YAMAHA

⚠ Read this manual carefully before operating this vehicle.

OWNER'S MANUAL

CRUX REV

YD110-1

BY1-F8199-E0

EAU46091

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

EAU10103

Welcome to the Yamaha world of motorcycling!
As the owner of the YD110-1, 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 YD110-1. 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.

EWA10032

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

*Product and specifications are subject to change without notice.

EAUE0011

YD110-1
OWNER'S MANUAL

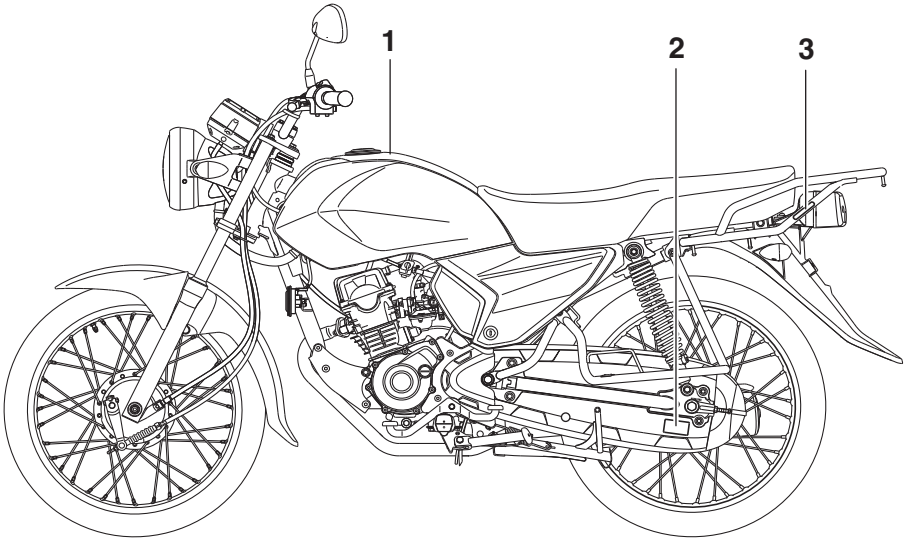
Table of contents

Location of important labels

EAU10385

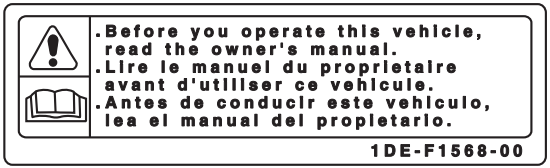
1

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.

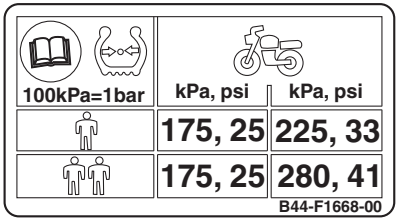


ZAUE2543

1



2



3

ZAUE2544

EAU1028B

2

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 appears 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.

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:
155 kg (342 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

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. Refer to page 7-16 for tire specifications and more information on replacing your tires.

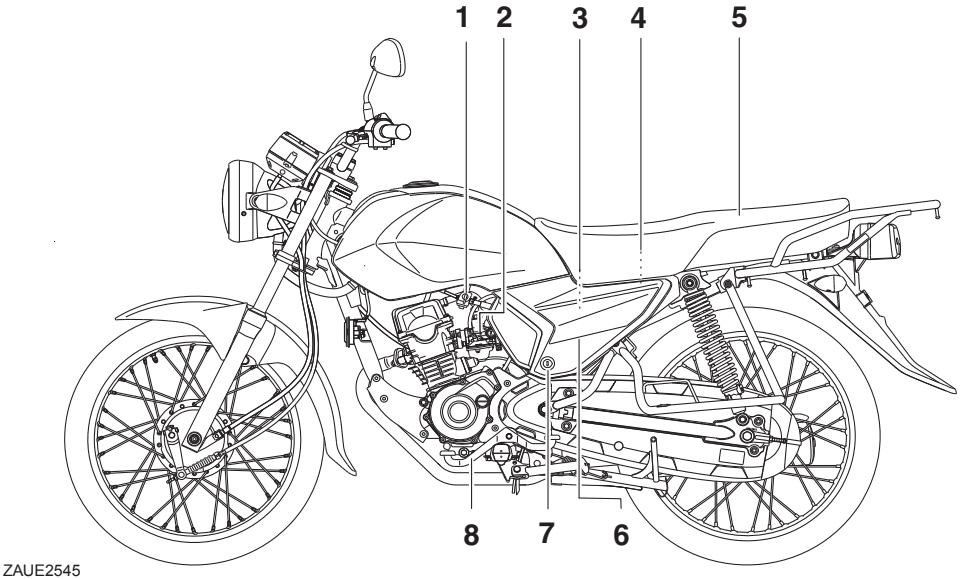
Transporting the Motorcycle

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.
- Point the front wheel straight ahead on the trailer or in the truck bed, and choke it in a rail to prevent movement.
- Shift the transmission in gear (for models with a manual transmission).
- Secure the motorcycle with tiedowns 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 tiedowns, if possible, so that the motorcycle will not bounce excessively during transport.

EAU10411

Left view

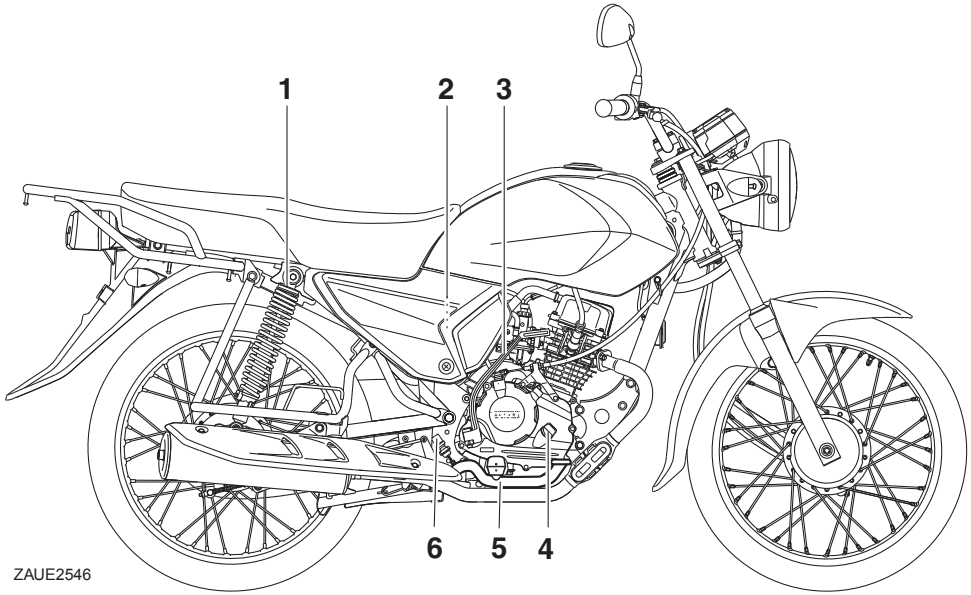


ZAUE2545

1. Fuel cock (page 4-6)
2. Starter (choke) lever (page 4-7)
3. Battery (page 7-28)
4. Fuse (page 7-30)
5. Seat (page 4-8)
6. Owner's tool kit (page 7-1)
7. Panel lock
8. Shift pedal (page 4-3)

EAU10421

Right view

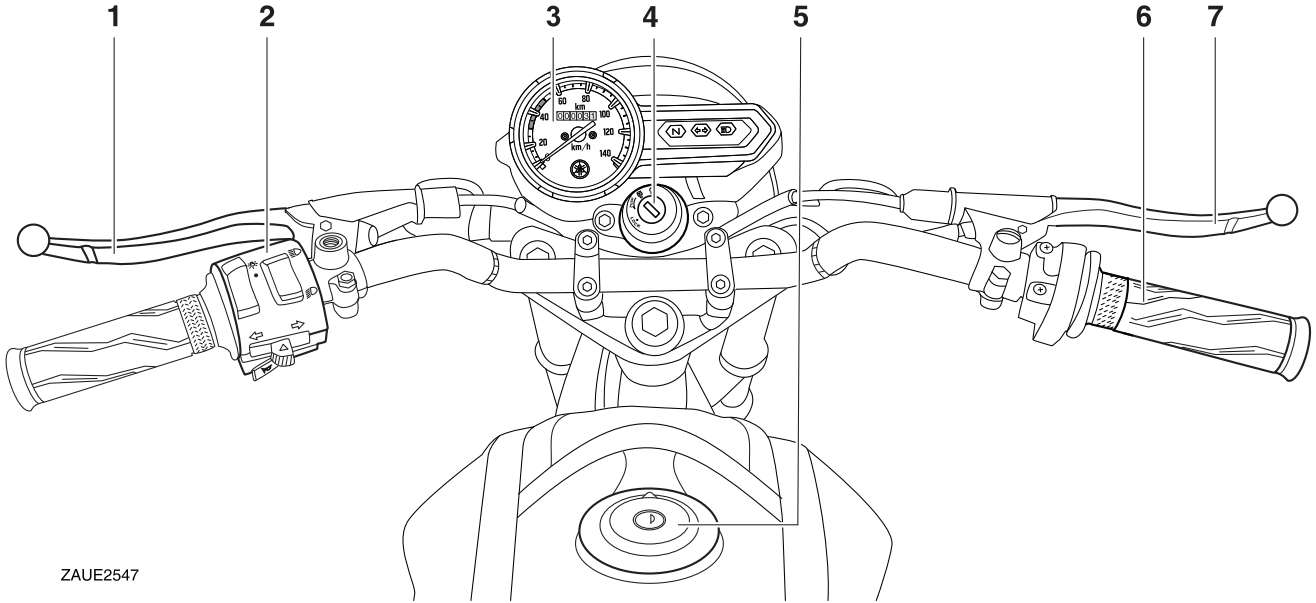


ZAUE2546

1. Rear shock absorber (page 4-9)
2. Air filter (page 7-12)
3. Kickstarter (page 4-7)
4. Engine oil filler cap (page 7-10)
5. Brake pedal (page 4-4)
6. Rear brake light switch (page 7-20)

EAU10431

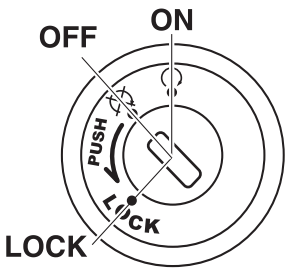
Controls and instruments



1. Clutch lever (page 4-3)
2. Left handlebar switches (page 4-2)
3. Speedometer (page 4-2)
4. Main switch/steering lock (page 4-1)
5. Fuel tank cap (page 4-4)
6. Throttle grip (page 7-15)
7. Brake lever (page 4-4)

EAU10462

Main switch/steering lock



ZAUE2548

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

EAUE0021

ON

All electrical systems are supplied with power, the meter lighting comes on and the engine can be started. The key cannot be removed.

EAU10662

OFF

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

EWA10062

⚠ WARNING

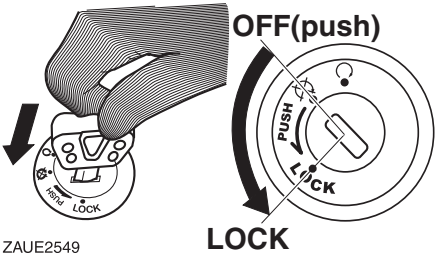
Never turn the key to "OFF" or "LOCK" while the vehicle is moving. Otherwise the electrical systems will be switched off, which may result in loss of control or an accident.

EAU10696

LOCK

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

To lock the steering



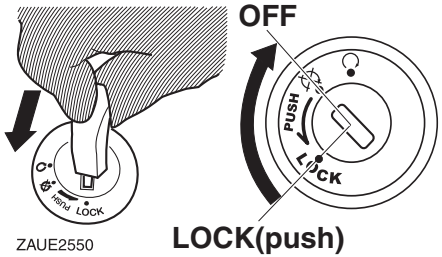
ZAUE2549

1. Turn the handlebars all the way to the left or right.
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 or left slightly.

To unlock the steering

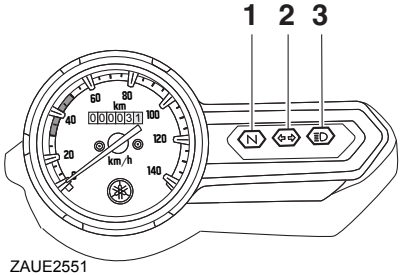


ZAUE2550

From the "LOCK" position, push the key and turn it to "OFF".

