



OWNER'S MANUAL

**⚠ Read this manual carefully
before operating this vehicle.**



MOTORCYCLE

SR400

B9F-28199-EY

Location of important labels	1
Safety information	2
Description	3
Instrument and control functions	4
For your safety – pre-operation checks	5
Operation and important riding points	6
Periodic maintenance and adjustment	7
Motorcycle care and storage	8
Specifications	9
Consumer information	10
Index	11



เครื่องวิทยุคมนาคมนี้ ได้รับยกเว้น ไม่ต้องได้รับ
ใบอนุญาตให้มี ใช้งานซึ่งเครื่องวิทยุคมนาคม
หรือตั้งสถานีวิทยุคมนาคมตามประกาศ กสทช.
เรื่อง เครื่องวิทยุคมนาคม และสถานีวิทยุ
คมนาคมที่ได้รับยกเว้นไม่ต้องได้รับใบอนุญาต
วิทยุคมนาคม ตามพระราชบัญญัติวิทยุ
คมนาคม พ.ศ. 2498



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เครื่องโทรคมนาคมและอุปกรณ์นี้ มีความสอดคล้องตาม
มาตรฐานหรือข้อกำหนดทางเทคนิคของ กสทช.

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

Welcome to the Yamaha world of motorcycling!

As the owner of the SR400, you are benefiting from Yamaha's vast experience and newest technology regarding the design and manufacture of high-quality products, which have earned Yamaha a reputation for dependability.

Please take the time to read this manual thoroughly, so as to enjoy all advantages of your SR400. The Owner's Manual does not only instruct you in how to operate, inspect and maintain your motorcycle, but also in how to safeguard yourself and others from trouble and injury.

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

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

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 a Yamaha dealer.





 **WARNING**

Please read this manual carefully and completely before operating this motorcycle.

Important manual information

EAU10134

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

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

*Product and specifications are subject to change without notice.

EAU10202

**SR400
OWNER'S MANUAL
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Table of contents

Location of important labels	1-1	Adjusting the shock absorber assemblies.....	4-12	Air filter element.....	7-15
Safety information	2-1	Luggage strap holders	4-13	Checking the engine idling speed	7-16
Helmets	2-5	Sidestand	4-13	Checking the throttle grip free play.....	7-16
Description	3-1	Ignition circuit cut-off system	4-14	Valve clearance.....	7-17
Left view	3-1	For your safety – pre-operation checks	5-1	Tires	7-17
Right view	3-2	Operation and important riding points	6-1	Spoke wheels	7-19
Controls and instruments	3-3	Engine break-in.....	6-1	Adjusting the clutch lever free play.....	7-19
Instrument and control functions ...	4-1	Starting the engine.....	6-2	Adjusting the brake lever free play.....	7-20
Immobilizer system.....	4-1	Starting trouble	6-2	Adjusting the brake pedal height and free play.....	7-20
Main switch/steering lock.....	4-2	Shifting	6-3	Checking the shift pedal.....	7-22
Indicator lights and warning lights.....	4-3	Tips for reducing fuel consumption.....	6-5	Brake light switches	7-22
Speedometer unit.....	4-4	Parking.....	6-5	Checking the front brake pads and rear brake shoes	7-23
Tachometer	4-5	Periodic maintenance and adjustment	7-1	Checking the brake fluid level	7-23
Handlebar switches.....	4-5	Tool kit	7-2	Changing the brake fluid	7-24
Clutch lever	4-6	Periodic maintenance chart for the emission control system.....	7-3	Drive chain slack.....	7-25
Shift pedal	4-7	General maintenance and lubrication chart.....	7-5	Cleaning and lubricating the drive chain.....	7-26
Brake lever.....	4-7	Removing and installing panels	7-9	Checking and lubricating the cables.....	7-27
Brake pedal	4-7	Checking the spark plug.....	7-10	Checking and lubricating the throttle grip and cable.....	7-27
Fuel tank cap.....	4-8	Canister.....	7-12	Checking and lubricating the brake and clutch levers.....	7-28
Fuel.....	4-8	Engine oil and oil filter element	7-12	Checking and lubricating the brake pedal	7-28
Catalytic converter	4-10	Why Yamalube.....	7-15		
Fuel cock	4-10				
Kickstarter	4-11				
Decompression lever.....	4-11				
Seat	4-11				
Helmet holder	4-12				

Table of contents

Checking and lubricating the centerstand and sidestand	7-29
Lubricating the swingarm pivots ...	7-29
Checking the front fork.....	7-30
Checking the steering	7-30
Checking the wheel bearings	7-31
Battery	7-31
Replacing the fuses.....	7-32
Replacing the headlight bulb.....	7-34
Replacing the brake/tail light bulb	7-35
Replacing a turn signal light bulb	7-36
Front wheel.....	7-37
Rear wheel.....	7-39
Troubleshooting	7-40
Troubleshooting chart	7-42

Motorcycle care and storage	8-1
Matte color caution	8-1
Care	8-1
Storage.....	8-3

Specifications	9-1
-----------------------------	-----

Consumer information	10-1
Identification numbers.....	10-1
Diagnostic connector	10-2
Vehicle data recording	10-2

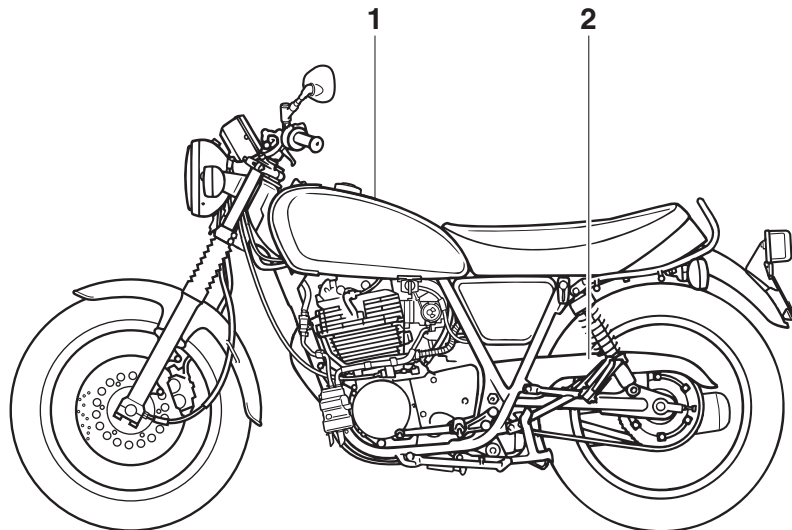
Index	11-1
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Location of important labels

EAU10385

1

Read and understand all of the labels on your vehicle. They contain important information for safe and proper operation of your vehicle. Never remove any labels from your vehicle. If a label becomes difficult to read or comes off, a replacement label is available from your Yamaha dealer.



1

คำเตือน

กรุณาอ่านคู่มือผู้ใช้รถจักรยานยนต์อย่างละเอียด
ก่อนการใช้งานรถจักรยานยนต์

**อาจถึงตายหรือพิการ หากไม่สวม
หมวกนิรภัย และไม่ควรถูกเด็กที่เท้า
ยังไม่ถึงที่วางเท้าโดยสาร**

ข้อควรระวัง

- นำรถเข้าตรวจสอบทันที ที่ศูนย์บริการยามาฮ่า
เมื่อไฟเตือนปัญหาเครื่องยนต์กระพริบหรือสว่างค้าง
- ควรนำรถเข้าศูนย์บริการ ตรวจสอบสภาพแบตเตอรี่
ทุก ๆ 3 เดือน เพื่อเพิ่มประสิทธิภาพและอายุการใช้งาน
ของแบตเตอรี่

B27-2117B-03

2

ข้อมูลความดันลมยาง

ความดันลมยางขณะยางเย็น
ไม่เกิน 90 กก. :

ล้อหน้า : 175 kPa, (1.75 kgf/cm²), 25 psi
ล้อหลัง : 200 kPa, (2.00 kgf/cm²), 29 psi

90 กก.ถึงนน.บรรทุกสูงสุด :

ล้อหน้า : 200 kPa, (2.00 kgf/cm²), 29 psi
ล้อหลัง : 225 kPa, (2.25 kgf/cm²), 33 psi

B27-21668-01

1

Be a Responsible Owner

As the vehicle's owner, you are responsible for the safe and proper operation of your motorcycle.

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 this motorcycle.

He or she should:

- Obtain thorough instructions from a competent source on all aspects of motorcycle operation.
- Observe the warnings and maintenance requirements in this Owner's Manual.
- Obtain qualified training in safe and proper riding techniques.
- Obtain professional technical service as indicated in this Owner's Manual and/or when made necessary by mechanical conditions.

- Never operate a motorcycle without proper training or instruction. Take a training course. Beginners should receive training from a certified instructor. Contact an authorized motorcycle dealer to find out about the training courses nearest you.

Safe Riding

Perform the pre-operation checks each time you use the vehicle to make sure it is in safe operating condition. Failure to inspect or maintain the vehicle properly increases the possibility of an accident or equipment damage. See page 5-1 for a list of pre-operation checks.

- This motorcycle is designed to carry the operator and a passenger.
- 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 ap-

pears to be very effective in reducing the chance of this type of accident.

Therefore:

- Wear a brightly colored jacket.
- Use extra caution when you are approaching and passing through intersections, since intersections are the most likely places for motorcycle accidents to occur.
- Ride where other motorists can see you. Avoid riding in another motorist's blind spot.
- Never maintain a motorcycle without proper knowledge. Contact an authorized motorcycle dealer to inform you on basic motorcycle maintenance. Certain maintenance can only be carried out by certified staff.

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

Protective Apparel

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

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

Safety information

2

Avoid Carbon Monoxide Poisoning

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

Carbon Monoxide is a colorless, odorless, tasteless gas which may be present even if you do not see or smell any engine exhaust. Deadly levels of carbon monoxide can collect rapidly and you can quickly be overcome and unable to save yourself. Also, deadly levels of carbon monoxide can linger for hours or days in enclosed or poorly ventilated areas. If you experience any symptoms of carbon monoxide poisoning, leave the area immediately, get fresh air, and **SEEK MEDICAL TREATMENT.**

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

- Do not run engine outdoors where engine exhaust can be drawn into a building through openings such as windows and doors.

Loading

Adding accessories or cargo to your motorcycle can adversely affect stability and handling if the weight distribution of the motorcycle is changed. To avoid the possibility of an accident, use extreme caution when adding cargo or accessories to your motorcycle. Use extra care when riding a motorcycle that has added cargo or accessories. Here, along with the information about accessories below, are some general guidelines to follow if loading cargo to your motorcycle:

The total weight of the operator, passenger, accessories and cargo must not exceed the maximum load limit.

Operation of an overloaded vehicle could cause an accident.

Maximum load:
150 kg (331 lb)

When loading within this weight limit, keep the following in mind:

- Cargo and accessory weight should be kept as low and close to the motorcycle as possible. Securely pack your heaviest items as close to the center of the vehicle as possible and make sure to distribute the weight as evenly as possible on both sides of the motorcycle to minimize imbalance or instability.
- Shifting weights can create a sudden imbalance. Make sure that accessories and cargo are securely attached to the motorcycle before riding. Check accessory mounts and cargo restraints frequently.
- Properly adjust the suspension for your load (suspension-adjustable models only), and check the condition and pressure of your tires.
- Never attach any large or heavy items to the handlebar, front fork, or front fender. These items, including such cargo as sleeping bags, duffel bags, or

tents, can create unstable handling or a slow steering response.

- **This vehicle is not designed to pull a trailer or to be attached to a sidecar.**

Genuine Yamaha Accessories

Choosing accessories for your vehicle is an important decision. Genuine Yamaha accessories, which are available only from a Yamaha dealer, have been designed, tested, and approved by Yamaha for use on your vehicle.

Many companies with no connection to Yamaha manufacture parts and accessories or offer other modifications for Yamaha vehicles. Yamaha is not in a position to test the products that these aftermarket companies produce. Therefore, Yamaha can neither endorse nor recommend the use of accessories not sold by Yamaha or modifications not specifically recommended by Yamaha, even if sold and installed by a Yamaha dealer.

Aftermarket Parts, Accessories, and Modifications

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

Keep the following guidelines in mind, as well as those provided under "Loading" when mounting accessories.

- Never install accessories or carry cargo that would impair the performance of your motorcycle. Carefully inspect the accessory before using it to make sure that 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.

- 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.
- 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 passing or being passed by large vehicles.
- Certain accessories can displace the operator from his or her normal riding position. This improper position limits the freedom of movement of the

Safety information

2

operator and may limit control ability, therefore, such accessories are not recommended.

- Use caution when adding electrical accessories. If electrical 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.

Aftermarket Tires and Rims

The tires and rims that came with your motorcycle were designed to match the performance capabilities and to provide the best combination of handling, braking, and comfort. Other tires, rims, sizes, and combinations may not be appropriate. See page 7-17 for tire specifications and for information on servicing and replacing your tires.

Transporting the Motorcycle

Be sure to observe following instructions before transporting the motorcycle in another vehicle.

- Remove all loose items from the motorcycle.
- Check that the fuel cock (if equipped) is in the off position and that there are no fuel leaks.
- Shift the transmission into gear (for models with a manual transmission).
- Secure the motorcycle with tie-downs or suitable straps that are attached to solid parts of the motorcycle, such as the frame or upper front fork triple clamp (and not, for example, to rubber-mounted handlebars or turn signals, or parts that could break). Choose the location for the straps carefully so the straps will not rub against painted surfaces during transport.
- The suspension should be compressed somewhat by the tie-downs, if possible, so that the motorcycle will not bounce excessively during transport.

EAUJ0033

Helmets

Operating this vehicle without an approved motorcycle helmet increases your chances of a severe head injury or death in the event of an accident. The majority of fatalities from motorcycle or scooter 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.

Always select an approved motorcycle helmet

Pay attention to the following when choosing a motorcycle helmet.

- The helmet must meet the safety standard "TIS".
- The helmet size must match the size of the rider's head.
- Never subject a helmet to heavy shocks.

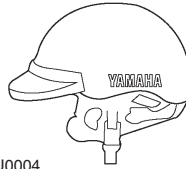
Wearing the helmet correctly

Always connect the chin strap. In the case of an accident, the helmet has a much less chance of coming off if the chin strap is connected.

Correct usage



ZAUU0003



ZAUU0004



ZAUU0006

Wrong usage



ZAUU0007

- Full-type: use only for riding at low to mid-range speeds



ZAUU0005

Types of helmets and their usage

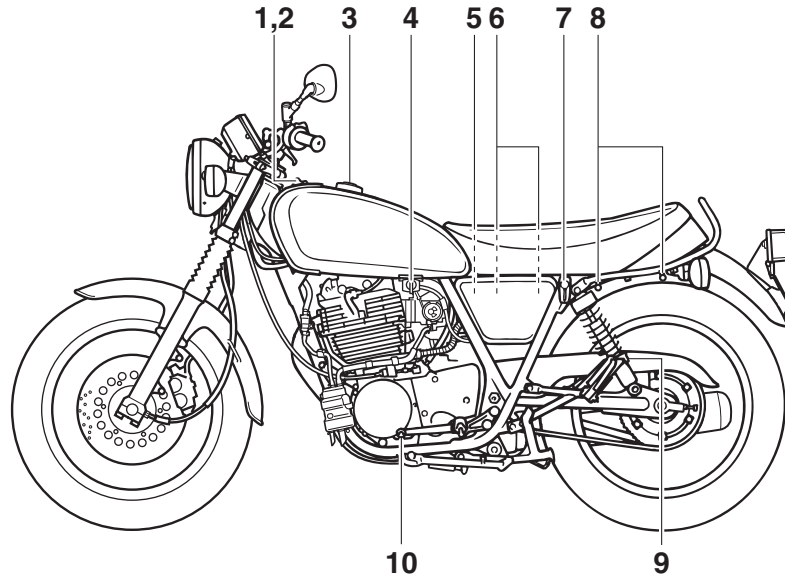
- Half-type: use only for riding at low speeds
- Full-face-type: use for riding at mid-range to high speeds

Description

EAU10411

Left view

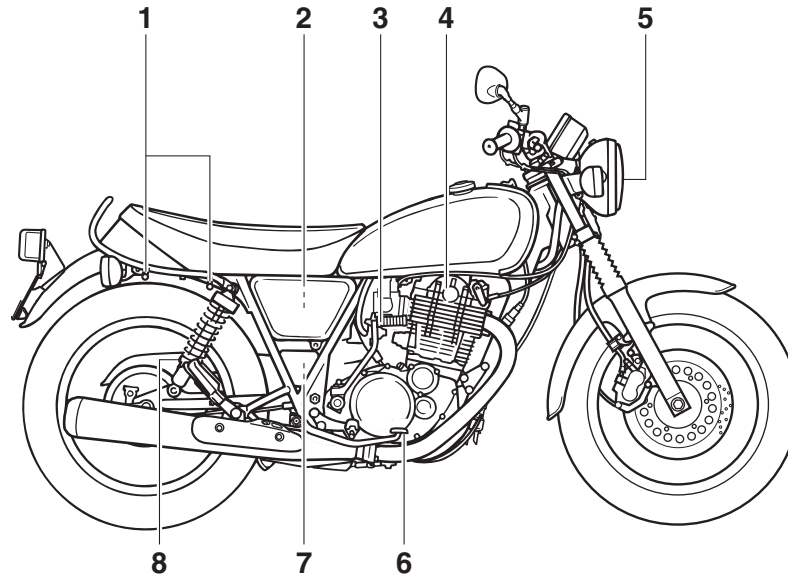
3



1. Engine oil dipstick (page 7-12)
2. Engine oil filler cap (page 7-12)
3. Fuel tank cap (page 4-8)
4. Fuel cock (page 4-10)
5. Battery (page 7-31)
6. Fuses (page 7-32)
7. Helmet holder (page 4-12)
8. Luggage strap holder (page 4-13)

9. Spring preload adjuster (page 4-12)
10. Shift pedal (page 4-7)

Right view



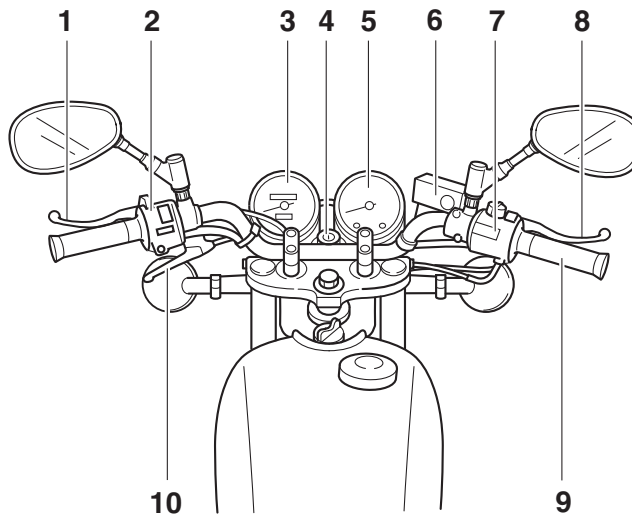
1. Luggage strap holder (page 4-13)
2. Air filter element (page 7-15)
3. Kickstarter (page 4-11)
4. Kick indicator (page 6-2)
5. Headlight (page 7-34)
6. Brake pedal (page 4-7)
7. Tool kit (page 7-2)
8. Spring preload adjuster (page 4-12)

Description

EAU10431

Controls and instruments

3

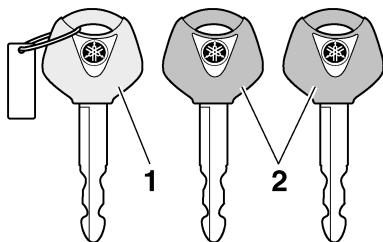


1. Clutch lever (page 4-6)
2. Left handlebar switches (page 4-5)
3. Speedometer unit (page 4-4)
4. Main switch/steering lock (page 4-2)
5. Tachometer (page 4-5)
6. Front brake fluid reservoir (page 7-23)
7. Right handlebar switches (page 4-5)
8. Brake lever (page 4-7)

9. Throttle grip (page 7-16)
10. Decompression lever (page 4-11)

Immobilizer system

EAU1097B



1. Code re-registering key (red bow)
2. Standard keys (black bow)

This vehicle is equipped with an immobilizer system to help prevent theft by re-registering codes in the standard keys. This system consists of the following:

- a code re-registering key
- two standard keys
- a transponder (in each key)
- an immobilizer unit (on the vehicle)
- an ECU (on the vehicle)
- a system indicator light (page 4-4)

About the keys

The code re-registering key is used to register codes in each standard key. Store the code re-registering key in a safe place. Use a standard key for daily operation.

