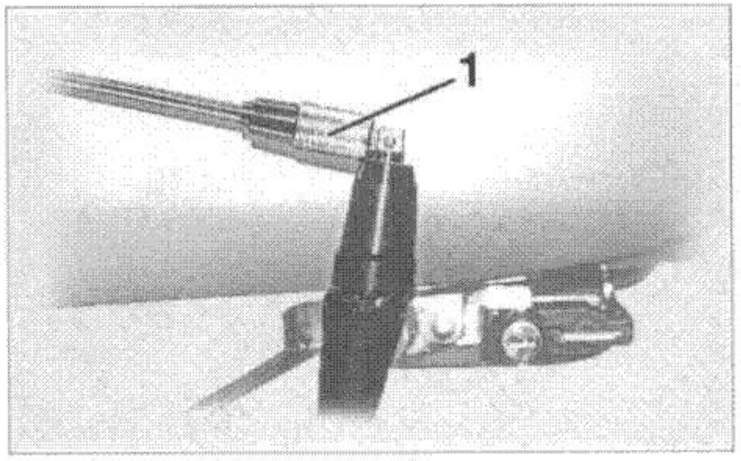


1. Radio antenna

Radio operation

⚠ WARNING

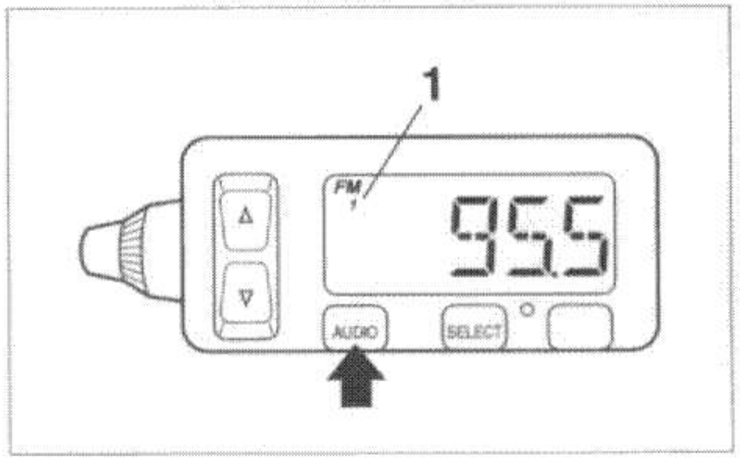
- **It is dangerous to operate the radio while riding. Never take your hands off the handlebars while riding.**
- **Keep the volume at a low enough level to be aware of traffic conditions and ensure safety.**
- **Never ride the motorcycle with the radio antenna folded down.**



1. Nut

NOTE:

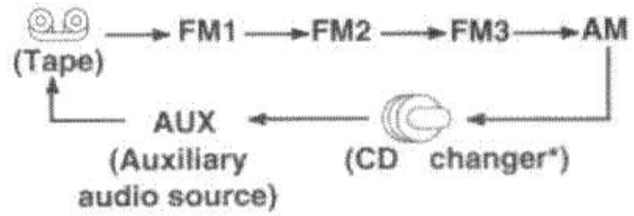
- The antenna can be folded down after loosening the nut.
- Be sure to tighten the antenna nut securely when putting the antenna back to the original position.



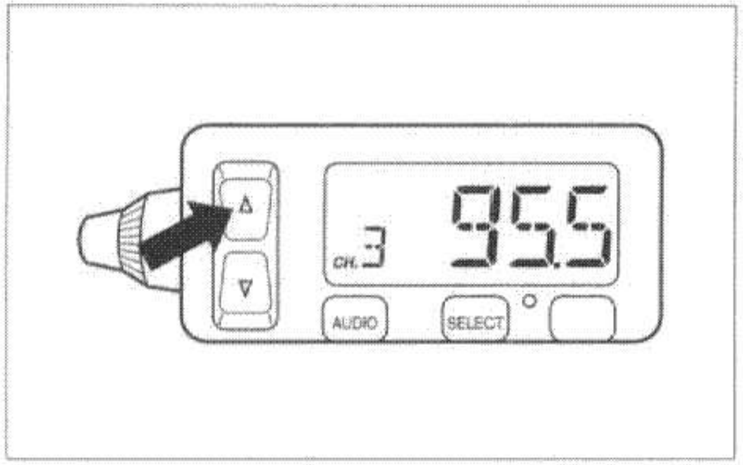
1. Frequency band

Selecting a frequency band

This radio offers 3 FM bands and 1 AM band. Since all 3 FM bands cover the whole FM frequency range, any one of them can be selected for tuning in an FM station. These 3 FM bands are useful for categorizing FM preset stations. Repeatedly push the "AUDIO" button for less than 1 second until the desired frequency band appears in the display.

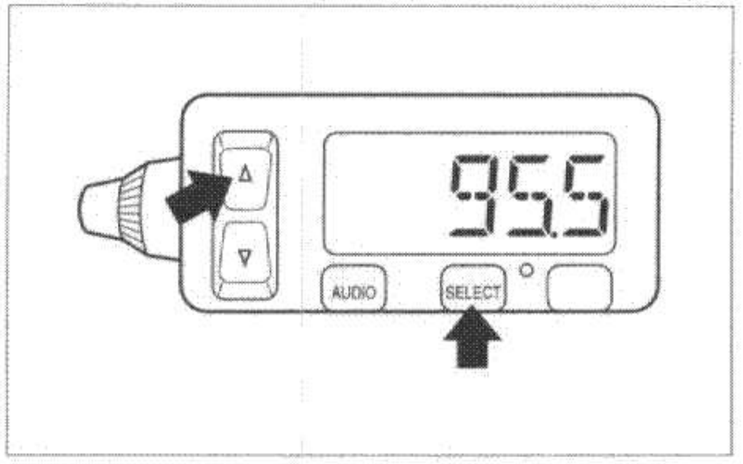


* The CD mode appears in the display only when the optional CD changer is installed.



Tuning in a radio station automatically

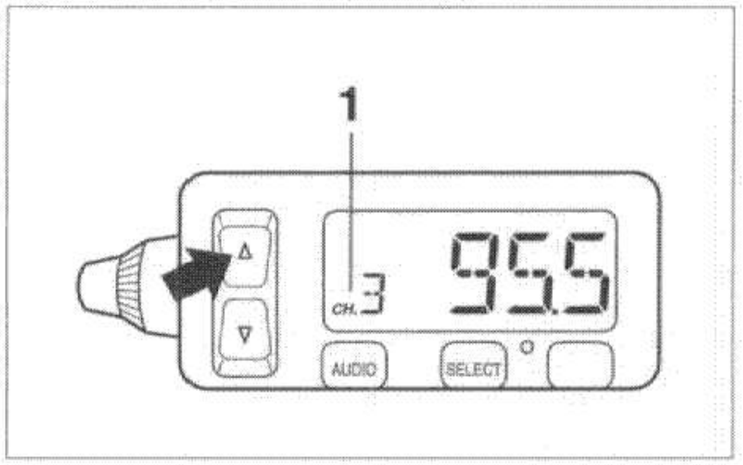
1. Select a frequency band. (Refer to page 4-12.)
2. Push either side of the up/down switch once for 1 second or more. The radio automatically tunes in the first station that has a strong enough signal to be received.



Tuning in a radio station manually

In order to tune in a particular radio station (e.g., when the signal is too weak for automatic tuning), the radio frequency can be selected manually as follows.

1. Select a frequency band. (Refer to page 4-12.)
2. Repeatedly push the "SELECT" button for less than 1 second until the currently selected radio frequency appears in the display.
3. Push either side of the up/down switch for less than 1 second until the desired frequency is displayed. The frequency changes in 0.2-MHz steps for FM and in 10-kHz steps for AM.



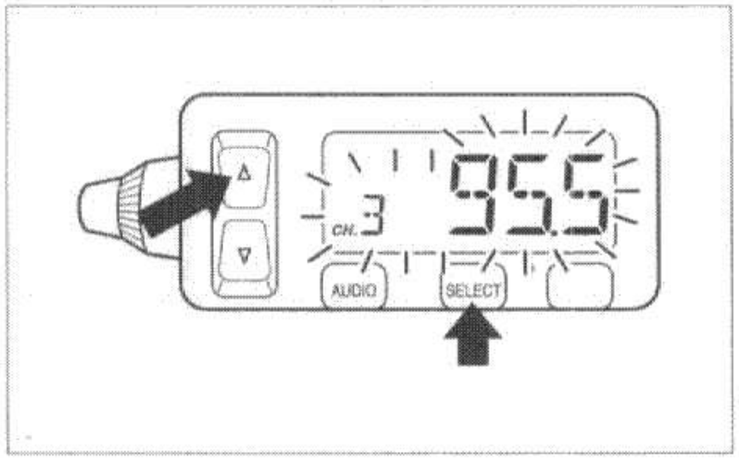
1. Preset station number

Tuning in a preset radio station

1. Select a frequency band. (Refer to page 4-12.)
2. Repeatedly push either side of the up/down switch for less than 1 second until the desired preset station number is displayed.

NOTE:

To be able to tune in a preset radio station, you must have previously programmed at least one. (Refer to page 4-14 for instructions.)



Programing preset radio stations manually

Up to 6 stations can be programmed for each frequency band (FM1, FM2, FM3, and AM) using either manual or automatic tuning.

Using manual tuning

1. Manually tune in a radio station that you wish to preset. (Refer to page 4-13 for instructions.)
2. Push the "SELECT" button once for 2 seconds or more. The radio frequency and preset station number "1" (to the right of "CH.") start flashing.
3. Repeatedly push either side of the up/down switch for less than 1 second until the desired preset number ("1" through "6") is displayed.

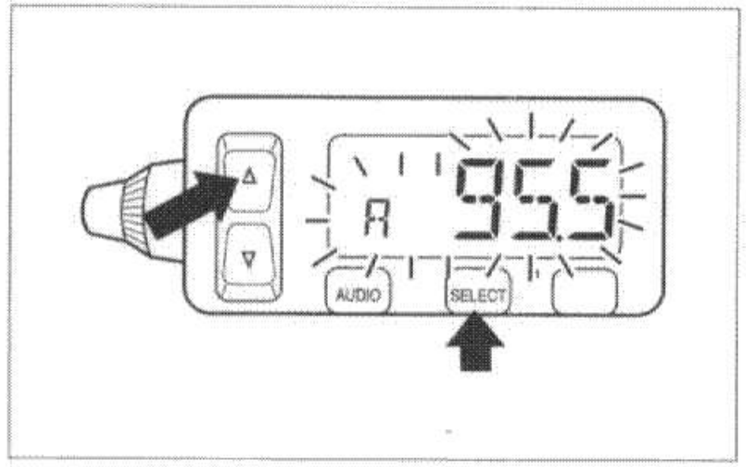
NOTE:

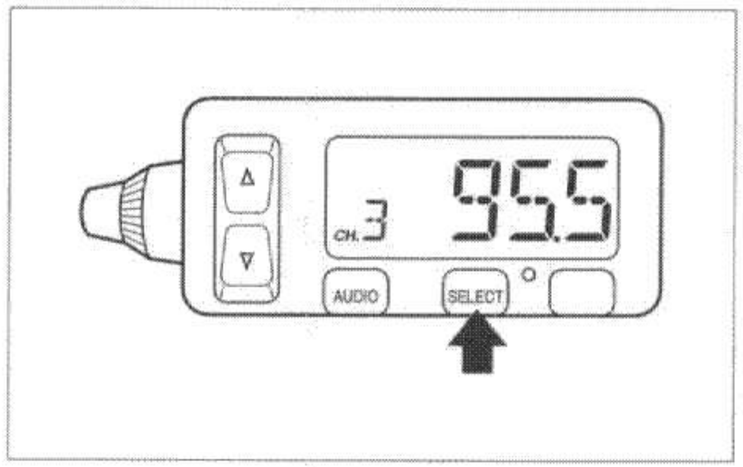
Selecting "A" will automatically program the preset stations. Refer to the following section.

4. Push the "SELECT" button once for less than 1 second to store the radio station selected in step 1 under the preset number selected in step 3.
5. Repeat this procedure to preset other radio stations.

Using automatic tuning

1. Select a frequency band. (Refer to page 4-12.)
2. Push the "SELECT" button once for 2 seconds or more. The radio frequency and preset station number "1" (to the right of "CH.") start flashing.
3. Push either side of the up/down switch once for 1 second or more to tune in a station automatically.
4. Repeatedly push either side of the up/down switch for less than 1 second until the desired preset number ("1" through "6") is displayed.
5. Push the "SELECT" button once for less than 1 second to store the radio station selected in step 3 under the preset number selected in step 4.
6. Repeat this procedure to preset other radio stations.





Programing preset radio stations automatically

Up to 6 stations can be programmed automatically for each frequency band (FM1, FM2, FM3, and AM) as follows.

NOTE:

This function works best in areas with strong radio signals.

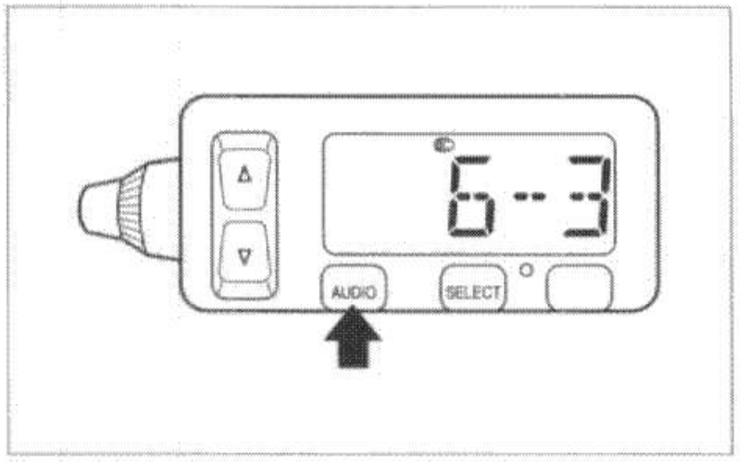
1. Select a frequency band. (Refer to page 4-12.)
2. Push the "SELECT" button once for 2 seconds or more. The radio frequency and preset station number "1" (to the right of "CH.") start flashing.
3. Repeatedly push either side of the up/down switch for less than 1 second until "A" (automatic) appears in the display.
4. Push the "SELECT" button once for less than 1 second to program preset radio stations automatically.

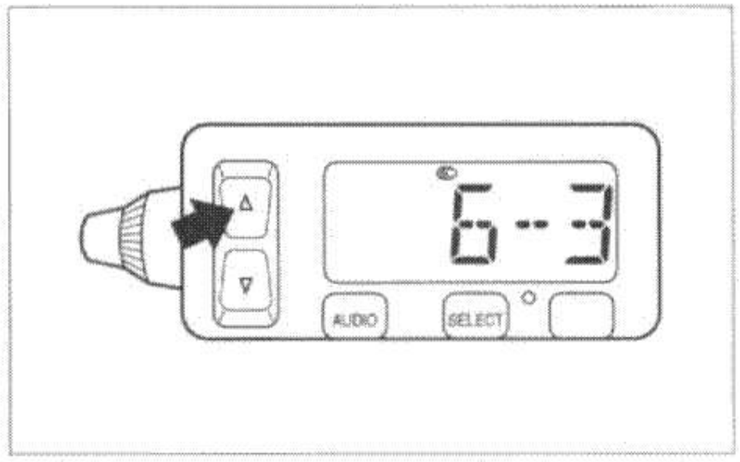
Optional CD changer operation

⚠ WARNING

- **It is dangerous to operate the CD changer while riding. Never take your hands off the handlebars while riding.**
- **Keep the volume at a low enough level to be aware of traffic conditions and ensure safety.**

An optional 6-disc CD changer can be mounted in the travel trunk. Ask a Yamaha dealer to install the genuine Clarion CDC635 model.





