



YAMAHA

OWNER'S MANUAL

YZF-R1L

YZF-R1LC

LIT-11626-12-32

4XV-28199-11

Congratulations on your purchase of the Yamaha YZF-R1 / YZF-R1C. 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.

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

IMPORTANT MANUAL INFORMATION

EAU00003

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



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



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



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

EW000000

WARNING

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

AFFIX DEALER

LABEL HERE

EAU01399

**YZF-R1L/YZF-R1LC
OWNER'S MANUAL**

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1st Edition, September 1998**

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SAFETY INFORMATION

EAU00014

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".



SAFETY INFORMATION

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.



SAFETY INFORMATION

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:



SAFETY INFORMATION

Loading

The total weight of the operator, passenger, accessories and cargo must not exceed the maximum load limit of YZF-R1: 197 kg (434 lb) / YZF-R1C: 196 kg (432 lb).

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.



SAFETY INFORMATION

- 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:



SAFETY INFORMATION

- 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. 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.

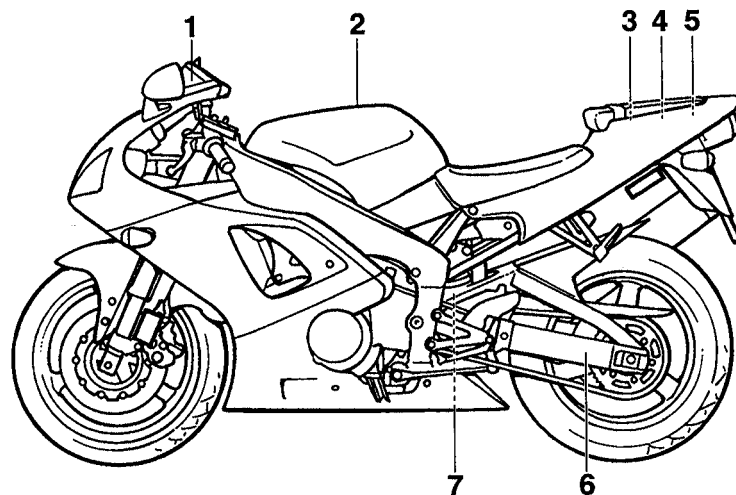


SAFETY INFORMATION

EAU00025

Location of the important labels

Please read the following labels carefully before operating this motorcycle.





SAFETY INFORMATION

1

CAUTION

Cleaning with alkaline or acid cleaner,
gasoline or solvent will damage windshield.
Use neutral detergent.

3JJ-2835Y-A0

2

⚠ WARNING

- BEFORE YOU OPERATE THIS VEHICLE, READ THE OWNER'S MANUAL AND ALL LABELS.
- ALWAYS WEAR AN APPROVED MOTORCYCLE HELMET, eye protection, and protective clothing.

3MX-2118K-A0

3

⚠ WARNING

Improper loading can cause loss of control.
Read owner's manual for proper loading.

3JJ-28446-A0

4

LOAD LIMIT

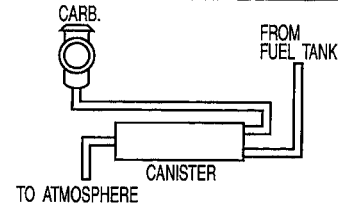
3 Kg (7 lbs)

3TB-24877-A0

5

California only

EMISSION HOSE ROUTING



4YN-21686-00

6

TIRE INFORMATION

Cold tire normal pressure should be set as follows.

- Up to 90 kg (198 lbs) load

FRONT : 250 kPa, {2.50 kgf/cm²}, 36 psi

REAR : 250 kPa, {2.50 kgf/cm²}, 36 psi

- 90 kg (198 lbs) ~ maximum load

FRONT : 250 kPa, {2.50 kgf/cm²}, 36 psi

REAR : 290 kPa, {2.90 kgf/cm²}, 42 psi

4XV-21668-00

7

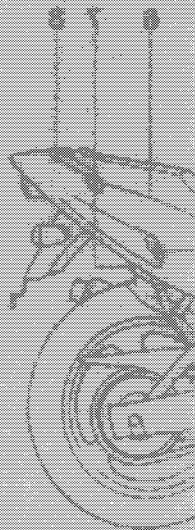
⚠ WARNING

This unit contains high pressure nitrogen gas.
 Mishandling can cause explosion.

- Read owner's manual for instructions.
- Do not incinerate, puncture or open.

YAMAHA

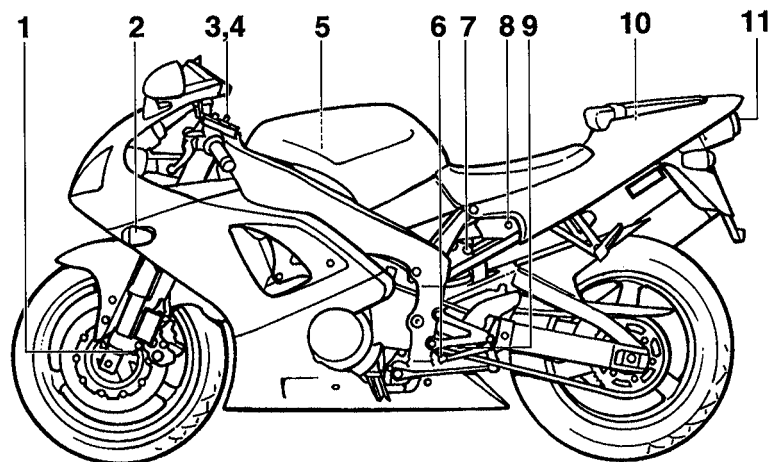
4AA-22259-00



(21-A epaq)
 (21-B epaq)
 (21-C epaq)
 (21-D epaq)
 (21-E epaq)
 (21-F epaq)
 (21-G epaq)

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Right view	2-2
Controls/Instruments	2-3

Left view



1. Front fork compression damping force
adjusting screw

(page 3-17)

2. Front turn signal/position light

(page 6-37)

3. Front fork rebound damping force
adjusting screw

(page 3-17)

4. Front fork spring preload adjusting bolt

(page 3-16)

5. Air filter

(page 6-17)

6. Shift pedal

(page 3-11)

7. Rear shock absorber compression
damping force adjusting screw

(page 3-19)

8. Passenger seat lock

(page 3-15)

9. Rear shock absorber rebound
damping force adjusting screw

(page 3-18)

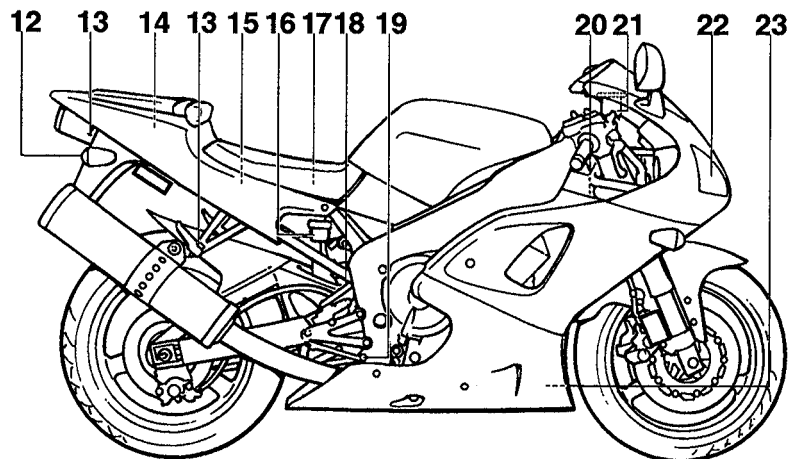
10. Helmet holder

(page 3-15)

11. Tail/brake light

(page 6-37)

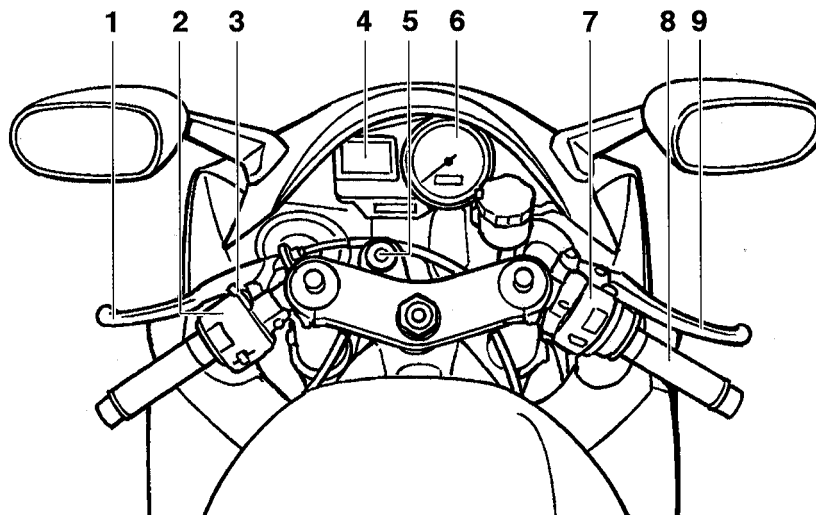
Right view




- | | | | |
|---|-------------|---|-------------|
| 12. Rear turn signal light | (page 6-37) | 19. Rear brake pedal | (page 3-12) |
| 13. Luggage strap holders | (page 3-21) | 20. Radiator cap and coolant reservoir tank cap | (page 6-15) |
| 14. Tool kit | (page 6-1) | 21. Front brake fluid master cylinder | (page 6-27) |
| 15. Fuses | (page 6-34) | 22. Headlight | (page 6-35) |
| 16. Rear brake fluid master cylinder | (page 6-27) | 23. Engine oil filter | (page 6-12) |
| 17. Battery | (page 6-33) | | |
| 18. Rear shock absorber spring preload adjusting ring | (page 3-18) | | |

DESCRIPTION

Controls/Instruments



- 1. Clutch lever
- 2. Left handlebar switches
- 3. Starter (choke) “”
- 4. Digital speedometer
- 5. Main switch

(page 3-11)
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(page 3-7)
(page 3-1)

- 6. Tachometer
- 7. Right handlebar switches
- 8. Throttle grip
- 9. Front brake lever

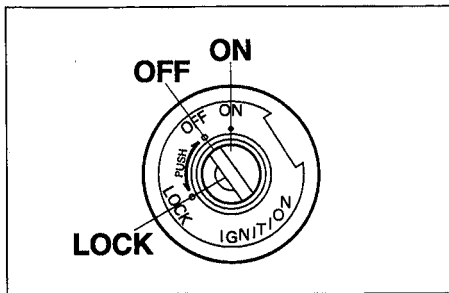
(page 3-8)
(page 3-10)
(page 6-19)
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INSTRUMENT AND CONTROL FUNCTIONS

Main switch/Steering lock	3-1	Fuel	3-13
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Front brake lever	3-11	Sidestand	3-21
Rear brake pedal	3-12	Sidestand/clutch switch operation check	3-22
Fuel tank cap	3-12		

INSTRUMENT AND CONTROL FUNCTIONS

EAU00027



EAU00029

Main switch/Steering lock

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

EAU00032

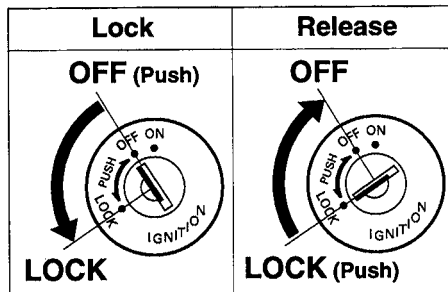
ON

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

EAU00038

OFF

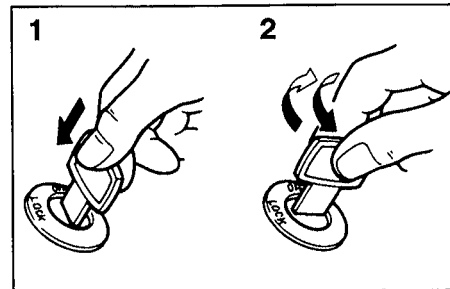
All electrical circuits are switched off. The key can be removed in this position.



EAU00040

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.

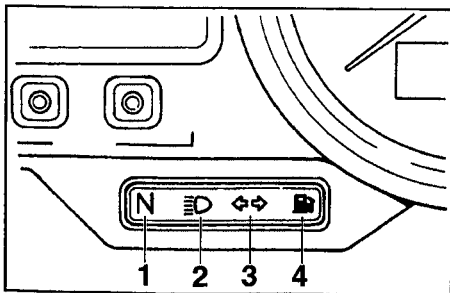





1. Push
2. Turn

EW000016

⚠ 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".



1. Neutral indicator light “N”
2. High beam indicator light “”
3. Turn indicator light “”
4. Fuel indicator light “”

Indicator lights

EAU00056

Neutral indicator light “N”

EAU00061

This indicator comes on when the transmission is in neutral.

High beam indicator light “”

EAU00063

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

Turn indicator light “”

EAU00057

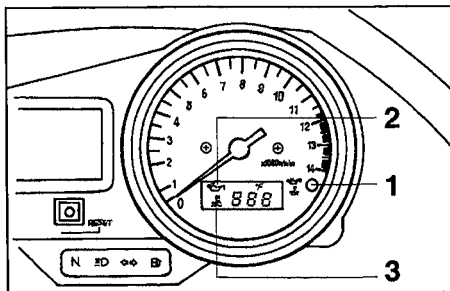
This indicator flashes when the turn switch is moved to the left or right.


Fuel indicator light “”

EAU01154

When the fuel level drops below approximately 4.0 L (0.88 Imp gal, 1.06 US gal), this light will come on. When this light comes on, fill the tank at the first opportunity. This light circuit can be checked by the procedure on page 3-6.



INSTRUMENT AND CONTROL FUNCTIONS



1. Oil level/coolant temperature indicator light “

EAU01564*

Oil level/coolant temperature indicator light “ This indicator light has two functions.

- The light will come on and symbol “
 - The light will come on and symbol “

The light circuit can be checked by the procedure on page 3-5.

EC000118

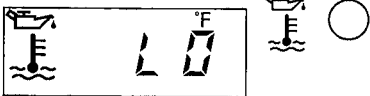
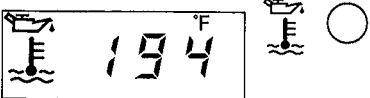
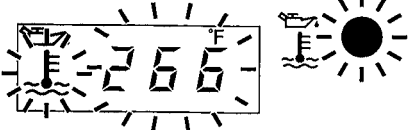
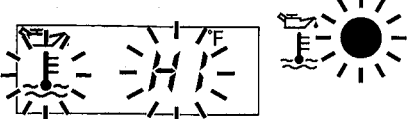
CAUTION:

- **Do not run the motorcycle until you know it has sufficient engine oil.**
- **Do not run the motorcycle if the engine is overheated.**

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.

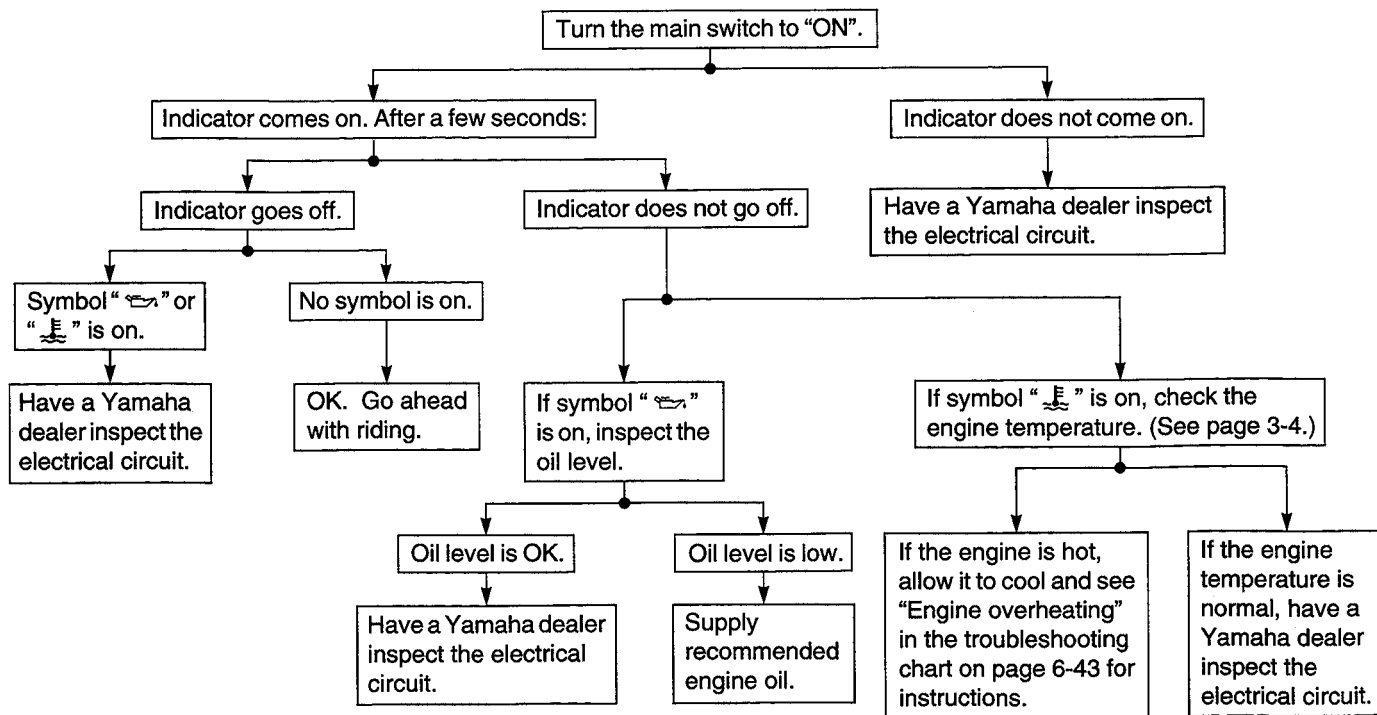
INSTRUMENT AND CONTROL FUNCTIONS

Coolant temperature	Display	Conditions	What to do
0°F ~ 104°F		Symbol is on and "LO" is displayed.	OK. Go ahead with riding.
105°F ~ 242°F		Symbol is on and temperature is displayed.	OK. Go ahead with riding.
243°F ~ 284°F		Symbol and temperature flash. Indicator light comes on.	Stop the motorcycle and allow it to idle until coolant temperature goes down. If the temperature does not go down, stop the engine. See "Engine overheating" in the troubleshooting chart on page 6-43 for instructions.
285°F ~		Symbol and message "HI" flash. Indicator light comes on.	Stop the engine and allow it to cool. See "Engine overheating" in the troubleshooting chart on page 6-43 for instructions.