When key replacement or re-registering is necessary, bring the vehicle and the code re-registering key along with any remaining standard keys to a Yamaha dealer to have them re-registered.

TIP

- Keep the standard keys as well as keys of other immobilizer systems away from the code re-registering key.
- Keep other immobilizer system keys away from the main switch as they may cause signal interference.

can still be used to start the vehicle. However, registering a new standard key is impossible. If all keys have been lost or damaged, the entire immobilizer system must be replaced. Therefore, handle the keys carefully.

- Do not submerge in water.
- Do not expose to high temperatures.
- Do not place near magnets.
- Do not place near items that transmit electrical signals.
- Do not handle roughly.
- Do not grind or alter.
- Do not disassemble.
- Do not put two keys of any immobilizer system on the same key ring.

ECA11823

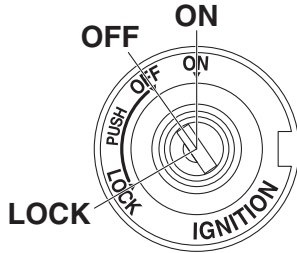
NOTICE

DO NOT LOSE THE CODE RE-REGISTERING KEY! CONTACT YOUR DEALER IMMEDIATELY IF IT IS LOST! If the code re-registering key is lost, the existing standard keys

Instrument and control functions

Main switch/steering lock

EAU10474



4

The main switch/steering lock controls the ignition and lighting systems, and is used to lock the steering. The various positions are described below.

TIP

Be sure to use the standard key (black bow) for regular use of the vehicle. To minimize the risk of losing the code re-registering key (red bow), keep it in a safe place and only use it for code re-registering.

ON

All electrical circuits are supplied with power and the vehicle lights are turned on. The engine can be started. The key cannot be removed.

EAU85041

TIP

- To prevent battery discharge, do not leave the key in the "ON" position without the engine running.
- The headlight comes on automatically when the engine is started.

OFF

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

EAU10662

⚠ WARNING

Never turn the key to "OFF" or "LOCK" while the vehicle is moving. Otherwise the electrical systems will be switched off, which may result in loss of control or an accident.

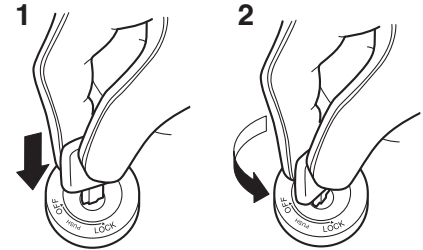
EWA10062

LOCK

The steering is locked and all electrical systems are off. The key can be removed.

EAU73800

To lock the steering



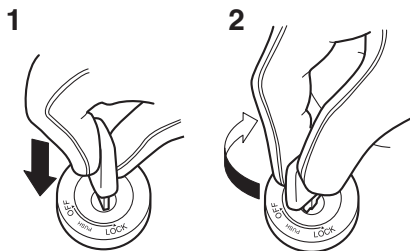
1. Push.
2. Turn.

1. Turn the handlebars all the way to the left.
2. With the key in the "OFF" position, push the key in and turn it to "LOCK".
3. Remove the key.

TIP _____

If the steering will not lock, try turning the handlebars back to the right slightly.

To unlock the steering

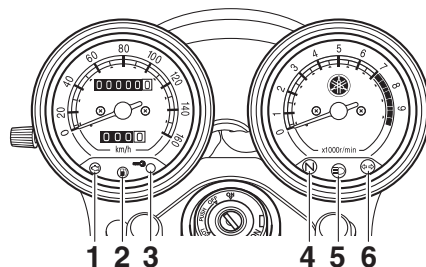








1. Push.
2. Turn.

Push the key in and turn it to “OFF”.

Indicator lights and warning lights

EAU4939R



1. Engine trouble warning light “”
2. Fuel level warning light “”
3. Immobilizer system indicator light “”
4. Neutral indicator light “**N**”
5. High beam indicator light “”
6. Turn signal indicator light “ ”

Turn signal indicator light “ ”

EAU11022

This indicator light flashes when a turn signal light is flashing.

Neutral indicator light “**N**”

EAU11061

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

High beam indicator light “”

EAU11081

This indicator light comes on when the high beam of the headlight is switched on.

Fuel level warning light “”

EAU11342

This warning light comes on when the fuel level drops below approximately 2.2 L (0.58 US gal, 0.48 Imp.gal). When this occurs, refuel as soon as possible.

TIP _____

When the vehicle is turned on, the light should come on for a few seconds and then go off. Otherwise, have a Yamaha dealer check the electrical circuit.

Engine trouble warning light “”

EAU79311

This warning light comes on if a problem is detected in the engine. If this occurs, have a Yamaha dealer check the on-board diagnostic system.

TIP _____

When the vehicle is turned on, this light should come on for a few seconds and then go off. Otherwise, have a Yamaha dealer check the vehicle.

Instrument and control functions

4

Immobilizer system indicator light “”

EAU73121

When the main switch is turned off and 30 seconds have passed, the indicator light will flash steadily to indicate the immobilizer system is enabled. After 24 hours have passed, the indicator light will stop flashing, however the immobilizer system is still enabled.

TIP

When the vehicle is turned on, this light should come on for a few seconds and then go off. If the light does not come on, or if the light remains on, have a Yamaha dealer check the vehicle.

Transponder interference

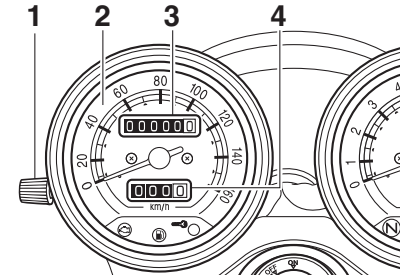
If the immobilizer system indicator light flashes in the pattern, slowly 5 times then quickly 2 times, this could be caused by transponder interference. If this occurs, try the following.

1. Make sure there are no other immobilizer keys close to the main switch.
2. Use the code re-registering key to start the engine.

3. If the engine starts, turn it off, and try starting the engine with the standard keys.
4. If one or both of the standard keys do not start the engine, take the vehicle and all 3 keys to a Yamaha dealer to have the standard keys re-registered.

Speedometer unit

EAU11631

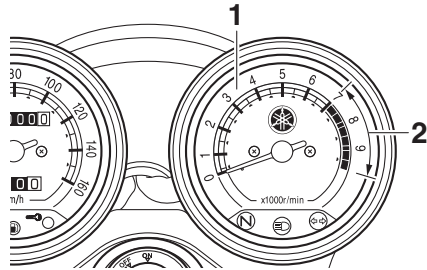


1. Reset knob
2. Speedometer
3. Odometer
4. Tripmeter

The speedometer unit is equipped with a speedometer, an odometer and a tripmeter. The speedometer shows riding speed. The odometer shows the total distance traveled. The tripmeter shows the distance traveled since it was last set to zero with the reset knob. The tripmeter can be used to estimate the distance that can be traveled with a full tank of fuel. This information will enable you to plan future fuel stops.

Tachometer

EAU11882



1. Tachometer
2. Tachometer red zone

The tachometer allows the rider to monitor the engine speed and keep it within the ideal power range.

ECA10032

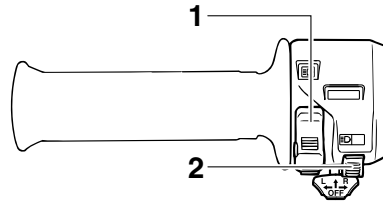
NOTICE

Do not operate the engine in the tachometer red zone.
Red zone: 7000 r/min and above

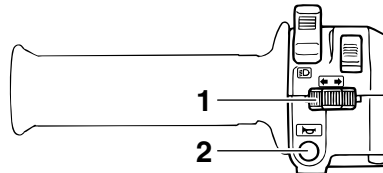
Handlebar switches

EAU1234R

Left

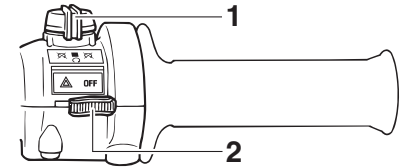


1. Dimmer switch “/”
2. Pass switch “”



1. Turn signal switch “/”
2. Horn switch “”

Right



1. Engine stop switch “/”
2. Hazard lights switch “/OFF”

EAU12352

Pass switch “”

Press this switch to flash the headlight.

TIP

When the dimmer switch is set to “”, the passing switch has no effect.

EAU12402

Dimmer switch “/”

Set this switch to “” for the high beam and to “” for the low beam.

Instrument and control functions

4

Turn signal switch “↔/↔”

EAU12461

To signal a right-hand turn, push this switch to “↔”. To signal a left-hand turn, push this switch to “↔”. When released, the switch returns to the center position. To cancel the turn signal lights, push the switch in after it has returned to the center position.

Horn switch “🔊”

EAU12501

Press this switch to sound the horn.

Engine stop switch “○/⊗”

EAU12664

Set this switch to “○” (run) before starting the engine. Set this switch to “⊗” (stop) to stop the engine in case of an emergency, such as in the event of an overturn or if the throttle is stuck.

Hazard lights switch “△/OFF”

EAUN2211

The hazard lights (simultaneous flashing of all turn signal lights) are used in case of an emergency, such as to warn other drivers when your vehicle is stopped where it might be a traffic hazard.

Set this switch to “△” to turn on the hazard lights. To turn off the hazard lights, set the switch to “OFF”.

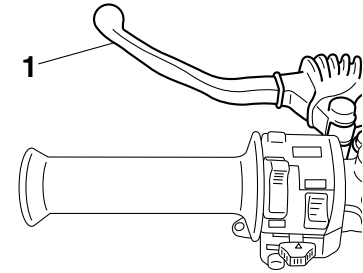
ECA10062

NOTICE

Do not use the hazard lights for an extended length of time with the engine not running, otherwise the battery may discharge.

Clutch lever

EAU12823



1. Clutch lever

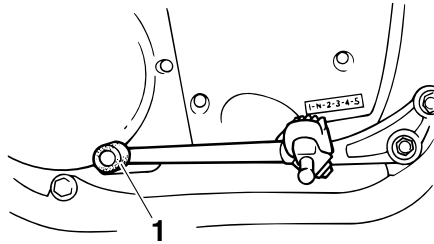
To disengage the drivetrain from the engine, such as when shifting gears, pull the clutch lever toward the handlebar. Release the lever to engage the clutch and transmit power to the rear wheel.

TIP

The lever should be pulled rapidly and released slowly for smooth shifting. (See page 6-3.)

Shift pedal

EAU12876

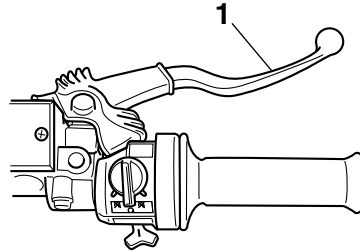


1. Shift pedal

The shift pedal is located on the left side of the motorcycle. To shift the transmission to a higher gear, move the shift pedal up. To shift the transmission to a lower gear, move the shift pedal down. (See page 6-3.)

Brake lever

EAU12892

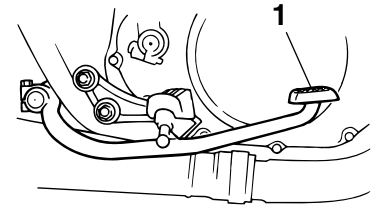


1. Brake lever

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

Brake pedal

EAU12944



1. Brake pedal

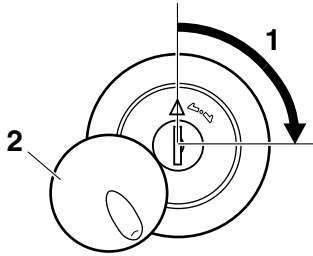
The brake pedal is located on the right side of the motorcycle. To apply the rear brake, press down on the brake pedal.

Instrument and control functions

EAU13126

Fuel tank cap

To remove the fuel tank cap

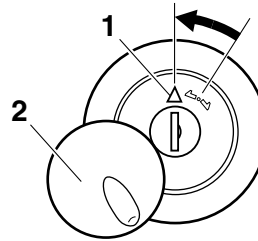


1. Unlock.
2. Fuel tank cap lock cover

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

To install the fuel tank cap

1. Insert the fuel tank cap into the tank opening with the key inserted and with the “△” mark facing forward.



1. “△” mark
2. Fuel tank cap lock cover

2. Turn the key counterclockwise to the original position, remove it, and then close the lock cover.

TIP _____
The fuel tank cap cannot be installed unless the key is in the lock. In addition, the key cannot be removed if the cap is not properly installed and locked.

EWA10132

WARNING _____
Make sure that the fuel tank cap is properly installed before riding. Leaking fuel is a fire hazard.

EAU13222

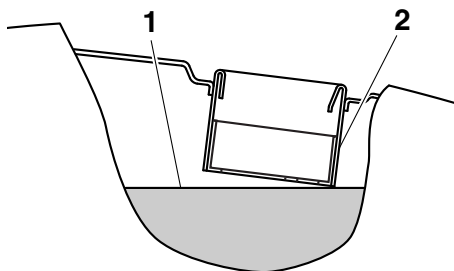
Fuel

Make sure there is sufficient gasoline in the tank.

EWA10882

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

1. Before refueling, turn off the engine and be sure that no one is sitting on the vehicle. Never refuel while smoking, or while in the vicinity of sparks, open flames, or other sources of ignition such as the pilot lights of water heaters and clothes dryers.
2. Do not overfill the fuel tank. When refueling, be sure to insert the pump nozzle into the fuel tank filler hole. Stop filling when the fuel reaches the bottom of the filler tube. Because fuel expands when it heats up, heat from the engine or the sun can cause fuel to spill out of the fuel tank.



1. Maximum fuel level
2. Fuel tank filler tube

3. Wipe up any spilled fuel immediately. **NOTICE: Immediately wipe off spilled fuel with a clean, dry, soft cloth, since fuel may deteriorate painted surfaces or plastic parts.** [ECA10072]
4. Be sure to securely close the fuel tank cap.

EWA15152

WARNING

Gasoline is poisonous and can cause injury or death. Handle gasoline with care. Never siphon gasoline by mouth. If you should swallow some gasoline or inhale a lot of gasoline vapor, or get some gasoline in your eyes, see your doctor immedi-

ately. If gasoline spills on your skin, wash with soap and water. If gasoline spills on your clothing, change your clothes.

EAU86081

Your Yamaha engine was designed to use unleaded gasoline with a research octane number of 90 or higher. If engine knocking or pinging occurs, use a gasoline of a different brand or higher octane rating.

Recommended fuel:

Unleaded gasoline (E10 acceptable)

Octane number (RON):

90

Fuel tank capacity:

12 L (3.2 US gal, 2.6 Imp.gal)

Fuel tank reserve:

2.2 L (0.58 US gal, 0.48 Imp.gal)

Gasohol

There are two types of gasohol: gasohol containing ethanol and that containing methanol. Gasohol containing ethanol can be used if the ethanol content does not exceed 10% (E10). Gasohol containing methanol is not

recommended by Yamaha because it can cause damage to the fuel system or vehicle performance problems.

ECA11401

NOTICE

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

Instrument and control functions

Catalytic converter

EAU13435

The exhaust system contains catalytic converter(s) to reduce harmful exhaust emissions.

EWA10863

WARNING

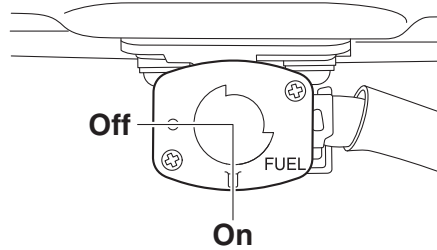
4

The exhaust system is hot after operation. To prevent a fire hazard or burns:

- Do not park the vehicle near possible fire hazards such as grass or other materials that easily burn.
- Park the vehicle in a place where pedestrians or children are not likely to touch the hot exhaust system.
- Make sure that the exhaust system has cooled down before doing any maintenance work.
- Do not allow the engine to idle more than a few minutes. Long idling can cause a build-up of heat.

