



OWNER'S MANUAL

TDM
twin 900

TDM900
TDM900A

5PS-28199-E4

DECLARATION of CONFORMITY

We

Company: MORIC CO.,LTD.

Address: 1450-6 Mori Mori-Machi Shuchi-gun Shizuoka 437-0292 Japan

Hereby declare that the product:

Kind of equipment: IMMOBILIZER

Type-designation: 5SL-00

is in compliance with following norm(s) or documents:

R&TTE Directive(1999/5/EC)

EN300 330-2 v1.1.1(2001-6),EN60950(2000)

Two or Three-Wheel Motor Vehicles Directive(97/24/EC:Chapter 8,EMC)

Place of issue: Shizuoka,Japan

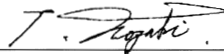
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Welcome to the Yamaha world of motorcycling!

As the owner of the TDM900/TDM900A, 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 TDM900/TDM900A. 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!

IMPORTANT MANUAL INFORMATION

EAU10151

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

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

NOTE:

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

EWA10030

WARNING

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

*Product and specifications are subject to change without notice.

IMPORTANT MANUAL INFORMATION

EAU10200

**TDM900/TDM900A
OWNER'S MANUAL
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TABLE OF CONTENTS

SAFETY INFORMATION	1-1	Luggage strap holders	3-19	Valve clearance	6-15
DESCRIPTION	2-1	Sidestand	3-19	Tires	6-15
Left view	2-1	Ignition circuit cut-off system	3-20	Cast wheels	6-18
Right view	2-3	PRE-OPERATION CHECKS	4-1	Adjusting the clutch lever free play	6-18
Controls and instruments.....	2-5	Pre-operation check list	4-2	Adjusting the rear brake light switch	6-19
INSTRUMENT AND CONTROL FUNCTIONS	3-1	OPERATION AND IMPORTANT RIDING POINTS	5-1	Checking the front and rear brake pads	6-20
Immobilizer system	3-1	Starting the engine	5-1	Checking the brake fluid level	6-20
Main switch/steering lock	3-2	Shifting	5-2	Changing the brake fluid	6-22
Indicator and warning lights	3-3	Tips for reducing fuel consumption	5-3	Drive chain slack	6-22
Tachometer unit	3-6	Engine break-in	5-3	Cleaning and lubricating the drive chain	6-24
Coolant temperature gauge	3-6	Parking	5-4	Checking and lubricating the cables	6-24
Multi-function display	3-7	PERIODIC MAINTENANCE AND MINOR REPAIR	6-1	Checking and lubricating the throttle grip and cable	6-25
Anti-theft alarm (optional)	3-8	Owner's tool kit	6-1	Checking and lubricating the brake and shift pedals	6-25
Handlebar switches	3-9	Periodic maintenance and lubrication chart	6-2	Checking and lubricating the brake and clutch levers	6-25
Clutch lever	3-10	Removing and installing cowlings and panels	6-5	Checking and lubricating the sidestand	6-26
Shift pedal	3-10	Checking the spark plugs	6-6	Lubricating the rear suspension	6-26
Brake lever	3-11	Engine oil and oil filter element	6-7	Checking the front fork	6-26
Brake pedal	3-11	Coolant	6-10	Checking the steering	6-27
ABS (for ABS models)	3-12	Replacing the air filter element	6-12	Checking the wheel bearings	6-28
Fuel tank cap	3-12	Adjusting the engine idling speed	6-14	Battery	6-28
Fuel	3-13	Checking the throttle cable free play	6-15	Replacing the fuses	6-29
Fuel tank breather hose	3-14			Replacing a headlight bulb	6-31
Catalytic converter	3-14				
Seat	3-14				
Storage compartment	3-15				
Adjusting the front fork	3-16				
Adjusting the shock absorber assembly	3-17				

TABLE OF CONTENTS

Replacing the tail/brake light bulb	6-32
Replacing a turn signal light bulb ..	6-32
Replacing an auxiliary light bulb	6-33
Supporting the motorcycle	6-33
Troubleshooting	6-34
Troubleshooting charts	6-35

MOTORCYCLE CARE AND

STORAGE	7-1
Care	7-1
Storage	7-3

SPECIFICATIONS	8-1
-----------------------------	-----

CONSUMER INFORMATION	9-1
Identification numbers	9-1

SAFETY INFORMATION

EAU10281

1

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 THE OWNER'S MANUAL.
- OBTAIN QUALIFIED TRAINING IN SAFE AND PROPER RIDING TECHNIQUES.
- OBTAIN PROFESSIONAL TECHNICAL SERVICE AS INDICATED BY THE OWNER'S MANUAL AND/OR WHEN MADE NECESSARY BY MECHANICAL CONDI-

TIONS.

Safe riding

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

Therefore:

- Wear a brightly colored jacket.
- Use extra caution when you are approaching and passing through intersections, since intersections are the most likely places for motorcycle accidents to occur.
- Ride where other motorists can see you. Avoid riding in another

motorist's blind spot.

- 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 warrant-

ed 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 motorcy-

cle 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.
- Never touch the engine or exhaust system during or after operation. They become very hot and can cause burns. Always wear protective clothing that covers your legs, ankles, and feet.
- A passenger should also observe the above precautions.

Modifications

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

Loading and accessories

Adding accessories or cargo to your motorcycle can adversely affect stability and handling if the weight distribution of the 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 are some general guidelines to follow if loading cargo or adding accessories to your motorcycle:

Loading

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

SAFETY INFORMATION

Maximum load:

TDM900 203 kg (448 lb)

TDM900A 200 kg (441 lb)

1

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. 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.
- 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.

Accessories

Genuine Yamaha accessories have been specifically designed for use on this motorcycle. Since Yamaha cannot test all other accessories that may be available, you must personally be responsible for the proper selection, installation and use of non-Yamaha accessories. Use extreme caution when selecting and installing any accessories.

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 aerody-

namic changes. If accessories are added to the handlebar or front fork area, they must be as lightweight as possible and should be kept to a minimum.

- Bulky or large accessories may seriously affect the stability of the motorcycle due to aerodynamic effects. Wind may attempt to lift the motorcycle, or the motorcycle may become unstable in cross winds. These accessories may also cause instability when passing or being passed by large vehicles.
- Certain accessories can displace the operator from his or her normal riding position. This improper position limits the freedom of movement of the operator and may limit control ability, therefore, such accessories are not recommended.
- Use caution when adding electrical accessories. If electrical accessories exceed the capacity of the motorcycle’s electrical system, an electric failure could result, which

could cause a dangerous loss of lights or engine power.

Gasoline and exhaust gas

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

motorcycle in a place where pedestrians or children are not likely to touch these hot areas.

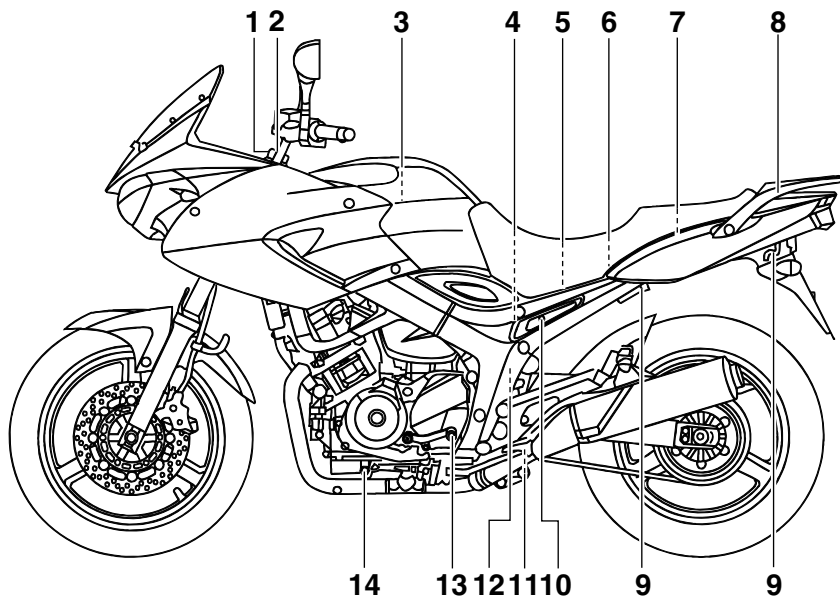
- Do not park the motorcycle on a slope or soft ground, otherwise it may fall over.
- Do not park the motorcycle near a flammable source, (e.g., a kerosene heater, or near an open flame), otherwise it could catch fire.
- When transporting the motorcycle in another vehicle, make sure that it is kept upright. If the motorcycle should lean over, gasoline may leak out of the fuel tank.
- If you should swallow any gasoline, inhale a lot of gasoline vapor, or allow gasoline to get into your eyes, see your doctor immediately. If any gasoline spills on your skin or clothing, immediately wash the affected area with soap and water and change your clothes.

DESCRIPTION

EAU32220

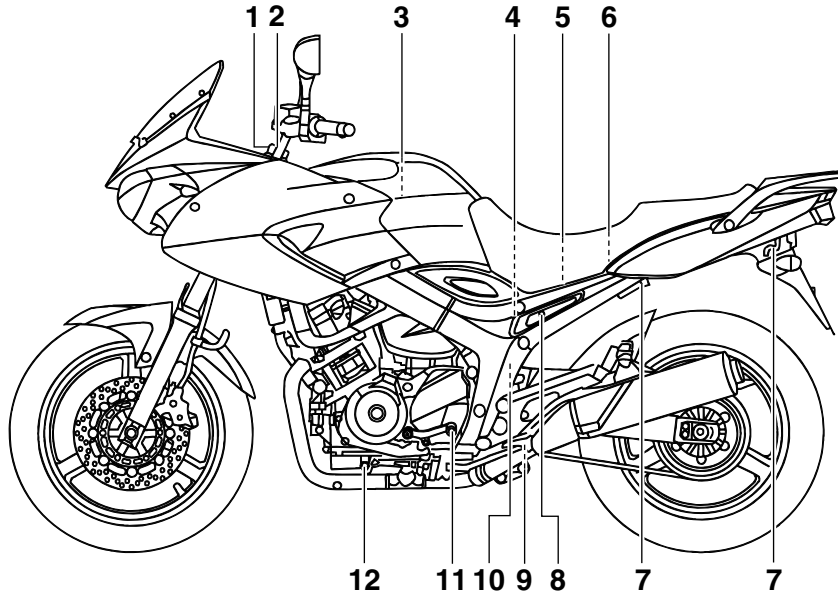
Left view TDM900

2



- | | |
|---|--|
| 1. Front fork spring preload adjusting bolt (page 3-16) | 8. Grab bar |
| 2. Front fork damping adjusting screw (page 3-16) | 9. Luggage strap holder (page 3-19) |
| 3. Air filter element (page 6-12) | 10. Seat lock (page 3-14) |
| 4. Shock absorber assembly compression damping force adjusting knob (page 3-17) | 11. Shock absorber assembly rebound damping force adjusting knob (page 3-17) |
| 5. Battery (page 6-28) | 12. Shock absorber assembly spring preload adjusting ring (page 3-17) |
| 6. Fuses (page 6-29) | 13. Shift pedal (page 3-10) |
| 7. Storage compartment (page 3-15) | 14. Engine oil drain bolt A (page 6-7) |

TDM900A



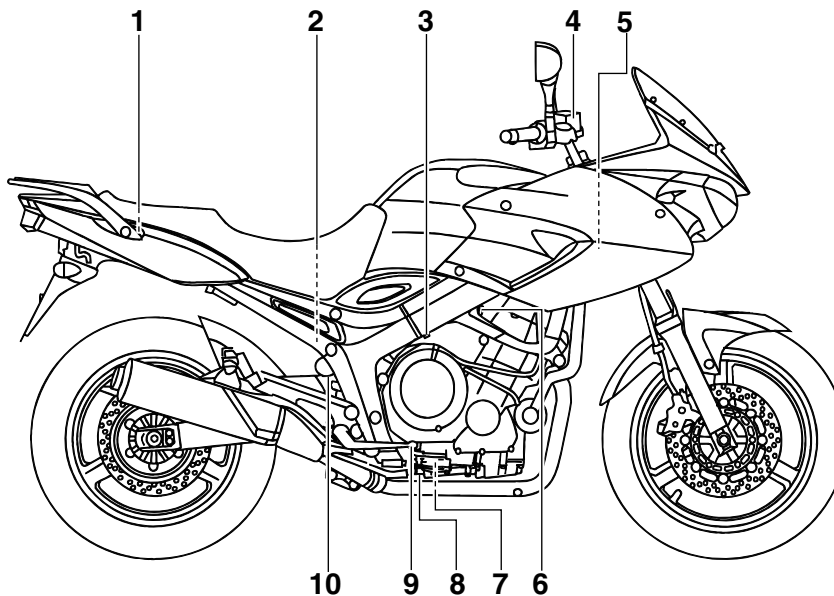
1. Front fork spring preload adjusting bolt (page 3-16)
2. Front fork damping adjusting screw (page 3-16)
3. Air filter element (page 6-12)
4. Coolant reservoir (page 6-10)
5. Battery (page 6-28)
6. Fuses (page 6-29)
7. Luggage strap holder (page 3-19)
8. Seat lock (page 3-14)
9. Shock absorber assembly rebound damping force adjusting knob (page 3-17)
10. Shock absorber assembly spring preload adjusting ring (page 3-17)
11. Shift pedal (page 3-10)
12. Engine oil drain bolt A (page 6-7)

DESCRIPTION

EAU32230

Right view TDM900

2



1. Owner's tool kit (page 6-1)

2. Coolant reservoir (page 6-10)

3. Idle adjusting screw (page 6-14)

4. Front brake fluid reservoir (page 6-20)

5. Radiator cap (page 6-10)

6. Engine oil filler cap (page 6-7)

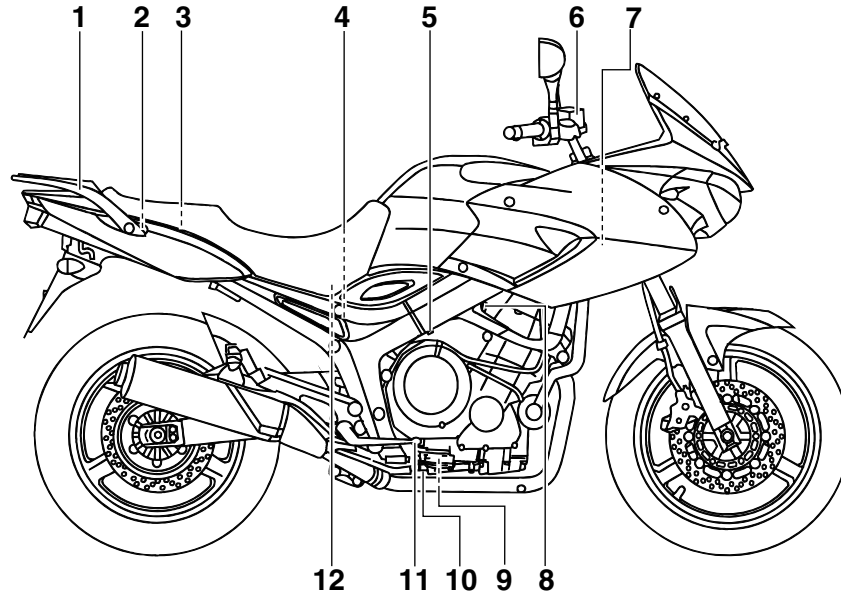
7. Engine oil filter element (page 6-7)

8. Engine oil drain bolt B (page 6-7)

9. Brake pedal (page 3-11)

10. Rear brake fluid reservoir (page 6-20)

TDM900A



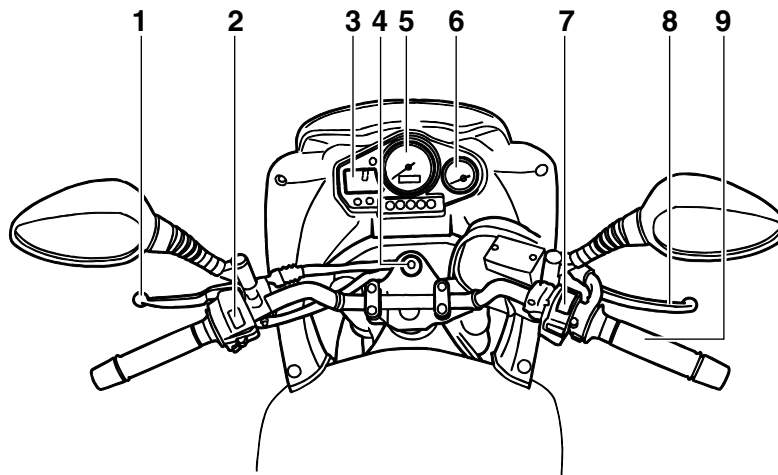
1. Grab bar
2. Owner's tool kit (page 6-1)
3. Storage compartment (page 3-15)
4. Shock absorber assembly compression damping force adjusting knob (page 3-17)
5. Idle adjusting screw (page 6-14)
6. Front brake fluid reservoir (page 6-20)
7. Radiator cap (page 6-10)
8. Engine oil filler cap (page 6-7)
9. Engine oil filter element (page 6-7)
10. Engine oil drain bolt B (page 6-7)
11. Brake pedal (page 3-11)
12. Rear brake fluid reservoir (page 6-20)

DESCRIPTION

EAU10430

Controls and instruments

2

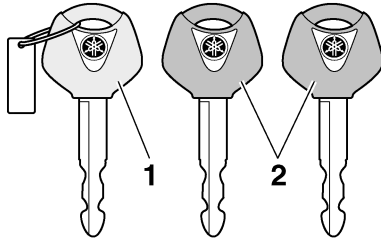


1. Clutch lever (page 3-10)
2. Left handlebar switches (page 3-9)
3. Multi-function display (page 3-7)
4. Main switch/steering lock (page 3-2)
5. Tachometer unit (page 3-6)
6. Coolant temperature gauge (page 3-6)
7. Right handlebar switches (page 3-9)
8. Brake lever (page 3-11)

9. Throttle grip (page 6-15)

Immobilizer system

EAU10972



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

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

- a code re-registering key (with a red bow)
- two standard keys (with a black bow) that can be re-registered with new codes
- a transponder (which is installed in the code re-registering key)
- an immobilizer unit
- an ECU

- an immobilizer system indicator light (See page 3-3.)
- The key with the red bow is used to register codes in each standard key. Since re-registering is a difficult process, take the vehicle along with all three keys to a Yamaha dealer to have them re-registered. Do not use the key with the red bow for driving. It should only be used for re-registering the standard keys. Always use a standard key for driving.

