This manual should be considered a permanent part of the motorcycle and should remain with the motorcycle when resold or otherwise transferred to a new owner or operator. The manual contains important safety information and instructions which should be read carefully before operating the motorcycle.

IMPORTANT

BREAK-IN (RUNNING-IN) INFORMATION FOR YOUR MOTORCYCLE

The first 1600 km (1000 miles) are the most important in the life of your motorcycle. Proper break-in operation during this time will help ensure maximum life and performance from your new motorcycle. Suzuki parts are manufactured of high quality materials, and machined parts are finished to close tolerances. Proper break-in operation allows the machined surfaces to polish each other and mate smoothly.

Motorcycle reliability and performance depend on special care and restraint exercised during the break-in period. It is especially important that you avoid operating the engine in a manner which could expose the engine parts to excessive heat.

Please refer to the BREAK-IN (RUNNING-IN) section for specific break-in recommendations.

⚠ WARNING/⚠ CAUTION/ ***NOTICE***/*NOTE*

Please read this manual and follow its instructions carefully. To emphasize special information, the symbol ⚠ and the words **WARNING**, **CAUTION**, ***NOTICE*** and *NOTE* have special meanings. Pay particular attention to messages highlighted by these signal words:

⚠ WARNING

Indicates a potential hazard that could result in death or serious injury.

⚠ CAUTION

Indicates a potential hazard that could result in minor or moderate injury.

NOTICE

Indicates a potential hazard that could result in vehicle or equipment damage.

NOTE: Indicates special information to make maintenance easier or instructions clearer.

FOREWORD

Motorcycling is one of the most exhilarating sports and to ensure your riding enjoyment, you should become thoroughly familiar with the information presented in this Owner's Manual before riding the motorcycle.

The proper care and maintenance that your motorcycle requires is outlined in this manual. By following these instructions explicitly you will ensure a long trouble-free operating life for your motorcycle. Your authorized Suzuki dealer has experienced technicians that are trained to provide your machine with the best possible service with the right tools and equipment.

All information, illustrations, photographs and specifications contained in this manual are based on the latest product information available at the time of publication. Due to improvements or other changes, there may be some discrepancies between information in this manual and your motorcycle. Suzuki reserves the right to make changes at any time.

Please note that this manual applies to all specifications for all respective destinations and explains all equipment. Therefore, your model may have different standard features than shown in this manual.

SUZUKI MOTOR CORPORATION

TABLE OF CONTENTS

CONSUMER INFORMATION

ACCESSORY USE AND MOTORCYCLE LOADING

ACCESSORY USE

The addition of unsuitable accessories can lead to unsafe operating conditions. It is not possible for Suzuki to test each accessory on the market or combinations of all the available accessories; however, your dealer can assist you in selecting quality accessories and installing them correctly. Use extreme caution when selecting and installing the accessories on your motorcycle and consult your Suzuki dealer if you have any questions.

⚠ WARNING

Improper installation of accessories or modification of the motorcycle may cause changes in handling which could lead to an accident.

Never use improper accessories, and make sure that any accessories that are used are properly installed. All parts and accessories added to the motorcycle should be genuine Suzuki parts or their equivalent designed for use on this motorcycle. Install and use them according to their instructions. If you have any questions, contact your Suzuki dealer.

ACCESSORY INSTALLATION GUIDELINES

- Install aerodynamic-affecting accessories, such as a fairing, windshield, backrests, saddlebags, and travel trunks, as low as possible, as close to the motorcycle and as near the center of gravity as is feasible. Check that the mounting brackets and other attachment hardware are rigidly mounted.
- Inspect for proper ground clearance and bank angle. Inspect that the accessory does not interfere with the operation of the suspension, steering or other control operations.
- Accessories fitted to the handlebars or the front fork area can create serious stability problems. The extra weight will cause the motorcycle to be less responsive to your steering control. The weight may also cause oscillations in the front end and lead to instability problems. Accessories added to the handlebars or front fork of the machine should be as light as possible and kept to a minimum.
- Certain accessories displace the rider from his or her normal riding position. This limits the freedom of movement of the rider and may limit his or her control ability.
- Additional electrical accessories may overload the existing electrical system. Severe overloads may damage the wiring harness or create a dangerous situation due to the loss of electrical power during the operation of the motorcycle.
- Do not pull a trailer or sidecar. This motorcycle is not designed to pull a trailer or sidecar.

LOADING LIMIT

⚠ WARNING

Overloading or improper loading can cause loss of motorcycle control and an accident.

Follow loading limits and loading guidelines in this manual.

Never exceed the G.V.W. (Gross Vehicle Weight) of this motorcycle. The G.V.W. is the combined weight of the machine, accessories, payload, rider and passenger. When selecting your accessories, keep in mind the weight of the rider as well as the weight of the accessories. The additional weight of the accessories may not only create an unsafe riding condition but may also affect the riding stability.