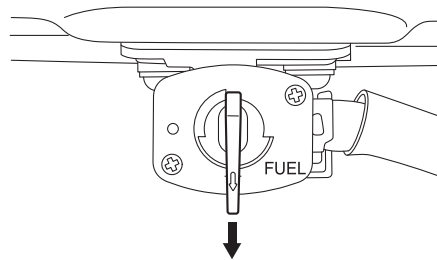
Fuel cock

EAU59492



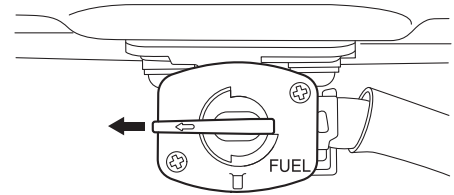
The fuel cock regulates and filters the fuel supply from the fuel tank. There are two positions.

On



With the lever in this position, fuel will be supplied to the engine. Normal operation is done with the lever in this position.

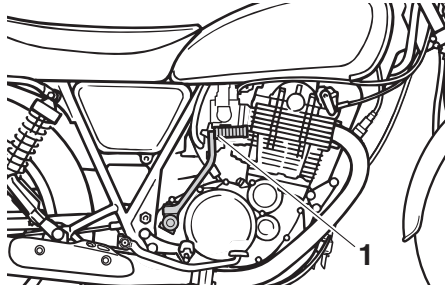
Off



With the lever in this position, fuel will not flow. Use this lever position when performing certain maintenance work or when storing the vehicle for a prolonged time.

Kickstarter

EAU13651

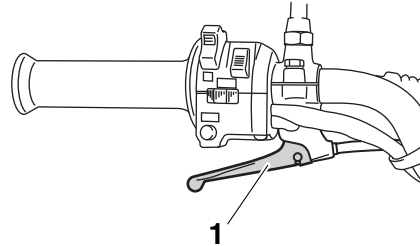


1. Kickstarter

To start the engine, fold out the kickstarter lever, move it down lightly with your foot until the gears engage, and then push it down smoothly but forcefully. This model is equipped with a primary kickstarter, allowing the engine to be started in any gear if the clutch is disengaged. However, shifting the transmission into the neutral position before starting is recommended.

Decompression lever

EAU13701



1. Decompression lever

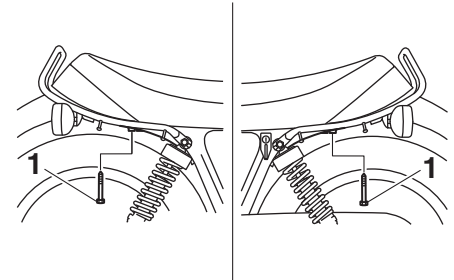
When this lever is pulled, the exhaust valve is forced open so that the compression pressure can be reduced. This allows the piston to be moved just past the compression stroke before kick starting. (See page 6-2.)

Seat

EAU13962

To remove the seat

Remove the bolts, and then pull the seat off.



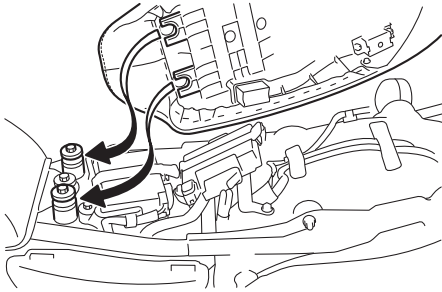
1. Bolt

To install the seat

1. Insert the projections on the front of the seat into the seat holders as shown.

Instrument and control functions

4



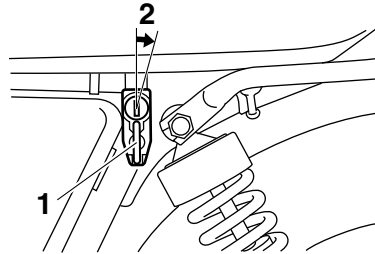
2. Place the seat in the original position, and then tighten the bolts.

TIP

Make sure that the seat is properly secured before riding.

Helmet holder

EAU14283



1. Helmet holder
2. Unlock.

To open the helmet holder, insert the key into the lock, and then turn the key as shown.

To lock the helmet holder, place it in the original position, and then remove the key. **WARNING! Never ride with a helmet attached to the helmet holder, since the helmet may hit objects, causing loss of control and possibly an accident.** [EWA10162]

Adjusting the shock absorber assemblies

EAU14885

EWA10211

! WARNING

Always adjust both shock absorber assemblies equally, otherwise poor handling and loss of stability may result.

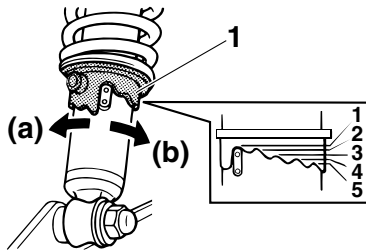
Each shock absorber assembly is equipped with a spring preload adjusting ring.

ECA10102

NOTICE

To avoid damaging the mechanism, do not attempt to turn beyond the maximum or minimum settings.

Adjust the spring preload as follows. Turn the adjusting ring in direction (a) to increase the spring preload. Turn the adjusting ring in direction (b) to decrease the spring preload. Align the appropriate notch in the adjusting ring with the position indicator on the shock absorber.



1. Spring preload adjusting ring

Spring preload setting:

Minimum (soft):

1

Standard:

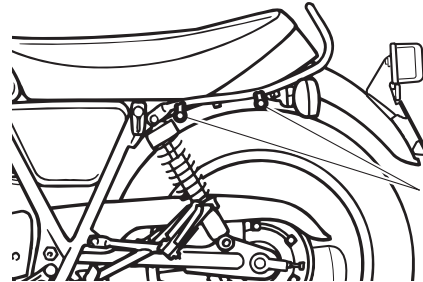
1

Maximum (hard):

5

Luggage strap holders

EAU84680



1. Luggage strap holder

Use the indicated strap points to secure luggage ties to the vehicle.

Sidestand

EAU15306

The sidestand is located on the left side of the frame. Raise the sidestand or lower it with your foot while holding the vehicle upright.

TIP

The built-in sidestand switch is part of the ignition circuit cut-off system, which cuts the ignition in certain situations. (See the following section for an explanation of the ignition circuit cut-off system.)

4

⚠ WARNING

The vehicle must not be ridden with the sidestand down, or if the sidestand cannot be properly moved up (or does not stay up), otherwise the sidestand could contact the ground and distract the operator, resulting in a possible loss of control. Yamaha's ignition circuit cut-off system has been designed to assist the operator in fulfilling the responsibility of raising the sidestand before starting off. Therefore, check

EWA10242

Instrument and control functions

this system regularly and have a Yamaha dealer repair it if it does not function properly.

EAU59341

Ignition circuit cut-off system

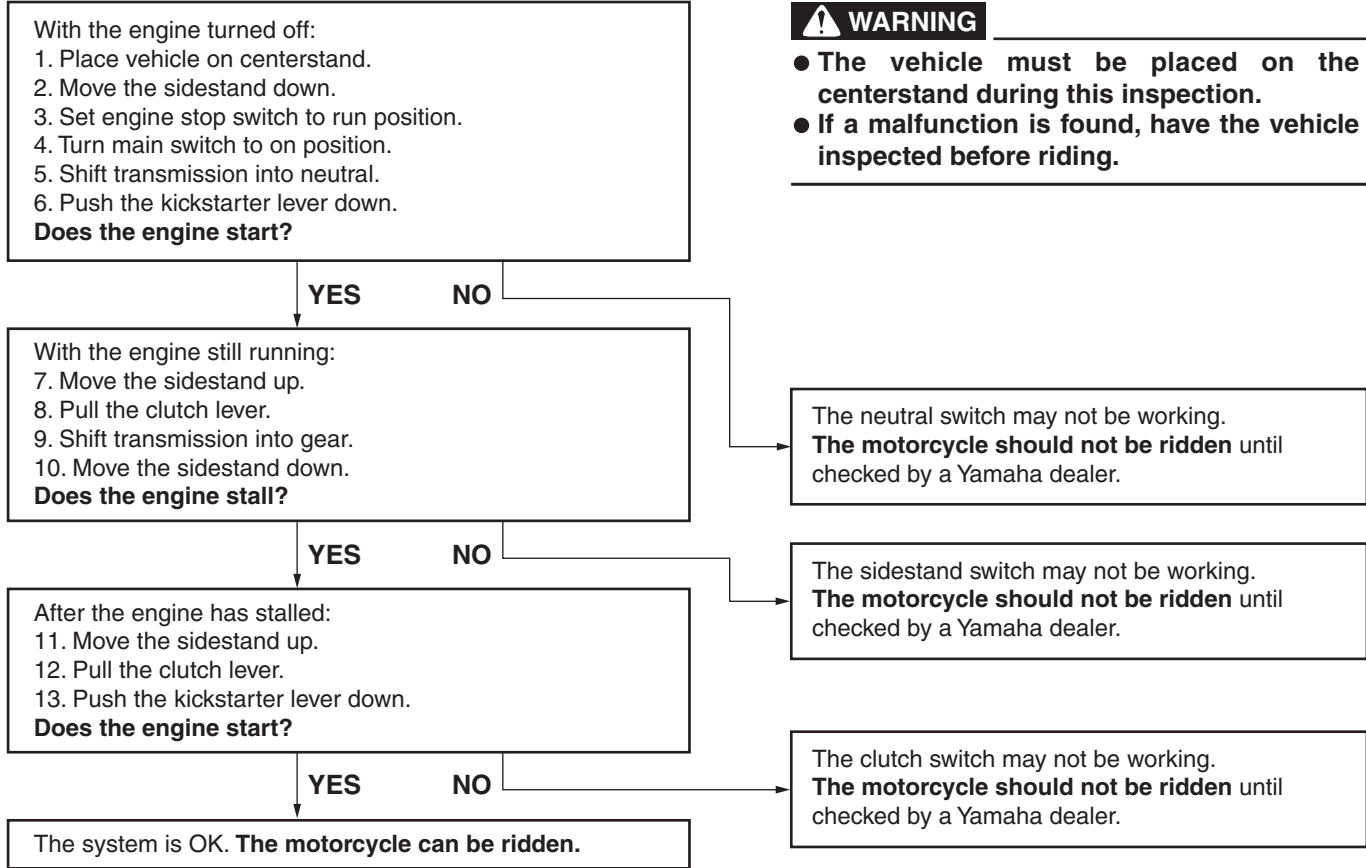
This system prevents in-gear engine starts unless the clutch lever is pulled and the sidestand is up. Also, it will stop the running engine should the sidestand be lowered while the transmission is in gear.

Periodically check the system via the following procedure.

TIP

- This check is most reliable if performed with a warmed-up engine.
 - See pages 4-2 and 4-5 for switch operation information.
-

Instrument and control functions



For your safety – pre-operation checks

EAU1559B

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

EWA11152

WARNING

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

5

Before using this vehicle, check the following points:

ITEM	CHECKS	PAGE
Fuel	<ul style="list-style-type: none">• Check fuel level in fuel tank.• Refuel if necessary.• Check fuel line for leakage.	4-8
Engine oil	<ul style="list-style-type: none">• Check oil level in oil tank.• If necessary, add recommended oil to specified level.• Check vehicle for oil leakage.	7-12
Front brake	<ul style="list-style-type: none">• Check operation.• If soft or spongy, have Yamaha dealer bleed hydraulic system.• Check lever free play.• Adjust if necessary.• Check brake pads for wear.• Replace if necessary.• Check fluid level in reservoir.• If necessary, add specified brake fluid to specified level.• Check hydraulic system for leakage.	7-20, 7-23, 7-23
Rear brake	<ul style="list-style-type: none">• Check operation.• Check pedal free play.• Adjust if necessary.	7-20, 7-23

For your safety – pre-operation checks

ITEM	CHECKS	PAGE
Clutch	<ul style="list-style-type: none"> • Check operation. • Lubricate cable if necessary. • Check lever free play. • Adjust if necessary. 	7-19
Throttle grip	<ul style="list-style-type: none"> • Make sure that operation is smooth. • Check throttle grip free play. • If necessary, have Yamaha dealer adjust throttle grip free play and lubricate cable and grip housing. 	7-16, 7-27
Control cables	<ul style="list-style-type: none"> • Make sure that operation is smooth. • Lubricate if necessary. 	7-27
Drive chain	<ul style="list-style-type: none"> • Check chain slack. • Adjust if necessary. • Check chain condition. • Lubricate if necessary. 	7-25, 7-26
Wheels and tires	<ul style="list-style-type: none"> • Check for damage. • Check tire condition and tread depth. • Check air pressure. • Correct if necessary. 	7-17, 7-19
Shift pedal	<ul style="list-style-type: none"> • Make sure that operation is smooth. • Correct if necessary. 	7-22
Brake pedal	<ul style="list-style-type: none"> • Make sure that operation is smooth. • Lubricate pedal pivoting point if necessary. 	7-28
Brake and clutch levers	<ul style="list-style-type: none"> • Make sure that operation is smooth. • Lubricate lever pivoting points if necessary. 	7-28
Centerstand, sidestand	<ul style="list-style-type: none"> • Make sure that operation is smooth. • Lubricate pivots if necessary. 	7-29
Chassis fasteners	<ul style="list-style-type: none"> • Make sure that all nuts, bolts and screws are properly tightened. • Tighten if necessary. 	—
Instruments, lights, signals and switches	<ul style="list-style-type: none"> • Check operation. • Correct if necessary. 	—

For your safety – pre-operation checks

ITEM	CHECKS	PAGE
Sidestand switch	<ul style="list-style-type: none">• Check operation of ignition circuit cut-off system.• If system is not working correctly, have Yamaha dealer check vehicle.	4-13

EAU15952

Read the Owner's Manual carefully to become familiar with all controls. If there is a control or function you do not understand, ask your Yamaha dealer.

EWA10272



Failure to familiarize yourself with the controls can lead to loss of control, which could cause an accident or injury.

EAU16842

Engine break-in

There is never a more important period in the life of your engine than the period between 0 and 1600 km (1000 mi). For this reason, you should read the following material carefully.

Since the engine is brand new, do not put an excessive load on it for the first 1600 km (1000 mi). The various parts in the engine wear and polish themselves to the correct operating clearances. During this period, prolonged full-throttle operation or any condition that might result in engine overheating must be avoided.

EAU17094

0–1000 km (0–600 mi)

Avoid prolonged operation above 3500 r/min. **NOTICE: After 1000 km (600 mi) of operation, the engine oil must be changed and the oil filter cartridge or element replaced.** [ECA10303]

1000–1600 km (600–1000 mi)

Avoid prolonged operation above 4200 r/min.

1600 km (1000 mi) and beyond

The vehicle can now be operated normally.

ECA10311

NOTICE

- **Keep the engine speed out of the tachometer red zone.**
- **If any engine trouble should occur during the engine break-in period, immediately have a Yamaha dealer check the vehicle.**

Operation and important riding points

Starting the engine

EAU85750

In order for the ignition circuit cut-off system to enable starting, one of the following conditions must be met:

- the transmission is in the neutral position or
- the transmission is in gear with the clutch lever pulled and the side-stand up.

1. Turn the fuel cock lever to on position.
2. Turn the main switch to on position and set the engine stop switch to run position.

The engine trouble warning light, fuel level warning light, and immobilizer system indicator light should come on for a few seconds, then go off.

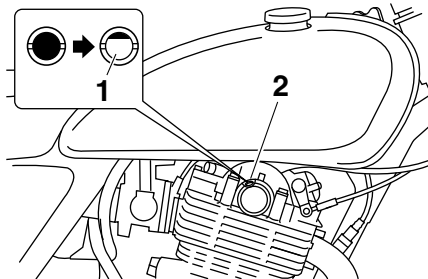
ECA23271

NOTICE

If a warning light does not come on or if a warning light remains on, see page 4-3 for the corresponding warning light circuit check.

3. Shift the transmission into the neutral position.

4. Completely close the throttle and apply the decompression lever.
5. Slowly push the kickstarter lever down until the starting mark shows on the kick indicator.



1. Starting mark
2. Kick indicator

6. Release the decompression lever, release the kickstarter lever, and then push the kickstarter lever down forcefully to start the engine.

ECA11043

NOTICE

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

EAU59471

Starting trouble

If the engine fails to start after 4 to 5 kicks, clear out the combustion chamber with the following procedure.

1. Turn the key to "OFF".
2. While applying the decompression lever, fully open the throttle grip and push the kickstarter lever down 4 to 5 times.
3. Completely close the throttle grip.
4. While still applying the decompression lever, slowly push the kickstarter lever down until the starting mark shows on the kick indicator.
5. Turn the key to "ON".
6. Release the decompression lever, and then push the kickstarter lever down forcefully to start the engine.

Operation and important riding points

EAU59361

EAUN0073

EAU16675

TIP _____

This model is equipped with:

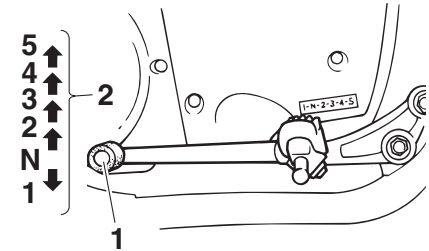
- a lean angle sensor. This sensor stops the engine in case of a turn-over. In this case, turn the main switch off and then on. Failing to do so will prevent the engine from starting even though the engine will crank when pushing the kick starter lever down.
- an engine auto-stop system. The engine stops automatically if left idling for 20 minutes. If the engine stops, simply push the kick starter lever down to restart the engine.

NOTICE _____

Do not ride through deep water, otherwise the engine may be damaged. Avoid puddles because they may be deeper than expected.

ECAN0072

Shifting



1. Shift pedal
2. Gear positions

Shifting gears lets you control the amount of engine power available for starting off, accelerating, climbing hills, etc.

The gear positions are shown in the illustration.

TIP _____

To shift the transmission into the neutral position (**N**), press the shift pedal down repeatedly until it reaches the end of its travel, and then slightly raise it.

Operation and important riding points

6

NOTICE

ECA10262

- When shifting, press the shift pedal firmly until you feel the gear shift is complete.
- Even with the transmission in the neutral position, do not coast for long periods of time with the engine off, nor tow the motorcycle for long distances. The transmission is properly lubricated only when the engine is running. Inadequate lubrication may damage the transmission.
- Always use the clutch while changing gears to avoid damaging the engine, transmission, and drive train, which are not designed to withstand the shock of forced shifting.