INSTRUMENT AND CONTROL FUNCTIONS

EAU01565

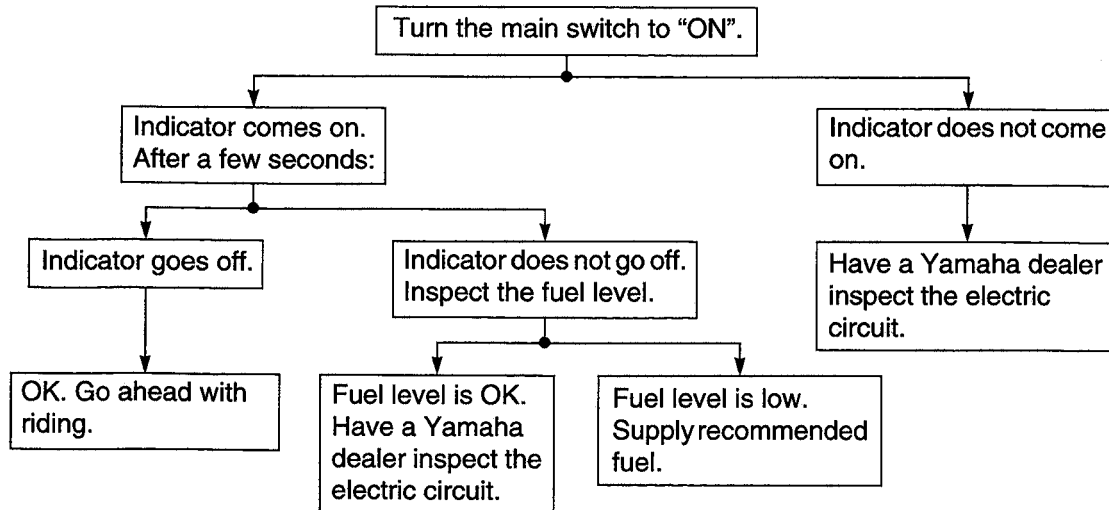
Oil level / coolant temperature indicator light circuit check



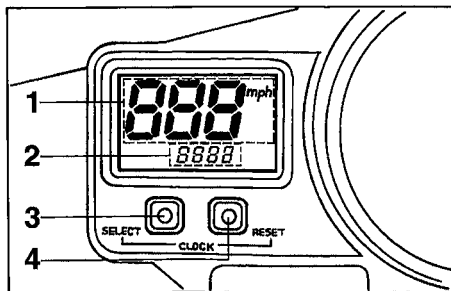
INSTRUMENT AND CONTROL FUNCTIONS

EAU01295

Fuel indicator light circuit check



INSTRUMENT AND CONTROL FUNCTIONS



1. Speedometer
2. Clock, odometer
3. "SELECT" button
4. "RESET" button

EAU01601

Digital speedometer

This speedometer is equipped with:

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

NOTE: _____

For UK and USA models only:

To change the speedometer display from kilometers to miles, press the "SELECT" button for at least two seconds.

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 3-2), 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 odometer, trip odometer 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 for at least one second.

To reset the fuel reserve trip meter, select it by pushing the "SELECT" button and push the "RESET" button for at least one second. 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 the motorcycle has traveled both 5 km and for approximately 3 minutes.

NOTE: _____

After the fuel reserve trip meter is reset, the display always returns to the "TRIP 1" mode. If "TRIP 2" was being used before the fuel reserve trip meter is reset, be sure to push the "SELECT" button to change back to the "TRIP 2" mode.

INSTRUMENT AND CONTROL FUNCTIONS

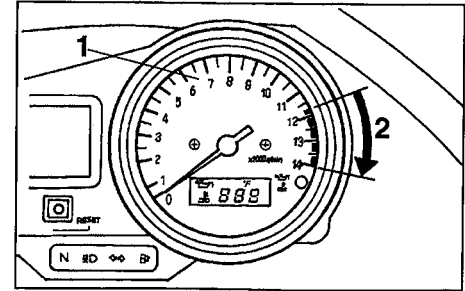
Clock mode

To change the display to the clock mode, push both the “SELECT” and “RESET” buttons.

To change the display back to the odometer mode, push the “RESET” button.

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. Tachometer
2. Red zone

EAU00101

Tachometer

This model is equipped with an electric tachometer so the rider can monitor the engine speed and keep it within the ideal power range.

EC000003

CAUTION:

**Do not operate in the red zone.
Red zone: 11,500 r/min and above**

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 to change the minutes.
4. When the minute digits start flashing, push the “RESET” button to set the minutes.
5. Push the “SELECT” button to start the clock.

INSTRUMENT AND CONTROL FUNCTIONS

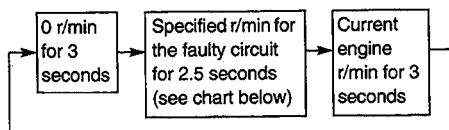
EAU00106

Diagnosis device

This model is equipped with a self diagnosis for the following circuits.

- Throttle Position Sensor (T.P.S.) circuit
- EXhaust Ultimate Power valve (EXUP) circuit
- Fuel level indicator circuit

If some trouble should occur in any of these circuits, the tachometer will repeatedly display as follows:



Use this chart to identify what circuit is faulty according to the specified r/min displayed.

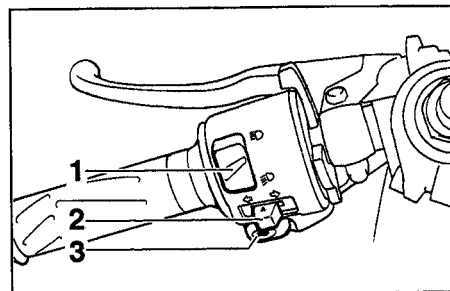
Specified r/min	Faulty circuit
3,000 r/min	Throttle Position Sensor (T.P.S.)
7,000 r/min	Exhaust Ultimate Power valve (EXUP)
8,000 r/min	Fuel level indicator

If the tachometer displays as described above, take note of the specified r/min and then take your motorcycle to a Yamaha dealer for repair.

EC000004*

CAUTION:

To prevent engine damage, be sure to consult a Yamaha dealer as soon as possible if the tachometer displays a repeated change in r/min.



1. Dimmer switch
2. Turn signal switch
3. Horn switch "🔊"

EAU00118

Handlebar switches

EAU00121

Dimmer switch

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

INSTRUMENT AND CONTROL FUNCTIONS

Turn signal switch

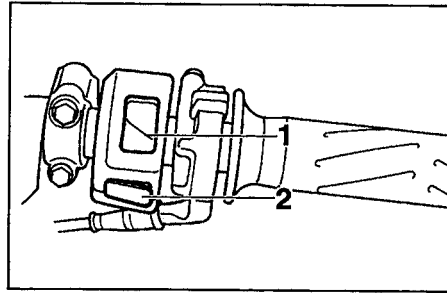
EAU00127

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.

Horn switch “🔊”

EAU00129

Press the switch to sound the horn.



1. Engine stop switch
2. Start switch “🔊”

Engine stop switch

EAU00138

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.

Start switch “🔊”

EAU00143

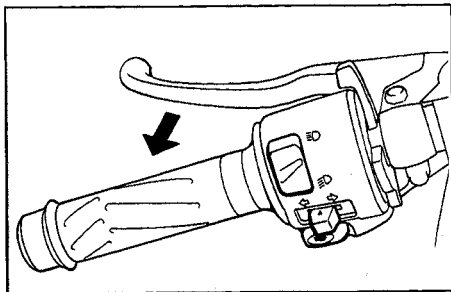
The starter motor cranks the engine when pushing the start switch.

EC000005

CAUTION:

See starting instructions prior to starting the engine.

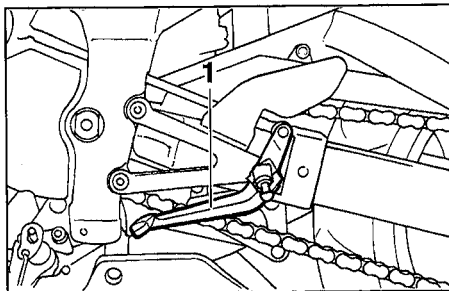
INSTRUMENT AND CONTROL FUNCTIONS



EAU00152

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.)

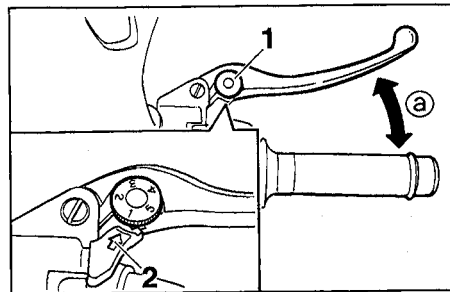


1. Shift pedal

EAU00157

Shift pedal

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



1. Lever position adjusting dial

2. Arrow mark

a. Lever distance

EAU00161

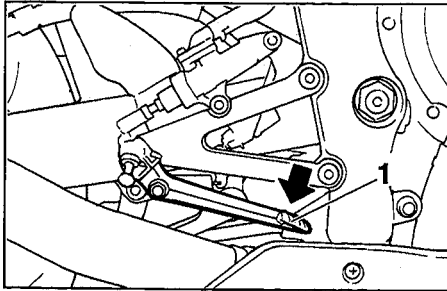
Front brake lever

The front brake lever is located on the right handlebar and is equipped with a brake lever adjusting dial.

To activate the front brake, pull the lever toward the handlebar.

To adjust the front brake lever position, turn the brake lever adjusting dial while pulling the lever forward. Make sure the setting on the brake lever adjusting dial is aligned with the arrow mark.

INSTRUMENT AND CONTROL FUNCTIONS

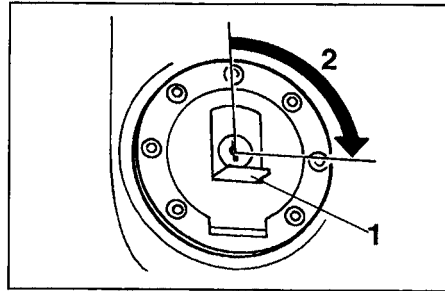


1. Rear brake pedal

EAU00162

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. Key cover
2. Open

EAU00172

Fuel tank cap

To open

Open the key cover. Insert the key and turn it 1/4 turn clockwise. The lock will be released and the cap can be opened.

To close

Push the tank cap into position with the key inserted. To remove the key, turn it counterclockwise to the original position. Then, close the key cover.

NOTE:

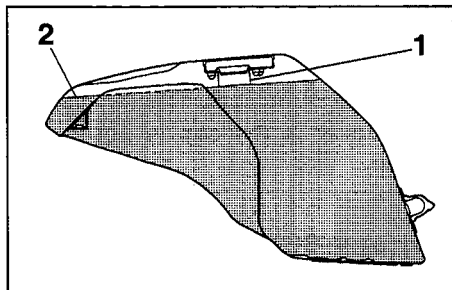
This tank cap cannot be closed unless the key is in the lock. The key cannot be removed if the cap is not locked properly.

EW000023

WARNING

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

INSTRUMENT AND CONTROL FUNCTIONS



- 1. Filler tube
- 2. Fuel level

EAU001183

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.

EW000130

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.

EAU00185

CAUTION:

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

EAU00189

Recommended fuel:
UNLEADED FUEL

Fuel tank capacity:

Total:

18 L (3.96 Imp gal, 4.76 US gal)

Reserve:

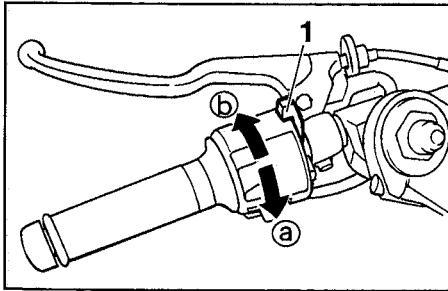
4.0 L (0.88 Imp gal, 1.06 US gal)


Your Yamaha engine has been designed to use regular unleaded gasoline with a pump octane number ([R+M]/2) of 86 or higher, or research octane number of 91 or higher. If knocking or pinging occurs, use a different brand of gasoline or premium unleaded fuel. Unleaded fuel will give you longer spark plug life and reduced maintenance cost. If unleaded gasoline is not available, then leaded regular gasoline can be used.

Gasohol

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

INSTRUMENT AND CONTROL FUNCTIONS



1. Starter (choke) “”

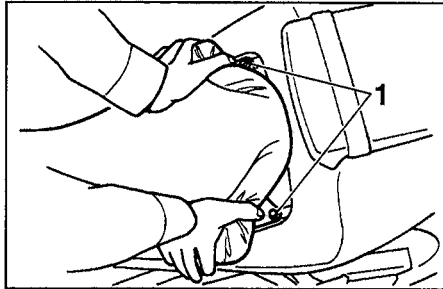
EAU00210

Starter (choke) “”

Starting a cold engine requires a richer air-fuel mixture. A separate starter circuit supplies this mixture.

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

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



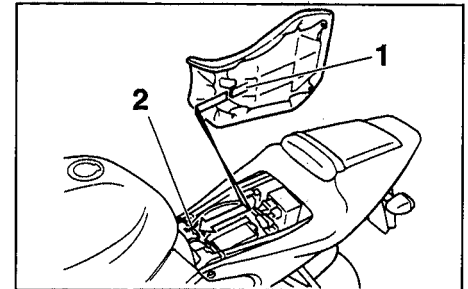
1. Bolt (× 2)

EAU01568

Seats

Rider seat

To remove the rider seat, lift up the rear corners of the seat as shown and remove the bolts.

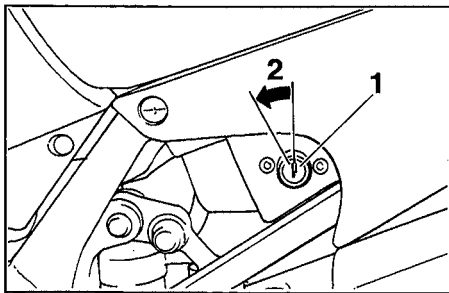


1. Projection

2. Seat holder

To install the rider seat, insert the projection on the front of the seat into the seat holder and install the bolts.

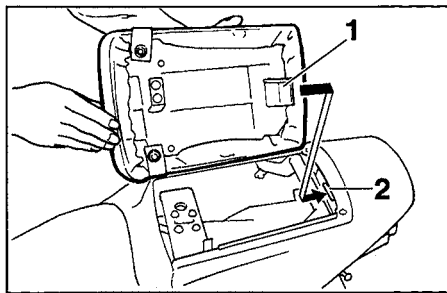
INSTRUMENT AND CONTROL FUNCTIONS



- 1. Passenger seat lock
- 2. Open

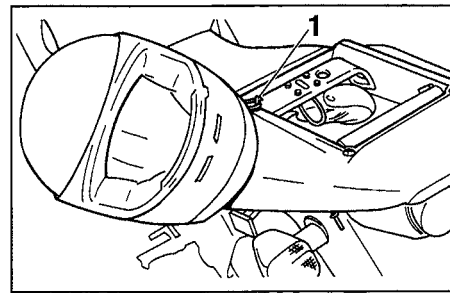
Passenger seat

To remove the passenger seat, insert the key into the seat lock and turn it counterclockwise. While holding the key in that position, lift up the front of the seat and pull it forward.