ECA11820

CAUTION:

- **DO NOT LOSE THE CODE RE-REGISTERING KEY! CONTACT YOUR DEALER IMMEDIATELY IF IT IS LOST!** If the code re-registering key is lost, registering new codes in the standard keys is impossible. The standard keys can still be used to start the vehicle, however if code re-registering is required (i.e., if a new standard key is made or all keys are lost) the entire immobilizer system must be replaced. Therefore, it is highly recommended to use either standard key and keep the code

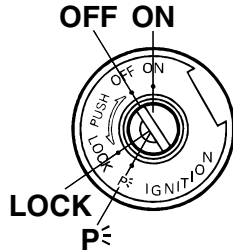
re-registering key in a safe place.

- Do not submerge any key in water.
- Do not expose any key to excessively high temperatures.
- Do not place any key close to magnets (this includes, but not limited to, products such as speakers, etc.).
- Do not place heavy items on any key.
- Do not grind any key or alter its shape.
- Do not disassemble the plastic part of any key.
- Do not put two keys of any immobilizer system on the same key ring.
- Keep the standard keys as well as keys of other immobilizer systems away from this vehicle's code re-registering key.
- Keep other immobilizer system keys away from the main switch as they may cause signal interference.

INSTRUMENT AND CONTROL FUNCTIONS

Main switch/steering lock

EAU10471



The main switch/steering lock controls the ignition and lighting systems, and is used to lock the steering.

NOTE:

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

EAU10570

ON

All electrical circuits are supplied with power; the meter lighting, taillight and auxiliary light come on, and the engine

can be started. The key cannot be removed.

NOTE:

The headlight comes on automatically when the engine is started and stays on until the key is turned to "OFF".

EAU10660

OFF

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

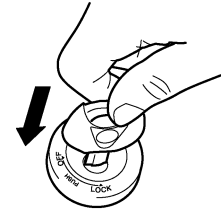
EAU10690

LOCK

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

To lock the steering

1



2

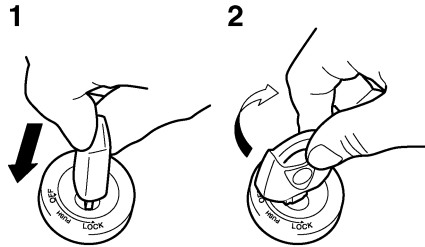


1. Push.
2. Turn.

1. Turn the handlebars all the way to the left or right.
2. Push the key in from the "OFF" position, and then turn it to "LOCK" while still pushing it.
3. Remove the key.

INSTRUMENT AND CONTROL FUNCTIONS

To unlock the steering



1. Push.
2. Turn.

Push the key into the main switch, and then turn it to “OFF” while still pushing it.

WARNING

Never turn the key to “OFF” or “LOCK” while the vehicle is moving, otherwise the electrical systems will be switched off, which may result in loss of control or an accident. Make sure that the vehicle is stopped before turning the key to “OFF” or “LOCK”.

EWA10060

P_≡ (Parking)

EAU33000

The steering is locked, and the taillight and auxiliary light are on. The hazard light and turn signal lights can be turned on, but all other electrical systems are off. The key can be removed. The steering must be locked before the key can be turned to “P_≡”.

ECA11020

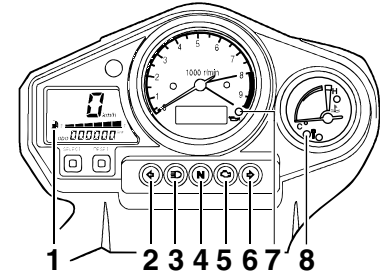
CAUTION:






Do not use the parking position for an extended length of time, otherwise the battery may discharge.

EAU38561

Indicator and warning lights

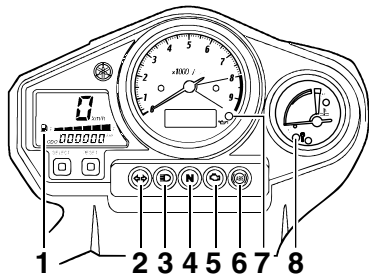
For TDM900



1. Fuel level warning indicator “”
2. Left turn signal indicator light “”
3. High beam indicator light “”
4. Neutral indicator light “**N**”
5. Engine trouble warning light “”
6. Right turn signal indicator light “”
7. Oil level warning light
8. Immobilizer system indicator light

INSTRUMENT AND CONTROL FUNCTIONS

For TDM900A



1. Fuel level warning indicator “”
2. Turn signal indicator light “ ”
3. High beam indicator light “”
4. Neutral indicator light “**N**”
5. Engine trouble warning light “”
6. Anti-lock Brake System (ABS) warning light “” (for ABS models)
7. Oil level warning light
8. Immobilizer system indicator light

EAU38572

Turn signal indicator lights “” and “” (For TDM900)

Turn signal indicator light “ ” (For TDM900A)

- For TDM900: The corresponding indicator light flashes when the

turn signal switch is pushed to the left or right.

- For TDM900A: This indicator light flashes when the turn signal switch is pushed to the left or right.

EAU11060

Neutral indicator light “**N**”

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

EAU11080

High beam indicator light “”

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

EAU38600

Oil level warning light

This warning light comes on when the engine oil level is low.

The electrical circuit of the warning light can be checked by turning the key to “ON”.

If the warning light does not come on for a few seconds, then go off, have a Yamaha dealer check the electrical circuit.

NOTE:

Even if the oil level is sufficient, the warning light may flicker when riding on a slope or during sudden acceleration or deceleration, but this is not a malfunction.

EAU11371

Fuel level warning indicator “”

This fuel level warning indicator starts flashing when the fuel level drops below approximately 3.5 L (0.92 US gal) (0.77 Imp.gal).

EAU11500

Engine trouble warning light “”

This warning light comes on or flashes when an electrical circuit monitoring the engine is defective. When this occurs, have a Yamaha dealer check the self-diagnosis system.

The electrical circuit of the warning light can be checked by turning the key to “ON”. If the warning light does not come on for a few seconds, then go off, have a Yamaha dealer check the electrical circuit.

ABS warning light “” (for ABS models)

EAU11543

If this warning light comes on or flashes while riding, the ABS may be defective. If this occurs, have a Yamaha dealer check the system as soon as possible. (See page 3-12.)



EWA10081

If the ABS warning light comes on or flashes while riding, the brake system reverts to conventional braking. Therefore, be careful not to cause the wheels to lock during emergency braking. If the warning light comes on or flashes while riding, have a Yamaha dealer check the brake system as soon as possible.

The electrical circuit of the warning light can be checked by turning the key to “ON”.

If the warning light does not come on or remains on, have a Yamaha dealer check the electrical circuit.

EAU38610

Immobilizer system indicator light

The electrical circuit of the indicator

light can be checked by turning the key to “ON”.

If the indicator light does not come on for a few seconds, then go off, have a Yamaha dealer check the electrical circuit.

When the key is turned to “OFF” and 30 seconds have passed, the indicator light will start flashing indicating the immobilizer system is enabled. After 24 hours have passed, the indicator light will stop flashing, however the immobilizer system is still enabled.

NOTE:

This model is also equipped with a self-diagnosis device for the immobilizer system. If the immobilizer system is defective, the indicator light will start flashing a pattern and the odometer/tripmeter will display a 2-digit code when the key is turned to “ON”. When this occurs, have a Yamaha dealer check the self-diagnosis system. However, if the indicator light slowly flashes five times, and then quickly flashes two times repeatedly, error code 52 will be displayed. This error could be caused by signal interference. If this occurs, try

the following.

1. Use the code re-registering key to start the engine.

NOTE:

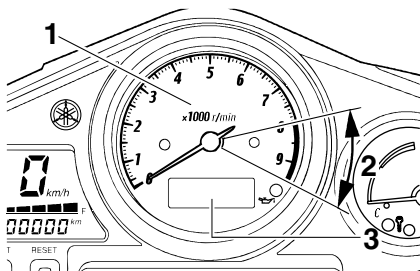
Make sure there are no other immobilizer keys close to the main switch, and do not keep more than one immobilizer key on the same key ring! Immobilizer system keys may cause signal interference, which may prevent the engine from starting.

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

INSTRUMENT AND CONTROL FUNCTIONS

Tachometer unit

EAU11911



1. Tachometer
2. Tachometer red zone
3. Clock

The electric tachometer allows the rider to monitor the engine speed and keep it within the ideal power range. When the key is turned to “ON”, the tachometer needle will sweep once across the r/min range and then return to zero r/min in order to test the electrical circuit.

ECA10031

CAUTION:

Do not operate the engine in the tachometer red zone.

Red zone: 8000 r/min and above

This tachometer unit is equipped with a clock.

To set the clock:

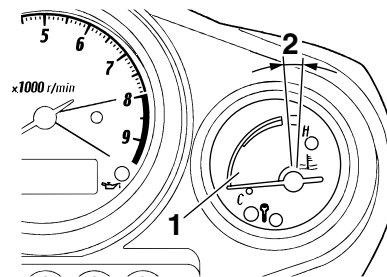
1. Push both the “SELECT” and “RESET” buttons for at least two seconds.
2. When the hour digits start flashing, push the “RESET” button to set the hours.
3. Push the “SELECT” button to change the minutes.
4. When the minute digits start flashing, push the “RESET” button to set the minutes.
5. Push the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

NOTE:

- After setting the clock, be sure to push the “SELECT” button before turning the key to “OFF”, otherwise the clock will not be set.
- When the key is turned to “OFF”, the clock display will remain on for 48 hours and then go off to prevent the battery from discharging.

Coolant temperature gauge

EAU12181



1. Coolant temperature gauge
2. Coolant temperature gauge red zone

With the key in the “ON” position, the coolant temperature gauge indicates the temperature of the coolant. When the key is turned to “ON”, the coolant temperature gauge needle will sweep once across the temperature range and then return to “C” in order to test the electrical circuit. The coolant temperature varies with changes in the weather and engine load. If the needle reaches or enters the red zone, stop the vehicle and let the engine cool. (See page 6-35.)

INSTRUMENT AND CONTROL FUNCTIONS

ECA10020

CAUTION:

Do not operate the engine if it is overheated.

EAU36610

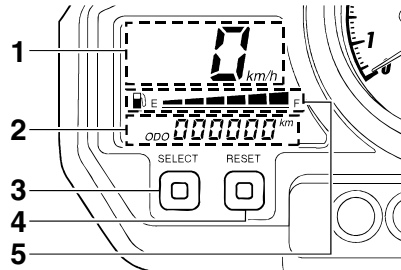
Multi-function display

EWA12311



WARNING

Be sure to stop the vehicle before making any setting changes to the multi-function display.



1. Speedometer
2. Odometer/tripmeter
3. "SELECT" button
4. "RESET" button
5. Fuel gauge

The multi-function display is equipped with the following:

- a digital speedometer (which shows riding speed)
- an odometer (which shows the total distance traveled)

- two tripmeters (which show the distance traveled since they were last set to zero)
- a fuel reserve tripmeter (which shows the distance traveled on the fuel reserve)
- a fuel gauge
- a self-diagnosis device

NOTE:

- Be sure to turn the key to "ON" before using the "SELECT" and "RESET" buttons.
- For the U.K. only: To switch the speedometer and odometer/tripmeter displays between kilometers and miles, press the "SELECT" button for at least one second.

Odometer and tripmeter modes

Pushing the "SELECT" button switches the display between the odometer mode "ODO" and the tripmeter modes "TRIP 1" and "TRIP 2" in the following order:

ODO → TRIP 1 → TRIP 2 → ODO

If the fuel level warning indicator flashes (see page 3-3), the odometer display will automatically change to the

INSTRUMENT AND CONTROL FUNCTIONS

fuel reserve tripmeter mode “TRIP F” and start counting the distance traveled from that point. In that case, pushing the “SELECT” button switches the display between the various tripmeter and odometer modes in the following order: TRIP F → TRIP 1 → TRIP 2 → ODO → TRIP F

To reset a tripmeter, select it by pushing the “SELECT” button, and then push the “RESET” button for at least one second. If you do not reset the fuel reserve tripmeter manually, it will reset itself automatically and the display will return to the prior mode after refueling and traveling 5 km (3 mi).

NOTE:

The display cannot be changed back to “TRIP F” after pushing the “RESET” button.

Fuel gauge

The fuel gauge indicates the amount of fuel in the fuel tank. The display segments of the fuel gauge disappear towards “E” (Empty) as the fuel level decreases. When only one segment is left near “E”, the fuel level warning indi-

cator and the last fuel gauge segment will flash. Refuel as soon as possible.

Self-diagnosis device

This model is equipped with a self-diagnosis device for various electrical circuits.

If any of those circuits are defective, the odometer/tripmeter will indicate a two-digit error code (e.g., 11, 12, 13).

If the odometer/tripmeter indicates such an error code, note the code number, and then have a Yamaha dealer check the vehicle.

ECA11520

CAUTION:

If the odometer/tripmeter indicates an error code, the vehicle should be checked as soon as possible in order to avoid engine damage.

EAU12331

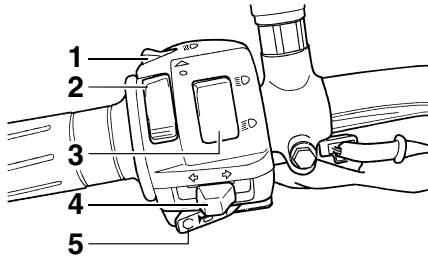
Anti-theft alarm (optional)

This model can be equipped with an optional anti-theft alarm by a Yamaha dealer. Contact a Yamaha dealer for more information.

INSTRUMENT AND CONTROL FUNCTIONS

Handlebar switches

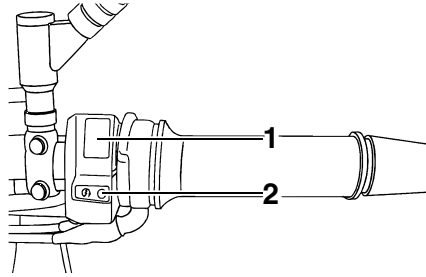
Left



1. Pass switch “≡〇”
2. Hazard switch “△”
3. Dimmer switch “≡〇/≡〇”
4. Turn signal switch “⇐/⇒”
5. Horn switch “🔔”

EAU12344

Right



1. Engine stop switch “○/∕”
2. Start switch “🔔”

EAU12350

Pass switch “≡〇”

Press this switch to flash the headlight.