EAU85370

To start out and accelerate

1. Pull the clutch lever to disengage the clutch.
2. Shift the transmission 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. After starting out, close the throttle, and at the same time, quickly pull the clutch lever in.
5. Shift the transmission into second gear. (Make sure not to shift the transmission into the neutral position.)
6. Open the throttle part way and gradually release the clutch lever.
7. Follow the same procedure when shifting to the next higher gear.

EAU85380

To decelerate

1. Release the throttle and apply both the front and the rear brakes smoothly to slow the motorcycle.
2. As the vehicle decelerates, shift to a lower gear.
3. When the engine is about to stall or runs roughly, pull the clutch lever in, use the brakes to slow the motorcycle, and continue to downshift as necessary.

4. Once the motorcycle has stopped, the transmission can be shifted into the neutral position. The neutral indicator light should come on and then the clutch lever can be released.

EWA17380

! WARNING

- Improper braking can cause loss of control or traction. Always use both brakes and apply them smoothly.
- Make sure that the motorcycle and the engine have sufficiently slowed before shifting to a lower gear. Engaging a lower gear when the vehicle or engine speed is too high could make the rear wheel lose traction or the engine to over-rev. This could cause loss of control, an accident and injury. It could also cause engine or drive train damage.

Tips for reducing fuel consumption

EAU16811

Fuel consumption depends largely on your riding style. Consider the following tips to reduce fuel consumption:

- Shift up swiftly, and avoid high engine speeds during acceleration.
- Do not rev the engine while shifting down, and avoid high engine speeds with no load on the engine.
- Turn the engine off instead of letting it idle for an extended length of time (e.g., in traffic jams, at traffic lights or at railroad crossings).

Parking

EAU17214

When parking, stop the engine, and then remove the key from the main switch.

EWA10312

WARNING

- **Since the engine and exhaust system can become very hot, park in a place where pedestrians or children are not likely to touch them and be burned.**
 - **Do not park on a slope or on soft ground, otherwise the vehicle may overturn, increasing the risk of a fuel leak and fire.**
 - **Do not park near grass or other flammable materials which might catch fire.**
-

Periodic maintenance and adjustment

EAU17246

EWA15123

EAU17303

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

The intervals given in the periodic maintenance charts should be simply considered as a general guide under normal riding conditions. However, depending on the weather, terrain, geographical location, and individual use, the maintenance intervals may need to be shortened.

WARNING

EWA10322

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

WARNING

Turn off the engine when performing maintenance unless otherwise specified.

- **A running engine has moving parts that can catch on body parts or clothing and electrical parts that can cause shocks or fires.**
 - **Running the engine while servicing can lead to eye injury, burns, fire, or carbon monoxide poisoning – possibly leading to death. See page 2-3 for more information about carbon monoxide.**
-

WARNING

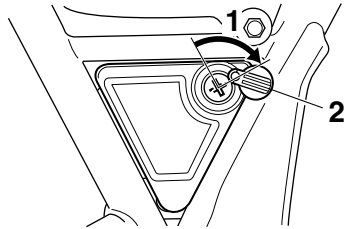
EWA15461

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

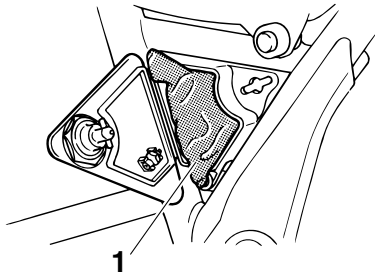
Emission controls not only function to ensure cleaner air, but are also vital to proper engine operation and maximum performance. In the following periodic maintenance charts, the services related to emissions control are grouped separately. These services require specialized data, knowledge, and equipment. Maintenance, replacement, or repair of the emission control devices and systems may be performed by any repair establishment or individual that is certified (if applicable). Yamaha dealers are trained and equipped to perform these particular services.

Tool kit

EAU59371



1. Unlock.
2. Lock cover



1. Tool box

The tool kit is located inside the tool box. To access the tool kit, slide the lock cover open, insert the key into the lock, and then turn it 1/4 turn clockwise.

The information included in this manual and the tools provided in the tool kit are intended to assist you in the performance of preventive maintenance and minor repairs. However, a torque wrench and other tools are necessary to perform certain maintenance work correctly.

TIP _____

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

Periodic maintenance and adjustment

EAU91891

TIP

- The annual checks must be performed every year, except if a kilometer-based maintenance is performed instead.
- For 31000 km or 30 months, repeat the maintenance intervals starting from 7000 km or 6 months.
- Items marked with an asterisk require special tools, data and technical skills, have a Yamaha dealer perform the service.

EAU91902

Periodic maintenance chart for the emission control system

No.	ITEM	ROUTINE	INITIAL	ODOMETER READINGS					ANNUAL CHECK
			1000 km or 1 month	7000 km or 6 months	13000 km or 12 months	19000 km or 18 months	25000 km or 24 months		
1	* Fuel line	<ul style="list-style-type: none"> • Check fuel hoses for cracks or damage. • Replace if necessary. 		√	√	√	√	√	
2	Spark plug	<ul style="list-style-type: none"> • Check condition. • Adjust gap and clean. 		√		√			
		<ul style="list-style-type: none"> • Replace. 	Every 13000 km (8000 mi) or 12 months						
3	* Valves	<ul style="list-style-type: none"> • Check valve clearance. • Adjust. 	√	√	√	√	√		
4	* Crankcase breather system	<ul style="list-style-type: none"> • Check breather hose for cracks or damage. • Replace if necessary. 		√		√			
5	* Fuel injection	<ul style="list-style-type: none"> • Check engine idle speed. 		√	√	√	√	√	

Periodic maintenance and adjustment

No.	ITEM	ROUTINE	INITIAL	ODOMETER READINGS					ANNUAL CHECK
			1000 km or 1 month	7000 km or 6 months	13000 km or 12 months	19000 km or 18 months	25000 km or 24 months		
6	*	Exhaust system	<ul style="list-style-type: none"> • Check for leakage. • Tighten if necessary. • Replace gasket(s) if necessary. 		√	√	√	√	
7	*	Evaporative emission control system	<ul style="list-style-type: none"> • Check control system for damage. • Replace if necessary. 	At 19000 km (12000 mi) and thereafter every 12000 km (8000 mi)					
8	*	Air induction system	<ul style="list-style-type: none"> • Check the air cut-off valve, reed valve, and hose for damage. • Replace any damaged parts if necessary. 	At 19000 km (12000 mi) and thereafter every 12000 km (8000 mi)					

Periodic maintenance and adjustment

EAU92131

General maintenance and lubrication chart

No.	ITEM	ROUTINE	INITIAL	ODOMETER READINGS					ANNUAL CHECK
			1000 km or 1 month	7000 km or 6 months	13000 km or 12 months	19000 km or 18 months	25000 km or 24 months		
1	* Diagnostic system check	<ul style="list-style-type: none"> Perform dynamic inspection using Yamaha diagnostic tool. Check the error codes. 	√	√	√	√	√	√	
2	Air filter element	<ul style="list-style-type: none"> Replace. 	Every 19000 km (12000 mi)						
3	* Clutch	<ul style="list-style-type: none"> Check operation. Adjust or replace cable. 	√	√	√	√	√		
4	* Timing chain	<ul style="list-style-type: none"> Check timing chain tensioner. Adjust if necessary. 	√	√	√	√	√		
5	* Decompression system	<ul style="list-style-type: none"> Check operation. Adjust or replace cable. 	√	√	√	√	√		
6	* Front brake	<ul style="list-style-type: none"> Check operation, fluid level, and for fluid leakage. Replace brake pads if necessary. 	√	√	√	√	√	√	
7	* Rear brake	<ul style="list-style-type: none"> Check operation. Adjust brake pedal free play and replace brake shoes if necessary. 	√	√	√	√	√	√	
8	* Brake hose	<ul style="list-style-type: none"> Check for cracks or damage. Check for correct routing and clamping. 		√	√	√	√	√	
		<ul style="list-style-type: none"> Replace. 	Every 4 years						
9	* Brake fluid	<ul style="list-style-type: none"> Change. 	Every 2 years						
10	* Wheels	<ul style="list-style-type: none"> Check runout, spoke tightness and for damage. Tighten spokes if necessary. 	√	√	√	√	√		

Periodic maintenance and adjustment

No.	ITEM	ROUTINE	INITIAL	ODOMETER READINGS					ANNUAL CHECK
			1000 km or 1 month	7000 km or 6 months	13000 km or 12 months	19000 km or 18 months	25000 km or 24 months		
11	* Tires	<ul style="list-style-type: none"> • Check tread depth and for damage. • Replace if necessary. • Check air pressure. • Correct if necessary. 		√	√	√	√	√	
12	* Wheel bearings	<ul style="list-style-type: none"> • Check bearings for looseness or damage. 		√	√	√	√		
13	* Swingarm	<ul style="list-style-type: none"> • Check operation and for excessive play. 		√	√	√	√		
		<ul style="list-style-type: none"> • Lubricate with lithium-soap-based grease. 	Every 50000 km (30000 mi)						
14	Drive chain	<ul style="list-style-type: none"> • Check chain slack, alignment and condition. • Adjust and lubricate chain with a special O-ring chain lubricant thoroughly. 	Every 500 km (300 mi) and after washing the motorcycle, riding in the rain or riding in wet areas						
15	* Steering bearings	<ul style="list-style-type: none"> • Check bearing assemblies for looseness. 	√	√	√	√	√		
		<ul style="list-style-type: none"> • Moderately repack with lithium-soap-based grease. 	Every 19000 km (12000 mi)						
16	* Chassis fasteners	<ul style="list-style-type: none"> • Make sure that all nuts, bolts and screws are properly tightened. 		√	√	√	√	√	
17	Brake lever pivot shaft	<ul style="list-style-type: none"> • Lubricate with silicone grease. 		√	√	√	√	√	
18	Brake pedal pivot shaft	<ul style="list-style-type: none"> • Lubricate with lithium-soap-based grease. 		√	√	√	√	√	

Periodic maintenance and adjustment

No.	ITEM	ROUTINE	INITIAL	ODOMETER READINGS					ANNUAL CHECK
			1000 km or 1 month	7000 km or 6 months	13000 km or 12 months	19000 km or 18 months	25000 km or 24 months		
19	Clutch lever pivot shaft	<ul style="list-style-type: none"> Lubricate with lithium-soap-based grease. 		√	√	√	√	√	
20	Sidestand, center-stand	<ul style="list-style-type: none"> Check operation. Lubricate with lithium-soap-based grease. 		√	√	√	√	√	
21	* Sidestand switch	<ul style="list-style-type: none"> Check operation. 	√	√	√	√	√	√	
22	* Front fork	<ul style="list-style-type: none"> Check operation and for oil leakage. 		√	√	√	√		
23	* Shock absorber assemblies	<ul style="list-style-type: none"> Check operation and shock absorbers for oil leakage. 		√	√	√	√		
24	Engine oil	<ul style="list-style-type: none"> Change. Check oil level and vehicle for oil leakage. 	√	√	√	√	√	√	
25	Engine oil filter element	<ul style="list-style-type: none"> Replace. 	√		√		√		
26	* Front and rear brake switches	<ul style="list-style-type: none"> Check operation. 	√	√	√	√	√	√	
27	Control cables	<ul style="list-style-type: none"> Apply Yamaha cable lubricant or other suitable cable lubricant thoroughly. 		√	√	√	√	√	
28	* Throttle grip	<ul style="list-style-type: none"> Check operation. Check throttle grip free play, and adjust if necessary. Lubricate cable and grip housing. 		√	√	√	√	√	
29	* Lights, signals and switches	<ul style="list-style-type: none"> Check operation. Adjust headlight beam. 	√	√	√	√	√	√	

TIP

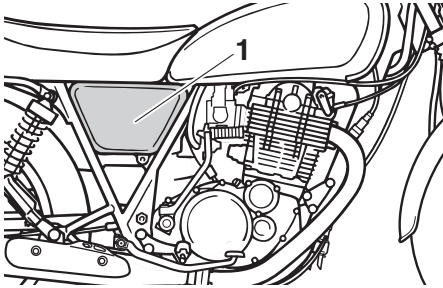
- Air filter
 - This model's air intake system is equipped with a disposable oil-coated paper element. The air filter element cannot be cleaned with compressed air, it must be replaced.
 - The air filter element needs to be replaced more frequently when riding in unusually wet or dusty areas.
 - Hydraulic brake service
 - After disassembling the brake master cylinder and caliper, always change the fluid. Regularly check the brake fluid level and fill the reservoir as required.
 - Every two years replace the internal components of the brake master cylinder and caliper, and change the brake fluid.
 - Replace the brake hose every four years and if cracked or damaged.
-

Periodic maintenance and adjustment

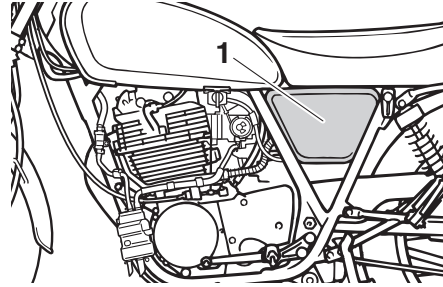
Removing and installing panels

EAU18773

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



1. Panel A



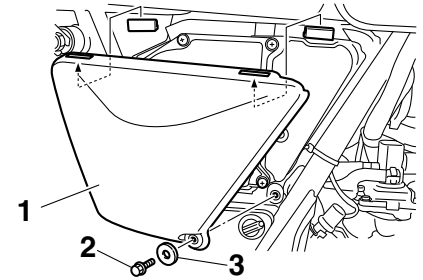
1. Panel B

EAU85681

Panel A

To remove the panel

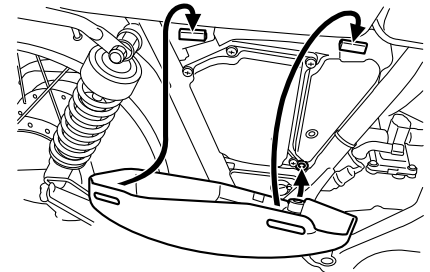
Remove the bolt, and then pull the panel off as shown.



1. Panel A
2. Bolt
3. Washer

To install the panel

Place the panel in the original position, and then install the bolt.



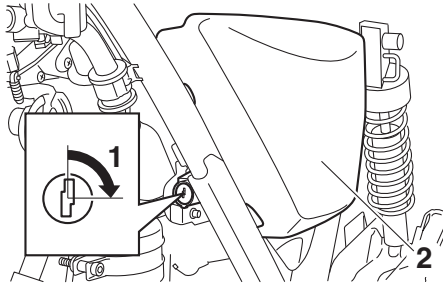
Periodic maintenance and adjustment

EAU19608

Panel B

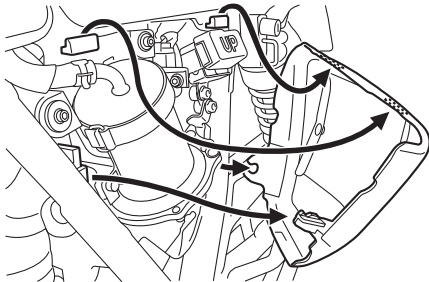
To remove the panel

1. Insert the key into the lock, and then turn it 1/4 turn clockwise.



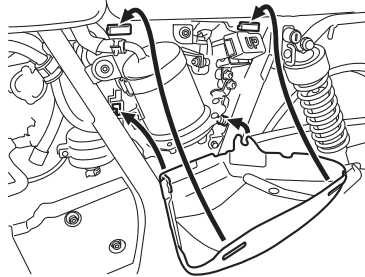
1. Unlock.
2. Panel B

2. Remove the panel as shown.



To install the panel

1. Place the panel in the original position.



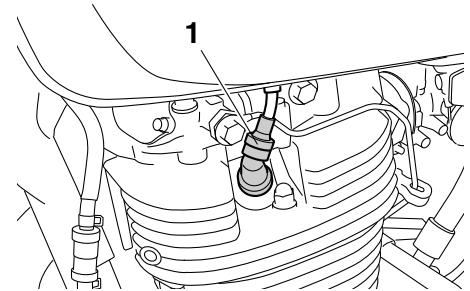
2. Turn the key counterclockwise to the original position, remove it.

Checking the spark plug

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

To remove the spark plug

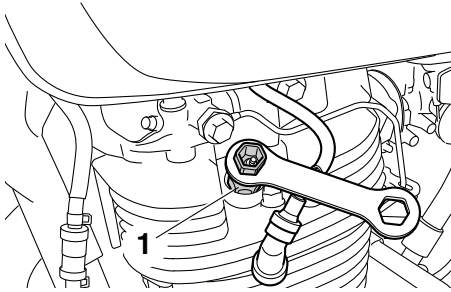
1. Remove the spark plug cap.



1. Spark plug cap

2. Remove the spark plug as shown, with the spark plug wrench included in the tool kit.

Periodic maintenance and adjustment



1. Spark plug wrench

To check the spark plug

1. Check that the porcelain insulator around the center electrode of the spark plug is a medium-to-light tan (the ideal color when the vehicle is ridden normally).

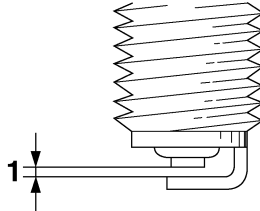
TIP

If the spark plug shows a distinctly different color, the engine could be operating improperly. Do not attempt to diagnose such problems yourself. Instead, have a Yamaha dealer check the vehicle.

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

Specified spark plug:
NGK/BPR6ES

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



1. Spark plug gap

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

To install the spark plug

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

Tightening torque:

Spark plug:
25 N·m (2.5 kgf·m, 18 lb·ft)

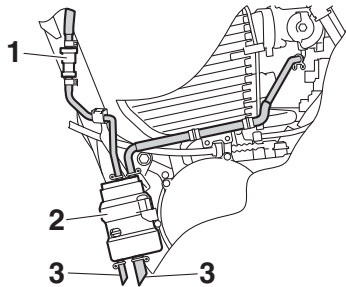
TIP

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

3. Install the spark plug cap.

Canister

EAU36113



1. Rollover valve
2. Canister
3. Canister breather

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

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

Engine oil and oil filter element

EAU59628

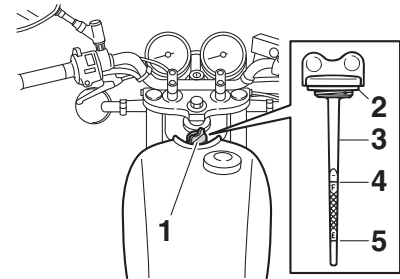
The engine oil level should be checked before each ride. In addition, the oil must be changed and the oil filter element replaced at the intervals specified in the periodic maintenance chart.