- 1. Projection
- 2. Seat holder

To install the passenger seat, insert the projection on the rear of the seat into the seat holder and push down on the front of the seat.



- 1. Helmet holder

EAU00265

Helmet holder

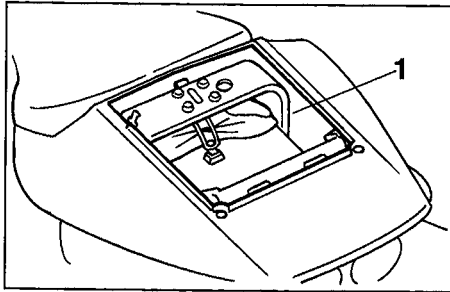
Remove the passenger seat and hook the helmet into the helmet holder. Then install the passenger seat.

EW000030

WARNING

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

INSTRUMENT AND CONTROL FUNCTIONS



1. Storage compartment

EAU01242

Storage compartment

The storage compartment is located under the passenger seat. (Refer to page 3-15 for details on how to open the seat.)

EW000033

WARNING

Do not exceed maximum load.
Maximum load: 3 kg (7 lb)

Front fork adjustment

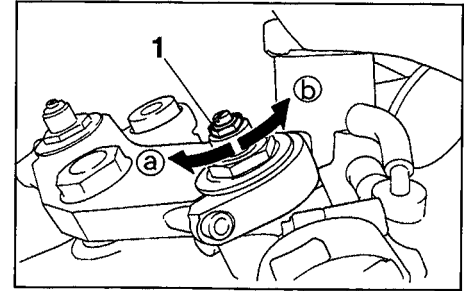
This front fork is equipped with spring preload and damping force adjusters.

EAU01569

EW000037

WARNING

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



1. Spring preload adjusting bolt

Adjusting spring preload

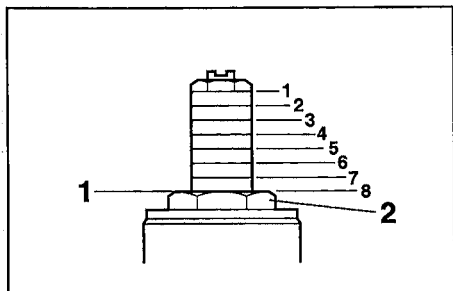
Turn the adjusting bolt in direction ① to increase spring preload and in direction ② to decrease spring preload. Align the preferred setting with the top of the front fork cap.

EC000013

CAUTION:

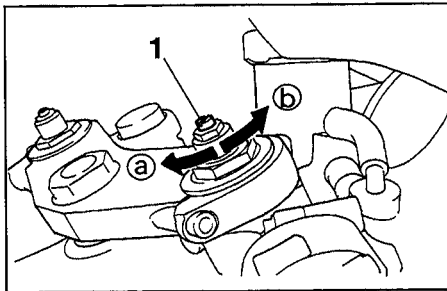
The grooves are provided to show the adjustment level. Always keep the adjustment level equal on both fork legs.

INSTRUMENT AND CONTROL FUNCTIONS



1. Setting position
2. Front fork cap

	Hard					Standard	Soft	
Adjusting position	1	2	3	4	5	6	7	8



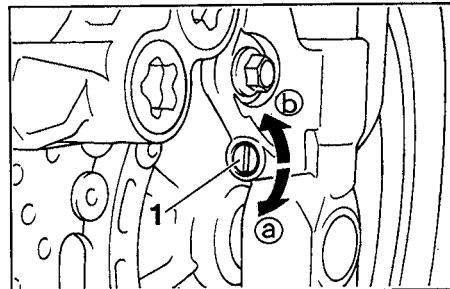
1. Rebound damping force adjusting screw

Adjusting rebound damping force

Turn adjusting screw in direction (a) to increase rebound damping force and in direction (b) to decrease rebound damping force.

Minimum (soft)	13 clicks out*
Standard	5 clicks out*
Maximum (hard)	1 click out*

* From the fully turned-in position



1. Compression damping force adjusting screw

Adjusting compression damping force

Turn the adjusting screw in direction (a) to increase compression damping force and in direction (b) to decrease compression damping force.

Minimum (soft)	11 clicks out*
Standard	5 clicks out*
Maximum (hard)	1 click out*

* From the fully turned-in position

EC000015

CAUTION:

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

INSTRUMENT AND CONTROL FUNCTIONS

Rear shock absorber adjustment

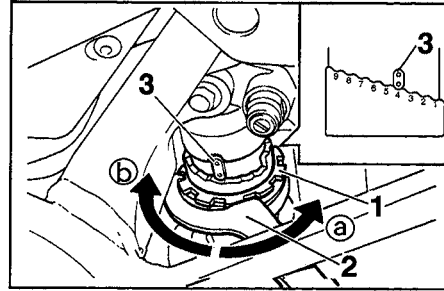
This shock absorber is equipped with spring preload and damping force adjusters.

EAU01570

EC000015

CAUTION:

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



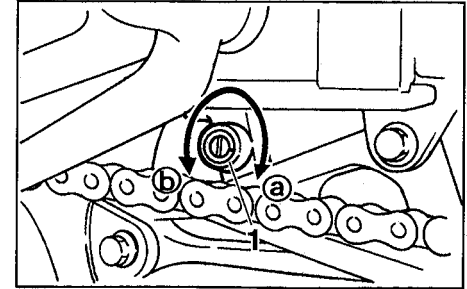
1. Spring preload adjusting ring
2. Special wrench
3. Position indicator

Adjusting spring preload

Turn the adjusting ring in direction (a) to increase spring preload and in direction (b) to decrease spring preload.

Make sure that the appropriate notch in the adjusting ring is aligned with the position indicator on the rear shock absorber.

	Soft			Standard	Hard				
Adjusting position	1	2	3	4	5	6	7	8	9



1. Rebound damping force adjusting screw

Adjusting rebound damping force

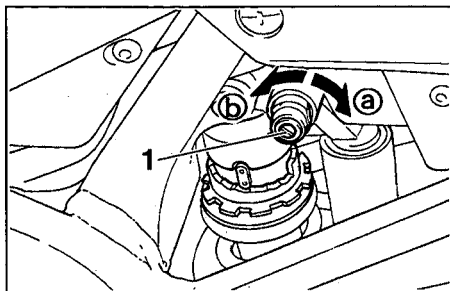
Turn the adjusting screw in direction (a) to increase rebound damping force and in direction (b) to decrease rebound damping force.

Standard	6 clicks out*
Minimum (soft)	12 clicks out*
Maximum (hard)	1 click out*

* From the fully turned-in position

INSTRUMENT AND CONTROL FUNCTIONS

EAU00315



1. Compression damping force adjusting screw

Adjusting compression damping force

Turn the adjusting screw in direction ① to increase compression damping force and in direction ② to decrease compression damping force.

Standard	8 clicks out*
Minimum (soft)	12 clicks out*
Maximum (hard)	1 click out*

* From the fully turned-in position

⚠ WARNING

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

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

INSTRUMENT AND CONTROL FUNCTIONS

EAU01580

Recommended combinations of the front fork and the rear shock absorber settings.

Use this table as a guide for specific settings according to motorcycle load conditions.

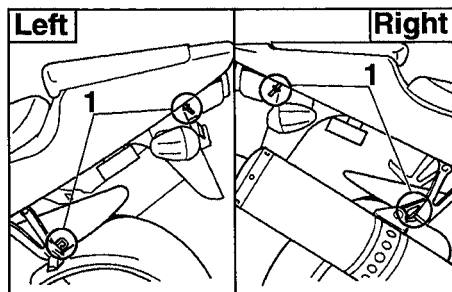
Loading condition	Front fork adjustment			Rear shock absorber adjustment		
	Spring preload	Compression damping force	Rebound damping force	Spring preload	Compression damping force	Rebound damping force
Solo rider	1 ~ 8	1 ~ 11	1 ~ 13	1 ~ 7	4 ~ 12	3 ~ 12
With passenger	1 ~ 8	1 ~ 11	1 ~ 13	4 ~ 9	1 ~ 8	1 ~ 6

EC000016

CAUTION:

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

INSTRUMENT AND CONTROL FUNCTIONS



1. Luggage strap holder (× 4)

EAU01354

Luggage strap holders

This motorcycle is equipped with four luggage strap holders. One holder is located on each passenger footrest and two holders are located below the passenger seat.

EXUP (EXhaust Ultimate Powervalue)

This model is equipped with Yamaha's EXUP system within the exhaust pipe. This valve is always activated by a computer-controlled servomotor in accordance with engine rpm.

EAU01571

EC000027

CAUTION:

- The EXUP was set at the Yamaha factory after many tests. If the settings are changed by someone without sufficient technical knowledge, poor engine performance and damage may result.
- If the EXUP does not operate, ask a Yamaha dealer to inspect.

Sidestand

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

EAU00330

EW000044

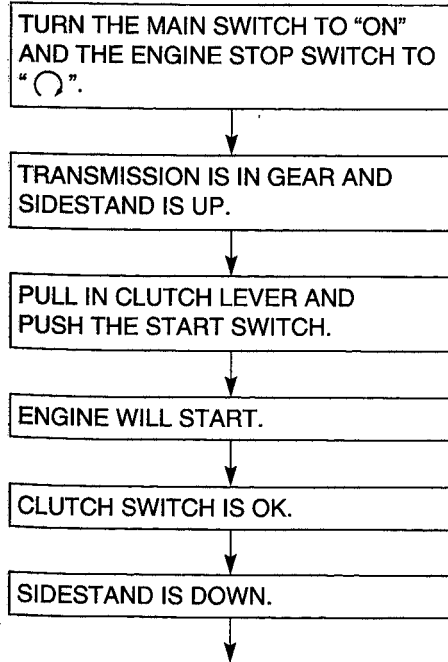
! WARNING

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.

EAU00331

Sidestand/clutch switch operation check

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



ENGINE WILL STALL.

SIDESTAND SWITCH IS OK.

EW000045

WARNING

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

PRE-OPERATION CHECKS

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

PRE-OPERATION CHECKS

EAU01114

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.

EAU00340

PRE-OPERATION CHECK LIST

ITEM	CHECKS	PAGE
Front brake	<ul style="list-style-type: none">• Check operation, free play, fluid level and fluid leakage.• Fill with DOT 4 brake fluid if necessary.	6-26 ~ 6-28
Rear brake		6-25 ~ 6-28
Clutch	<ul style="list-style-type: none">• Check operation condition and free play.• Adjust if necessary.	6-24
Throttle grip and housing	<ul style="list-style-type: none">• Check for smooth operation.• Lubricate if necessary.	6-19, 6-30
Engine oil	<ul style="list-style-type: none">• Check oil level.• Fill with oil if necessary.	6-11 ~ 6-14
Coolant reservoir tank	<ul style="list-style-type: none">• Check coolant level.• Fill with coolant if necessary.	6-15 ~ 6-17
Drive chain	<ul style="list-style-type: none">• Check chain slack and condition.• Adjust if necessary.	6-28 ~ 6-29
Wheels and tires	<ul style="list-style-type: none">• Check tire pressure, wear and damage.	6-20 ~ 6-23 6-39 ~ 6-41
Control cable	<ul style="list-style-type: none">• Check for smooth operation.• Lubricate if necessary.	6-30
Brake pedal shaft	<ul style="list-style-type: none">• Check for smooth operation.• Lubricate if necessary.	6-31
Brake and clutch lever pivots	<ul style="list-style-type: none">• Check for smooth operation.• Lubricate if necessary.	6-30

PRE-OPERATION CHECKS

ITEM	CHECKS	PAGE
Sidestand pivot	<ul style="list-style-type: none">• Check for smooth operation.• Lubricate if necessary.	6-31
Chassis fasteners	<ul style="list-style-type: none">• Make sure that all nuts, bolts and screws are properly tightened.• Tighten if necessary.	—
Fuel tank	<ul style="list-style-type: none">• Check fuel level.• Fill with fuel if necessary.	3-12 ~ 3-13
Lights, signals and switches	<ul style="list-style-type: none">• Check for proper operation.	6-35 ~ 6-37

NOTE:

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

WARNING

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

OPERATION AND IMPORTANT RIDING POINTS

Starting and warming up a cold engine	5-1
Starting a warm engine	5-4
Shifting	5-4
To start out and accelerate	5-5
To decelerate	5-5
Recommended shift point	5-5
Engine break-in	5-6
Parking	5-6

OPERATION AND IMPORTANT RIDING POINTS

EAU00372

EAU00373

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.

EAU00376

CAUTION

- Be careful where you store personal items on the motorcycle. Avoid blocking the air cleaner intake or performance will suffer.
- Be careful not to put anything near the battery and its terminals. Electrical failure and acid corrosion may result.

EAU01361

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 the following conditions:

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

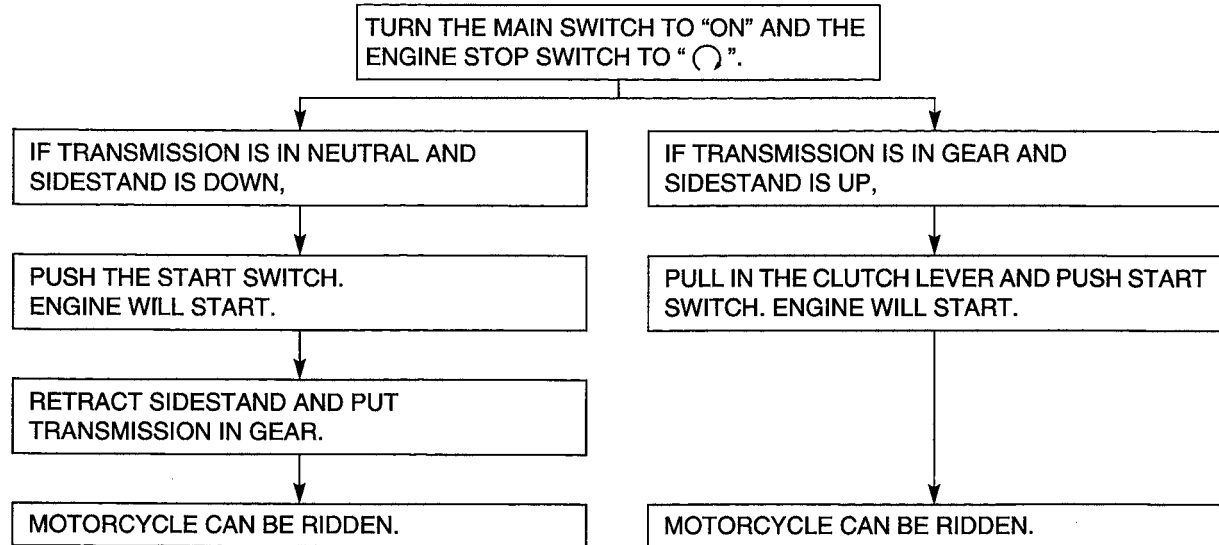
The motorcycle must not be ridden when the sidestand is down.

EW000054

WARNING

Before going through the following steps, check the function of the sidestand switch and clutch switch. (Refer to page 3-22.)

OPERATION AND IMPORTANT RIDING POINTS



OPERATION AND IMPORTANT RIDING POINTS

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

ECA00005

CAUTION:

The oil level/coolant temperature indicator light and fuel indicator light should come on for a few seconds and then go off. If an indicator light does not go off, refer to the corresponding indicator light circuit check in the "INSTRUMENT AND CONTROL FUNCTIONS" section.

2. 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.

3. Turn on the starter (choke) and completely close the throttle grip.
4. 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.

5. After starting the engine, move the starter (choke) to the warming up position.

NOTE:

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

6. 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 turned off. To avoid the possibility of excessive exhaust emissions, never leave the starter circuit on longer than necessary. The length of time the starter is needed depends upon the ambient temperature. Warm ambient temperatures (above 10°C/50°F) require about 10 seconds of starter use. Cold ambient temperatures (below 10°C/50°F) require about 35 seconds with the starter turned on, then about 2.5 minutes with the starter in the halfway position.
- For maximum engine life, always warm up the engine before starting off. Never accelerate hard with a cold engine.

OPERATION AND IMPORTANT RIDING POINTS

Starting a warm engine

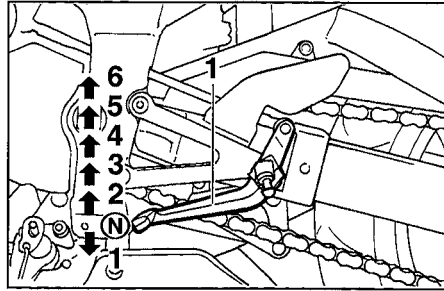
The starter (choke) is not required when the engine is warm.

