



⚠ Read this manual carefully before operating this vehicle.

OWNER'S MANUAL

YZF155

YZF155D-A

BNC-F8199-EZ



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

Welcome to the Yamaha world of motorcycling!

As the owner of the YZF155D-A, 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 YZF155D-A. 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.






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

Important manual information

EAU10134

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

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

*Product and specifications are subject to change without notice.

EAUN0430

**YZF155D-A
OWNER'S MANUAL
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Manufacturing
1st edition, January 2022
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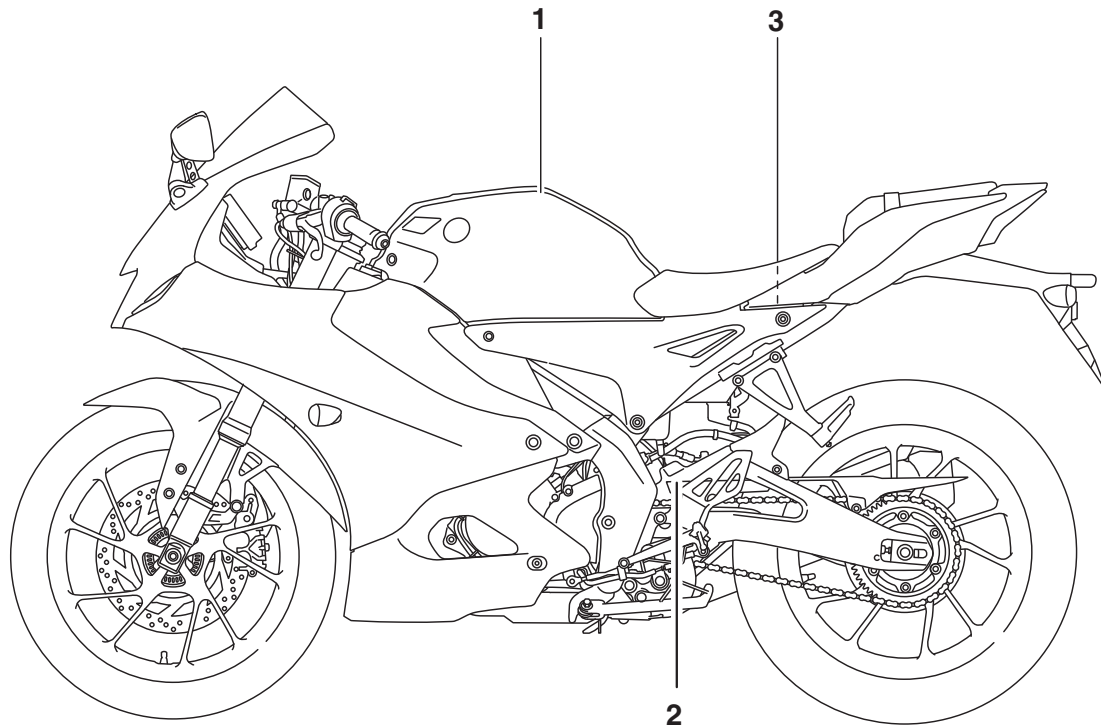
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Location of important labels

EAU10385

1

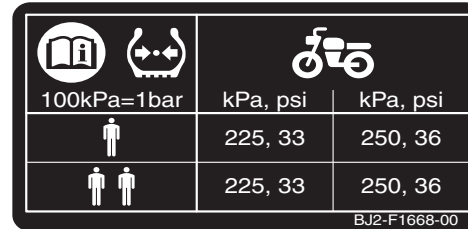
Read and understand all of the labels on your vehicle. They contain important information for safe and proper operation of your vehicle. Never remove any labels from your vehicle. If a label becomes difficult to read or comes off, a replacement label is available from your Yamaha dealer.



1



2



3



EAU1028C

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 6-1 for a list of pre-operation checks.

- This motorcycle is designed to carry the operator and a passenger.
- The failure of motorists to detect and recognize motorcycles in traffic is the predominating cause of automobile/motorcycle accidents. Many accidents have been caused by an automobile driver who did not see the motorcycle. Making yourself conspicuous ap-

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

Therefore:

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

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

Protective Apparel

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

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

Safety information

2

Avoid Carbon Monoxide Poisoning

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

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

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

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

Loading

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

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

Operation of an overloaded vehicle could cause an accident.

Maximum load:
165 kg (364 lb)

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

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

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

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

Genuine Yamaha Accessories

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

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

Aftermarket Parts, Accessories, and Modifications

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

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

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

steering travel or control operation, or obscure lights or reflectors.

- Accessories fitted to the handlebar or the front fork area can create instability due to improper weight distribution or aerodynamic changes. If accessories are added to the handlebar or front fork area, they must be as lightweight as possible and should be kept to a minimum.
- Bulky or large accessories may seriously affect the stability of the motorcycle due to aerodynamic effects. Wind may attempt to lift the motorcycle, or the motorcycle may become unstable in cross winds. These accessories may also cause instability when passing or being passed by large vehicles.
- Certain accessories can displace the operator from his or her normal riding position. This improper position limits the freedom of movement of the

Safety information

2

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

- Use caution when adding electrical accessories. If electrical accessories exceed the capacity of the motorcycle's electrical system, an electric failure could result, which could cause a dangerous loss of lights or engine power.

Aftermarket Tires and Rims

The tires and rims that came with your motorcycle were designed to match the performance capabilities and to provide the best combination of handling, braking, and comfort. Other tires, rims, sizes, and combinations may not be appropriate. See page 8-15 for tire specifications and for information on servicing and replacing your tires.

Transporting the Motorcycle

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

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

Further safe-riding points

EAU57610

- Be sure to signal clearly when making turns.
- Braking can be extremely difficult on a wet road. Avoid hard braking, because the motorcycle could slide. Apply the brakes slowly when stopping on a wet surface.
- Slow down as you approach a corner or turn. Once you have completed a turn, accelerate slowly.
- Be careful when passing parked cars. A driver might not see you and open a door in your path.
- Railroad crossings, streetcar rails, iron plates on road construction sites, and manhole covers become extremely slippery when wet. Slow down and cross them with caution. Keep the motorcycle upright, otherwise it could slide out from under you.
- The brake pads or linings could get wet when you wash the motorcycle. After washing the motorcycle, check the brakes before riding.

- Always wear a helmet, gloves, trousers (tapered around the cuff and ankle so they do not flap), and a brightly colored jacket.
- Do not carry too much luggage on the motorcycle. An overloaded motorcycle is unstable. Use a strong cord to secure any luggage to the carrier (if equipped). A loose load will affect the stability of the motorcycle and could divert your attention from the road. (See page 2-3.)

Helmets

EAUU0033

Operating this vehicle without an approved motorcycle helmet increases your chances of a severe head injury or death in the event of an accident. The majority of fatalities from motorcycle or scooter accidents are the result of head injuries. The use of a safety helmet is the single most critical factor in the prevention or reduction of head injuries.

Always select an approved motorcycle helmet

Pay attention to the following when choosing a motorcycle helmet.

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

Wearing the helmet correctly

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

Correct usage



ZAUU0003

Wrong usage



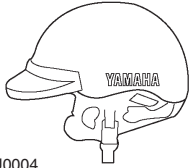
ZAUU0007

Types of helmets and their usage

- Half-type: use only for riding at low speeds

Safety information

2

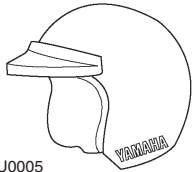


ZAUU0004



ZAUU0006

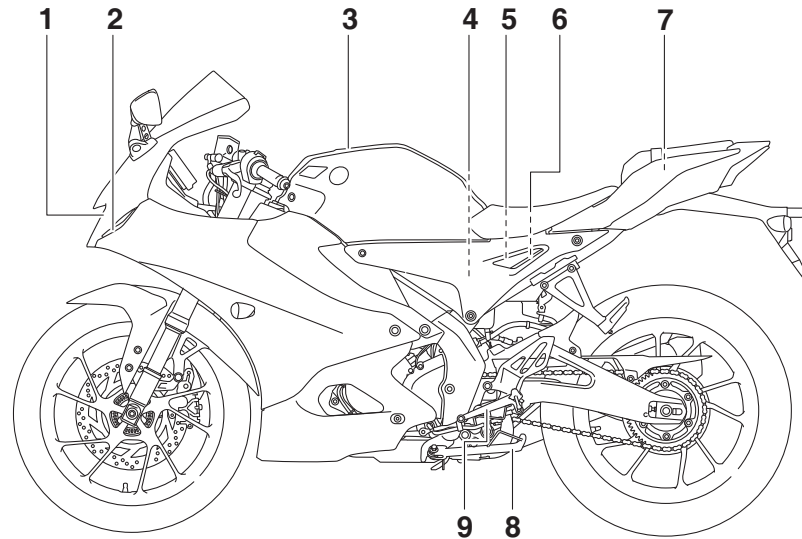
- Full-type: use only for riding at low to mid-range speeds



ZAUU0005

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

Left view



1. Headlight (page 8-29)
2. Auxiliary light (page 8-29)
3. Fuel tank cap (page 5-20)
4. Air filter (page 8-13)
5. Battery (page 8-27)
6. Fuse (page 8-29)
7. Tool kit (page 8-1)
8. Sidestand (page 5-25)

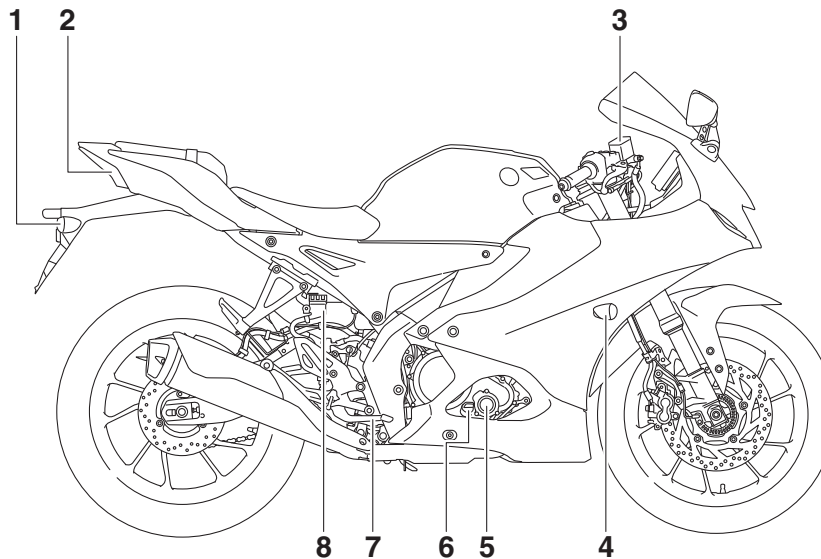
9. Shift pedal (page 5-18)

Description

EAU10421

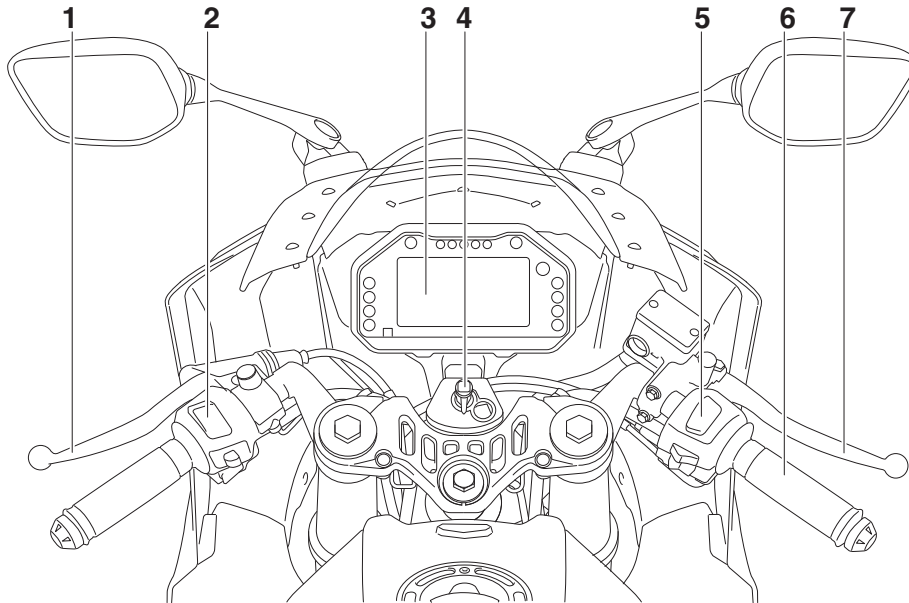
Right view

3



1. Rear turn signal light (page 8-30)
2. Tail/brake light
3. Front brake fluid reservoir (page 8-20)
4. Front turn signal light (page 8-30)
5. Engine oil filter element (page 8-9)
6. Dipstick (page 8-9)
7. Brake pedal (page 5-19)
8. Rear brake fluid reservoir (page 8-20)

Controls and instruments



1. Clutch lever (page 5-17)
2. Left handlebar switches (page 5-16)
3. Multi-function meter unit
4. Main switch/steering lock (page 5-1)
5. Right handlebar switches (page 5-16)
6. Throttle grip (page 8-14)
7. Brake lever (page 5-18)

Special features

4

Quick shifter

EAU79482

The quick shifter allows for full-throttle, clutch lever-less upshifts. When the shift switch detects motion in the shift pedal, engine power and drive torque are momentarily adjusted to allow the upshift to occur.

TIP

The quick shifter operates when traveling at least 20 km/h (12 mi/h) with an engine speed of 2000 r/min or higher, and only when accelerating. It does not operate when the clutch lever is pulled.

ECA26261

NOTICE

To prevent drivetrain damage, always use the clutch lever to shift when riding at slow speed, when downshifting, or if the quick shifter is off.

EAUE4660

CCU (Communication Control Unit)

This model is equipped with a CCU that allows your vehicle and smartphone to connect using Bluetooth wireless technology and the Yamaha Motorcycle Connect smartphone app. With this connection, notifications from SNS (social network service) apps, incoming phone calls and missed calls are signaled to you, and the battery level of your smartphone is displayed. The Yamaha Motorcycle Connect app also provides other information such as your last parking location, etc.

EWAN0070

WARNING

- Always stop the vehicle before operating your smartphone.
- Never take your hands off the handlebars while riding.
- Always concentrate on riding by keeping your eyes and mind on the road.

ECAN0150

NOTICE

The Bluetooth connection may not work in the following situations.

- In a location exposed to strong radio waves or other electromagnetic noise.
- At facilities nearby that are emitting strong radio waves (TV or radio towers, power plants, broadcasting stations, airports, etc.).

Pairing the CCU and your smartphone

1. Scan the QR code below and download the Yamaha Motorcycle Connect app.



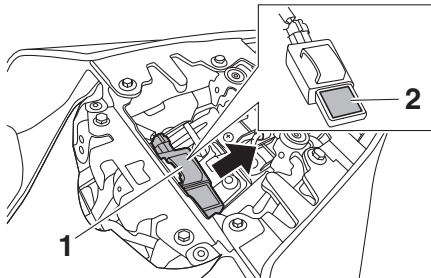
TIP

Yamaha Motorcycle Connect may not work on all smartphone models and OS (operating system) versions.

2. Remove the passenger seat. (See page 5-22.)
3. Pull out the CCU and scan its QR code with the Yamaha Motorcycle Connect app.