EAU10982

Indicator lights



ZAUE2551

1. Neutral indicator light "N"
2. Turn signal indicator light "⇦ ⇨"
3. High beam indicator light "≣D"

EAU11022

Turn signal indicator light "⇦ ⇨"

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

EAU11061

Neutral indicator light "N"

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

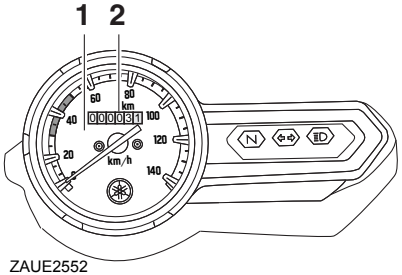
EAU11081

High beam indicator light "≣D"

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

EAUT1822

Speedometer unit



ZAUE2552

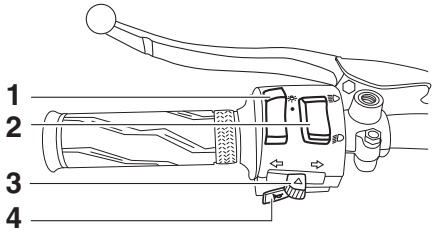
1. Speedometer
2. Odometer

The speedometer unit is equipped with a speedometer and an odometer. The speedometer shows the riding speed. The odometer shows the total distance traveled.

EAU1234K

Handlebar switches

Left



ZAUE2553

1. Light switch "☼/●"
2. Dimmer switch "≣D/≣D"
3. Turn signal switch "⇦/⇨"
4. Horn switch "📯"

EAU12401

Dimmer switch "≣D/≣D"

Set this switch to "≣D" for the high beam and to "≣D" for the low beam.

EAU12461

Turn signal switch "⇦/⇨"

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 cen-

ter position. To cancel the turn signal lights, push the switch in after it has returned to the center position.

EAU12501

Horn switch "🔊"

Press this switch to sound the horn.

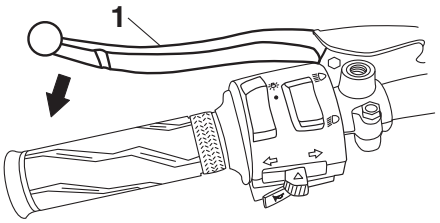
EAUE3090

Light switch "☼/●"

Set the switch to "☼" to turn on the headlight and taillight. Set the switch to "●" to turn off all the lights.

EAU12852

Clutch lever



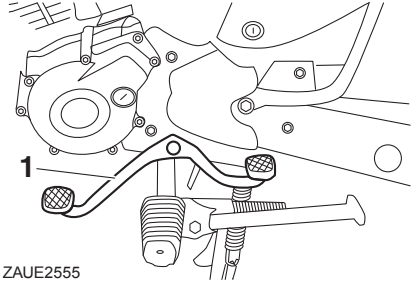
ZAUE2554

1. Clutch lever

The clutch lever is located on the left side of the handlebar. To disengage the clutch, pull the lever toward the handlebar grip. To engage the clutch, release the lever. The lever should be pulled rapidly and released slowly for smooth clutch operation.

EAU12872

Shift pedal



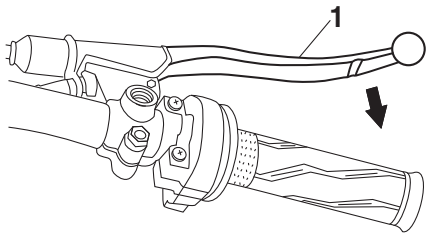
ZAUE2555

1. Shift pedal

The shift pedal is located on the left side of the motorcycle and is used in combination with the clutch lever when shifting the gears of the 4-speed constant-mesh transmission equipped on this motorcycle.

EAU12892

Brake lever



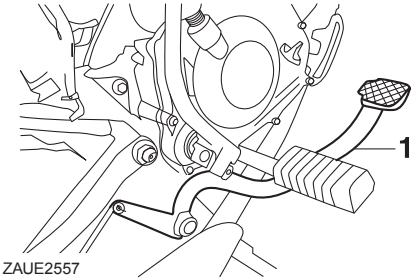
ZAUE2556

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.

EAU12944

Brake pedal



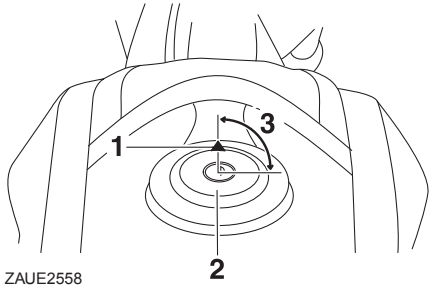
ZAUE2557

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.

EAUE0041

Fuel tank cap



ZAUE2558

1. Arrow mark
2. Fuel tank cap
3. Open.

To remove the fuel tank cap

Insert the key into the lock and 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. Push the fuel tank cap into position with the key inserted in the lock.

TIP

The mark on the fuel tank cap must be pointing forward.

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

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.

EWA11142

⚠ WARNING

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

EAU13213

Fuel

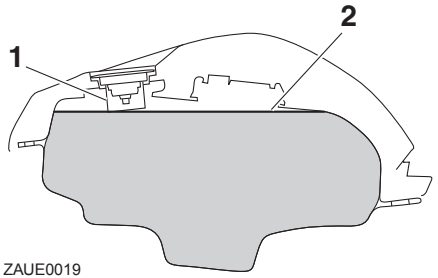
Make sure there is sufficient gasoline in the tank.

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. 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.



ZAUE0019

1. Fuel tank filler tube
2. Maximum fuel level

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.

EAU13245

Recommended fuel:
Regular unleaded gasoline (Gasohol [E10] acceptable)
Fuel tank capacity:
7.2 L (1.9 US gal, 1.6 Imp.gal)
Fuel reserve amount:
1.0 L (0.26 US gal, 0.22 Imp.gal)

ECA11401

NOTICE

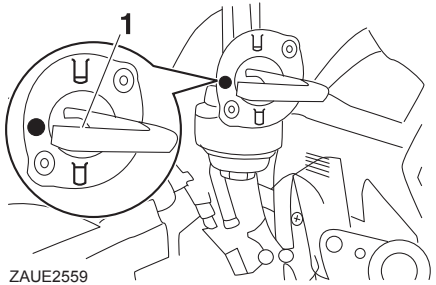
Use only unleaded gasoline. The use of leaded gasoline will cause severe damage to internal engine parts, such as the valves and piston rings, as well as to the exhaust system.

EAU13562

Fuel cock

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

OFF

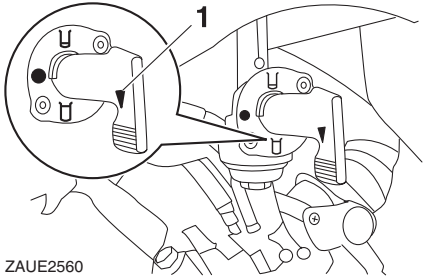


ZAUE2559

1. "•" indicates "OFF" position

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

ON

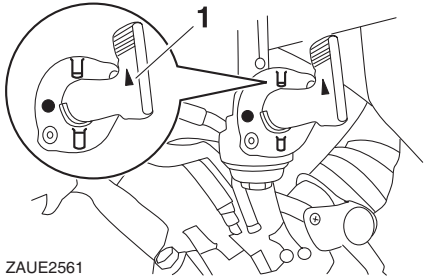


ZAUE2560

1. "⊔" indicates "ON" position

With the lever in this position, fuel flows to the carburetor. Normal riding is done with the lever in this position.

RES



ZAUE2561

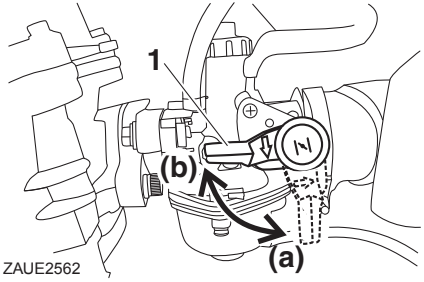
1. "⊍" indicates "RES" position

4

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

EAU13591

Starter (choke) lever "⌐|"

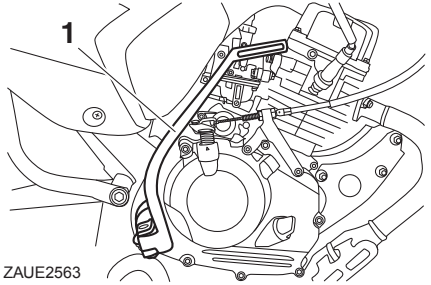


1. Starter (choke) lever "⌐|"

Starting a cold engine requires a richer air-fuel mixture, which is supplied by the starter (choke).
Move the lever in direction (a) to turn on the starter (choke).
Move the lever in direction (b) to turn off the starter (choke).

EAUE3321

Kickstarter



1. Kickstarter lever

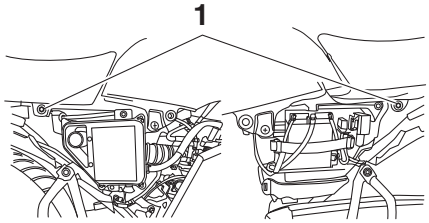
Use the kickstarter to start the engine. (See page 6-1.)
To use the kickstarter, shift the transmission into neutral. Fold out the kickstarter lever, move it down lightly with your foot until the gears engage, and then kick it down smoothly but forcefully.

EAUE2670

Seat

To remove the seat

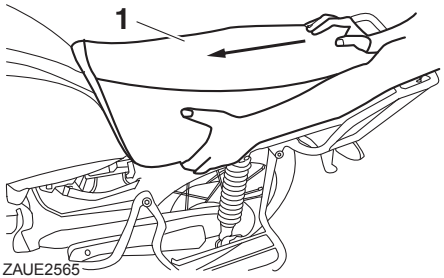
1. Remove panels A and B. (See page 7-7.)
2. Remove the bolts.



ZAUE2564

1. Bolt

3. Lift the front of the seat and pull it forward as shown in illustration.

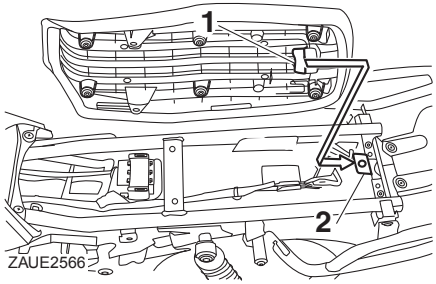


ZAUE2565

1. Seat

To install the seat

1. Insert the projection on the back of the seat into the seat holder as shown.



ZAUE2566

1. Projection
2. Seat holder

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

Tightening torque:
Bolt:
8 N·m (0.8 kgf·m, 5.8 lb·ft)

3. Install the panels.

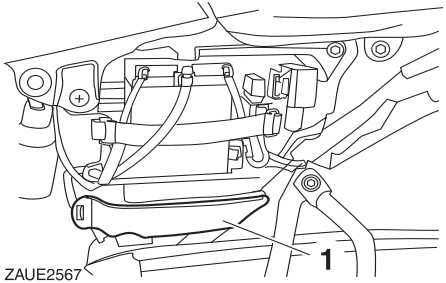
TIP

Make sure that the seat is properly secured before riding.

4

EAUE3110

Storage compartment

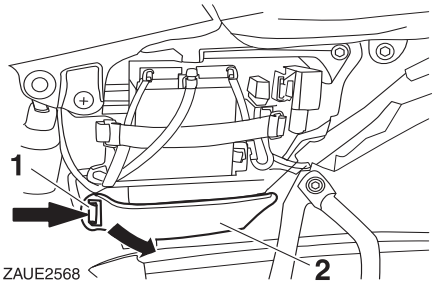


1. Storage compartment

The storage compartment is located on the left side of the vehicle.

To open the storage compartment

1. Remove panel A. (See page 7-7.)
2. Unhook the hook, and then pull the storage compartment cover out.



1. Hook
2. Storage compartment cover

To close the storage compartment

1. Place the storage compartment cover in its original position so that the cover is secured by the hook.
2. Install the panel.

EAU14883

Adjusting the shock absorber assemblies

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.

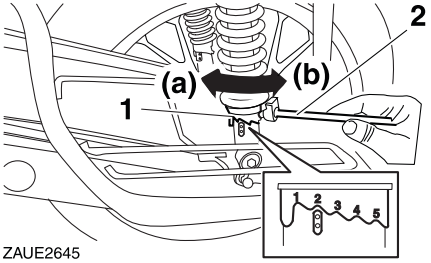
ECA10102

NOTICE

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

Adjust the spring preload as follows.
To increase the spring preload and thereby harden the suspension, turn the adjusting ring on each shock absorber assembly in direction (a). To decrease the spring preload and thereby soften the suspension, turn the adjusting ring on each shock absorber assembly in direction (b).