EAU01258

EC000046

CAUTION:

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



1. Shift pedal
N. Neutral

EAU00423

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.

OPERATION AND IMPORTANT RIDING POINTS

EAU01205

To start out and accelerate

1. Pull the clutch lever to disengage the clutch.
2. Shift into first gear. The neutral indicator light should go out.
3. Open the throttle gradually, and at the same time, release the clutch lever slowly.
4. At the recommended shift point in the table on page 5-5, close the throttle, and at the same time, quickly pull in the clutch lever.
5. Shift into second gear. (Be careful not to shift into neutral.)
6. Open the throttle part way and gradually release the clutch lever.
7. Follow the same procedure when shifting to the next higher gear.
Always shift gears at the recommended shift points.

EAU00427

To decelerate

1. Apply both the front and the rear brakes at the same time to slow the motorcycle.
2. When the motorcycle reaches 25 km/h (15.5 mi/h), shift into first gear. Any time the engine is about to stall or runs very roughly, pull in the clutch and use the brakes to stop.
3. When the motorcycle is almost completely stopped, shift into neutral. The neutral indicator light should come on.

EAU00431

Recommended shift point

	Acceleration shift point km/h (mi/h)	Deceleration shift point km/h (mi/h)
1st → 2nd	16 (9.9)	—
2nd → 3rd	24 (14.9)	25 (15.5)
3rd → 4th	32 (19.9)	25 (15.5)
4th → 5th	40 (24.9)	25 (15.5)
5th → 6th	48 (29.8)	25 (15.5)

OPERATION AND IMPORTANT RIDING POINTS

Engine break-in

EAU01128

There is never a more important period in the life of your motorcycle than the period between zero and 1,600 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 1,600 km. The various parts in the engine wear and polish themselves to the correct operating clearances. During this period, prolonged full throttle operation, or any condition which might result in excessive heating of the engine, must be avoided.

0 ~ 1,000 km (0 ~ 600 mi)

Avoid operation above 5,000 r/min.

EAU01329

1,000 ~ 1,600 km (600 ~ 1,000 mi)

Avoid cruising speeds in excess of 6,000 r/min.

EC000052

CAUTION:

After 1,000 km (600 mi) of operation, be sure to replace the engine oil and oil filter.

1,600 km (1,000 mi) and beyond

Proceed with normal riding.

EC000053

CAUTION:

- Never let engine speeds enter the red zone.
- If any engine trouble should occur during the break-in period, consult a Yamaha dealer immediately.

Parking

EAU00460

When parking the motorcycle, stop the engine and remove the ignition key.

EW000058

! 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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EAU00463

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

“Maintenance, replacement, or repair of the emission control devices and systems may be performed by any repair establishment or individual using any part which is certified (if applicable)”.

EW000060

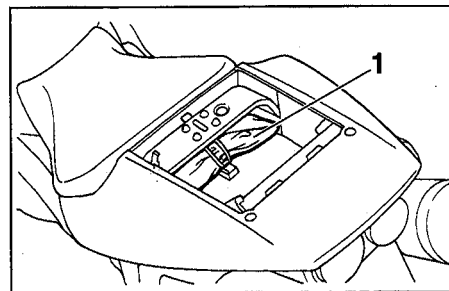
WARNING

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

EAU00467

PERIODIC MAINTENANCE

PROPER PERIODIC MAINTENANCE OF YOUR MOTORCYCLE IS IMPORTANT IN ORDER TO ENJOY LONG, PLEASURABLE SERVICE. ESPECIALLY IMPORTANT ARE THE MAINTENANCE SERVICES RELATED TO EMISSIONS CONTROL. THESE CONTROLS NOT ONLY FUNCTION TO ENSURE CLEANER AIR BUT ARE ALSO VITAL TO PROPER ENGINE OPERATION AND MAXIMUM PERFORMANCE. IN THE FOLLOWING TABLES OF PERIODIC MAINTENANCE, THE SERVICES RELATED TO EMISSIONS CONTROL ARE GROUPED SEPARATELY. THESE SERVICES REQUIRE SPECIALIZED DATA, KNOWLEDGE, AND EQUIPMENT. YAMAHA DEALERS ARE TRAINED AND EQUIPPED TO PERFORM THESE PARTICULAR SERVICES.



1. Tool kit

EAU01575

Tool kit

The tool kit is located inside of the storage compartment under the passenger seat. (See page 3-15 for seat opening procedures.) 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.

PERIODIC MAINTENANCE AND MINOR REPAIR

NOTE:

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

EW000063

WARNING

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

PERIODIC MAINTENANCE AND MINOR REPAIR

EAU00471

PERIODIC MAINTENANCE CHART FOR EMISSION CONTROL SYSTEM

No.	ITEM	ROUTINE	INITIAL	ODOMETER READINGS					
			1,000 km (600 mi) or 1 month	7,000 km (4,400mi) or 7 months	13,000 km (8,200 mi) or 13 months	19,000 km (12,000 mi) or 19 months	25,000 km (15,800 mi) or 25 months	31,000 km (19,600 mi) or 31 months	
1	* Valve clearance	• Check and adjust valve clearance when engine is cold.	Every 42,000 km (26,600 mi)						
2	Spark plugs	• Check condition. • Adjust gap and clean. • Replace at 13,000 km (8,200 mi) or 13 months and thereafter every 12,000 km (7,600 mi) or 12 months.		✓	Replace	✓	Replace	✓	
3	* Crankcase ventilation system	• Check ventilation hose for cracks or damage. • Replace if necessary.		✓	✓	✓	✓	✓	
4	* Fuel line	• Check fuel hose for cracks or damage. • Replace if necessary.		✓	✓	✓	✓	✓	
5	* Fuel filter	• Replace initial 31,000 km (19,600 mi) or 31 months and thereafter every 30,000 km (19,000 mi) or 30 months.						Replace	
6	* Exhaust system	• Check for leakage. • Retighten if necessary. • Replace gasket(s) if necessary.		✓	✓	✓	✓	✓	
7	* Carburetor synchronization	• Adjust synchronization of carburetors.	✓	✓	✓	✓	✓	✓	
8	* Idle speed	• Check and adjust engine idle speed. • Adjust cable free play.		✓	✓	✓	✓	✓	

PERIODIC MAINTENANCE AND MINOR REPAIR

No.	ITEM	ROUTINE	INITIAL	ODOMETER READINGS					
			1,000 km (600 mi) or 1 month	7,000 km (4,400mi) or 7 months	13,000 km (8,200 mi) or 13 months	19,000 km (12,000 mi) or 19 months	25,000 km (15,800 mi) or 25 months	31,000 km (19,600 mi) or 31 months	
9	* Evaporative emission control system (For California only)	<ul style="list-style-type: none">• Check control system for damage.• Replace if necessary.				√		√	

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

PERIODIC MAINTENANCE AND MINOR REPAIR

EAU00472

GENERAL MAINTENANCE AND LUBRICATION CHART

No.	ITEM	ROUTINE	INITIAL	ODOMETER READINGS					
			1,000 km (600 mi) or 1 month	7,000 km (4,400 mi) or 7 months	13,000 km (8,200 mi) or 13 months	19,000 km (12,000 mi) or 19 months	25,000 km (15,800 mi) or 25 months	31,000 km (19,600 mi) or 31 months	
1	Engine oil	• Replace (warm engine before draining). (See NOTE on page 6-7.)	√	√	√	√	√	√	
2	* Engine oil filter	• Replace at initial 1,000 km (600 mi) or 1 month, and thereafter every 12,000 km (7,600 mi) or 12 months.	√		√		√		
3	* Air filter	• Clean with compressed air. • Replace if necessary.		√	√	√	√	√	
4	* Cooling system	• Check hose for cracks or damage. • Replace if necessary.		√	√	√	√	√	
		• Replace coolant every 24 months. #3					Replace		
5	* Brake system	• Check operation, pad wear, and fluid leakage. (See NOTE on page 6-7.) • Correct if necessary.	√	√	√	√	√	√	
6	* Clutch	• Check operation. • Adjust or replace cable.	√	√	√	√	√	√	
7	* Control cable	• Apply chain lube thoroughly. #1	√	√	√	√	√	√	
8	* Swing arm pivot bearing	• Check bearing assembly for looseness. • Moderately repack every 24,000 km (15,200 mi) or 24 months. #2			√		√ Repack		
9	* Rear suspension link pivots	• Check operation. • Correct if necessary.			√		√		

PERIODIC MAINTENANCE AND MINOR REPAIR

No.	ITEM	ROUTINE	INITIAL	ODOMETER READINGS					
			1,000 km (600 mi) or 1 month	7,000 km (4,400 mi) or 7 months	13,000 km (8,200 mi) or 13 months	19,000 km (12,000 mi) or 19 months	25,000 km (15,800 mi) or 25 months	31,000 km (19,600 mi) or 31 months	
10	* Rear shock absorber	<ul style="list-style-type: none">• Check operation and for oil leakage.• Replace if necessary.		√	√	√	√	√	
11	* Front fork	<ul style="list-style-type: none">• Check operation and oil leakage.• Repair if necessary.		√	√	√	√	√	
12	* Steering bearings	<ul style="list-style-type: none">• Check bearing assembly for looseness.• Moderately repack every 24,000 km (15,200 mi) or 24 months. #2		√	√	√	√ Repack	√	
13	Brake/Clutch lever pivot shaft	<ul style="list-style-type: none">• Apply chain lube lightly. #1		√	√	√	√	√	
14	Brake pedal	<ul style="list-style-type: none">• Apply chain lube lightly. #1		√	√	√	√	√	
15	* Drive chain	<ul style="list-style-type: none">• Check chain slack/alignment condition.• Adjust and lubricate chain thoroughly #1.	Every 1,000 km (600 mi) or after washing the motorcycle or riding the rain.						
16	* Wheel bearings	<ul style="list-style-type: none">• Check bearings for smooth operation.		√	√	√	√	√	
17	* Sidestand pivot	<ul style="list-style-type: none">• Check operation and lubricate.• Apply chain lube lightly. #1		√	√	√	√	√	
18	* Sidestand switch	<ul style="list-style-type: none">• Check and clean or replace if necessary.	√	√	√	√	√	√	

PERIODIC MAINTENANCE AND MINOR REPAIR

No.	ITEM	ROUTINE	INITIAL	ODOMETER READINGS					
			1,000 km (600 mi) or 1 month	7,000 km (4,400 mi) or 7 months	13,000 km (8,200 mi) or 13 months	19,000 km (12,000 mi) or 19 months	25,000 km (15,800 mi) or 25 months	31,000 km (19,600 mi) or 31 months	
19	*	Chassis fasteners	<ul style="list-style-type: none">• Check all chassis fitting and fasteners.• Correct if necessary.		√	√	√	√	√

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

#1 : Yamaha chain and cable lube or SAE10W30 motor oil.

#2 : Lithium soap base grease.

#3 : Ethlene glycol anti-freeze coolant.

EAU00476

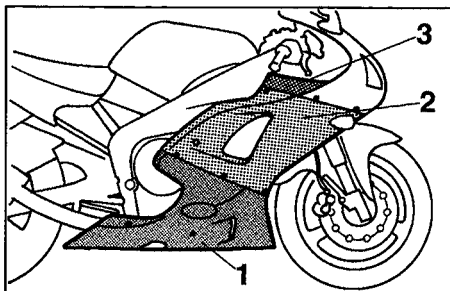
NOTE:

For odometer readings or time periods higher than 31,000 km (19,600 mi) or 31 months, repeat the same maintenance as listed in the chart from the 7,000 km (4,400 mi) or 7 month interval.

NOTE:

- The air filter needs more frequent service if you are riding in unusually wet or dusty areas.
- Hydraulic brake system
 - When disassembling the master cylinder or caliper cylinder, replace the brake fluid.
Normally check the brake fluid level and add fluid as required.
 - On the inner parts of the master cylinder and caliper cylinder, replace the oil seals every two years.
 - Replace the brake hoses every four years, or if cracked or damaged.
- Engine oil type
Yamalube 4 (20W40) or SAE20W40 type "SE" motor oil for temperatures 5°C (40°F) or above.
Yamalube 4 (10W30) or SAE10W30 type "SE" motor oil for temperatures 15°C (60°F) or below.

PERIODIC MAINTENANCE AND MINOR REPAIR

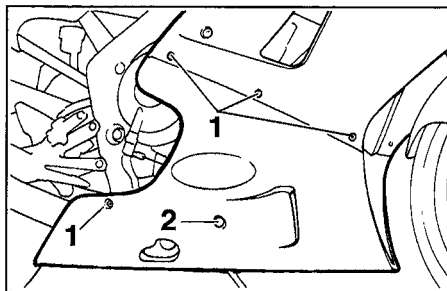


- 1. Cowling A
- 2. Cowling C
- 3. Panel B

Cowling and panel removal and installation

EAU01139

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.

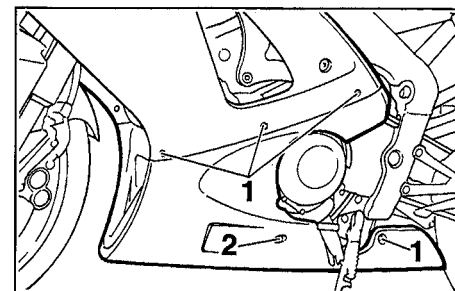


- 1. Quick fastener screw (× 4)
- 2. Screw

Cowling A

To remove

Loosen the quick fastener screws and remove the screws.



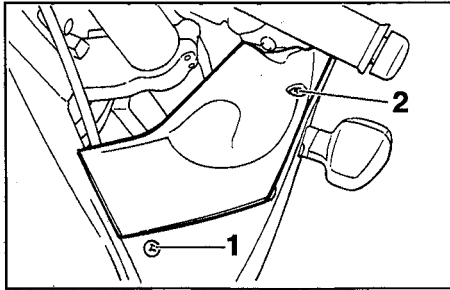
- 1. Quick fastener screw (× 4)
- 2. Screw

To install

Place the cowling in its original position, tighten the quick fastener screws and install the screws.

EAU01254

PERIODIC MAINTENANCE AND MINOR REPAIR



1. Quick fastener screw
2. Screw

EAU01255

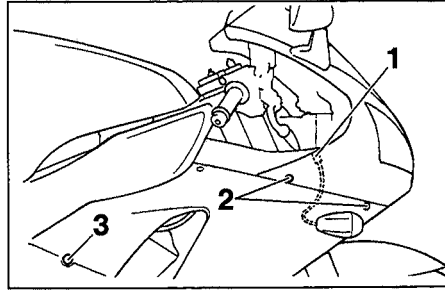
Panel B

To remove

Loosen the quick fastener screw and remove the screw.

To install

Place the panel in its original position, tighten the quick fastener screw and install the screw.



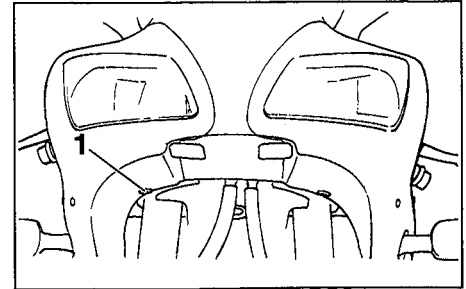
1. Connector (× 2)
2. Quick fastener screw (× 2)
3. Screw

EAU01259

Cowling C

To remove

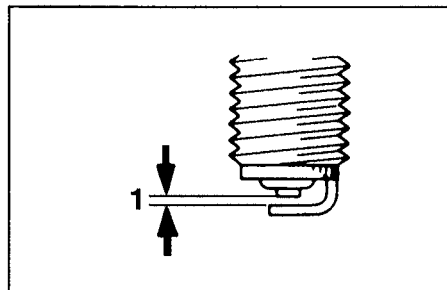
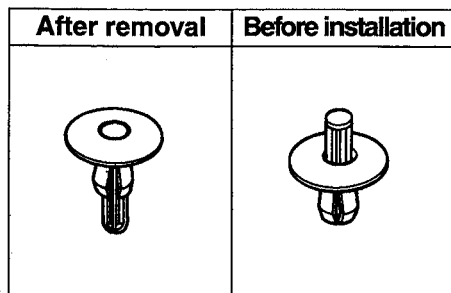
1. Remove cowling A and panel B.
2. Disconnect the turn signal connectors.
3. Remove the screw and loosen the quick fastener screws.



1. Quick fastener

4. Remove the quick fastener at the front of the cowling by pushing its center in with a screwdriver, then pulling the fastener out.