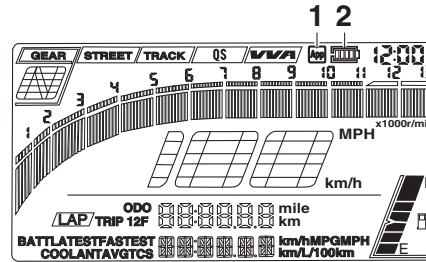
TIP

Pairing can also be done using the vehicle identification number. (See page 11-1.) Refer to the login screen in the Yamaha Motorcycle Connect app.



1. CCU (Communication Control Unit)
2. CCU QR Code

4. When pairing is complete, the Yamaha Motorcycle Connect icon and smartphone battery level meter will come on.



1. Yamaha Motorcycle Connect icon
2. Smartphone battery level meter

TIP

- Once paired, the smartphone is registered in the CCU. The next time the vehicle is turned on and the Yamaha Motorcycle Connect app is active, the connection will be automatically established.
- Only one smartphone can be connected to the CCU at one time.

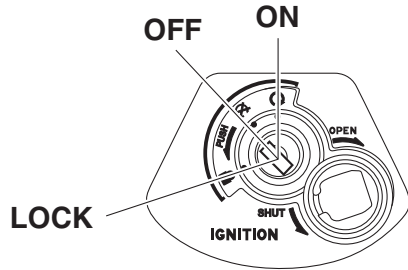
- If more than one phone has been registered in the CCU, then the first phone within reach will be connected.

5. Install the CCU in its original position and then install the passenger seat.

Instrument and control functions

Main switch/steering lock

EAUN0264



5

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

TIP

The main switch/steering lock is equipped with a keyhole shutter. (See page 5-2 for keyhole shutter opening and closing procedures.)

EAU80650

⦿ (on)

All electrical circuits are supplied with power, and the engine can be started. The key cannot be removed.

TIP

- The meter lighting comes on automatically when the key is turned to “⦿”.
- The fuel pump can be heard when the key is turned to “⦿”.

EAU76120

⊗ (off)

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

EWA15351

⚠ WARNING

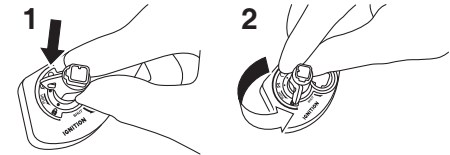
Never turn the key to “⊗” or “⦿” while the vehicle is moving. Otherwise the electrical systems will be switched off, which may result in loss of control or an accident.

EAU76130

🔒 (lock)

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

To lock the steering



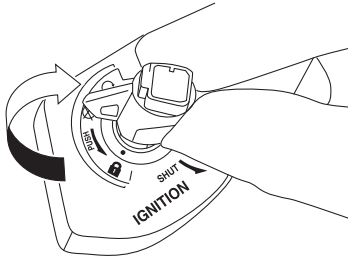
1. Push.
2. Turn.


1. Turn the handlebars all the way to the left.
2. Push the key in from the “⊗” position, release it, and then turn it to “🔒”.
3. Remove the key.

TIP

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

To unlock the steering

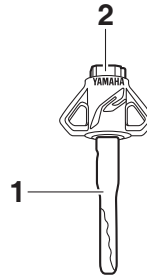


Insert the key and turn it to “”.

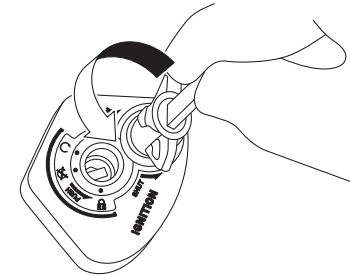
Keyhole shutter

EAU61101

To close the keyhole shutter

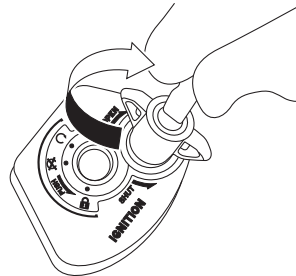


1. Keyhole shutter key
2. Main switch/steering lock key



Insert the keyhole shutter key into the keyhole shutter receptacle as shown, and then turn the key to the left to close the keyhole shutter.

To open the keyhole shutter

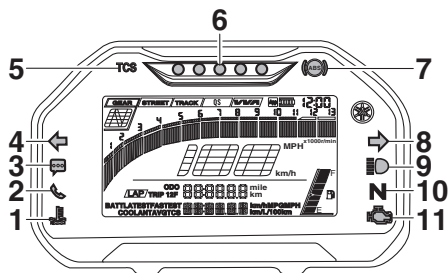


Insert the keyhole shutter key into the keyhole shutter receptacle as shown, and then turn the key to the right to open the keyhole shutter.

Instrument and control functions

Indicator lights and warning lights

EAU77123



1. Coolant temperature warning light “”
2. Incoming call indicator light “”
3. Notification indicator light “”
4. Left turn signal indicator light “”
5. Traction control system indicator light “TCS”
6. Shift timing indicator light
7. ABS warning light “”
8. Right turn signal indicator light “”
9. High beam indicator light “”
10. Neutral indicator light “N”
11. Engine trouble warning light “”

Turn signal indicator lights “” and “”

EAU88900

Each indicator light will flash when its corresponding turn signal lights are flashing.

Neutral indicator light “N”

EAU11061

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

High beam indicator light “”

EAU11081

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

Coolant temperature warning light “”

EAU11449

This warning light comes on when the engine is overheating. If this occurs, stop the engine immediately and allow the engine to cool. (See page 8-34.) For vehicles with a radiator fan, the radiator fan(s) automatically switch on or off according to the coolant temperature.

TIP

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

NOTICE

ECA10022

Do not continue to operate the engine if it is overheating.

Engine trouble warning light “”

EAU73172

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

TIP

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

ABS warning light “”

EAU88890

This warning light comes on when the vehicle is first turned on, and goes off after starting riding. If the warning light comes on while riding, the anti-lock brake system may not work correctly.

EWA16043



WARNING

If the ABS warning light does not turn off after reaching 10 km/h (6 mi/h), or if the warning light comes on while riding:

- Use extra caution to avoid possible wheel lock during emergency braking.
- Have a Yamaha dealer check the vehicle as soon as possible.

TIP

The ABS warning light may come on while revving the engine with the vehicle on its centerstand, but this does not indicate a malfunction.

EAU88930

Traction control system indicator light “TCS”

This indicator light will flash when traction control has engaged.

If the traction control system is turned off, this indicator light will come on.

TIP

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

EAU92970

Shift timing indicator light

This indicator light can be set to come on and go off at select engine speeds.

TIP

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

EAUN2781

Incoming call indicator light “”

This indicator light flashes when there is an incoming call to the connected smartphone. If you do not answer the call, the indicator light stays on until you turn the vehicle off.

TIP

This function works only when the smartphone is connected to the vehicle.

EAUN2792

Incoming notification indicator light “”

This indicator light flashes for 10 seconds when the connected smartphone receives an SNS, E-mail or other notification. After that, the indicator light stays on until you turn the vehicle off.

TIP

- This function works only when the smartphone is connected to the vehicle.
- Notification setting is needed for each application at the connected smartphone in advance.

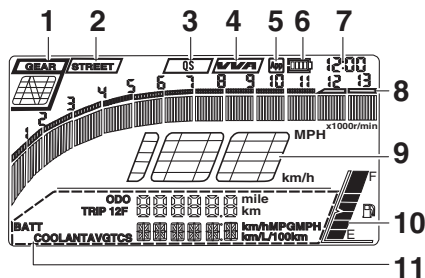
Instrument and control functions

EAUN3415

Display

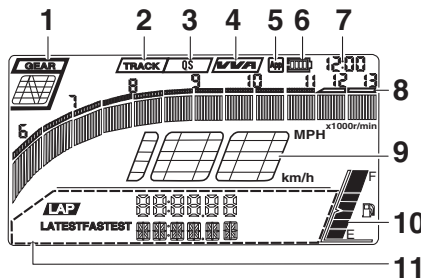
The display has two different main screen display modes, STREET MODE and TRACK MODE. Most of the functions are viewable in either mode, but the layout differs slightly. The following items can be found on the display:

STREET MODE



1. Transmission gear display
2. Display in STREET MODE
3. Quick shifter indicator light “QS”
4. VVA (variable valve actuation) indicator
5. Yamaha Motorcycle Connect icon
6. Smartphone battery level meter
7. Clock
8. Tachometer
9. Speedometer
10. Fuel meter
11. Information display

TRACK MODE



1. Transmission gear display
2. Display in TRACK MODE
3. Quick shifter indicator light “QS”
4. VVA (variable valve actuation) indicator
5. Yamaha Motorcycle Connect icon
6. Smartphone battery level meter
7. Clock
8. Tachometer
9. Speedometer
10. Fuel meter
11. Information display

EWA18210



Stop the vehicle before making any setting changes. Changing settings while riding can distract the operator and increase the risk of an accident.

TIP

The display units can be switched between kilometers/miles and celcius/farenheit.

Speedometer

The speedometer shows the vehicle’s traveling speed.

Tachometer

The tachometer shows the engine speed, as measured by the rotational velocity of the crankshaft, in revolutions per minute (r/min).

TIP

- In TRACK MODE, the tachometer starts at 6000 r/min.
- The tachometer has a revolution peak hold indicator which can be turned on or off.

ECA23050

NOTICE

Do not operate the engine in the tachometer high-r/min zone. High-r/min zone: 11000 r/min and above

Fuel meter

The fuel meter indicates the amount of fuel in the fuel tank. The display segments of the fuel meter disappear from “F” (full) towards “E” (empty) as the fuel level decreases.

When the last segment starts flashing, the fuel tank reserve level has been reached. Refuel as soon as possible.

TIP

If all the fuel meter display segments flash repeatedly, have a Yamaha dealer check the related circuits.

Clock

The clock uses a 12-hour time system.

To set the clock:

1. Set the upper information display to the odometer (ODO). See page 5-7.
2. Press and hold (**long push**) the TRIP switch until the hour digits of the clock begin to flash.
3. Use the INFO switch to cycle the numbers. Press and hold (**long push**) the TRIP switch to confirm the hour value.

4. Use the INFO switch to cycle the numbers. Press and hold (**long push**) the TRIP switch to confirm the minute value and exit the clock setting function.

TIP

The clock automatically updates when a connection is established between a smartphone and the CCU.

Transmission gear display

This shows which gear the transmission is in. This model has 6 gears and a neutral position. The neutral position is indicated by the neutral indicator light “N” and by the transmission gear display “N”.

Revolution peak hold indicator

This small bar momentarily appears within the tachometer to mark the most recent peak engine speed (from 7000 r/min).

It can be turned on/off in the menu mode.

VVA indicator

This model is equipped with variable valve actuation (VVA) for good fuel economy and acceleration in both the low-speed and high-speed ranges. The VVA indicator comes on when the variable valve actuation system has switched to the high-speed range.

Quick shifter icon

This icon comes on when the quick shifter is active and able to shift. When the icon is not visible, the quick shifter will not operate. See page 4-1 for quick shifter information.

Yamaha Motorcycle Connect icon

This icon comes on when CCU and smartphone are connected via the Yamaha Motorcycle Connect.

TIP

Even if the smartphone is not connected, when the vehicle is turned on, this icon should come on for a few seconds. Otherwise have a Yamaha dealer check the CCU and the electrical circuit.

Instrument and control functions

Smartphone battery level meter

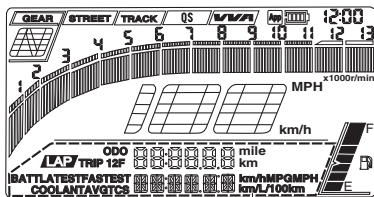
This meter indicates the current battery level of the connected smartphone. The display segments of the meter disappear from full to blank as the battery level decreases. When approximately 10% or less of the battery remains, the last segment starts flashing.

5

TIP

Even if the smartphone is not connected, when the vehicle is turned on, this icon should come on for a few seconds. Otherwise have a Yamaha dealer check the CCU and the electrical circuit.

Information display



1. Information display

The information display items are:

ODO: odometer
TRIP1: tripmeter 1
TRIP 2: tripmeter 2
TRIP F: fuel reserve tripmeter
Current fuel consumption
AVG: average fuel consumption
AVG: average speed
TCS: traction control system ON/OFF
BATT: battery voltage
COOLANT: coolant temperature
TRACK: change to track mode
LAP: current lap time
FASTEST: fastest lap time
LATEST: latest lap time

TIP

- LAP, FASTEST, and LATEST are only available in TRACK mode.
- TRIP1, TRIP 2, TRIP F, and the two AVG items can be individually reset.
- FASTEST and LATEST are reset simultaneously.
- The fuel reserve tripmeter (TRIP F) will only be available when active due to low fuel level.

The display items are grouped into 2 separate displays. The upper display is controlled using the TRIP switch and the lower display is controlled using the INFO switch.

STREET MODE: Pressing the TRIP or INFO switches will cycle the display items in the following order:

1. Upper display: → Odometer → Tripmeter 1 → Tripmeter 2 → Fuel reserve tripmeter →
2. Lower display: → Current fuel consumption → AVG fuel consumption → AVG speed → Traction control setting → Battery voltage → Coolant temp. → TRACK mode function →

TRACK MODE: Pressing the INFO switch will cycle the display items in the following order:

→ Latest lap time → Fastest lap time →

TIP

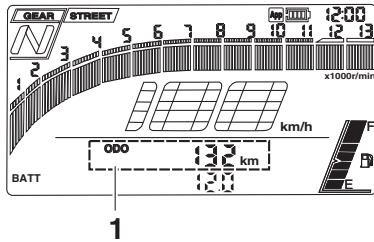
In TRACK mode, the upper information display will always show the current lap timer.

Instrument and control functions

To reset information display items

1. Use the TRIP/INFO switches to cycle through the display items until the item you want to reset appears.
2. Press and hold (**long push**) either the TRIP switch (for upper information display items) or the INFO switch (for lower information display items) until the item resets.

Odometer:



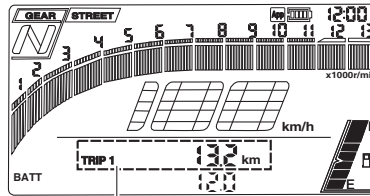
1. Odometer

The odometer shows the total distance traveled by the vehicle.

TIP

ODO will lock at 999999 and cannot be reset.

Tripmeters:



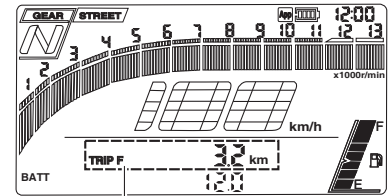
1. Tripmeter

TRIP1 and TRIP 2 show the distance traveled since they were last reset.

TIP

TRIP1 and TRIP 2 will reset to 0 and begin counting again after 9999.9 has been reached.

Fuel reserve tripmeter:



1. Fuel reserve tripmeter "TRIP F"

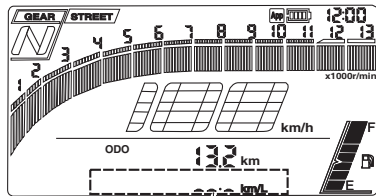
When the fuel tank reserve level has been reached, TRIP F appears automatically and begins recording distance traveled from that point. Press and hold (**long push**) the TRIP switch while TRIP F is displayed to reset the tripmeter after refueling.