Align the appropriate notch in the adjusting ring with the position indicator on the shock absorber.



ZAUE2645

1. Spring preload adjusting ring
2. Rod

Spring preload setting:
Minimum (soft):
1
Standard:
2
Maximum (hard):
5

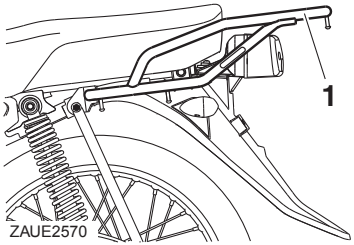
EAU15113

Carrier

EWA10172

⚠ WARNING

- **Do not exceed the load limit of 3 kg (6.6 lb) for the carrier.**
- **Do not exceed the maximum load of 155 kg (342 lb) for the vehicle.**



ZAUE2570

1. Carrier

EAU37491

Sidestand

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.

EWA14191

⚠ 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.

For your safety – pre-operation checks

EAU15599

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.

Before using this vehicle, check the following points:

ITEM	CHECKS	PAGE
Fuel	• Check fuel level in fuel tank. • Refuel if necessary. • Check fuel line for leakage.	4-5
Engine oil	• Check oil level in engine. • If necessary, add recommended oil to specified level. • Check vehicle for oil leakage.	7-10
Front brake	• Check operation. • Lubricate cable end if necessary. • Check lever free play. • Adjust if necessary. • Check brake shoe wear. • Replace if necessary.	7-19, 7-21
Rear brake	• Check operation. • Check pedal free play. • Adjust if necessary. • Check brake shoe wear. • Replace if necessary.	7-20, 7-21

ITEM	CHECKS	PAGE
Clutch	• Check operation. • Lubricate cable end if necessary. • Check lever free play. • Adjust if necessary.	7-18
Throttle grip	• Make sure that operation is smooth. • Check throttle grip free play. • If necessary, have Yamaha dealer adjust throttle grip free play and lubricate cable end and grip housing.	7-15, 7-24
Control cables	• Make sure that operation is smooth. • Lubricate cable ends if necessary.	7-24
Drive chain	• Check chain slack. • Adjust if necessary. • Check chain condition. • Lubricate if necessary.	7-21, 7-23
Wheels and tires	• Check for damage. • Check tire condition and tread depth. • Check air pressure. • Correct if necessary.	7-16, 7-18
Brake and shift pedals	• Make sure that operation is smooth. • Lubricate pedal pivoting points if necessary.	7-25
Brake and clutch levers	• Make sure that operation is smooth. • Lubricate lever pivoting points if necessary.	7-25
Centerstand, sidestand	• Make sure that operation is smooth. • Lubricate pivots if necessary.	7-26
Chassis fasteners	• Make sure that all nuts, bolts and screws are properly tightened. • Tighten if necessary.	—
Instruments, lights, signals and switches	• Check operation. • Correct if necessary.	—
Battery	• Check battery function. • If necessary, have a Yamaha dealer recharge the battery.	7-28

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

⚠ WARNING

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

EAUE1271

Starting and warming up a cold engine

1. Turn the fuel cock lever to "ON".
2. Turn the key to "ON".
3. Shift the transmission into the neutral position. The neutral indicator light should come on. If not, ask a Yamaha dealer to check the electrical circuit.
4. Turn the starter (choke) on and completely close the throttle. (See page 4-7.)
5. Start the engine by pushing the kickstarter lever down.
6. After starting the engine, move the starter (choke) back halfway.
7. When the engine is warm, turn the starter (choke) off.

TIP

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

ECA11043

NOTICE

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

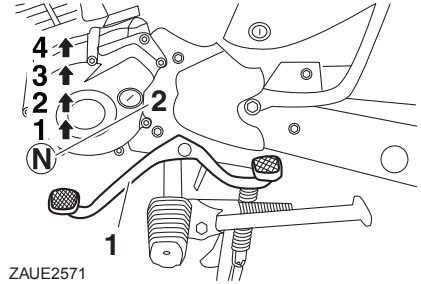
EAU16641

Starting a warm engine

Follow the same procedure as for starting a cold engine with the exception that the starter (choke) is not required when the engine is warm.

EAUE2280

Shifting



ZAUE2571

1. Shift pedal
2. Neutral position

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, press the shift pedal down repeatedly until it reaches the end of its travel.
- Use your toe to shift down and your heel to shift up.

ECA10261

NOTICE

- **Even with the transmission in the neutral position, do not coast for long periods of time with the engine off, and do not tow the 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.**

6

EAU16801

Tips for reducing fuel consumption

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

- Turn the starter (choke) off as soon as possible.
- 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).

EAU16831

Engine break-in

There is never a more important period in the life of your engine than the period between 0 and 1000 km (600 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 1000 km (600 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.

EAU16953

0–150 km (0–90 mi)

Avoid prolonged operation above 1/3 throttle.

After every hour of operation, stop the engine, and then let it cool for five to ten minutes.

Vary the engine speed from time to time. Do not operate the engine at one set throttle position.

150–500 km (90–300 mi)

Avoid prolonged operation above 1/2 throttle.

Rev the engine freely through the gears, but do not use full throttle at any time.

500–1000 km (300–600 mi)

Avoid prolonged operation above 3/4 throttle. ***NOTICE:*** **After 1000 km (600 mi) of operation, the engine oil must be changed and the oil strainer cleaned.** [ECA10352]

1000 km (600 mi) and beyond

Avoid prolonged full-throttle operation. Vary the speed occasionally.

ECA10271

NOTICE

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

EAU17172

Parking

When parking, stop the engine, remove the key from the main switch, and then turn the fuel cock lever to “OFF”.

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.**

EAU17246

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.

EWA10322

⚠ WARNING

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

EWA15123

⚠ 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.**

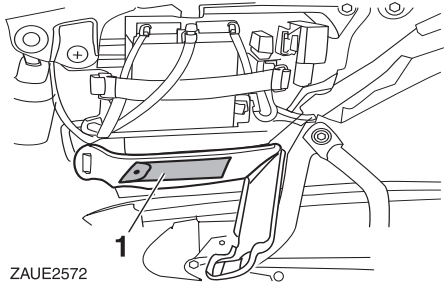
EWA15461

⚠ WARNING

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

EAU17342

Owner's tool kit



ZAUE2572

1. Owner's tool kit

The owner's tool kit is located behind panel A. (See page 7-7.)

The service information included in this manual and the tools provided in the owner's tool kit are intended to assist you in the performance of preventive maintenance and minor repairs. However, additional tools such as a torque wrench may be necessary to perform certain maintenance work correctly.

TIP

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

EAUU0621

TIP

- **The annual checks must be performed every year, except if a kilometer-based maintenance is performed instead.**
- From 20000 km, repeat the maintenance intervals starting from 4000 km.
- Items marked with an asterisk should be performed by a Yamaha dealer as they require special tools, data and technical skills.

EAU67781

Periodic maintenance chart for the emission control system

NO.		ITEM	CHECK OR MAINTENANCE JOB	ODOMETER READING (whichever comes first)					ANNUAL CHECK
				1000 km or 1 month	4000 km or 4 months	8000 km or 8 months	12000 km or 12 months	16000 km or 16 months	
1	*	**Fuel line**	• Check fuel hoses for cracks or damage.	√	√	√	√	√	√
2	*	**Fuel cock filter**	• Check condition and clean if necessary.	√	√	√	√	√	√
3		**Spark plug**	• Check condition. • Clean and regap.	√	√	√	√	√	√
			• Replace.	Every 12000 km (7500 mi)					
4	*	**Valves**	• Check valve clearance. Adjust if necessary.	√	√	√	√	√	√
5	*	**Carburetor**	• Check starter (choke) operation. • Adjust engine idling speed.	√	√	√	√	√	√

EAU67791

General maintenance and lubrication chart

NO.		ITEM	CHECK OR MAINTENANCE JOB	ODOMETER READING (whichever comes first)					ANNUAL CHECK
				1000 km or 1 month	4000 km or 4 months	8000 km or 8 months	12000 km or 12 months	16000 km or 16 months	
1		**Primary air filter element**	• Clean.	√	√	√	√	√	√
		Secondary air filter element	• Replace.	Every 24000 km (15000 mi)					
2	*	**Battery**	• Check the battery output voltage. • Check electrolyte level and specific gravity. • Make sure that the breather hose is properly routed.	√	√	√	√	√	√
3		**Clutch**	• Check operation. • Adjust.	√	√	√	√	√	√
4	*	**Front brake**	• Check operation and adjust brake lever free play.	√	√	√	√	√	√
			• Replace brake shoes.	Whenever worn to the limit					
5	*	**Rear brake**	• Check operation and adjust brake pedal free play.	√	√	√	√	√	√
			• Replace brake shoes.	Whenever worn to the limit					
6	*	**Wheels**	• Check runout, spoke tightness and for damage. • Tighten spokes if necessary.	√	√	√	√	√	√
7	*	**Tires**	• Check tread depth and for damage. • Replace if necessary. • Check air pressure. • Correct if necessary.	√	√	√	√	√	√

NO.		ITEM	CHECK OR MAINTENANCE JOB	ODOMETER READING (whichever comes first)					ANNUAL CHECK
				1000 km or 1 month	4000 km or 4 months	8000 km or 8 months	12000 km or 12 months	16000 km or 16 months	
8	*	**Wheel bearings**	• Check bearing for looseness or damage. Replace if necessary.	√	√	√	√	√	√
			• Lubricate with lithium-soap-based grease.	Every 12000 km (7500 mi)					
9	*	**Swingarm**	• Check operation and for excessive play.	√	√	√	√	√	√
			• Lubricate with lithium-soap-based grease.	Every 12000 km (7500 mi)					
10		**Drive chain**	• Check chain slack, alignment and condition. • Adjust and lubricate chain with YAMALUBE.	Every 2000 km (1200 mi) after the initial 1000 km (600 mi) and after washing the motorcycle, riding in the rain or riding in wet areas					
11	*	**Steering bearings**	• Check bearing play and steering for roughness.	√	√	√	√	√	√
			• Lubricate with lithium-soap-based grease.	Every 12000 km (7500 mi)					
12	*	**Chassis fasteners**	• Make sure that all nuts, bolts and screws are properly tightened.	√	√	√	√	√	√
13		**Brake lever pivot shaft**	• Lubricate with lithium-soap-based grease.	√	√	√	√	√	√
14		**Brake pedal pivot shaft**	• Lubricate with lithium-soap-based grease.	√	√	√	√	√	√
15		**Clutch lever pivot shaft**	• Lubricate with lithium-soap-based grease.	√	√	√	√	√	√
16		**Shift pedal pivot shaft**	• Lubricate with lithium-soap-based grease.	√	√	√	√	√	√

NO.		ITEM	CHECK OR MAINTENANCE JOB	ODOMETER READING (whichever comes first)					ANNUAL CHECK
				1000 km or 1 month	4000 km or 4 months	8000 km or 8 months	12000 km or 12 months	16000 km or 16 months	
17		**Sidestand, centerstand**	• Check operation. • Lubricate with lithium-soap-based grease.	√	√	√	√	√	√
18	*	**Front fork**	• Check operation and for oil leakage. Repair if necessary.	√	√	√	√	√	√
			• Replace oil.	Every 12000 km (7500 mi)					
19	*	**Shock absorber assemblies**	• Check operation and shock absorbers for oil leakage.	√	√	√	√	√	√
20		**Engine oil**	• Change. • Check oil level and vehicle for oil leakage.	√	√	√	√	√	
21		**Engine oil strainer**	• Clean.	√	Every 12000 km (7500 mi)				
22	*	**Front and rear brake switches**	• Check operation.	√	√	√	√	√	√
23		**Moving parts and cable ends**	• Lubricate.	√	√	√	√	√	√
24	*	**Throttle grip**	• Check operation. • Check throttle grip free play, and adjust if necessary. • Lubricate cable end and grip housing.	√	√	√	√	√	√
25	*	**Lights, signals and switches**	• Check operation. • Adjust headlight beam.	√	√	√	√	√	√

7

EAUE2910

TIP

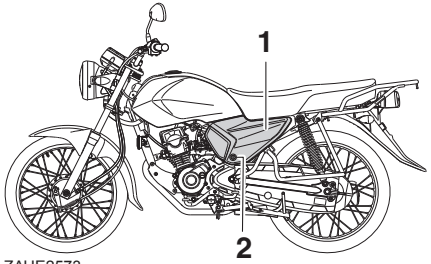
Air filter

- This model's air filter has two filter elements. The sponge-type primary filter element can be cleaned, lubricated, and re-used. The secondary filter element is an oil-coated paper type which must only be replaced. To avoid damaging the air filter elements, do not attempt to clean it with compressed air, by tapping it.
- The air filter needs to be serviced more frequently when riding in unusually wet are dusty areas.