PERIODIC MAINTENANCE AND MINOR REPAIR



1. Spark plug gap

EAU00496

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

Specified spark plug:
CR9E (NGK) or
U27ESR-N (DENSO)

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

Spark plug gap:
0.7 ~ 0.8 mm (0.028 ~ 0.031 in)

To install

1. Connect the turn signal connectors.
2. Place the cowling in its original position, then install the screw and tighten the quick fastener screws.
3. Prepare the quick fastener for installation by pushing its pin back so that it will protrude from the fastener head, then insert the fastener into the cowling and push the protruding pin in until it is flush with the fastener head.
4. Install cowling A and panel B.

Spark plug inspection

The spark plug is an important engine component and is easy to inspect. The condition of the spark plug can indicate the condition of the engine.

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

PERIODIC MAINTENANCE AND MINOR REPAIR

When installing the spark plug, always clean the gasket surface and use a new gasket. Wipe off any grime from the threads and tighten the spark plug to the specified torque.

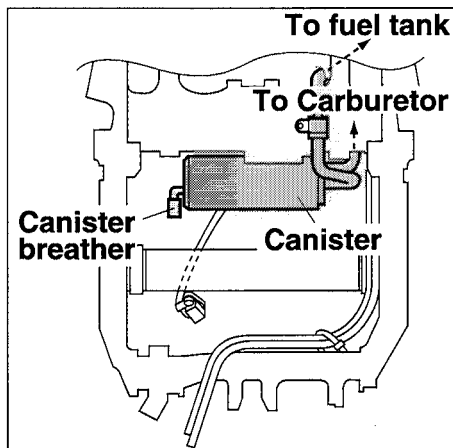
Tightening torque:

Spark plug:

12.5 Nm (1.25 m·kg, 9.0 ft·lb)

NOTE:

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

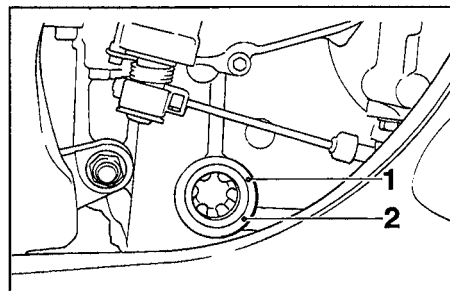


EAU00499

Canister (for California only)

This model is equipped with a canister to prevent the discharging of fuel vapor into the atmosphere. Before using this motorcycle, be sure to check the following:

- Check each hose connection.
- Check each hose and canister for cracks or damage. Replace if damaged.
- Make sure the canister breather is not blocked. Clean it if necessary.



1. Maximum level mark

2. Minimum level mark

EAU01593

Engine oil

Oil level inspection

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

NOTE:

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

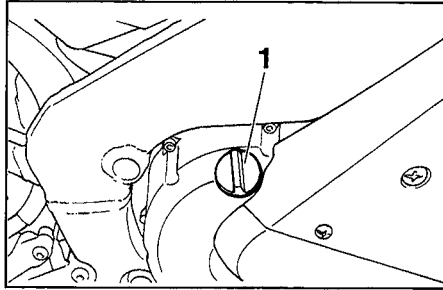
PERIODIC MAINTENANCE AND MINOR REPAIR

2. With the engine stopped, check the oil level through the level window located at the lower part of the right side crankcase cover.

NOTE:

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

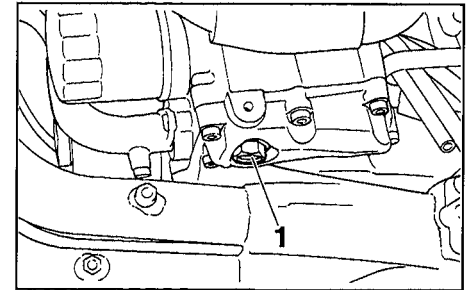
3. The oil level should be between maximum and minimum marks. If the level is low, fill the engine with sufficient oil to reach the specified level.



1. Engine oil filler cap

Engine oil and oil filter cartridge replacement

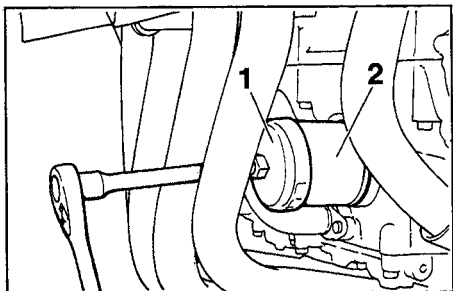
1. Remove cowling A.
2. Remove the cowling stay.
3. Warm up the engine for several minutes.
4. Stop the engine. Place an oil pan under the engine and remove the oil filler cap.



1. Engine oil drain plug

5. Remove the drain plug and drain the oil.

PERIODIC MAINTENANCE AND MINOR REPAIR



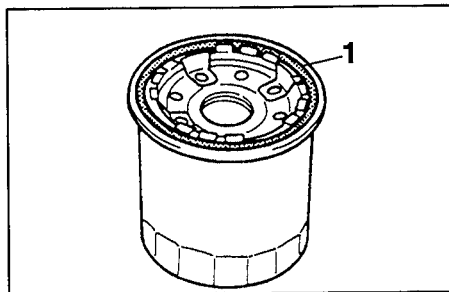
- 1. Oil filter wrench
- 2. Oil filter cartridge

6. Remove the oil filter by using an oil filter wrench.

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

7. Reinstall the drain plug and tighten it to the specified torque.

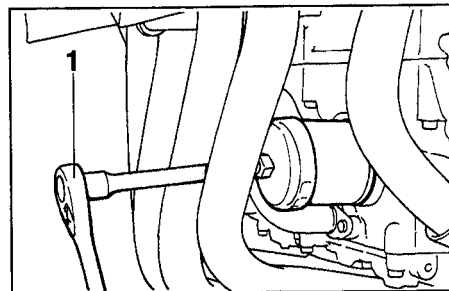
Tightening torque:
Drain plug:
43 Nm (4.3 m·kg, 31 ft·lb)



- 1. O-ring

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

NOTE: _____
Make sure the O-ring is seated properly.



- 1. Torque wrench

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

Tightening torque:
Oil filter:
17 Nm (1.7 m·kg, 12 ft·lb)

PERIODIC MAINTENANCE AND MINOR REPAIR

10. Fill the engine with sufficient oil to reach the specified level. Install the oil filler cap and tighten it.

Recommended oil:

See page 8-1.

Oil quantity:

Total amount:

3.6 L (3.17 Imp qt, 3.81 US qt)

Periodic oil change:

2.7 L (2.38 Imp qt, 2.85 US qt)

With oil filter replacement:

2.9 L (2.55 Imp qt, 3.07 US qt)

EC000066

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.

11. 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.
12. After the engine is started, the oil level indicator light should go off if the oil is at the specified level.

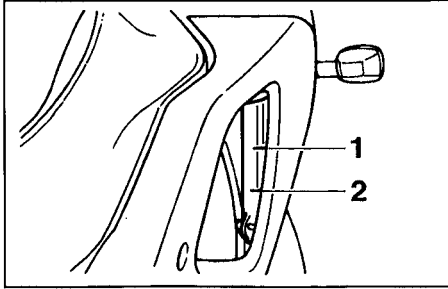
EC000067

CAUTION:

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

13. Install the cowl stay and cowl.

PERIODIC MAINTENANCE AND MINOR REPAIR



1. Maximum level mark
2. Minimum level mark

EAU01576

Cooling system

Check the coolant level in the reservoir tank when the engine is cold. The coolant level will vary with engine temperature. The coolant level is satisfactory if it is between the minimum and maximum marks on the tank. If the coolant level is at or below the minimum mark, fill with tap water (soft water) to bring the level up to the maximum mark. Change the coolant every two years.

! WARNING

Do not remove the radiator cap when the engine is hot.

EW000067

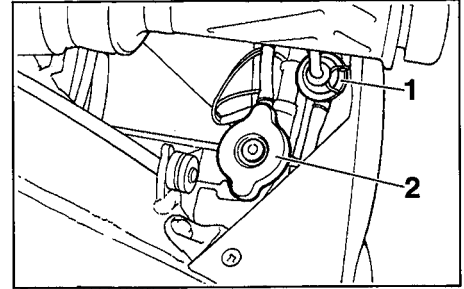
CAUTION:

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

EC000080

NOTE:

The radiator fan operation is completely automatic. It is switched on or off according to the coolant temperature in the radiator.



1. Coolant reservoir tank cap
2. Radiator cap

EAU01577

Changing the coolant

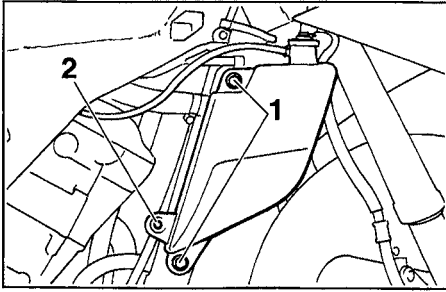
1. Remove cowlings A and C (including panel B.) (See page 6-8 ~ 6-10 for removal and installation procedures.)
2. Place a container under the engine.
3. Remove the radiator cap and coolant reservoir tank cap.

EW000067

! WARNING

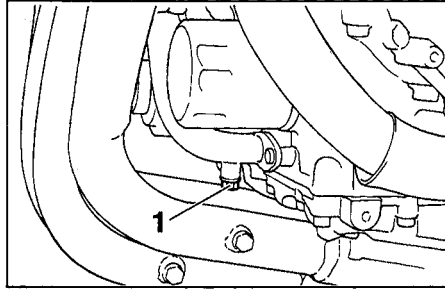
Do not remove the radiator cap when the engine is hot.

PERIODIC MAINTENANCE AND MINOR REPAIR

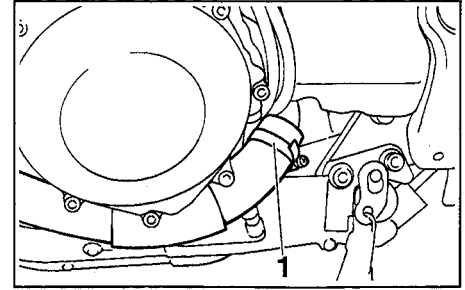


- 1. Bolt (× 2)
- 2. Clutch cable holder

- 4. Remove the coolant reservoir tank bolts and clutch cable holder, then turn the coolant reservoir tank upside-down to empty it.
- 5. Install the coolant reservoir tank and clutch cable holder.



- 1. Coolant drain plug
- 6. Remove the coolant drain plug.



- 1. Hose clamp
- 7. Loosen the radiator outlet hose clamp on the left side of the engine and pull off the hose.
- 8. Drain the coolant completely and thoroughly flush the cooling system with clean tap water.
- 9. Install the coolant drain plug and tighten it to the specified torque. If the drain plug washer is damaged, replace it.

Tightening torque:

Coolant drain plug:

7 Nm (0.7 m·kg, 5.1 ft·lb)

- 10. Install the radiator outlet hose and hose clamp.

PERIODIC MAINTENANCE AND MINOR REPAIR

11. Pour the specified amount of recommended coolant into the radiator and reservoir tank.

Recommended antifreeze:

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

Antifreeze and water mixing ratio:

1:1

Coolant quantity:

Total amount:

2.55 L (2.24 Imp qt, 2.7 US qt)

Reservoir tank capacity:

0.45 L (0.4 Imp qt, 0.48 US qt)

EC000080

CAUTION

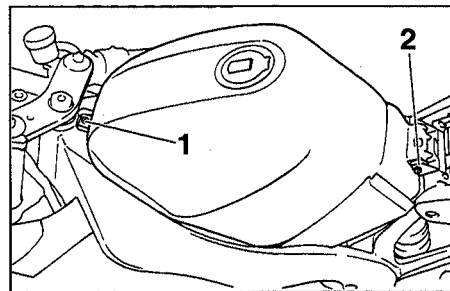
Hard water or salt water is harmful to the engine. You may use distilled water if you can't get soft water.

12. Run the engine several minutes. Stop the engine and recheck the coolant level in the radiator. If it is low, add more coolant until it reaches the top of the radiator.
13. Fill the reservoir tank with coolant up to maximum level.
14. Install the radiator cap and reservoir tank cap. Check for coolant leakage.

NOTE:

If any leakage is found, ask a Yamaha dealer to inspect the cooling system.

15. Install the cowlings and the panel.



1. Bolt (front)

2. Bolt (rear)

EAU01355

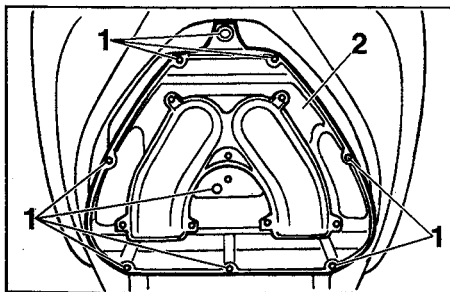
Air filter

The air filter should be cleaned at the specified intervals. It should be cleaned more frequently if you are riding in unusually wet or dusty areas.

1. Remove the rider seat. (See page 3-14 for rider seat removal and installation procedures.)
2. Remove the bolt at the front of the fuel tank and loosen the bolt at the rear.
3. Lift the front of the fuel tank upward and tilt it back and away from the air filter case. (Do not remove the fuel hoses.)

PERIODIC MAINTENANCE AND MINOR REPAIR

EC000085



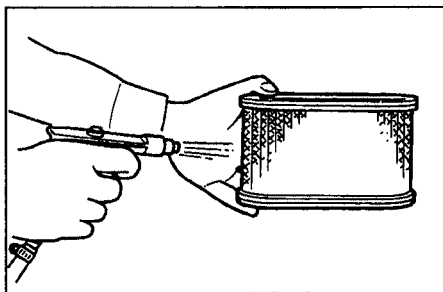
1. Screw (× 9)
2. Air filter case cover

EW000071

⚠ WARNING

- Support the fuel tank carefully during this procedure.
- Do not tilt the fuel tank too much or pull it too hard because the fuel hose connections may become loose causing fuel leakage.

4. Remove the screws holding the air filter case cover.



5. Pull out the air filter element.
6. Tap the air filter element lightly to remove most of the dust and dirt. Blow out the remaining dirt with compressed air from the mesh side of the air filter element. If it is damaged, replace it.
7. Reinstall by reversing the removal procedure.

CAUTION:

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

EW000072

⚠ WARNING

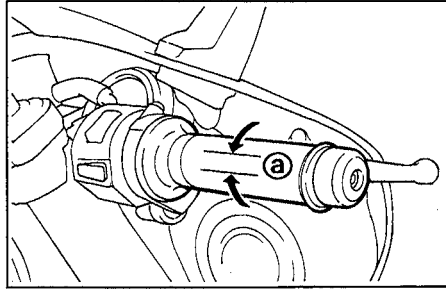
- Before reinstallation, make sure that the fuel hoses are not damaged at all. If any damage is found, it may result in a fuel leak, so do not start the engine. Ask a Yamaha dealer for repairs.
- Always make sure that the fuel hoses are properly connected, in place, and not pinched.

PERIODIC MAINTENANCE AND MINOR REPAIR

Carburetor adjustment

EAU00628

The carburetors are important parts of the engine and emission control system. Adjusting should be left to a Yamaha dealer with the professional knowledge, specialized data and equipment to do so properly.



a. Free play

Throttle cable free play inspection

EAU00635

There should be a free play of 3 ~ 5 mm (0.1 ~ 0.2 in) at the throttle grip. If the free play is incorrect, ask a Yamaha dealer to make this adjustment.

EAU00637

Valve clearance adjustment

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

PERIODIC MAINTENANCE AND MINOR REPAIR

EAU00656

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.

EW000082

WARNING

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

Maximum load*	197 kg (434 lb): YZF-R1 196 kg (432 lb): YZF-R1C	
Cold tire pressure	Front	Rear
Up to 90 kg (198 lb) load*	250 kPa (2.50 kgf/cm ² , 36 psi)	250 kPa (2.50 kgf/cm ² , 36 psi)
90 kg (198 lb) load ~ Maximum load*	250 kPa (2.50 kgf/cm ² , 36 psi)	290 kPa (2.90 kgf/cm ² , 42 psi)
High speed riding	250 kPa (2.50 kgf/cm ² , 36 psi)	250 kPa (2.50 kgf/cm ² , 36 psi)

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

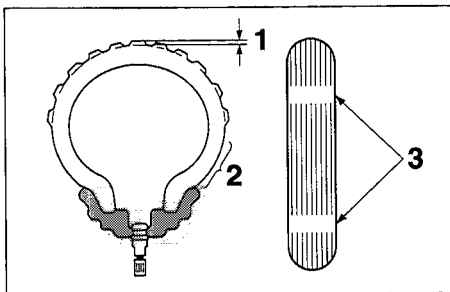
EW000083

WARNING

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

PERIODIC MAINTENANCE AND MINOR REPAIR

EW000094



1. Tread depth
2. Side wall
3. Wear indicator

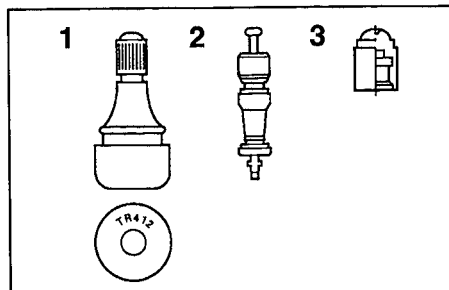
Tire inspection

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.