TIP

After refueling and traveling 5 km (3 mi), TRIP F will automatically disappear.

Instrument and control functions

Current fuel consumption:



ZAUE4518

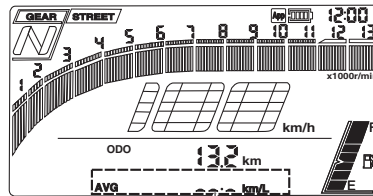
1

1. Current fuel consumption

The current fuel consumption display can be switched between “km/L” and “L/100km”. When the units are set to miles, the current fuel consumption will display in MPG.

TIP _____
If traveling at speeds under 10 km/h (6 MPH), “_ _.” will be displayed.

Average fuel consumption:



ZAUE4519

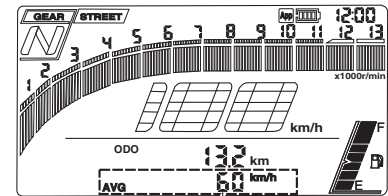
1

1. Average fuel consumption

Shows the average amount of fuel consumed since last reset.
The average fuel consumption display can be switched between “km/L” and “L/100km”. When the units are set to miles, the current fuel consumption will display in MPG.

TIP _____
After resetting the average fuel consumption display, “_ _.” will be shown until the vehicle has traveled 1 km (1 mi).

Average speed:



ZAUE4520

1

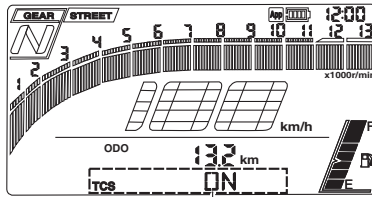
1. Average speed

Shows the average speed travelled since last reset.

TIP _____
After resetting the average speed display, 0 km/h (0 MPH) will be shown until the vehicle has traveled for approx. 10 seconds.

Instrument and control functions

Traction control system setting:



ZAU4521

1

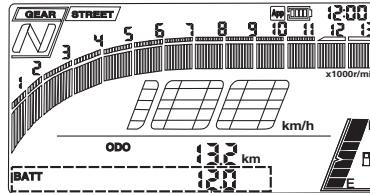
1. Traction control system display

This setting allows the traction control system to be turned ON/OFF.

TIP

- The traction control system can only be turned off when the vehicle is stopped.
- The traction control system resets to “ON” whenever the main switch is turned off/on.

Battery voltage:



ZAU4522

1

1. Battery voltage display

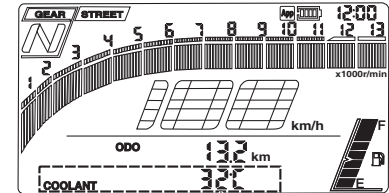
This display shows the current charge state of the battery.

- Over 12.8 V = Full charge.
- Under 12.7 V = Charging is required.

TIP

- If the battery voltage is less than 9.0 V, “_ _ . _” is displayed.
- If the Stop/Run/Start switch “/○/⊗” is set to “”, “_ _ . _” is displayed.

Coolant temperature:



ZAU4523

1

1. Coolant temperature display

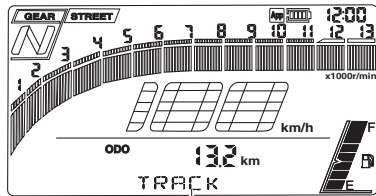
The coolant temperature is displayed from -30 °C (-22 °F) to 114 °C (237 °F) in 1 °C (1 °F) increments.

TIP

- If the vehicle coolant temperature is below -30 °C (-22 °F) the coolant temperature display will lock.
- If the vehicle coolant temperature is above 114 °C (237 °F) the coolant temperature display will read “Hi”.

Instrument and control functions

TRACK mode:



ZAUE4524

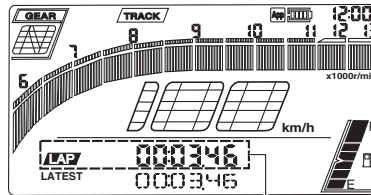
1. Track Mode display

Allows switching to track mode from the main display screen.

TIP

TRACK mode can also be entered via the menu mode.

Current lap timer:

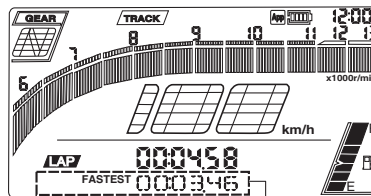


ZAUE4525

1. Current lap time

Shows the current lap time when in TRACK mode.

Fastest lap time:

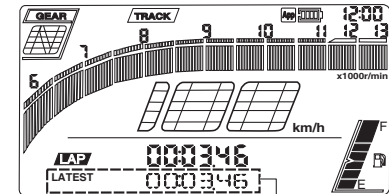


ZAUE4526

1. Fastest lap time

Shows the fastest lap time recorded since entering TRACK mode or since last reset.

Latest lap time:



ZAUE4528

1. Latest/Previous lap time

Shows the last lap time recorded.

TRACK mode/Lap timer

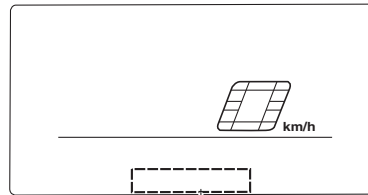
To use the lap timer:

1. Enter TRACK mode. The lap timer is now in standby mode.
2. Press the PASS switch to start the timer.
3. Press the PASS switch again to count each lap and reset the lap timer.

4. Press the TRIP switch to pause the timer and return to standby mode. Press the PASS switch to resume the timer.
5. Press and hold (**long push**) the TRIP/INFO switch to reset the timer, lap number and return to standby mode.
6. From standby mode press and hold (**long push**) the TRIP/INFO switch to return to STREET mode.

Menu mode

EAUN3424



ZAUE4529

1. Menu mode display

The menu mode contains the following setting modules in order:

Module	Description
MODE	Switch the main screen display between STREET mode and TRACK mode
BACKLIGHT BRIGHTNESS	Adjust the display backlight brightness
MESSAGE	Change the welcome message
SHIFT INDICATOR	Change shift indicator settings
PEAK REV INDICATOR	Change peak rev indicator settings
UNIT	Set measurement units
ALL RESET	Return all settings to factory defaults
EXIT	Exit menu mode and returns to the main display

Menu access and operation

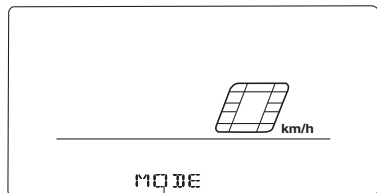
- With the main switch off, press and hold either the TRIP or INFO switch. Turn the main switch on while still holding the TRIP/INFO switch. The main display will appear and after a few seconds will switch to the menu mode.
- Briefly press the INFO switch (**short push**) to cycle forward in the menus and adjust settings values upward (increase). Briefly press the TRIP switch (**short push**) to cycle backward in the menus and adjust settings values downward (decrease).
- Press and hold the TRIP/INFO switch (either side of the switch) for 1 second (**long push**) to select a menu item or confirm a setting.
- Use the EXIT option of the main menu to return to the main display screen.

TIP

Should vehicle motion be detected, the menu mode will automatically exit and return to the main display.

Instrument and control functions

MODE



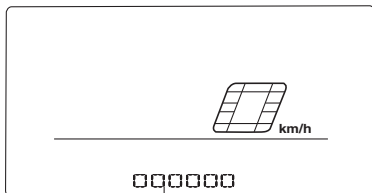
ZAUE4530

1

1. Menu mode display

Cycle between the two main screen display modes, STREET MODE and TRACK MODE. The icon for the currently selected mode will flash at the top of the screen.

BACKLIGHT BRIGHTNESS



ZAUE4531

1

1. Backlight setting mode

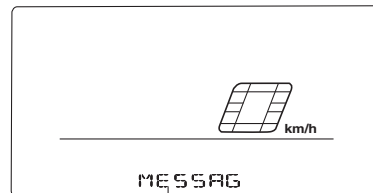
This module allows you to adjust the general brightness level of the display screen.

The display has 6 brightness level settings. The brightness level is represented by a segmented bar at the bottom of the screen.

TIP

The screen brightness will adjust as the levels are changed in this menu.

MESSAGE

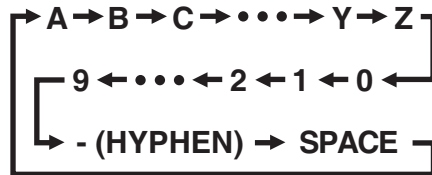


ZAUE4532

1

1. Message display

A 6 digit message appears on the bottom information display when the main switch is turned on. The default message is 000000. Customize the message one digit at a time with this module. Change the flashing digits value in the following order:



ZAUE4533

Long push the TRIP/INFO switch to confirm the digit and move to the next digit.

TIP

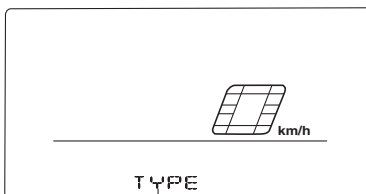
- After the 6th and final digit is confirmed, the display will return to the main menu.
- If all the digits are set to “SPACE”, “000000” is displayed (default). If any digit is changed, the “SPACE” digits will appear blank.

SHIFT INDICATOR

This module has 3 sub-menus and an exit to main menu option:
→TYPE→RPM→BRIGHTNESS→EXIT→

Long push either the TRIP/INFO switch to enter a sub-module

TYPE



ZAUE4534

1. Shift indicator type

This module allows you to change the shift indicator between 3 settings (→OFF → TYPE 1 → TYPE 2 →).

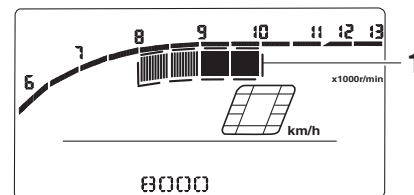
- TYPE 1 causes the shift indicator lights to shine solid without flashing when the final set r/min is reached.
- TYPE 2 causes the shift indicator lights to flash when the final set r/min is reached.
- OFF disables the shift indicator light.

TIP

The shift indicator lights will come on/off and flash as the settings are adjusted.

RPM

This module allows the r/min range of the shift indicator lights to be adjusted in increments of 200 r/min. The values are represented by flashing segments of the tachometer and also by numbers at the bottom of the display.

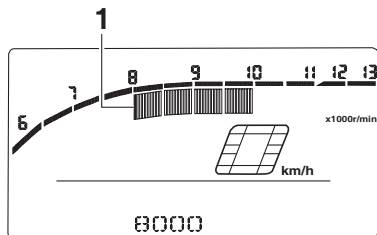


ZAUE4535

1. Shift timing indicator light activation range

First the initial r/min at which the shift indicator lights begin coming on must be set. The minimum value is 6000 r/min and the maximum value is 12800 r/min.

Instrument and control functions

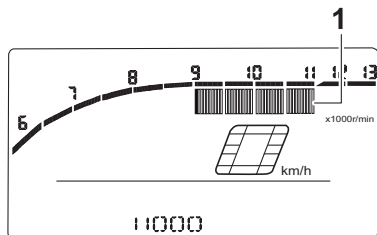


ZAUE4536

5

1. Initial r/min value

Once the initial value is set, the final r/min value at which the shift indicator lights are all on can be set. The minimum value is 6200 r/min and the maximum value is 13000 r/min.

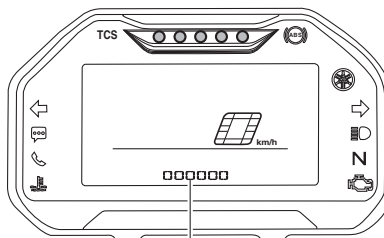


1. Final r/min value

TIP

The initial r/min value must be at least 200 r/min below the final r/min value.

BRIGHTNESS



ZAUE4537

1. Brightness level display

The brightness level of the shift indicator lights can be adjusted between 6 settings which are represented by a segmented bar at the bottom of the display.

TIP

The shift indicator lights come on and adjust to the brightness levels as they are changed.

PEAK REV INDICATOR

The peak rev indicator marks the most recent maximum engine r/min on the tachometer. It can be turned ON/OFF in this module.

UNIT

This module has 3 sub-menus and an exit to main menu option:
→SPEED→FUEL CONSUMPTION→TEMPERATURE→EXIT→
Long push the TRIP/INFO switch to enter a sub-module.

SPEED

The speed measurement units can be changed between km/h and MPH. The selected unit type will flash.

FUEL CONSUMPTION

- If the speed measurement units are set to km/h, the fuel consumption units can be changed between km/L and L/100km. The selected unit will flash.
- If the speed measurement units are set to MPH, only MPG is available as a fuel consumption unit.

TEMPERATURE

The temperature units can be switched between Celsius and Fahrenheit. The selected unit will flash.

ALL RESET

This module resets everything, except the odometer and clock, to its factory preset or default setting. Select YES to reset all items. Select NO to return to the main menu.

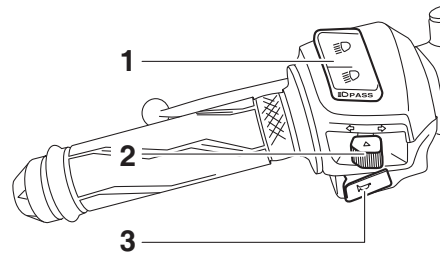
EXIT

Use this to exit the menu mode and return to the main display.

Handlebar switches

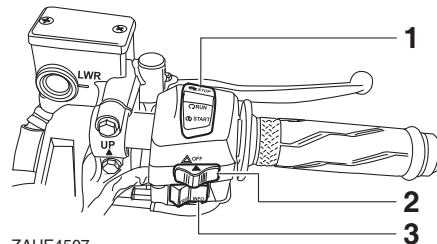
EAU1234R

Left



1. Dimmer/Pass switch “ \equiv / \equiv /PASS”
2. Turn signal switch “ \leftarrow / \rightarrow ”
3. Horn switch “ 📢 ”

Right



ZAUE4507

1. Stop/Run/Start switch “ 🛑 / 🚦 / 🏎 ”
2. Hazard switch “ \triangle /OFF”
3. “TRIP/INFO” switch

Dimmer/Pass switch “ \equiv / \equiv /PASS”

EAU54203

Set this switch to “ \equiv ” for the high beam and to “ \equiv ” for the low beam. To flash the high beam, push the switch down towards “PASS” while the headlights are on low beam.

Turn signal switch “ \leftarrow / \rightarrow ”

EAU12461

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

Horn switch “ 📢 ”

EAU12501

Press this switch to sound the horn.

Stop/Run/Start switch “ 🛑 / 🚦 / 🏎 ”

EAU69960

Set this switch to the stop position “ 🛑 ” to stop the engine in case of an emergency.

Set this switch to the run position “ 🚦 ” to power all electrical circuits and operate the vehicle.

Instrument and control functions

Push and briefly hold this switch down to the start position “(⊕)” to crank the engine with the starter.

TIP

- See page 7-2 for further instructions before starting the engine for the first time.
- For certain models, the engine warning light will come on when the start switch is pushed, but this does not indicate a malfunction.

5

Hazard lights switch “△/OFF”

EAUN2211

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

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

NOTICE

ECA10062

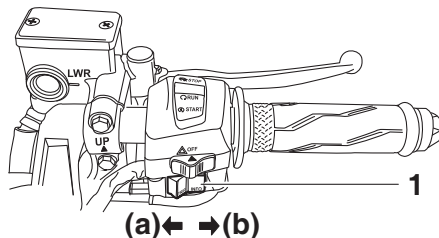
Do not use the hazard lights for an extended length of time with the engine not running, otherwise the battery may discharge.