EAU12400

Dimmer switch “≡〇/≡〇”

Set this switch to “≡〇” for the high beam and to “≡〇” for the low beam.

EAU12460

Turn signal switch “⇐/⇒”

To signal a right-hand turn, push this switch to “⇒”. To signal a left-hand turn, push this switch to “⇐”. When released, the switch returns to the center

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

EAU12500

Horn switch “🔔”

Press this switch to sound the horn.

EAU12660

Engine stop switch “○/∕”

Set this switch to “○” before starting the engine. Set this switch to “∕” to stop the engine in case of an emergency, such as when the vehicle overturns or when the throttle cable is stuck.

3

EAU12710

Start switch “🔔”

Push this switch to crank the engine with the starter.

ECA10050

CAUTION:

See page 5-1 for starting instructions prior to starting the engine.

EAU12733

Hazard switch “△”

With the key in the “ON” or “P<” position, use this switch to turn on the haz-

INSTRUMENT AND CONTROL FUNCTIONS

ard lights (simultaneous flashing of all turn signal lights).

The hazard lights are used in case of an emergency or to warn other drivers when your vehicle is stopped where it might be a traffic hazard.

ECA10061

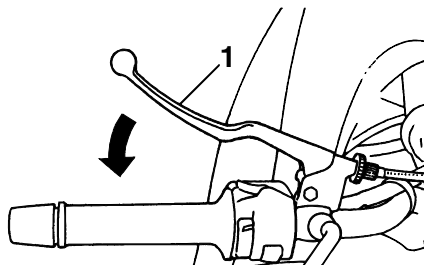
CAUTION:

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

3

Clutch lever

EAU12820



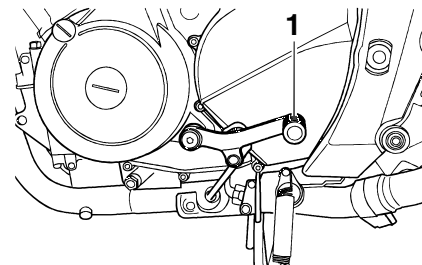
1. Clutch lever

The clutch lever is located at the left handlebar grip. 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 ignition circuit cut-off system. (See page 3-20.)

Shift pedal

EAU12870



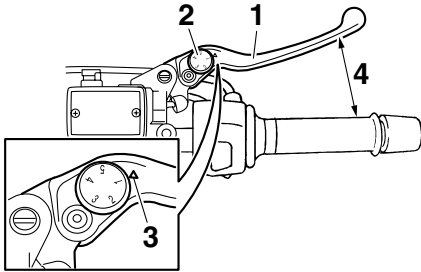
1. Shift pedal

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

EAU26822

Brake lever

The brake lever is located at the right handlebar grip. To apply the front brake, pull the lever toward the handlebar grip.



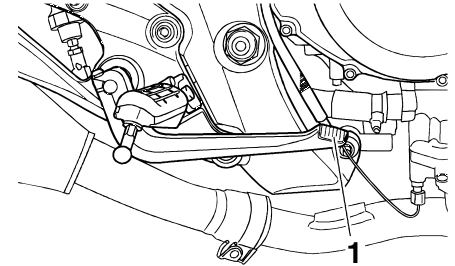
1. Brake lever
2. Brake lever position adjusting dial
3. “ \triangle ” mark
4. Distance between brake lever and handlebar grip

The brake lever is equipped with a position adjusting dial. To adjust the distance between the brake lever and the handlebar grip, turn the adjusting dial while holding the lever pushed away from the handlebar grip. Make sure that the appropriate setting on the adjusting

dial is aligned with the “ \triangle ” mark on the brake lever.

EAU12941

Brake pedal



1. Brake pedal

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

INSTRUMENT AND CONTROL FUNCTIONS

EAU26792

ABS (for ABS models)

The Yamaha ABS (Anti-lock Brake System) features a dual electronic control system, which acts on the front and rear brakes independently. The ABS is monitored by an ECU (Electronic Control Unit), which will have recourse to manual braking if a malfunction occurs.

EWA10090

WARNING

- The ABS performs best on long braking distances.
- On certain (rough or gravel) roads, the braking distance may be longer with than without the ABS. Therefore, always keep a sufficient distance to the vehicle ahead to match the riding speed.

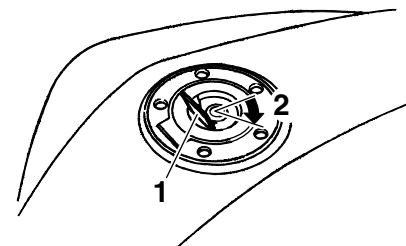
NOTE:

- When the ABS is activated, the brakes are operated in the usual way. A pulsating action may be felt at the brake lever or brake pedal, but this does not indicate a malfunction.
- This ABS has a test mode which

allows the owner to experience the pulsating at the brake lever or brake pedal when the ABS is operating. However, special tools are required, so please consult your Yamaha dealer when performing this test.

EAU13090

Fuel tank cap



1. Fuel tank cap lock cover
2. Unlock.

To open the fuel tank cap

Open the fuel tank cap lock cover, insert the key into the lock, and then turn it 1/8 turn clockwise. The lock will be released and the fuel tank cap can be opened.

To close the fuel tank cap

1. Push the fuel tank cap into position with the key inserted in the lock.
2. Turn the key counterclockwise to the original position, remove it, and then close the lock cover.

INSTRUMENT AND CONTROL FUNCTIONS

NOTE: _____

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

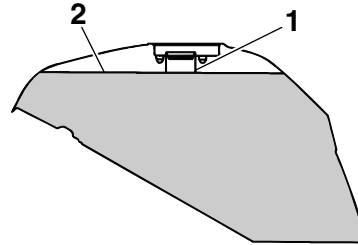
EWA11090



WARNING _____

Make sure that the fuel tank cap is properly closed before riding.

Fuel



1. Fuel tank filler tube
2. Fuel level

Make sure that there is sufficient fuel in the tank. Fill the fuel tank to the bottom of the filler tube as shown.

EWA10880



WARNING _____

- Do not overfill the fuel tank, otherwise it may overflow when the fuel warms up and expands.
- Avoid spilling fuel on the hot engine.

ECA10070

CAUTION: _____

Immediately wipe off spilled fuel with a clean, dry, soft cloth, since

EAU13210

fuel may deteriorate painted surfaces or plastic parts.

EAU13320

Recommended fuel:

REGULAR UNLEADED GASOLINE ONLY

Fuel tank capacity:

20.0 L (5.28 US gal) (4.40 Imp.gal)

Fuel reserve amount:

3.5 L (0.92 US gal) (0.77 Imp.gal)

ECA11400

CAUTION: _____

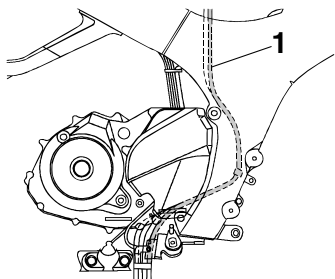
Use only unleaded gasoline. The use of leaded gasoline will cause severe damage to internal engine parts, such as the valves and piston rings, as well as to the exhaust system.

Your Yamaha engine has been designed to use regular unleaded gasoline with a research octane number of 91 or higher. If knocking (or pinging) occurs, use a gasoline of a different brand or premium unleaded fuel. Use of unleaded fuel will extend spark plug life and reduce maintenance costs.

INSTRUMENT AND CONTROL FUNCTIONS

EAU13410

Fuel tank breather hose



1. Fuel tank breather hose

Before operating the motorcycle:

- Check the fuel tank breather hose connection.
- Check the fuel tank breather hose for cracks or damage, and replace it if damaged.
- Make sure that the end of the fuel tank breather hose is not blocked, and clean it if necessary.

EAU13441

Catalytic converter

This vehicle is equipped with catalytic converters in the exhaust system.

EWA10860

WARNING

The exhaust system is hot after operation. Make sure that the exhaust system has cooled down before doing any maintenance work.

ECA10700

CAUTION:

The following precautions must be observed to prevent a fire hazard or other damages.

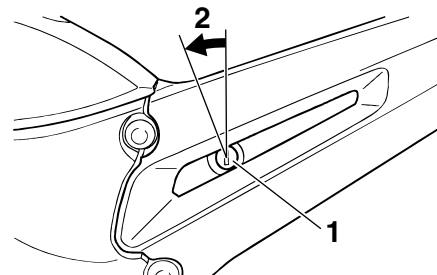
- **Use only unleaded gasoline. The use of leaded gasoline will cause unreparable damage to the catalytic converter.**
- **Never park the vehicle near possible fire hazards such as grass or other materials that easily burn.**
- **Do not allow the engine to idle too long.**

EAU13860

Seat

To remove the seat

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

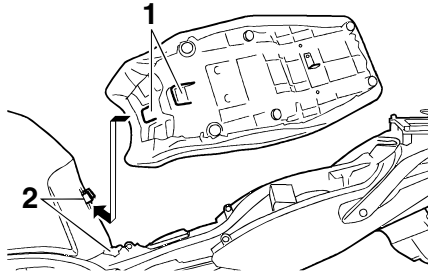


1. Seat lock
2. Unlock.

To install the seat

Insert the projections on the front of the seat into the seat holder, push the rear of the seat down to lock it in place, and then remove the key.

INSTRUMENT AND CONTROL FUNCTIONS



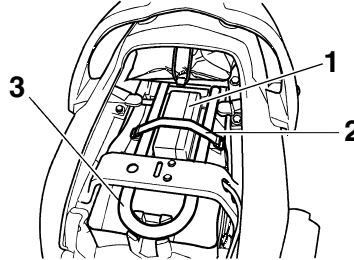
1. Projection
2. Seat holder

NOTE: _____
Make sure that the seat is properly secured before riding.

Storage compartment

EAU14411

When washing the motorcycle, be careful not to let any water enter the storage compartment.



1. Yamaha U-LOCK (optional)
2. Strap
3. U-LOCK bar (optional)

This storage compartment is designed to hold an optional genuine Yamaha U-LOCK. (Other locks may not fit.) When placing a U-LOCK in the storage compartment, securely fasten it with the straps. When the U-LOCK is not in the storage compartment, be sure to secure the straps to prevent losing them.

When storing the owner's manual or other documents in the storage compartment, be sure to wrap them in a plastic bag so that they will not get wet.

INSTRUMENT AND CONTROL FUNCTIONS

Adjusting the front fork

This front fork is equipped with spring preload adjusting bolts and damping force adjusting screws.

EUA14781

EWA10180

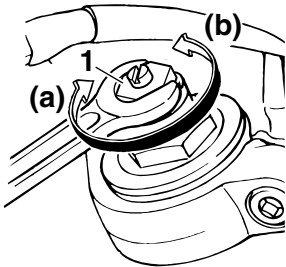


WARNING

Always adjust both fork legs equally, otherwise poor handling and loss of stability may result.

3

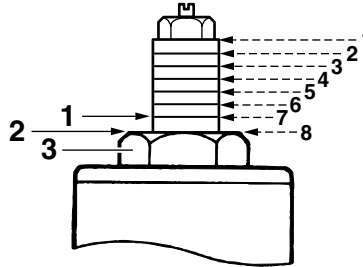
Spring preload



1. Spring preload adjusting bolt

To increase the spring preload and thereby harden the suspension, turn the adjusting bolt on each fork leg in direction (a). To decrease the spring preload and thereby soften the

suspension, turn the adjusting bolt on each fork leg in direction (b).



1. Standard setting
2. Current setting
3. Front fork cap bolt

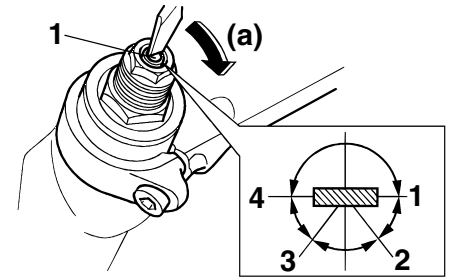
NOTE:

Align the appropriate groove on the adjusting mechanism with the top of the front fork cap bolt.

Spring preload setting:

- Minimum (soft):
8
- Standard:
7
- Maximum (hard):
1

Damping force



1. Damping force adjusting screw

1. Turn the adjusting screw on each fork leg in direction (a) until the screw moves almost a 1/2 turn without clicking.
2. Continue turning the adjusting screw in direction (a) until it clicks. This is the minimum setting.
3. To increase the damping force, continue turning the adjusting screw in direction (a). The third click after the minimum setting is the maximum setting. If the adjusting screw is turned further in direction (a), it will move half a turn before returning to the minimum setting.

INSTRUMENT AND CONTROL FUNCTIONS

NOTE: _____
Make sure that the adjusting screw is turned to one of the four settings.

Damping setting:

- Minimum (soft):
1
- Standard:
2
- Maximum (hard):
4

Adjusting the shock absorber assembly

This shock absorber assembly is equipped with a spring preload adjusting ring and rebound and compression damping force adjusting knobs.

CAUTION:

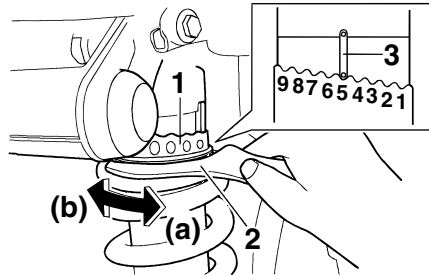
Never attempt to turn an adjusting mechanism beyond the maximum or minimum settings.

thereby harden the suspension, turn the adjusting ring in direction (a). To decrease the spring preload and thereby soften the suspension, turn the adjusting ring in direction (b).

Spring preload setting:

- Minimum (soft):
1
- Standard:
5
- Maximum (hard):
9

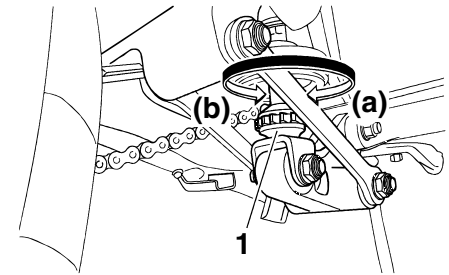
Spring preload



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

To increase the spring preload and

Rebound damping force



1. Rebound damping force adjusting knob

To increase the rebound damping force and thereby harden the rebound damping, turn the adjusting knob in direction

INSTRUMENT AND CONTROL FUNCTIONS

EWA10220

(a). To decrease the rebound damping force and thereby soften the rebound damping, turn the adjusting knob in direction (b).

Rebound damping setting:

Minimum (soft):

20 clicks in direction (b)*

Standard:

12 clicks in direction (b)*

Maximum (hard):

3 clicks in direction (b)*

* With the adjusting knob fully turned in direction (a)

force and thereby harden the compression damping, turn the adjusting knob in direction (a). To decrease the compression damping force and thereby soften the compression damping, turn the adjusting knob in direction (b).

Compression damping setting:

Minimum (soft):

12 clicks in direction (b)*

Standard:

11 clicks in direction (b)*

Maximum (hard):

1 click in direction (b)*

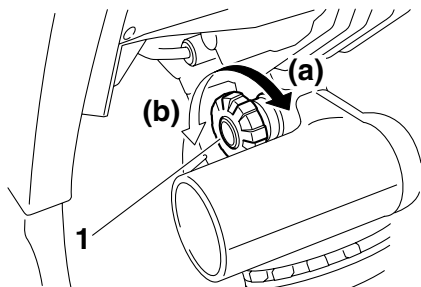
* With the adjusting knob fully turned in direction (a)

⚠ WARNING

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

- Do not tamper with or attempt to open the gas cylinder.
- Do not subject the shock absorber to an open flame or other high heat sources, otherwise it may explode due to excessive gas pressure.
- Do not deform or damage the gas cylinder in any way, as this will result in poor damping performance.
- Always have a Yamaha dealer service the shock absorber.

Compression damping force



1. Compression damping force adjusting knob

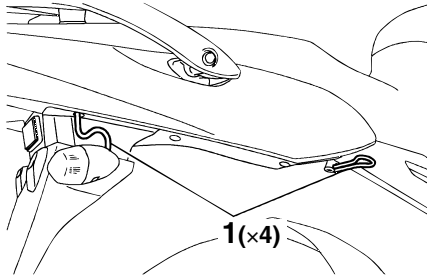
To increase the compression damping

NOTE:

Although the total number of clicks of a damping force adjusting mechanism may not exactly match the above specifications due to small differences in production, the actual number of clicks always represents the entire adjusting range. To obtain a precise adjustment, it would be advisable to check the number of clicks of each damping force adjusting mechanism and to modify the specifications as necessary.