Playing a CD

1. Insert up to 6 CDs into the CD changer. Follow the manufacturer's directions.
2. Push the "AUDIO" button until " " as well as the CD number and track number (e.g.,"6-3") appear in the display. The CD starts playing.

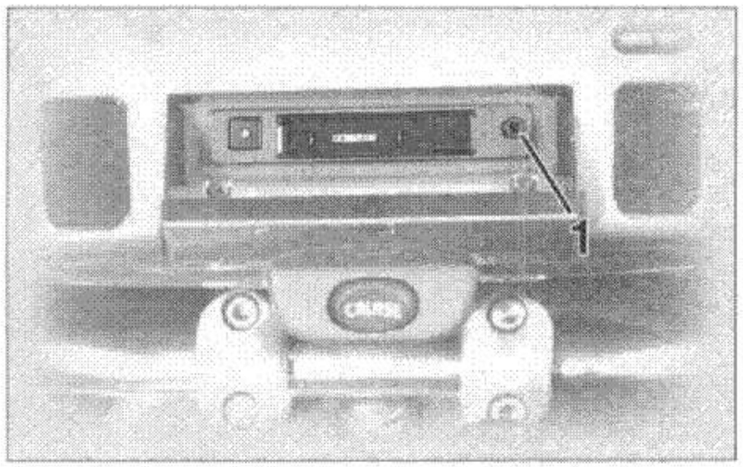
NOTE:
"6-3" indicates track no. 3 on CD no. 6.

Selecting a CD

Repeatedly push either side of the up/down switch for **1** second or more until the number for the desired CD appears in the display.

Selecting a CD track

Repeatedly push either side of the up/down switch for less than 1 second until the number for the desired CD track appears in the display.

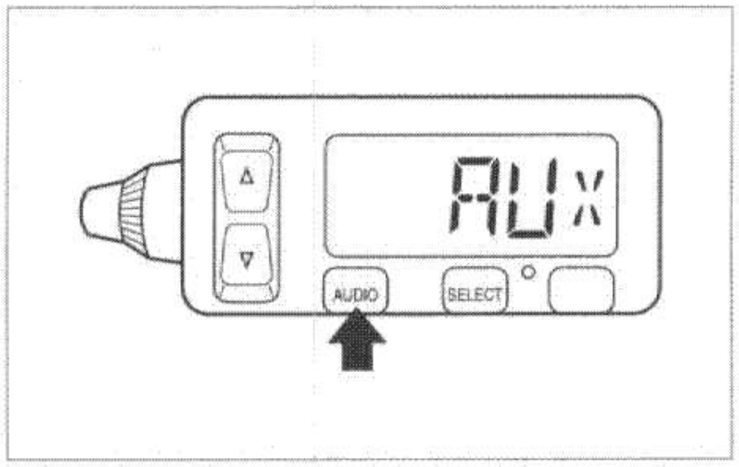


1. Auxiliary audio input jack

Auxiliary audio source operation

Auxiliary audio equipment can be connected to, and played through, the audio system.

1. Insert the output plug of the auxiliary equipment into the jack located at the right of the cassette deck.



2. Repeatedly push the "AUDIO" button for less than 1 second until "AUX" appears in the display. The auxiliary equipment can now be played through the audio system.

Pre-operation check list..... 5-1

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.	7-22 ~ 7-26
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.	7-22
Throttle grip and housing	• Check for smooth operation. • Lubricate if necessary.	7-18
Engine oil	• Check oil level. • Fill with oil if necessary.	7-11 ~ 7-13
Coolant reservoir tank	• Check coolant level. • Fill with coolant if necessary.	7-14
Final gear oil	• Check vehicle for leakage.	7-13
Wheels and tires	• Check tire pressure, wear and for damage.	7-19 ~ 7-21
Brake and shift pedal shafts	• Check for smooth operation. • Lubricate if necessary.	7-26
Brake and clutch lever pivots	• Check for smooth operation. • Lubricate if necessary.	7-27
Sidestand pivot	• Check for smooth operation. • Lubricate if necessary.	7-27

ITEM	CHECKS	PAGE
Chassis fasteners	• Make sure that all nuts, bolts and screws are properly tightened. • Tighten if necessary.	—
Fuel tank	• Check fuel level. • Fill with fuel if necessary.	3-10 ~ 3-11
Lights, signals and switches	• Check for proper operation.	7-31 ~ 7-34

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.

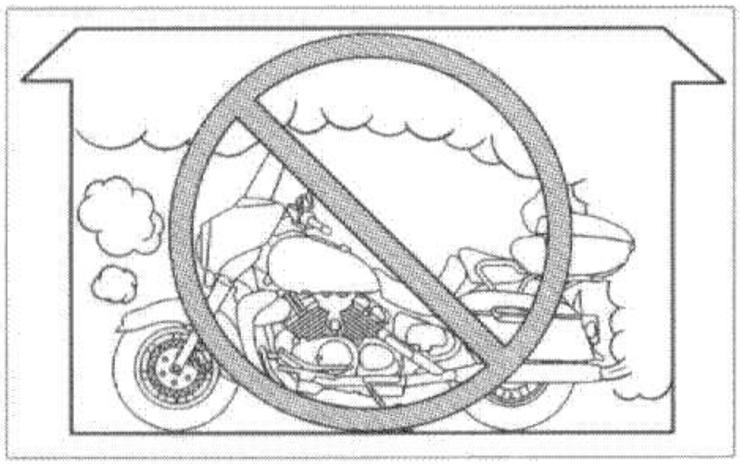
⚠ WARNING

- **If any item in the PRE-OPERATION CHECK is not working properly, have it inspected and repaired before operating the motorcycle.**
- **The engine and exhaust system will be very hot after the engine has been run. Be careful not to touch them or to allow any clothing item to contact them during inspection or repair.**

OPERATION AND IMPORTANT RIDING POINTS

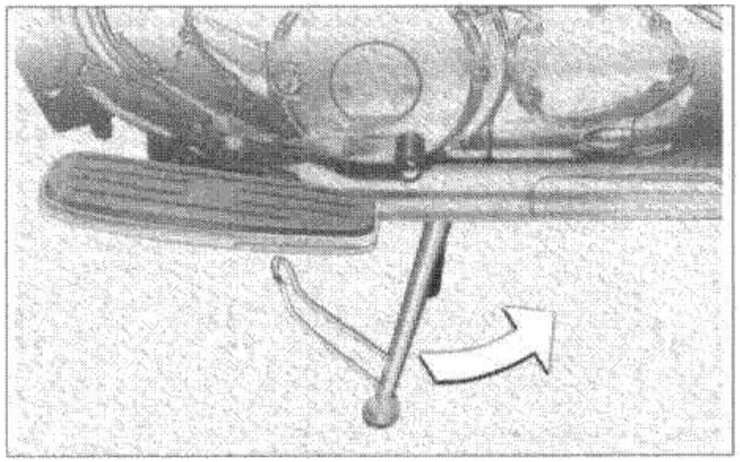
Starting and warming up a cold engine 6-1
Starting a warm engine 6-3
Shifting 6-3
Tips for reducing fuel consumption 6-4
Engine break-in 6-4
Parking 6-5

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 and warming up a cold engine

NOTE:

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

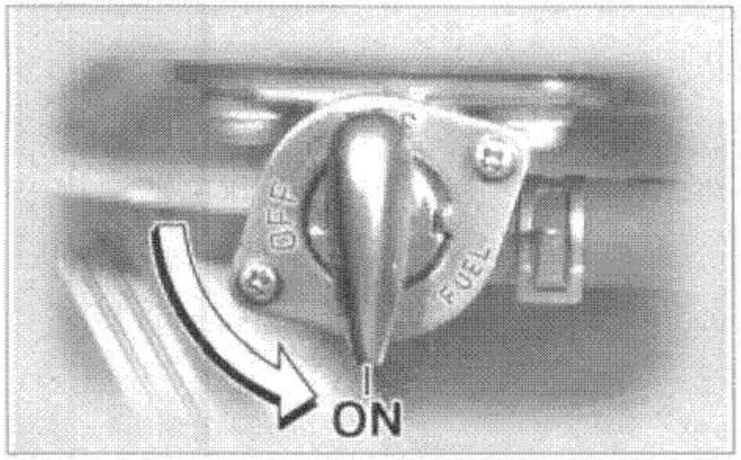
The engine can be started only under one of the following conditions:

- The transmission is in neutral.
- The transmission is in gear with the sidestand up and the clutch 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 3-19.)



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

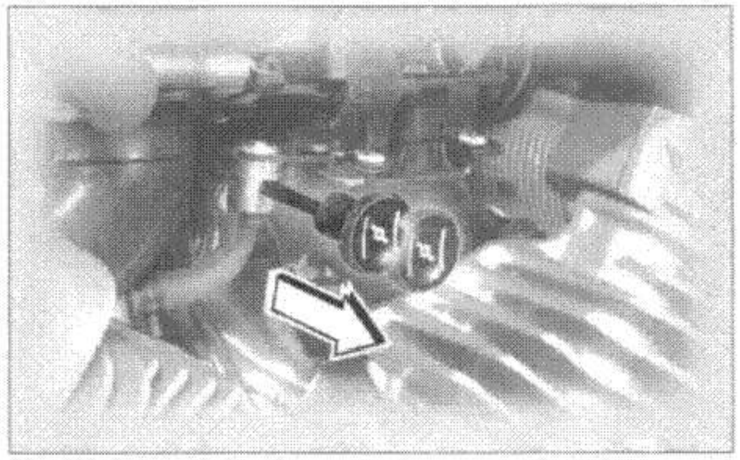
CAUTION:

If the fuel indicator light comes on, check the fuel level. If necessary, fill the tank with fuel.

3. Shift the transmission into neutral.

NOTE:

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



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

NOTE:

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

CAUTION:

The engine trouble indicator light should come on when the start switch is pushed and should go off when the start switch is released. If the engine trouble indicator light remains on, have a Yamaha dealer check the self-diagnosis system.

6. Turn off the starter (choke) when the engine is warm. Refer to the following notes.

NOTE:

For maximum engine life, always warm up the engine before starting off. Never accelerate hard with a cold engine.

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

NOTE:

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

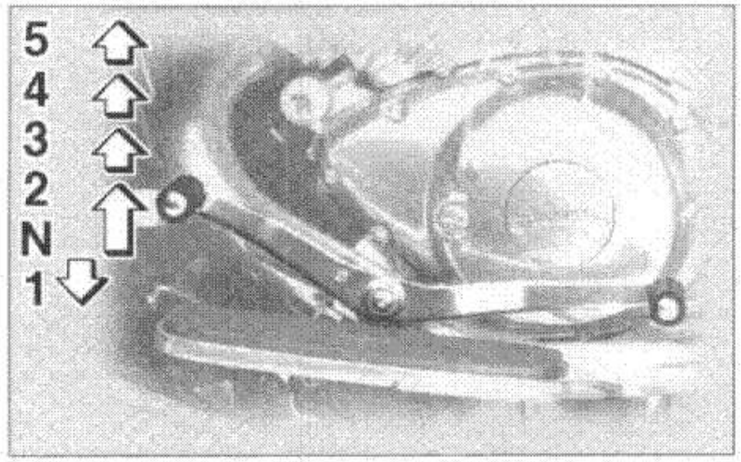
OPERATION AND IMPORTANT RIDING POINTS

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.

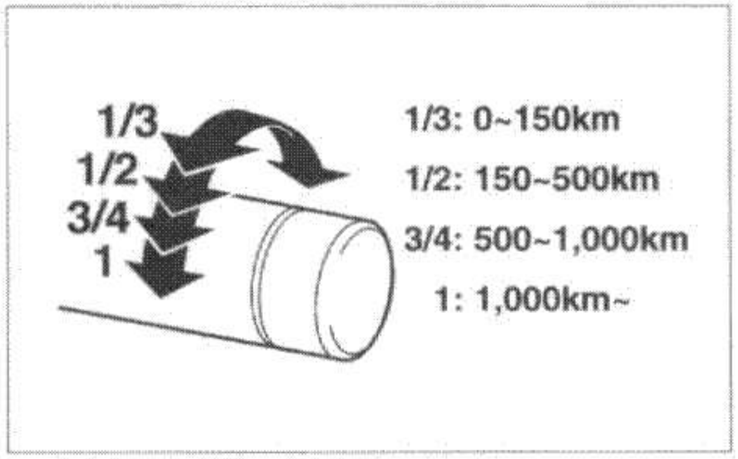
CAUTION:

- **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.



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.

OPERATION AND IMPORTANT RIDING POINTS

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.

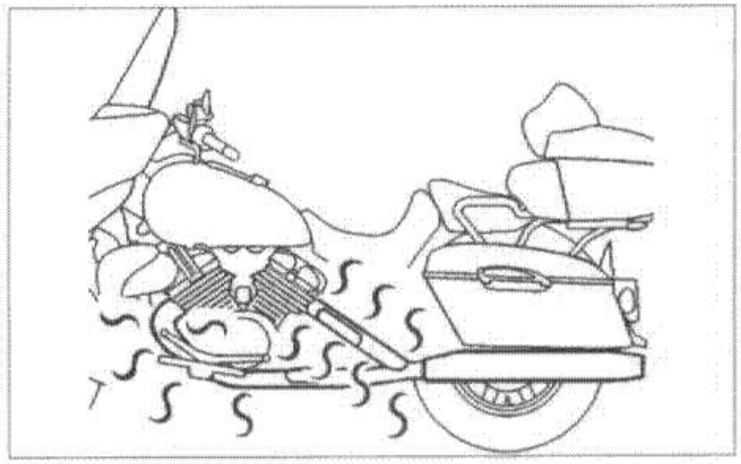
CAUTION:

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

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Periodic maintenance and lubrication 7-3
Cowling and panel removal and installation 7-6
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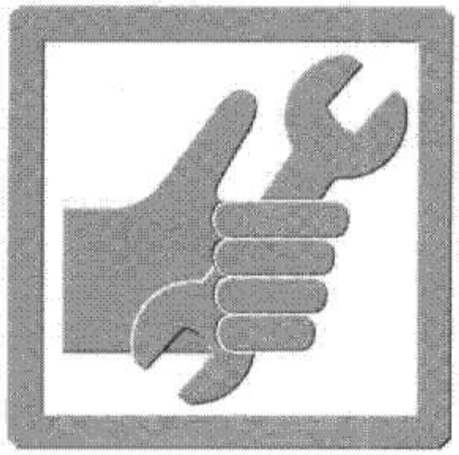
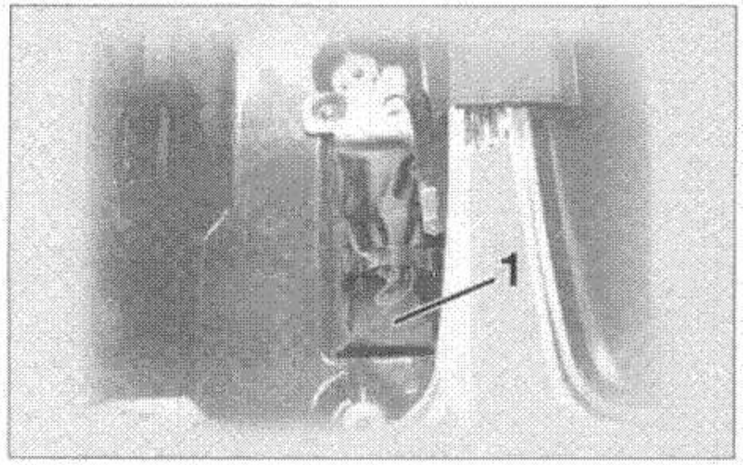
PERIODIC MAINTENANCE AND MINOR REPAIR



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

⚠ WARNING

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



1. Owner's tool kit

Tool kit

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

NOTE:

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

⚠ 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 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 7-5.) • Correct accordingly.	√	√	√
7	*	**Front brake**	• Check operation, fluid level and vehicle for fluid leakage. (See NOTE on page 7-5.) • Correct accordingly. • Replace brake pads if necessary.	√	√	√
8	*	**Rear brake**	• Check operation, fluid level and vehicle for fluid leakage. (See NOTE on page 7-5.) • Correct accordingly. • Replace brake pads if necessary.	√	√	√
9	*	**Wheels**	• Check balance, runout and for damage. • Rebalance or replace if necessary.		√	√
10	*	**Tires**	• Check tread depth and for damage. • Replace if necessary. • Check air pressure. • Correct if necessary.		√	√

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

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)
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).		√	√
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.)	√	√	√

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

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)
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).	√	√	√

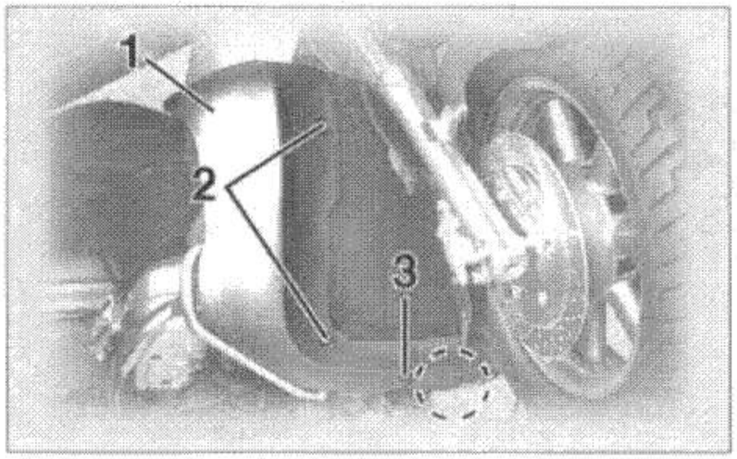
* Since these items require special tools, data and technical skills, they should be serviced by a Yamaha dealer.