To check the engine oil level

1. Start the engine, warm it up for several minutes, and then turn it off.
2. Place the vehicle on its centerstand on a level surface, and then wait a few minutes for the oil level to settle for an accurate reading.
3. Remove the engine oil filler cap, wipe the dipstick clean, insert it back into the oil filler hole (without screwing it in), and then remove it again to check the oil level.

WARNING! Never remove the engine oil filler cap after high-speed operation, otherwise hot engine oil could spout out and cause damage or injury. Always

let the engine oil cool down sufficiently before removing the oil filler cap. [EWA17640]



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

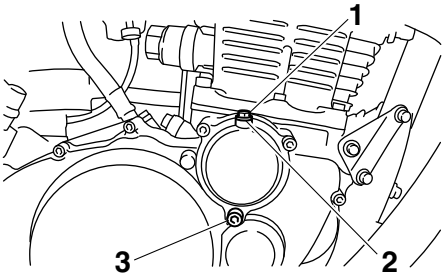
4. If the oil level is below the minimum level mark, add engine oil.
5. Check the engine oil filler cap gasket. Replace if damaged.
6. Install the oil filler cap.

To change the engine oil (and filter element)

1. Start the engine, warm it up for several minutes, and then turn it off.

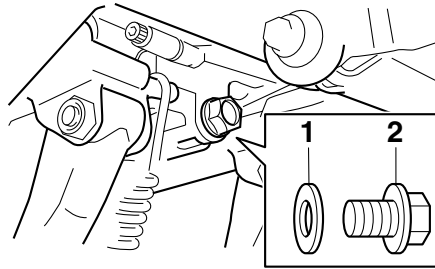
Periodic maintenance and adjustment

2. Place an oil pan under the engine to collect the used oil.
3. Remove the oil filter element cover bleed bolt and gasket, and the oil filter element drain bolt to drain the oil from the oil filter element chamber.



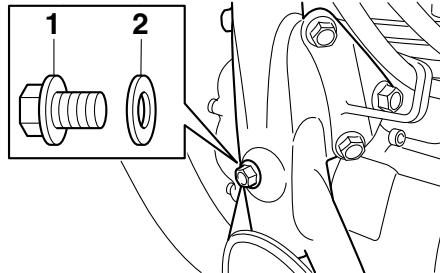
1. Oil filter element cover bleed bolt
2. Gasket
3. Oil filter element drain bolt

4. Remove the engine oil drain bolt and gasket to drain the oil from the crankcase.



1. Gasket
2. Engine oil drain bolt (crankcase)

5. Remove the engine oil filler cap, and the engine oil tank drain bolt and gasket to drain the oil from the oil tank.

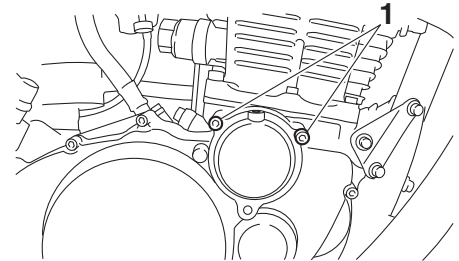


1. Engine oil drain bolt (oil tank)
2. Gasket

TIP

Perform steps 6–8 when replacing the oil filter element.

6. Remove the oil filter element cover by removing the bolts.



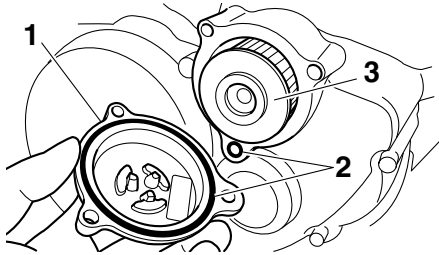
1. Oil filter element cover bolt

7. Remove the used oil filter element and O-rings. Install new O-rings and oil filter element.

TIP

Make sure the new O-rings are properly seated.

Periodic maintenance and adjustment



1. Oil filter element cover
2. O-ring
3. Oil filter element

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

Tightening torque:

Oil filter element cover bolt:
10 N·m (1.0 kgf·m, 7.4 lb·ft)

9. Install the oil filter element drain bolt, and then tighten the bolt to the specified torque.

Tightening torque:

Oil filter element drain bolt:
10 N·m (1.0 kgf·m, 7.4 lb·ft)

10. Install the oil filter element cover bleed bolt and its gasket, and then tighten the bolt to the specified torque.

Tightening torque:

Oil filter element cover bleed bolt:
5 N·m (0.5 kgf·m, 3.7 lb·ft)

11. Install the engine oil drain bolts and their new gasket, and then tighten the bolts to the specified torques.

Tightening torques:

Engine oil drain bolt (crankcase):
30 N·m (3.0 kgf·m, 22 lb·ft)
Engine oil drain bolt (oil tank):
16 N·m (1.6 kgf·m, 12 lb·ft)

12. Add the specified amount of the recommended engine oil, and then install and tighten the oil filler cap.

Recommended engine oil:

See page 9-1.

Oil quantity:

Oil change:

2.00 L (2.11 US qt, 1.76 Imp.qt)

With oil filter removal:

2.10 L (2.22 US qt, 1.85 Imp.qt)

ECA11621

NOTICE

- In order to prevent clutch slip-page (since the engine oil also lubricates the clutch), do not mix any chemical additives. Do not use oils with a diesel specification of "CD" or oils of a higher quality than specified. In addition, do not use oils labeled "ENERGY CONSERVING II" or higher.

- Make sure that no foreign material enters the crankcase.

13. Start the engine, and check for oil leakage and oil pressure.

ECA11233

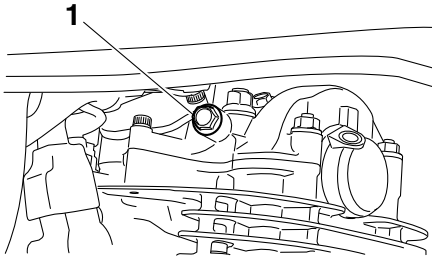
NOTICE

After changing the engine oil, the oil pressure must be checked using the bleed bolt.

Periodic maintenance and adjustment

EAU85450

EAU85690



1. Bleed bolt

Tightening torque:

Bleed bolt:

18 N·m (1.8 kgf·m, 13 lb·ft)

14. Stop the engine, and check the oil level one last time.
15. Wipe off any spilled oil after the engine and exhaust have cooled.

Why Yamalube

YAMALUBE oil is a Genuine YAMAHA Part born of the engineers' passion and belief that engine oil is an important liquid engine component. We form teams of specialists in the fields of mechanical engineering, chemistry, electronics and track testing, and have them develop the engine together with the oil it will use. Yamalube oils take full advantage of the base oil's qualities and blend in the ideal balance of additives to make sure the final oil clears our performance standards. Thus, Yamalube mineral, semisynthetic and synthetic oils have their own distinct characters and value. Yamaha's experience gained over many years of research and development into oil since the 1960's helps make Yamalube the best choice for your Yamaha engine.

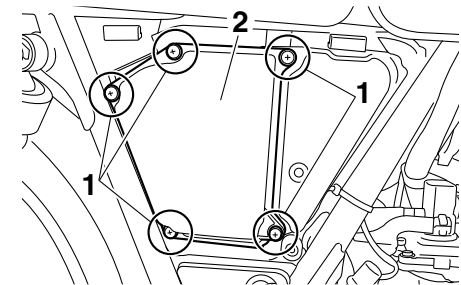


Air filter element

The air filter element should be replaced at the intervals specified in the periodic maintenance chart. Replace the air filter element more frequently if you often ride in wet or dusty conditions.

To replace the air filter element

1. Remove panel A. (See page 7-9.)
2. Remove the air filter case cover by removing the screws.

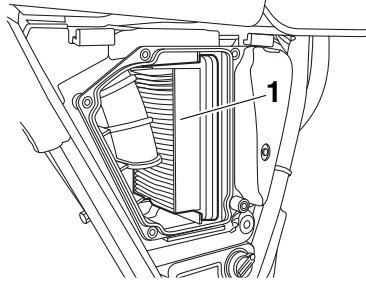


1. Screw

2. Air filter case cover

3. Pull the air filter element out.

Periodic maintenance and adjustment



1. Air filter element

4. Insert a new air filter element into the air filter case. **NOTICE: Make sure that the air filter element is properly seated in the air filter case. The engine should never be operated without the air filter element installed, otherwise the piston(s) and/or cylinder(s) may become excessively worn.**

[ECA10482]

5. Install the air filter case cover by installing the screws.
6. Install the panel.

Checking the engine idling speed

EAU44735

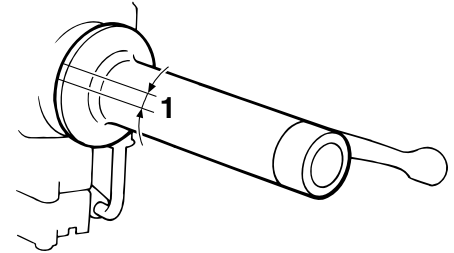
Check the engine idling speed and, if necessary, have it corrected by a Yamaha dealer.

Engine idling speed:
1200–1400 r/min

Checking the throttle grip free play

EAU21386

Measure the throttle grip free play as shown.



1. Throttle grip free play

Throttle grip free play:
3.0–6.0 mm (0.12–0.24 in)

Periodically check the throttle grip free play and, if necessary, have a Yamaha dealer adjust it.

Periodic maintenance and adjustment

EAU21403

Valve clearance

The valves are an important engine component, and since valve clearance changes with use, they must be checked and adjusted at the intervals specified in the periodic maintenance chart. Unadjusted valves can result in improper air-fuel mixture, engine noise, and eventually engine damage. To prevent this from occurring, have your Yamaha dealer check and adjust the valve clearance at regular intervals.

7

TIP

This service must be performed when the engine is cold.

EAU64181

Tires

Tires are the only contact between the vehicle and the road. Safety in all conditions of riding depends on a relatively small area of road contact. Therefore, it is essential to maintain the tires in good condition at all times and replace them at the appropriate time with the specified tires.

Tire air pressure

The tire air pressure should be checked and, if necessary, adjusted before each ride.

EWA10504



WARNING

Operation of this vehicle with improper tire pressure may cause severe injury or death from loss of control.

- The tire air pressure must be checked and adjusted on cold tires (i.e., when the temperature of the tires equals the ambient temperature).
- The tire air pressure must be adjusted in accordance with the riding speed and with the total

weight of rider, passenger, cargo, and accessories approved for this model.

Cold tire air pressure:

Up to 90 kg (198 lb) load:

Front:

175 kPa (1.75 kgf/cm², 25 psi)

Rear:

200 kPa (2.00 kgf/cm², 29 psi)

90 kg (198 lb) to maximum load:

Front:

200 kPa (2.00 kgf/cm², 29 psi)

Rear:

225 kPa (2.25 kgf/cm², 33 psi)

Maximum load:

Vehicle:

150 kg (331 lb)

The vehicle's maximum load is the combined weight of the rider, passenger, cargo, and any accessories.

EWA10512

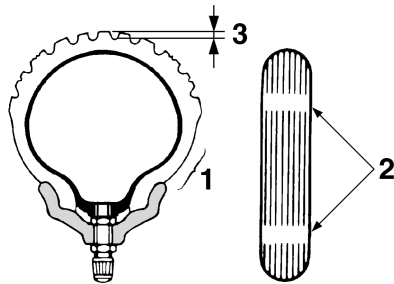


WARNING

Never overload your vehicle. Operation of an overloaded vehicle could cause an accident.

Periodic maintenance and adjustment

Tire inspection



1. Tire sidewall
2. Tire wear indicator
3. Tire tread depth

The tires must be checked before each ride. If the tire shows crosswise lines (minimum tread depth), if the tire has a nail or glass fragments in it, or if the sidewall is cracked, have a Yamaha dealer replace the tire immediately.

Minimum tire tread depth (front and rear):

1.0 mm (0.04 in)

! WARNING

EWA10563

- It is dangerous to ride with a worn-out tire. When a tire tread begins to show crosswise lines, have a Yamaha dealer replace the tire immediately.
- The replacement of all wheel and brake-related parts, including the tires, should be left to a Yamaha dealer, who has the necessary professional knowledge and experience.
- It is not recommended to patch a punctured tube. If unavoidable, however, patch the tube very carefully and replace it as soon as possible with a high-quality product.
- Ride at moderate speeds after changing a tire since the tire surface must first be “broken in” for it to develop its optimal characteristics.

Tire information

This model is equipped with tube tires.

Tires age, even if they have not been used or have only been used occasionally. Cracking of the tread and sidewall rubber, sometimes accompanied by carcass deformation, is an evidence of ageing. Old and aged tires shall be checked by tire specialists to ascertain their suitability for further use.

EWA10462

! WARNING

The front and rear tires should be of the same make and design, otherwise the handling characteristics of the vehicle may be different, which could lead to an accident.

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

Front tire:

Size:

90/100-18M/C 54S

Manufacturer/model:

BRIDGESTONE/BT45F

Rear tire:

Size:

110/90-18M/C 61S

Manufacturer/model:

BRIDGESTONE/BT45R

Periodic maintenance and adjustment

Spoke wheels

To maximize the performance, durability, and safe operation of the vehicle, note the following points.

- Check each wheel for cracks, deformation and other damage. If any damage is found, have the wheel inspected by your Yamaha dealer. Do not attempt to repair or straighten a bent or damaged wheel.
- Check the spokes for looseness. If any loose spokes are found, have the wheel adjusted by your Yamaha dealer. Improperly tightened spokes can cause wheel misalignment.
- Have the wheel balanced whenever the tire or tube has been replaced. An unbalanced wheel can result in adverse handling characteristics and shortened tire life.

EAU21945

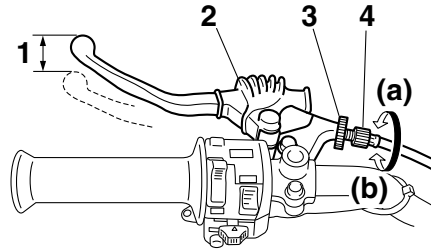
WARNING

The wheels on this model are not designed for use with tubeless tires. Do not attempt to use tubeless tires on this model.

EWA10611

Adjusting the clutch lever free play

EAU48293



1. Clutch lever free play
2. Rubber cover
3. Locknut
4. Clutch lever free play adjusting bolt

Measure the clutch lever free play as shown.

Clutch lever free play:
5.0–10.0 mm (0.20–0.39 in)

Periodically check the clutch lever free play and, if necessary, adjust it as follows.

1. Slide the rubber cover back at the clutch lever.
2. Loosen the locknut.

3. To increase the clutch lever free play, turn the clutch lever free play adjusting bolt in direction (a). To decrease the clutch lever free play, turn the adjusting bolt in direction (b).
4. Tighten the locknut and then slide the rubber cover to its original position.

TIP

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

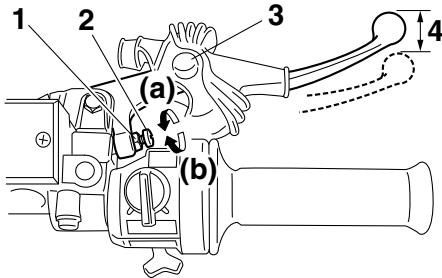
Adjusting the brake lever free play

EAU48444

Measure the brake lever free play as shown.

Brake lever free play:
5.0–8.0 mm (0.20–0.31 in)

Periodically check the brake lever free play and, if necessary, adjust it as follows.



1. Locknut
2. Brake lever free play adjusting screw
3. Rubber cover
4. Brake lever free play

1. Slide the rubber cover back at the brake lever.
2. Loosen the locknut.

3. To increase the brake lever free play, turn the brake lever free play adjusting screw in direction (a). To decrease the brake lever free play, turn the adjusting screw in direction (b).
4. Tighten the locknut, and then slide the rubber cover back to its original position.

! WARNING

EWA10631

- After adjusting the brake lever free play, check the free play and make sure that the brake is working properly.
- A soft or spongy feeling in the brake lever can indicate the presence of air in the hydraulic system. If there is air in the hydraulic system, have a Yamaha dealer bleed the system before operating the motorcycle. Air in the hydraulic system will diminish the braking performance, which may result in loss of control and an accident.

Adjusting the brake pedal height and free play

EAU22199

EWA10671

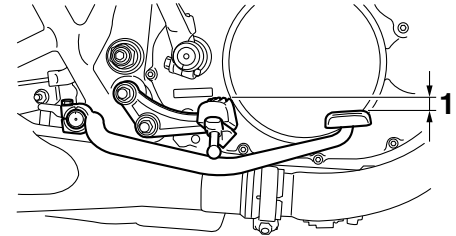
! WARNING

It is advisable to have a Yamaha dealer make these adjustments.

Brake pedal height

The top of the brake pedal should be positioned at the specified distance below the top of the footrest as shown.

Brake pedal height:
20.0 mm (0.79 in)

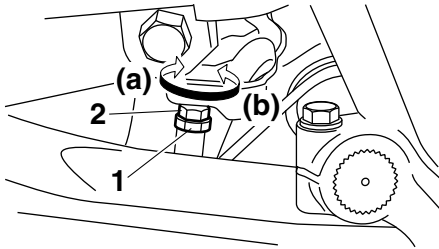


1. Brake pedal height

Periodic maintenance and adjustment

Periodically check the brake pedal height and, if necessary, adjust it as follows.

1. Loosen the brake pedal height locknut.
2. To raise the brake pedal, turn the brake pedal height adjusting bolt in direction (a). To lower the brake pedal, turn the adjusting bolt in direction (b).



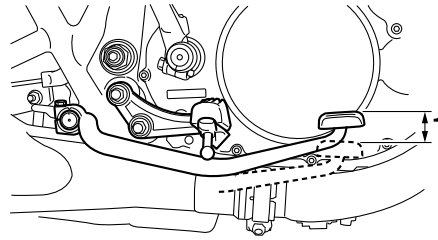
1. Brake pedal height locknut
2. Brake pedal height adjusting bolt
3. Tighten the locknut.

