

PERIODIC MAINTENANCE AND MINOR REPAIR

⚠ WARNING

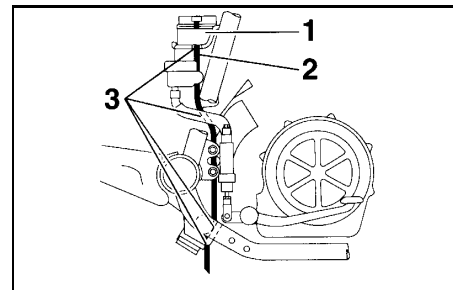
- Electrolyte is poisonous and dangerous since it contains sulfuric acid, which causes severe burns. Avoid any contact with skin, eyes or clothing and always shield your eyes when working near batteries. In case of contact, administer the following FIRST AID.
 - **EXTERNAL:** Flush with plenty of water.
 - **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.**

EC000100

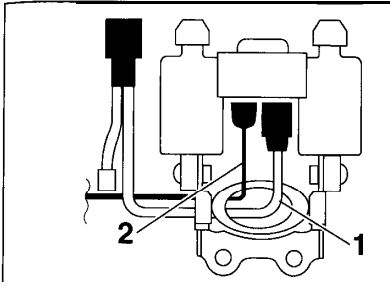
CAUTION:

Use only distilled water, as tap water contains minerals that are harmful to the battery.



1. Battery
2. Battery breather hose
3. Pass through the cable guide.
9. Check and, if necessary, correct the breather hose routing.
10. Install the ignition coil assemblies by installing the bolts.

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1. Battery positive lead (red)
2. Starter motor lead (black)

11. Connect and tighten the positive battery lead and the starter motor lead to the starter motor relay.

WARNING

Pass the positive battery lead and starter lead through the hole in the ignition coil bracket as shown. Improper routing of these leads could bring about a short circuit, causing the engine and lights to fail and possibly resulting in an accident.

12. Connect and tighten the negative battery lead to the battery.
13. Install the rider seat.

To store the battery

1. If the motorcycle will not be used for more than one month, remove the battery, fully charge it, and then place it in a cool, dry place.
2. If the battery will be stored for more than two months, check the specific gravity of the electrolyte at least once a month and fully charge the battery whenever necessary.
3. Fully charge the battery before installation.

4. After installation, make sure that the battery leads are properly connected to the battery terminals and that the breather hose is properly routed, in good condition, and not obstructed.

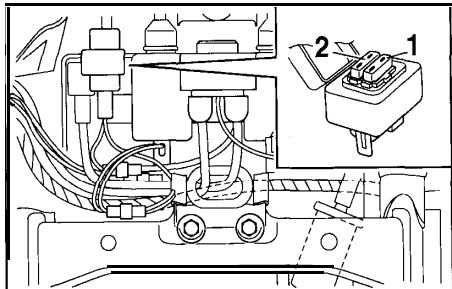
EC000099

CAUTION:

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

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EC000103



1. Main fuse
2. Spare main fuse

EAU01664

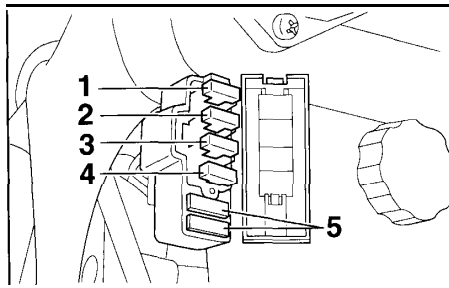
Replacing the fuses

The main fuse box is located under the rider seat. (See page 3-9 for rider seat removal and installation procedures.)

The fuse box, which contains the fuses for the individual circuits, is located under cowling A. (See page 6-8 for cowling removal and installation procedures.)

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.



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

Specified fuses:

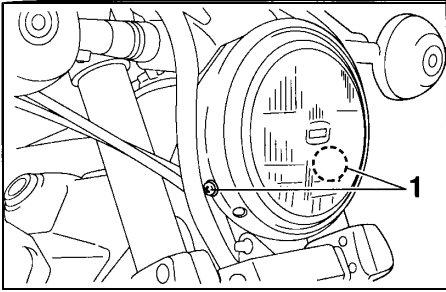
Main fuse:	30A
Headlight fuse:	15A
Signaling system fuse:	10A
Radiator fan fuse:	10A
Ignition fuse:	10A

CAUTION:

Do not use a fuse of a higher amperage rating than recommended to avoid causing extensive damage to the electrical system and possibly a fire.

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.