“TRIP/INFO” switch

EAU78491

This switch is used to make setting and display changes in the multi-function meter unit.

To use the “TRIP” switch, move the “TRIP/INFO” switch in direction (a). To use the “INFO” switch, move the “TRIP/INFO” switch in direction (b).

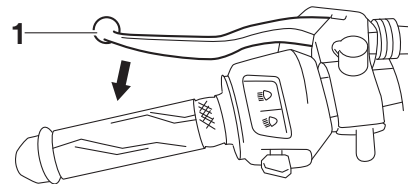


ZAUE4465

1. “TRIP/INFO” switch

Clutch lever

EAU31642



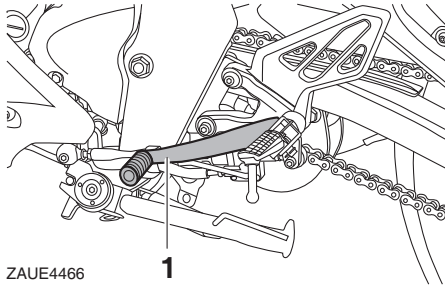
1. Clutch lever

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.

The clutch lever is equipped with a clutch switch, which is part of the starting circuit cut-off system. (See page 5-25.)

Shift pedal

EAU12876



ZAUE4466

1. Shift pedal

The shift pedal is located on the left side of the motorcycle. To shift the transmission to a higher gear, move the shift pedal up. To shift the transmission to a lower gear, move the shift pedal down. (See page 7-3.)

Quick shifter

EAUN3570

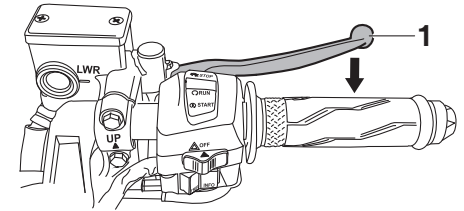
The quick shifter allows for full-throttle, clutch lever-less, electronically-assisted upshifts. When the shift switch detects motion in the shift pedal (page 5-18), engine power and drive torque are momentarily adjusted to allow the upshift to occur.

TIP

- The quick shifter operates when traveling at least 20 km/h with an engine speed of 2000 r/min or higher, and only when accelerating.
- It does not operate when the clutch lever is pulled.

Brake lever

EAU12892



ZAUE4467

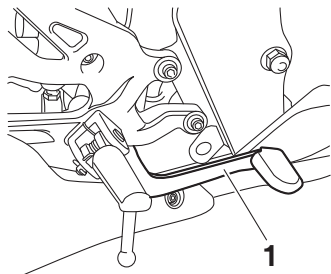
1. Brake lever

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

Instrument and control functions

Brake pedal

EAU12944



5

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.

ABS

EAU63041

The Yamaha ABS (Anti-lock Brake System) features a dual electronic control system, which acts on the front and rear brakes independently.

Operate the brakes with ABS as you would conventional brakes. If the ABS is activated, a pulsating sensation may be felt at the brake lever or brake pedal. In this situation, continue to apply the brakes and let the ABS work; do not “pump” the brakes as this will reduce braking effectiveness.

EWA16051

⚠ WARNING

Always keep a sufficient distance from the vehicle ahead to match the riding speed even with ABS.

- **The ABS performs best with long braking distances.**
- **On certain surfaces, such as rough or gravel roads, the braking distance may be longer with the ABS than without.**

The ABS is monitored by an ECU, which will revert the system to conventional braking if a malfunction occurs.

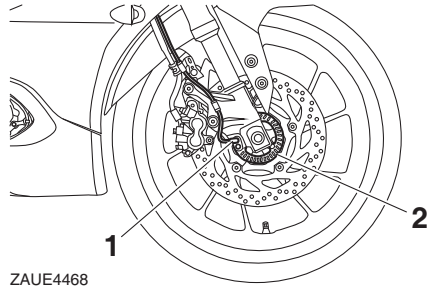
TIP

- The ABS performs a self-diagnostic test each time the vehicle first starts off after the key is turned to “ON” and the vehicle has traveled at a speed of 10 km/h (6 mi/h) or higher. During this test, a “clicking” noise can be heard from the hydraulic control unit, and if the brake lever or brake pedal is even slightly applied, a vibration can be felt at the lever and pedal, but these do not indicate a malfunction.
- This ABS has a test mode which allows the owner to experience the pulsation at the brake lever or brake pedal when the ABS is operating. However, special tools are required, so please consult your Yamaha dealer.

ECA20100

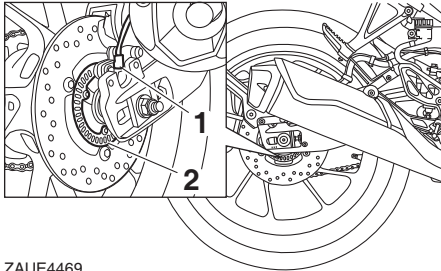
NOTICE

Be careful not to damage the wheel sensor or wheel sensor rotor; otherwise, improper performance of the ABS will result.



ZAUE4468

1. Front wheel sensor
2. Front wheel sensor rotor

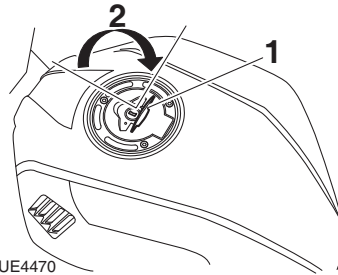


ZAUE4469

1. Rear wheel sensor
2. Rear wheel sensor rotor

Fuel tank cap

EAUE1482



ZAUE4470

1. Fuel tank cap lock cover
2. Unlock.

To remove the fuel tank cap

1. Open the fuel tank cap lock cover.
2. Insert the key 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.
2. Turn the key counterclockwise to the original position, and then remove it.
3. Close the lock cover.

TIP

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

EWA11142

WARNING

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

Instrument and control functions

Fuel

Make sure there is sufficient gasoline in the tank.

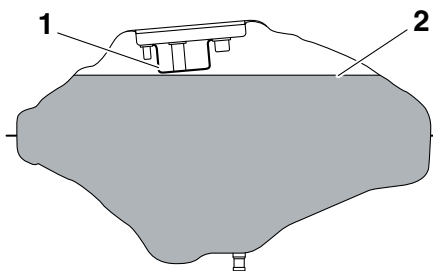
EAU13213

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.



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 (E10 to E20 only)

Fuel tank capacity:

11 L (2.9 US gal, 2.4 Imp.gal)

Fuel reserve amount:

1.5 L (0.40 US gal, 0.33 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.

Catalytic converter

EAU13435

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

EWA10863

WARNING

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

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

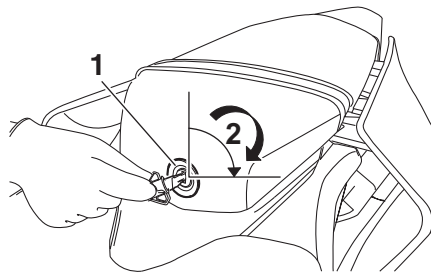
Seats

EAU83851

Passenger seat

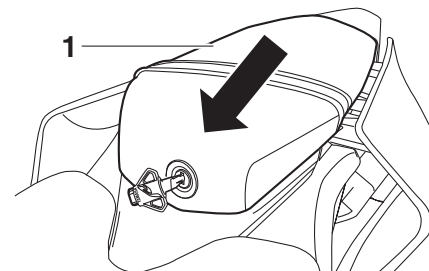
To remove the passenger seat

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



1. Seat lock
2. Unlock.

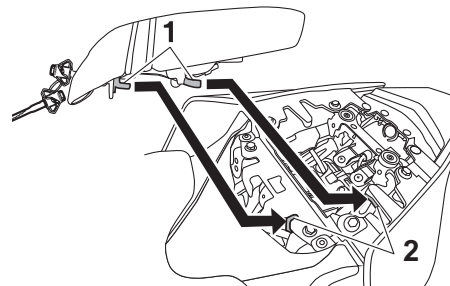
2. While holding the key in that position, lift the rear of the passenger seat and pull it backward.



1. Passenger seat

To install the passenger seat

1. Insert the projections on the front of the passenger seat into the seat holders as shown, and then push the rear of the seat down to lock it in place.



1. Projection
2. Seat holder

Instrument and control functions

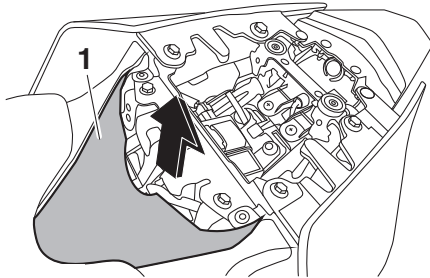
2. Remove the key.

Rider seat

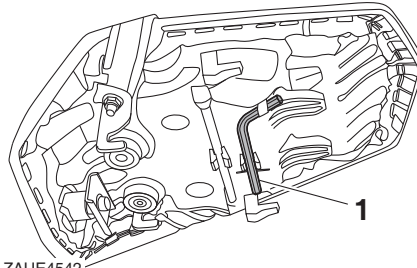
To remove the rider seat

1. Remove the passenger seat, and then remove the hexagon wrench located on the bottom of the seat.

5



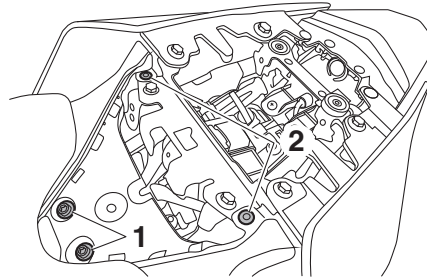
1. Rider seat cover



ZAUE4542

1. Hexagon wrench

2. Remove the bolts with the hexagon wrench.

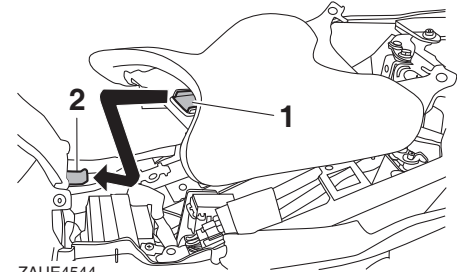


1. Bolt
2. Quick fastener

3. Lift the seat rearward and up to remove it.

To install the rider seat

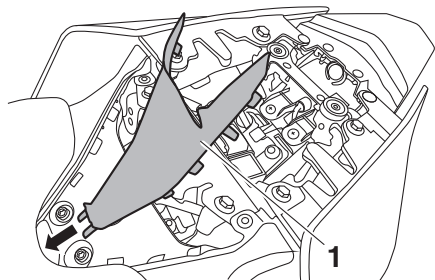
1. Fit the slot in the seat onto the projection on the frame cross member as shown, and then place the seat in the original position.



ZAUE4544

1. Projection
2. Seat holder

2. Install the bolts with the hexagon wrench.
3. Insert the hexagon wrench back into its holder on the passenger seat.
4. Install the passenger seat.



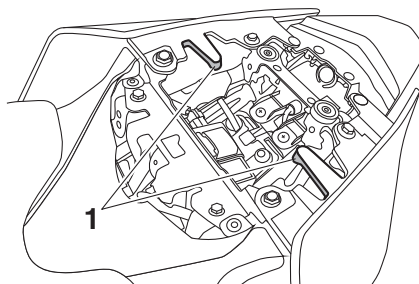
1. Rider seat cover

TIP

Make sure that the seats are properly secured before riding.

Helmet holders

EAU62930

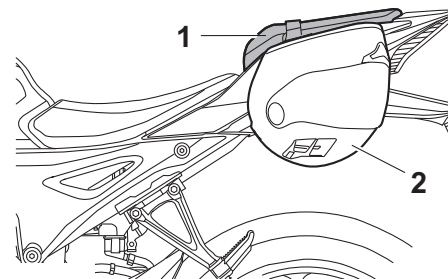


1. Helmet holder

The helmet holders are located on the bottom of the passenger seat.

To secure a helmet to a helmet holder

1. Remove the passenger seat. (See page 5-22.)
2. Attach a helmet to a helmet holder, and then securely install the passenger seat. **WARNING! Never ride with a helmet attached to the helmet holder, since the helmet may hit objects, causing loss of control and possibly an accident.** [EWA10162]



1. Passenger seat
2. Helmet

To release a helmet from a helmet holder

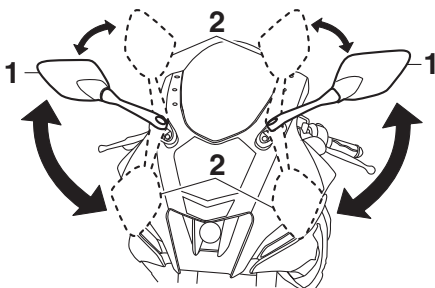
Remove the passenger seat, remove the helmet from the helmet holder, and then install the seat.

Instrument and control functions

Rear view mirrors

EAU39672

The rear view mirrors of this vehicle can be folded forward or backward for parking in narrow spaces. Fold the mirrors back to their original position before riding.



1. Riding position
2. Parking position

WARNING

EWA14372

Be sure to fold the rear view mirrors back to their original position before riding.

Sidestand

EAU37491

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.

Starting circuit cut-off system

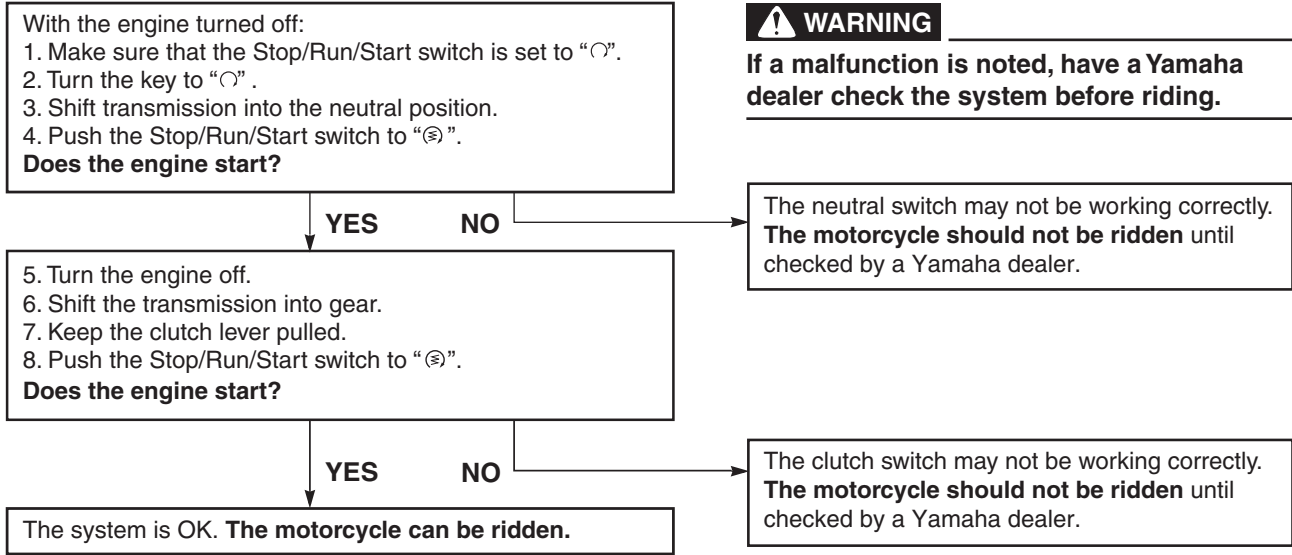
EAUN3580

This system prevents in-gear engine starts unless the clutch lever is pulled. Periodically check the system via the following procedure.