Luggage strap holders

EAU15140



1. Luggage strap holder

There are four luggage strap holders below the passenger seat, two of which can be turned out for easier access.

Sidestand

EAU15301

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.

NOTE:

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

EWA10240

WARNING

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

pair it if it does not function properly.

INSTRUMENT AND CONTROL FUNCTIONS

EAU15311

Ignition circuit cut-off system

The ignition circuit cut-off system (comprising the sidestand switch, clutch switch and neutral switch) has the following functions.

- It prevents starting when the transmission is in gear and the sidestand is up, but the clutch lever is not pulled.
- It prevents starting when the transmission is in gear and the clutch lever is pulled, but the sidestand is still down.
- It cuts the running engine when the transmission is in gear and the sidestand is moved down.

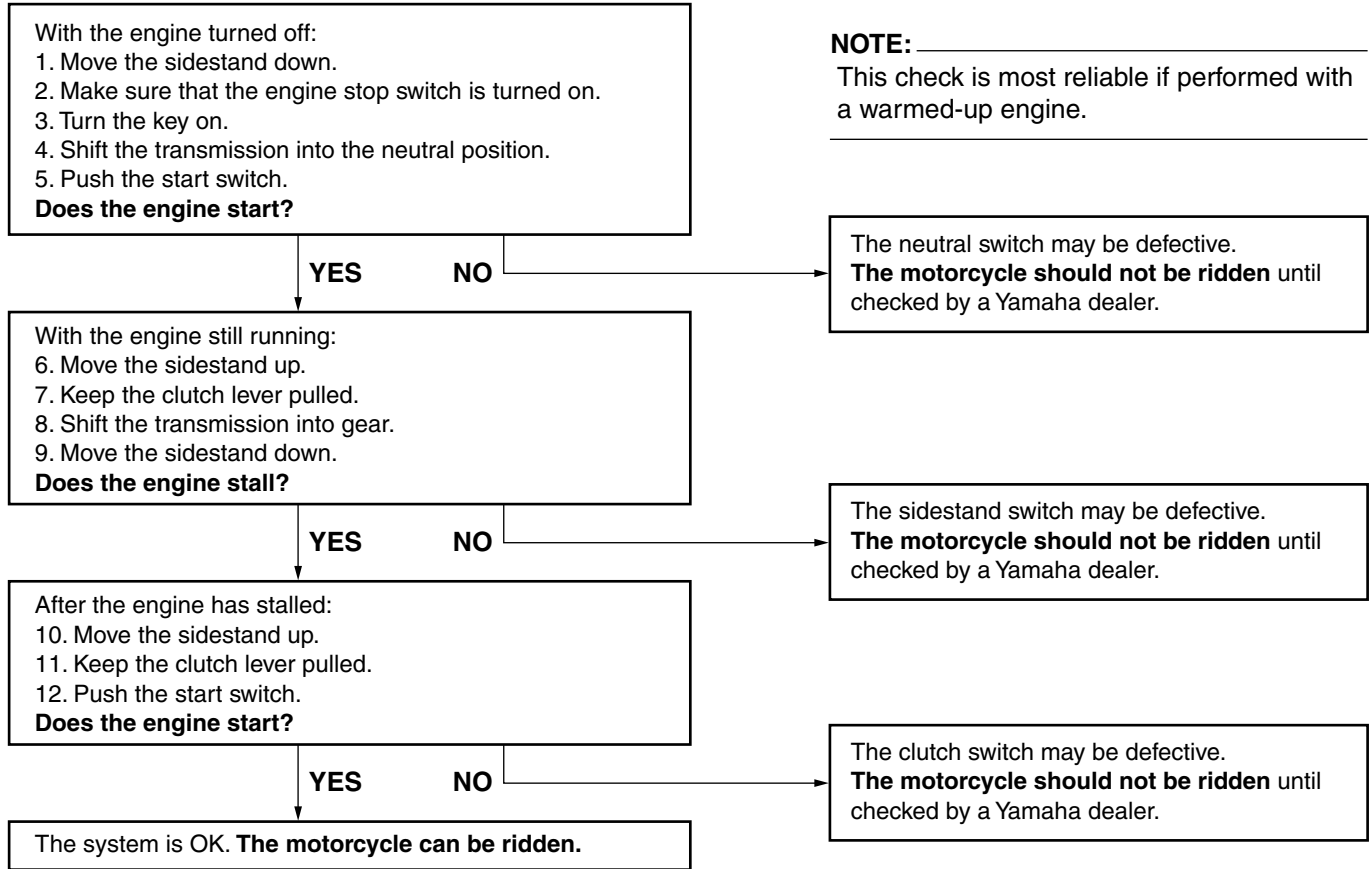
Periodically check the operation of the ignition circuit cut-off system according to the following procedure.

EWA10250



If a malfunction is noted, have a Yamaha dealer check the system before riding.

INSTRUMENT AND CONTROL FUNCTIONS



PRE-OPERATION CHECKS

EAU15591

The condition of a vehicle is the owner's responsibility. Vital components can start to deteriorate quickly and unexpectedly, even if the vehicle remains unused (for example, as a result of exposure to the elements). Any damage, fluid leakage or loss of tire air pressure could have serious consequences. Therefore, it is very important, in addition to a thorough visual inspection, to check the following points before each ride.

NOTE:

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

EWA11150

 WARNING

4

If any item in the Pre-operation check list is not working properly, have it inspected and repaired before operating the vehicle.

PRE-OPERATION CHECKS

EAU15603

Pre-operation check list

ITEM	CHECKS	PAGE
Fuel	<ul style="list-style-type: none">• Check fuel level in fuel tank.• Refuel if necessary.• Check fuel line for leakage.	3-13
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.	6-7
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.	6-10
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 recommended brake fluid to specified level.• Check hydraulic system for leakage.	6-20
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 recommended brake fluid to specified level.• Check hydraulic system for leakage.	6-20
Clutch	<ul style="list-style-type: none">• Check operation.• Lubricate cable if necessary.• Check lever free play.• Adjust if necessary.	6-18

PRE-OPERATION CHECKS

ITEM	CHECKS	PAGE
Throttle grip	<ul style="list-style-type: none"> • Make sure that operation is smooth. • Check cable free play. • If necessary, have Yamaha dealer adjust cable free play and lubricate cable and grip housing. 	6-15, 6-25
Control cables	<ul style="list-style-type: none"> • Make sure that operation is smooth. • Lubricate if necessary. 	6-24
Drive chain	<ul style="list-style-type: none"> • Check chain slack. • Adjust if necessary. • Check chain condition. • Lubricate if necessary. 	6-22, 6-24
Wheels and tires	<ul style="list-style-type: none"> • Check for damage. • Check tire condition and tread depth. • Check air pressure. • Correct if necessary. 	6-15, 6-18
Brake and shift pedals	<ul style="list-style-type: none"> • Make sure that operation is smooth. • Lubricate pedal pivoting points if necessary. 	6-25
Brake and clutch levers	<ul style="list-style-type: none"> • Make sure that operation is smooth. • Lubricate lever pivoting points if necessary. 	6-25
Sidestand	<ul style="list-style-type: none"> • Make sure that operation is smooth. • Lubricate pivot if necessary. 	6-26
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. 	—
Sidestand switch	<ul style="list-style-type: none"> • Check operation of ignition circuit cut-off system. • If system is defective, have Yamaha dealer check vehicle. 	3-19

OPERATION AND IMPORTANT RIDING POINTS

EAU15950

EAU26801

EWA10270

WARNING

- Become thoroughly familiar with all operating controls and their functions before riding. Consult a Yamaha dealer regarding any control or function that you do not thoroughly understand.
- Never start the engine or operate it in a closed area for any length of time. Exhaust fumes are poisonous, and inhaling them can cause loss of consciousness and death within a short time. Always make sure that there is adequate ventilation.
- Before starting out, make sure that the sidestand is up. If the sidestand is not raised completely, it could contact the ground and distract the operator, resulting in a possible loss of control.

Starting the engine

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

- The transmission is in the neutral position.
- The transmission is in gear with the clutch lever pulled and the sidestand up.

EWA10290

WARNING

- Before starting the engine, check the function of the ignition circuit cut-off system according to the procedure described on page 3-20.
- Never ride with the sidestand down.

1. Turn the key to “ON” and make sure that the engine stop switch is set to “○”.

ECA11781

CAUTION:

The following warning lights and indicator light should come on for a few seconds, then go off.

- Oil level warning light

- Engine trouble warning light
- Immobilizer system indicator light
- ABS warning light (for ABS models)

If a warning or indicator light does not go off, see page 3-3 for the corresponding warning and indicator light circuit check.

2. Shift the transmission into the neutral position.

NOTE:

When the transmission is in the neutral position, the neutral indicator light should be on, otherwise have a Yamaha dealer check the electrical circuit.

3. Start the engine by pushing the start switch.

NOTE:

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

OPERATION AND IMPORTANT RIDING POINTS

attempt.

ECA11040

CAUTION:

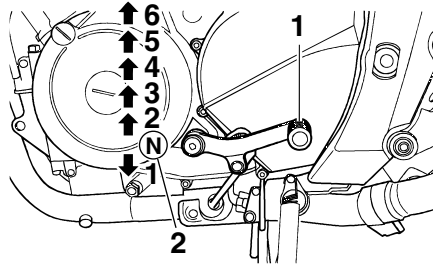
For maximum engine life, never accelerate hard when the engine is cold!

NOTE:

The engine is warm when it quickly responds to the throttle.

Shifting

EAU16671



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.

NOTE:

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

ECA10260

CAUTION:

- Even with the transmission in

the neutral position, do not coast for long periods of time with the engine off, and do not tow the motorcycle for long distances. The transmission is properly lubricated only when the engine is running. Inadequate lubrication may damage the transmission.

- Always use the clutch while changing gears to avoid damaging the engine, transmission, and drive train, which are not designed to withstand the shock of forced shifting.

OPERATION AND IMPORTANT RIDING POINTS

Tips for reducing fuel consumption

EAU16810

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).

Engine break-in

EAU16841

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.

EAU17100

0–1000 km (0–600 mi)

Avoid prolonged operation above 4000 r/min.

1000–1600 km (600–1000 mi)

Avoid prolonged operation above 6000 r/min.

ECA11150

CAUTION: _____

After 1000 km (600 mi) of operation,

the engine oil must be changed, and the oil filter element replaced.

1600 km (1000 mi) and beyond

The vehicle can now be operated normally.

ECA10310

CAUTION: _____

- **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

EAU17212

Parking

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

EWA10310

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.
- Do not park on a slope or on soft ground, otherwise the vehicle may overturn.

ECA10380

CAUTION:

Never park in an area where there are fire hazards such as grass or other flammable materials.

PERIODIC MAINTENANCE AND MINOR REPAIR

EAU17240

EAU17520

EWA10350

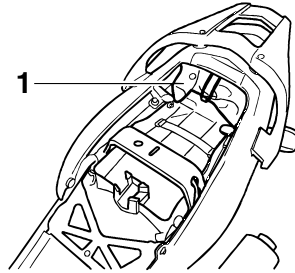
Safety is an obligation of the owner. Periodic inspection, adjustment and lubrication will keep your vehicle in the safest and most efficient condition possible. The most important points of inspection, adjustment, and lubrication are explained on the following pages. The intervals given in the periodic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

EWA10320

! WARNING

If you are not familiar with maintenance work, have a Yamaha dealer do it for you.

Owner's tool kit



1. Owner's tool kit

The owner's tool kit is located inside the storage compartment under the seat. (See page 3-14.)

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

NOTE:

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

! WARNING

Modifications not approved by Yamaha may cause loss of performance and render the vehicle unsafe for use. Consult a Yamaha dealer before attempting any changes.

PERIODIC MAINTENANCE AND MINOR REPAIR

EAU17705

Periodic maintenance and lubrication chart

NOTE:

- The annual checks must be performed every year, except if a kilometer-based maintenance is performed instead.
- From 50000 km, repeat the maintenance intervals starting from 10000 km.
- Items marked with an asterisk should be performed by a Yamaha dealer as they require special tools, data and technical skills.

NO.	ITEM	CHECK OR MAINTENANCE JOB	ODOMETER READING (× 1000 km)					ANNUAL CHECK
			1	10	20	30	40	
1	* Fuel line	<ul style="list-style-type: none"> ● Check fuel hoses for cracks or damage. 		√	√	√	√	√
2	* Spark plugs	<ul style="list-style-type: none"> ● Check condition. ● Clean and regap. 		√		√		
		<ul style="list-style-type: none"> ● Replace. 			√		√	
3	* Valves	<ul style="list-style-type: none"> ● Check valve clearance. ● Adjust. 	Every 40000 km					
4	Air filter element	<ul style="list-style-type: none"> ● Replace. 					√	
5	Clutch	<ul style="list-style-type: none"> ● Check operation. ● Adjust. 	√	√	√	√	√	
6	* 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					
7	* 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					
8	* Brake hoses	<ul style="list-style-type: none"> ● Check for cracks or damage. 		√	√	√	√	√
		<ul style="list-style-type: none"> ● Replace. 	Every 4 years					
9	* Wheels	<ul style="list-style-type: none"> ● Check runout and for damage. 		√	√	√	√	

PERIODIC MAINTENANCE AND MINOR REPAIR

NO.	ITEM	CHECK OR MAINTENANCE JOB	ODOMETER READING (× 1000 km)					ANNUAL CHECK
			1	10	20	30	40	
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 bearing for looseness or damage. 		√	√	√	√	
12	* Swingarm	<ul style="list-style-type: none"> • Check operation and for excessive play. • Lubricate with lithium-soap-based grease. 		√	√	√	√	
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 and after washing the motorcycle or riding in the rain					
14	* Steering bearings	<ul style="list-style-type: none"> • Check bearing play and steering for roughness. • Lubricate with lithium-soap-based grease. 	√	√	√	√	√	
15	* Chassis fasteners	<ul style="list-style-type: none"> • Make sure that all nuts, bolts and screws are properly tightened. 		√	√	√	√	√
16	Sidestand	<ul style="list-style-type: none"> • Check operation. • Lubricate. 		√	√	√	√	√
17	* Sidestand switch	<ul style="list-style-type: none"> • Check operation. 	√	√	√	√	√	√
18	* Front fork	<ul style="list-style-type: none"> • Check operation and for oil leakage. 		√	√	√	√	
19	* Shock absorber assembly	<ul style="list-style-type: none"> • Check operation and shock absorber for oil leakage. 		√	√	√	√	
20	* Rear suspension relay arm and connecting arm pivoting points	<ul style="list-style-type: none"> • Check operation. 		√	√	√	√	
		<ul style="list-style-type: none"> • Lubricate with lithium-soap-based grease. 			√		√	
21	* Fuel injection	<ul style="list-style-type: none"> • Adjust engine idling speed and synchronization. 	√	√	√	√	√	√
22	Engine oil	<ul style="list-style-type: none"> • Change. • Check oil level and vehicle for oil leakage. 	√	√	√	√	√	√
23	Engine oil filter element	<ul style="list-style-type: none"> • Replace. 	√		√		√	
24	* Cooling system	<ul style="list-style-type: none"> • Check coolant level and vehicle for coolant leakage. 		√	√	√	√	√
		<ul style="list-style-type: none"> • Change. 	Every 3 years					

PERIODIC MAINTENANCE AND MINOR REPAIR

NO.	ITEM	CHECK OR MAINTENANCE JOB	ODOMETER READING (× 1000 km)					ANNUAL CHECK
			1	10	20	30	40	
25	* Front and rear brake switches	<ul style="list-style-type: none"> • Check operation. 	✓	✓	✓	✓	✓	✓
26	Moving parts and cables	<ul style="list-style-type: none"> • Lubricate. 		✓	✓	✓	✓	✓
27	* Throttle grip housing and cable	<ul style="list-style-type: none"> • Check operation and free play. • Adjust the throttle cable free play if necessary. • Lubricate the throttle grip housing and cable. 		✓	✓	✓	✓	✓
28	* Air induction system	<ul style="list-style-type: none"> • Check the air cut-off valve, reed valve, and hose for damage. • Replace the entire air induction system if necessary. 		✓	✓	✓	✓	✓
29	* Muffler and exhaust pipe	<ul style="list-style-type: none"> • Check the screw clamp for looseness. 	✓	✓	✓	✓	✓	
30	* Lights, signals and switches	<ul style="list-style-type: none"> • Check operation. • Adjust headlight beam. 	✓	✓	✓	✓	✓	✓

EAU18680

6

NOTE:

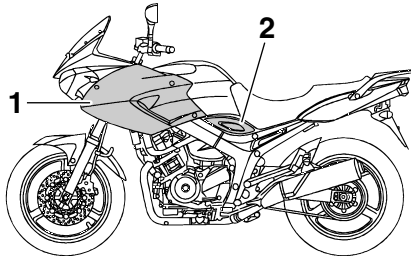
- Air filter
 - This model's air filter is equipped with a disposable oil-coated paper element, which must not be cleaned with compressed air to avoid damaging it.
 - The air filter element needs to be replaced more frequently when riding in unusually wet or dusty areas.
- Hydraulic brake service
 - Regularly check and, if necessary, correct the brake fluid level.
 - Every two years replace the internal components of the brake master cylinders and calipers, and change the brake fluid.
 - Replace the brake hoses every four years and if cracked or damaged.