G.V.W.: 335 kg (740 lbs)
at the tire pressure (cold)
Front: 125 kPa (1.25 kgf/cm^2, 18 psi)
Rear: 175 kPa (1.75 kgf/cm^2, 25 psi)

LOADING GUIDELINES

This motorcycle is primarily intended to carry small items when you are not riding with a passenger. Follow the loading guidelines below:

- Balance the load between the left and right side of the motorcycle and fasten it securely.
- Keep cargo weight low and as close to the center of the motorcycle as possible.
- Do not attach large or heavy items to the handlebars, front forks or rear fender.
- Do not install a luggage carrier or a luggage box protruding over the tail end of the motorcycle.
- Do not carry any items that protrude over the tail end of the motorcycle.
- Check that both tires are properly inflated to the specified tire pressure for your loading conditions. Refer to page 6-30.
- Improperly loading your motorcycle can reduce your ability to balance and steer the motorcycle. You should ride at reduced speeds, less than 130 km/h (80 mph), when you are carrying cargo or have added accessories.
- Adjust suspension setting as necessary.

MODIFICATION

Modification of the motorcycle, or removal of original equipment may render the vehicle unsafe or illegal.

SAFE RIDING RECOMMENDATION FOR MOTORCYCLE RIDERS

Motorcycle riding is great fun and an exciting sport. Motorcycle riding also requires that some extra precautions be taken to ensure the safety of the rider and passenger. These precautions are:

WEAR A HELMET

Motorcycle safety equipment starts with a quality helmet. One of the most serious injuries that can happen is a head injury. ALWAYS wear a properly approved helmet. You should also wear suitable eye protection.

RIDING APPAREL

Loose, fancy clothing can be uncomfortable and unsafe when riding your motorcycle. Choose good quality motorcycle riding apparel when riding your motorcycle. Wear gloves, strong boots that fit over the ankle, long pants, and long sleeve shirt or jacket.

INSPECTION BEFORE RIDING

Review thoroughly the instructions in the “INSPECTION BEFORE RIDING” section of this manual. Do not forget to perform an entire safety inspection to ensure the safety of the rider and its passenger.

FAMILIARIZE YOURSELF WITH THE MOTORCYCLE

Your riding skill and your mechanical knowledge form the foundation for safe riding practices. We suggest that you practice riding your motorcycle in a non-traffic situation until you are thoroughly familiar with your machine and its controls. Remember practice makes perfect.

KNOW YOUR LIMITS

Ride within the boundaries of your own skill at all times. Knowing these limits and staying within them will help you to avoid accidents.

BE EXTRA SAFETY CONSCIOUS ON BAD WEATHER DAYS

Riding on bad weather days, especially wet ones, requires extra caution. Braking distances double on a rainy day. Stay off of the painted surface marks, manhole covers and greasy appearing areas as they can be especially slippery. Use extreme caution at railway crossings and on metal gratings and bridges. Whenever in doubt about road condition, slow down!

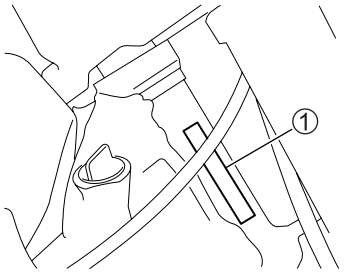
RIDE DEFENSIVELY

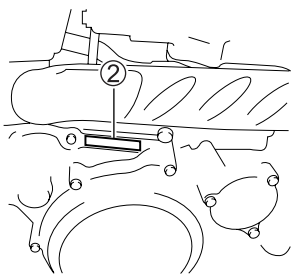
The most common type of motorcycle accident occurs when a car traveling towards a motorcycle turns round corner in front of the motorcyclist. Ride defensively. Wise motorcyclist uses a strategy of assuming they are invisible to other drivers, even in broad daylight. Wear bright, reflecting clothing. Turn on the headlight and taillight every time even on a bright, sunny day to attract driver's attention. Do not ride in another driver's blind spot.

LABELS

Read and follow all the labels on the motorcycle. Make sure you understand all of the labels. Do not remove any labels from the motorcycle.

SERIAL NUMBER LOCATION





The frame and/or engine serial numbers are used to register the motorcycle. They are also used to assist your dealer when ordering parts or referring to special service information. The frame number ① is stamped on the steering head tube. The engine serial number ② is stamped on the crankcase assembly.