TIP

- This check is most reliable if performed with a warmed-up engine.
- See pages 5-1 and 5-16 for switch operation information.

Instrument and control functions



For your safety – pre-operation checks

EAU1559B

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

EWA11152

WARNING

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

Before using this vehicle, check the following points:

ITEM	CHECKS	PAGE
Fuel	<ul style="list-style-type: none">• Check fuel level in fuel tank.• Refuel if necessary.• Check fuel line for leakage.	5-21
Engine oil	<ul style="list-style-type: none">• Check oil level in engine.• If necessary, add recommended oil to specified level.• Check vehicle for oil leakage.	8-9
Coolant	<ul style="list-style-type: none">• Check coolant level in reservoir.• If necessary, add recommended coolant to specified level.• Check cooling system for leakage.	8-12
Front brake	<ul style="list-style-type: none">• Check operation.• If soft or spongy, have Yamaha dealer bleed hydraulic system.• Check brake pads for wear.• Replace if necessary.• Check fluid level in reservoir.• If necessary, add specified brake fluid to specified level.• Check hydraulic system for leakage.	8-19, 8-20

6

For your safety – pre-operation checks

ITEM	CHECKS	PAGE
Rear brake	<ul style="list-style-type: none"> • Check operation. • If soft or spongy, have Yamaha dealer bleed hydraulic system. • Check brake pads for wear. • Replace if necessary. • Check fluid level in reservoir. • If necessary, add specified brake fluid to specified level. • Check hydraulic system for leakage. 	8-19, 8-20
Clutch	<ul style="list-style-type: none"> • Check operation. • Lubricate cable if necessary. • Check lever free play. • Adjust if necessary. 	8-17
Throttle grip	<ul style="list-style-type: none"> • Make sure that operation is smooth. • Check throttle grip free play. • If necessary, have Yamaha dealer adjust throttle grip free play and lubricate cable end and grip housing. 	8-14, 8-24
Control cables	<ul style="list-style-type: none"> • Make sure that operation is smooth. • Lubricate cable ends if necessary. 	8-23
Drive chain	<ul style="list-style-type: none"> • Check chain slack. • Adjust if necessary. • Check chain condition. • Lubricate if necessary. 	8-21, 8-23
Wheels and tires	<ul style="list-style-type: none"> • Check for damage. • Check tire condition and tread depth. • Check air pressure. • Correct if necessary. 	8-15, 8-17
Brake and shift pedals	<ul style="list-style-type: none"> • Make sure that operation is smooth. • Lubricate pedal pivoting points if necessary. 	8-24
Brake and clutch levers	<ul style="list-style-type: none"> • Make sure that operation is smooth. • Lubricate lever pivoting points if necessary. 	8-25
Sidestand	<ul style="list-style-type: none"> • Make sure that operation is smooth. • Lubricate pivot if necessary. 	8-25

For your safety – pre-operation checks

ITEM	CHECKS	PAGE
Chassis fasteners	<ul style="list-style-type: none">• Make sure that all nuts, bolts and screws are properly tightened.• Tighten if necessary.	–
Instruments, lights, signals and switches	<ul style="list-style-type: none">• Check operation.• Correct if necessary.	–

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.

EAU16842

Engine break-in

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

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

EAU17104

0–1000 km (0–600 mi)

Avoid prolonged operation above 5000 r/min. **NOTICE: After 1000 km (600 mi) of operation, the engine oil must be changed and the oil filter element replaced.** [ECA11153]

1000–1600 km (600–1000 mi)

Avoid prolonged operation above 7500 r/min.

1600 km (1000 mi) and beyond

The vehicle can now be operated normally.

ECA10311

NOTICE

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

Operation and important riding points

EAUN3592

Starting the engine

The starting circuit cut-off system will enable starting when:

- The transmission is in the neutral position or the transmission is in gear with the clutch lever pulled.

To start the engine

1. Turn the key to “○” and make sure that the Stop/Run/Start switch is set to “○”.
2. Confirm the indicator and warning light(s) come on for a few seconds, and then go off. (See page 5-3.)

TIP

- Do not start the engine if the engine trouble warning light remains on.
 - The coolant warning light should come on and stay on until the engine is started.
 - The ABS warning light should come on and stay on until the vehicle reaches a speed of 10 km/h.
-

ECA24110

NOTICE

If a warning or indicator light does not work as described above, have a Yamaha dealer check the vehicle.

3. Shift the transmission into the neutral position.
4. Start the engine by pushing the Stop/Run/Start switch.
5. Release the Stop/Run/Start switch when the engine starts, or after 5 seconds. Wait 10 seconds before pressing the switch again to allow battery voltage to restore.

ECA11043

NOTICE

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

EAUN0073

ECA0072

NOTICE

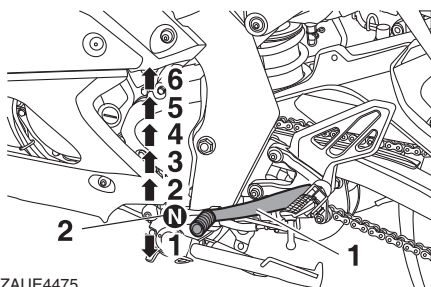
Do not ride through deep water, otherwise the engine may be damaged. Avoid puddles because they may be deeper than expected.

Shifting

EAU84372

ECA22523

EAU16811



ZAUE4475

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 (N), press the shift pedal down repeatedly until it reaches the end of its travel, and then slightly raise it.
- This model is equipped with a quick shifter. (See page 5-18.)

NOTICE

- When shifting, press the shift pedal firmly until you feel the gear shift is complete.
- Even with the transmission in the neutral position, do not coast for long periods of time with the engine off, nor tow the motorcycle for long distances. The transmission is properly lubricated only when the engine is running. Inadequate lubrication may damage the transmission.
- Except when using the quick shifter, always pull the clutch lever when changing gears to avoid damaging the engine, transmission, and drivetrain.

Tips for reducing fuel consumption

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

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

Operation and important riding points

EAU17214

Parking

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

EWA10312

WARNING

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

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.**

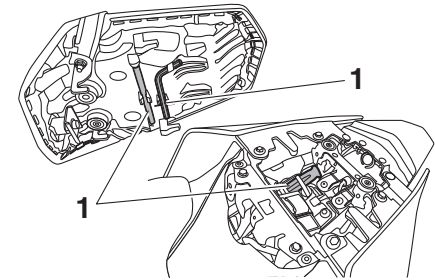
EWA15461

! WARNING

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

EAU84630

Tool kit



1. Tool kit

The tool kit is located on the bottom of the passenger seat. (See page 5-22.)

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

TIP

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

Periodic maintenance and adjustment

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.

EAUU1294

Periodic maintenance chart for the emission control system

NO.	ITEM	CHECK OR MAINTENANCE JOB	ODOMETER READING (whichever comes first)					ANNUAL CHECK
			1000 km or 2 months	4000 km or 6 months	8000 km or 10 months	12000 km or 14 months	16000 km or 18 months	
1	* Fuel line	<ul style="list-style-type: none"> • Check fuel hoses for cracks or damage. 		√	√	√	√	√
2	* Fuel filter	<ul style="list-style-type: none"> • Check condition. • Replace if necessary. 	Every 12000 km (7500 mi)					
3	Spark plug	<ul style="list-style-type: none"> • Check condition. • Clean and regap. 		√	√	√	√	
		<ul style="list-style-type: none"> • Replace. 	Every 8000 km (5000 mi)					
4	* Valves	<ul style="list-style-type: none"> • Check valve clearance. • Adjust if necessary. 			√		√	
5	* Fuel injection	<ul style="list-style-type: none"> • Check engine idle speed. 		√	√	√	√	√
6	* Exhaust system	<ul style="list-style-type: none"> • Check for leakage. • Tighten if necessary. • Replace gasket(s) if necessary. 		√	√	√	√	√

Periodic maintenance and adjustment

EAUU1287

General maintenance and lubrication chart

NO.	ITEM	CHECK OR MAINTENANCE JOB	ODOMETER READING (whichever comes first)					ANNUAL CHECK
			1000 km or 2 months	4000 km or 6 months	8000 km or 10 months	12000 km or 14 months	16000 km or 18 months	
1	* Diagnostic system check	<ul style="list-style-type: none"> Perform dynamic inspection using Yamaha diagnostic tool. Check the error codes. 	√	√	√	√	√	√
2	Air filter element	<ul style="list-style-type: none"> Clean. 	√	√	√		√	√
		<ul style="list-style-type: none"> Replace. 	Every 12000 km (7500 mi)					
3	* Battery	<ul style="list-style-type: none"> Check voltage. Charge if necessary. 	√	√	√	√	√	√
4	Clutch	<ul style="list-style-type: none"> Check operation. Adjust. 	√	√	√	√	√	
5	* Front brake	<ul style="list-style-type: none"> Check operation, fluid level and vehicle for fluid leakage. 	√	√	√	√	√	√
		<ul style="list-style-type: none"> Replace brake pads. 	Whenever worn to the limit					
6	* Rear brake	<ul style="list-style-type: none"> Check operation, fluid level and vehicle for fluid leakage. 	√	√	√	√	√	√
		<ul style="list-style-type: none"> Replace brake pads. 	Whenever worn to the limit					
7	* Brake hose	<ul style="list-style-type: none"> Check for cracks or damage. Check for correct routing and clamping. 		√	√	√	√	√
		<ul style="list-style-type: none"> Replace. 	Every 4 years					
8	* Brake fluid	<ul style="list-style-type: none"> Change. 	Every 2 years					
9	* Wheels	<ul style="list-style-type: none"> Check runout and for damage. 		√	√	√	√	√

Periodic maintenance and adjustment

NO.	ITEM	CHECK OR MAINTENANCE JOB	ODOMETER READING (whichever comes first)					ANNUAL CHECK
			1000 km or 2 months	4000 km or 6 months	8000 km or 10 months	12000 km or 14 months	16000 km or 18 months	
10	* Tires	<ul style="list-style-type: none"> • Check tread depth and for damage. • Replace if necessary. • Check air pressure. • Correct if necessary. 		√	√	√	√	√
11	* Wheel bearings	<ul style="list-style-type: none"> • Check bearings for looseness or damage. 		√	√	√	√	
12	* Swingarm	<ul style="list-style-type: none"> • Check operation and for excessive play. 		√	√	√	√	
		<ul style="list-style-type: none"> • Lubricate with lithium-soap-based grease. 	Every 24000 km (14000 mi)					
13	Drive chain	<ul style="list-style-type: none"> • Check chain slack, alignment and condition. • Adjust and lubricate chain with a special O-ring chain lubricant thoroughly. 	Every 1000 km (600 mi) and after washing the motorcycle, riding in the rain or riding in wet areas					
14	* Steering bearings	<ul style="list-style-type: none"> • Check bearing play and steering for roughness. 	√	√	√	√	√	
		<ul style="list-style-type: none"> • Lubricate with lithium-soap-based grease. 	Every 24000 km (14000 mi)					
15	* Chassis fasteners	<ul style="list-style-type: none"> • Make sure that all nuts, bolts and screws are properly tightened. 		√	√	√	√	√
16	Brake lever pivot shaft	<ul style="list-style-type: none"> • Lubricate with silicone grease. 		√	√	√	√	√
17	Brake pedal pivot shaft	<ul style="list-style-type: none"> • Lubricate with silicone grease. 		√	√	√	√	√

Periodic maintenance and adjustment

NO.	ITEM	CHECK OR MAINTENANCE JOB	ODOMETER READING (whichever comes first)					ANNUAL CHECK
			1000 km or 2 months	4000 km or 6 months	8000 km or 10 months	12000 km or 14 months	16000 km or 18 months	
18	Clutch lever pivot shaft	<ul style="list-style-type: none"> Lubricate with silicone grease. 		√	√	√	√	√
19	Shift pedal pivot shaft	<ul style="list-style-type: none"> Lubricate with lithium-soap-based grease. 	√	√	√	√	√	√
20	Sidestand	<ul style="list-style-type: none"> Check operation. Lubricate with lithium-soap-based grease. 	√	√	√	√	√	√
21	* Front fork	<ul style="list-style-type: none"> Check operation and for oil leakage. 		√	√	√	√	
22	* Shock absorber assembly	<ul style="list-style-type: none"> Check operation and shock absorber for oil leakage. 		√	√	√	√	
23	Engine oil	<ul style="list-style-type: none"> Change. Check oil level and vehicle for oil leakage. 	√	√	√	√	√	√
24	Engine oil filter element	<ul style="list-style-type: none"> Replace. 	√		√		√	
25	* Cooling system	<ul style="list-style-type: none"> Check coolant level and vehicle for coolant leakage. 		√	√	√	√	√
		<ul style="list-style-type: none"> Change coolant. 	Every 3 years					
26	* Front and rear brake switches	<ul style="list-style-type: none"> Check operation. 	√	√	√	√	√	√
27	Moving parts and cables	<ul style="list-style-type: none"> Lubricate. 		√	√	√	√	√

Periodic maintenance and adjustment

NO.	ITEM	CHECK OR MAINTENANCE JOB	ODOMETER READING (whichever comes first)					ANNUAL CHECK
			1000 km or 2 months	4000 km or 6 months	8000 km or 10 months	12000 km or 14 months	16000 km or 18 months	
28	* Throttle grip	<ul style="list-style-type: none"> • Check operation. • Check throttle grip free play, and adjust if necessary. • Lubricate cable and grip housing. 		√	√	√	√	√
29	* Lights, signals and switches	<ul style="list-style-type: none"> • Check operation. • Adjust headlight beam. 	√	√	√	√	√	√

EAU18662

TIP

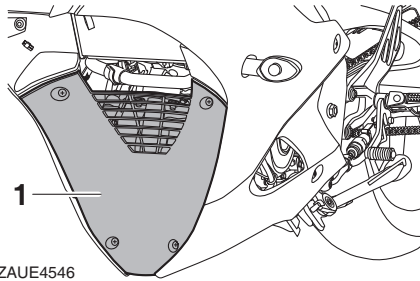
- The air filter needs more frequent service if you are riding in unusually wet or dusty areas.
- Hydraulic brake service
 - Regularly check and, if necessary, correct the brake fluid level.
 - Every two years replace the internal components of the brake master cylinder and caliper, and change the brake fluid.
 - Replace the brake hoses every four years and if cracked or damaged.

Periodic maintenance and adjustment

Removing and installing the cowling

EUAUE4730

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



ZAUE4546

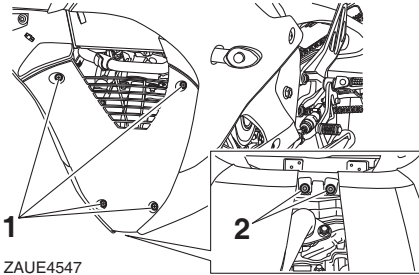
1. Cowling

Cowling

EUAUE4741

To remove the cowling

Remove the screws and quick fasteners, then take the cowling off.