NOTE:

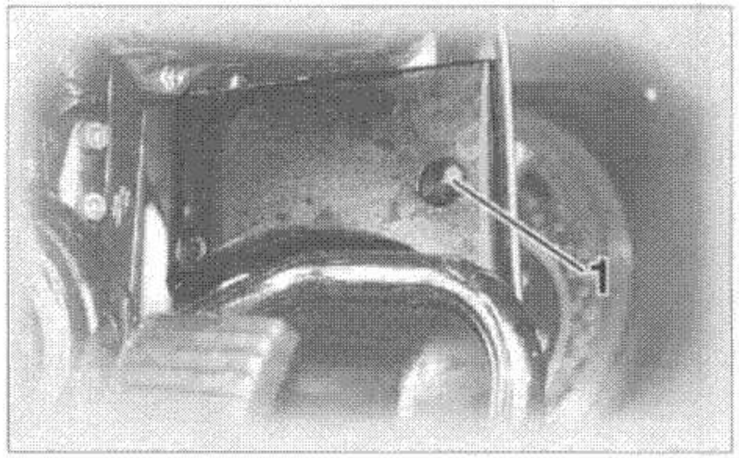
- The air filter needs more frequent service if you are riding in unusually wet or dusty areas.
- Hydraulic brake and clutch systems
  - After disassembling the master cylinder, caliper cylinder or clutch release cylinder, always replace the brake fluid. Check the brake fluid level of the master cylinder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

Cowling and panel removal and installation

The cowlings and panels illustrated need to be removed to perform some of the maintenance described in this chapter. Refer to this section each time a cowling or panel has to be removed or reinstalled.



1. Cowling A
2. Screw (× 2)
3. Quick fastener

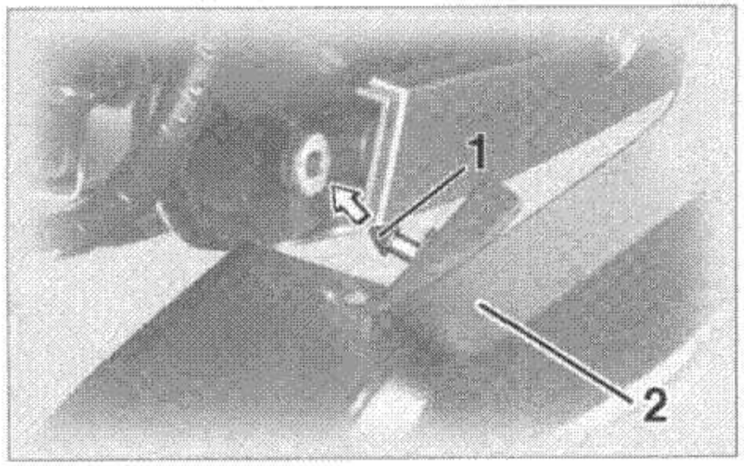


1. Screw

Cowling A

To remove

Remove the cowling screws and the quick fastener. Then, pull outward on the area shown.



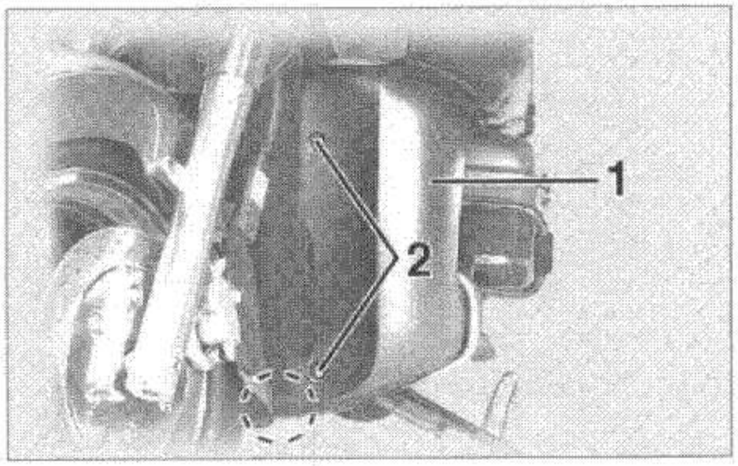
1. Projection
2. Cowling A

To install

1. Place the cowling in the original position.

NOTE:
Be sure to insert the projection into the grommet.

2. Install the screws and the quick fastener.

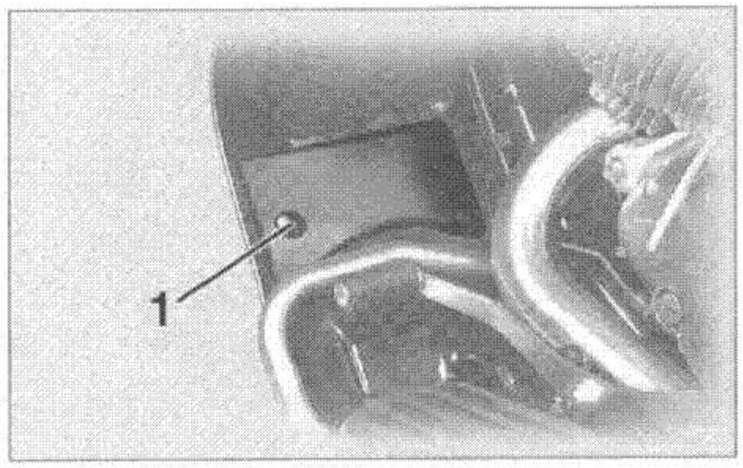


1. Cowling B
2. Screw (× 2)

Cowling B

To remove

1. Remove cowling A.
2. Remove the screws. Then, pull outward on the area shown.



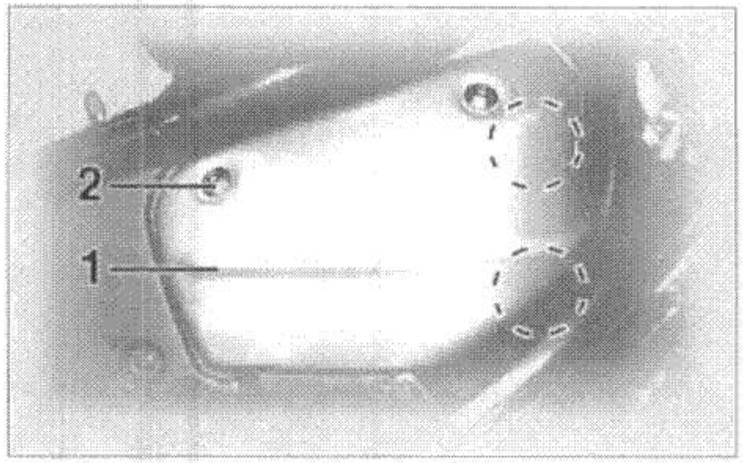
1. Screw

To install

1. Place the cowling in the original position.

NOTE:
Be sure to insert the projection into the grommet.

2. Install the screws.
3. Install cowling A.

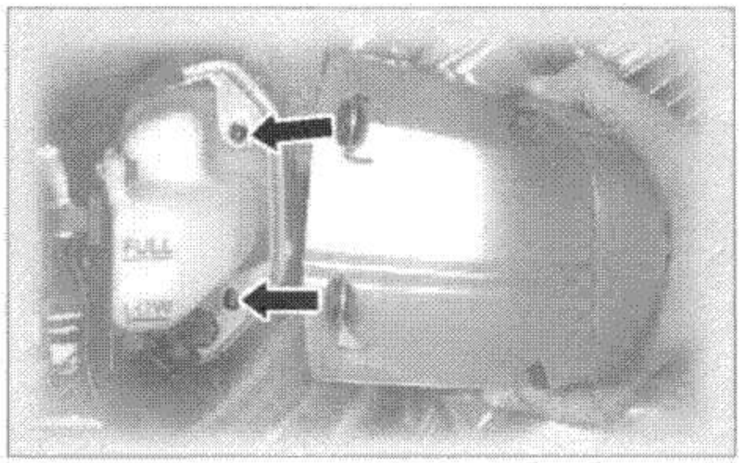


1. Panel C
2. Screw

Panel C

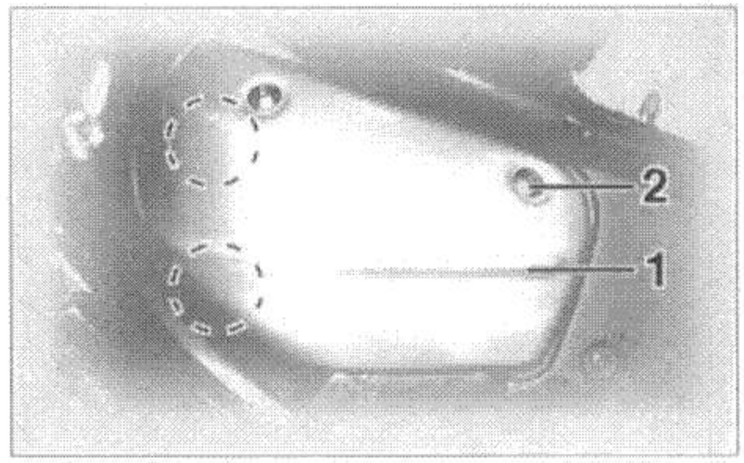
To remove

Remove the screw and pull outward on the areas shown.



To install

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

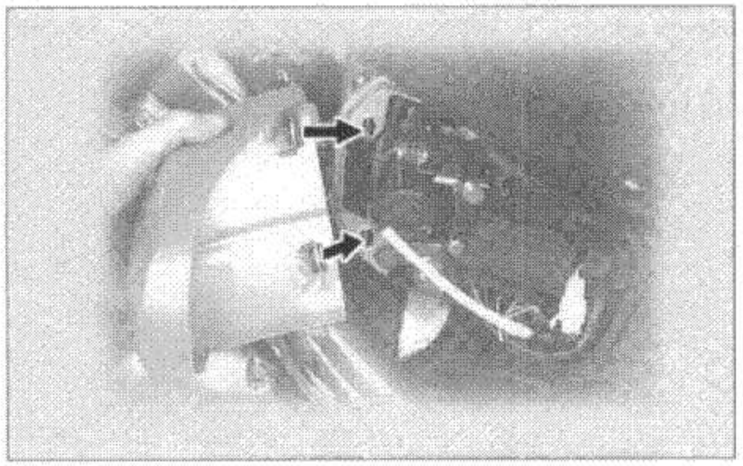


1. Panel D
2. Screw

Panel D

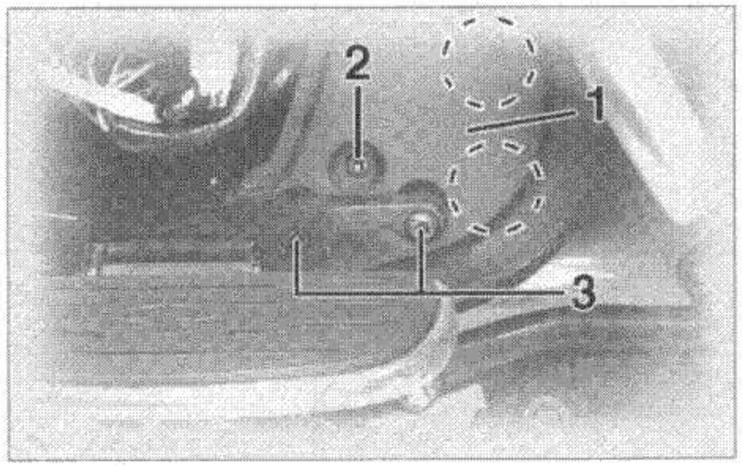
To remove

Remove the screw and pull outward on the areas shown.



To install

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

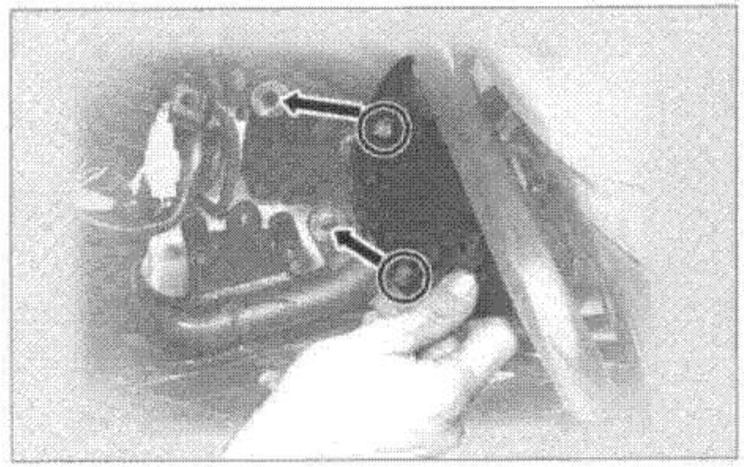


1. Panel E
2. Screw
3. Bolt (× 2)

Panel E

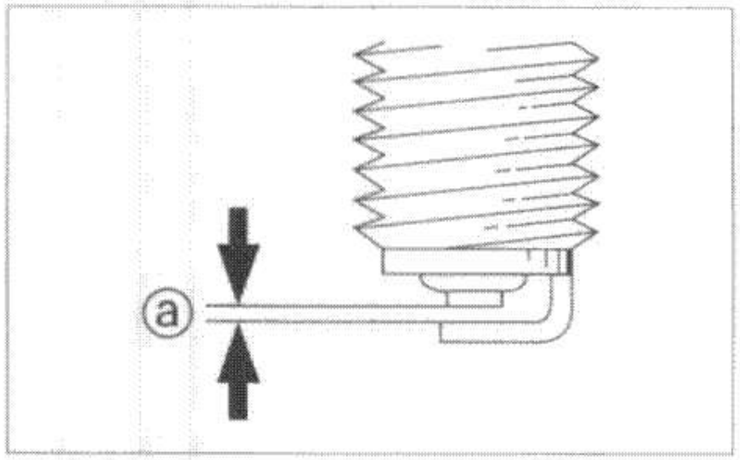
To remove

1. Remove the left passenger footrest by removing the bolts.
2. Remove the screw and pull outward on the areas shown.



To install

1. Place the panel in the original position and install the screw.
2. Install the passenger footrest and tighten the bolts.



a. Spark plug gap

Spark plug inspection

The spark plug is an important engine component and should be inspected periodically, preferably by a Yamaha dealer. The condition of the spark plug can indicate the condition of the engine.