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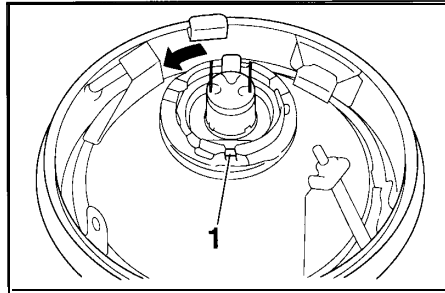
1. Screw (x 2)

EAU03003

Replacing the headlight bulb

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

1. Remove the headlight unit by removing the screws.
2. Disconnect the headlight coupler, and then remove the headlight unit and bulb cover.



1. Headlight bulb holder

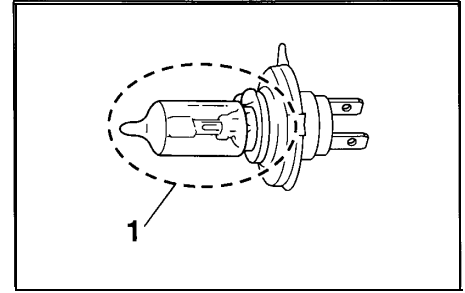
3. Remove the headlight bulb holder by turning it counterclockwise, and then remove the defective bulb.

EW000119

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.

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



1. Do not touch this area.

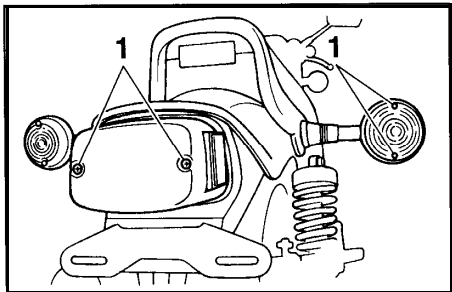
EC000105

CAUTION:

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.

5. Install the bulb cover, and then connect the coupler.
6. Install the headlight unit by installing the screws.
7. Have a Yamaha dealer adjust the headlight beam if necessary.

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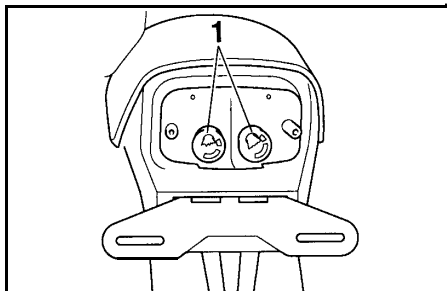


1. Screw (x 2)

EAU00855

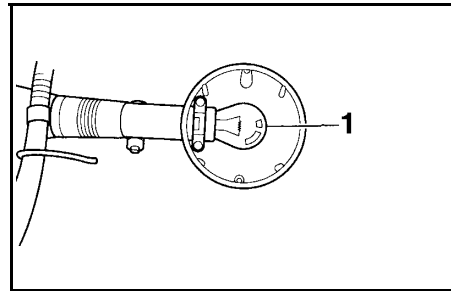
Replacing a turn signal light bulb or the tail/brake light bulb

1. Remove the lens by removing the screws.
2. Remove the defective bulb by pushing it in and turning it counter-clockwise.



1. Tail/brake light bulb (x 2)

3. Insert a new bulb into the socket, push it in, and then turn it clockwise until it stops.



1. Turn signal light bulb

4. Install the lens by installing the screws.

EC000108

CAUTION:

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

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Front wheel

EAU03419

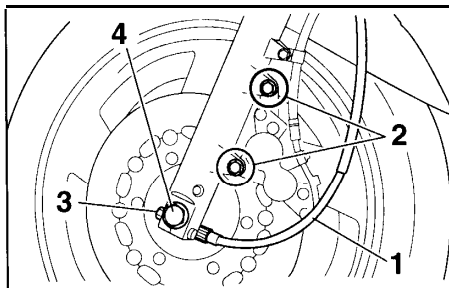
To remove the front wheel

22

WARNING

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

1. Place the motorcycle on the centerstand.



1. Speedometer cable
2. Bolt (x 2)
3. Pinch bolt
4. Wheel axle

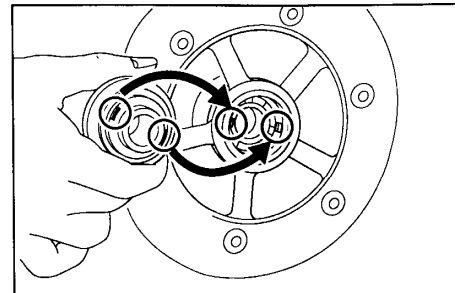
2. Disconnect the speedometer cable from the front wheel.
3. Remove the brake caliper by removing the bolts.

ECA00047

CAUTION

Do not pull the brake lever after the brake caliper has been removed, otherwise the brake pads will be forced shut.