EAU18773

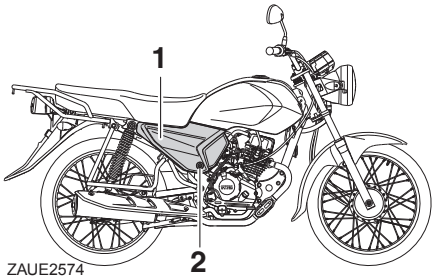
Removing and installing panels

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.



ZAUE2573

1. Panel A
2. Panel lock



ZAUE2574

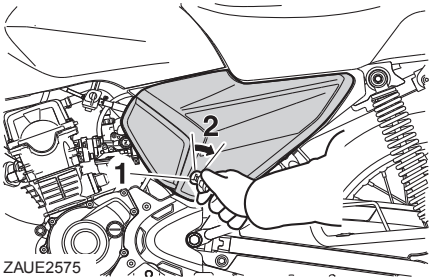
1. Panel B
2. Screw

EAUE2920

Panel A

To remove the panel

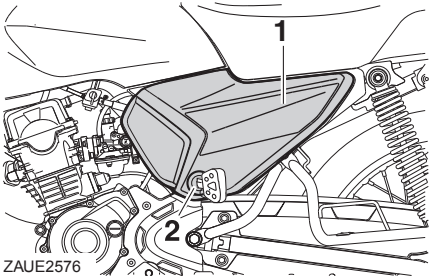
1. Insert the key into the lock and turn it clockwise.



ZAUE2575

1. Panel lock
2. Unlock.

2. Without removing the key, pull the front of the panel out to release the projection. Then slide the panel forward to release it in the rear.

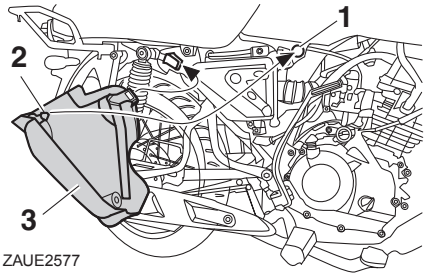


ZAUE2576

1. Panel A
2. Panel lock

To install the panel

1. Secure the rear of the panel first, then push the front of the panel in to insert the projection into the hole.



ZAUE2577

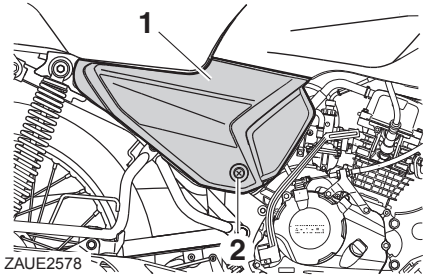
1. Hole
2. Projection
3. Panel A

2. Turn the key counterclockwise and remove it.

Panel B

To remove the panel

1. Remove the screw.



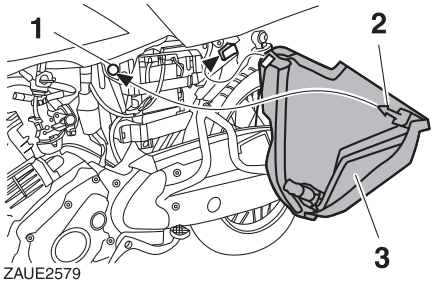
ZAUE2578

1. Panel B
2. Screw

2. Fold out the kickstarter lever.
3. Pull the front of the panel out to release the projection, and then slide the panel forward to release it in the rear.

To install the panel

1. Secure the rear of the panel first, then push the front of the panel in to insert the projection into the hole.



ZAUE2579

1. Hole
2. Projection
3. Panel B

2. Install the screw.
3. Fold the kickstarter lever inward to its original position.

7

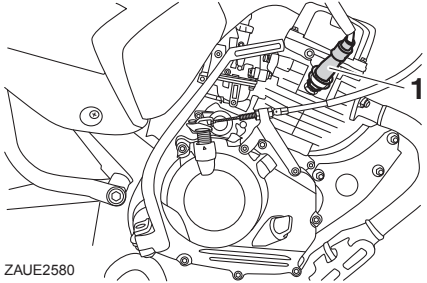
EAU19607

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

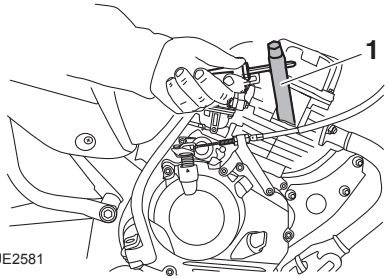
1. Remove the spark plug cap.



ZAUE2580

1. Spark plug cap

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



ZAUE2581

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).

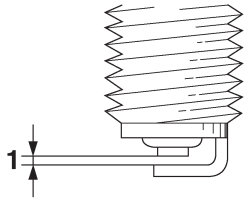
TIP

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/CR6HSA

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



ZAUE0032

1. Spark plug gap

Spark plug gap:
0.6–0.7 mm (0.024–0.028 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:
13 N·m (1.3 kgf·m, 9.4 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.

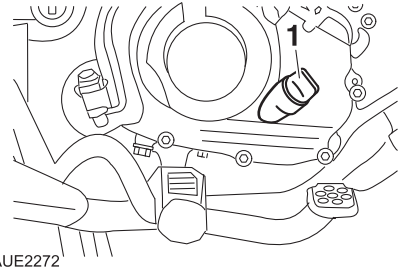
EAUE2870

Engine oil

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

To check the engine oil level

1. Place the vehicle on the centerstand. A slight tilt to the side can result in a false reading.
2. Start the engine, warm it up for several minutes, and then turn it off.
3. Wait a few minutes until the oil settles, remove the 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. ***NOTICE:*** **Do not operate the vehicle until you know that the engine oil level is sufficient.** [ECA10012]

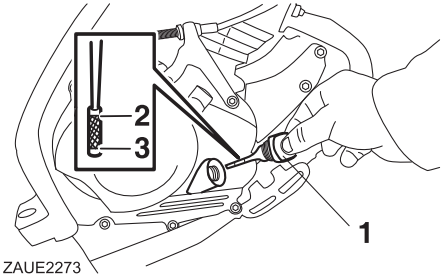


ZAUE2272

1. Engine oil filler cap

TIP

The engine oil should be between the minimum and maximum level marks.



ZAUE2273

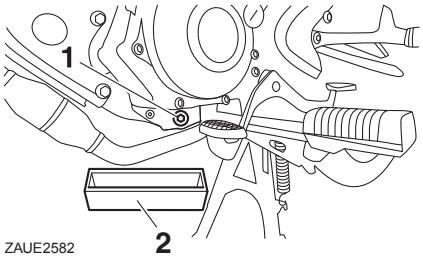
1. Dipstick
2. Maximum level mark
3. Minimum level mark

7

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

To change the engine oil

1. Start the engine, warm it up for several minutes, and then turn it off.
2. Place an oil pan under the engine to collect the used oil.
3. Remove the engine oil filler cap with the O-ring, then engine oil drain bolt to its gasket to drain the oil from the crankcase.



1. Engine oil drain bolt
2. Oil pan

4. Install the engine oil drain bolt, and then tighten it to the specified torque.

Tightening torque:
Engine oil drain bolt:
20 N·m (2.0 kgf·m, 14 lb·ft)

5. Refill with 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:
0.90 L (0.95 US qt, 0.79 Imp.qt)

ECA11621

NOTICE

- **In order to prevent clutch slippage (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.**

6. Start the engine, and then let it idle for several minutes while checking it for oil leakage. If oil is leaking, immediately turn the engine off and check for the cause.
7. Turn the engine off, wait for a few minutes until the oil settles, and then check the oil level and correct it if necessary.

EAUE2931

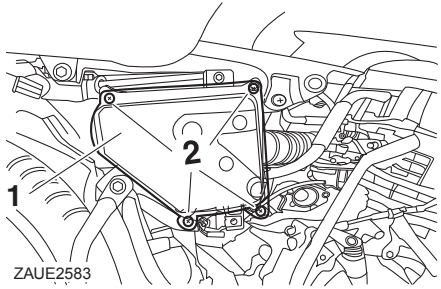
Servicing the air filter

This model's air filter has two filter elements. The sponge-type primary filter element can be cleaned, lubricated, and re-used. The secondary filter element is an oil-coated paper type which must only be replaced.

The air filter elements should be maintained at the intervals specified in the periodic maintenance and lubrication chart. Service the air filter elements more frequently if you ride in unusually wet or dusty areas.

Cleaning the primary air filter element

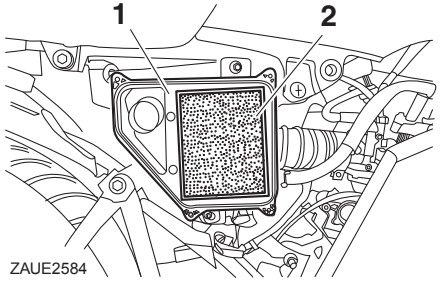
1. Remove panel B. (See page 7-7.)
2. Remove the air filter case cover by removing the screws.



ZAUE2583

1. Air filter case cover
2. Screw

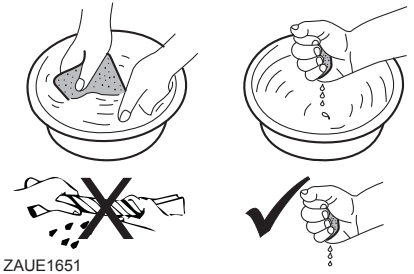
3. Remove the primary air filter element by pulling it out.



ZAUE2584

1. Secondary air filter element
2. Primary air filter element

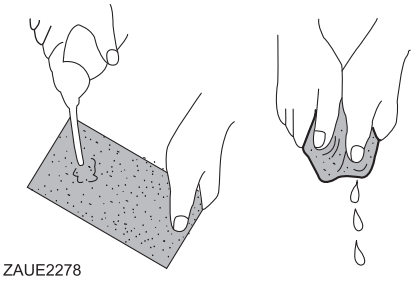
4. Clean the primary air filter element with kerosene or diesel. After cleaning, gently squeeze the element to remove the excess kerosene or diesel. **WARNING! Use only a dedicated parts cleaning solvent. To avoid the risk of fire or explosion, do not use gasoline or solvents with a low flash point.** [EWA10432] ***NOTICE:*** **To avoid damaging the air filter element, handle it gently and carefully, and do not twist it.** [ECA10522]



ZAUE1651

5. Apply foam air filter oil or fresh engine oil to the entire sponge material. After applying oil, gently squeeze the element to remove any excess oil.

7


ZAUE2278

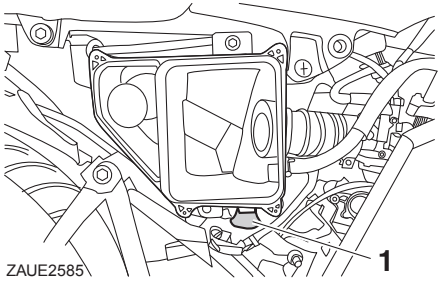
TIP

The primary air filter element should be wet but not dripping.

6. Install primary air filter element into the secondary air filter element.

TIP

On the bottom of the air filter case is check hose. If dust or water or both collects in this hose, clean or replace the air filter elements and clean the air filter case.



ZAUE2585

1. Air filter check hose

7. Install the air filter case cover by installing the screws.

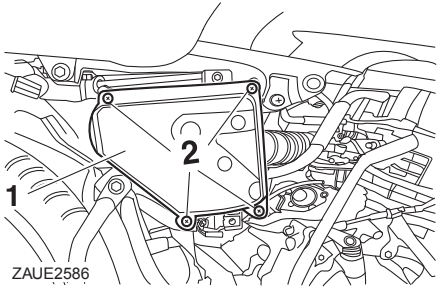
TIP

When installing the air filter element into the air filter case cover, make sure their sealing surfaces are aligned to prevent any air leaks.