PERIODIC MAINTENANCE AND MINOR REPAIR

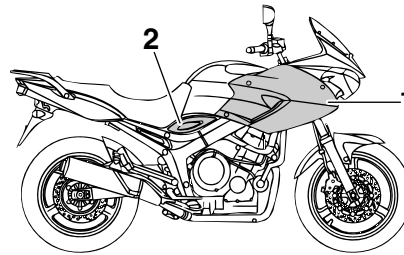
EAU18712

Removing and installing cowlings and panels

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



1. Cowling A
2. Panel A

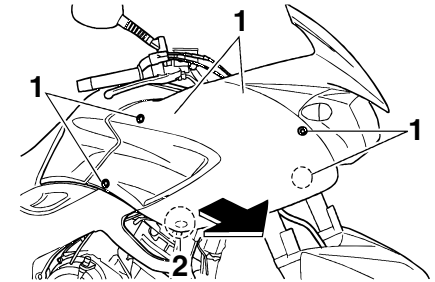


1. Cowling B
2. Panel B

Cowlings A and B

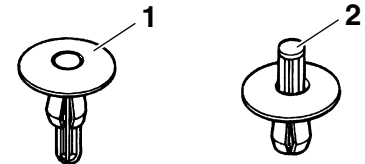
To remove one of the cowlings
Remove the cowling screws and the quick fastener, and then pull the cowling off as shown.

EAU18991



1. Screw
2. Quick fastener

NOTE: _____
The quick fastener is removed by pushing the center pin in with a screwdriver, and then pulling the fastener out.



1. Quick fastener (after removal)
2. Quick fastener (before installation)

PERIODIC MAINTENANCE AND MINOR REPAIR

To install the cowling

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

NOTE:

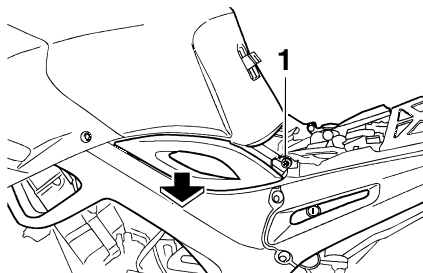
To install the quick fastener, push the center pin out so that it will protrude from the fastener head, insert the fastener into the cowling, and then push the protruding pin in until it is flush with the fastener head.

EAU19171

Panels A and B

6 To remove one of the panels

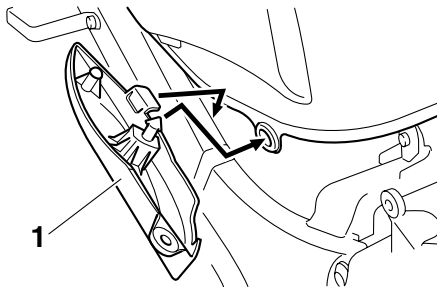
1. Remove the corresponding cowling A or B. (See page 6-5.)
2. Remove the seat. (See page 3-14.)
3. Remove the screw, and then take the panel off.



1. Screw

To install the panel

1. Place the panel in the original position, and then install the screw.
2. Install the seat and the cowling.



1. Panel A

EAU19641

Checking the spark plugs

The spark plugs are important engine components, which should be checked periodically, preferably by a Yamaha dealer. Since heat and deposits will cause any spark plug to slowly erode, they should be removed and checked in accordance with the periodic maintenance and lubrication chart. In addition, the condition of the spark plugs can reveal the condition of the engine.

The porcelain insulator around the center electrode of each spark plug should be a medium-to-light tan (the ideal color when the vehicle is ridden normally), and all spark plugs installed in the engine should have the same color. If any spark plug shows a distinctly different color, the engine could be defective. Do not attempt to diagnose such problems yourself. Instead, have a Yamaha dealer check the vehicle.

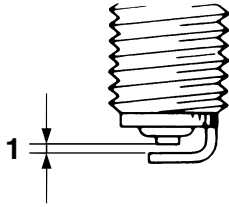
If a spark plug shows signs of electrode erosion and excessive carbon or other deposits, it should be replaced.

PERIODIC MAINTENANCE AND MINOR REPAIR

EAU19830

Specified spark plug:
NGK/DPR8EA-9
DENSO/X24EPR-U9

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 gap

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:
17.5 Nm (1.75 m·kgf, 12.7 ft·lbf)

NOTE: _____
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

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.

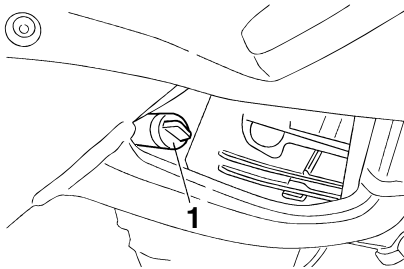
NOTE: _____
Make sure that the vehicle is positioned straight up when checking the oil level. A slight tilt to the side can result in a false reading.

2. Start the engine, warm it up for 15 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 with the arrow mark pointing upward as shown), and then remove it again to check

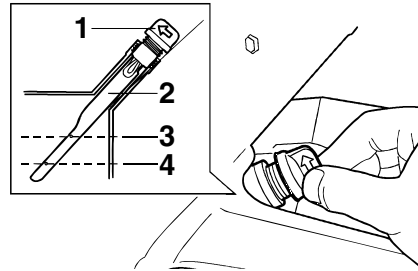
PERIODIC MAINTENANCE AND MINOR REPAIR

the oil level.

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



1. Engine oil filler cap



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

ECA10010

CAUTION: _____

Do not operate the vehicle until you know that the engine oil level is sufficient.

EWA10360

WARNING _____

Never remove the engine oil tank cap after high-speed operation, otherwise hot engine oil could spout out and cause damage or injury. Always let the engine oil cool down sufficiently before removing the oil tank cap.

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 the oil filler cap.

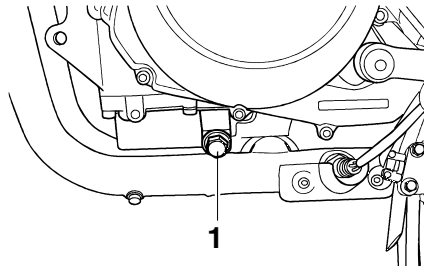
NOTE: _____

- The engine oil tank is located behind the cylinders.
- The engine oil should be between the minimum and maximum level marks.

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 and drain bolts to drain the oil from the crankcase.

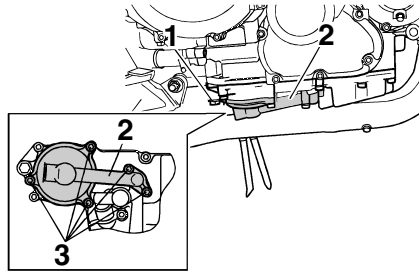
PERIODIC MAINTENANCE AND MINOR REPAIR



1. Engine oil drain bolt A

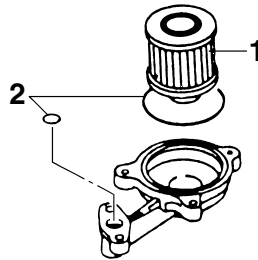
NOTE: _____
Skip steps 4–6 if the oil filter element is not being replaced.

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



1. Engine oil drain bolt B
2. Oil filter element cover
3. Bolt

5. Remove and replace the oil filter element and O-rings.



1. Oil filter element
2. O-ring

6. Install the oil filter element cover by

installing the bolts, then tightening them to the specified torque.

Tightening torque:

Oil filter element cover bolt:
10 Nm (1.0 m·kgf, 7.2 ft·lbf)

NOTE: _____

Make sure that the O-rings are properly seated.

7. Install the engine oil drain bolts, and then tighten them to the specified torques.

Tightening torques:

Engine oil drain bolt A:
35 Nm (3.5 m·kgf, 25 ft·lbf)
Engine oil drain bolt B:
30 Nm (3.0 m·kgf, 21.7 ft·lbf)

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

PERIODIC MAINTENANCE AND MINOR REPAIR

Recommended engine oil:

See page 8-1.

Oil quantity:

Without oil filter element replacement:

3.80 L (4.02 US qt) (3.34 Imp.qt)

With oil filter element replacement:

3.90 L (4.12 US qt) (3.43 Imp.qt)

ECA11620

CAUTION:

- 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.

9. 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.
10. Turn the engine off, and then

check the oil level and correct it if necessary.

EAU20070

Coolant

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.

EAU38581

To check the coolant level

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

NOTE:

- 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.

2. Check the coolant level in the coolant reservoir.

NOTE:

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

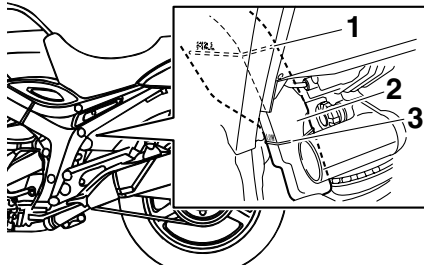
PERIODIC MAINTENANCE AND MINOR REPAIR

For TDM900



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

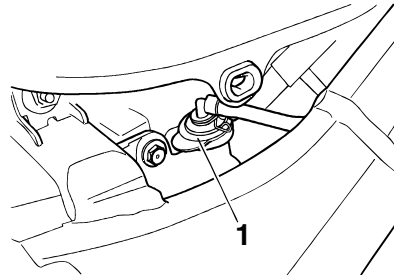
For TDM900A



1. Maximum level mark
 2. Coolant reservoir cap
 3. Minimum level mark
3. If the coolant is at or below the

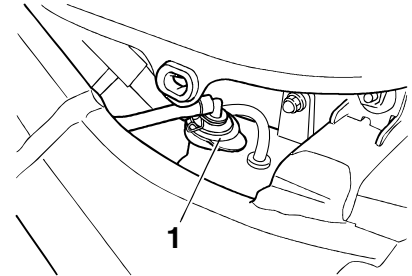
minimum level mark, remove panel B for TDM900 or panel A for TDM900A (See page 6-5.), remove the reservoir cap, add coolant to the maximum level mark, and then install the reservoir cap and the panel.

For TDM900



1. Coolant reservoir cap

For TDM900A



1. Coolant reservoir cap

Coolant reservoir capacity (up to the maximum level mark):
0.25 L (0.26 US qt) (0.22 Imp.qt)

ECA10470

CAUTION:

- 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 engine may not be sufficiently cooled and the cooling system will not be protected

PERIODIC MAINTENANCE AND MINOR REPAIR

against frost and corrosion.

- If water has been added to the 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.

WARNING

EWA10380

Never attempt to remove the radiator cap when the engine is hot.

NOTE:

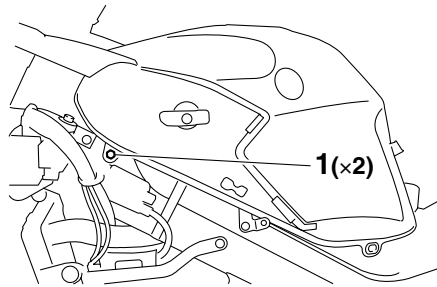
- The radiator fan is automatically switched on or off according to the coolant temperature in the radiator.
- If the engine overheats, see page 6-35 for further instructions.

EAU27053

Replacing the air filter element

The air filter element should be replaced at the intervals specified in the periodic maintenance and lubrication chart. Replace the air filter element more frequently if you are riding in unusually wet or dusty areas.

1. Remove the seat. (See page 3-14.)
2. Remove cowlings A and B as well as panels A and B. (See page 6-5.)
3. Remove the fuel tank bolts.



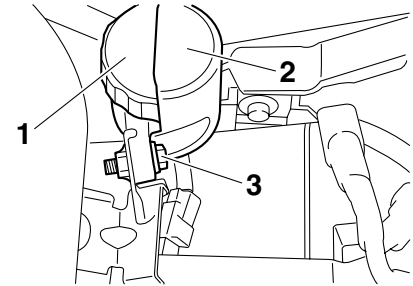
1. Bolt

NOTE:

For TDM900, skip steps 4 and 11.

4. Remove the rear brake fluid reservoir holder by removing the bolt.

For TDM900A

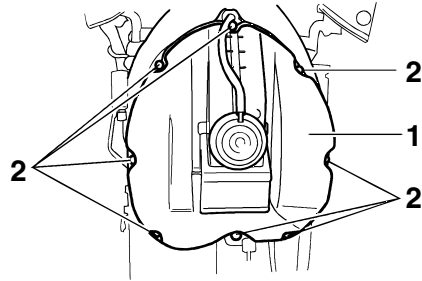


1. Rear brake fluid reservoir holder
2. Rear brake fluid reservoir
3. Bolt

5. Lift the fuel tank away from the air filter case. (Do not disconnect the fuel hoses!)
6. Remove the air filter case cover by removing the screws.

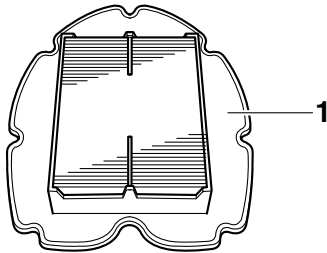
PERIODIC MAINTENANCE AND MINOR REPAIR

ECA10480



1. Air filter case cover
2. Screw

7. Pull the air filter element out.



1. Air filter element

8. Insert a new air filter element into the air filter case.

CAUTION:

- Make sure that the air filter element is properly seated in the air filter case.
- The engine should never be operated without the air filter element installed, otherwise the piston(s) and/or cylinder(s) may become excessively worn.

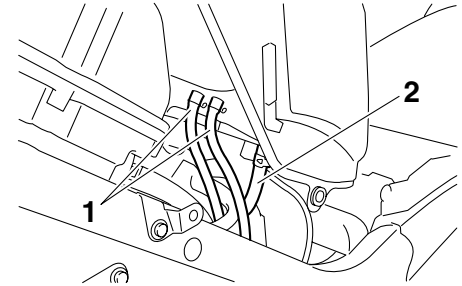
9. Install the air filter case cover by installing the screws.
10. Place the fuel tank in the original position and install the bolts.

WARNING

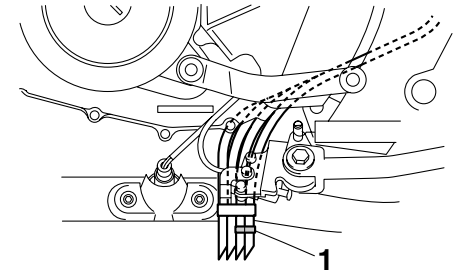
EWA11330

- Before installing the fuel tank, make sure that the fuel hoses are not damaged. If any fuel hose is damaged, do not start the engine but have a Yamaha dealer replace the hose, otherwise fuel may leak.
- Make sure that the fuel hoses are properly connected and routed, and not pinched.
- Be sure to place the fuel tank breather hose and the fuel tank

overflow hose in the original position.



1. Fuel tank breather/overflow hose
2. Fuel hose



1. Original position (paint mark)

11. Install the rear brake fluid reservoir holder by installing the bolt.

PERIODIC MAINTENANCE AND MINOR REPAIR

12. Install the panels and cowlings.
13. Install the seat.

EAU34300

Adjusting the engine idling speed

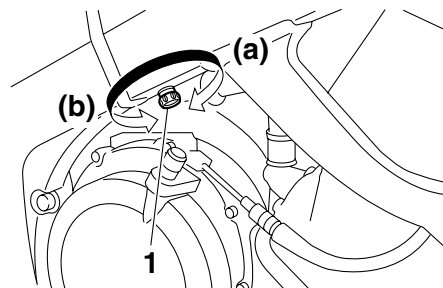
The engine idling speed must be checked and, if necessary, adjusted as follows at the intervals specified in the periodic maintenance and lubrication chart.