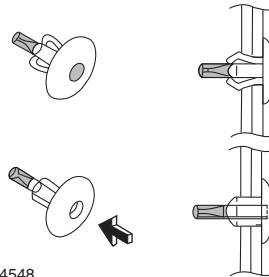


ZAUE4547

1. Screw
2. Quick fastener

TIP

The quick fasteners are removed by pushing in the center pin and then pulling the fastener out.



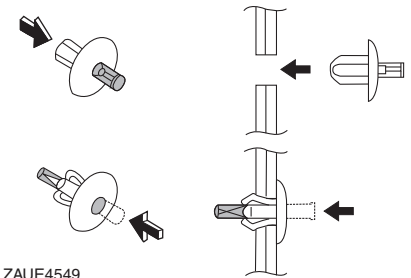
ZAUE4548

To install the cowling

Place the cowling in the original position, then install the quick fasteners and screws.

TIP

The quick fasteners are installed by pushing out the center pin, inserting the fastener into the cowling, and then pushing the center pin flush with the fastener head.



ZAUE4549

Periodic maintenance and adjustment

8

Checking the spark plug

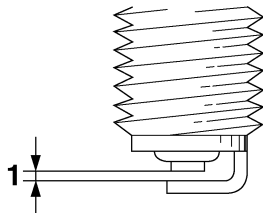
EAU19623

The spark plug is an important engine component, which should be checked periodically, preferably by a Yamaha dealer. Since heat and deposits will cause any spark plug to slowly erode, it 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. The porcelain insulator around the center electrode of the spark plug should be a medium-to-light tan (the ideal color when the vehicle is ridden normally). 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.

If the spark plug shows signs of electrode erosion and excessive carbon or other deposits, it should be replaced.

Specified spark plug:
NGK/MR8E9

Before installing a spark plug, the spark plug gap should be measured with a wire thickness gauge and, if necessary, adjusted to specification.



1. Spark plug cap

Spark plug gap:

0.8–0.9 mm (0.031–0.035 in)

Clean the surface of the spark plug gasket and its mating surface, and then wipe off any grime from the spark plug threads.

Tightening torque:

Spark plug:
12.5 N·m (1.25 kgf·m, 9.2 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.

Engine oil and oil filter element

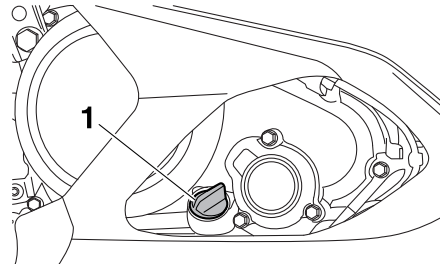
EAE0453

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

To check the engine oil level

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

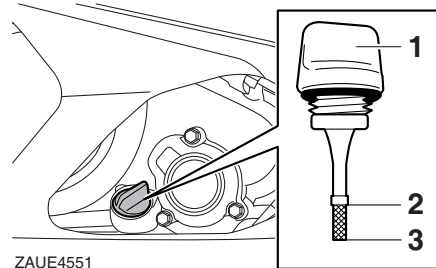


ZAUE4550

1. Engine oil filler cap

TIP

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



ZAUE4551

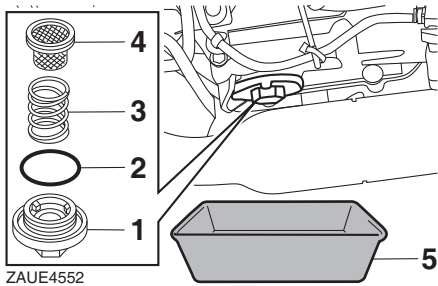
1. Dipstick
2. Maximum level mark
3. Minimum level mark

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. Install and tighten the oil filler cap.

To change the engine oil (with or without oil filter element replacement)

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, then the drain bolt along with the O-ring, compression spring, and engine oil strainer, to drain the oil from the crankcase. **NOTICE:** When removing the engine oil drain bolt, the O-ring, compression spring, and oil strainer will fall out. Take care not to lose these parts. [ECA11002]

Periodic maintenance and adjustment



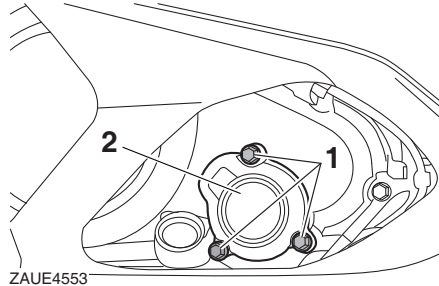
1. Engine oil drain bolt
2. O-ring
3. Compression spring
4. Strainer
5. Oil pan

4. Clean the engine oil strainer with solvent.

TIP

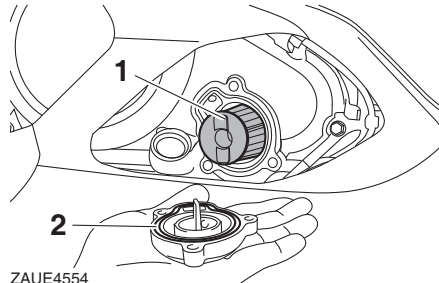
Skip steps 5–7 if the oil filter element is not being replaced.

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



1. Bolt
2. Oil filter element cover

6. Remove and replace the oil filter element and O-ring.



1. Oil filter element
2. O-ring

7. Install the oil filter element cover by installing the bolts, then tightening them to the specified torque.

Tightening torques:

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

TIP

Make sure that the O-ring is properly seated.

8. Install the engine oil strainer, compression spring, O-ring and the engine oil drain bolt, and then tighten it to the specified torque.

NOTICE: Before installing the engine oil drain bolt, do not forget to install the O-ring, compression spring, and oil strainer in position. [ECA10422]

Tightening torques:

Engine oil drain bolt:
32 N·m (3.2 kgf·m, 24 lb·ft)

9. Refill with the specified amount of the recommended engine oil, and then install and tighten the oil filler cap.
10. 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.
11. Turn the engine off, and then check the oil level and correct it if necessary.

Recommended engine oil:

See page 10-1.

Oil quantity:

Oil change:

0.85 L (0.90 US qt, 0.75 Imp.qt)

With oil filter removal:

0.95 L (1.00 US qt, 0.84 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.**

Why Yamalube

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



YAMALUBE®

Periodic maintenance and adjustment

Coolant

EAU20071

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

To check the coolant level

EAU80890

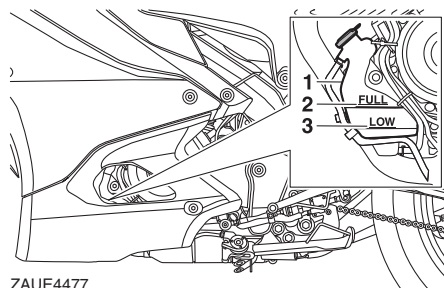
1. Place the vehicle on a level surface.
2. Remove cowling. (See page 8-7.)
3. Hold the vehicle in an upright position.

TIP

- The coolant level must be checked on a cold engine since the level varies with engine temperature.
 - Make sure that the vehicle is positioned straight up when checking the coolant level. A slight tilt to the side can result in a false reading.
4. Check the coolant level in the coolant reservoir.

TIP

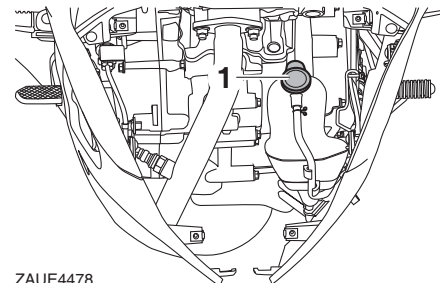
The coolant should be between the minimum and maximum level marks.



ZAUE4477

1. Coolant reservoir
2. Maximum level mark
3. Minimum level mark

5. If the coolant is at or below the minimum level mark, remove the coolant reservoir cap.



ZAUE4478

1. Coolant reservoir cap

6. Add coolant to the maximum level mark, and then install the coolant reservoir cap. **WARNING! Remove only the coolant reservoir cap. Never attempt to remove the radiator cap when the engine is hot.** [EWA15162] **NOTICE: If coolant is not available, use distilled water or soft tap water instead. Do not use hard water or salt water since it is harmful to the engine. If water has been used instead of coolant, replace it with coolant as soon as possible, otherwise the cooling system will not be protected against frost and corrosion. If water has been added to the**

Periodic maintenance and adjustment

coolant, have a Yamaha dealer check the antifreeze content of the coolant as soon as possible, otherwise the effectiveness of the coolant will be reduced.

[ECA10473]

Coolant reservoir capacity (up to the maximum level mark):
0.15 L (0.16 US qt, 0.13 Imp.qt)

7. Install the cowling.

Changing the coolant

EAU33032

The coolant must be changed at the intervals specified in the periodic maintenance and lubrication chart. Have a Yamaha dealer change the coolant. **WARNING! Never attempt to remove the radiator cap when the engine is hot.** [EWA10382]

Air filter element and check hose

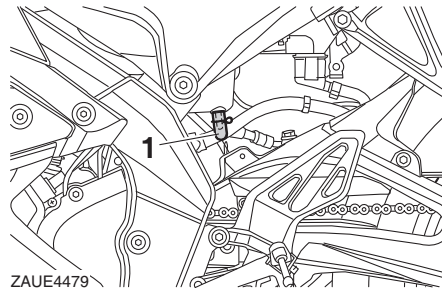
EAUJ2170

The air filter element should be cleaned or replaced by a Yamaha dealer at the intervals specified in the periodic maintenance chart. Have the air filter element serviced more frequently if you often ride in wet or dusty areas. In addition, the air filter check hose should be regularly checked and cleaned if necessary.

2. If dirt or water is visible, remove the hose, clean it and then install it.

To clean the air filter check hose

1. Check the hose for accumulated dirt or water.



ZAUE4479

1. Air filter check hose

Periodic maintenance and adjustment

Checking the engine idling speed

EAU44735

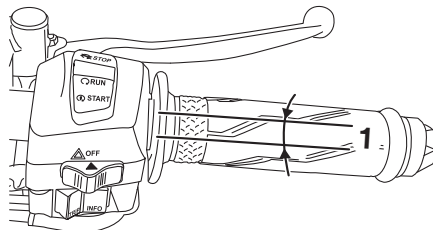
Check the engine idling speed and, if necessary, have it corrected by a Yamaha dealer.

Engine idling speed:
1300–1500 r/min

Adjusting the throttle grip free play

EAU21377

Measure the throttle grip free play as shown.



ZAUE4480

1. Throttle grip free play

Throttle grip free play:
3.0–5.0 mm (0.12–0.20 in)

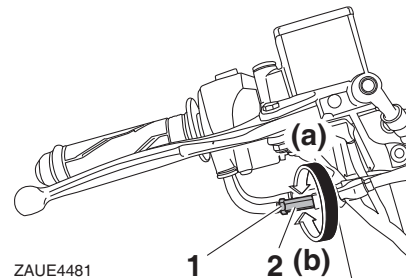
Periodically check the throttle grip free play and, if necessary, adjust it as follows.

TIP

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

1. Loosen the locknut.

2. 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).



ZAUE4481

1. Locknut
2. Adjusting nut
3. Tighten the locknut.

EAU21403

Valve clearance

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

TIP

This service must be performed when the engine is cold.

EAU82721

Tires

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

Tire air pressure

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

EWA10504

WARNING

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

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

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

Cold tire air pressure:

1 person:

Front:

225 kPa (2.25 kgf/cm², 33 psi)

Rear:

250 kPa (2.50 kgf/cm², 36 psi)

2 persons:

Front:

225 kPa (2.25 kgf/cm², 33 psi)

Rear:

250 kPa (2.50 kgf/cm², 36 psi)

Maximum load:

Vehicle:

165 kg (364 lb)

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

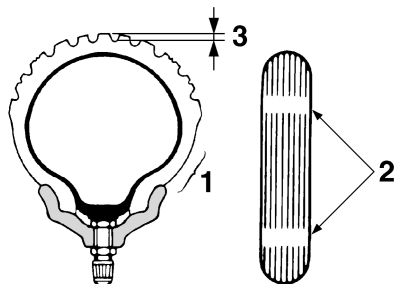
EWA10512

WARNING

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

Periodic maintenance and adjustment

Tire inspection



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

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

Minimum tire tread depth (front and rear):

1.0 mm (0.04 in)

WARNING

EWA10583

- 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 to do so.
- 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 tubeless tires and tire air valves.

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:

100/80-17M/C 52P

Manufacturer/model:

IRC/RX-01F

Rear tire:

Size:

140/70-17M/C 66S

Manufacturer/model:

IRC/RX-01R

Cast wheels

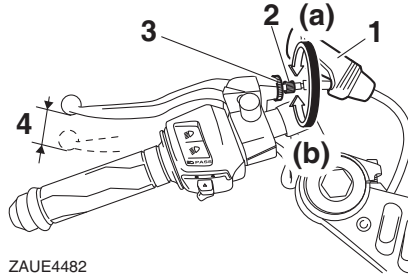
To maximize the performance, durability, and safe operation of your vehicle, note the following points regarding the specified wheels.

- The wheel rims should be checked for cracks, bends, warpage or other damage 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.

EAU21963

Adjusting the clutch lever free play

Measure the clutch lever free play as shown.



ZAUE4482

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

Clutch lever free play:
10.0–15.0 mm (0.39–0.59 in)

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

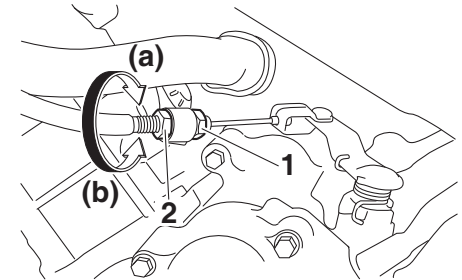
1. Slide the rubber cover back at the clutch lever.
2. Loosen the locknut.

3. To increase the clutch lever free play, turn the clutch lever free play adjusting bolt in direction (a). To decrease the clutch lever free play, turn the adjusting bolt in direction (b).

TIP

If the specified clutch lever free play could be obtained as described above, skip steps 4–7.

4. Fully turn the adjusting bolt at the clutch lever in direction (a) to loosen the clutch cable.
5. Loosen the locknut at the crankcase.

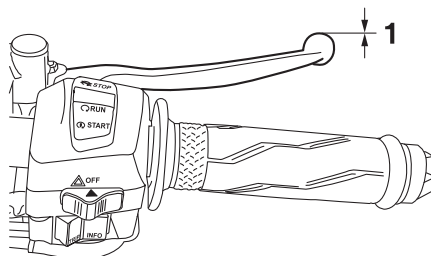


1. Locknut
2. Clutch lever free play adjusting nut

Periodic maintenance and adjustment

6. To increase the clutch lever free play, turn the clutch lever free play adjusting nut in direction (a). To decrease the clutch lever free play, turn the adjusting nut in direction (b).
7. Tighten the locknut at the crankcase.
8. Tighten the locknut at the clutch lever and then slide the rubber cover to its original position.

Checking the brake lever free play EAU37914



ZAUE4483

1. Front brake lever

There should be no free play at the brake lever end. If there is free play, have a Yamaha dealer inspect the brake system.

EWA14212

WARNING

A soft or spongy feeling in the brake lever can indicate the presence of air in the hydraulic system. If there is air in the hydraulic system, have a Yamaha dealer bleed the system before operating the vehicle. Air in the hydraulic system will diminish the

braking performance, which may result in loss of control and an accident.