8. Install the panel.

Replacing the secondary air filter element

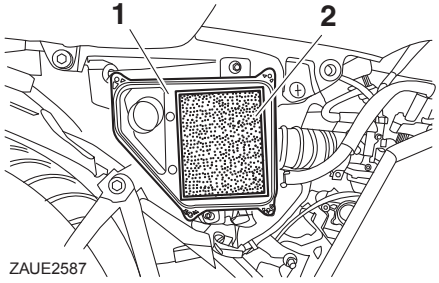
1. Remove panel B. (See page 7-7.)
2. Remove the air filter case cover by removing the screws.



ZAUE2586

1. Air filter case cover
2. Screw

3. Remove the secondary air filter element along with primary air filter element.



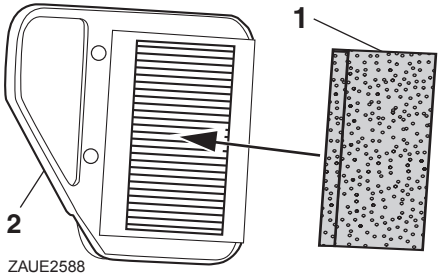
ZAUE2587

1. Secondary air filter element
2. Primary air filter element

ECA21220

NOTICE

- **The air filter element must be replaced at the intervals specified in the periodic maintenance and lubrication chart.**
- **The air filter element needs more frequent replacement if you are riding in unusually wet or dusty areas.**
- **Do not clean the air filter element by blowing it with compressed air.**



ZAUE2588

1. Primary air filter element
2. Secondary air filter element

4. Install a new secondary air filter element along with new primary 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.

TIP

When installing the air filter element into the air filter case cover, make sure their sealing surfaces are aligned to prevent any air leaks.

6. Install the panel.

EAU21281

Adjusting the carburetor

The carburetor is an important part of the engine and requires very sophisticated adjustment. Therefore, most carburetor adjustments should be left to a Yamaha dealer, who has the necessary professional knowledge and experience. The adjustment described in the following section, however, may be serviced by the owner as part of routine maintenance.

ECA10551

NOTICE

The carburetor has been set and extensively tested at the Yamaha factory. Changing these settings without sufficient technical knowledge may result in poor performance of or damage to the engine.

7

EAU21341

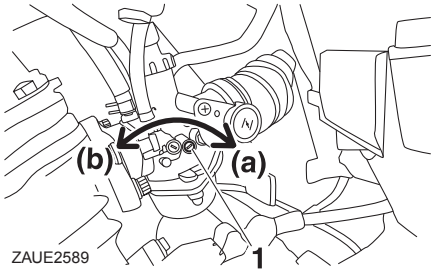
Adjusting the engine idling speed

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

TIP

- The engine is warm when it quickly responds to the throttle.
- A diagnostic tachometer is needed to make this adjustment.

1. Attach the tachometer to the spark plug lead.
2. Check the engine idling speed and, if necessary, adjust it to specification by turning the throttle stop screw. To increase the engine idling speed, turn the screw in direction (a). To decrease the engine idling speed, turn the screw in direction (b).



1. Throttle stop screw

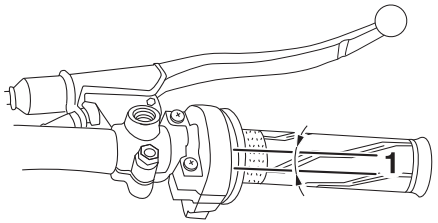
Engine idling speed:
1300–1500 r/min

TIP

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

EAUE1572

Adjusting the throttle grip free play



1. Throttle grip free play

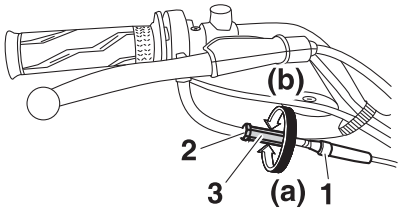
The throttle grip free play should measure 3.0–7.0 mm (0.12–0.28 in) at the inner edge of the throttle grip. Periodically check the throttle grip free play and, if necessary, adjust it as follows.

TIP

The engine idling speed must be correctly adjusted before checking and adjusting the throttle grip free play.

1. Slide the rubber cover at the throttle cable.
2. Loosen the locknut.

3. To increase the throttle grip free play, turn the throttle grip free play adjusting nut in direction (a). To decrease the throttle grip free play, turn the adjusting nut in direction (b).



ZAUE2591

1. Rubber cover
2. Locknut
3. Adjusting nut

4. Tighten the locknut.
5. Slide the rubber cover back to its original position.

EAU21402

Valve clearance

The valve clearance changes with use, resulting in improper air-fuel mixture and/or engine noise. To prevent this from occurring, the valve clearance must be adjusted by a Yamaha dealer at the intervals specified in the periodic maintenance and lubrication chart.

EAU70051

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.

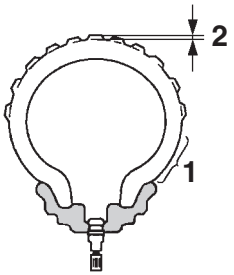
Tire air pressure (measured on cold tires):
1 person:
Front:
175 kPa (1.75 kgf/cm², 25 psi)
Rear:
225 kPa (2.25 kgf/cm², 33 psi)
2 persons:
Front:
175 kPa (1.75 kgf/cm², 25 psi)
Rear:
280 kPa (2.80 kgf/cm², 41 psi)
Maximum load*:
155 kg (342 lb)
* Total weight of rider, passenger, cargo and accessories

EWA10512

⚠ WARNING

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

Tire inspection



ZAUE0044

1. Tire sidewall
2. 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)

EWA10563

⚠ WARNING

- **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:
2.75-17 41P
Manufacturer/model:
TVS/ATT625
Rear tire:
Size:
3.00-17 50P
Manufacturer/model:
TVS/ATT925

EAU49712

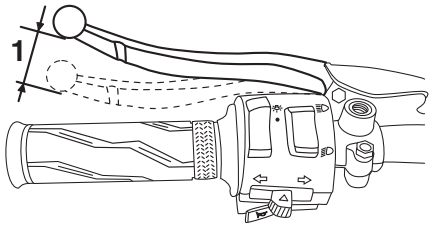
Spoke wheels

To maximize the performance, durability, and safe operation of your vehicle, note the following points regarding the specified wheels.

- The wheel rims should be checked for cracks, bends, warpage or other damage, and the spokes for looseness or damage before each ride. If any damage is found, have a Yamaha dealer replace the wheel. Do not attempt even the smallest repair to the wheel. A deformed or cracked wheel must be replaced.
- The wheel should be balanced whenever either the tire or wheel has been changed or replaced. An unbalanced wheel can result in poor performance, adverse handling characteristics, and a shortened tire life.

EAU69930

Adjusting the clutch lever free play

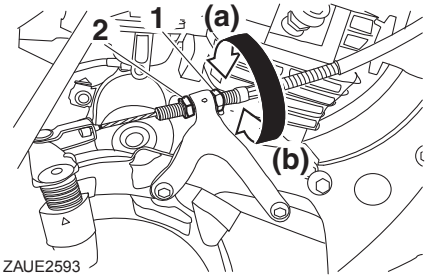


ZAUE2592

1. Clutch lever free play

The clutch lever free play should measure 10.0–15.0 mm (0.39–0.59 in) as shown. Periodically check the clutch lever free play and, if necessary, adjust it as follows.

1. Loosen the locknut at crankcase side.
2. To increase the clutch lever free play, turn the adjusting nut in direction (a). To decrease the clutch lever free play, turn the adjusting nut in direction (b).



1. Locknut
2. Clutch lever free play adjusting nut

3. Tighten the locknut.

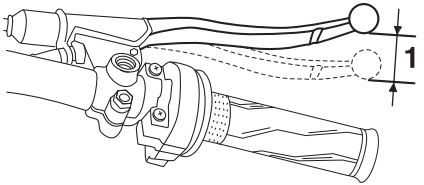
TIP

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.

EAU22133

Adjusting the brake lever free play

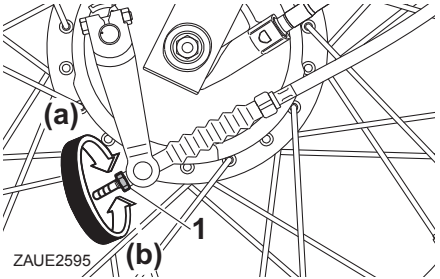
Measure the brake lever free play as shown.



1. Brake lever free play

Brake lever free play:
10.0–20.0 mm (0.39–0.79 in)

Periodically check the brake lever free play and, if necessary, adjust it as follows.
To increase the brake lever free play, turn the brake lever free play adjusting nut at the brake shoe plate in direction (a). To decrease the brake lever free play, turn the adjusting nut in direction (b).



1. Brake lever free play adjusting nut

EWA10651

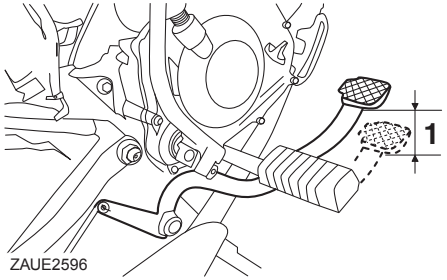
⚠ WARNING

If proper adjustment cannot be obtained as described, have a Yamaha dealer make this adjustment.

EAU39815

Adjusting the brake pedal free play

Measure the brake pedal free play at the brake pedal end as shown.

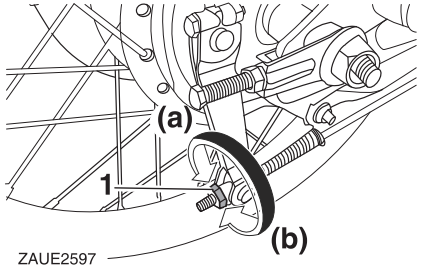


1. Brake pedal free play

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

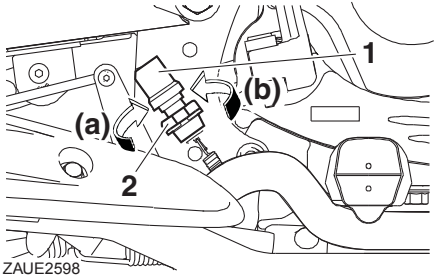
EWA10681

⚠ 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.**

EAU22274

Brake light switches



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

The brake light, which is activated by the brake pedal and brake lever, should come on just before braking takes effect. If necessary, adjust the rear brake light switch as follows, but the front brake light switch should be adjusted by a Yamaha dealer.

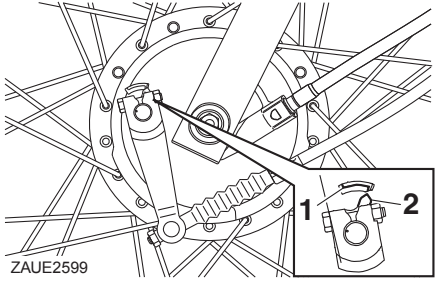
Turn the rear brake light switch adjusting nut while holding the rear brake light switch in place. To make the brake light come on earlier, turn the adjusting nut in direction (a). To make the brake light come on later, turn the adjusting nut in direction (b).

7

EAU22363

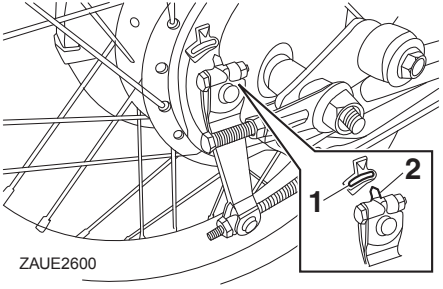
Checking the front and rear brake shoes

Front



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

Rear



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

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

EAU22762

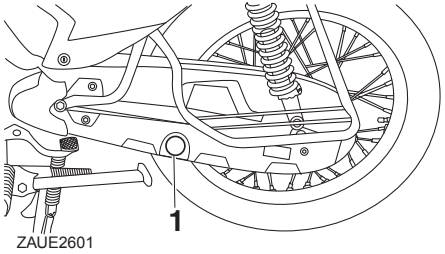
Drive chain slack

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

EAUE2940

To check the drive chain slack

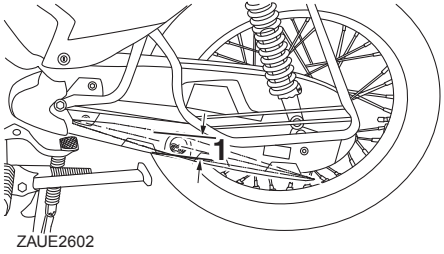
1. Place the motorcycle on the centerstand.
2. Shift the transmission into the neutral position.
3. To check the drive chain slack, remove the cover by pulling it outward.