4. Loosen the front wheel axle pinch bolt, then the wheel axle.
5. Pull the wheel axle out, and then remove the wheel.

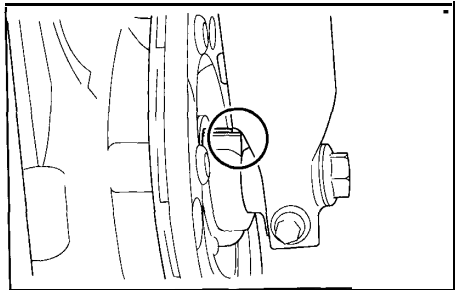


EAU03420

To install the front wheel

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

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2. Lift the wheel up between the fork legs.

NOTE: _____
Make sure that the slot in the speedometer gear unit fits over the retainer on the fork leg.

3. Insert the wheel axle.
4. Take the motorcycle off the centerstand so that the front wheel is on the ground.
5. Install the brake calipers by installing the bolts.

NOTE: _____
Make sure that there is enough space between the brake pads before installing the brake calipers onto the brake discs.

6. Tighten the front wheel axle pinch bolt, then the wheel axle, and the brake caliper bolts to the specified torques.

Tightening torques:

Wheel axle:

58 Nm (5.8 m.kg, 42 ft.lb)

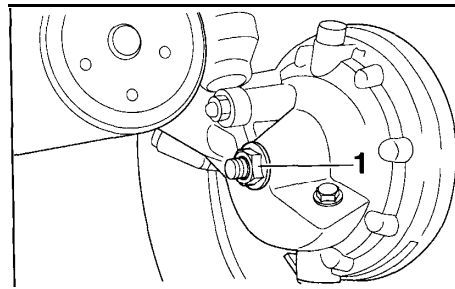
Front wheel axle pinch bolt:

20 Nm (2.0 m.kg, 14 ft.lb)

Brake caliper bolt:

40 Nm (4.0 m.kg, 29

7. Connect the speedometer cable.
8. Push down hard on the handlebar several times to check for proper fork operation.



1. Axle nut

EAU03421

Rear wheel

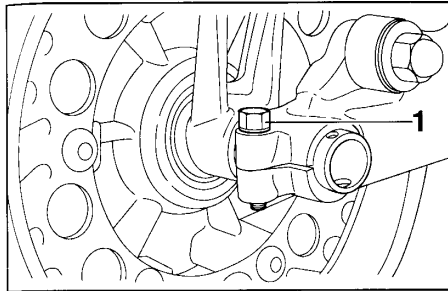
To remove the rear wheel

EW000122

WARNING

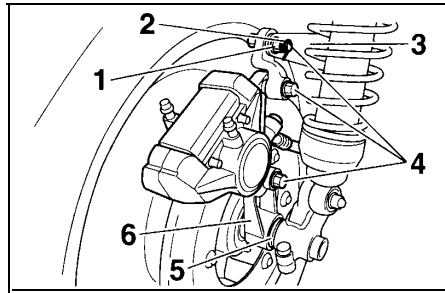
- It is advisable to have a Yamaha dealer service the wheel.
- **Securely support the motorcycle so that there is no danger of it falling over.**

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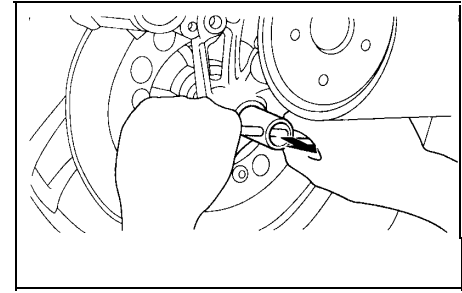
1. Pinch bolt

1. Loosen the rear wheel axle pinch bolt, then the axle nut.
2. Place the motorcycle on the centerstand.



1. Nut
2. Cotter pin
3. Brake torque rod
4. Bolt (x 3)
5. Spacer
6. Brake caliper bracket

3. Remove the brake caliper bolts and the axle nut.
4. Disconnect the brake torque rod from the brake caliper bracket by removing the cotter pin, the nut, and the bolt.



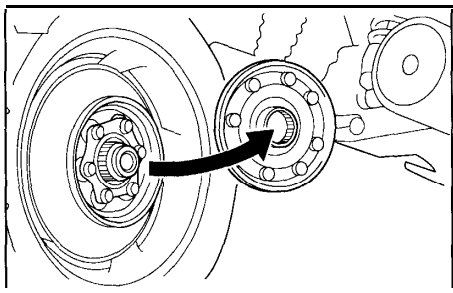
5. While supporting the brake caliper, pull the wheel axle out.
6. Remove the brake caliper bracket and spacer.
7. Pull the wheel to the right to separate it from the final gear case, and then remove it.