Brake light switches

EAU36505

The brake light should come on just before braking takes effect. The brake light is activated by switches connected to the brake lever and brake pedal. Since the brake light switches are components of the anti-lock brake system, they should only be serviced by a Yamaha dealer.

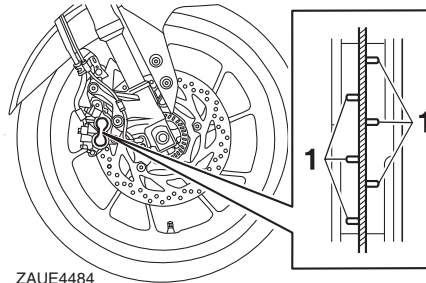
Checking the front and rear brake pads

EAU22393

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

Front brake pads

EAU22434



ZAUE4484

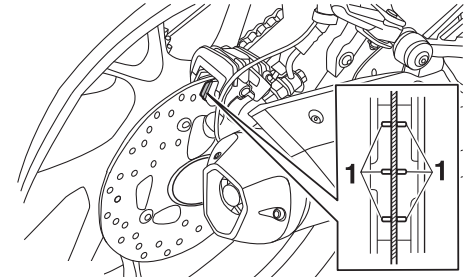
1. Brake pad wear indicator groove

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

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

Rear brake pads

EAU36721



1. Brake pad wear indicator groove

Each rear brake pad is provided with wear indicator grooves, which allow you to check the brake pad wear without having to disassemble the brake. To check the brake pad wear, check the wear indicator grooves. If a brake pad has worn to the point that the wear indicator grooves have almost disappeared, have a Yamaha dealer replace the brake pads as a set.

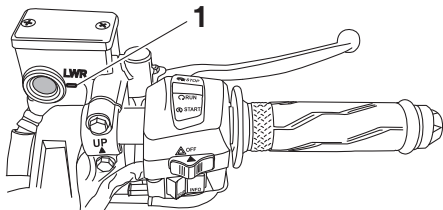
Periodic maintenance and adjustment

Checking the brake fluid level

EAU66670

Before riding, check that the brake fluid is above the minimum level mark. Check the brake fluid level with the top of the reservoir level. Replenish the brake fluid if necessary.

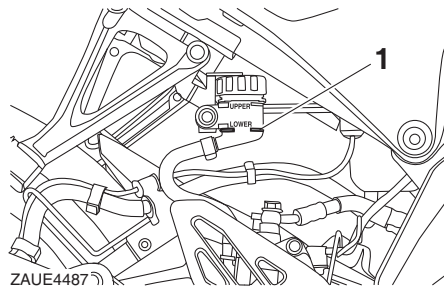
Front brake



ZAUE4486

1. Minimum level mark

Rear brake



ZAUE4487

1. Minimum level mark

Specified brake fluid:
YAMAHA GENUINE BRAKE FLUID
(DOT 4)

EWA16011

WARNING

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

- Insufficient brake fluid may allow air to enter the brake system, reducing braking performance.
- Clean the filler cap before removing. Use only DOT 4 brake fluid from a sealed container.

- Use only the specified brake fluid; otherwise, the rubber seals may deteriorate, causing leakage.
- Refill with the same type of brake fluid. Adding a brake fluid other than DOT 4 may result in a harmful chemical reaction.
- Be careful that water or dust does not enter the brake fluid reservoir when refilling. Water will significantly lower the boiling point of the fluid and may result in vapor lock, and dirt may clog the ABS hydraulic unit valves.

ECA17641

NOTICE

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

As the brake pads wear, it is normal for the brake fluid level to gradually go down. A low brake fluid level may indicate worn brake pads and/or brake system leakage; therefore, be sure to check the brake pads for wear and the brake system for leakage. If the brake

Periodic maintenance and adjustment

fluid level goes down suddenly, have a Yamaha dealer check the cause before further riding.

Changing the brake fluid

EAUM1362

Have a Yamaha dealer change the brake fluid at the intervals specified in the periodic maintenance and lubrication chart. In addition, have the brake hose replaced every four years and whenever it is damaged or leaking.

Drive chain slack

EAU22762

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

To check the drive chain slack

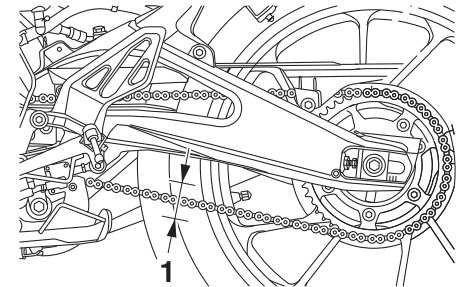
EAUE1414

1. Support the motorcycle according to the procedure on page 8-31.

TIP

When checking and adjusting the drive chain slack, there should be no weight on the motorcycle.

2. Shift the transmission into the neutral position.
3. Measure the drive chain slack as shown.



1. Drive chain slack

Periodic maintenance and adjustment

Drive chain slack:

30.0–40.0 mm (1.18–1.57 in)

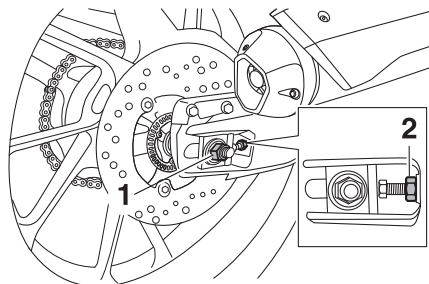
4. If the drive chain slack is incorrect, adjust it as follows. **NOTICE: Improper drive chain slack will overload the engine as well as other vital parts of the motorcycle and can lead to chain slippage or breakage. To prevent this from occurring, keep the drive chain slack within the specified limits.**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

EAU3431B

To adjust the drive chain slack

Consult a Yamaha dealer before adjusting the drive chain slack.

1. Loosen the axle nut and the locknut on each side of the swingarm.

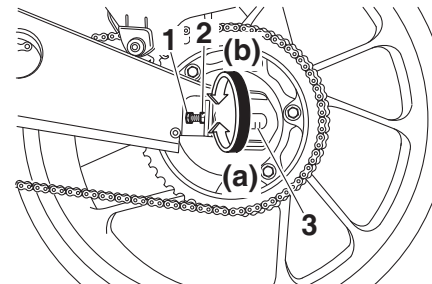


1. Axle nut
2. Locknut

2. To tighten the drive chain, turn the drive chain slack adjusting bolt on each side of the swingarm in direction (a). To loosen the drive chain, turn the adjusting bolt on each side 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 drive chain pullers are in the same position for proper wheel alignment.



1. Locknut
2. Drive chain slack adjusting bolt
3. Alignment marks

3. Tighten the axle nut, then the locknuts to their specified torques.

Tightening torques:

Axle nut:

59 N·m (5.9 kgf·m, 44 lb-ft)

Locknut:

16 N·m (1.6 kgf·m, 12 lb-ft)

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

Cleaning and lubricating the drive chain ^{EAE0141}

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 soap water to remove the accumulated dust & mud and then dry off.
2. Apply the cleaning spray on all the links and plates of chain, then wipe the chain. **NOTICE: To prevent damaging the O-rings, do not clean the drive chain with steam cleaners, high-pressure washers or inappropriate solvents.** ^[ECA11122]

3. Thoroughly lubricate the drive chain with a special O-ring chain lubricant.

Checking and lubricating the cables ^{EAE1151}

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

Periodic maintenance and adjustment

Checking and lubricating the throttle grip and cable end EAU1191

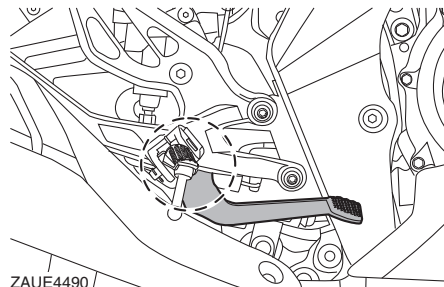
The operation of the throttle grip should be checked before each ride. In addition, the cable end should be lubricated by a Yamaha dealer at the intervals specified in the periodic maintenance chart.

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.

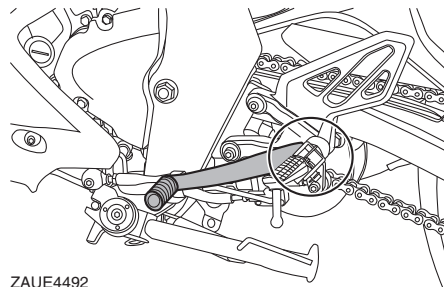
Checking and lubricating the brake and shift pedals EAU44276

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



Shift pedal



Recommended lubricant:
Lithium-soap-based grease

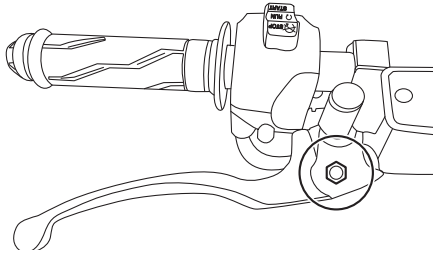
Periodic maintenance and adjustment

Checking and lubricating the brake and clutch levers

EAU23144

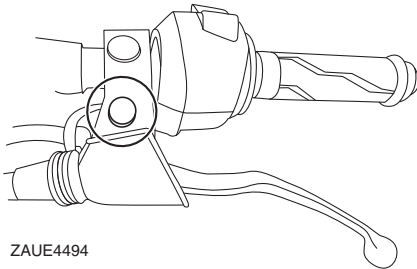
The operation of the brake and clutch levers should be checked before each ride, and the lever pivots should be lubricated if necessary.

Brake lever



ZAUE4493

Clutch lever



ZAUE4494

Recommended lubricants:

Brake lever:

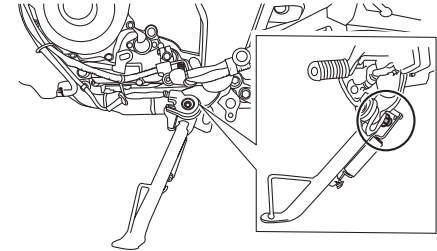
Silicone grease

Clutch lever:

Lithium-soap-based grease

Checking and lubricating the sidestand

EAU23203



ZAUE4495

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

8

⚠ WARNING

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

EWA10732

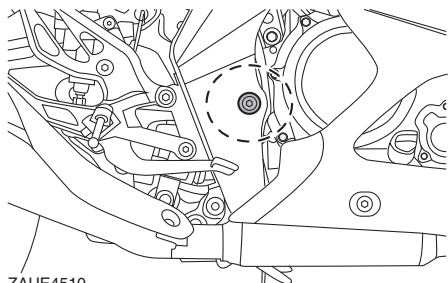
Recommended lubricant:

Lithium-soap-based grease

Periodic maintenance and adjustment

Lubricating the swingarm pivots

EAUM1653



ZAUE4510

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

Checking the front fork

EAU23273

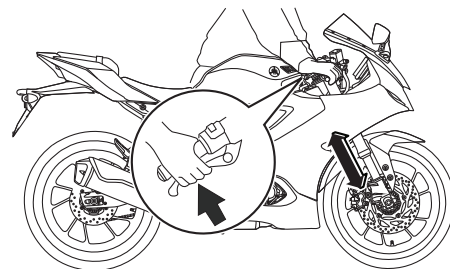
The condition and operation of the front fork must be checked as follows at the intervals specified in the periodic maintenance and lubrication chart.

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.



ECA10591

NOTICE

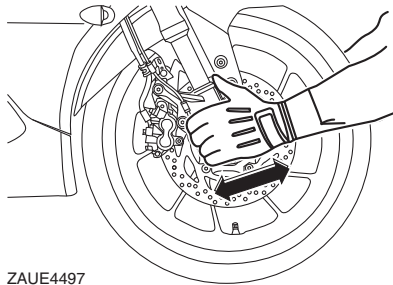
If any damage is found or the front fork does not operate smoothly, have a Yamaha dealer check or repair it.

Checking the steering

EAU23285

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.

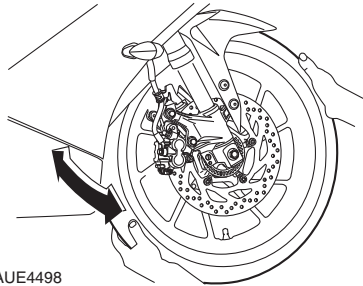
1. Raise the front wheel off the ground. (See page 8-31.) **WARNING! To avoid injury, securely support the vehicle so there is no danger of it falling over.** [EWA10752]
2. Hold the lower ends of the front fork legs and try to move them forward and backward. If any free play can be felt, have a Yamaha dealer check or repair the steering.



ZAUE4497

Checking the wheel bearings

EAU23292

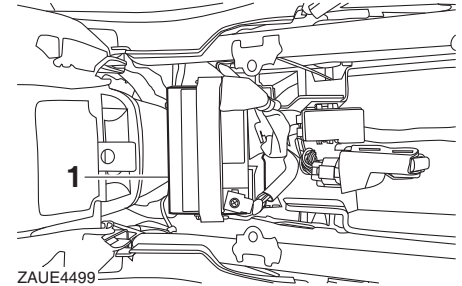


ZAUE4498

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.

Battery

EAU50583



ZAUE4499

1. Battery

The battery is located under the rider seat. It is a VRLA (valve-regulated lead-acid) battery. There is no need to check the electrolyte or to add distilled water. However, the battery lead connections need to be checked, and tightened if necessary.

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**

EWA10761

Periodic maintenance and adjustment

working near batteries. In case of contact, administer the following **FIRST AID**.

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

ECA10621

NOTICE

Never attempt to remove the battery cell seals, as this would permanently damage the battery.

To charge the battery

Have your Yamaha dealer charge the battery if it seems to have discharged. Keep in mind that the battery tends to discharge more quickly if the vehicle is equipped with optional electrical accessories.

ECA16522

NOTICE

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

To store the battery

1. If the vehicle will not be used for more than one month, remove the battery, fully charge it, and then place it in a cool, dry place. **NOTICE: When removing the battery, be sure to turn the main switch off, then disconnect the negative lead before disconnecting the positive lead.** [ECA16304]
2. If the battery will be stored for more than two months, check it at least once a month and fully charge it if necessary.

3. Fully charge the battery before installation. **NOTICE: When installing the battery, be sure to turn the main switch off, then connect the positive lead before connecting the negative lead.**

[ECA16842]

4. After installation, make sure that the battery leads are properly connected to the battery terminals.

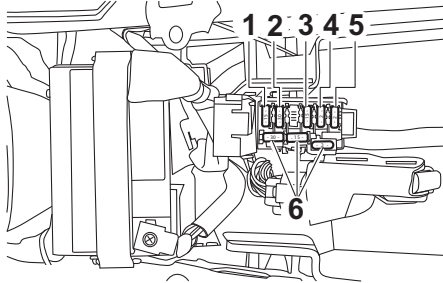
ECA16531

NOTICE

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

EAU53044

Replacing the fuses



1. ABS solenoid fuse
2. ABS motor fuse
3. Main fuse
4. ABS control unit fuse
5. Terminal fuse 1
6. Spare fuse

The fuse box is located under the rider seat. (See page 5-22.)

If a fuse is blown, replace it as follows.