1. Cover

4. Spin the rear wheel several times to locate the tightest portion of the drive chain.

5. Measure the drive chain slack as shown.

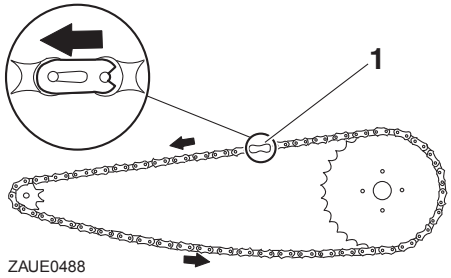


1. Drive chain slack

Drive chain slack:
25.0–35.0 mm (0.98–1.38 in)

TIP

If the chain is disassembled, be sure the chain lock is placed in the correct direction when installing.



1. Chain joint

6. 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]

TIP

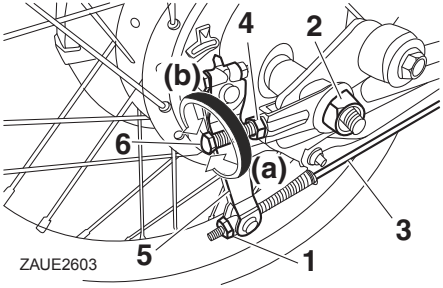
Be sure to install the cover after checking or adjusting the drive chain slack.

EAUN1071

To adjust the drive chain slack

Consult a Yamaha dealer before adjusting the drive chain slack.

1. Loosen the brake pedal free play adjusting nut.

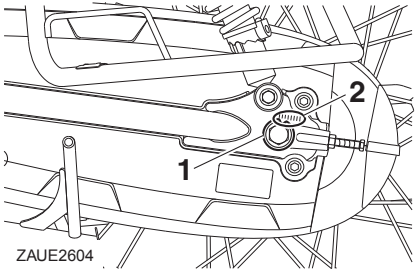


1. Brake pedal free play adjusting nut
2. Axle nut
3. Brake rod
4. Drive chain puller locknut
5. Brake camshaft lever
6. Drive chain slack adjusting bolt

2. Loosen the axle nut.
3. Loosen the drive chain puller locknut at each end of the swingarm.
4. 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.

TIP

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



1. Washer
2. Alignment marks

5. Tighten the locknuts, and then tighten the axle nut to the specified torques.

Tightening torques:
Drive chain puller locknut:
16 N·m (1.6 kgf·m, 12 lb·ft)
Axle nut:
75 N·m (7.5 kgf·m, 54 lb·ft)

6. 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.

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

EAUE2350

Cleaning and lubricating the drive chain

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

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 kerosene and a small soft brush.
2. Rinse off any remaining dirt and then wipe the drive chain dry.
3. Thoroughly lubricate the drive chain with clean engine oil.
4. Wait a few minutes to let the oil soak in, and then wipe off any excess.

TIP

- If kerosene or other high flash-point solvent is not available, soap and water may also be used.

- For a thorough cleaning, have a Yamaha dealer remove the drive chain and soak it in solvent.

EAUE1151

Checking and lubricating the cables

The operation of all control cables and the condition of the cables should be checked before each ride, and the 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:
Lithium-soap-based grease

EAUE1191

Checking and lubricating the throttle grip and cable end

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

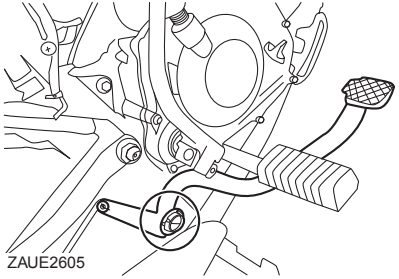
The throttle cable is equipped with a rubber cover. Make sure that the cover is securely installed. Even though the cover is installed correctly, it does not completely protect the cable from water entry. Therefore, use care not to pour water directly onto the cover or cable when washing the vehicle. If the cable or cover becomes dirty, wipe clean with a moist cloth.

EAU44276

Checking and lubricating the brake and shift pedals

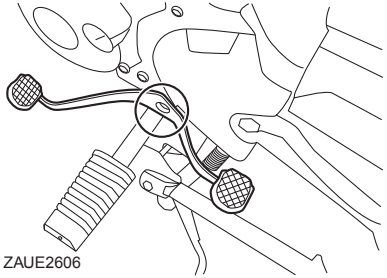
The operation of the brake and shift pedals should be checked before each ride, and the pedal pivots should be lubricated if necessary.

Brake pedal



ZAUE2605

Shift pedal



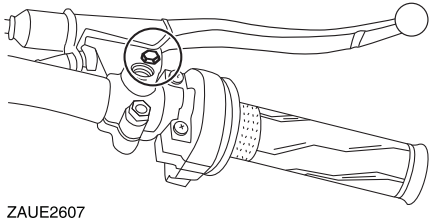
ZAUE2606

Recommended lubricant:
Lithium-soap-based grease

EAU43612

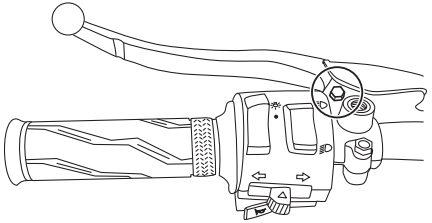
Checking and lubricating the brake and clutch levers

Brake lever



ZAUE2607

Clutch lever

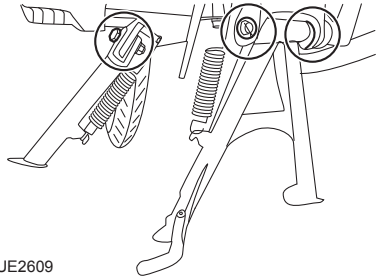


ZAUE2608

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

Recommended lubricant:
Lithium-soap-based grease

EAU23215
Checking and lubricating the centerstand and sidestand


ZAUE2609

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

EAUM1653

Lubricating the swingarm pivots

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

EAU23273

Checking the front fork

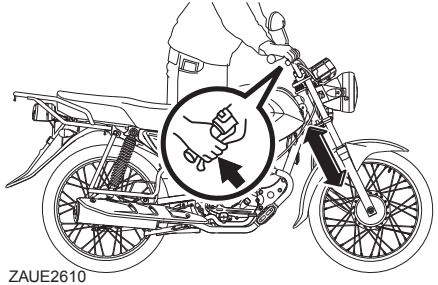
The condition and operation of the front fork must be checked as follows at the intervals specified in the periodic maintenance and lubrication chart.

To check the condition

Check the inner tubes for scratches, 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.



ZAUE2610

ECA10591

NOTICE

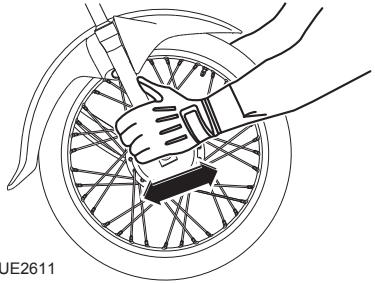
If any damage is found or the front fork does not operate smoothly, have a Yamaha dealer check or repair it.

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.

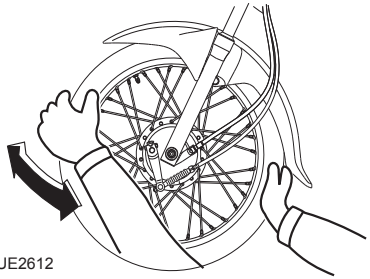
1. Place the vehicle on the centerstand. **WARNING! To avoid injury, securely support the vehicle so there is no danger of it falling over.** [EWA10752]
2. Hold the lower ends of the front fork legs and try to move them forward and backward. If any free play can be felt, have a Yamaha dealer check or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



ZAUE2611

EAU23292

Checking the wheel bearings



ZAUE2612

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.

EAU23315

Battery

A poorly maintained battery will corrode and discharge quickly. The electrolyte level, battery lead connections and breather hose routing should be checked before each ride and at the intervals specified in the periodic maintenance and lubrication chart.

EWA10771

⚠ WARNING

- **Electrolyte is poisonous and dangerous since it contains sulfuric acid, which causes severe burns. Avoid any contact with skin, eyes or clothing and always 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.**
- **Take care not to spill electrolyte on the drive chain, as this may weaken it, shorten chain life and possibly result in an accident.**
- **KEEP THIS AND ALL BATTERIES OUT OF THE REACH OF CHILDREN.**

To check the electrolyte level

1. Place the vehicle on a level surface and hold it in an upright position.

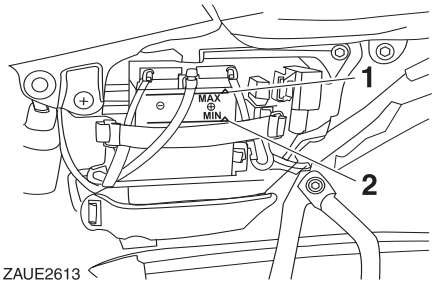
TIP

Make sure that the vehicle is positioned straight up when checking the electrolyte level.

2. Check the electrolyte level in the battery.

TIP

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



ZAUE2613

1. Maximum level mark
2. Minimum level mark

3. If the electrolyte is at or below the minimum level mark, add distilled water to raise it to the maximum level mark. ***NOTICE:*** **Use only distilled water, as tap water contains minerals that are harmful to the battery.** [ECA10612]
4. Check and, if necessary, tighten the battery lead connections and correct the breather hose routing.

To store the battery

1. If the motorcycle 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", then disconnect the negative lead before disconnecting the positive lead.** [ECA16303]
2. If the battery will be stored for more than two months, check the specific gravity of the electrolyte at least once a month and fully charge the battery whenever necessary.
3. Fully charge the battery before installation. ***NOTICE:*** **When installing the battery, be sure the key is turned to "OFF", then connect the positive lead before connecting the negative lead.** [ECA16841]
4. After installation, make sure that the battery leads are properly connected to the battery terminals and that the breather hose is properly routed, in good condition, and not obstructed. ***NOTICE:***

If the breather hose is positioned in such a way that the frame is exposed to electrolyte or gas expelled from the battery, the frame could suffer structural and external damages. [ECA10602]

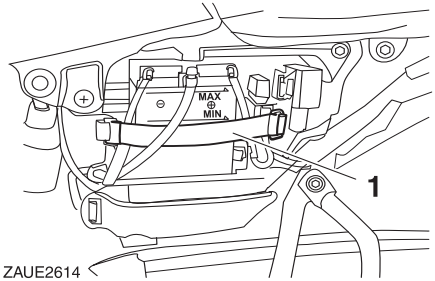
EAUE3120

Replacing the fuse

The fuse holder is located behind panel A. (See page 7-7.)

If the fuse is blown, replace it as follows.

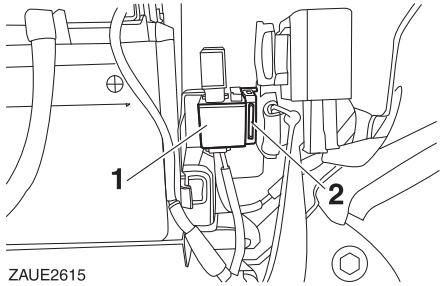
1. Turn the key to "OFF" and turn off all electrical circuits.
2. Remove panel A. (See page 7-7.)
3. Remove the battery band.



ZAUE2614

1. Battery band

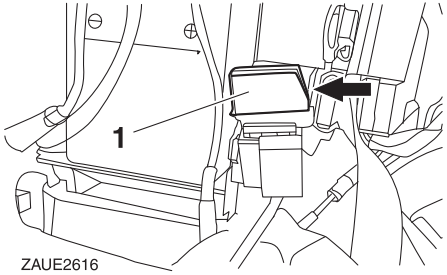
4. Remove the fuse holder from fuse holder bracket by pulling it outward.



ZAUE2615

1. Fuse holder
2. Fuse holder bracket

5. Open fuse box cover by pressing lock as shown.

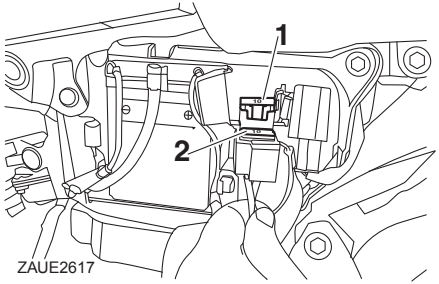


ZAUE2616

1. Fuse box cover

6. Remove the blown fuse, and then install 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]



1. Fuse
2. Spare fuse

Specified fuse:
10.0 A

7. Close the fuse box cover.
8. Install fuse holder into fuse holder bracket.
9. Install the battery band.
10. Install the panel.
11. Turn the key to “ON” and turn on the electrical circuits to check if the devices operate.
12. If the fuse immediately blows again, have a Yamaha dealer check the electrical system.