EWA11232

! WARNING

After adjusting the brake pedal height, the brake pedal free play must be adjusted.

Brake pedal free play



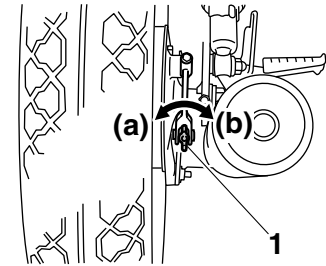
1. Brake pedal free play

Measure the brake pedal free play as shown.

Brake pedal free play:
20.0–30.0 mm (0.79–1.18 in)

Periodically check the brake pedal free play and, if necessary, adjust it as follows.

To increase the brake pedal free play, turn the brake pedal free play adjusting nut at the brake rod in direction (a). To decrease the brake pedal free play, turn the adjusting nut in direction (b).



1. Brake pedal free play adjusting nut

EWA10681

! WARNING

- After adjusting the drive chain slack or removing and installing the rear wheel, always check the brake pedal free play.
- If proper adjustment cannot be obtained as described, have a Yamaha dealer make this adjustment.
- After adjusting the brake pedal free play, check the operation of the brake light.

Checking the shift pedal

EAU44821

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

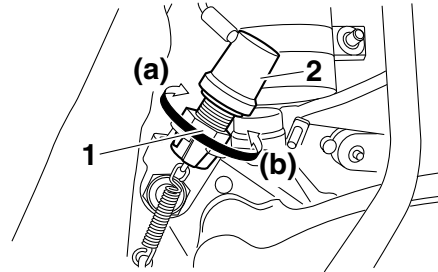
Brake light switches

EAU22275

The brake light is activated by switches connected to the brake lever and brake pedal. Check that the brake light comes on just before braking takes effect. If necessary, adjust the rear brake light switch as follows.

TIP

The front brake light switch should be serviced by a Yamaha dealer.



1. Rear brake light switch adjusting nut
2. Rear brake light switch

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

Periodic maintenance and adjustment

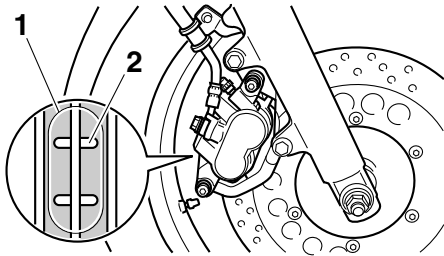
Checking the front brake pads and rear brake shoes

EAU22382

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

Front brake pads

EAU22434



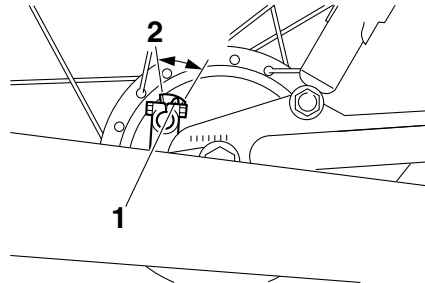
1. Brake pad
2. Brake pad wear indicator groove

Each front brake pad is provided with wear indicator grooves, which allow you to check the brake pad wear without having to disassemble the brake. To check the brake pad wear, check the wear indicator grooves. If a brake pad has worn to the point that the wear

indicator grooves have almost disappeared, have a Yamaha dealer replace the brake pads as a set.

Rear brake shoes

EAU22541



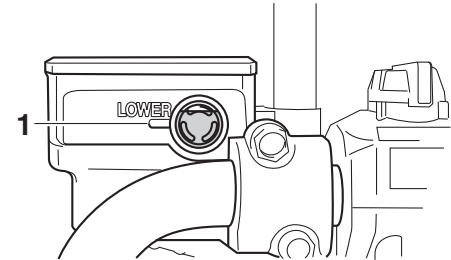
1. Brake shoe wear indicator
2. Brake shoe wear limit line

The rear brake is provided with a wear indicator, which allows you to check the brake shoe wear without having to disassemble the brake. To check the brake shoe wear, check the position of the wear indicator while applying the brake. If a brake shoe has worn to the point that the wear indicator reaches the wear limit line, have a Yamaha dealer replace the brake shoes as a set.

Checking the brake fluid level

EAU77930

Before starting off, confirm that the brake fluid is above the minimum level mark. (Position the handlebars so the brake fluid in the reservoir is level to the ground.) Replenish the brake fluid if necessary.



1. Minimum level mark

Specified brake fluid:
YAMAHA GENUINE BRAKE FLUID
DOT 4

WARNING

EWA18870

Improper maintenance can result in loss of braking ability. Observe these precautions:

Periodic maintenance and adjustment

- **Insufficient brake fluid may allow air to enter the brake system, reducing braking performance.**
- **Do not let water enter the brake fluid reservoir when refilling. Water will significantly lower the boiling point of the fluid and may result in vapor lock.**
- **To prevent contamination, clean the reservoir and filler cap before removing. Use only fresh brake fluid from a sealed container.**
- **Use only the specified brake fluid. Use of a different brake fluid may result in a harmful chemical reaction, may cause the rubber seals to deteriorate or cause internal rusting of the brake system.**

ECA17641

NOTICE

Brake fluid may damage painted surfaces or plastic parts. Always clean up spilled fluid immediately.

As the brake pads wear, it is normal for the brake fluid level to gradually go down. A low brake fluid level may indicate worn brake pads or brake system leakage. Therefore, be sure to check the brake pads for wear and the brake system for leakage. If the brake fluid level goes down suddenly, have a Yamaha dealer check the vehicle before further operation.

Changing the brake fluid

EAU22725

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

- **Brake seals:** Replace every two years.
- **Brake hose:** Replace every four years.

Periodic maintenance and adjustment

Drive chain slack

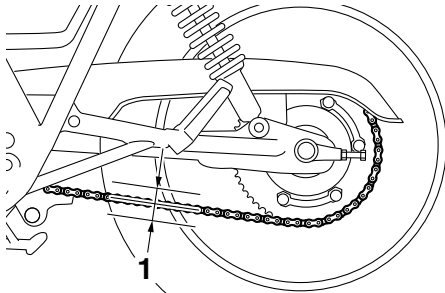
EAU22762

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

To check the drive chain slack

EAU59595

1. Place the motorcycle on the centerstand.
2. Shift the transmission into the neutral position.
3. Push on the drive chain at the center point between the drive axle and the rear wheel axle.
4. Measure the drive chain slack as shown.



1. Drive chain slack

Drive chain slack:

30.0–40.0 mm (1.18–1.57 in)

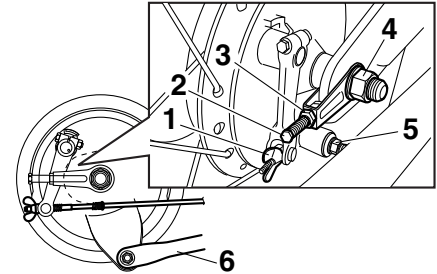
5. If the drive chain slack is incorrect, adjust it as follows. **NOTICE: Improper drive chain slack will overload the engine as well as other vital parts of the motorcycle and can lead to chain slippage or breakage. To prevent this from occurring, keep the drive chain slack within the specified limits.** [ECA10572]

EAU59643

To adjust the drive chain slack

Consult a Yamaha dealer before adjusting the drive chain slack.

1. Take the motorcycle off the centerstand, and then put the side-stand down.
2. Loosen the brake pedal free play adjusting nut, brake torque rod nut, and axle nut.



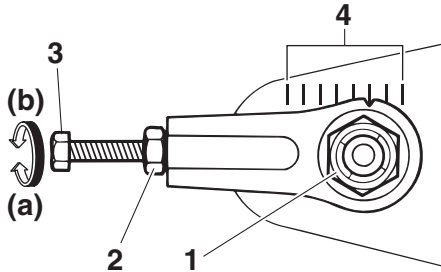
1. Brake pedal free play adjusting nut
2. Drive chain slack adjusting bolt
3. Drive chain puller locknut
4. Axle nut
5. Brake torque rod nut
6. Brake torque rod

3. Loosen the drive chain puller locknut at each end of the swingarm.
4. Place the motorcycle on the centerstand.
5. To tighten the drive chain, turn the drive chain slack adjusting bolt at each end of the swingarm in direction (a). To loosen the drive chain, turn the adjusting bolt at each end of the swingarm in direction (b), and then push the rear wheel forward.

Periodic maintenance and adjustment

TIP

Using the alignment marks on each side of the swingarm, make sure that both drive chain pullers are in the same position for proper wheel alignment.



1. Axle nut
2. Drive chain puller locknut
3. Drive chain slack adjusting bolt
4. Alignment marks

6. Take the motorcycle off the centerstand, and then put the side-stand down.
7. Tighten both drive chain puller locknuts to the specified torque, and then tighten the axle nut and brake torque rod nut to their specified torques.

Tightening torques:

- Drive chain puller locknut:
16 N·m (1.6 kgf·m, 12 lb·ft)
- Axle nut:
130 N·m (13 kgf·m, 96 lb·ft)
- Brake torque rod nut:
19 N·m (1.9 kgf·m, 14 lb·ft)

8. Adjust the brake pedal free play.
(See page 7-20.)

EWA10661

WARNING

After adjusting the brake pedal free play, check the operation of the brake light.

9. Make sure that the drive chain pullers are in the same position, the drive chain slack is correct, and the drive chain moves smoothly.

Cleaning and lubricating the drive chain

EAU23027

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

ECA10584

NOTICE

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

1. Clean the drive chain with a drive chain cleaner and a small soft brush. **NOTICE: To prevent damaging the O-rings, do not clean the drive chain with steam cleaners, high-pressure washers or inappropriate solvents.**
2. Wipe the drive chain dry.
3. Thoroughly lubricate the drive chain with a special O-ring chain lubricant. **NOTICE: Do not use engine oil or any other lubri-**

[ECA11122]

Periodic maintenance and adjustment

cants for the drive chain, as they may contain substances that could damage the O-rings.

[ECA11112]

Checking and lubricating the cables

EAU23098

The operation of all control cables and the condition of the cables should be checked before each ride, and the cables and cable ends should be lubricated if necessary. If a cable is damaged or does not move smoothly, have a Yamaha dealer check or replace it. **WARNING! Damage to the outer housing of cables may result in internal rusting and cause interference with cable movement. Replace damaged cables as soon as possible to prevent unsafe conditions.** [EWA10712]

Recommended lubricant:
Yamaha cable lubricant or other suitable cable lubricant

Checking and lubricating the throttle grip and cable

EAU49921

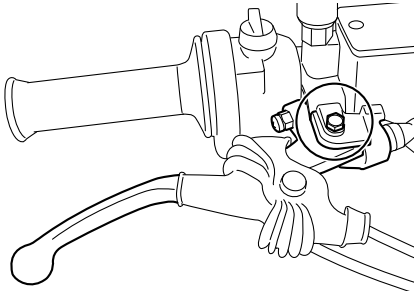
The operation of the throttle grip should be checked before each ride. In addition, the cable should be lubricated by a Yamaha dealer at the intervals specified in the periodic maintenance chart.

Periodic maintenance and adjustment

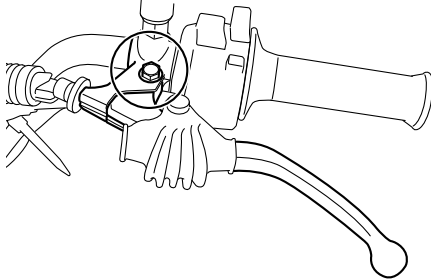
Checking and lubricating the brake and clutch levers EAU23144

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

Brake lever



Clutch lever

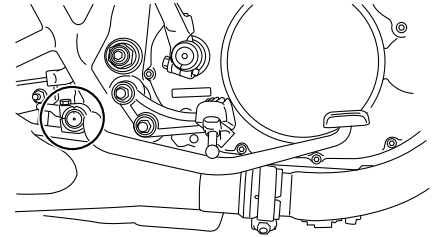


Recommended lubricants:

- Brake lever:
 - Silicone grease
- Clutch lever:
 - Lithium-soap-based grease

Checking and lubricating the brake pedal EAU23185

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

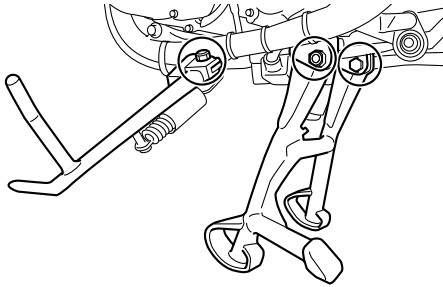


- Recommended lubricant:
 - Lithium-soap-based grease

Periodic maintenance and adjustment

Checking and lubricating the centerstand and sidestand

EAU23215



7

The operation of the centerstand and sidestand should be checked before each ride, and the pivots and metal-to-metal contact surfaces should be lubricated if necessary.

EWA10742

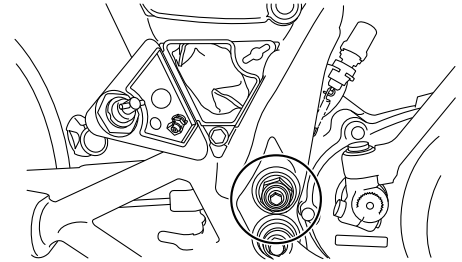
⚠ WARNING

If the centerstand or sidestand does not move up and down smoothly, have a Yamaha dealer check or repair it. Otherwise, the centerstand or sidestand could contact the ground and distract the operator, resulting in a possible loss of control.

Recommended lubricant:
Lithium-soap-based grease

Lubricating the swingarm pivots

EAUM1653



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

Recommended lubricant:
Lithium-soap-based grease

EAU51951

Checking the front fork

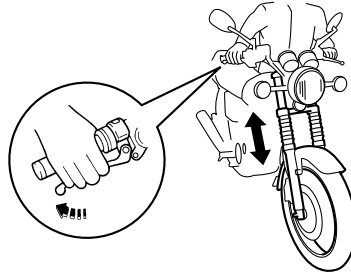
The condition and operation of the front fork must be checked as follows at the intervals specified in the periodic maintenance and lubrication chart.

To check the condition

Check the front fork for damage and excessive oil leakage.

To check the operation

1. Place the vehicle on a level surface and hold it in an upright position. **WARNING! To avoid injury, securely support the vehicle so there is no danger of it falling over.** [EWA10752]
2. While applying the front brake, push down hard on the handlebars several times to check if the front fork compresses and rebounds smoothly.



ECA10591

NOTICE

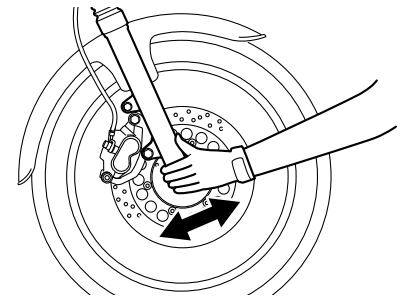
If any damage is found or the front fork does not operate smoothly, have a Yamaha dealer check or repair it.

EAU45512

Checking the steering

Worn or loose steering bearings may cause danger. Therefore, the operation of the steering must be checked as follows at the intervals specified in the periodic maintenance and lubrication chart.

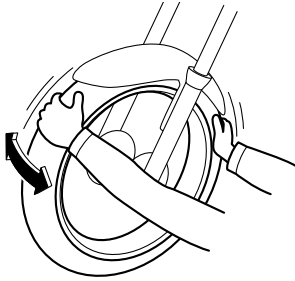
1. Place the vehicle on the centerstand. **WARNING! To avoid injury, securely support the vehicle so there is no danger of it falling over.** [EWA10752]
2. Hold the lower ends of the front fork legs and try to move them forward and backward. If any free play can be felt, have a Yamaha dealer check or repair the steering.



Periodic maintenance and adjustment

Checking the wheel bearings

EAU23292

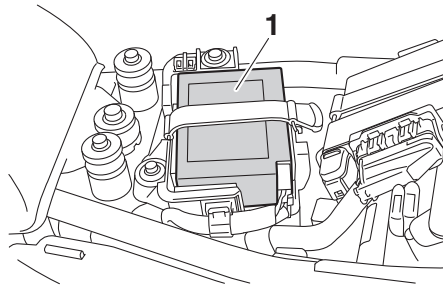


The front and rear wheel bearings must be checked at the intervals specified in the periodic maintenance and lubrication chart. If there is play in the wheel hub or if the wheel does not turn smoothly, have a Yamaha dealer check the wheel bearings.

7

Battery

EAU40447



1. Battery

The battery is located under the seat. (See page 4-11.)

This model is equipped with a VRLA (Valve Regulated Lead Acid) battery. There is no need to check the electrolyte or to add distilled water. However, the battery coupler connection needs to be checked to make sure that it is securely connected.

EWA10761

WARNING

- **Electrolyte is poisonous and dangerous since it contains sulfuric acid, which causes severe burns. Avoid any contact with skin, eyes or clothing and al-**

ways shield your eyes when working near batteries. In case of contact, administer the following **FIRST AID**.

- **EXTERNAL:** Flush with plenty of water.
- **INTERNAL:** Drink large quantities of water or milk and immediately call a physician.
- **EYES:** Flush with water for 15 minutes and seek prompt medical attention.
- **Batteries produce explosive hydrogen gas. Therefore, keep sparks, flames, cigarettes, etc., away from the battery and provide sufficient ventilation when charging it in an enclosed space.**
- **KEEP THIS AND ALL BATTERIES OUT OF THE REACH OF CHILDREN.**

To charge the battery

Have a Yamaha dealer charge the battery as soon as possible if it seems to have discharged. Keep in mind that the

battery tends to discharge more quickly if the vehicle is equipped with optional electrical accessories.

ECA16522

NOTICE

To charge a VRLA (Valve Regulated Lead Acid) battery, a special (constant-voltage) battery charger is required. Using a conventional battery charger will damage the battery.

To store the battery

1. If the vehicle will not be used for more than one month, remove the battery, fully charge it, and then place it in a cool, dry place. **NOTICE: When removing the battery, be sure the key is turned to "OFF" before disconnecting the coupler.** [ECA16323]
2. If the battery will be stored for more than two months, check it at least once a month and fully charge it if necessary.
3. Fully charge the battery before installation. **NOTICE: When installing the battery, be sure the key is turned to "OFF" before connecting the coupler.** [ECA16931]

ECA16531

NOTICE

Always keep the battery charged. Storing a discharged battery can cause permanent battery damage.