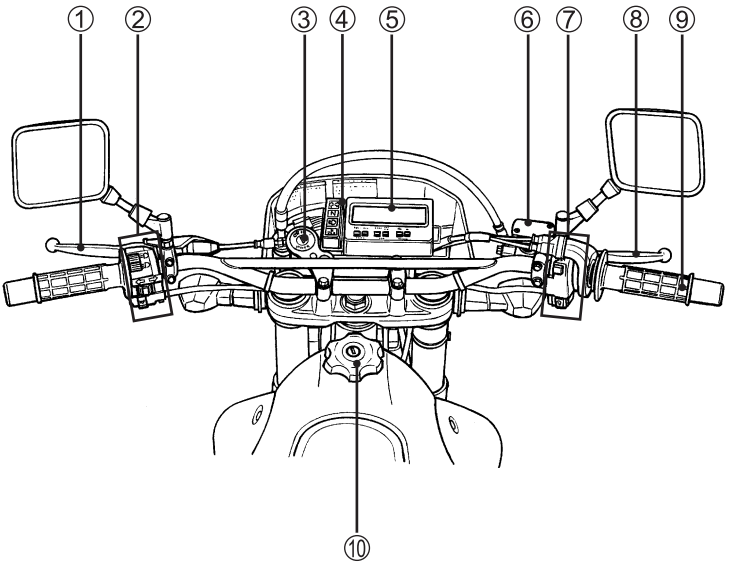
Please write down the numbers in the boxes provided below for your future reference.

Frame number:

Engine number:

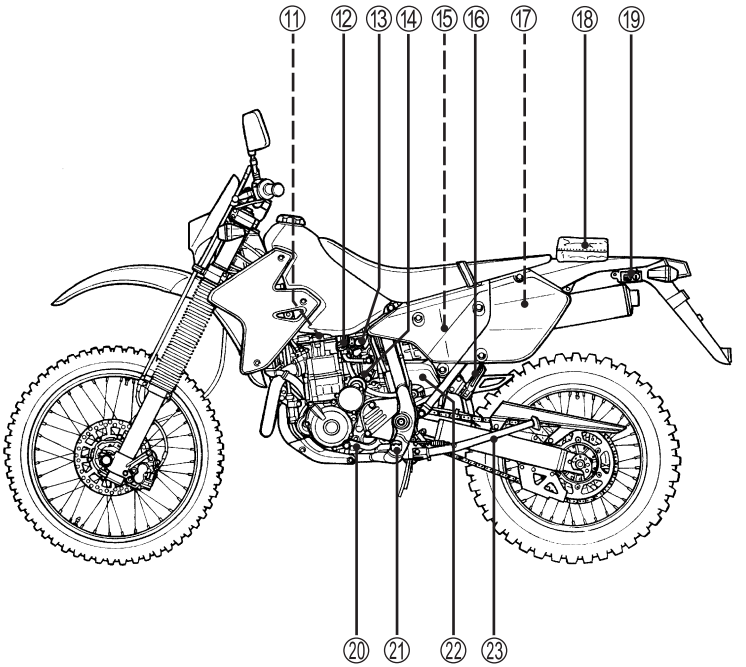
CONTROLS

LOCATION OF PARTS



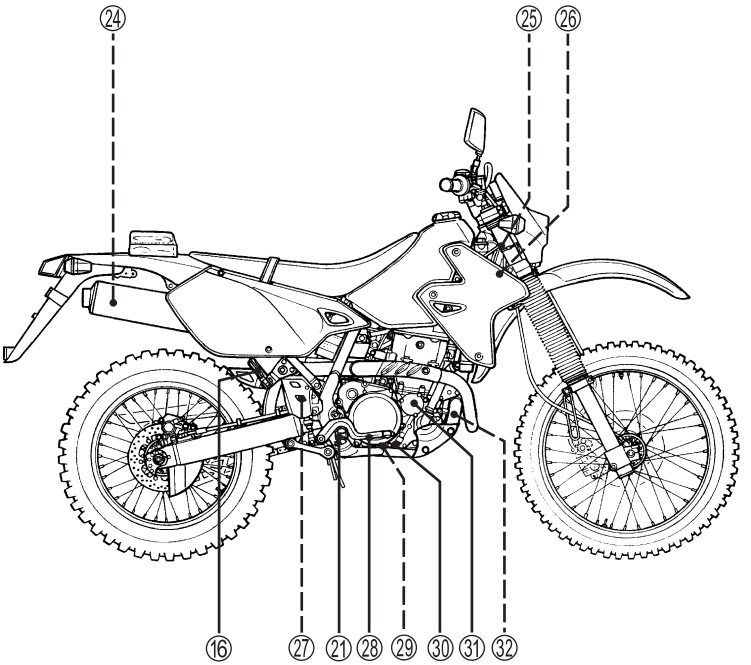
DR-Z400S

① Clutch lever
② Left handlebar switches
③ Ignition switch
④ Indicator light
⑤ Instrument panel
⑥ Front brake fluid reservoir
⑦ Right handlebar switches
⑧ Front brake lever
⑨ Throttle grip
⑩ Fuel tank cap