Minimum tire tread depth (front and rear)	1.0 mm (0.04 in)
--	------------------

⚠ WARNING

It is dangerous to ride with a worn-out tire. When a tire tread begins to show lines, have a Yamaha dealer replace the tire immediately. Brakes, tires and related wheel parts replacement should also be left to a Yamaha dealer.



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

Tire information

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

PERIODIC MAINTENANCE AND MINOR REPAIR

EW000080

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.
- The use of tire valves and valve cores other than listed below could cause tire deflation during extreme high speed riding. Always use genuine parts or their equivalent for replacement.
- Be sure to install the valve caps securely, as these are important to prevent air pressure leakage during extreme high speed riding.

FRONT

Manufacturer	Size	Type
Bridgestone	120/70 ZR17 (58W)	BT56F BT57F
Metzeler	120/70 ZR17 (58W)	MEZ1 Racing
Metzeler	120/70 ZR17 (58W)	MEZ3 Front
Dunlop	120/70 ZR17 (58W)	D207FN
Michelin	120/70 ZR17 (58W)	TX15N
Michelin	120/70 ZR17 (58W)	MACADAM 90XS
Pirelli	120/70 ZR17 (58W)	MTR01
Pirelli	120/70 ZR17 (58W)	MTR01 CORSA

REAR

Manufacturer	Size	Type
Bridgestone	190/50 ZR17 (73W)	BT56R BT57R
Metzeler	190/50 ZR17 (73W)	MEZ1 Racing
Metzeler	190/50 ZR17 (73W)	MEZ3
Dunlop	190/50 ZR17 (73W)	D207L
Michelin	190/50 ZR17 (73W)	TX25N
Michelin	190/50 ZR17 (73W)	MACADAM 90X
Pirelli	190/50 ZR17 (73W)	MTR02
Pirelli	190/50 ZR17 (73W)	MTR02 CORSA

	Type
Tire valve	TR412
Valve core	#9000A (original)

EAU00684

WARNING

This motorcycle is fitted with super high-speed running tires. The following points must be observed in order for you to make fully effective use of these tires.

- Never fail to use the specified tires in tire replacement. Other tires may have a danger of bursting at super high-speeds.
- New tires have a relatively low grip on the road surface until they have been slightly worn. Therefore, approximately 100 km should be traveled at normal speed before any high-speed riding is done.
- Before any high-speed runs, the tires should be warmed-up sufficiently.
- Always inflate to the correct tire pressure according to the operating conditions.

PERIODIC MAINTENANCE AND MINOR REPAIR

EAU00687

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.

EAU00691

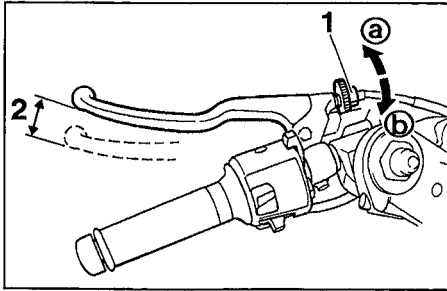
Accessories or replacement parts

EW000098

WARNING

This motorcycle is not designed to pull a trailer or to be attached to a sidecar. The accessories or replacement parts you choose for your motorcycle should be designed specifically for it, and they must be securely mounted to maintain the inherent stability of the original design. Genuine Yamaha Parts and Accessories are designed and tested to be compatible with your motorcycle. Please consider Genuine Yamaha Parts and Accessories before making an accessory purchase. Use of non-Yamaha-approved parts or accessories may cause loss of handling stability and riding safety. Since Yamaha cannot control the quality of parts or accessories manufactured by other companies, Yamaha cannot be held liable for

any consequences caused by the use of items which have not been approved by Yamaha.



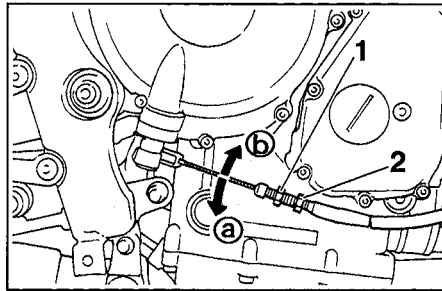
- 1. Adjusting bolt
- 2. Free play

Clutch lever free play adjustment

EAU01356

The clutch lever free play should be adjusted to 10 ~ 15 mm (0.4 ~ 0.6 in).

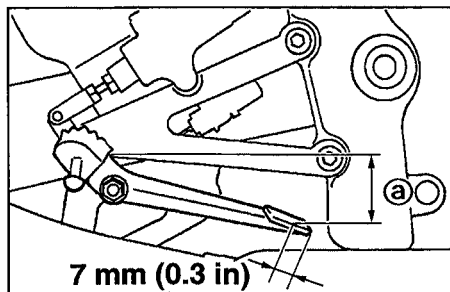
1. Turn the adjusting bolt at the clutch lever in direction ① to increase free play or in direction ② to decrease free play. If the specified free play cannot be obtained, proceed with the following steps.
2. Turn the adjusting bolt at the clutch lever in direction ② to loosen the cable.



- 1. Locknut
- 2. Adjusting nut

3. Remove cowling A. (See page 6-8 for removal and installation procedures.)
4. Loosen the locknut at the crankcase side.
5. Turn the adjusting nut at the crankcase in direction ① to increase free play or in direction ② to decrease free play. Then tighten the locknut.
6. Install the cowling.

PERIODIC MAINTENANCE AND MINOR REPAIR



a. Pedal height

EAU01357

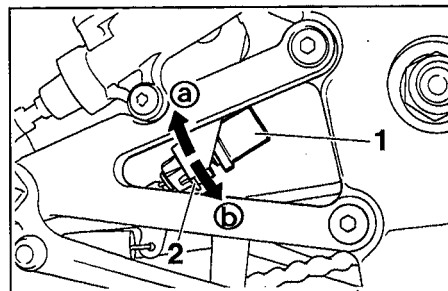
Rear brake pedal height adjustment

The top of the brake pedal should be positioned 35 ~ 40 mm (1.4 ~ 1.6 in) below the bottom of the footrest bracket. 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.

EW000109



1. Brake light switch

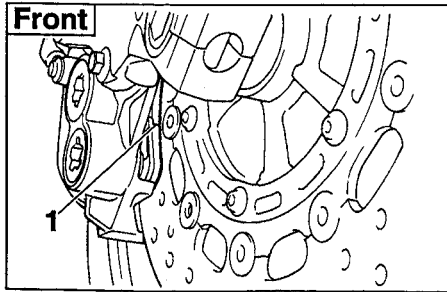
2. Adjusting nut

EAU00713

Brake light switch adjustment

The rear brake light switch is activated by the brake pedal and is properly adjusted when the brake light comes on just before braking takes effect. To adjust the rear brake light switch, hold the switch body so it does not rotate while turning the adjusting nut. Turn the adjusting nut in direction **a** to make the brake light come on earlier. Turn the adjusting nut in direction **b** to make the brake light come on later.

PERIODIC MAINTENANCE AND MINOR REPAIR



1. Wear indicator groove

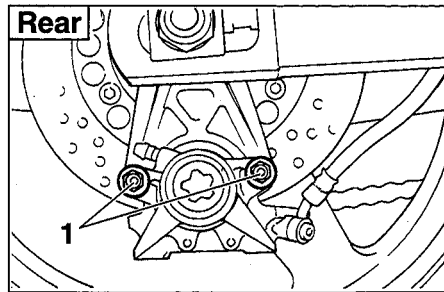
EAU00721

Checking the front and rear brake pads

EAU00725

Front 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. Caliper bolt (× 2)

EAU01248

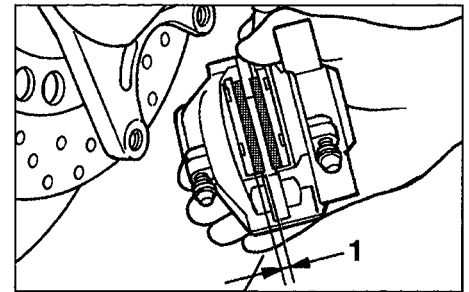
Rear brake

Remove the caliper bolts and the caliper to inspect the brake pads. If the thickness is less than the specified value, have a Yamaha dealer replace the pads. Reinstall the caliper and caliper bolts and tighten the bolts to the specified tightening torque.

Tightening torque:

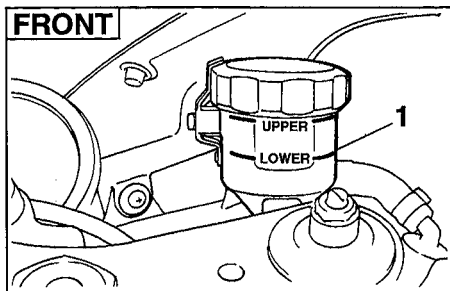
Caliper bolt

40 Nm (4.0 m·kg, 29 ft·lb)



1. Wear limit: 0.5 mm (0.02 in)

PERIODIC MAINTENANCE AND MINOR REPAIR



1. Minimum level mark

EAU00731

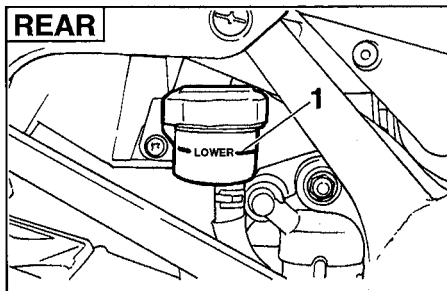
Inspecting the brake fluid level

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

Before riding, check that the brake fluid is above the minimum level and replenish when necessary.

Observe these precautions:

- When checking the fluid level, make sure the top of the master cylinder is level by turning the handlebars.



1. Minimum level mark

- Use only the designated quality brake fluid. Otherwise, the rubber seals may deteriorate, causing leakage and poor brake 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 performance.
- Be careful that water does not enter the master cylinder when refilling. Water will significantly lower the boiling point of the fluid and may result in vapor lock.

- Brake fluid may deteriorate painted surfaces or plastic parts. Always clean up spilled fluid immediately.
- Have a Yamaha dealer check the cause if the brake fluid level goes down.

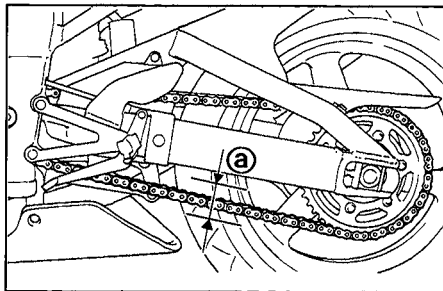
PERIODIC MAINTENANCE AND MINOR REPAIR

EAU00742

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)



a. Chain slack

EAU00744

Drive chain slack check

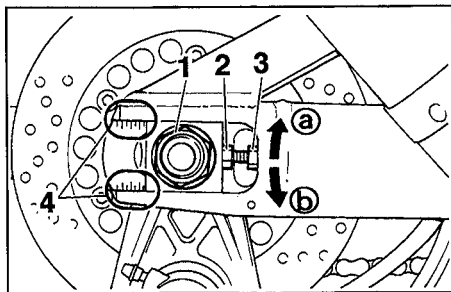
NOTE: _____

Spin the wheel several times and find the tightest position of the chain. Check and/or adjust the chain slack while it's in this tightest position.

To check the chain slack the motorcycle must be held straight up with both wheels on the ground and without rider. Check the slack at the position shown in the illustration. Normal slack is approximately 40 ~ 50 mm (1.57 ~ 1.97 in). If the slack exceeds 50 mm (1.97 in), adjust.

PERIODIC MAINTENANCE AND MINOR REPAIR

EAU00769



1. Axle nut
2. Adjusting bolt
3. Locknut
4. Alignment marks

EAU01251

Drive chain slack adjustment

1. Loosen the axle nut.
2. Loosen the locknuts on each side.
To tighten the chain, turn the chain adjusting bolts in direction ①. To loosen the chain, turn the adjusting bolts in direction ② and push the wheel forward. Turn each adjusting bolt exactly the same amount to maintain correct axle alignment.

There are marks on each side of the swingarm. Use these marks to align the rear wheel.

EC000096

CAUTION:

Too little chain slack will overload the engine and other vital parts. Keep the slack within the specified limits.

3. After adjusting, tighten the locknuts. Then tighten the axle nut to the specified torque.

Tightening torque:

Axle nut:

150 Nm (15 m·kg, 110 ft·lb)

Drive chain lubrication

The chain consists of many parts which work with each other. If the chain is not maintained properly, it will wear out quickly. Therefore, the chain must be serviced regularly. This service is especially necessary when riding in dusty areas. This motorcycle is equipped with a sealed type chain. Steam cleaning, high-pressure washes, and solvents can damage chain so do not use these for cleaning it. Use only kerosene to clean the drive chain. Wipe it dry, and thoroughly lubricate it with SAE 30 ~ 50W motor oil. Do not use any other lubricants on the drive chain. They may contain solvents that could damage the sealed chain.

EC000097

CAUTION:

Be sure to oil the chain after washing the motorcycle or riding in the rain.

PERIODIC MAINTENANCE AND MINOR REPAIR

Cable inspection and lubrication

EAU01541

EW000111

WARNING

Damage to the outer housing of cables may allow internal rusting and cause interference with cable movement. Replace damaged cables as soon as possible to prevent unsafe conditions.

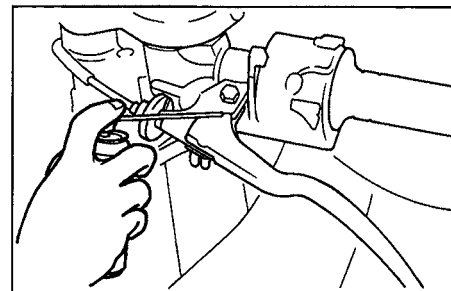
Lubricate the cables and cable ends. If a cable does not operate smoothly, ask a Yamaha dealer to replace it.

Recommended lubricant:
Yamaha Chain and Cable Lube
or SAE 10W30 motor oil

Throttle cable and grip lubrication

EAU00773

The throttle twist grip assembly should be greased at the time that the cable is lubricated, since the grip must be removed to get at the end of the throttle cable. After removing the screws, hold the end of the cable up in the air and put in several drops of lubricant. With the throttle grip disassembled, coat the metal surface of the grip assembly with a suitable all-purpose grease.



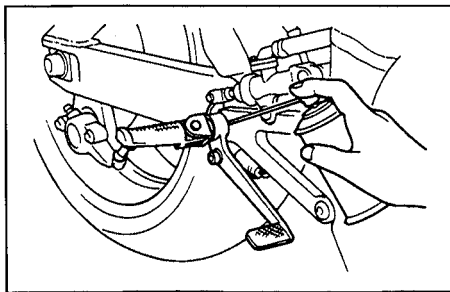
EAU00777

Brake and clutch lever lubrication

Lubricate the pivoting parts.

Recommended lubricant:
Yamaha Chain and Cable Lube
or SAE 10W30 motor oil

PERIODIC MAINTENANCE AND MINOR REPAIR



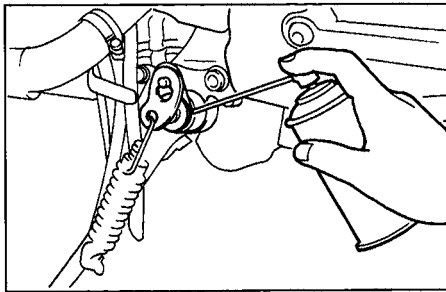
EAU01512

Brake pedal lubrication

Lubricate the pivoting parts.

Recommended lubricant:

Yamaha Chain and Cable Lube
or SAE 10W30 motor oil



EAU01542

Sidestand lubrication

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

Recommended lubricant:

Yamaha Chain and Cable Lube
or SAE 10W30 motor oil

EW000113

WARNING

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

EAU00791

Rear suspension lubrication

Lubricate the pivoting parts.