EAU85700

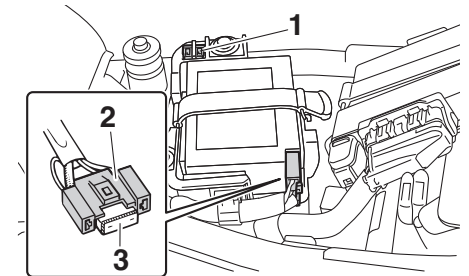
Replacing the fuses

The main fuse is located inside the battery coupler. The fuse box is located behind panel B.

TIP

- Before replacing a fuse, turn off all individual switches and turn off the main switch 4-2.
- After checking and replacing the fuses, if a fuse immediately blows again, have the vehicle inspected by your Yamaha dealer.

Main fuse

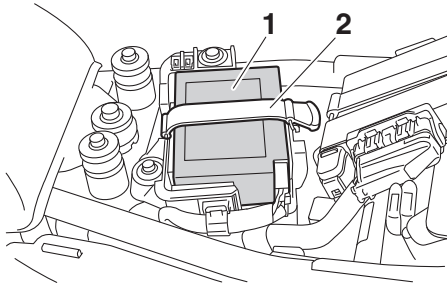


1. Spare main fuse
2. Battery coupler
3. Main fuse

1. Turn the main switch off.

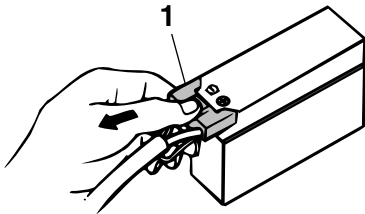
Periodic maintenance and adjustment

2. Remove the seat.
3. Remove the battery band and pull out the battery.



1. Battery
2. Battery band

4. Disconnect the battery coupler.



1. Battery coupler

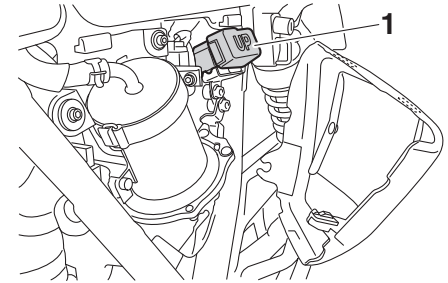
5. If the fuse is blown, replace it with a new fuse of the specified amperage. **WARNING! Do not use a fuse of a higher amperage rating than recommended to avoid causing extensive damage to the electrical system and possibly a fire.** [EWA15132]

Specified amperage:

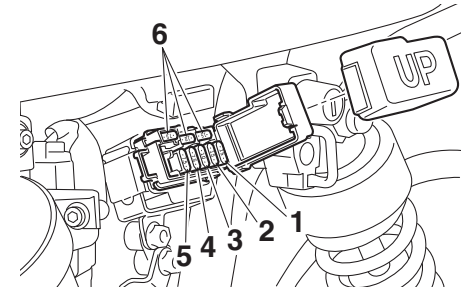
Main fuse:
30.0 A

6. Connect the battery coupler.
7. Install the battery and the battery band.
8. Install the seat.
9. Turn the main switch on and start the engine.

Fuse box



1. Fuse box



1. Headlight fuse
2. Signaling system fuse
3. Ignition fuse
4. Backup fuse
5. Fuel injection system fuse
6. Spare fuse

Periodic maintenance and adjustment

1. Turn off all individual switches and the main switch.
2. Remove panel B.
3. If a fuse is blown, replace it with a new fuse of the specified amperage. **WARNING! Do not use a fuse of a higher amperage rating than recommended to avoid causing extensive damage to the electrical system and possibly a fire.** [EWA15132]

Specified amperage:

Signaling system fuse:

15.0 A

Headlight fuse:

15.0 A

Ignition fuse:

10.0 A

Backup fuse:

7.5 A

Fuel injection system fuse:

7.5 A

4. Turn on the main switch and the switch of the electrical circuit in question.

Replacing the headlight bulb

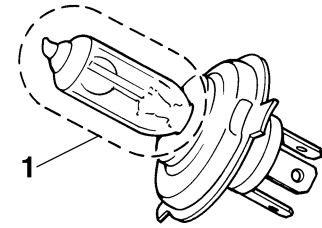
EAU23788

This model is equipped with a halogen bulb headlight. If the headlight bulb burns out, replace it as follows.

ECA26690

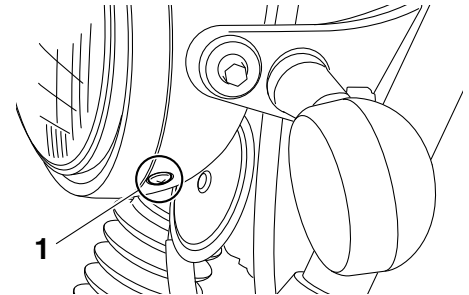
NOTICE

- Do not touch the glass part of the headlight bulb. Otherwise the luminosity and the life of the bulb may be adversely affected.
- Thoroughly clean off any dirt, oil, or fingerprints from the bulb using a cloth moistened with alcohol or thinner.
- Do not use a headlight bulb of a wattage higher than specified.
- Do not affix any type of tinted film or stickers to the headlight lens.



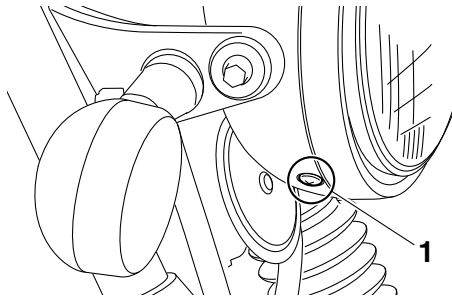
1. Do not touch the glass part of the bulb.

1. Remove the headlight unit by removing the screws.



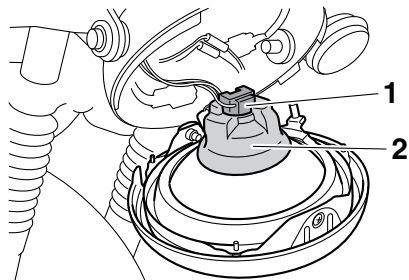
1. Screw

Periodic maintenance and adjustment



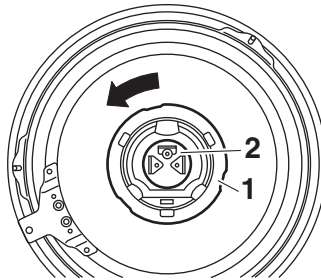
1. Screw

2. Disconnect the headlight coupler, and then remove the headlight bulb cover.



1. Headlight coupler
2. Headlight bulb cover

3. Remove the headlight bulb holder by turning it counterclockwise, and then remove the burnt-out bulb.

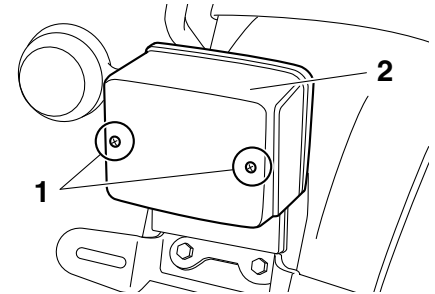


1. Headlight bulb holder
2. Headlight bulb

4. Place a new headlight bulb into position, and then secure it with the bulb holder.
5. Install the headlight bulb cover, and then connect the coupler.
6. Install the headlight unit by installing the screws.
7. Have a Yamaha dealer adjust the headlight beam if necessary.

Replacing the brake/tail light bulb EAU70550

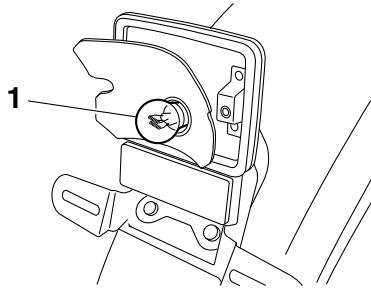
1. Remove the brake/tail light lens by removing the screws.



1. Screw
2. Brake/tail light lens

2. Remove the burnt-out bulb by pushing it in and turning it counterclockwise.

Periodic maintenance and adjustment

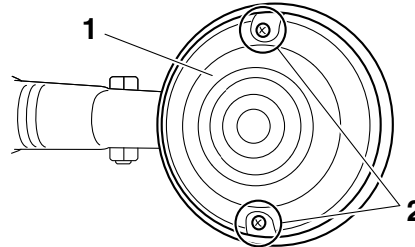


1. Brake/tail light bulb

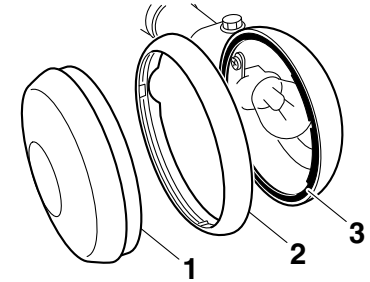
3. Insert a new bulb into the socket, push it in, and then turn it clockwise until it stops.
4. Install the lens by installing the screws. **NOTICE: Do not overtighten the screws, otherwise the lens may break.** [ECA10682]

Replacing a turn signal light bulb EAU60010

1. Remove the turn signal light lens, turn signal light rim and gasket by removing the screws.



1. Turn signal light lens
2. Screw

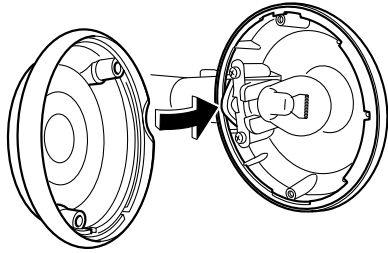


1. Turn signal light lens
2. Turn signal light rim
3. Gasket

2. Remove the burnt-out bulb by pushing it in and turning it counterclockwise.
3. Insert a new bulb into the socket, push it in, and then turn it clockwise until it stops.
4. Install the gasket, rim and lens by installing the screws with the notch on the rim and lens facing to inward as shown. **NOTICE: Do not overtighten the screws, otherwise the lens may break.**

[ECA10682]

Periodic maintenance and adjustment



Front wheel

EAU24361

EAU59603

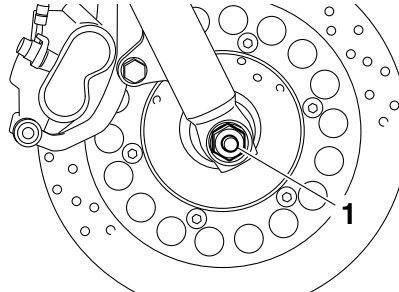
EWA10822

To remove the front wheel



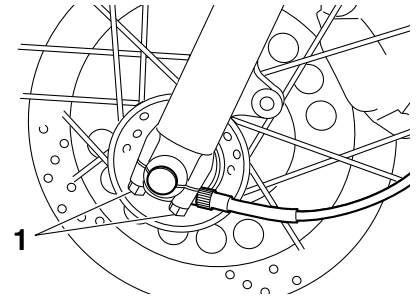
To avoid injury, securely support the vehicle so there is no danger of it falling over.

1. Loosen the wheel axle nut.



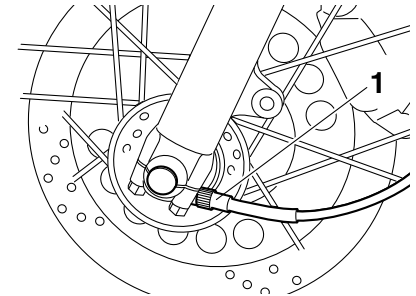
1. Wheel axle nut

2. Loosen the wheel axle holder nuts.



1. Axle holder nut

3. Place the motorcycle on the centerstand.
4. Disconnect the speedometer cable from the speedometer gear unit.



1. Speedometer cable

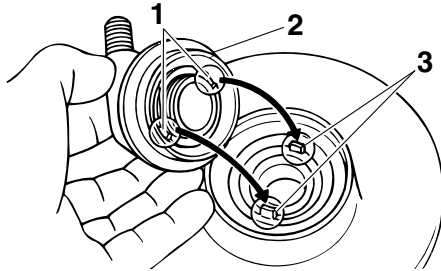
5. Remove the wheel axle nut and the washer.

Periodic maintenance and adjustment

- Pull the wheel axle out, and then remove the collar and wheel.
NOTICE: Do not apply the brake after the wheel and brake disc have been removed, otherwise the brake pads will be forced shut. [ECA11073]

To install the front wheel

- Install the speedometer gear unit into the wheel hub so that the projections mesh with the slots.

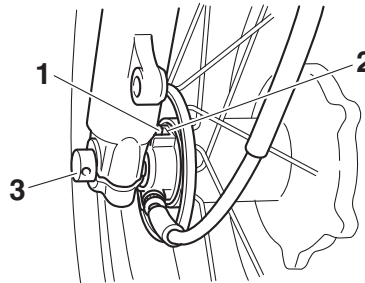


- Slot
- Speedometer gear unit
- Projection

- Install the collar into the right side of the wheel hub.
- Lift the wheel up between the fork legs.

TIP

Make sure that there is enough space between the brake pads before inserting the brake disc and that the slot in the speedometer gear unit fits over the retainer on the fork leg.



- Retainer
- Slot
- Wheel axle

- Insert the wheel axle from the left side, and then install the washer and axle nut.
- Take the motorcycle off the centerstand so that the front wheel is on the ground, and then put the sidestand down.

- Tighten the axle nut and the wheel axle holder nuts to their specified torques.

Tightening torques:

Axle nut:

105 N·m (10.5 kgf·m, 77 lb·ft)

Wheel axle holder nut:

9 N·m (0.9 kgf·m, 6.6 lb·ft)

- While applying the front brake, push down hard on the handlebars several times to check if the front fork compresses and rebounds smoothly.
- Connect the speedometer cable.

Periodic maintenance and adjustment

Rear wheel

EAU25081

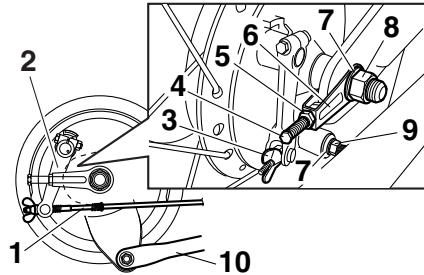
EAU59615

EWA10822

To remove the rear wheel

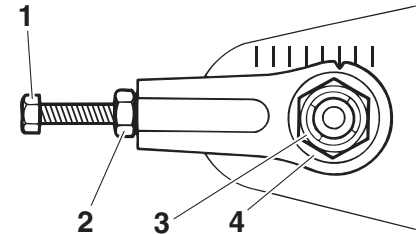
WARNING

To avoid injury, securely support the vehicle so there is no danger of it falling over.

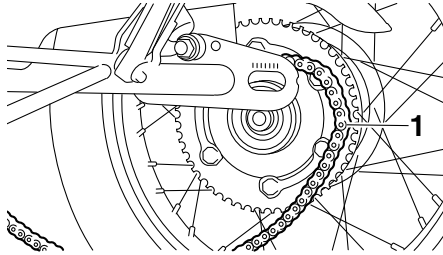


1. Brake rod
2. Brake camshaft lever
3. Brake pedal free play adjusting nut
4. Drive chain slack adjusting bolt
5. Drive chain puller locknut
6. Drive chain puller
7. Washer
8. Axle nut
9. Brake torque rod nut
10. Brake torque rod

3. Place the motorcycle on the centerstand.
4. Remove the brake pedal free play adjusting nut, and then disconnect the brake rod from the brake camshaft lever.
5. Loosen the drive chain puller locknut and the drive chain slack adjusting bolt on both ends of the swingarm.



1. Drive chain slack adjusting bolt
 2. Drive chain puller locknut
 3. Axle nut
 4. Washer
6. Remove the axle nut and washer.
 7. While supporting the rear wheel, pull the wheel axle out.
 8. Remove the chain pullers and the spacer.
 9. Push the wheel forward, and then remove the drive chain from the rear sprocket.



1. Drive chain

TIP

The drive chain does not need to be disassembled in order to remove and install the wheel.

To install the rear wheel

1. Install the spacer into left side of the wheel hub.
2. Install the chain pullers and the wheel by inserting the wheel axle from the left side.
3. Install the drive chain onto the rear sprocket.
4. Install the washer and axle nut.

5. Install the brake rod onto the brake camshaft lever, and then install the brake pedal free play adjusting nut onto the brake rod.
6. Connect the brake torque rod to the brake shoe plate by installing the bolt, washer and nut.
7. Check and adjust the drive chain slack. (See page 7-25.)
8. Check and adjust the brake pedal free play. (See page 7-20.)

EWA10661

WARNING

After adjusting the brake pedal free play, check the operation of the brake light.

Troubleshooting

Although Yamaha motorcycles receive a thorough inspection before shipment from the factory, trouble may occur during operation. Any problem in the fuel, compression, or ignition systems, for example, can cause poor starting and loss of power.

The following troubleshooting chart represents a quick and easy procedure for checking these vital systems yourself. However, should your motorcycle require any repair, take it to a Yamaha dealer, whose skilled technicians have the necessary tools, experience, and know-how to service the motorcycle properly.

Use only genuine Yamaha replacement parts. Imitation parts may look like Yamaha parts, but they are often inferior, have a shorter service life and can lead to expensive repair bills.

EWA15142

WARNING

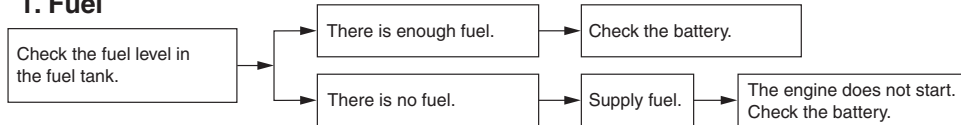
When checking the fuel system, do not smoke, and make sure there are no open flames or sparks in the area, including pilot lights from water

Periodic maintenance and adjustment

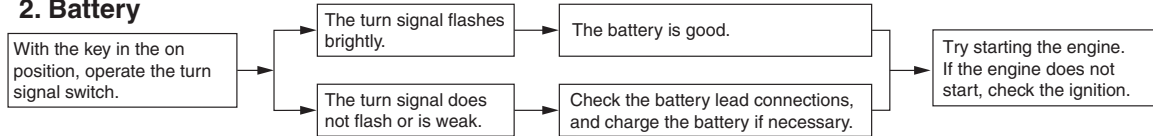
heaters or furnaces. Gasoline or gasoline vapors can ignite or explode, causing severe injury or property damage.