EAU34242

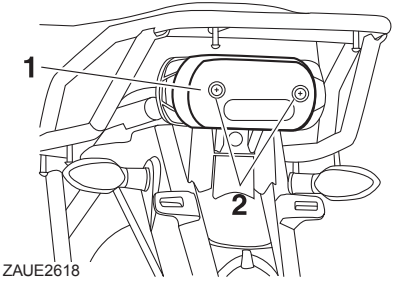
Replacing a headlight bulb

This model is equipped with halogen bulb headlights. If a headlight bulb burns out, have a Yamaha dealer replace it and, if necessary, adjust the headlight beam.

EAU24135

Replacing the tail/brake light bulb

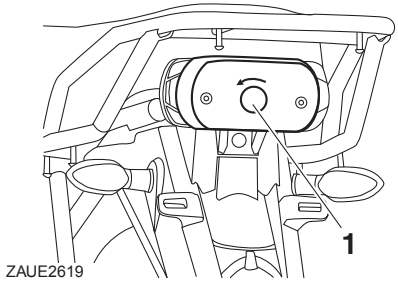
1. Remove the tail/brake light lens by removing the screws.



ZAUE2618

1. Tail/brake light lens
2. Screw

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



ZAUE2619

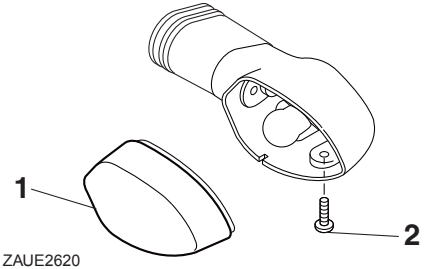
1. Bulb

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]

EAU24205

Replacing a turn signal light bulb

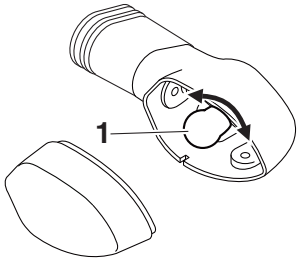
1. Remove the turn signal light lens by removing the screw.



ZAUE2620

1. Turn signal light lens
2. Screw

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



ZAUE2621

1. 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 screw. ***NOTICE:*** **Do not overtighten the screw, otherwise the lens may break.** [ECA11192]

EAU24361

Front wheel

EAUE2880

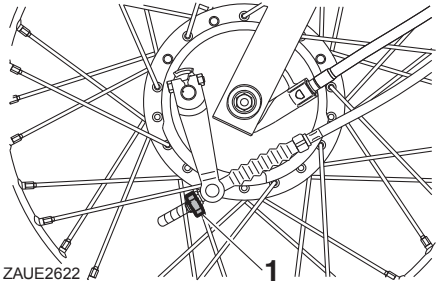
To remove the front wheel

EWA10822

⚠ WARNING

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

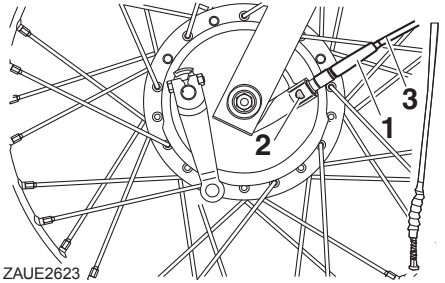
1. Loosen the wheel axle nut.
2. Place the motorcycle on the centerstand.
3. Disconnect the brake cable from the brake camshaft lever by removing the brake lever free play adjusting nut, and then remove the cable from the brake shoe plate.



ZAUE2622

1. Front brake lever free play adjusting nut

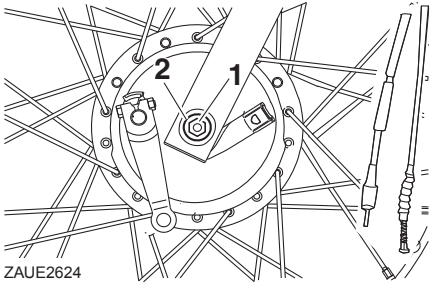
4. Slide the rubber cover back, and then disconnect the speedometer cable by pressing the lock.



ZAUE2623

1. Rubber cover
2. Lock.
3. Speedometer cable

5. Remove the wheel axle nut and the washer.



ZAUE2624

1. Axle nut
2. Washer

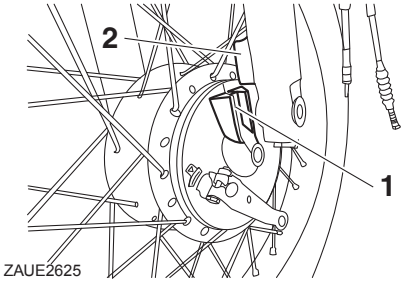
6. Pull the wheel axle out, and then remove the wheel.

To install the front wheel

1. Lift the wheel up between the fork legs.

TIP

Make sure that the slot in the brake shoe plate fits over the retainer on the fork leg.



ZAUE2625

1. Slot
2. Retainer

2. Insert the wheel axle from the right side of the vehicle, and then install the washer and the wheel axle nut.
3. Take the motorcycle off the centerstand so that the front wheel is on the ground, and then put the sidestand down.
4. Tighten the wheel axle nut to the specified torque.

Tightening torque:
Wheel axle nut:
46 N·m (4.6 kgf·m, 33 lb·ft)

TIP

When tightening the axle nut, hold the wheel axle with a wrench to keep it from turning.

5. Install the brake cable to the brake shoe plate, and then connect the cable to the brake camshaft lever by installing the brake lever free play adjusting nut.
6. Adjust the brake lever free play. (See page 7-19.)
7. While applying the front brake, push down hard on the handlebars several times to check if the front fork compresses and rebounds smoothly.
8. Connect the speedometer cable by attaching the lock to its original position, and then place the rubber cover back into original position.

Rear wheel

EAU25081

EAUE2661

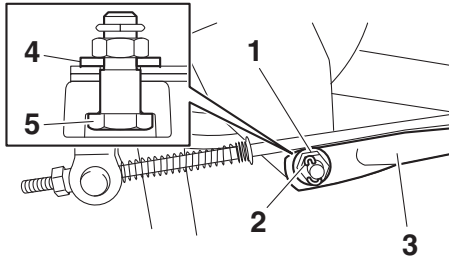
To remove the rear wheel

EWA10822

⚠ WARNING

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

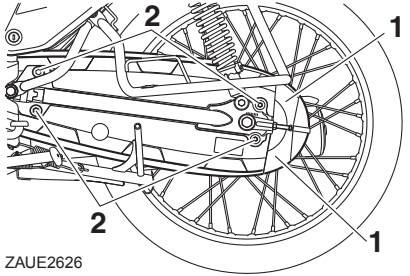
1. Place the motorcycle on the centerstand.
2. Disconnect the brake torque rod from the brake shoe plate by removing the cotter pin, the nut, the washer and the bolt.



ZAUE1520

1. Nut
2. Cotter pin
3. Brake torque rod
4. Washer
5. Bolt

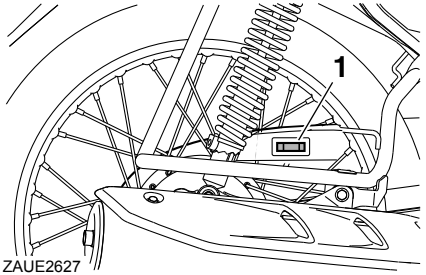
3. Remove the bolts and collars from the drive chain case.



ZAUE2626

1. Drive chain case
2. Bolt and collar

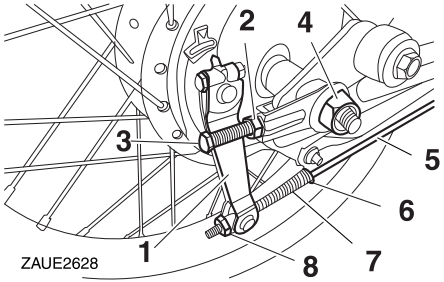
4. Unhook the drive chain case lock and remove the drive chain case.



ZAUE2627

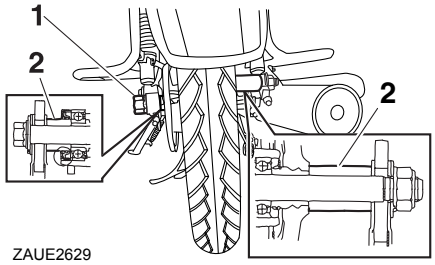
1. Drive chain case lock

5. Remove the brake pedal free play adjusting nut, disconnect the brake rod from the brake camshaft lever, and remove the spring and washer from the brake rod.



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

6. Loosen the drive chain puller locknut and the drive chain slack adjusting bolt on both ends of the swingarm.
7. Remove the axle nut and washer, and then pull the wheel axle and collars out.

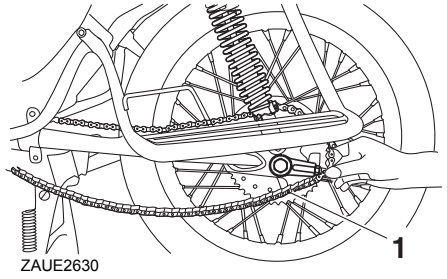


1. Wheel axle
2. Collar

TIP

A rubber mallet may be useful to tap the wheel axle out.

8. 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.

9. Remove the wheel.

To install the rear wheel

1. Install the drive chain onto the rear sprocket.
2. Install the wheel by inserting the collars and wheel axle from the left side.
3. Install the washer and the axle nut.
4. Install the washer and spring onto the brake rod, connect the brake rod to the brake camshaft lever,

and then install the brake pedal free play adjusting nut onto the brake rod.
5. Connect the brake torque rod to the brake shoe plate by installing the bolt, washer and nut.
6. Adjust the drive chain slack. (See page 7-21.)
7. Tighten the axle nut, and then the brake torque rod nut to the specified torques.

Tightening torques:
Axle nut:
75 N·m (7.5 kgf·m, 54 lb·ft)
Brake torque rod nut:
19 N·m (1.9 kgf·m, 13 lb·ft)

8. Insert a new cotter pin into the brake torque rod bolt, and then bend the ends of each cotter pin. **WARNING! Always use new cotter pins.** [EWAE0011]
9. Install the drive chain case by secured the drive chain case lock and installing the collars and bolts.
10. Tighten the drive chain case bolts to the specified torque.

Tightening torque:
Drive chain case bolt:
7.0 N·m (0.7 kgf·m, 5.1 lb·ft)

11. 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.

EAU25852

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

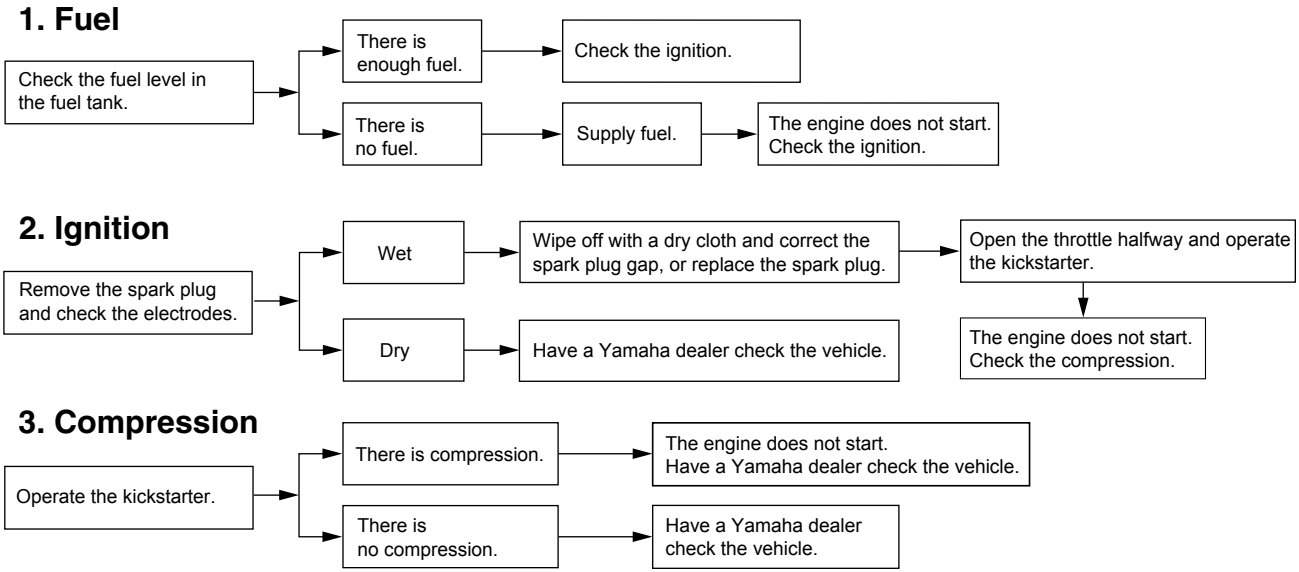
⚠ WARNING

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

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

EAU25975

Troubleshooting chart



EAU37834

Matte color caution

ECA15193

NOTICE

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.