The engine should be warm before making this adjustment.

NOTE: _____

The engine is warm when it quickly responds to the throttle.

Check the engine idling speed and, if necessary, adjust it to specification by turning the idle adjusting screw. To increase the engine idling speed, turn the screw in direction (a). To decrease the engine idling speed, turn the screw in direction (b).



1. Idle adjusting screw

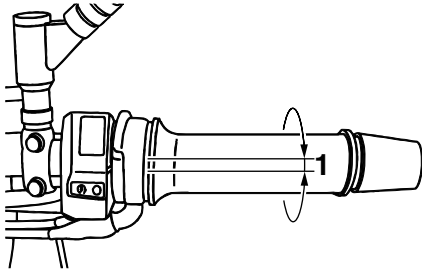
Engine idling speed: 1100–1200 r/min
--

NOTE: _____

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

EAU21381

Checking the throttle cable free play



1. Throttle cable free play

The throttle cable free play should measure 3.0–5.0 mm (0.12–0.20 in) at the throttle grip. Periodically check the throttle cable free play and, if necessary, have a Yamaha dealer adjust it.

EAU21401

Valve clearance

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

EAU33041

Tires

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

Tire air pressure

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

EWA10500

WARNING

- 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.

PERIODIC MAINTENANCE AND MINOR REPAIR

Tire air pressure (measured on cold tires):

0–90 kg (0–198 lb):

Front:

225 kPa (33 psi) (2.25 kgf/cm²)

Rear:

250 kPa (36 psi) (2.50 kgf/cm²)

TDM900 90–203 kg (198–448 lb)

TDM900A 90–200 kg (198–441 lb):

Front:

225 kPa (33 psi) (2.25 kgf/cm²)

Rear:

290 kPa (42 psi) (2.90 kgf/cm²)

High-speed riding:

Front:

225 kPa (33 psi) (2.25 kgf/cm²)

Rear:

250 kPa (36 psi) (2.50 kgf/cm²)

Maximum load*:

TDM900 203 kg (448 lb)

TDM900A 200 kg (441 lb)

* Total weight of rider, passenger, cargo and accessories

EWA11020

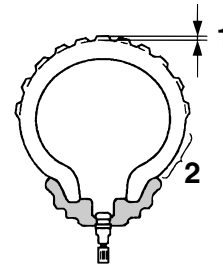
WARNING

Because loading has an enormous impact on the handling, braking, performance and safety characteristics of your motorcycle, you should keep the following precautions in

mind.

- **NEVER OVERLOAD THE MOTORCYCLE!** Operation of an overloaded motorcycle may result in tire damage, loss of control, or severe injury. Make sure that the total weight of rider, passenger, cargo, and accessories does not exceed the specified maximum load for the vehicle.
- **Do not carry along loosely packed items, which can shift during a ride.**
- **Securely pack the heaviest items close to the center of the motorcycle and distribute the weight evenly on both sides.**
- **Adjust the suspension and tire air pressure with regard to the load.**
- **Check the tire condition and air pressure before each ride.**

Tire inspection



1. Tire tread depth
2. Tire sidewall

The tires must be checked before each ride. If the center tread depth reaches the specified limit, if the tire has a nail or glass fragments in it, or if the sidewall is cracked, have a Yamaha dealer replace the tire immediately.

Minimum tire tread depth (front and rear):
1.6 mm (0.06 in)

NOTE:

The tire tread depth limits may differ from country to country. Always comply with the local regulations.

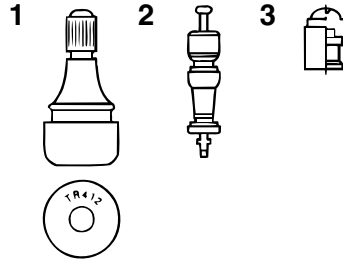
PERIODIC MAINTENANCE AND MINOR REPAIR

EWA10470

WARNING

- Have a Yamaha dealer replace excessively worn tires. Besides being illegal, operating the vehicle with excessively worn tires decreases riding stability and can lead to loss of control.
- 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.

Tire information



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

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

EWA10900

WARNING

- The front and rear tires should be of the same make and design, otherwise the handling characteristics of the motorcycle cannot be guaranteed.
- After extensive tests, only the tires listed below have been approved for this model by Yamaha Motor Co., Ltd.
- Always make sure that the valve

caps are securely installed to prevent air pressure leakage.

- Use only the tire valves and valve cores listed below to avoid tire deflation during a ride.

Front tire:

Size:

120/70 ZR18M/C (59W)

Manufacturer/model:

TDM900 METZELER/MEZ4

FRONT

TDM900A DUNLOP/D220FSTJ

Tire air valve:

TR412

Valve core:

#9100 (original)

Rear tire:

Size:

160/60 ZR17M/C (69W)

Manufacturer/model:

TDM900 METZELER/MEZ4

TDM900A DUNLOP/D220STJ

Tire air valve:

TR412

Valve core:

#9100 (original)

EWA10600

WARNING

This motorcycle is fitted with super-high-speed tires. Note the fol-

PERIODIC MAINTENANCE AND MINOR REPAIR

lowing points in order to make the most efficient use of these tires.

- Use only the specified replacement tires. Other tires may run the danger of bursting at super high speeds.
- Brand-new tires can have a relatively poor grip on certain road surfaces until they have been “broken in”. Therefore, it is advisable before doing any high-speed riding to ride conservatively for approximately 100 km (60 mi) after installing a new tire.
- The tires must be warmed up before a high-speed run.
- Always adjust the tire air pressure according to the operating conditions.

EAU21960

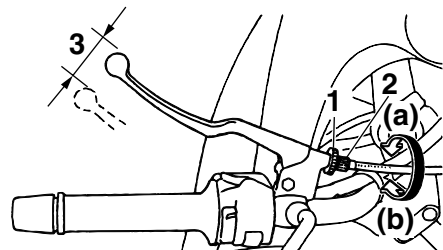
Cast wheels

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 or warpage 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.
- Ride at moderate speeds after changing a tire since the tire surface must first be “broken in” for it to develop its optimal characteristics.

EAU22041

Adjusting the clutch lever free play



1. Locknut (clutch lever)
2. Clutch lever free play adjusting bolt
3. Clutch lever free play

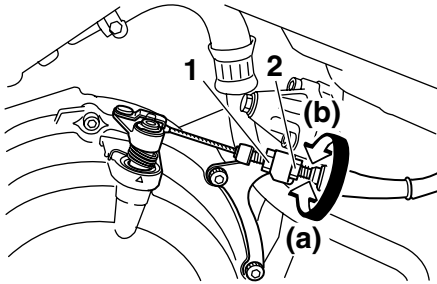
The clutch lever free play should measure 10.0–15.0 mm (0.39–0.59 in) as shown. Periodically check the clutch lever free play and, if necessary, adjust it as follows.

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

PERIODIC MAINTENANCE AND MINOR REPAIR

NOTE: _____
If the specified clutch lever free play could be obtained as described above, tighten the locknut and skip the rest of the procedure, otherwise proceed as follows.

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



1. Locknut (crankcase)
2. Clutch lever free play adjusting nut (crankcase)

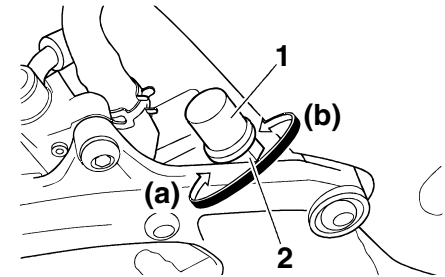
5. To increase the clutch lever free play, turn the adjusting nut in direction (a). To decrease the clutch lever

free play, turn the adjusting nut in direction (b).

6. Tighten the locknut at the clutch lever and the crankcase.

EAU22270

Adjusting the rear brake light switch



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

The rear brake light switch, which is activated by the brake pedal, is properly adjusted when the brake light comes on just before braking takes effect. If necessary, adjust the brake light switch as follows.

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

PERIODIC MAINTENANCE AND MINOR REPAIR

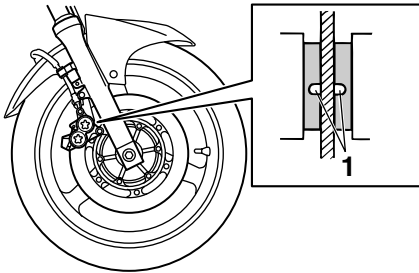
Checking the front and rear brake pads

EAU22390

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

EAU22420



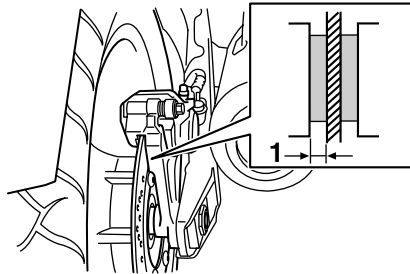
1. Brake pad wear indicator groove

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

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

Rear brake pads

EAU22500



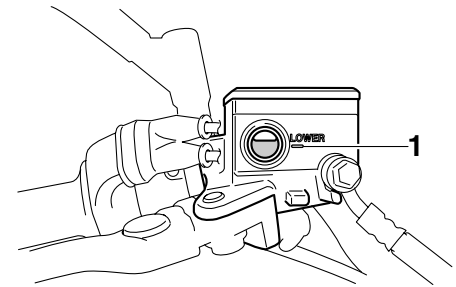
1. Lining thickness

Check each rear brake pad for damage and measure the lining thickness. If a brake pad is damaged or if the lining thickness is less than 0.8 mm (0.03 in), have a Yamaha dealer replace the brake pads as a set.

Checking the brake fluid level

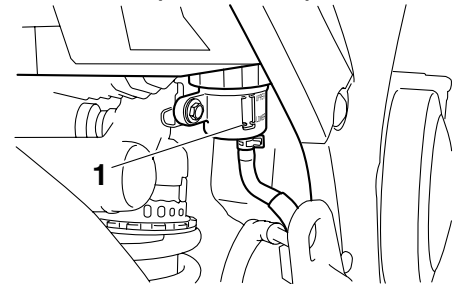
EAU38640

Front brake



1. Minimum level mark

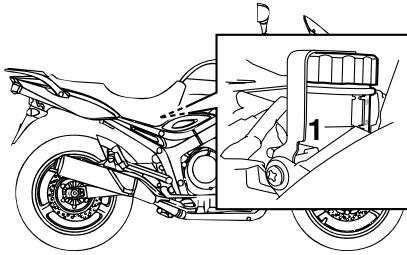
Rear brake (for TDM900)



1. Minimum level mark

PERIODIC MAINTENANCE AND MINOR REPAIR

Rear brake (for TDM900A)



1. Minimum level mark

Insufficient brake fluid may allow air to enter the brake system, possibly causing it to become ineffective.

Before riding, check that the brake fluid is above the minimum level mark and replenish if necessary. A low brake fluid level may indicate worn brake pads and/or brake system leakage. If the brake fluid level is low, be sure to check the brake pads for wear and the brake system for leakage.

NOTE: _____
For TDM900A, the rear brake fluid reservoir is located under the seat. (See page 3-14.)

Observe these precautions:

- When checking the fluid level, make sure that the top of the brake fluid reservoir is level.
- Use only the recommended quality brake fluid, otherwise the rubber seals may deteriorate, causing leakage and poor braking performance.

Recommended brake fluid:
DOT 4

- Refill with the same type of brake fluid. Mixing fluids may result in a harmful chemical reaction and lead to poor braking performance.
- 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.
- Brake fluid may deteriorate 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 grad-

ually go down. However, if the brake fluid level goes down suddenly, have a Yamaha dealer check the cause.

PERIODIC MAINTENANCE AND MINOR REPAIR

EAU22730

Changing the brake fluid

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

- Oil seals: Replace every two years.
- Brake hoses: Replace every four years.

EAU22760

Drive chain slack

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

EAU22771

To check the drive chain slack

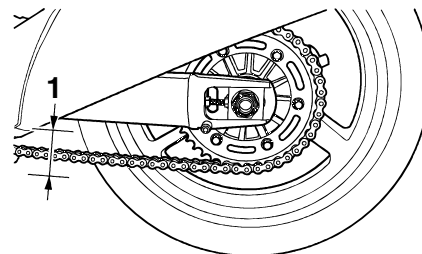
1. Place the motorcycle on the side-stand.

NOTE:

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. Move the rear wheel by pushing the motorcycle to locate the tightest portion of the drive chain, and then measure the drive chain slack as shown.

Drive chain slack:
50.0–60.0 mm (1.97–2.36 in)



1. Drive chain slack

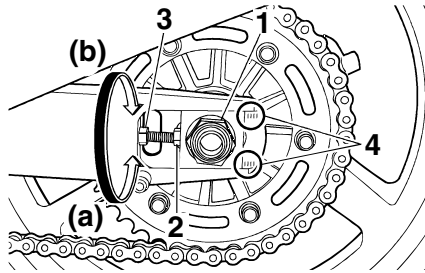
4. If the drive chain slack is incorrect, adjust it as follows.

EAU22951

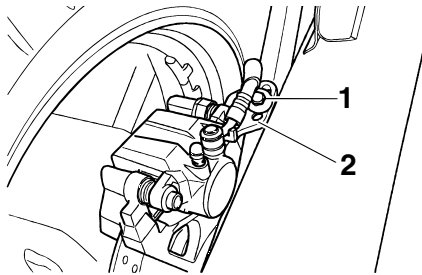
To adjust the drive chain slack

1. Loosen the axle nut, the brake caliper bracket bolt and the locknut on each side of the swingarm.

PERIODIC MAINTENANCE AND MINOR REPAIR



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



1. Brake caliper bracket bolt
2. Brake caliper bracket

2. To tighten the drive chain, turn the 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.

NOTE:

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

ECA10570

CAUTION:

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.

3. Tighten the locknuts, and then tighten the axle nut and the brake caliper bracket bolt to the specified torques.

Tightening torque:

Axle nut:

150 Nm (15.0 m·kgf, 108.5 ft·lbf)

Brake caliper bracket bolt:

40 Nm (4.0 m·kgf, 29 ft·lbf)

PERIODIC MAINTENANCE AND MINOR REPAIR

EAU23022

Cleaning and lubricating the drive chain

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

ECA10581

CAUTION:

The drive chain must be lubricated after washing the motorcycle and riding in the rain.

1. Clean the drive chain with kerosene and a small soft brush.

ECA11120

CAUTION:

To prevent damaging the O-rings, do not clean the drive chain with steam cleaners, high-pressure washers or inappropriate solvents.

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

ECA11110

CAUTION:

Do not use engine oil or any other lubricants for the drive chain, as they may contain substances that could damage the O-rings.

EAU23100

Checking and lubricating the cables

The operation of all control cables and the condition of the cables should be checked before each ride, and the cables and cable ends should be lubricated if necessary. If a cable is damaged or does not move smoothly, have a Yamaha dealer check or replace it.

Recommended lubricant:
Engine oil

EWA10720

WARNING

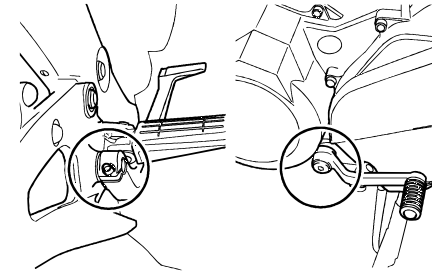
Damage to the outer sheath may interfere with proper cable operation and will cause the inner cable to rust. Replace a damaged cable as soon as possible to prevent unsafe conditions.

PERIODIC MAINTENANCE AND MINOR REPAIR

EAU23111

Checking and lubricating the throttle grip and cable

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



Checking and lubricating the brake and shift pedals

EAU23131

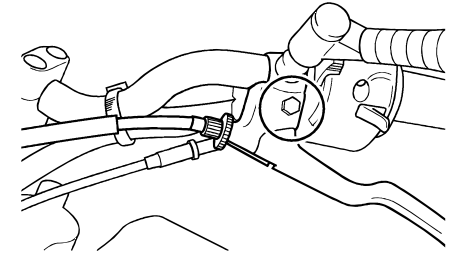
The operation of the brake and shift pedals should be checked before each ride, and the pedal pivots should be lubricated if necessary.