ECA00062

CAUTION:

Do not push the brake pedal after the wheel has been removed together with the brake disc, otherwise the brake pads will be forced shut.

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EAU03422

To install the rear wheel

1. Apply a light coating of lithium-soap-based grease to the splines of the final gear case and wheel hub.
2. Install the wheel, brake caliper bracket, spacer and wheel axle.
3. Install the brake caliper by installing the bolts.

NOTE: _____
Make sure that there is enough space between the brake pads before installing the brake caliper onto the brake disc

4. Install the brake torque rod bolt and nut at the brake caliper bracket.
5. Install the rear wheel axle nut.
6. Take the motorcycle off the centerstand so that the rear wheel is on the ground.
7. Tighten the axle nut, brake caliper bolts, brake torque rod nut, and pinch bolt to the specified torques.

Tightening torques:

Axle nut:

150 Nm (15.0 m-kg, 108 ft.lb)

Brake caliper bolt:

40 Nm (4.0 m-kg, 29 ft.lb)

Brake torque rod nut:

48 Nm (4.8 m-kg, 35 ft.lb)

Rear wheel axle pinch bolt:

16 Nm (1.6 m-kg, 11 ft.lb)

8. Install the brake torque rod cotter pin.

EW000124



WARNING

Always use a new cotter pin.

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.

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EAU03363

Troubleshooting charts

Starting problems or poor engine performance

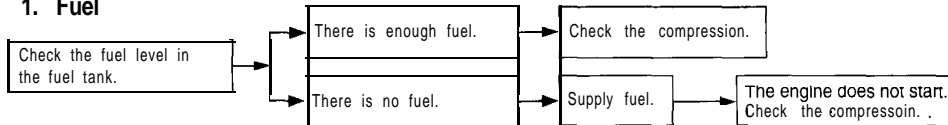
EW000125



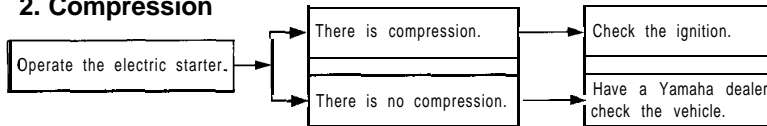
WARNING

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

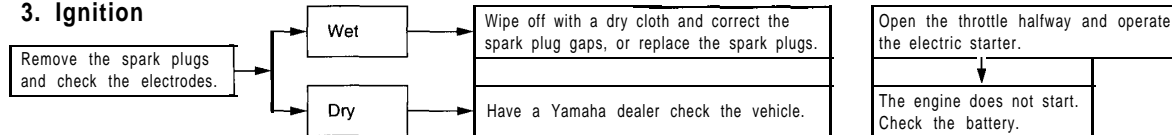
1. Fuel



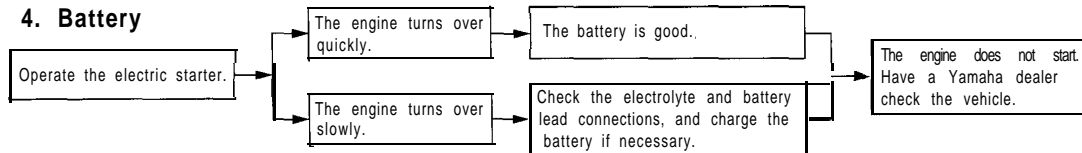
2. Compression



3. Ignition



4. Battery



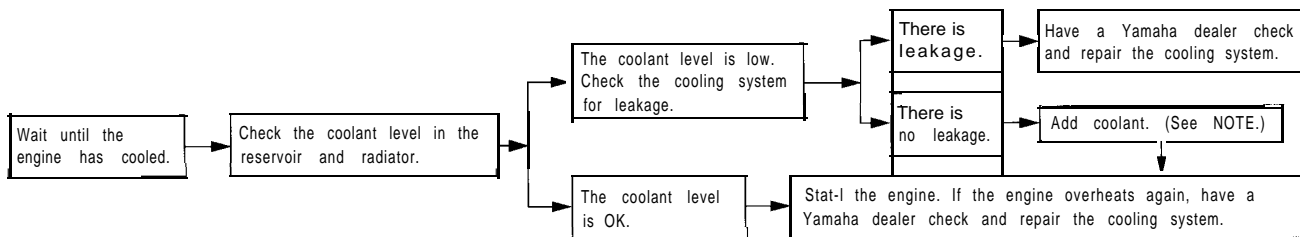
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Engine overheating

EW000070

WARNING

- Do not remove the radiator cap when the engine and radiator are hot. Scalding hot fluid and steam may be blown out under pressure, which could cause serious injury. 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.



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.