Recommended lubricant:

Lithium soap base grease

PERIODIC MAINTENANCE AND MINOR REPAIR

Front fork inspection

EAU00793

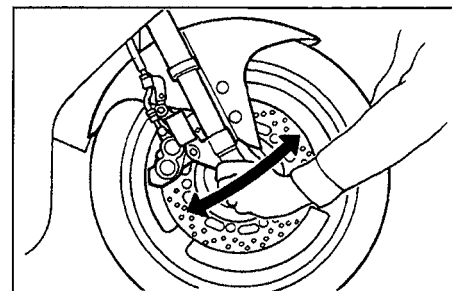
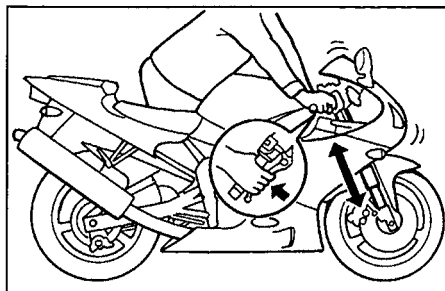
EW000115

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.



EAU00794

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.

EC000098

CAUTION:

If any damage or unsmooth movement is found with the front fork, 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.

EW000115

WARNING

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

PERIODIC MAINTENANCE AND MINOR REPAIR

EAU01144

Wheel bearings

If there is play in the front or rear wheel hub or if the wheel does not turn smoothly, have a Yamaha dealer inspect the wheel bearings.

EAU01291

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.

EW000116

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.

PERIODIC MAINTENANCE AND MINOR REPAIR

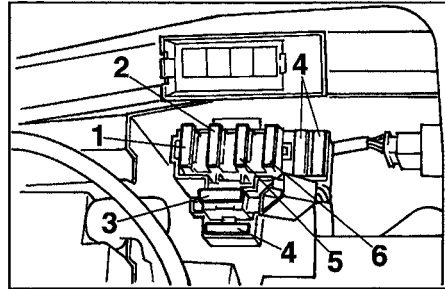
Battery storage

This motorcycle is equipped with a digital speedometer and the odometer memory tends to drain the battery. When the motorcycle is not used for a month or longer, be sure to remove the battery, fully charge it and store it in a cool, dry place.

EC000102

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.**

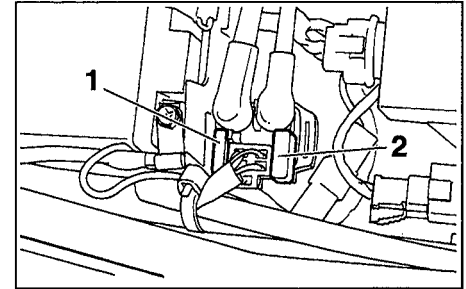


1. Ignition fuse
2. Headlight fuse
3. Signaling system fuse
4. Spare fuse (x 3)
5. Radiator fan fuse
6. Back up fuse (odometer)

EAU01578

Fuse replacement

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



1. Main fuse
2. Spare fuse

EC000103

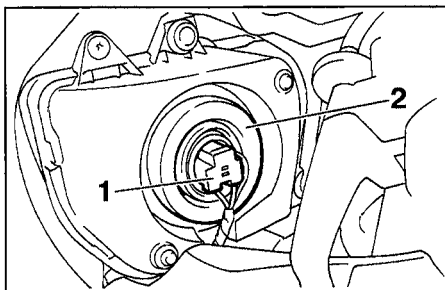
CAUTION:

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.

PERIODIC MAINTENANCE AND MINOR REPAIR

Specified fuses:

Main fuse:	30 A
Headlight fuse:	20 A
Signaling system fuse:	20 A
Radiator fan fuse:	7.5 A
Ignition fuse:	15 A
Back up fuse (Odometer):	7.5 A



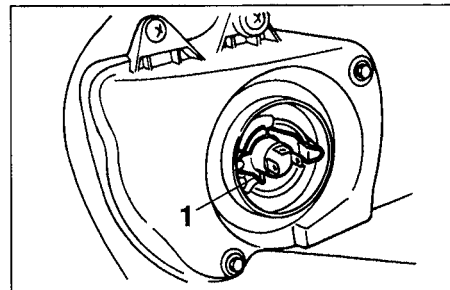
1. Connector
2. Bulb holder cover

EAU00826

Headlight bulb replacement

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

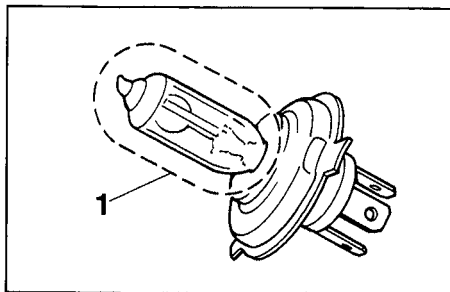
1. Remove the headlight connector and the bulb holder cover.



1. Bulb holder
2. Unhook the bulb holder and remove the defective bulb.

PERIODIC MAINTENANCE AND MINOR REPAIR

EC000104



1. Don't touch

EW000119

WARNING

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

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

CAUTION:

To prevent damage or deforming:

- **Headlight bulb**

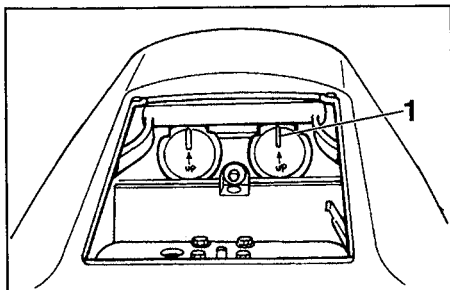
Avoid touching the glass part of the bulb. Keep it free from oil; otherwise, the transparency of the glass, life of the bulb, and illuminous flux will be adversely affected. If oil gets on the bulb, thoroughly clean it with a cloth moistened with alcohol or lacquer thinner.

- **Headlight lense**

- Do not affix any type of tinted film or stickers to the headlight lense.
- Do not use headlight bulbs of wattage higher than specified.

4. Install the bulb holder cover and reconnect the headlight connector. If the headlight beam adjustment is necessary, ask a Yamaha dealer to make that adjustment.

PERIODIC MAINTENANCE AND MINOR REPAIR

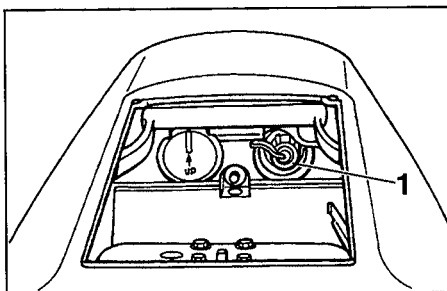


1. Bulb holder cover

EAU01358

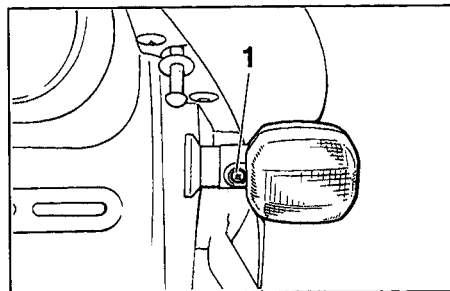
Taillight bulb replacement

1. Remove the passenger seat. (See page 3-15 for passenger seat removal and installation procedures.)
2. Remove the bulb cover.
3. To remove the socket, turn it counterclockwise.
4. To remove the defective bulb, turn it counterclockwise.



1. Bulb holder

5. Push a new bulb into the socket and turn it clockwise.
6. Install the socket and turn it clockwise.
7. Install the bulb cover.
8. Install the passenger seat.



1. Screw

EAU01095

Turn signal light bulb replacement

1. Remove the screw and the lense.
2. Remove the defective bulb by pushing it inward and turning it counterclockwise.
3. Install a new bulb by pushing it inward and turning it clockwise.
4. Install the lense and tighten the screw.

EAU01579

Supporting the motorcycle

Since the Yamaha YZF-R1 has no centerstand, follow these precautions when removing the front and rear wheel or performing other maintenance requiring the motorcycle to stand upright.

Check that the motorcycle is in a stable and level position before starting any maintenance. A strong wooden box can be placed under the engine for added stability.

Front wheel service

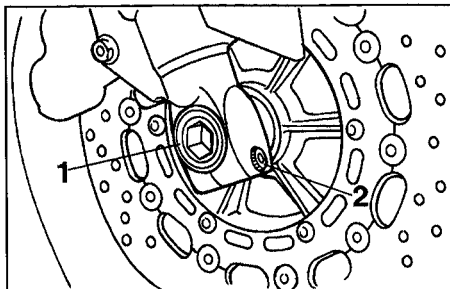
To stabilize the rear of the motorcycle, either use a motorcycle stand or place a motorcycle jack under the frame in front of the rear wheel to prevent it from moving from side to side. Then use a motorcycle stand to elevate the front wheel off of the ground.

Rear wheel service

Use a motorcycle stand or motorcycle jack to elevate the motorcycle so the rear wheel is off the ground. Alternatively, two jacks can be placed under the frame or swingarm.

PERIODIC MAINTENANCE AND MINOR REPAIR

EAU01360



1. Axle
2. Pinch bolt

EAU01359

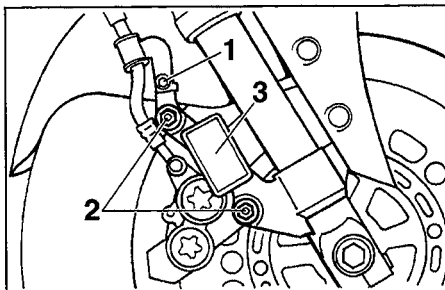
Front wheel removal

EW000122

WARNING

- It is advisable to have a Yamaha dealer service the wheel.
- Securely support the motorcycle so there is no danger of it falling over.

1. Remove cowling A. (See page 6-8 for removal and installation procedures.)



1. Brake hose holder bolt
2. Caliper bolt (x 2)
2. Loosen the pinch bolt, wheel axle and calipers bolts.
3. Elevate the front wheel.
4. Remove the brake hose holders, reflectors and calipers.

NOTE:
Do not depress the brake lever when the calipers are off the discs as the brake pads will be forced shut.

5. Remove the axle. Make sure the motorcycle is properly supported.

Front wheel installation

1. Lift up the wheel between the front fork legs.
2. Install the wheel axle and let the motorcycle down.
3. Push down hard on the handlebars several times to check for proper fork operation.
4. Install the calipers, reflectors, caliper bolts and brake hose holders. Make sure there is enough gap between the brake pads before installing the calipers onto the brake discs.
5. Tighten the wheel axle, pinch bolt and caliper bolts to the specified torques.

Tightening torque:

Wheel axle:

72 Nm (7.2 m·kg, 52 ft·lb)

Pinch bolt:

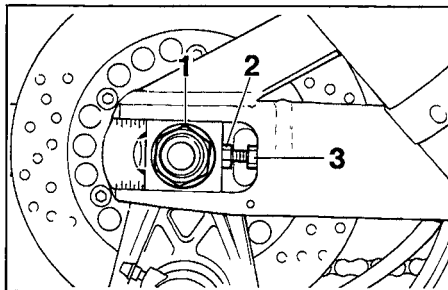
23 Nm (2.3 m·kg, 17 ft·lb)

Caliper bolt:

40 Nm (4.0 m·kg, 29 ft·lb)

6. Install the cowling.

PERIODIC MAINTENANCE AND MINOR REPAIR



1. Axle nut
2. Adjusting bolt
3. Locknut

Rear wheel removal

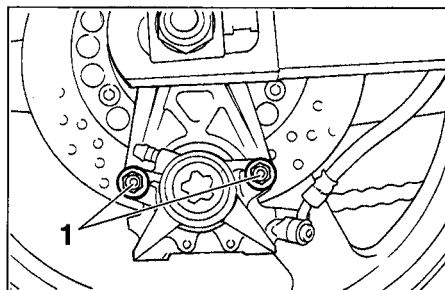
EAU01247

EW000122

WARNING

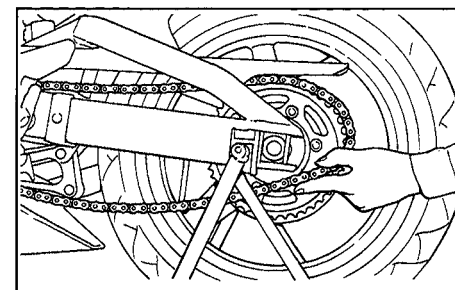
- It is advisable to have a Yamaha dealer service the wheel.
- Securely support the motorcycle so there is no danger of it falling over.

1. Loosen the axle nut and caliper bolts.
2. Elevate the rear wheel.



1. Caliper bolt (x 2)

3. Remove the axle nut, caliper bolts and caliper.
4. Loosen the locknuts on each side of the swingarm.
5. Turn the chain adjusting bolts fully inward.
6. Push the wheel forward and remove the drive chain.
7. Pull out the wheel axle and remove the wheel assembly by pulling backwards.



NOTE:

- Do not depress the brake pedal when the caliper is off the disc as the brake pads will be forced shut.
- You do not have to disassemble the chain in order to remove or install the rear wheel.

PERIODIC MAINTENANCE AND MINOR REPAIR

EAU01246

Rear wheel installation

1. Install the wheel assembly and insert the axle.
2. Install and adjust the drive chain. (See page 6-28 for details about adjusting the drive chain slack.)
3. Install the axle nut and let the motorcycle down.
4. Install the caliper and caliper bolts. Make sure there is enough gap between the brake pads before installing the caliper onto the brake disc.
5. Tighten the axle nut and caliper bolts to the specified torques.

Tightening torque:

Axle nut:

150 Nm (15.0 m·kg, 110 ft·lb)

Caliper bolt:

40 Nm (4.0 m·kg, 29 ft·lb)

EAU01008

Troubleshooting

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

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

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

PERIODIC MAINTENANCE AND MINOR REPAIR

Troubleshooting chart

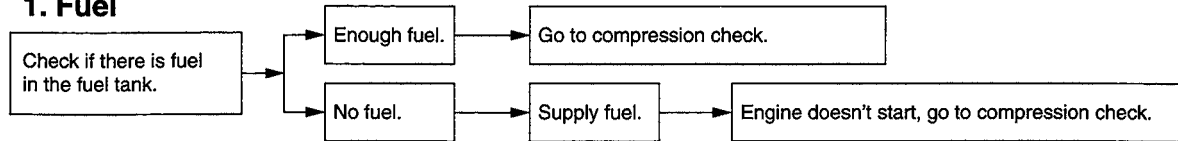
EAU01262

EW000125

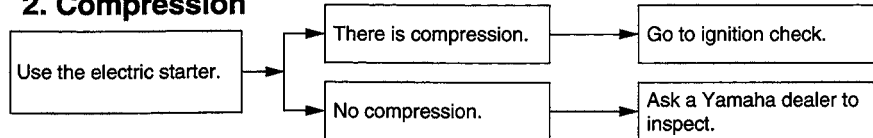
WARNING

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

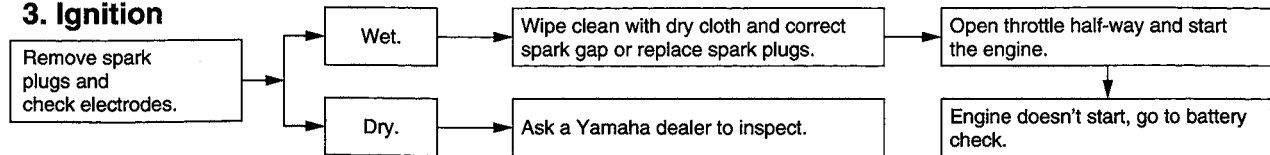
1. Fuel



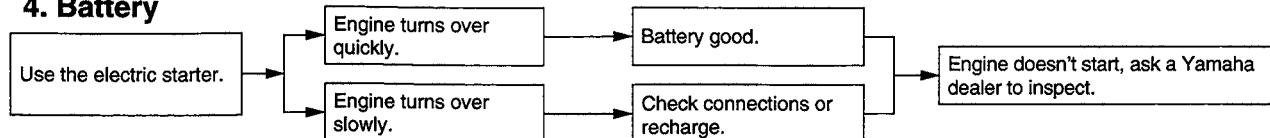
2. Compression



3. Ignition



4. Battery



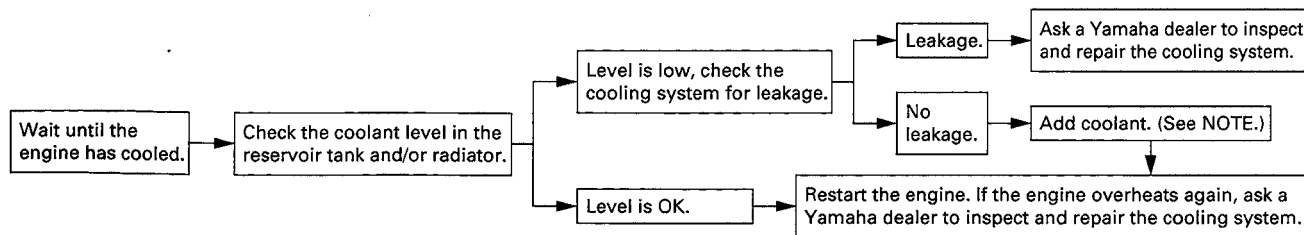
PERIODIC MAINTENANCE AND MINOR REPAIR

5. Engine overheating

EW000070

⚠ 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.