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

Do not attempt to diagnose such problems yourself. Instead, take the motorcycle to a Yamaha dealer. The spark plugs should be periodically removed and inspected 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, the spark plug should be replaced with the specified plug.

Specified spark plug:
DPR8EA-9 (NGK) or
X24EPR-U9 (DENSO)

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

Spark plug gap:
0.8 ~ 0.9 mm

When installing a spark plug, the gasket surface should always be cleaned and a new gasket used. Any grime should be wiped off from the threads and the spark plug tightened to the specified torque.

Tightening torque:
Spark plug:
17.5 Nm (1.75 m·kg)

NOTE:

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

Engine oil

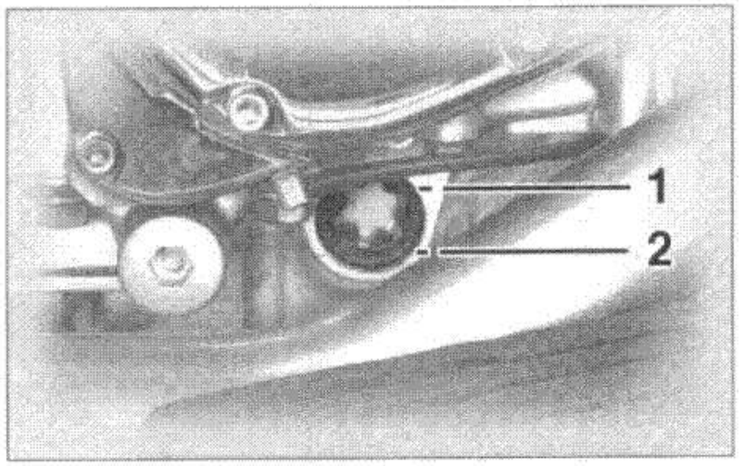
Oil level inspection

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.

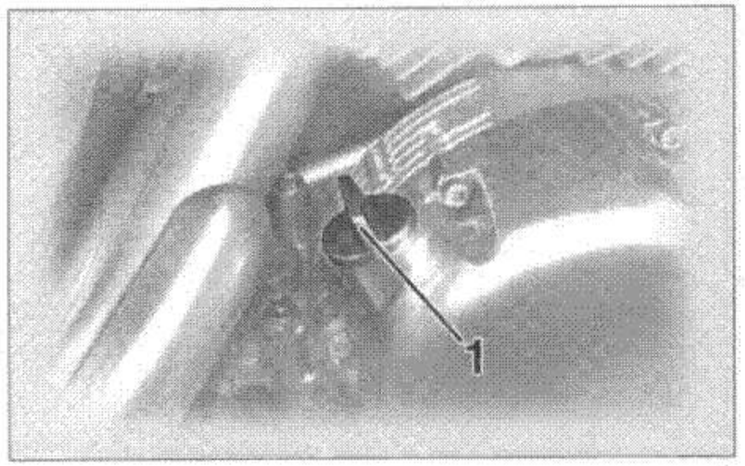
2. Stop the engine and wait for a few minutes. Check the oil level through the level window located at the lower part of the right side crankcase cover.

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



1. Maximum level mark
2. Minimum level mark

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.

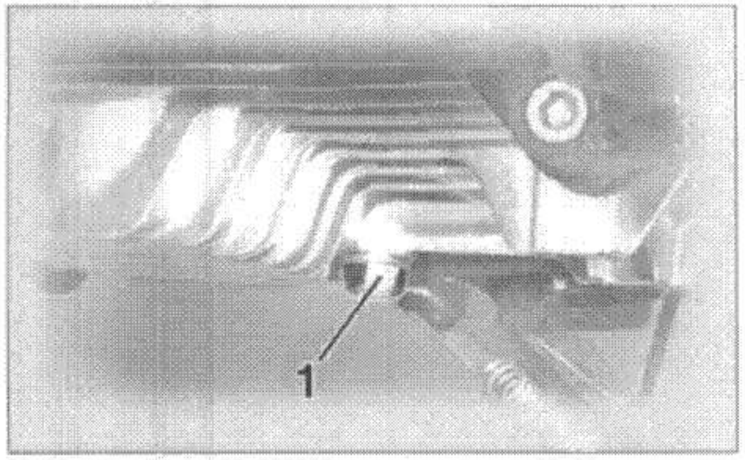


1. Engine oil filler cap

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.



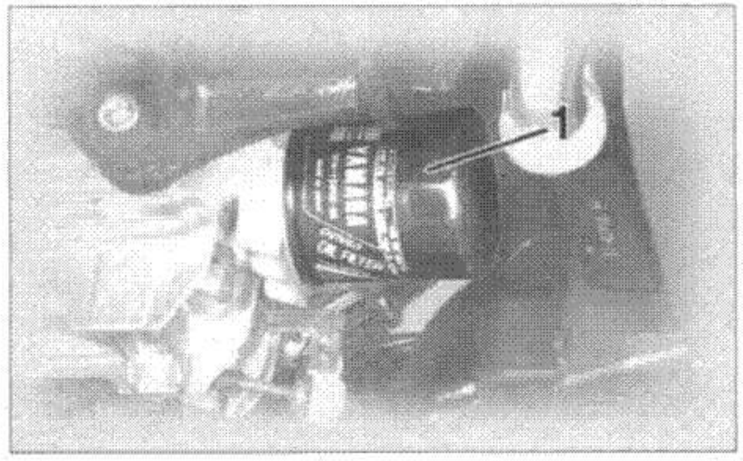
1. Engine oil drain bolt

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

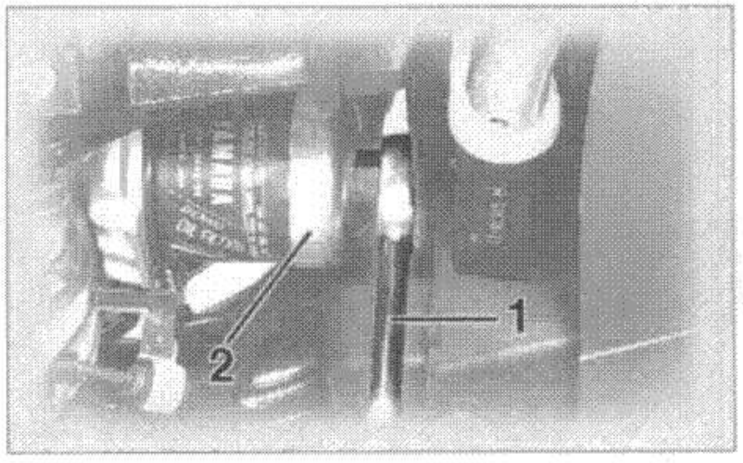
Tightening torque:
Drain bolt:
38 Nm (3.8 m·kg)

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.



1. Engine oil filter cartridge



1. Torque wrench
2. Oil filter wrench

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)

7

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

Recommended oil:
See page 9-1.
Oil quantity:
Total amount:
4.3 L
Periodic oil change:
3.5 L
With oil filter replacement:
3.7 L

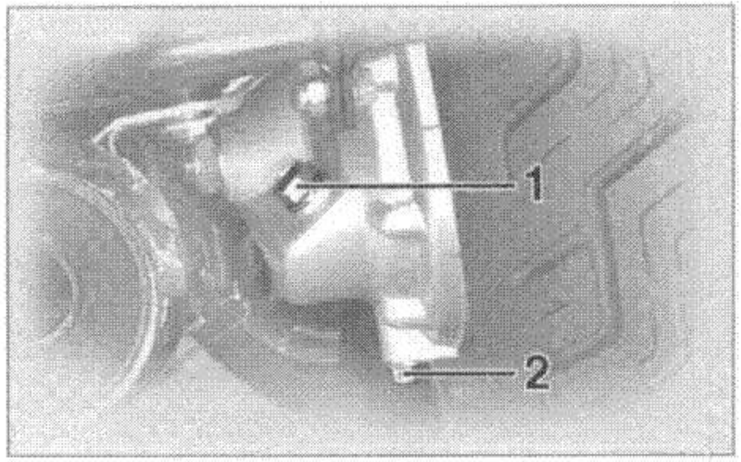
CAUTION:

- **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.

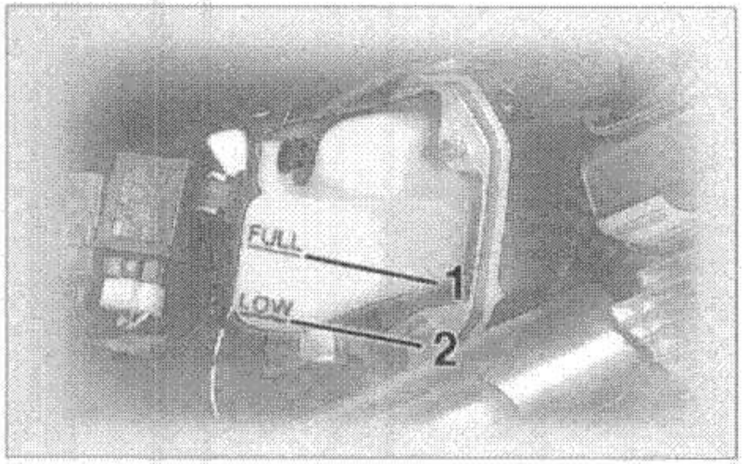
CAUTION:
If the indicator light flickers or remains on, immediately stop the engine and consult with a Yamaha dealer.



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

Final gear oil

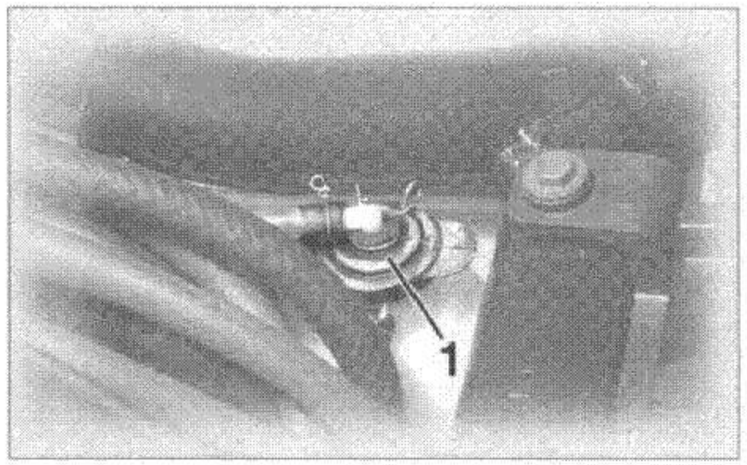
Check for oil leakage. If any leakage is found, take the motorcycle to a Yamaha dealer for repairs.



1. Maximum level mark
2. Minimum level mark

Coolant

1. Remove panel C. (See page 7-8 for removal and installation procedures.)
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.



1. Coolant reservoir tank cap

3. If the level is low, remove the rider seat, open the reservoir tank cap, and add coolant or distilled water to the specified level. (See page 3-13 for rider seat removal and installation procedures.)
4. Install the reservoir tank cap and rider seat.
5. Install the panel.

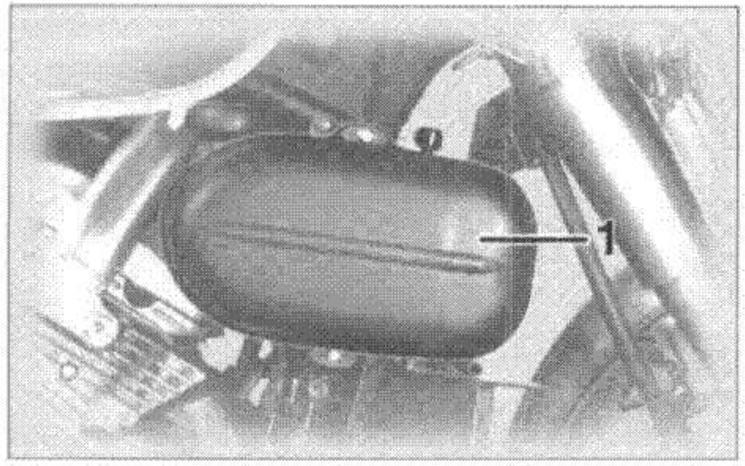
Reservoir tank capacity:
0.84 L

CAUTION:

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

NOTE:

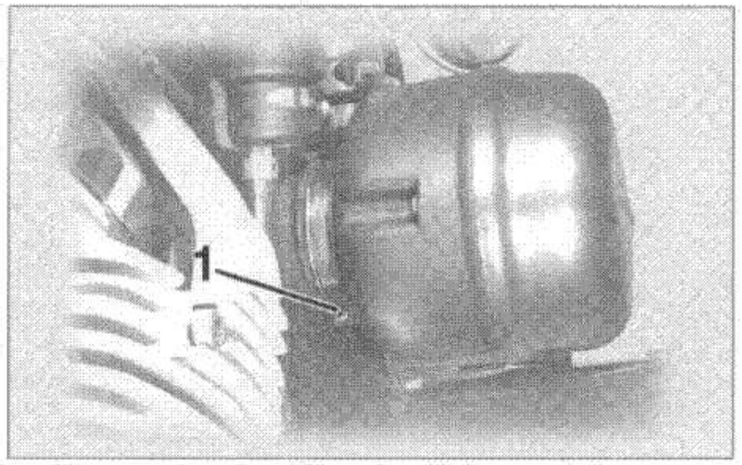
- If water is added, have a Yamaha dealer check the antifreeze content of the coolant as soon as possible.
- Have a Yamaha dealer change the coolant every two years.
- The radiator fan operation is completely automatic. It is switched on or off according to the coolant temperature in the radiator.



1. Air filter case

Air filters

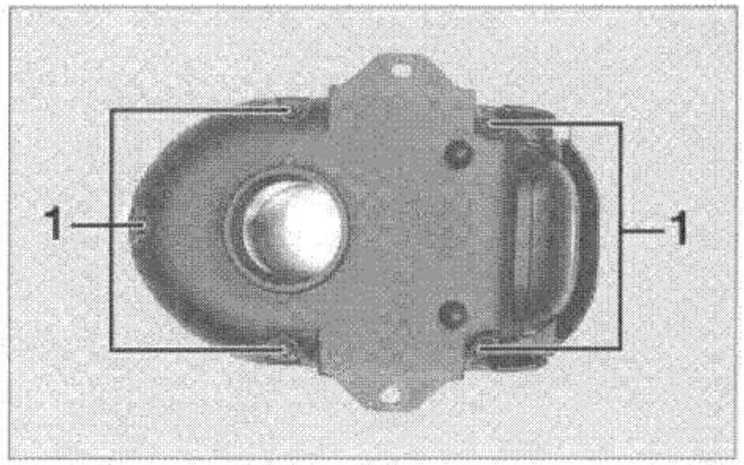
1. Remove cowlings A and B. (See page 7-6 and 7-7 for removal and installation procedures.)