Recommended lubricant:

Lithium-soap-based grease (all-purpose grease)

Checking and lubricating the brake and clutch levers

EAU23140



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

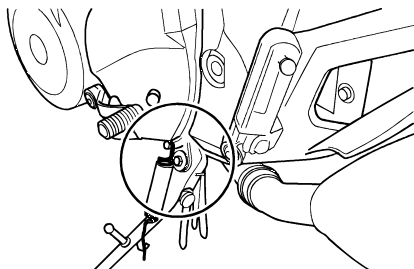
Recommended lubricant:

Lithium-soap-based grease (all-purpose grease)

PERIODIC MAINTENANCE AND MINOR REPAIR

EAU23200

Checking and lubricating the sidestand



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.

EWA10730

WARNING

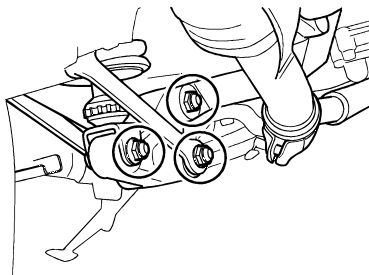
If the sidestand does not move up and down smoothly, have a Yamaha dealer check or repair it.

Recommended lubricant:

Lithium-soap-based grease (all-purpose grease)

EAU23250

Lubricating the rear suspension



The pivoting points of the rear suspension must be lubricated at the intervals specified in the periodic maintenance and lubrication chart.

Recommended lubricant:

Lithium-soap-based grease

EAU23271

Checking the front fork

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

To check the condition

EWA10750

WARNING

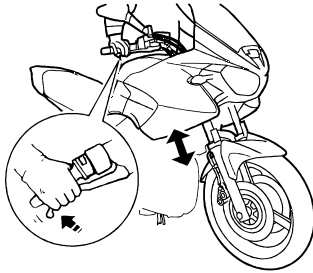
Securely support the vehicle so that there is no danger of it falling over.

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

PERIODIC MAINTENANCE AND MINOR REPAIR



ECA10590

CAUTION:

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

EAU23280

Checking the steering

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

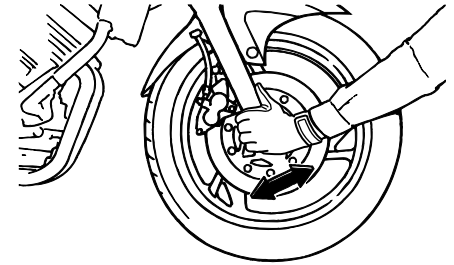
1. Place a stand under the engine to raise the front wheel off the ground.

EWA10750

WARNING

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

2. Hold the lower ends of the front fork legs and try to move them forward and backward. If any free play can be felt, have a Yamaha dealer check or repair the steering.



PERIODIC MAINTENANCE AND MINOR REPAIR

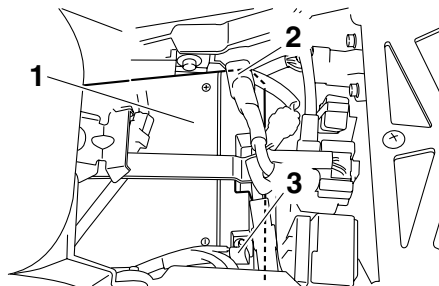
EAU23290

Checking the wheel bearings

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.

EAU23370

Battery



1. Battery
2. Positive battery lead (red)
3. Negative battery lead

This model is equipped with a sealed-type (MF) battery, which does not require any maintenance. There is no need to check the electrolyte or to add distilled water.

ECA10620

CAUTION:

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

EWA10760

WARNING

- Electrolyte is poisonous and

dangerous since it contains sulfuric acid, which causes severe burns. Avoid any contact with skin, eyes or clothing and always shield your eyes when working near batteries. In case of contact, administer the following FIRST AID.

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

PERIODIC MAINTENANCE AND MINOR REPAIR

EAU38591

To charge the battery

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

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

ECA10630

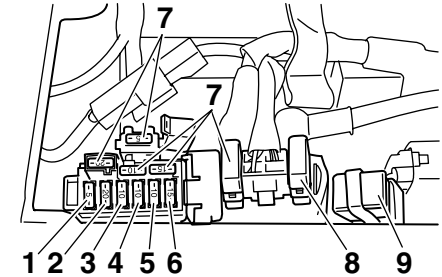
CAUTION:

- Always keep the battery charged. Storing a discharged battery can cause permanent battery damage.
- To charge a sealed-type (MF)

battery, a special (constant-voltage) battery charger is required. Using a conventional battery charger will damage the battery. If you do not have access to a sealed-type (MF) battery charger, have a Yamaha dealer charge your battery.

Replacing the fuses

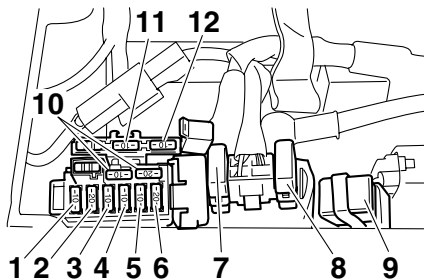
For TDM900



1. Backup fuse (for odometer and clock)
2. Radiator fan fuse
3. Turn signal light and hazard fuse
4. Ignition fuse
5. Signaling system fuse
6. Headlight fuse
7. Spare fuse
8. Fuel injection system fuse
9. Main fuse

PERIODIC MAINTENANCE AND MINOR REPAIR

For TDM900A



1. Backup fuse (for odometer and clock)
2. Radiator fan fuse
3. Turn signal light and hazard fuse
4. Ignition fuse
5. Signaling system fuse
6. Headlight fuse
7. ABS motor fuse (for ABS models)
8. ABS motor spare fuse (for ABS models)
9. Main fuse
10. Spare fuse
11. Fuel injection system fuse
12. ABS control unit fuse (for ABS models)

The main fuse and the fuse box, which contains the fuses for the individual circuits, are located under the seat. (See page 3-14.)

If a fuse is blown, replace it as follows.

1. Turn the key to “OFF” and turn off

- the electrical circuit in question.
2. Remove the blown fuse, and then install a new fuse of the specified amperage.

Specified fuses:

- Main fuse:
 - 40.0 A
- Headlight fuse:
 - TDM900 15.0 A
 - TDM900A 20.0 A
- Radiator fan fuse:
 - 20.0 A
- Ignition fuse:
 - 10.0 A
- Signaling system fuse:
 - 10.0 A
- Backup fuse:
 - TDM900 5.0 A
 - TDM900A 10.0 A
- Fuel injection system fuse:
 - 10.0 A
- Turn signal light and hazard fuse:
 - 10.0 A
- ABS motor fuse:
 - TDM900A 30.0 A
- ABS control unit fuse:
 - TDM900A 10.0 A

avoid causing extensive damage to the electrical system and possibly a fire.

3. Turn the key to “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.

CAUTION:

Do not use a fuse of a higher amperage rating than recommended to

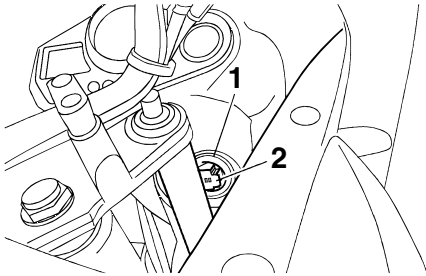
PERIODIC MAINTENANCE AND MINOR REPAIR

EAU23750

Replacing a headlight bulb

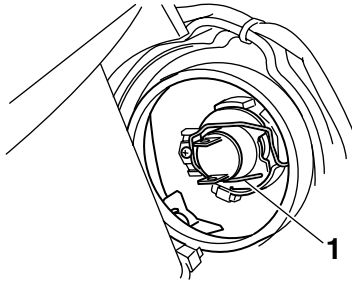
This model is equipped with two quartz bulb headlights. If a headlight bulb burns out, replace it as follows.

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



1. Headlight bulb holder
2. Headlight coupler

2. Unhook the headlight bulb holder, and then remove the defective bulb.



1. Headlight bulb holder

EWA10790

WARNING

Headlight bulbs get very hot. Therefore, keep flammable products away from a lit headlight bulb, and do not touch the bulb until it has cooled down.

3. Place a new bulb into position, and then secure it with the bulb holder.

ECA10650

CAUTION:

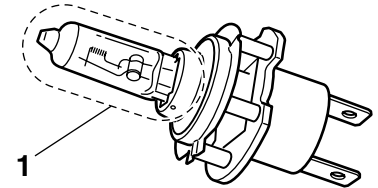
Take care not to damage the following parts:

- Headlight bulb

Do not touch the glass part of the headlight bulb to keep it free from oil, otherwise the transparency of

the glass, the luminosity of the bulb, and the bulb life will be adversely affected. Thoroughly clean off any dirt and fingerprints on the headlight bulb using a cloth moistened with alcohol or thinner.

- Headlight lens
 - Do not affix any type of tinted film or stickers to the headlight lens.
 - Do not use a headlight bulb of a wattage higher than specified.



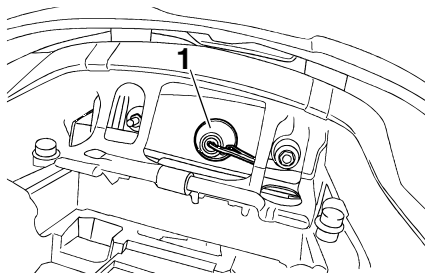
1. Do not touch the glass part of the bulb.
4. Install the bulb cover, and then connect the coupler.
5. Have a Yamaha dealer adjust the headlight beam if necessary.

PERIODIC MAINTENANCE AND MINOR REPAIR

EAU24080

Replacing the tail/brake light bulb

1. Remove the seat. (See page 3-14.)
2. Remove the socket (together with the bulb) by turning it counter-clockwise.



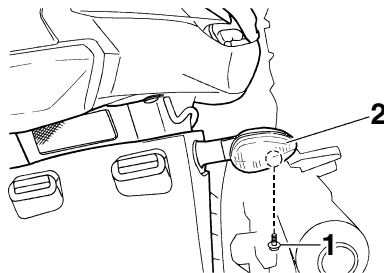
1. Socket

3. Remove the defective bulb by pushing it in and turning it counter-clockwise.
4. Insert a new bulb into the socket, push it in, and then turn it clockwise until it stops.
5. Install the socket (together with the bulb) by turning it clockwise.
6. Install the seat.

EAU24202

Replacing a turn signal light bulb

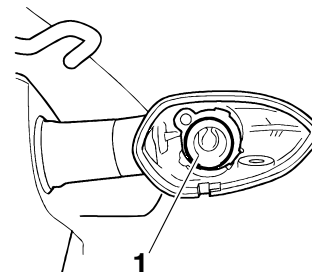
1. Remove the turn signal light lens by removing the screw.



1. Screw

2. Turn signal light lens

2. Remove the defective bulb by pushing it in and turning it counter-clockwise.



1. Turn signal light bulb

3. Insert a new bulb into the socket, push it in, and then turn it clockwise until it stops.
4. Install the lens by installing the screw.

ECA11190

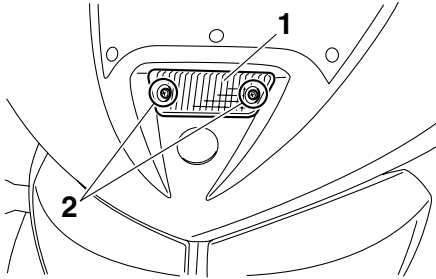
CAUTION:

Do not overtighten the screw, otherwise the lens may break.

EAU38900

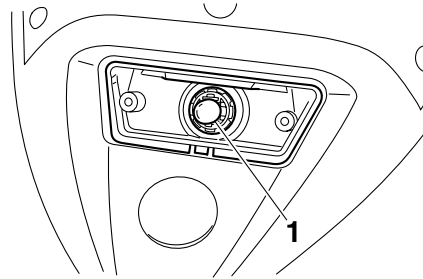
Replacing the auxiliary light bulb

1. Remove the auxiliary light lens by removing the screws.



1. Auxiliary light lens
2. Screw

2. Remove the defective bulb by pulling it out.



1. Auxiliary light bulb

3. Insert a new bulb into the socket.
4. Install the lens by installing the screws.

ECA10680

CAUTION:

Do not overtighten the screws, otherwise the lens may break.

EAU24350

Supporting the motorcycle

Since this model is not equipped with a centerstand, follow these precautions when removing the front and rear wheel or performing other maintenance requiring the motorcycle to stand upright. Check that the motorcycle is in a stable and level position before starting any maintenance. A strong wooden box can be placed under the engine for added stability.

To service the front wheel

1. Stabilize the rear of the motorcycle by using a motorcycle stand or, if an additional motorcycle stand is not available, by placing a jack under the frame in front of the rear wheel.
2. Raise the front wheel off the ground by using a motorcycle stand.

To service the rear wheel

Raise the rear wheel off the ground by using a motorcycle stand or, if a motorcycle stand is not available, by placing a jack either under each side of the

PERIODIC MAINTENANCE AND MINOR REPAIR

frame in front of the rear wheel or under each side of the swingarm.

EAU25870

Troubleshooting

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

The following troubleshooting 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.

Troubleshooting charts

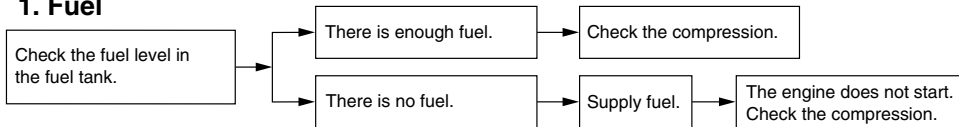
Starting problems or poor engine performance



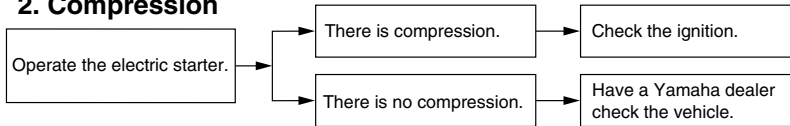
WARNING

Keep away open flames and do not smoke while checking or working on the fuel system.

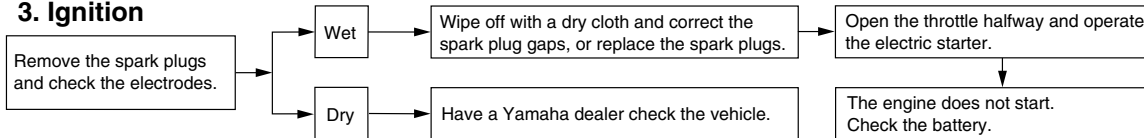
1. Fuel



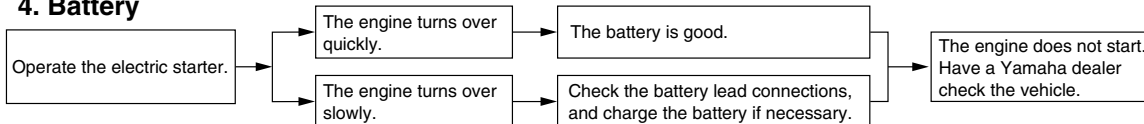
2. Compression



3. Ignition



4. Battery



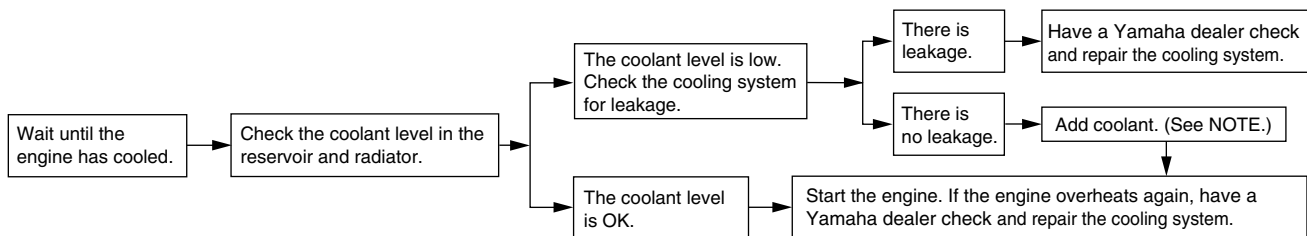
PERIODIC MAINTENANCE AND MINOR REPAIR

Engine overheating

EWA10400

⚠ 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.
- After removing the radiator cap retaining bolt, 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.



6

NOTE:

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.