Troubleshooting chart

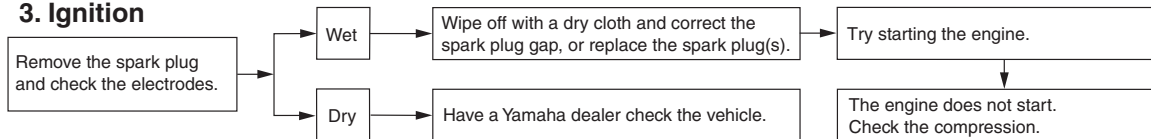
1. Fuel



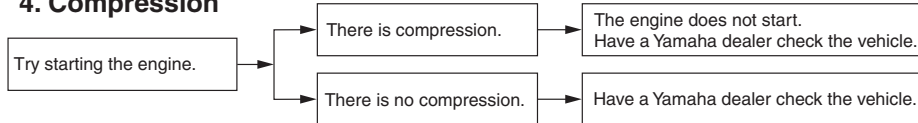
2. Battery



3. Ignition



4. Compression



Motorcycle care and storage

Matte color caution

EAU37834

EAU84990

NOTICE

ECA15193

Some models are equipped with matte colored finished parts. Be sure to consult a Yamaha dealer for advice on what products to use before cleaning the vehicle. Using a brush, harsh chemical products or cleaning compounds when cleaning these parts will scratch or damage their surface. Wax also should not be applied to any matte colored finished parts.

Care

Frequent, thorough cleaning of the vehicle will not only enhance its appearance but also will improve its general performance and extend the useful life of many components. Washing, cleaning, and polishing will also give you a chance to inspect the condition of the vehicle more frequently. Be sure to wash the vehicle after riding in the rain or near the sea, because salt is corrosive to metals.

TIP

- Genuine Yamaha care and maintenance products are sold under the YAMALUBE brand in many markets worldwide.
- See your Yamaha dealer for additional cleaning tips.

ECA26280

NOTICE

Improper cleaning can cause cosmetic and mechanical damage. Do not use:

- high-pressure washers or steam-jet cleaners. Excessive water pressure may cause wa-

ter seepage and deterioration of wheel bearings, brakes, transmission seals and electrical devices. Avoid high-pressure detergent applications such as those available in coin-operated car washers.

- harsh chemicals, including strong acidic wheel cleaners, especially on spoke or magnesium wheels.
 - harsh chemicals, abrasive cleaning compounds, or wax on matte-finished parts. Brushes can scratch and damage the matte-finish, use soft sponge or towel only.
 - towels, sponges, or brushes contaminated with abrasive cleaning products or strong chemicals such as, solvents, gasoline, rust removers, brake fluid, or antifreeze, etc.
-

Before washing

1. Park the vehicle out of direct sunlight and allow it to cool. This will help avoid water spots.

2. Make sure all caps, covers, electrical couplers and connectors are tightly installed.
3. Cover the muffler end with a plastic bag and a strong rubber band.
4. Pre-soak stubborn stains like insects or bird droppings with a wet towel for a few minutes.
5. Remove road grime and oil stains with a quality degreasing agent and a plastic-bristle brush or sponge. **NOTICE: Do not use degreasing agent on areas requiring lubrication such as seals, gaskets, and wheel axles. Follow product instructions.**

[ECA26290]

Washing

1. Rinse off any degreaser and spray down the vehicle with a garden hose. Use only enough pressure to do the job. Avoid spraying water directly into the muffler, instrument panel, air inlet, or other inner areas such as underseat storage compartments.
2. Wash the vehicle with a quality automotive-type detergent mixed with cool water and a soft, clean towel or sponge. Use an old toothbrush or plastic-bristle brush for hard-to-reach places. **NOTICE: Use cold water if the vehicle has been exposed to salt. Warm water will increase salt's corrosive properties.** [ECA26301]
3. For windshield-equipped vehicles: Clean the windshield with a soft towel or sponge dampened with water and a pH neutral detergent. If necessary, use a high-quality windshield cleaner or polish for motorcycles. **NOTICE: Never use any strong chemicals to clean the windshield. Additionally, some cleaning compounds for plastic may scratch the windshield, so be sure to test all cleaning products before general application.** [ECA26310]
4. Rinse off thoroughly with clean water. Be sure to remove all detergent residues, as they can be harmful to plastic parts.

After washing

1. Dry the vehicle with a chamois or absorbent towel, preferably microfiber terrycloth.
2. For drive chain-equipped models: Dry and then lubricate the drive chain to prevent rust.
3. Use a chrome polish to shine chrome, aluminum, and stainless steel parts. Often the thermally induced discoloring of stainless steel exhaust systems can be removed through polishing.
4. Apply a corrosion protection spray on all metal parts including chrome or nickel-plated surfaces. **WARNING! Do not apply silicone or oil spray to seats, hand grips, rubber foot pegs or tire treads. Otherwise these parts will become slippery, which could cause loss of control. Thoroughly clean the surfaces of these parts before operating the vehicle.** [EWA20650]
5. Treat rubber, vinyl, and unpainted plastic parts with a suitable care product.

Motorcycle care and storage

6. Touch up minor paint damage caused by stones, etc.
7. Wax all painted surfaces using a non-abrasive wax or use a detail spray for motorcycles.
8. When finished cleaning, start the engine and let it idle for several minutes to help dry any remaining moisture.
9. If the headlight lens has fogged up, start the engine and turn on the headlight to help remove the moisture.
10. Let the vehicle dry completely before storing or covering it.

ECA26320

NOTICE

- Do not apply wax to rubber or unpainted plastic parts.
- Do not use abrasive polishing compounds as they will wear away the paint.
- Apply sprays and wax sparingly. Wipe off excess afterwards.

EWA20660

WARNING

Contaminants left on the brakes or tires can cause loss of control.

- **Make sure there is no lubricant or wax on the brakes or tires.**
- **If necessary, wash the tires with warm water and a mild detergent.**
- **If necessary, clean the brake discs and pads with brake cleaner or acetone.**
- **Before riding at higher speeds, test the vehicle's braking performance and cornering behavior.**

EAU83472

Storage

Always store the vehicle in a cool, dry place. If necessary, protect it against dust with a porous cover. Be sure the engine and the exhaust system are cool before covering the vehicle. If the vehicle often sits for weeks at a time between uses, the use of a quality fuel stabilizer is recommended after each fill-up.

ECA21170

NOTICE

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

Long term storage

Before storing the vehicle long term (60 days or more):

1. Make all necessary repairs and perform any outstanding maintenance.
2. Follow all instructions in the Care section of this chapter.
3. Fill up the fuel tank, adding fuel stabilizer according to product instructions. Run the engine for 5 minutes to distribute treated fuel through the fuel system.
4. For vehicles equipped with a fuel cock: Turn the fuel cock lever to the off position.
5. For vehicles with a carburetor: To prevent fuel deposits from building up, drain the fuel in the carburetor float chamber into a clean container. Retighten the drain bolt and pour the fuel back into the fuel tank.
6. Use a quality engine fogging oil according to product instructions to protect internal engine components from corrosion. If engine fogging oil is not available, perform the following steps for each cylinder:
 - a. Remove the spark plug cap and spark plug.
 - b. Pour a teaspoonful of engine oil into the spark plug bore.
 - c. Install the spark plug cap onto the spark plug, and then place the spark plug on the cylinder head so that the electrodes are grounded. (This will limit sparking during the next step.)
 - d. Turn the engine over several times with the starter. (This will coat the cylinder wall with oil.)
WARNING! To prevent damage or injury from sparking, make sure to ground the spark plug electrodes while turning the engine over.
[EWA10952]
 - e. Remove the spark plug cap from the spark plug, and then install the spark plug and the spark plug cap.
7. Lubricate all control cables, pivots, levers and pedals, as well as the sidestand and centerstand (if equipped).
8. Check and correct the tire air pressure, and then lift the vehicle so that all wheels are off the ground. Otherwise, turn the wheels a little once a month in order to prevent the tires from becoming degraded in one spot.
9. Cover the muffler outlet with a plastic bag to prevent moisture from entering it.
10. Remove the battery and fully charge it, or attach a maintenance charger to keep the battery optimally charged. **NOTICE: Confirm that the battery and its charger are compatible. Do not charge a VRLA battery with a conventional charger.** [ECA26330]

TIP

- If the battery will be removed, charge it once a month and store it in a temperate location between 0-30 °C (32-90 °F).
- See page 7-31 for more information on charging and storing the battery.

Specifications

Dimensions:

- Overall length:
2085 mm (82.1 in)
- Overall width:
750 mm (29.5 in)
- Overall height:
1100 mm (43.3 in)
- Seat height:
790 mm (31.1 in)
- Wheelbase:
1410 mm (55.5 in)
- Ground clearance:
130 mm (5.12 in)
- Minimum turning radius:
2.4 m (7.87 ft)

Weight:

- Curb weight:
175 kg (386 lb)

Engine:

- Combustion cycle:
4-stroke
- Cooling system:
Air cooled
- Valve train:
SOHC
- Number of cylinders:
Single cylinder
- Displacement:
399 cm³
- Bore × stroke:
87.0 × 67.2 mm (3.43 × 2.65 in)
- Starting system:
Kickstarter

Engine oil:

Recommended brand:



SAE viscosity grades:
10W-40

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

Engine oil quantity:
Oil change:
2.00 L (2.11 US qt, 1.76 Imp.qt)
With oil filter removal:
2.10 L (2.22 US qt, 1.85 Imp.qt)

Fuel:

Recommended fuel:
Unleaded gasoline (E10 acceptable)
Octane number (RON):
90
Fuel tank capacity:
12 L (3.2 US gal, 2.6 Imp.gal)
Fuel reserve amount:
2.2 L (0.58 US gal, 0.48 Imp.gal)

Fuel injection:

Throttle body:
ID mark:
B9F1

Drivetrain:

Gear ratio:
1st:
2.357 (33/14)

2nd:
1.556 (28/18)
3rd:
1.190 (25/21)
4th:
0.917 (22/24)
5th:
0.778 (21/27)

Front tire:

Type:
With tube
Size:
90/100-18M/C 54S
Manufacturer/model:
BRIDGESTONE/BT45F

Rear tire:

Type:
With tube
Size:
110/90-18M/C 61S
Manufacturer/model:
BRIDGESTONE/BT45R

Loading:

Maximum load:
150 kg (331 lb)
(Total weight of rider, passenger, cargo and
accessories)

Front brake:

Type:
Hydraulic single disc brake

Rear brake:

Type:
Mechanical leading trailing drum brake

Front suspension:

Type:
Telescopic fork

Rear suspension:

Type:
Swingarm

Electrical system:

System voltage:
12 V

Battery:

Model:
GT4B-5
Voltage, capacity:
12 V, 2.5 Ah (10 HR)

Headlight:

Bulb type:
Halogen bulb

Bulb wattage:

Headlight:
H4, 60.0 W/55.0 W
Brake/tail light:
21.0 W/5.0 W
Front turn signal light:
21.0 W
Rear turn signal light:
21.0 W

Consumer information

EAU53562

Identification numbers

Record the vehicle identification number, engine serial number, and the model label information in the spaces provided below. These identification numbers are needed when registering the vehicle with the authorities in your area and when ordering spare parts from a Yamaha dealer.

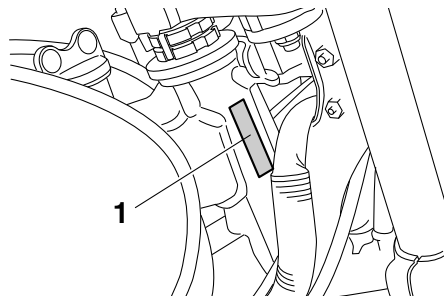
VEHICLE IDENTIFICATION NUMBER:

ENGINE SERIAL NUMBER:

MODEL LABEL INFORMATION:

Vehicle identification number

EAU26401



1. Vehicle identification number

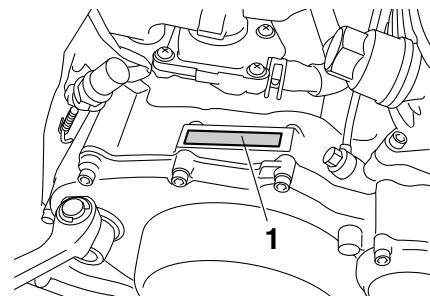
The vehicle identification number is stamped into the steering head pipe. Record this number in the space provided.

TIP

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

Engine serial number

EAU26442

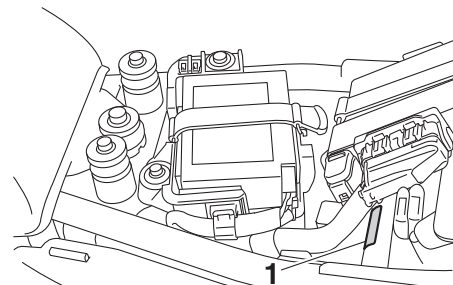


1. Engine serial number

The engine serial number is stamped into the crankcase.

Model label

EAU26481

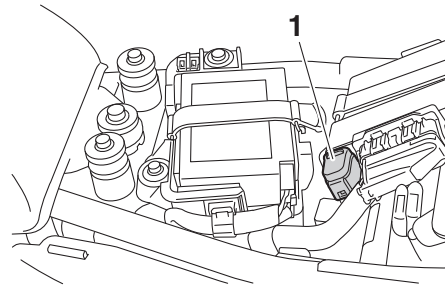


1. Model label

The model label is affixed to the frame under the seat. (See page 4-11.) Record the information on this label in the space provided. This information will be needed when ordering spare parts from a Yamaha dealer.

Diagnostic connector

EAU69910



1. Diagnostic connector

The diagnostic connector is located as shown.

Vehicle data recording

EAU85400

This model's ECU stores certain vehicle data to assist in the diagnosis of malfunctions and for research, statistical analysis and development purposes.

Although the sensors and recorded data will vary by model, the main data points are:

- Vehicle status and engine performance data
- Fuel-injection and emission-related data

This data will be uploaded only when a special Yamaha diagnostic tool is attached to the vehicle, such as when maintenance checks or service procedures are performed.

Yamaha will not disclose this data to a third party except in the following cases. In addition, Yamaha may provide vehicle data to a contractor in order to outsource services related to the handling of vehicle data. Even in this case, Yamaha will require the contractor to

Consumer information

properly handle the vehicle data we provided and Yamaha will appropriately manage the data.

- With the consent of the vehicle owner
- Where obligated by law
- For use by Yamaha in litigation
- When the data is not related to an individual vehicle nor owner

- A**
 Air filter element..... 7-15
- B**
 Battery 7-31
 Brake and clutch levers, checking and lubricating..... 7-28
 Brake fluid, changing..... 7-24
 Brake fluid level, checking..... 7-23
 Brake lever..... 4-7
 Brake lever free play, adjusting 7-20
 Brake light switches 7-22
 Brake pads and shoes, checking 7-23
 Brake pedal 4-7
 Brake pedal, checking and lubricating..... 7-28
 Brake pedal height and free play, adjusting..... 7-20
 Brake/tail light bulb, replacing..... 7-35
- C**
 Cables, checking and lubricating 7-27
 Canister 7-12
 Care 8-1
 Catalytic converter 4-10
 Centerstand and sidestand, checking and lubricating 7-29
 Clutch lever..... 4-6
 Clutch lever free play, adjusting 7-19
- D**
 Data recording, vehicle..... 10-2
 Decompression lever..... 4-11
 Diagnostic connector 10-2
 Dimmer switch..... 4-5
 Drive chain, cleaning and lubricating ... 7-26
 Drive chain slack 7-25
- E**
 Engine break-in 6-1
 Engine idling speed, checking 7-16
 Engine oil and oil filter element 7-12
 Engine serial number 10-1
 Engine stop switch..... 4-6
 Engine trouble warning light 4-3
- F**
 Front fork, checking 7-30
 Fuel 4-8
 Fuel cock..... 4-10
 Fuel consumption, tips for reducing 6-5
 Fuel level warning light..... 4-3
 Fuel tank cap..... 4-8
 Fuses, replacing..... 7-32
- H**
 Handlebar switches 4-5
 Hazard lights switch..... 4-6
 Headlight bulb, replacing 7-34
 Helmet holder..... 4-12
 Helmets 2-5
 High beam indicator light 4-3
 Horn switch 4-6
- I**
 Identification numbers 10-1
 Ignition circuit cut-off system 4-14
 Immobilizer system 4-1
 Immobilizer system indicator light 4-4
 Indicator lights and warning lights 4-3
- K**
 Kickstarter..... 4-11
- L**
 Labels, location 1-1
 Luggage strap holders..... 4-13
- M**
 Main switch/steering lock..... 4-2
 Maintenance and lubrication, periodic ... 7-5
 Maintenance, emission control system 7-3
 Matte color, caution..... 8-1
 Model label 10-1
- N**
 Neutral indicator light 4-3
- P**
 Panels, removing and installing 7-9
 Parking..... 6-5
 Part locations..... 3-1
 Pass switch..... 4-5
- S**
 Safety information..... 2-1
 Seat..... 4-11
 Shifting..... 6-3
 Shift pedal..... 4-7
 Shift pedal, checking 7-22
 Shock absorber assemblies, adjusting 4-12
 Sidestand..... 4-13
 Spark plug, checking 7-10
 Specifications 9-1
 Speedometer unit 4-4
 Starting the engine 6-2
 Starting the engine, trouble 6-2
 Steering, checking 7-30
 Storage 8-3
 Swingarm pivots, lubricating 7-29
- T**
 Tachometer..... 4-5

Index

Throttle grip and cable, checking and lubricating.....	7-27
Throttle grip free play, checking	7-16
Tires	7-17
Tool kit	7-2
Troubleshooting.....	7-40
Troubleshooting chart.....	7-42
Turn signal indicator light	4-3
Turn signal light bulb, replacing.....	7-36
Turn signal switch.....	4-6

V

Valve clearance.....	7-17
Vehicle identification number	10-1

W

Wheel bearings, checking.....	7-31
Wheel (front).....	7-37
Wheel (rear).....	7-39
Wheels	7-19

Y

Yamalube.....	7-15
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