1. Carburetor intake joint clamp screw

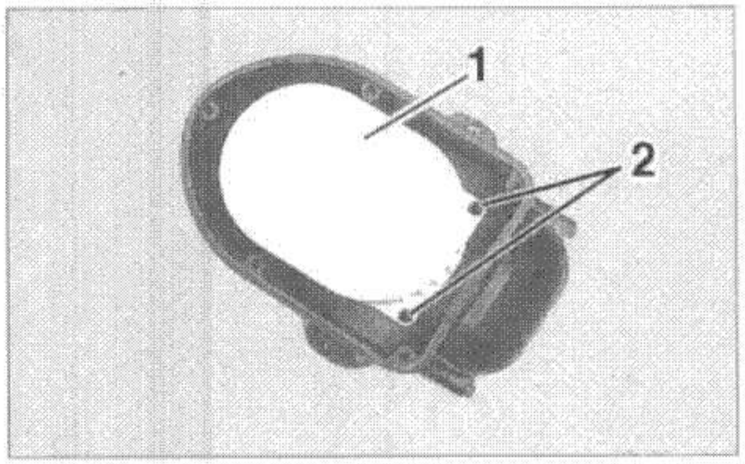
For each air filter:

2. Loosen the carburetor intake joint clamp screw and pull off the air filter.



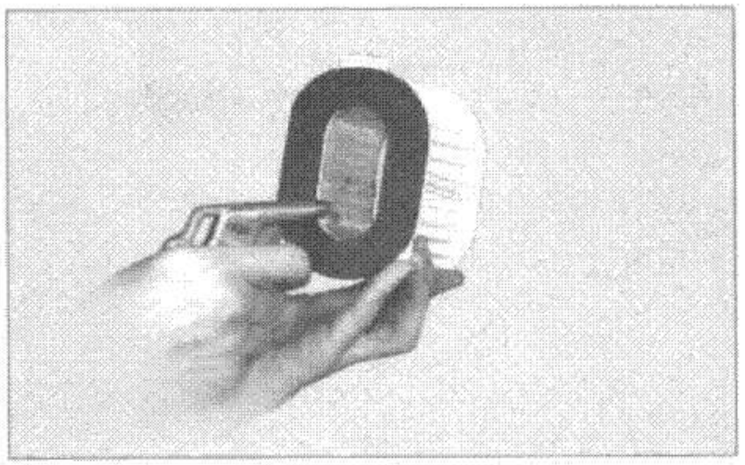
1. Air filter case bolt (× 5)

3. Remove the air filter case cover by removing the bolts.



1. Air filter element
2. Air filter element screw (× 2)

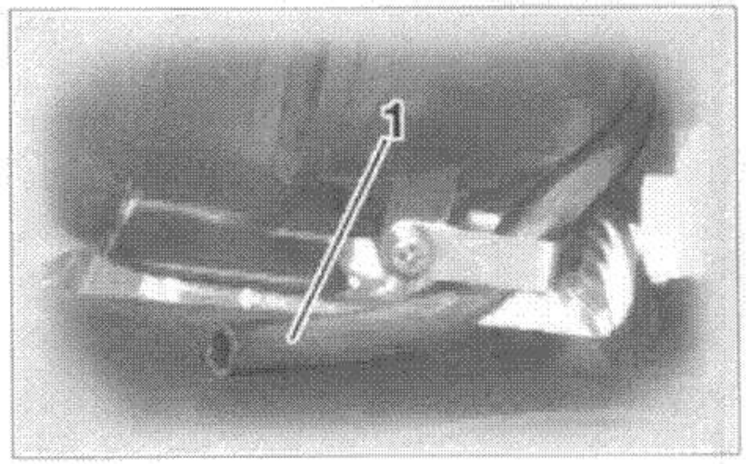
4. Remove the air filter element by removing the screws.



5. Tap the air filter lightly to remove most of the dust and dirt and blow out the remaining dirt with compressed air as shown. If the air filter is damaged, replace it.

CAUTION:

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



1. Air filter case drain hose

6. Fit the projection on the air filter element into the holder in the air filter case, and then tighten the screws.
7. Install the air filter case cover and tighten the bolts.
8. Insert the air filter case into the carburetor intake joint and tighten the clamp screw.
9. Install the cowlings.

NOTE:

Be sure to position the air filter case drain hose as shown.

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:

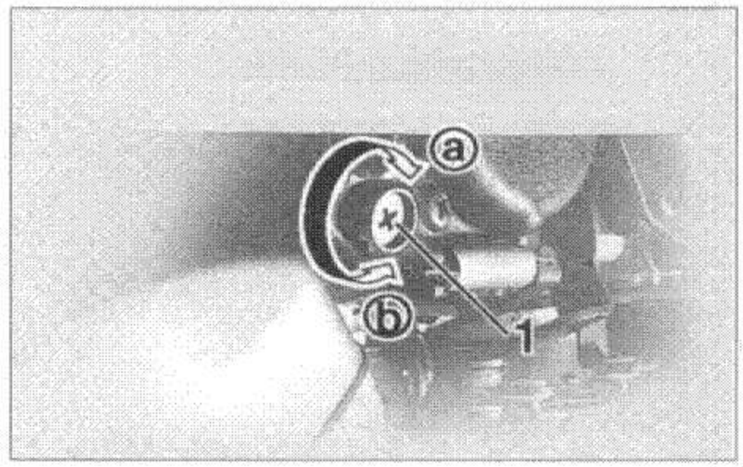
The carburetors were set at the Yamaha factory after many tests. If they are changed, poor engine performance and damage may result.

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.



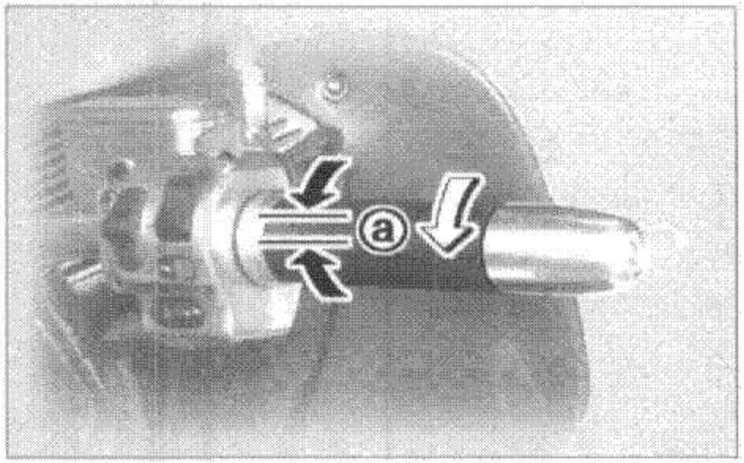
1. Throttle stop screw

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



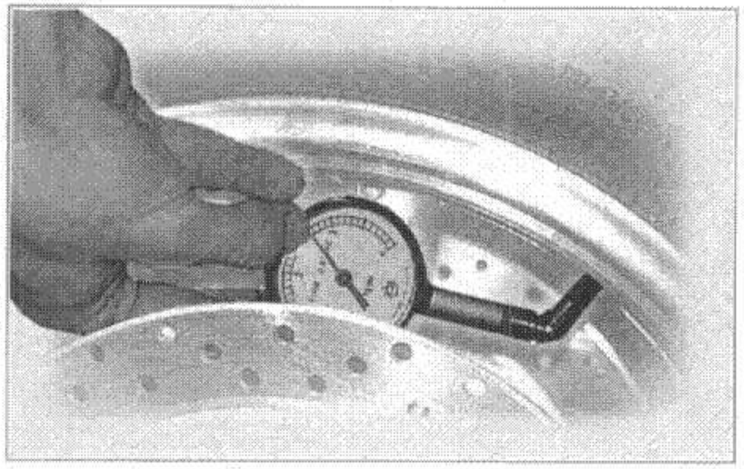
a. Free play

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.



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

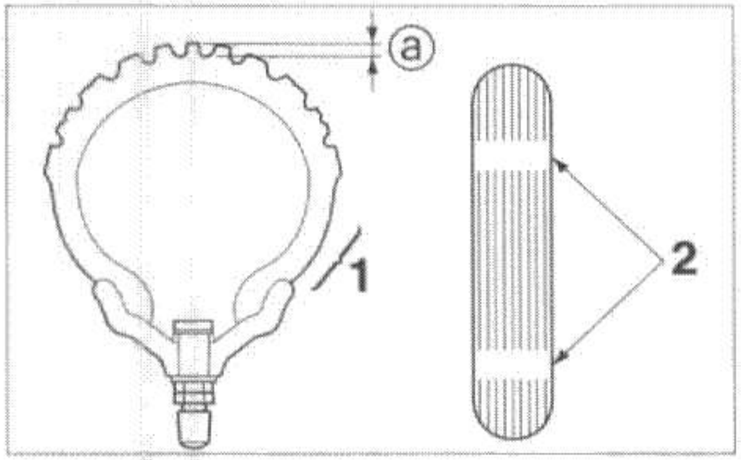
Tire inflation pressure should be checked and adjusted when the temperature of the tire equals the ambient air temperature. Tire inflation pressure must be adjusted according to total weight of cargo, rider, passenger, and accessories (fairing, saddlebags, etc.).

Maximum load*	190 kg	
Cold tire pressure	Front	Rear
Up to 90 kg load*	250 kPa (2.50 kgf/cm^2, 2.50 bar)	250 kPa (2.50 kgf/cm^2, 2.50 bar)
90 kg load ~ Maximum load*	250 kPa (2.50 kgf/cm^2, 2.50 bar)	280 kPa (2.80 kgf/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.



1. Sidewall
2. Wear indicator
a. Tread depth

Tire inspection

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

⚠ 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)	1.0 mm

NOTE:

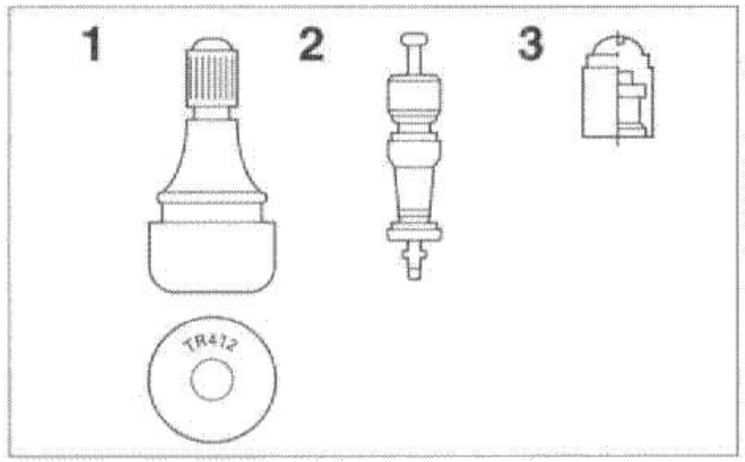
These limits may be different by regulation from country to country. If so, conform to the limits specified by the regulations of your own country.

Tire information

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

⚠ 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.



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

FRONT

Manufacturer	Size	Type
Dunlop	150/80-16 71H	D404F
Bridgestone	150/80-16 71H	G705

	Type
Tire valve	TR412
Valve core	#9000A

REAR

Manufacturer	Size	Type
Dunlop	150/90B15M/C 74H	D404
Bridgestone	150/90B15M/C 74H	G702

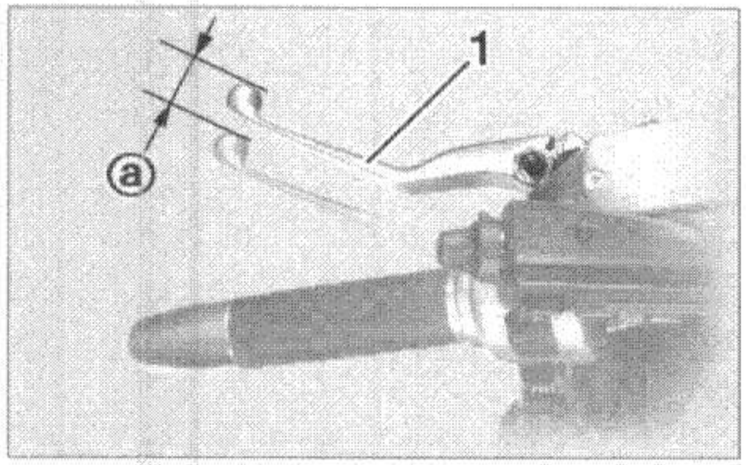
	Type
Tire valve	PVR59A
Valve core	#9000

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

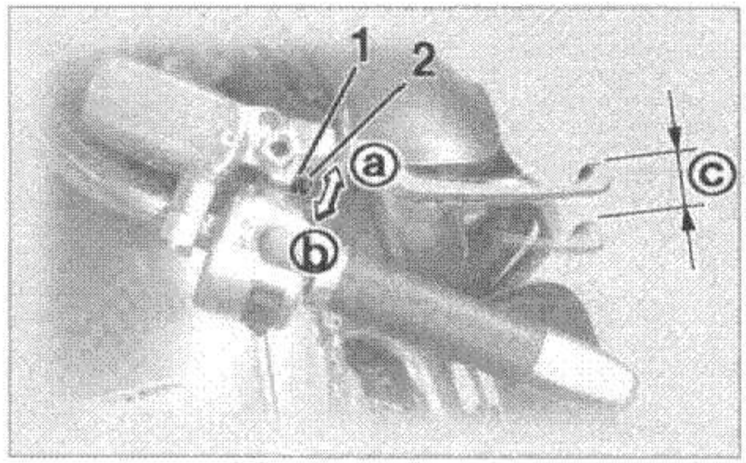
Tightening torque:
Valve stem nut:
1.6 Nm (0.16 m·kg)
Valve stem locknut:
1.6 Nm (0.16 m·kg)



1. Clutch lever
a. Clutch lever free play

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.



1. Locknut
2. Adjusting bolt
c. Free play

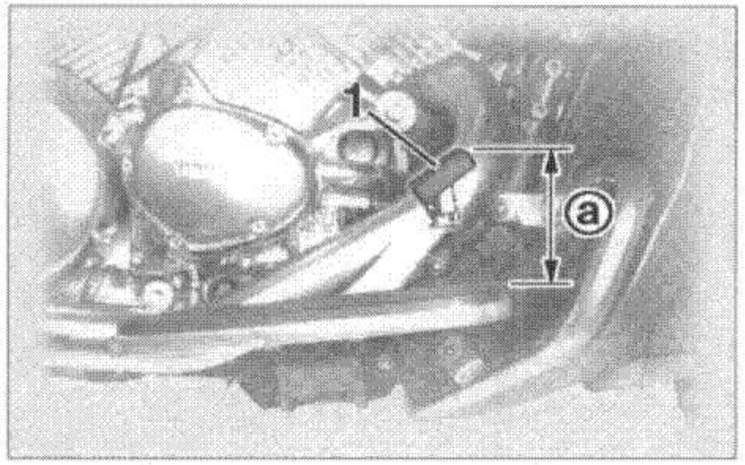
Front brake lever free play adjustment

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

1. Loosen the locknut.
2. Turn the adjusting bolt in direction ⓐ to increase free play or in direction ⓑ 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.**



1. Rear brake pedal
a. Brake pedal height

Rear brake pedal height adjustment

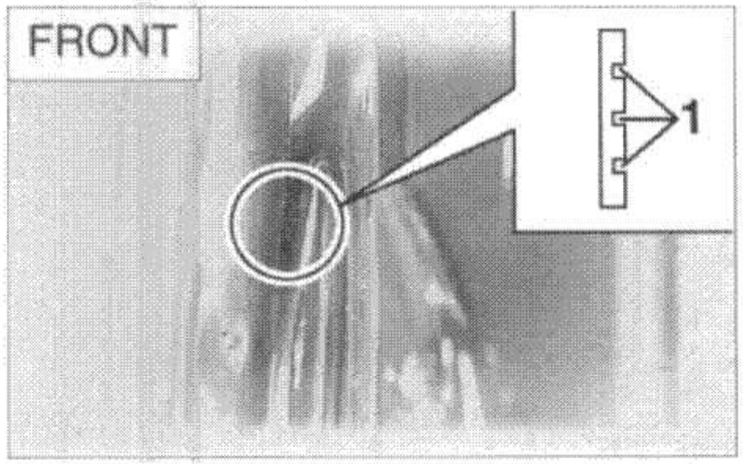
The top of the brake pedal should be positioned 100 mm above the top of the footrest. If not, ask a Yamaha dealer to adjust it.