MOTORCYCLE CARE AND STORAGE

EAU26040

Care

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

Before cleaning

1. Cover the muffler outlets with plastic bags after the engine has cooled down.
2. Make sure that all caps and covers as well as all electrical couplers and connectors, including the spark plug caps, are tightly installed.
3. Remove extremely stubborn dirt, like oil burnt onto the crankcase, with a degreasing agent and a brush, but never apply such prod-

ucts onto seals, gaskets, sprockets, the drive chain and wheel axles. Always rinse the dirt and degreaser off with water.

Cleaning

ECA10770

CAUTION:

- **Avoid using strong acidic wheel cleaners, especially on spoked wheels. If such products are used on hard-to-remove dirt, do not leave the cleaner on the affected area any longer than instructed. Also, thoroughly rinse the area off with water, immediately dry it, and then apply a corrosion protection spray.**
- **Improper cleaning can damage windshields, cowlings, panels and other plastic parts. Use only a soft, clean cloth or sponge with mild detergent and water to clean plastic.**
- **Do not use any harsh chemical products on plastic parts. Be sure to avoid using cloths or sponges which have been in contact with strong or abrasive**

cleaning products, solvent or thinner, fuel (gasoline), rust removers or inhibitors, brake fluid, antifreeze or electrolyte.

- **Do not use high-pressure washers or steam-jet cleaners since they cause water seepage and deterioration in the following areas: seals (of wheel and swing-arm bearings, fork and brakes), electric components (couplers, connectors, instruments, switches and lights), breather hoses and vents.**
- **For motorcycles equipped with a windshield: Do not use strong cleaners or hard sponges as they will cause dulling or scratching. Some cleaning compounds for plastic may leave scratches on the windshield. Test the product on a small hidden part of the windshield to make sure that it does not leave any marks. If the windshield is scratched, use a quality plastic polishing compound after washing.**

MOTORCYCLE CARE AND STORAGE

After normal use

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

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

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

NOTE:

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

1. Clean the motorcycle with cold water and a mild detergent, after the engine has cooled down.

ECA10790

CAUTION:

Do not use warm water since it increases the corrosive action of the

salt.

2. After drying the motorcycle, apply a corrosion protection spray on all metal, including chrome- and nickel-plated, surfaces to prevent corrosion.

After cleaning

1. Dry the motorcycle with a chamois or an absorbing cloth.
2. Immediately dry the drive chain and lubricate it to prevent it from rusting.
3. Use a chrome polish to shine chrome, aluminum and stainless-steel parts, including the exhaust system. (Even the thermally induced discoloring of stainless-steel exhaust systems can be removed through polishing.)
4. To prevent corrosion, it is recommended to apply a corrosion protection spray on all metal, including chrome- and nickel-plated, surfaces.
5. Use spray oil as a universal cleaner to remove any remaining dirt.
6. Touch up minor paint damage

caused by stones, etc.

7. Wax all painted surfaces.
8. Let the motorcycle dry completely before storing or covering it.

EWA10930

! WARNING

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

ECA10800

CAUTION:

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

away the paint.

NOTE:

Consult a Yamaha dealer for advice on what products to use.

EAU26201

Storage

Short-term

Always store your motorcycle in a cool, dry place and, if necessary, protect it against dust with a porous cover.

ECA10810

CAUTION:

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

Long-term

Before storing your motorcycle for several months:

1. Follow all the instructions in the “Care” section of this chapter.
2. Fill up the fuel tank and add fuel stabilizer (if available) to prevent the fuel tank from rusting and the

fuel from deteriorating.

3. Perform the following steps to protect the cylinders, piston rings, etc. from corrosion.
 - a. Remove the spark plug caps and spark plugs.
 - b. Pour a teaspoonful of engine oil into each spark plug bore.
 - c. Install the spark plug caps onto the spark plugs, and then place the spark plugs on the cylinder head so that the electrodes are grounded. (This will limit sparking during the next step.)
 - d. Turn the engine over several times with the starter. (This will coat the cylinder walls with oil.)
 - e. Remove the spark plug caps from the spark plugs, and then install the spark plugs and the spark plug caps.

EWA10950

 **WARNING**

To prevent damage or injury from sparking, make sure to ground the spark plug electrodes while turning the engine over.

4. Lubricate all control cables and the

MOTORCYCLE CARE AND STORAGE

pivoting points of all levers and pedals as well as of the sidestand/centerstand.

5. Check and, if necessary, correct the tire air pressure, and then lift the motorcycle so that both of its wheels are off the ground. Alternatively, turn the wheels a little every month in order to prevent the tires from becoming degraded in one spot.
6. Cover the muffler outlets with plastic bags to prevent moisture from entering them.
7. Remove the battery and fully charge it. Store it in a cool, dry place and charge it once a month. Do not store the battery in an excessively cold or warm place [less than 0 °C (30 °F) or more than 30 °C (90 °F)]. For more information on storing the battery, see page 6-28.

NOTE: _____
Make any necessary repairs before storing the motorcycle.

Dimensions:

- Overall length:
2180 mm (85.8 in)
- Overall width:
800 mm (31.5 in)
- Overall height:
1290 mm (50.8 in)
- Seat height:
825 mm (32.5 in)
- Wheelbase:
1485 mm (58.5 in)
- Ground clearance:
160 mm (6.30 in)
- Minimum turning radius:
2900 mm (114.2 in)

Weight:

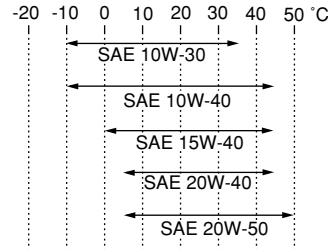
- With oil and fuel:
TDM900 221.0 kg (487 lb)
TDM900A 224.0 kg (494 lb)

Engine:

- Engine type:
Liquid cooled 4-stroke, DOHC
- Cylinder arrangement:
Forward-inclined parallel 2-cylinder
- Displacement:
897.0 cm³ (54.73 cu.in)
- Bore × stroke:
92.0 × 67.5 mm (3.62 × 2.66 in)
- Compression ratio:
10.40 :1
- Starting system:
Electric starter

EAU2633E

- Lubrication system:
Dry sump
- Engine oil:**
Type:
SAE10W30 or SAE10W40 or SAE15W40
or SAE20W40 or SAE20W50



- Recommended engine oil grade:
API service SE, SF, SG type or higher

Engine oil quantity:

- Without oil filter element replacement:
3.80 L (4.02 US qt) (3.34 Imp.qt)
- With oil filter element replacement:
3.90 L (4.12 US qt) (3.43 Imp.qt)

Cooling system:

- Coolant reservoir capacity (up to the maximum level mark):
0.25 L (0.26 US qt) (0.22 Imp.qt)
- Radiator capacity (including all routes):
1.75 L (1.85 US qt) (1.54 Imp.qt)

Air filter:

- Air filter element:
Oil-coated paper element

Fuel:

- Recommended fuel:
Regular unleaded gasoline only
- Fuel tank capacity:
20.0 L (5.28 US gal) (4.40 Imp.gal)
- Fuel reserve amount:
3.5 L (0.92 US gal) (0.77 Imp.gal)

Fuel injection:

- Manufacturer:
DENSO
- Model/quantity:
195500-3830/2

Spark plug (s):

- Manufacturer/model:
NGK/DPR8EA-9
- Manufacturer/model:
DENSO/X24EPR-U9
- Spark plug gap:
0.8–0.9 mm (0.031–0.035 in)

Clutch:

- Clutch type:
Wet, multiple-disc

Transmission:

- Primary reduction system:
Spur gear
- Primary reduction ratio:
67/39 (1.718)
- Secondary reduction system:
Chain drive
- Secondary reduction ratio:
42/16 (2.625)
- Transmission type:
Constant mesh 6-speed

SPECIFICATIONS

Operation:

Left foot operation

Gear ratio:

1st:

33/12 (2.750)

2nd:

37/19 (1.947)

3rd:

34/22 (1.545)

4th:

31/25 (1.240)

5th:

26/25 (1.040)

6th:

24/26 (0.923)

Chassis:

Frame type:

Diamond

Caster angle:

25.50 °

Trail:

114.0 mm (4.49 in)

Front tire:

Type:

Tubeless

Size:

120/70 ZR18M/C (59W)

Manufacturer/model:

TDM900 METZELER/MEZ4 FRONT

TDM900A DUNLOP/D220FSTJ

Manufacturer/model:

TDM900 DUNLOP/D220FSTJ

Rear tire:

Type:

Tubeless

Size:

160/60 ZR17M/C (69W)

Manufacturer/model:

TDM900 METZELER/MEZ4

TDM900A DUNLOP/D220STJ

Manufacturer/model:

TDM900 DUNLOP/D220STJ

Loading:

Maximum load:

TDM900 203 kg (448 lb)

TDM900A 200 kg (441 lb)

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

Tire air pressure (measured on cold tires):

Loading condition:

0–90 kg (0–198 lb)

Front:

225 kPa (33 psi) (2.25 kgf/cm²)

Rear:

250 kPa (36 psi) (2.50 kgf/cm²)

Loading condition:

TDM900 90–203 kg (198–448 lb)

TDM900A 90–200 kg (198–441 lb)

Front:

225 kPa (33 psi) (2.25 kgf/cm²)

Rear:

290 kPa (42 psi) (2.90 kgf/cm²)

High-speed riding:

Front:

225 kPa (33 psi) (2.25 kgf/cm²)

Rear:

250 kPa (36 psi) (2.50 kgf/cm²)

Front wheel:

Wheel type:

Cast wheel

Rim size:

18M/C x MT3.50

Rear wheel:

Wheel type:

Cast wheel

Rim size:

17M/C x MT5.00

Front brake:

Type:

Dual disc brake

Operation:

Right hand operation

Recommended fluid:

DOT 4

Rear brake:

Type:

Single disc brake

Operation:

Right foot operation

Recommended fluid:

DOT 4

Front suspension:

Type:

Telescopic fork

Spring/shock absorber type:

Coil spring/oil damper

Wheel travel:

150.0 mm (5.91 in)

Rear suspension:

Type:

Swingarm (link suspension)

Spring/shock absorber type:

Coil spring/gas-oil damper

Wheel travel:

133.0 mm (5.24 in)

Electrical system:

Ignition system:

Transistorized coil ignition (digital)

Charging system:

AC magneto

Battery:

Model:

GT12B-4

Voltage, capacity:

12 V, 10.0 Ah

Headlight:

Bulb type:

Halogen bulb

Bulb voltage, wattage × quantity:

Headlight:

12 V, 55.0 W × 2

Tail/brake light:

12 V, 5.0 W/21.0 W × 1

Front turn signal light:

12 V, 10.0 W × 2

Rear turn signal light:

12 V, 10.0 W × 2

Auxiliary light:

12 V, 5.0 W × 1

Meter lighting:

14 V, 2.0 W × 2

Neutral indicator light:

14 V, 1.2 W × 1

High beam indicator light:

14 V, 1.4 W × 1

Oil level warning light:

LED

Turn signal indicator light:

TDM900 14 V, 1.2 W × 2

TDM900A 14 V, 1.2 W × 1

Engine trouble warning light:

14 V, 1.4 W × 1

ABS warning light:

TDM900A 14 V, 1.4 W × 1

Immobilizer system indicator light:

LED

Fuses:

Main fuse:

40.0 A

Headlight fuse:

TDM900 15.0 A

TDM900A 20.0 A

Signaling system fuse:

10.0 A

Ignition fuse:

10.0 A

Radiator fan fuse:

20.0 A

Turn signal light and hazard fuse:

10.0 A

CONSUMER INFORMATION

EAU26351

Identification numbers

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

KEY IDENTIFICATION NUMBER:

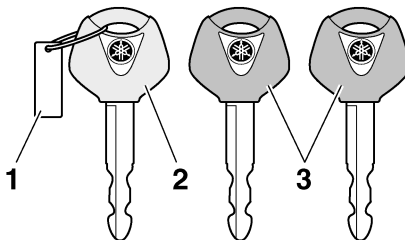
VEHICLE IDENTIFICATION NUMBER:

MODEL LABEL INFORMATION:

9

EAU26381

Key identification number

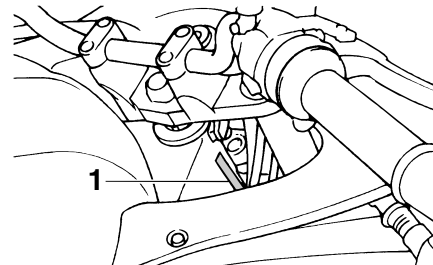


1. Key identification number
2. Code re-registering key (red bow)
3. Standard keys (black bow)

The key identification number is stamped into the key tag. Record this number in the space provided and use it for reference when ordering a new key.

EAU26400

Vehicle identification number



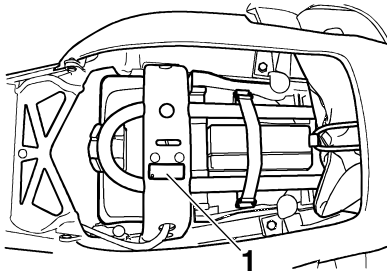
1. Vehicle identification number

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

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

EAU26540

Model label



1. Model label

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


INDEX

- A**
ABS (for ABS models) 3-12
ABS warning light (for ABS models) 3-5
Air filter element, replacing 6-12
Anti-theft alarm (optional)..... 3-8
Auxiliary light bulb, replacing 6-33
- B**
Battery..... 6-28
Brake and clutch levers, checking and lubricating 6-25
Brake and shift pedals, checking and lubricating 6-25
Brake fluid, changing 6-22
Brake fluid level, checking 6-20
Brake lever 3-11
Brake pedal..... 3-11
- C**
Cables, checking and lubricating 6-24
Care 7-1
Catalytic converter 3-14
Clutch lever 3-10
Clutch lever free play, adjusting 6-18
Coolant..... 6-10
Coolant temperature gauge 3-6
Cowlings and panels, removing and installing..... 6-5
- D**
Dimmer switch 3-9
Drive chain, cleaning and lubricating 6-24
Drive chain slack..... 6-22
- E**
Engine break-in..... 5-3
Engine idling speed..... 6-14
Engine oil and oil filter element..... 6-7
Engine stop switch.....3-9
Engine trouble warning light 3-4
- F**
Front and rear brake pads, checking6-20
Front fork, adjusting.....3-16
Front fork, checking6-26
Fuel.....3-13
Fuel consumption, tips for reducing.....5-3
Fuel level warning indicator3-4
Fuel tank breather hose.....3-14
Fuel tank cap3-12
Fuses, replacing6-29
- H**
Handlebar switches3-9
Hazard switch3-9
Headlight bulb, replacing6-31
High beam indicator light3-4
Horn switch.....3-9
- I**
Identification numbers.....9-1
Ignition circuit cut-off system3-20
Immobilizer system3-1
Immobilizer system indicator light.....3-5
Indicator and warning lights3-3
- K**
Key identification number9-1
- L**
Luggage strap holders.....3-19
- M**
Main switch/steering lock.....3-2
Model label9-2
Multi-function display3-7
- N**
Neutral indicator light.....3-4
- O**
Oil level warning light 3-4
- P**
Parking 5-4
Part locations..... 2-1
Pass switch 3-9
Periodic maintenance and lubrication chart 6-2
Pre-operation check list..... 4-2
- R**
Rear brake light switch, adjusting..... 6-19
Rear suspension, lubricating 6-26
- S**
Safety information 1-1
Seat 3-14
Shifting 5-2
Shift pedal 3-10
Shock absorber assembly, adjusting..... 3-17
Sidestand 3-19
Sidestand, checking and lubricating 6-26
Spark plugs, checking 6-6
Specifications 8-1
Starting the engine 5-1
Start switch 3-9
Steering, checking 6-27
Storage 7-3
Storage compartment 3-15
Supporting the motorcycle..... 6-33
- T**
Tachometer unit 3-6
Tail/brake light bulb, replacing..... 6-32
Throttle cable free play, checking..... 6-15
Throttle grip and cable, checking and lubricating..... 6-25

Tires.....	6-15
Tool kit.....	6-1
Troubleshooting.....	6-34
Troubleshooting charts.....	6-35
Turn signal indicator lights.....	3-4
Turn signal light bulb, replacing.....	6-32
Turn signal switch.....	3-9
V	
Valve clearance.....	6-15
Vehicle identification number.....	9-1
W	
Wheel bearings, checking.....	6-28
Wheels.....	6-18



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