Cleaning.....	7-1
Storage.....	7-3

EAU01331

EC000111

A. CLEANING

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

ECA00001

CAUTION:

- Improper cleaning can damage the windshield, cowlings, panels and other plastic parts. Use only a soft, clean cloth or sponge with mild detergent and water to clean plastic. If the windshield is scratched, use a quality plastic polishing compound after washing.

- 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.

CAUTION:

Excessive hose pressure may cause water seepage and deterioration of wheel bearings, front fork, brakes, transmission seals and electrical parts.

Many expensive repair bills have resulted from improper high pressure detergent applications such as those available in coin-operated car washers.

1. Before cleaning the motorcycle:
 - a. Block off the end of the exhaust pipe to prevent water entry. A plastic bag and strong rubber band may be used.
 - b. Make sure the spark plugs and all filler caps are properly installed.
2. If the engine case is excessively greasy, apply degreaser with a paint brush. Do not apply degreaser to the chain, sprockets or wheel axles.
3. Rinse the dirt and degreaser off with a garden hose. Use only enough pressure to do the job.
4. After riding on salted roads, wash the motorcycle with cold water immediately. Do not use warm water as it increases the chemical reaction of the salt.
5. Once the majority of the dirt has been hosed off, wash all surfaces with warm water and mild, detergent-type soap. An old toothbrush or bottle brush is handy for hard-to-get-at places.

6. Rinse the motorcycle off immediately with clean water and dry all surfaces with a chamois, clean towel or soft absorbent cloth.
7. Dry the chain and lubricate it to prevent rust.
8. Clean the windshield with a cloth or sponge dampened with a neutral detergent, and after cleaning, thoroughly wash it off with water. Some cleaning compounds for plastics may leave scratches on surfaces of the windshield. Before using them, make a test by polishing an area which does not affect your visibility.
9. Clean the seat with a vinyl upholstery cleaner to keep the cover pliable and glossy.
10. Automotive-type wax may be applied to all painted and chrome-plated surfaces. Avoid combination cleaner-waxes. Many contain abrasives which may mar the paint or protective finish. When finished, start the engine and let it idle for several minutes.

CLEANING AND STORAGE

EAU01321

B. STORAGE

Long term storage (60 days or more) of your motorcycle will require some preventive procedures to guard against deterioration. After thoroughly cleaning the motorcycle, prepare for storage as follows:

1. Fill the fuel tank with fuel and add fuel stabilizer (if available).
2. Remove each spark plug, pour about one tablespoon of engine oil in each spark plug hole and reinstall the spark plugs. Turn the engine over several times (ground spark plug leads) to coat the cylinder walls with oil.

EW000127



When using the starter motor to crank the engine, remove the spark plug wires, and ground them to prevent sparking.

3. Clean the chain and lubricate it (refer to "Drive chain lubrication").
4. Lubricate all control cables.
5. Block up the frame to raise both wheels off the ground.
6. Tie a plastic bag over the exhaust pipe outlet to prevent moisture from entering.
7. If storing in a humid or salt-air atmosphere, coat all exposed metal surfaces with a light film of oil. Do not apply oil to any rubber parts or the seat cover.
8. 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 warm or cold place (less than 0°C (30°F) or more than 30°C (90°F)). See page 6-34 for battery storage precautions.

NOTE:

Make any necessary repairs before storing the motorcycle.

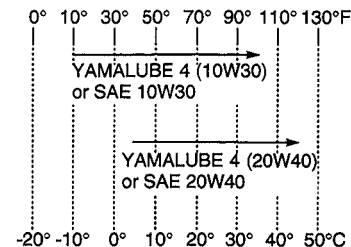
Specifications	8-1
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Specifications

Model	YZF-R1
Dimensions	
Overall length	2,035 mm (80.1 in)
Overall width	695 mm (27.4 in)
Overall height	1,095 mm (43.1 in)
Seat height	815 mm (32.1 in)
Wheelbase	1,395 mm (54.9 in)
Ground clearance	140 mm (5.5 in)
Minimum turning radius	3,400 mm (133.9 in)
Basic weight (with oil and full fuel tank)	
	198 kg (437 lb) YZF-R1L
	199 kg (439 lb) YZF-R1LC
Engine	
Engine type	Liquid-cooled 4-stroke, DOHC
Cylinder arrangement	Forward-inclined parallel 4-cylinder
Displacement	998 cm ³
Bore × Stroke	74 × 58 mm (2.91 × 2.28 in)
Compression ratio	11.8:1
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	2.7 L (2.38 Imp qt, 2.85 US qt)
With oil filter replacement	2.9 L (2.55 Imp qt, 3.07 US qt)
Total amount	3.6 L (3.17 Imp qt, 3.81 US qt)

Radiator

Quantity (including all routes) 2.55 L (2.24 Imp qt, 2.7 US qt)

Air filter

Dry type element

Fuel

Type Unleaded fuel

Fuel tank capacity 18 L (3.96 Imp gal, 4.76 US gal)

Fuel reserve amount 4.0 L (0.88 Imp gal, 1.06 US gal)

Carburetor

Type × quantity BDSR40 × 4

Manufacturer MIKUNI

Spark plug

Type/Manufacturer CR9E / NGK or
U27ESR-N / DENSO

Gap 0.7 ~ 0.8 mm (0.028 ~ 0.031 in)

Clutch type

Wet, multiple-disc

Transmission

Primary reduction system Spur gear

Primary reduction ratio 1.581

Secondary reduction system Chain drive

Secondary reduction ratio 2.688

Number of sprocket teeth

Front/Rear 16/43

Transmission type Constant mesh 6-speed

Operation Left foot operation

Gear ratio

1st 2.600

2nd 1.842

3rd 1.500

4th 1.333

5th 1.200

6th 1.115

Chassis

Frame type Diamond

Caster angle 24°

Trail 92 mm (3.62 in)

Tire

Type Tubeless

Size

Front 120/70 ZR17 (58 W)

Rear 190/50 ZR17 (73 W)

Manufacturer/model

Front Bridgestone / BT56F, BT57F

Metzeler / MEZ1 Racing

Metzeler / MEZ3 Front

Dunlop / D207FN

Michelin / TX15N

Michelin / MACADAM 90XS

SPECIFICATIONS

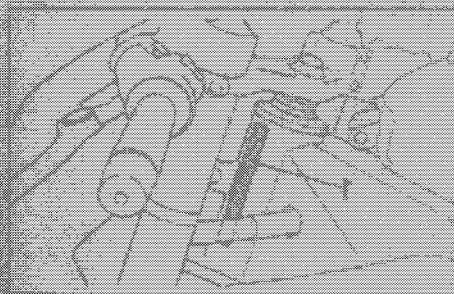
Rear	Pirelli / MTR01	High speed riding	
	Pirelli / MTR01 CORSA	Front	250 kPa; 2.50 kgf/cm ² ; 36 psi
	Bridgestone / BT56R, BT57R	Rear	250 kPa; 2.50 kgf/cm ² ; 36 psi
	Metzeler / MEZ1 Racing	* Load is total weight of cargo, rider, passenger and accessories.	
	Metzeler / MEZ3	Wheels	
	Dunlop / D207L	Type	
	Michelin / TX25N	Front	Cast
	Michelin / MACADAM 90X	Rear	Cast
Maximum load*	Pirelli / MTR02	Size	
	Pirelli / MTR02 CORSA	Front	17 × MT 3.50
		Rear	17 × MT 6.00
		Brakes	
Air pressure (cold tire)	197 kg (434 lb) YZF-R1L	Front	
	196 kg (432 lb) YZF-R1LC	Type	Dual disc brake
		Operation	Right hand operation
		Fluid	DOT 4
Up to 90 kg (198 lb) load*		Rear	
	Front	Type	Single disk brake
	Rear	Operation	Right foot operation
		Fluid	DOT 4
90 kg (198 lb) load ~ maximum load*	Front	Suspension	
	Rear	Front	
		Type	Telescopic fork

Rear	
Type	Swingarm (link suspension)
Shock absorbers	
Front	Coil spring / oil damper
Rear	Coil spring / gas-oil damper
Wheel travel	
Front	135 mm (5.31 in)
Rear	130 mm (5.12 in)
Electrical system	
Ignition system	T.C.I. (digital)
Charging system	
Type	A.C. magneto
Standard output	14 V, 365 W @ 5,000 r/min
Battery	
Type	GT12B-4
Voltage, capacity	12 V, 10 AH
Headlight type	Quartz bulb (halogen)
Bulb voltage, wattage × quantity	
Headlight	12 V, 60/55 W × 2
Tail/brake light	12 V, 5/21 W × 2
Front turn signal/position light	12 V, 27/8 W × 2
Rear turn signal light	12 V, 27 W × 2
Meter light	12 V, 1.4 W × 2

Neutral indicator light	LED
High beam indicator light	LED
Turn indicator light	LED
Fuel indicator light	LED
Oil level/coolant temperature indicator light	LED

Fuses

Main fuse	30 A
Headlight fuse	20 A
Signaling system fuse	20 A
Radiator fan fuse	7.5 A
Ignition fuse	15 A
Back up fuse (odometer)	7.5 A



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.

Identification numbers record	9-1
Key identification number	9-1
Vehicle identification number	9-1
Model label	9-2
Reporting safety defects	9-3
Motorcycle noise regulation	9-4
Maintenance record	9-5
Street and enduro motorcycle limited warranty	9-7
Yamaha extended service (Y.E.S.)	9-9

EAU01040

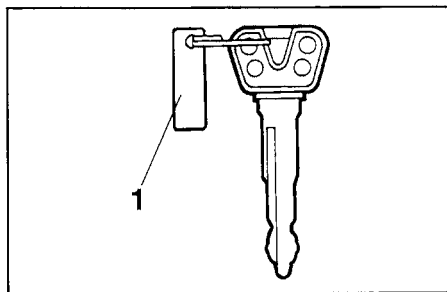
Identification numbers record

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:

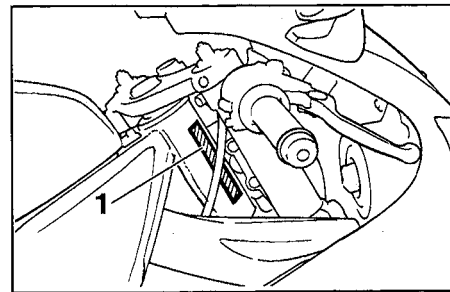
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1. Key identification number

EAU01041

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

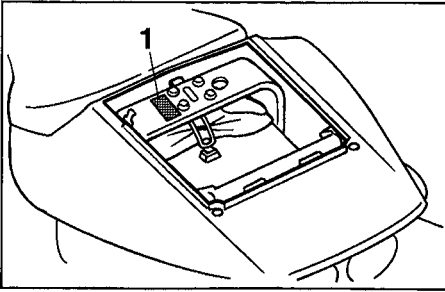
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Vehicle identification number

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

EAU01050

Model label

The model label is affixed to the frame under the seat. (See page 3-14 for seat removal procedures.) Record the information on this label in the space provided. This information will be needed to order spare parts from your Yamaha dealer.

CONSUMER INFORMATION

EAU01051

Reporting safety defects

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

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (or 366-0123 in Washington, D.C. area) or write to: NHTSA, U.S. Department of Transportation, Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from the Hotline.

Motorcycle noise regulation

TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED:

Federal law prohibits the following acts or the causing thereof: (1) The removal or rendering inoperative by any person other than for purposes of maintenance, repair, or replacement of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use or (2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

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

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

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

CONSUMER INFORMATION

EAU01059

Maintenance record

Copies of work orders and/or receipts for parts you purchase and install will be required to document that maintenance has been completed in accordance with the emission warranty. The chart below is printed only as a reminder to you that the maintenance work is required. It is not acceptable proof of maintenance work.

MAINTENANCE INTERVAL	DATE OF SERVICE	MILEAGE	SERVICING DEALER NAME AND ADDRESS	REMARKS
1,000km (600mi)or 1 mo.				
7,000km (4,400mi)or 7 mos.				
13,000km (8,200mi)or 13 mos.				
19,000km (12,000mi)or 19 mos.				
25,000km (15,800mi)or 25 mos.				
31,000km (19,600mi)or 31 mos.				
37,000km (23,400mi)or 37 mos.				

CONSUMER INFORMATION

MAINTENANCE INTERVAL	DATE OF SERVICE	MILEAGE	SERVICING DEALER NAME AND ADDRESS	REMARKS
43,000km (27,200mi)or 43 mos.				
49,000km (31,000mi)or 49 mos.				
55,000km (34,800mi)or 55 mos.				
61,000km (38,600mi)or 61 mos.				

CONSUMER INFORMATION

EAU01061

YAMAHA MOTOR CORPORATION, U.S.A. STREET AND ENDURO MOTORCYCLE LIMITED WARRANTY

Yamaha Motor Corporation, U.S.A. hereby warrants each new model Yamaha motorcycle will be free from defects in material and workmanship for the period of time stated herein, subject to certain stated limitations.

THE PERIOD OF WARRANTY for Yamaha motorcycles originally equipped with headlight, stoplight, and turn signals shall be one (1) year from the date of purchase, with no mileage limitation.

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

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

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

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

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

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

- Operate and maintain the motorcycle as specified in the appropriate Owner's Manual, and
- Give notice to an authorized Yamaha motorcycle dealer of any and all apparent defects within ten (10) days after discovery, and make the machine available at that time for inspection and repairs at such dealer's place of business.

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

EMISSIONS CONTROL SYSTEM WARRANTY

Yamaha Motor Corporation, U.S.A. also warrants to the ultimate purchaser and each subsequent purchaser of each Yamaha motorcycle covered by this warranty with a displacement of 50cc or greater, that the vehicle is designed, built, and equipped so as to conform at the time of sale with all U.S. emissions standards applicable at the time of manufacture and that it is free from defects in materials and workmanship which would cause it not to meet these standards within the periods listed immediately below. Failure other than those resulting from defects in material or workmanship which arise solely as a result of owner abuse and / or lack of proper maintenance are not covered by this warranty.

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

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

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

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

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

WARRANTY QUESTIONS AND ANSWERS

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

CUSTOMER SERVICE

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

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

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

CHANGE OF ADDRESS

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

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

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

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

CONSUMER INFORMATION

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YAMAHA EXTENDED SERVICE (Y.E.S.)

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

- Y.E.S. is designed and administered by Yamaha Motor Corporation to provide maximum owner satisfaction. You get uninterrupted factory-backed coverage for extra peace of mind.
- Y.E.S. is flexible. You choose the plan that's right for you: 12 months, 24 months, or 36 months beyond your warranty period.
- Y.E.S. is designed and administered by the same Yamaha people who handle your warranty – and it shows in the comprehensive coverage benefits. There are no mileage limitations. Coverage isn't limited to "moving parts" or the "drive train" like many other plans. And Y.E.S. covers manufacturing defects just like the warranty. See the sample contract at your Yamaha dealer to see how comforting uninterrupted factory-backed protection can be.
- You don't have to pay anything for covered repairs. There's no deductible to pay, and repairs aren't "pro-rated." You don't have any "out-of-pocket" expenses for covered repairs.
- In addition, Travel and Recreation Interruption Protection (TRIP) is included at no extra cost. TRIP gives you up to \$150 reimbursement per occurrence for any reasonable expenses you incur because your Yamaha needs covered service: replacement vehicle rental, emergency towing, phone calls, even food and lodging when you are away from home. This superb coverage goes into effect when you purchase Y.E.S., so it applies to any warranty repairs as well as covered repairs during your entire Y.E.S. plan period.
- Y.E.S. coverage is honored at any authorized Yamaha dealer nationwide.
- Y.E.S. coverage is transferable to a new owner if you sell or trade-in. That can make your Yamaha much more valuable!

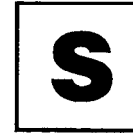
This excellent Y.E.S. plan coverage is only available to Yamaha owners like you, and only while your Yamaha is still within the Yamaha Limited Warranty period. So visit your authorized Yamaha dealer to get all the facts. He can show you how easy it is to protect your investment with Yamaha Extended Service.

We urge you to act now. You'll get the excellent benefits of TRIP coverage right away, and you'll rest easy knowing you'll have strong factory-backed protection even after your Yamaha Limited Warranty expires. You can also save money: Y.E.S. costs less within the first 90 days after you buy your Yamaha. See your dealer today!

A special note:

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

Yamaha Service Marketing
P.O. Box 6555
Cypress, CA 90630



YAMAHA EXTENDED SERVICE

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PROTECT YOUR INVESTMENT
Use Genuine YAMAHA Parts And Accessories

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

YAMAHA
YAMAHA MOTOR CO., LTD.



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