⚠ WARNING

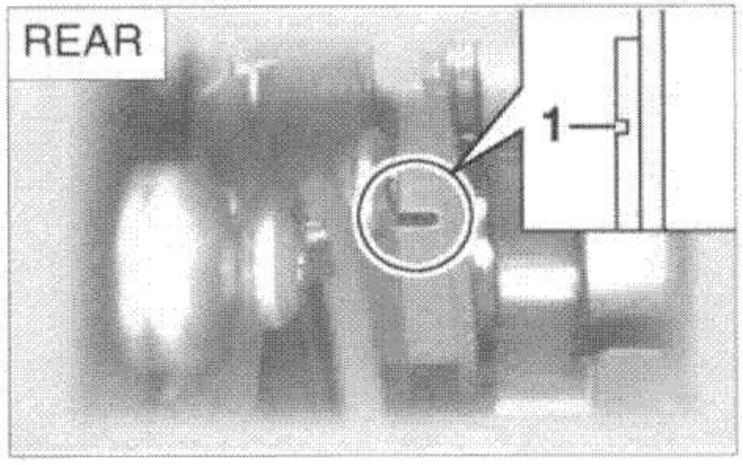
A soft or spongy feeling in the brake pedal can indicate the presence of air in the brake system. This air must be removed by bleeding the brake system before the motorcycle is operated. Air in the system will cause greatly diminished braking capability and can result in loss of control and an accident.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

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. Since the brake light switch is a component of the cruise control system, adjustment should be made by a Yamaha dealer.



1. Groove (× 3)



1. Groove

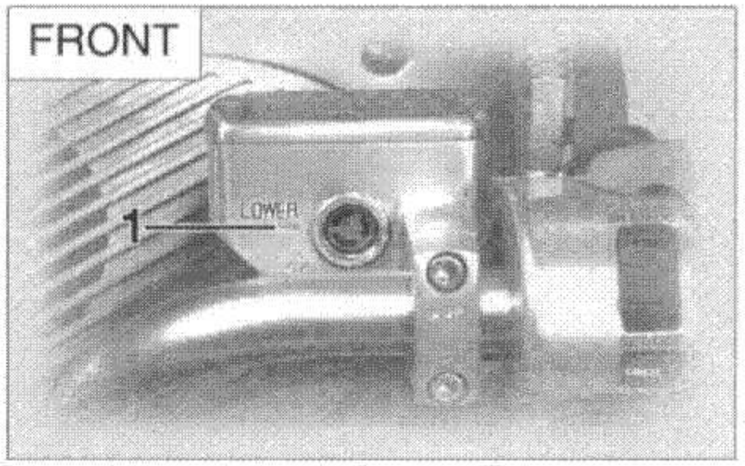
Checking the front and rear brake pads

Front brake

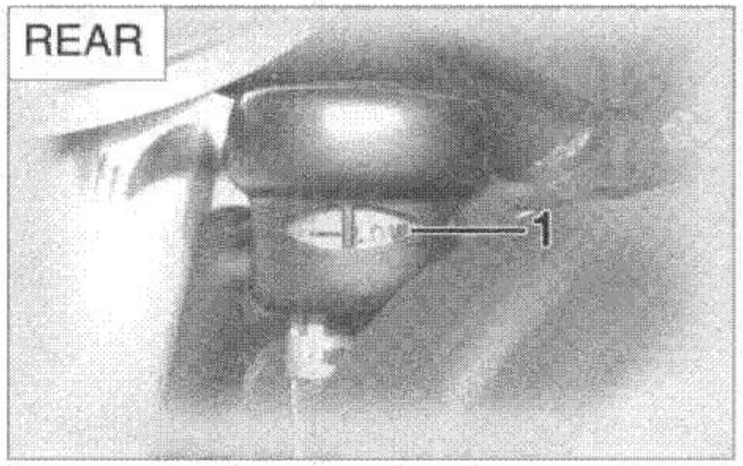
Wear indicator grooves are provided on each brake pad. These indicators allow checking of brake pad wear without disassembling the brake. Inspect the grooves. If they have almost disappeared, ask a Yamaha dealer to replace the pads.

Rear brake

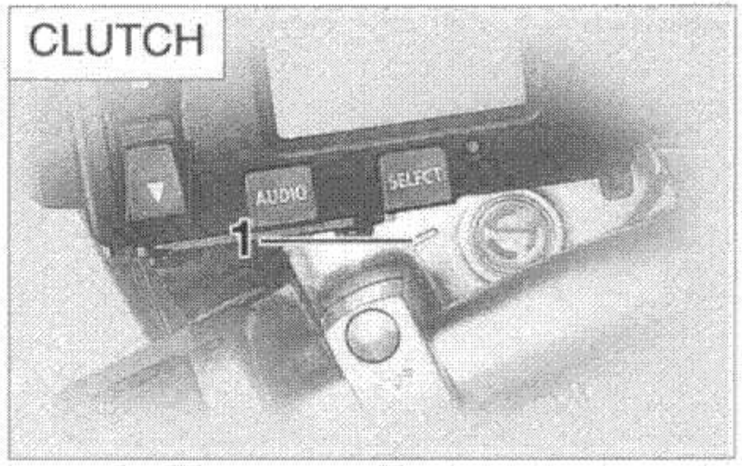
A wear indicator groove is provided on each brake pad. This indicator allows checking of brake pad wear without disassembling the brake. Inspect the groove. If the groove has almost disappeared, ask a Yamaha dealer to replace the pads.



1. Minimum level mark



1. Minimum level mark



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.
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.

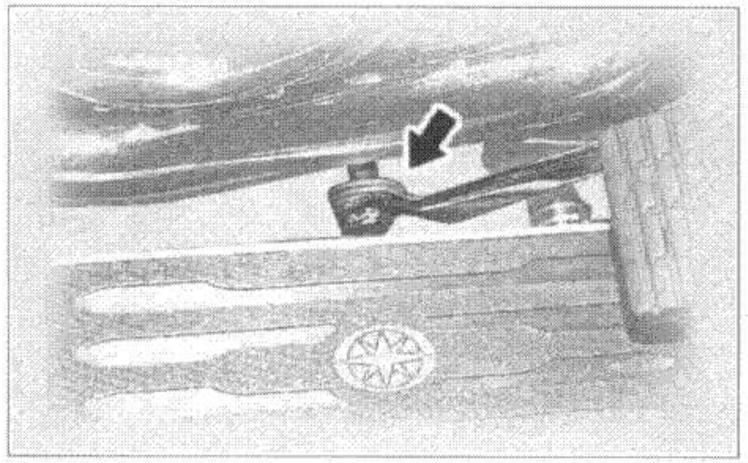
Recommended brake fluid: DOT 4

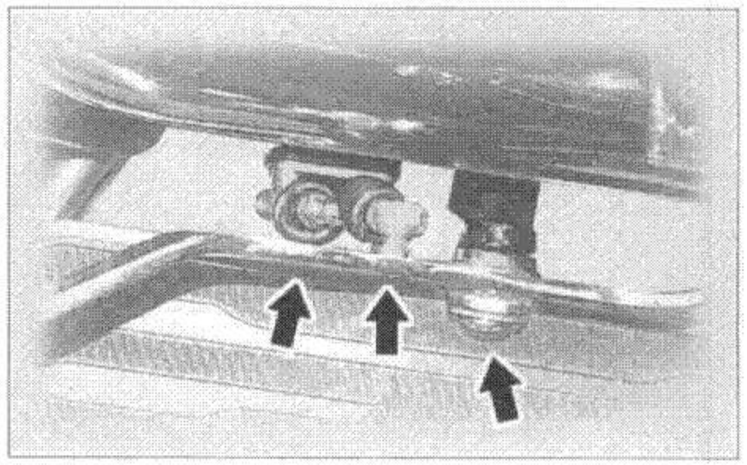
- Refill with the same type of brake fluid. Mixing fluids may result in a harmful chemical reaction and lead to poor brake or clutch performance.
- Be careful that water does not enter the master cylinder when refilling. Water will significantly lower the boiling point of the fluid and may result in 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.

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)

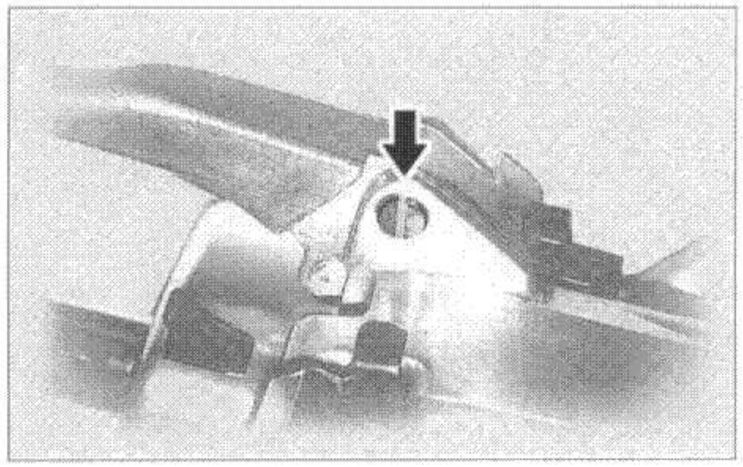




Brake and shift pedal lubrication

Lubricate the pivoting parts.

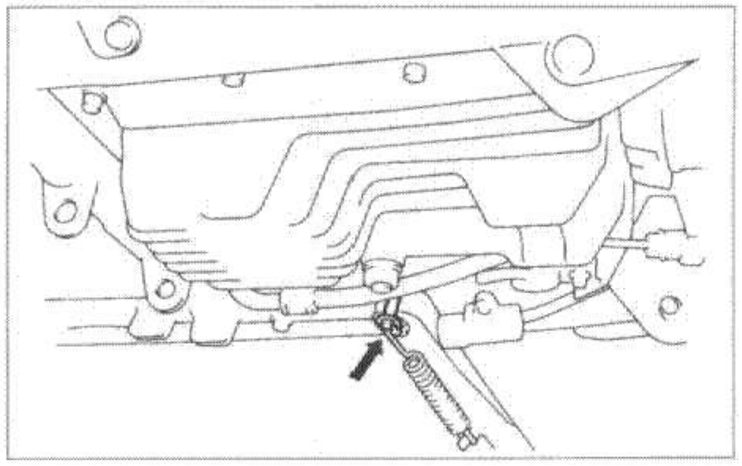
Recommended lubricant:
Same as engine oil



Brake and clutch lever lubrication

Lubricate the pivoting parts.

Recommended lubricant:
Same as engine oil



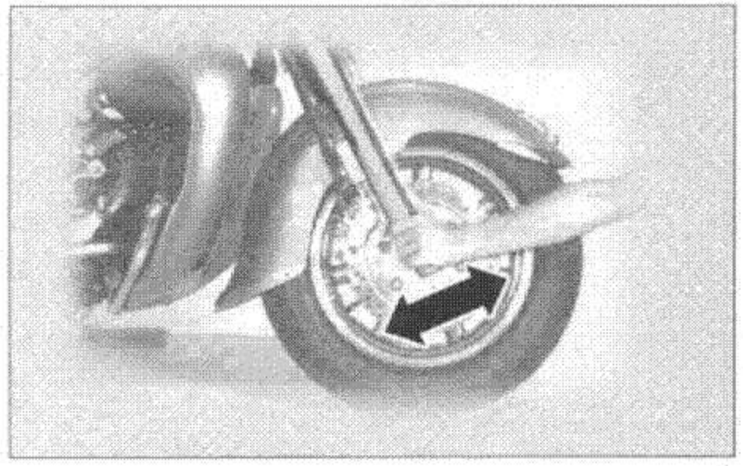
Sidestand lubrication

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

Recommended lubricant:
Same as engine oil

⚠ WARNING

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



Steering inspection

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

⚠ WARNING

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

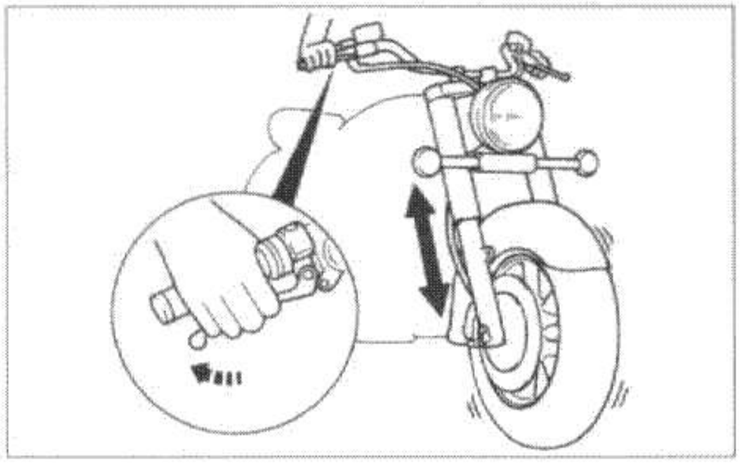
Front fork inspection

⚠ WARNING

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

Visual check

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

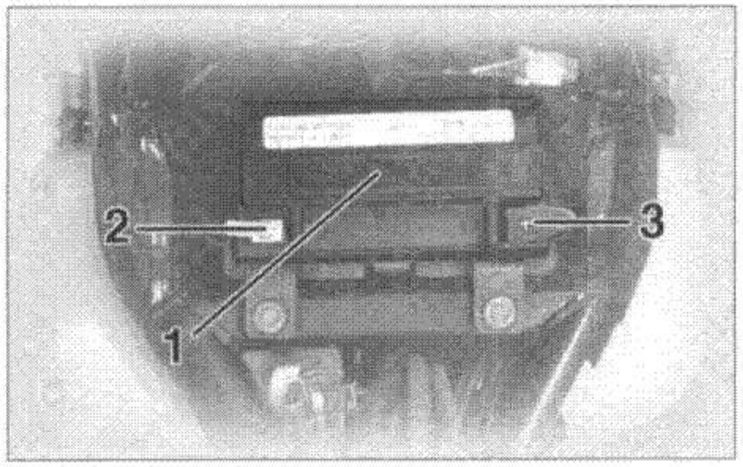


Operation check

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
2. Negative terminal
3. Positive terminal

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.

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.**

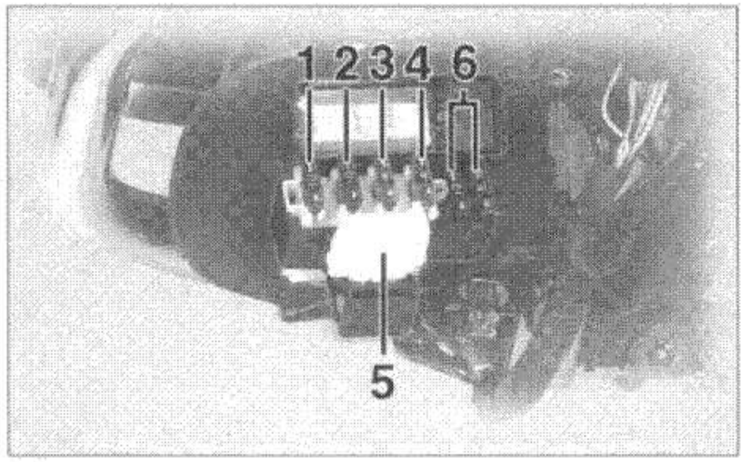
Batteries produce explosive gases. Keep sparks, flame, cigarettes etc., away. Ventilate when charging or using in an enclosed space. Always shield your eyes when working near batteries.
KEEP OUT OF REACH OF CHILDREN.