EAU26005

Care

While the open design of a motorcycle reveals the attractiveness of the technology, it also makes it more vulnerable. Rust and corrosion can develop even if high-quality components are used. A rusty exhaust pipe may go unnoticed on a car, however, it detracts from the overall appearance of a motorcycle. Frequent and proper care does not only comply with the terms of the warranty, but it will also keep your motorcycle looking good, extend its life and optimize its performance.

Before cleaning

1. Cover the muffler outlet with a plastic bag after the engine has cooled down.
2. Make sure that all caps and covers as well as all electrical couplers and connectors, including the spark plug cap, are tightly installed.
3. Remove extremely stubborn dirt, like oil burnt onto the crankcase, with a degreasing agent and a brush, but never apply such products onto seals, gaskets, sprockets, the drive chain and wheel axles. Always rinse the dirt and degreaser off with water.

Cleaning

ECA10773

NOTICE

- **Avoid using strong acidic wheel cleaners, especially on spoked wheels. If such products are used on hard-to-remove dirt, do not leave the cleaner on the affected area any longer than instructed. Also, thoroughly rinse the area off with water, immediately dry it, and then apply a corrosion protection spray.**
- **Improper cleaning can damage plastic parts (such as cowlings, panels, windshields, headlight lenses, meter lenses, etc.) and the mufflers. Use only a soft, clean cloth or sponge with water to clean plastic. However, if the plastic parts cannot be thoroughly cleaned with water, diluted mild detergent with water may be used. Be sure to rinse**

off any detergent residue using plenty of water, as it is harmful to plastic parts.

- **Do not use any harsh chemical products on plastic parts. Be sure to avoid using cloths or sponges which have been in contact with strong or abrasive cleaning products, solvent or thinner, fuel (gasoline), rust removers or inhibitors, brake fluid, antifreeze or electrolyte.**
- **Do not use high-pressure washers or steam-jet cleaners since they cause water seepage and deterioration in the following areas: seals (of wheel and swingarm bearings, fork and brakes), electric components (couplers, connectors, instruments, switches and lights), breather hoses and vents.**
- **For motorcycles equipped with a windshield: Do not use strong cleaners or hard sponges as they will cause dulling or scratching. Some cleaning compounds for plastic may leave scratches on the windshield. Test the product on a small hidden part of the windshield to make sure that it does not leave any marks. If the windshield is scratched, use a quality plastic polishing compound after washing.**

After normal use

Remove dirt with warm water, a mild detergent, and a soft, clean sponge, and then rinse thoroughly with clean water. Use a toothbrush or bottlebrush for hard-to-reach areas. Stubborn dirt and insects will come off more easily if the area is covered with a wet cloth for a few minutes before cleaning.

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

Since sea salt or salt sprayed on roads during winter are extremely corrosive in combination with water, carry out the following steps after each ride in the rain, near the sea or on salt-sprayed roads.

TIP

Salt sprayed on roads in the winter may remain well into spring.

1. Clean the motorcycle with cold water and a mild detergent, after the engine has cooled down. ***NOTICE:*** **Do not use warm water since it increases the corrosive action of the salt.** [ECA10792]
2. Apply a corrosion protection spray on all metal, including chrome- and nickel-plated, surfaces to prevent corrosion.

After cleaning

1. Dry the motorcycle with a chamois or an absorbing cloth.
2. Immediately dry the drive chain and lubricate it to prevent it from rusting.
3. Use a chrome polish to shine chrome, aluminum and stainless-steel parts, including the exhaust system. (Even the thermally induced discoloring of stainless-steel exhaust systems can be removed through polishing.)

4. To prevent corrosion, it is recommended to apply a corrosion protection spray on all metal, including chrome- and nickel-plated, surfaces.
5. Use spray oil as a universal cleaner to remove any remaining dirt.
6. Touch up minor paint damage caused by stones, etc.
7. Wax all painted surfaces.
8. Let the motorcycle dry completely before storing or covering it.

EWA11132

⚠ WARNING

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

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

ECA10801

NOTICE

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

TIP

- Consult a Yamaha dealer for advice on what products to use.
- Washing, rainy weather or humid climates can cause the headlight lens to fog. Turning the headlight on for a short period of time will help remove the moisture from the lens.

EAUE1201

Storage

Short-term

Always store your motorcycle in a cool, dry place and, if necessary, protect it against dust with a porous cover. Be sure the engine and the exhaust system are cool before covering the motorcycle.

ECA10811

NOTICE

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

Long-term

Before storing your motorcycle for several months:

1. Follow all the instructions in the "Care" section of this chapter.

2. Turn the fuel cock lever to the off position.
3. Drain the carburetor float chamber by loosening the drain bolt; this will prevent fuel deposits from building up. Pour the drained fuel into the fuel tank.
4. Fill up the fuel tank and add fuel stabilizer (if available) to prevent the fuel tank from rusting and the fuel from deteriorating.
5. Perform the following steps to protect the cylinder, piston rings, etc. from corrosion.
   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.)
   e. Remove the spark plug cap from the spark plug, and then install the spark plug and the spark plug cap. **WARNING! To prevent damage or injury from sparking, make sure to ground the spark plug electrodes while turning the engine over.** [EWA10952]
6. Lubricate all control cable ends and the pivoting points of all levers and pedals as well as of the sidestand/centerstand.
7. Check and, if necessary, correct the tire air pressure, and then lift the motorcycle so that both of its wheels are off the ground. Alternatively, turn the wheels a little every month in order to prevent the tires from becoming degraded in one spot.
8. Cover the muffler outlet with a plastic bag to prevent moisture from entering it.
9. Remove the battery and fully charge it. Store it in a cool, dry place and charge it once a month. Do not store the battery in an excessively cold or warm place [less than 0 °C (30 °F) or more than 30 °C (90 °F)]. For more information on storing the battery, see page 7-28.

TIP

Make any necessary repairs before storing the motorcycle.

Dimensions:
- Overall length:
  - 2020 mm (79.5 in)
- Overall width:
  - 740 mm (29.1 in)
- Overall height:
  - 1045 mm (41.1 in)
- Seat height:
  - 785 mm (30.9 in)
- Wheelbase:
  - 1255 mm (49.4 in)
- Ground clearance:
  - 175 mm (6.89 in)
- Minimum turning radius:
  - 2.1 m (6.89 ft)

Weight:
- Curb weight:
  - 95 kg (209 lb)

Engine:
- Combustion cycle:
  - 4-stroke
- Cooling system:
  - Air cooled
- Valve train:
  - SOHC
- Number of cylinders:
  - Single cylinder
- Displacement:
  - 110 cm^3
- Bore × stroke:
  - 50.0 × 56.2 mm (1.97 × 2.21 in)
- Compression ratio:
  - 9.9 : 1
- Starting system:
  - Kickstarter
- Lubrication system:
  - Wet sump

Engine oil:
- Recommended brand:
  - YAMALUBE
- SAE viscosity grades:
  - 10W-40
- Recommended engine oil grade:
  - API service SG type or higher, JASO standard MA
- Engine oil quantity:
  - Oil change:
    - 0.90 L (0.95 US qt, 0.79 Imp.qt)

Air filter:
- Air filter element:
  - Oil-coated paper element

Fuel:
- Recommended fuel:
  - Regular unleaded gasoline (Gasohol [E10] acceptable)
- Fuel tank capacity:
  - 7.2 L (1.9 US gal, 1.6 Imp.gal)
- Fuel reserve amount:
  - 1.0 L (0.26 US gal, 0.22 Imp.gal)

Carburetor:
- Type × quantity:
  - VM17 × 1

Spark plug(s):
- Manufacturer/model:
  - NGK/CR6HSA
- Spark plug gap:
  - 0.6–0.7 mm (0.024–0.028 in)

Clutch:
- Clutch type:
  - Wet, multiple-disc

Drivetrain:
- Primary reduction ratio:
  - 3.421 (65/19)
- Final drive:
  - Chain
- Secondary reduction ratio:
  - 3.000 (42/14)
- Transmission type:
  - Constant mesh 4-speed
- Gear ratio:
  - 1st:
    - 3.273 (36/11)
  - 2nd:
    - 1.765 (30/17)
  - 3rd:
    - 1.190 (25/21)
  - 4th:
    - 0.917 (22/24)

Chassis:
- Frame type:
  - Diamond
- Caster angle:
  - 26.0 °
- Trail:
  - 84 mm (3.3 in)

Front tire:
- Type:
  - With tube
- Size:
  - 2.75-17 41P

Specifications

Manufacturer/model:
TVS/ATT625

Rear tire:

Type:
With tube
Size:
3.00-17 50P
Manufacturer/model:
TVS/ATT925

Loading:

Maximum load:
155 kg (342 lb)
(Total weight of rider, passenger, cargo and accessories)

Tire air pressure (measured on cold tires):

1 person:
Front:
175 kPa (1.75 kgf/cm², 25 psi)
Rear:
225 kPa (2.25 kgf/cm², 33 psi)
2 persons:
Front:
175 kPa (1.75 kgf/cm², 25 psi)
Rear:
280 kPa (2.80 kgf/cm², 41 psi)

Front wheel:

Wheel type:
Spoke wheel
Rim size:
17 M/C x 1.40

Rear wheel:

Wheel type:
Spoke wheel
Rim size:
17 M/C x 1.60

Front brake:

Type:
Mechanical leading trailing drum brake

Rear brake:

Type:
Mechanical leading trailing drum brake

Front suspension:

Type:
Telescopic fork
Spring:
Coil spring
Shock absorber:
Hydraulic damper
Wheel travel:
120 mm (4.7 in)

Rear suspension:

Type:
Swingarm
Spring:
Coil spring
Shock absorber:
Hydraulic damper
Wheel travel:
100 mm (3.9 in)

Electrical system:

System voltage:
12 V
Ignition system:
TCI
Charging system:
AC magneto

Battery:

Model:
AB2.5L-C-4
Model:
12MX2.5L-C-5
Voltage, capacity:
12 V, 2.5 Ah (10 HR)
Voltage, capacity:
12 V, 2.5 Ah (10 HR)

Headlight:

Bulb type:
Halogen bulb

Bulb wattage × quantity:

Headlight:
HS1, 35.0 W/35.0 W x 1
Brake/tail light:
21.0 W/5.0 W × 1
Front turn signal light:
10.0 W × 2
Rear turn signal light:
10.0 W × 2
Meter lighting:
1.7 W × 1
Neutral indicator light:
1.7 W × 1
High beam indicator light:
1.7 W × 1
Turn signal indicator light:
1.7 W × 1

Fuse(s):

Main fuse:
10.0 A

EAU26365

Identification numbers

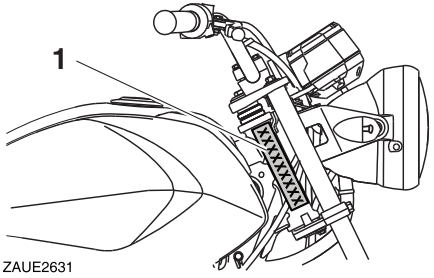
Record the vehicle identification number and the engine serial number in the spaces provided below for assistance when ordering spare parts from a Yamaha dealer or for reference in case the vehicle is stolen.

VEHICLE IDENTIFICATION NUMBER:

ENGINE SERIAL NUMBER:

EAU26401

Vehicle identification number



ZAUE2631

1. Vehicle identification number

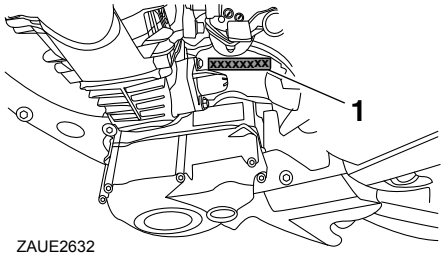
The vehicle identification number is stamped into the steering head pipe. Record this number in the space provided.

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.

EAU26442

Engine serial number



ZAUE2632

1. Engine serial number

The engine serial number is stamped into the crankcase.

Index

W

BY1-F8199-E0

PRINTED IN INDIA

2Y121(OM-01)919-07-16-E