1. Turn the main switch off and turn off the electrical circuit in question.
2. 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]

Specified fuses:

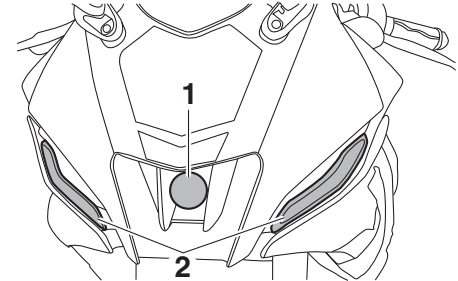
- Main fuse:
15.0 A
- Terminal fuse 1:
2.0 A
- ABS solenoid fuse:
15.0 A
- ABS motor fuse:
30.0 A
- ABS control unit fuse:
2.0 A

3. Turn the main switch on and turn on the electrical circuit in question to check if the device operates.
4. If the fuse immediately blows again, have a Yamaha dealer check the electrical system.

EAUN2261

Vehicle lights

This model is equipped with LED lights for headlights, auxiliary lights and brake/tail light. If a light does not come on, check the fuse and then have a Yamaha dealer check the vehicle.



1. Headlight
2. Auxiliary light

NOTICE

Do not affix any type of tinted film or stickers to the headlight lens.

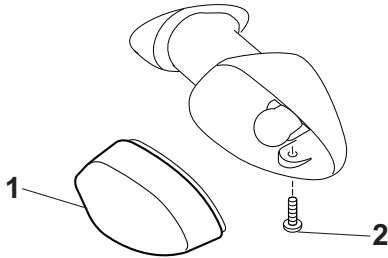
ECA16581

Periodic maintenance and adjustment

Replacing a turn signal light bulb

EAU24205

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



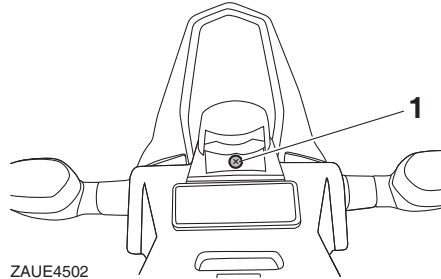
1. Turn signal light lens
2. Screw

2. Remove the burnt-out bulb by pushing it in and turning it counterclockwise.
3. Insert a new bulb into the socket, push it in, and then turn it clockwise until it stops.
4. Install the lens by installing the screw. **NOTICE: Do not over-tighten the screw, otherwise the lens may break.** [ECA11192]

Replacing a license plate light bulb

EAUE3370

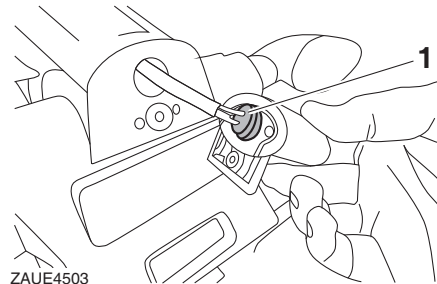
1. Remove the screw.



ZAUE4502

1. Screw

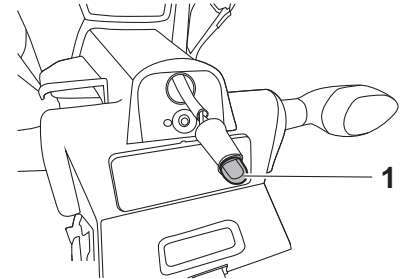
2. Remove the license plate light bulb socket (together with the bulb) by pulling it out.



ZAUE4503

1. License plate light bulb socket

3. Remove the burnt-out bulb by pulling it out.

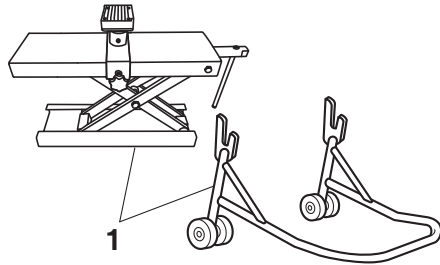


1. License plate light bulb

4. Insert a new bulb into the socket.
5. Install the socket (together with the bulb) by pushing it in.
6. Place the license plate light unit in the original position, and then install the screw.

Supporting the motorcycle

EAU67131



ZAUE4555

1. Maintenance stand (example)

Since this model is not equipped with a centerstand, use maintenance stands when removing the front or rear wheel or when performing other maintenance that requires the motorcycle to stand up right.

Check that the motorcycle is in a stable and level position before starting any maintenance.

Front wheel

EAUE3880

The front wheel contains components that are part of the anti-lock brake system. To prevent ABS malfunction due to wheel damage or improper installation, Yamaha recommends the wheel be professionally serviced.

EWAE0050

! WARNING

Have a Yamaha dealer remove and install the wheel.

Rear wheel

EAUE3900

The rear wheel contains components that are part of the anti-lock brake system. To prevent ABS malfunction due to wheel damage or improper installation, Yamaha recommends the wheel be professionally serviced.

EWAE0050

! WARNING

Have a Yamaha dealer remove and install the wheel.

Periodic maintenance and adjustment

Troubleshooting

EAU25872

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 charts represent quick and easy procedures 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

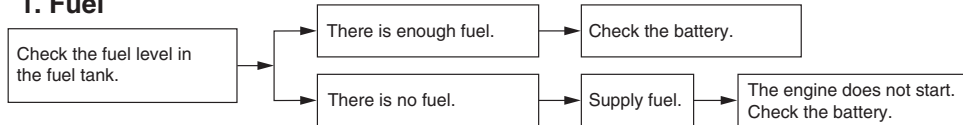
WARNING

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

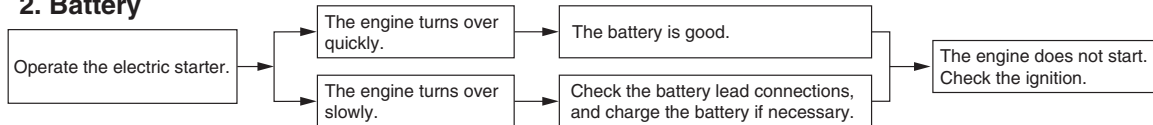
heaters or furnaces. Gasoline or gasoline vapors can ignite or explode, causing severe injury or property damage.

Troubleshooting chart

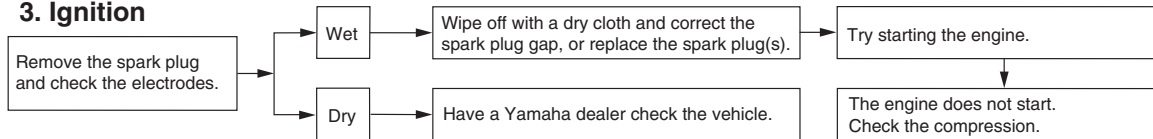
1. Fuel



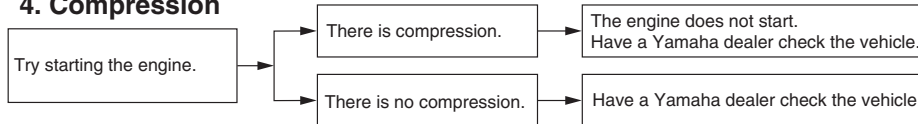
2. Battery



3. Ignition



4. Compression



Periodic maintenance and adjustment

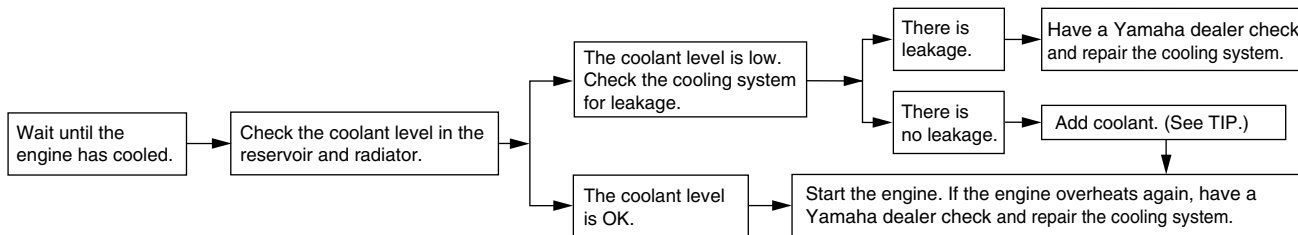
EAU86420

Engine overheating

EWAT1041

⚠ WARNING

- Do not remove the radiator cap when the engine and radiator are hot. Scalding hot fluid and steam may be blown out under pressure, which could cause serious injury. Be sure to wait until the engine has cooled.
- Place a thick rag, like a towel, over the radiator cap, and then slowly rotate the cap counterclockwise to the detent to allow any residual pressure to escape. When the hissing sound has stopped, press down on the cap while turning it counterclockwise, and then remove the cap.



TIP

If coolant is not available, tap water can be temporarily used instead, provided that it is changed to the recommended coolant as soon as possible.

Matte color caution

EAU37834

EAU84990

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.

ECA15193

Care

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

TIP

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

ECA26280

NOTICE

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

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

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

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

Before washing

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

Motorcycle care and storage

2. Make sure all caps, covers, electrical couplers and connectors are tightly installed.
 3. Cover the muffler end with a plastic bag and a strong rubber band.
 4. Pre-soak stubborn stains like insects or bird droppings with a wet towel for a few minutes.
 5. Remove road grime and oil stains with a quality degreasing agent and a plastic-bristle brush or sponge. **NOTICE: Do not use degreasing agent on areas requiring lubrication such as seals, gaskets, and wheel axles. Follow product instructions.**
[ECA26290]
2. Wash the vehicle with a quality automotive-type detergent mixed with cool water and a soft, clean towel or sponge. Use an old toothbrush or plastic-bristle brush for hard-to-reach places. **NOTICE: Use cold water if the vehicle has been exposed to salt. Warm water will increase salt's corrosive properties.** [ECA26301]
 3. For windshield-equipped vehicles: Clean the windshield with a soft towel or sponge dampened with water and a pH neutral detergent. If necessary, use a high-quality windshield cleaner or polish for motorcycles. **NOTICE: Never use any strong chemicals to clean the windshield. Additionally, some cleaning compounds for plastic may scratch the windshield, so be sure to test all cleaning products before general application.** [ECA26310]
 4. Rinse off thoroughly with clean water. Be sure to remove all detergent residues, as they can be harmful to plastic parts.

After washing

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

Washing

1. Rinse off any degreaser and spray down the vehicle with a garden hose. Use only enough pressure to do the job. Avoid spraying water directly into the muffler, instrument panel, air inlet, or other inner areas such as underseat storage compartments.

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

ECA26320

NOTICE

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

EWA20660



WARNING

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

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

Storage

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

ECA21170

NOTICE

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

Long term storage

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

Motorcycle care and storage

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

TIP

- If the battery will be removed, charge it once a month and store it in a temperate location between 0-30 °C (32-90 °F).
 - See page 8-27 for more information on charging and storing the battery.
-

Dimensions:

- Overall length:
1990 mm (78.3 in)
- Overall width:
725 mm (28.5 in)
- Overall height:
1135 mm (44.7 in)
- Seat height:
815 mm (32.1 in)
- Wheelbase:
1325 mm (52.2 in)
- Ground clearance:
170 mm (6.69 in)
- Minimum turning radius:
2.8 m (9.19 ft)

Weight:

- Curb weight:
140 kg (309 lb)

Engine:

- Combustion cycle:
4-stroke
- Cooling system:
Liquid cooled
- Valve train:
SOHC
- Number of cylinders:
Single cylinder
- Displacement:
155 cm³
- Bore × stroke:
58.0 × 58.7 mm (2.28 × 2.31 in)
- Starting system:
Electric starter

Engine oil:

Recommended brand:



- SAE viscosity grades:
10W-40
- Recommended engine oil grade:
API service SG type or higher, JASO standard MA
- Engine oil quantity:
Oil change:
0.85 L (0.90 US qt, 0.75 Imp.qt)
With oil filter removal:
0.95 L (1.00 US qt, 0.84 Imp.qt)

Coolant quantity:

- Coolant reservoir (up to the maximum level mark):
0.15 L (0.16 US qt, 0.13 Imp.qt)
- Radiator (including all routes):
0.49 L (0.52 US qt, 0.43 Imp.qt)

Fuel:

- Recommended fuel:
Unleaded gasoline (E10 to E20 only)
- Octane number (RON):
90
- Fuel tank capacity:
11 L (2.9 US gal, 2.4 Imp.gal)
- Fuel reserve amount:
1.5 L (0.40 US gal, 0.33 Imp.gal)

Fuel injection:

- Throttle body:
ID mark:
BK61 00

Drivetrain:

- Gear ratio:
1st:
2.833 (34/12)
2nd:
1.875 (30/16)
3rd:
1.364 (30/22)
4th:
1.143 (24/21)
5th:
0.957 (22/23)
6th:
0.840 (21/25)

Front tire:

- Type:
Tubeless
- Size:
100/80-17M/C 52P
- Manufacturer/model:
IRC/RX-01F

Rear tire:

- Type:
Tubeless
- Size:
140/70-17M/C 66S
- Manufacturer/model:
IRC/RX-01R

Specifications

Loading:

Maximum load:

165 kg (364 lb)

(Total weight of rider, passenger, cargo and accessories)

Auxiliary light:

LED

License plate light:

5.0 W

Front brake:

Type:

Hydraulic single disc brake

Rear brake:

Type:

Hydraulic single disc brake

Front suspension:

Type:

Telescopic fork

Rear suspension:

Type:

Swingarm (link suspension)

Electrical system:

System voltage:

12 V

Battery:

Model:

YTZ6V

Voltage, capacity:

12 V, 5.0 Ah (10 HR)

Bulb wattage:

Headlight:

LED

Brake/tail light:

LED

Front turn signal light:

10.0 W

Rear turn signal light:

10.0 W

Identification numbers

EAU26366

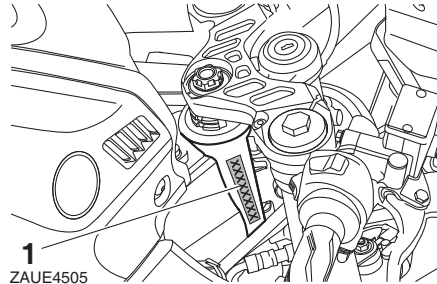
Record the vehicle identification number and the engine serial number in the spaces provided below for assistance when ordering spare parts from a Yamaha dealer or for reference in case the vehicle is stolen.

VEHICLE IDENTIFICATION NUMBER:

ENGINE SERIAL NUMBER:

Vehicle identification number

EAU26401



1
ZAUE4505

1. Vehicle identification number

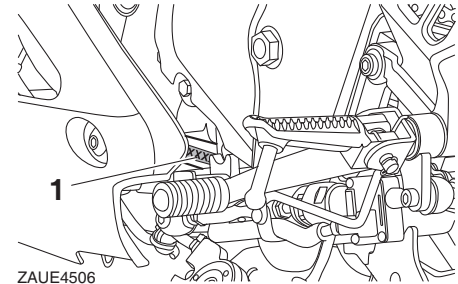
The vehicle identification number is stamped into the steering head pipe. Record this number in the space provided.

TIP _____

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

Engine serial number

EAU26442



1
ZAUE4506

1. Engine serial number

The engine serial number is stamped into the crankcase.

Consumer information

EAU85400

Vehicle data recording

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

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

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

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

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

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

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

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Yamaha Motorcycle Connect