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.**



1. Cruise control fuse
2. Carburetor heater fuse
3. Auxiliary DC terminal fuse
4. Auxiliary DC jack fuse
5. Audio system fuse
6. Spare fuse (× 2)

Fuse replacement

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

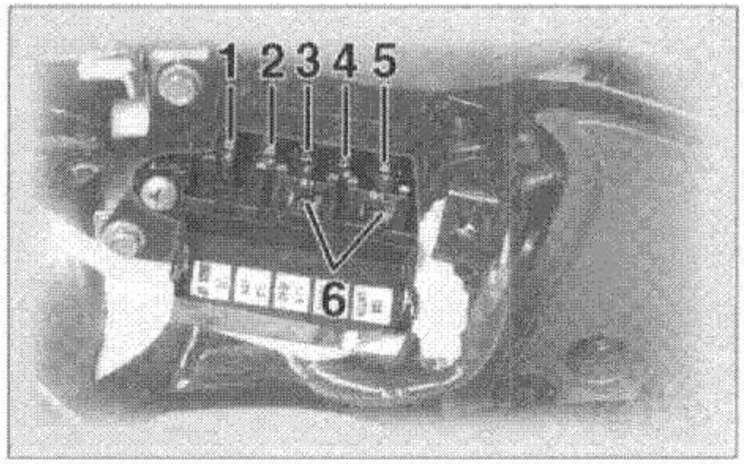
CAUTION:

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.

Fuse box A

Fuse box A is located behind cowling A. (See page 7-6 for removal and installation procedures.)

Specified fuses:	
Cruise control fuse:	10 A
Carburetor heater fuse:	10 A
Auxiliary DC terminal fuse:	5 A
Auxiliary DC jack fuse:	5 A
Audio system fuse:	10 A

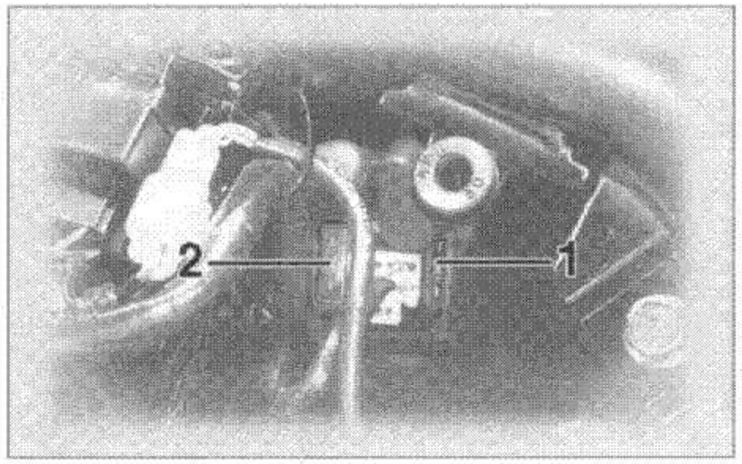


1. Ignition fuse
2. Signaling system fuse
3. Headlight fuse
4. Radiator fan fuse
5. Odometer fuse
6. Spare fuse (× 2)

Fuse box B

Fuse box B is located behind panel D. (See page 7-8 for removal and installation procedures.)

Specified fuses:	
Ignition fuse:	10 A
Signaling system fuse:	15 A
Headlight fuse:	15 A
Radiator fan fuse:	10 A
Odometer fuse:	10 A

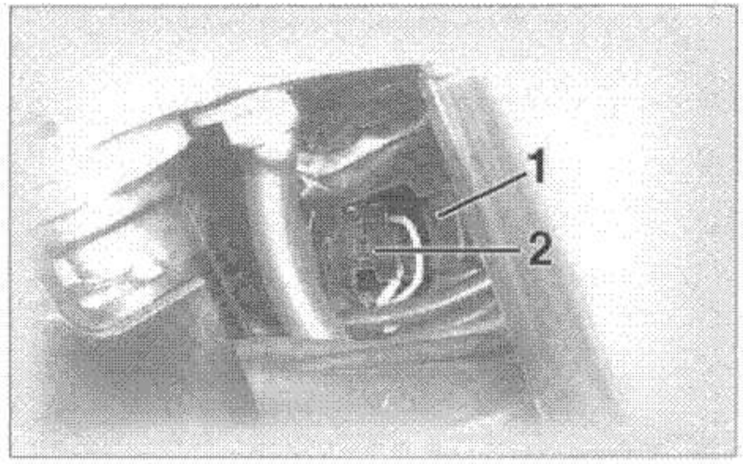


1. Main fuse
2. Spare fuse

Main fuse box

The main fuse box is located behind panel E. (See page 7-9 for removal and installation procedures.)

Specified main fuse: 30 A

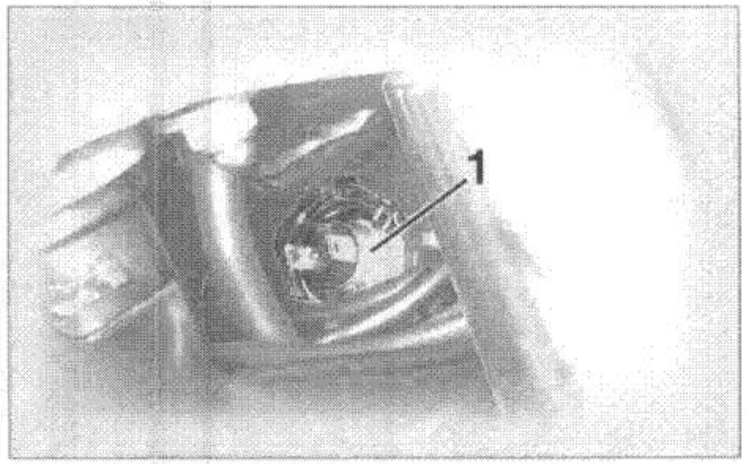


1. Bulb holder cover
2. Headlight connector

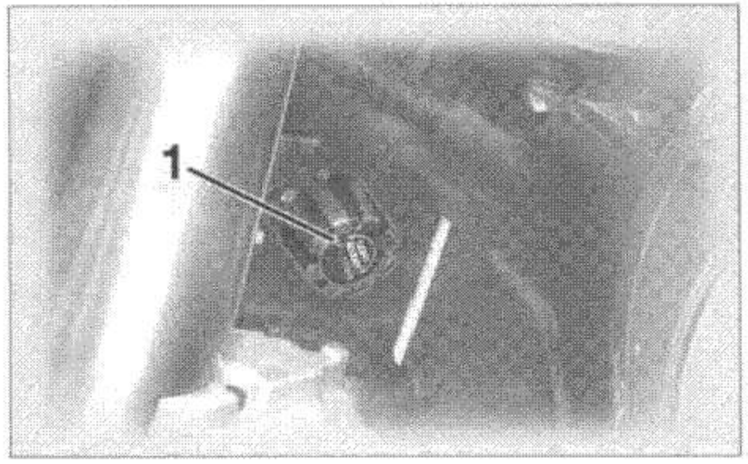
Headlight bulb replacement

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

1. Disconnect the headlight connector and remove the bulb holder cover.
2. Turn the bulb holder counterclockwise to remove it and remove the defective bulb.



1. Bulb holder



1. Vertical headlight beam adjusting knob

⚠ WARNING

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

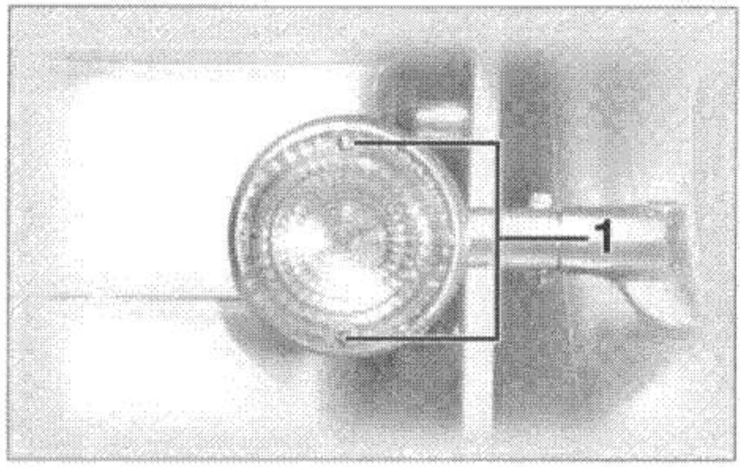
3. Put a new bulb into position and secure it in place with the bulb holder.

CAUTION:

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

4. Install the bulb holder cover and connect the headlight connector.

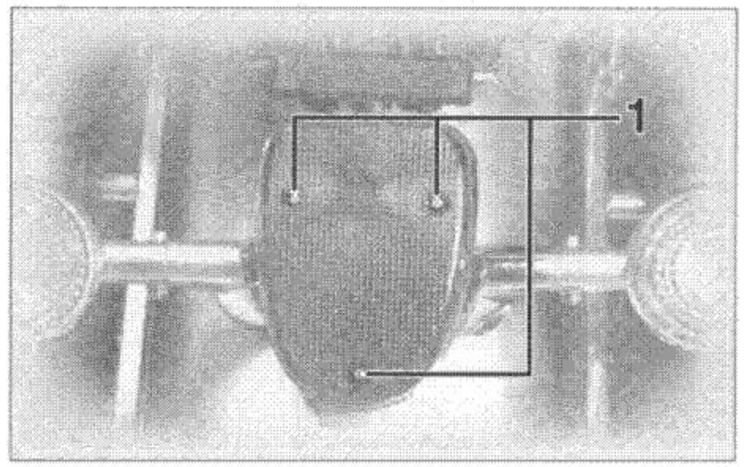
If the headlight beam adjustment is necessary, ask a Yamaha dealer to make that adjustment.



1. Screw (× 2)

Turn signal and taillight bulb replacement

1. Remove the screws and the lense.
2. Push the bulb inward and turn it counterclockwise.

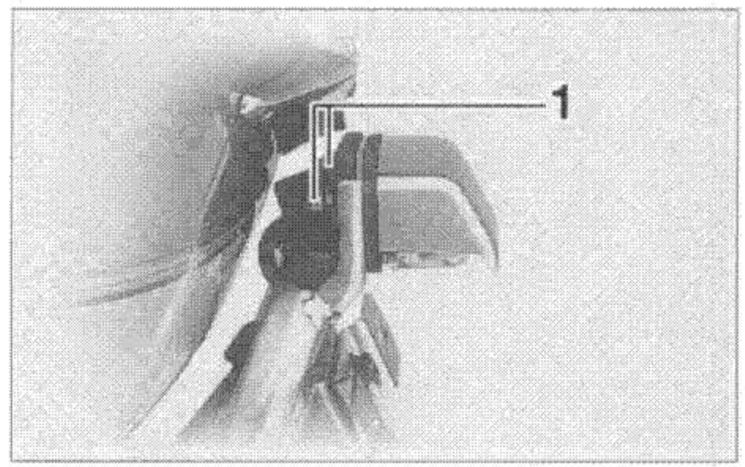


1. Screw (× 3)

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 lense and the screws.

CAUTION:

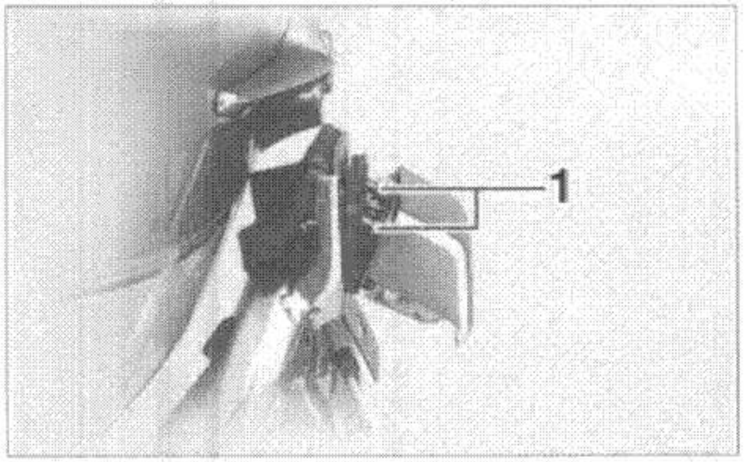
Do not over-tighten the screws as the lense may break.



1. Nut (× 2)

License light bulb replacement

1. Remove the license light assembly by removing the nuts.



1. Nut (× 2)

2. Remove the license light lense by removing the nuts.
3. Pull out the defective bulb.
4. Install a new bulb.
5. Install the license light lense and tighten the nuts.
6. Install the license light assembly and tighten the nuts.

Troubleshooting

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

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

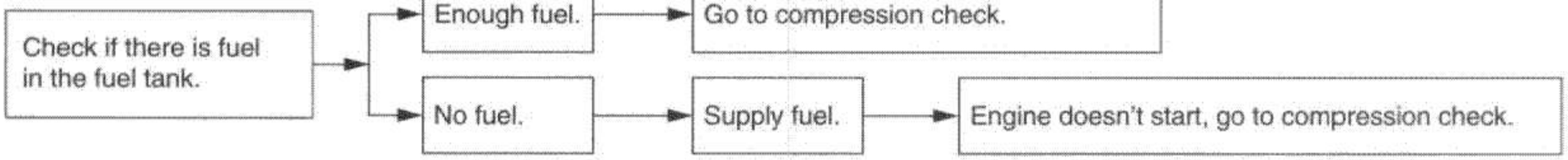
If your motorcycle requires any repair, bring it to a Yamaha dealer. The skilled technicians at a Yamaha dealership have the tools, experience, and know-how to properly service your motorcycle. Use only genuine Yamaha parts on your motorcycle. Imitation parts may look like Yamaha parts, but they are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

Troubleshooting chart

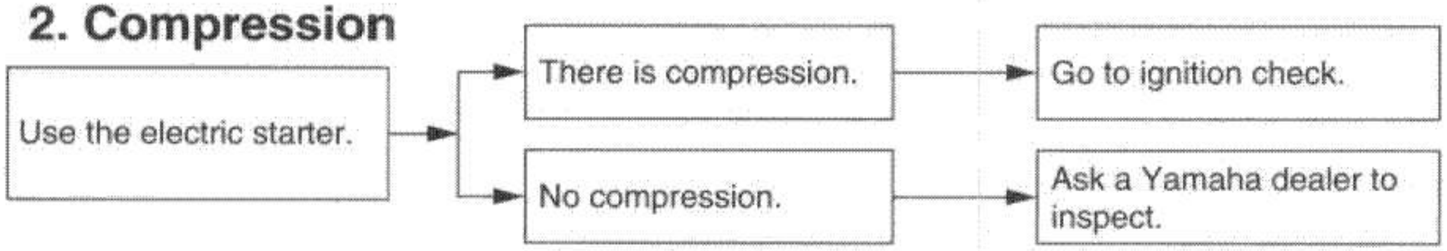
⚠ WARNING

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

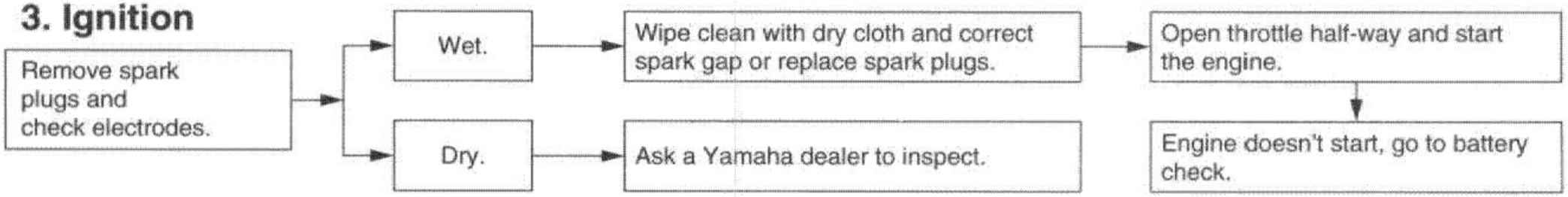
1. Fuel



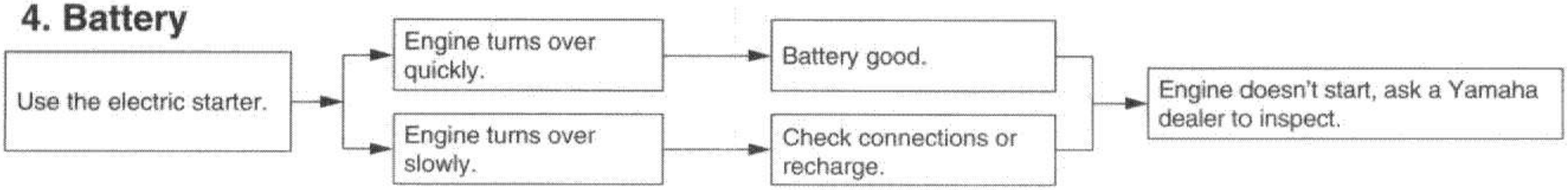
2. Compression



3. Ignition



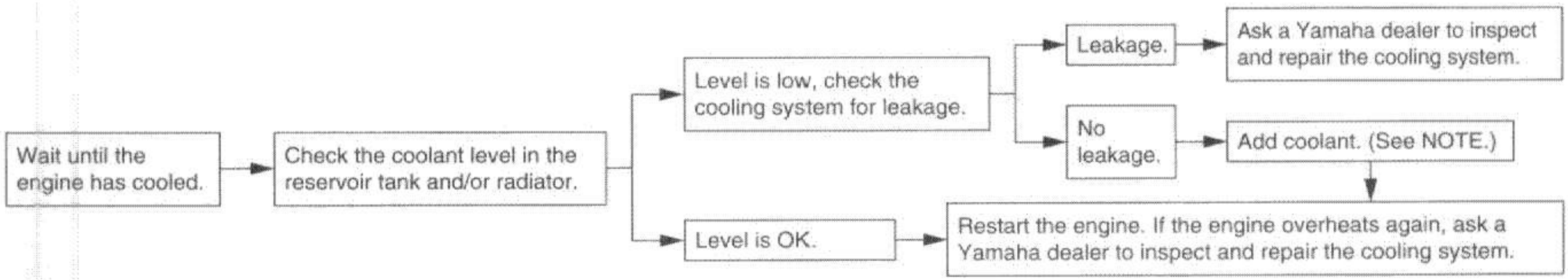
4. Battery



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.



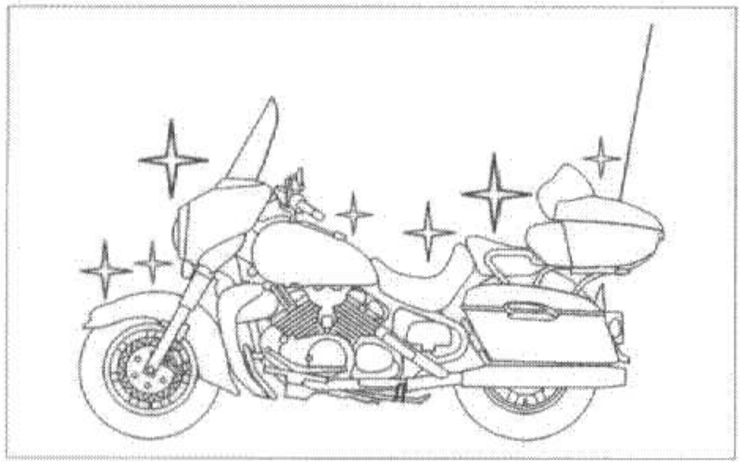
NOTE:

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 8-1
Storage 8-4

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

<u>After normal use</u>

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.

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, lights, audio system and speakers), saddlebags, travel trunk, 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.**

<u>After riding in the rain, near the sea or on salt-sprayed roads</u>

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.)

8

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

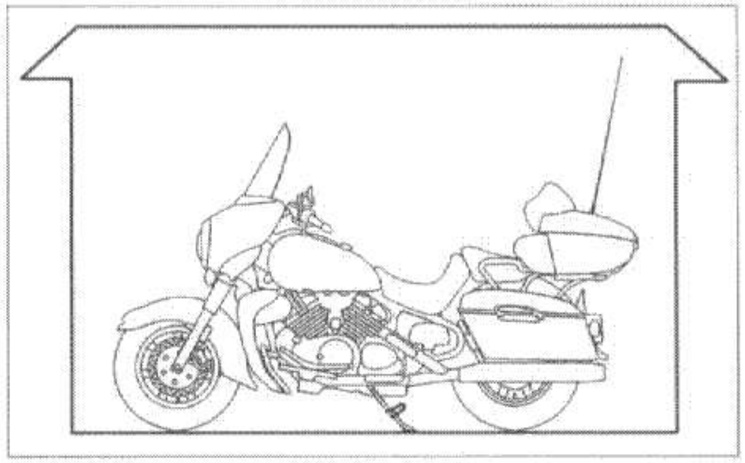
Make sure that there is no oil or wax on the brakes and tires. If necessary, clean the brake discs and linings with a regular brake disc cleaner or acetone, and wash the tires with warm water and mild soap. Then, carefully test the motorcycle for its braking performance and cornering behavior.

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.

8

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.

⚠ WARNING

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

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.

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How to use the conversion table 9-5

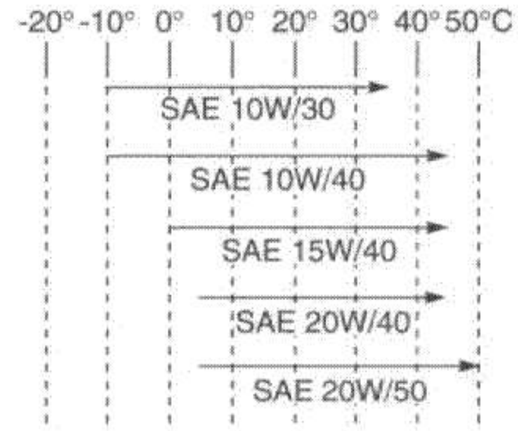
SPECIFICATIONS

Specifications

Model	**XVZ13TF**
Dimensions	
Overall length	2,705 mm
Overall width	900 mm
Overall height	1,565 mm
Seat height	750 mm
Wheelbase	1,705 mm
Minimum ground clearance	155 mm
Minimum turning radius	3,500 mm
Basic weight (With oil and full fuel tank)	394 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
Final gear case capacity	0.2 L
Radiator	
Quantity (including all routes)	3.5 L
Air filter	Dry type element
Fuel	
Type	Regular gasoline
	Unleaded fuel only (for Australia)
Fuel tank capacity	22.5 L
Reserve amount	3.5 L
Carburetor	
Type × quantity	BDSR32 × 4
Manufacturer	MIKUNI
Spark plug	
Type/Manufacturer	DPR8EA-9/NGK or X24EPR-U9/DENSO
Gap	0.8 ~ 0.9 mm
Clutch type	Wet, multiple-disc
Transmission	
Primary reduction system	Spur gear
Primary reduction ratio	1.776
Secondary reduction system	Shaft drive
Secondary reduction ratio	2.567
Transmission type	Constant mesh 5-speed
Operation	Left foot operation
Gear ratio	
1st	2.529
2nd	1.632
3rd	1.200
4th	0.960
5th	0.786
Chassis	
Frame type	Double cradle
Caster angle	29°10′
Trail	152 mm
Tire	
Type	Tubeless
Front	
Size	150/80-16 71H
Manufacturer / model	Dunlop / D404F
	Bridgestone / G705
Rear	
Size	150/90B15M/C 74H
Manufacturer / model	Dunlop / D404
	Bridgestone / G702

SPECIFICATIONS

Maximum load*	190 kg
Air pressure (cold tire)	
Up to 90 kg load*	
Front	250 kPa (2.50 kgf/cm^2, 2.50 bar)
Rear	250 kPa (2.50 kgf/cm^2, 2.50 bar)
90 kg load ~ maximum load*	
Front	250 kPa (2.50 kgf/cm^2, 2.50 bar)
Rear	280 kPa (2.80 kgf/cm^2, 2.80 bar)

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

Wheels

Front		
	Type	Cast
	Size	16 × MT 3.50
Rear		
	Type	Cast
	Size	15M/C × MT 4.00

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

Shock absorber

Front	Coil-air spring / Oil damper
Rear	Coil-air spring / Oil damper

Wheel travel

Front	140 mm
Rear	105 mm

Electrical systems

Ignition system		T.C.I. (digital)
Charging system		
	Type	A.C. magneto
	Standard output	14 V 29 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
Tail / brake light	12 V, 5 / 21 W × 1
Turn signal light	12 V, 21 W × 4
Licence light	12 V, 5 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 × 2
Fuel indicator light	14 V, 3 W × 1
Engine overheat indicator light	12 V, 1.7 W × 1
Engine trouble indicator light	12 V, 1.7 W × 1
Overdrive indicator light	12 V, 1.7 W × 1
Cruise control "SET" indicator light	12 V, 1.7 W × 1
Cruise control "RES" indicator light	12 V, 1.7 W × 1
Cruise control "ON" indicator light	12 V, 1.7 W × 1

Audio system amplifier	
Output power	
Speaker	14 W × 4
Headset	1 W × 2
Auto-Vol. range	5 steps
Output impedance	
Speaker	4 Ω
Headset	8 Ω ~ 16 Ω
Fuses	
Main fuse	30 A
Headlight fuse	15 A
Signaling system fuse	15 A
Ignition fuse	10 A
Radiator fan fuse	10 A
Odometer fuse	10 A
Cruise control fuse	10 A
Carburetor heater fuse	10 A
Audio fuse	10 A
Auxiliary DC jack fuse	5 A
Auxiliary DC terminal 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 m·kg cm·kg cm·kg	7.233 86.794 0.0723 0.8679	ft·lb in·lb ft·lb in·lb
Weight	kg g	2.205 0.03527	lb oz
Speed	km/hr	0.6214	mph
Distance	km m m cm mm	0.6214 3.281 1.094 0.3937 0.03937	mi ft yd in in
Volume / Capacity	cc (cm^3) cc (cm^3) lt (liter) lt (liter)	0.03527 0.06102 0.8799 0.2199	oz (IMP liq.) cu·in qt (IMP liq.) gal (IMP liq.)
Misc.	kg/mm kg/cm^2 Centigrade (°C)	55.997 14.2234 9/5 + 32	lb/in psi (lb/in^2) Fahrenheit (°F)

9

Identification numbers record 10-1
Key identification number 10-1
Vehicle identification number 10-1
Model label 10-2
Noise regulation (For Australia) 10-2

CONSUMER INFORMATION

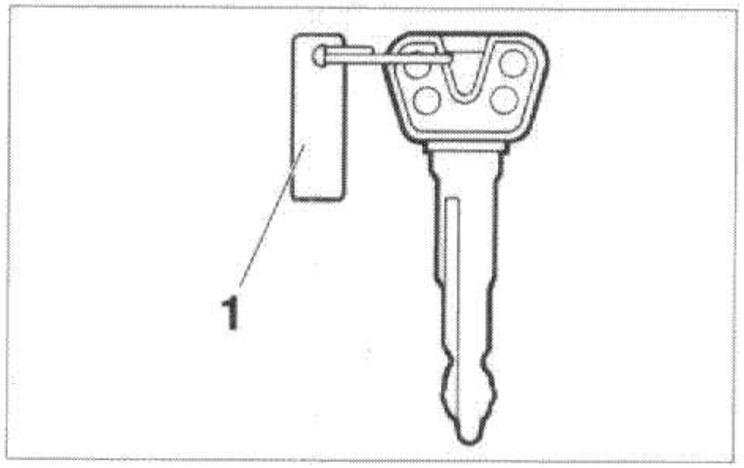
Identification numbers record

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

1. KEY IDENTIFICATION NUMBER:

2. VEHICLE IDENTIFICATION NUMBER:

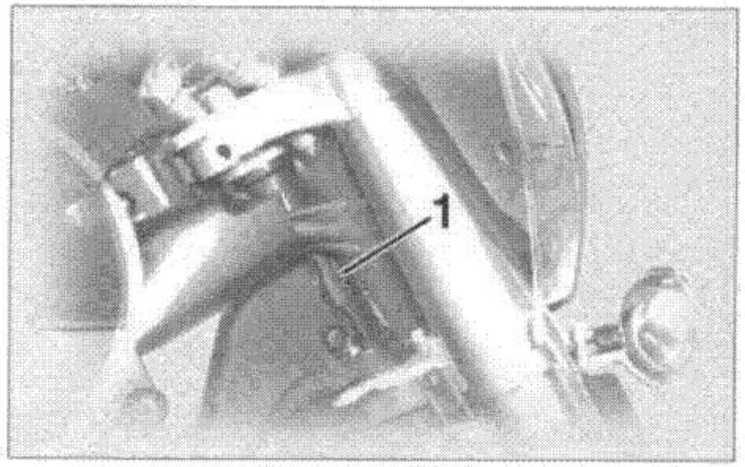
3. MODEL LABEL INFORMATION:



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.



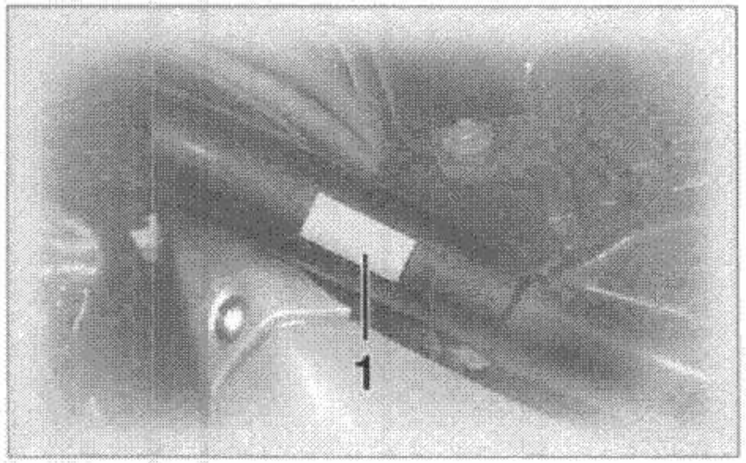
1. Vehicle identification number

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 rider seat. (See page 3-13 for rider seat removal and installation procedures.)
Record the information on this label in the space provided. This information will be needed to order spare parts from your Yamaha dealer.

NOISE REGULATION (For Australia)

TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED
Owners are warned that the law may prohibit:

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

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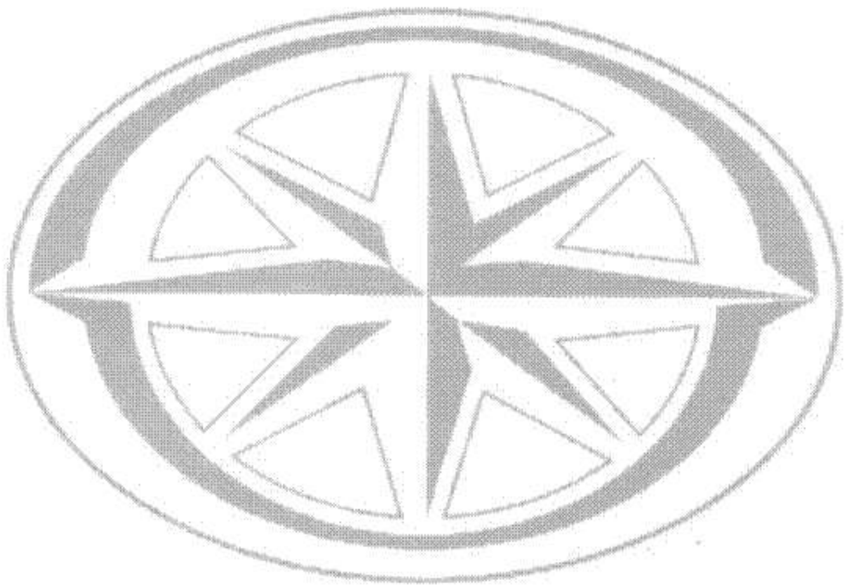

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