DR-Z400S

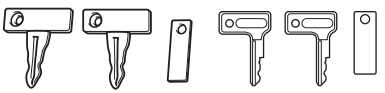
⑪ Spark plug
⑫ Fuel valve
⑬ Choke knob
⑭ Throttle stop screw
⑮ Air cleaner
⑯ Passenger footrests
⑰ Battery and fuse
⑱ Tools
⑲ Helmet holder
⑳ Gearshift lever
㉑ Footrests
㉒ Engine coolant reservoir
㉓ Side stand



DR-Z400S

㉔ Spark arrester
㉕ Steering lock
㉖ Radiator cap
㉗ Rear brake fluid reservoir
㉘ Rear brake pedal
㉙ Crankcase drain plug
㉚ Oil loss check bolt
㉛ Engine oil filter
㉜ Frame tube drain plug

KEY



This motorcycle comes equipped with two pairs of keys, one for the ignition switch and the other for the steering lock. Keep the spare key in a safe place.

IGNITION SWITCH

"OFF" POSITION
All electrical circuits are cut off. The engine will not start. The key can be removed.

"ON" POSITION
The ignition circuit is completed and the engine can now be started. The headlight and taillight will automatically be turned on when the key is in this position. The key cannot be removed from the ignition switch in this position.

NOTE: Start the engine promptly after turning the key to the "ON" position, or the battery will lose power due to consumption by the headlight and taillight.

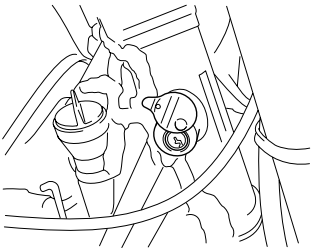
"P" (Parking) POSITION
When parking the motorcycle, turn the key to the "P" position. The key can now be removed and the taillight will remain lit. This position is for night time roadside parking to increase visibility.

⚠ WARNING

If the motorcycle falls down due to a slip or collision, unexpected damage to the motorcycle could cause the engine to keep running, which could result in a fire, or could result in injury from moving parts such as the rear wheel.

If the motorcycle falls down, turn the ignition switch off immediately. Ask your authorized Suzuki dealer to inspect the motorcycle for unseen damage.

STEERING LOCK



To lock the steering, turn the handlebars all the way to the left, insert the key into the lock, turn it counterclockwise and push it further in. Turn the key clockwise while being pushed and pull out the key.

⚠ WARNING

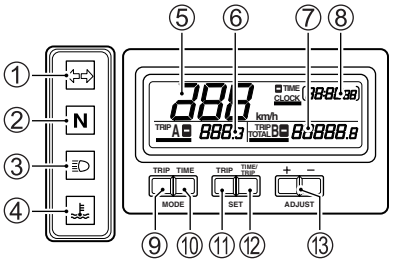
Moving the motorcycle while the steering is locked can be hazardous. You could lose your balance and fall, or you could drop the motorcycle.

Never attempt to move the motorcycle when the steering is locked.

NOTE:

- *Move the handlebar to the right and left, to make sure that the steering has been locked securely.*
- *When it cannot be locked easily, turn the key to the "LOCK" position, moving the handlebar slightly to the right.*

INSTRUMENT PANEL



TURN SIGNAL INDICATOR LIGHT "⇦⇨" ①

When the turn signals are being operated either to the right or to the left, the indicator light will blink intermittently.

NOTE: If a turn signal light is not operating properly due to bulb filament or circuit failure, the indicator light blinks more quickly to notify the rider of the existence of a problem.

NEUTRAL INDICATOR LIGHT "N" ②

The green light will come on when the transmission is in neutral. The light will go out when you shift into any gear other than neutral.

HIGH BEAM INDICATOR LIGHT "≡D" ③

This blue indicator light will be lit when the headlight high beam is turned on.

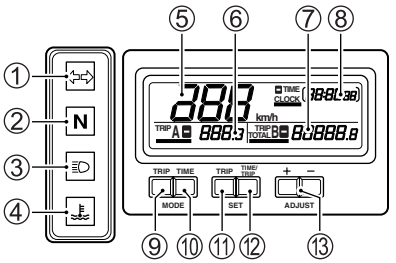
COOLANT TEMPERATURE INDICATOR LIGHT "🌡" ④

If this light comes on while riding it means that the coolant temperature is too high. When the coolant temperature indicator light comes on, stop the engine and check the coolant level after engine cools.

NOTICE

Riding the motorcycle with the coolant temperature indicator lit can cause serious engine damage due to overheating.

If the engine coolant temperature indicator light comes on, stop the engine to let it cool. Do not run the engine until the coolant temperature indicator light goes off.

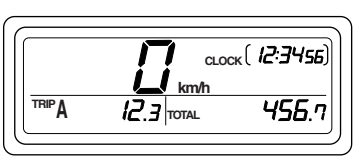


DISPLAY

The meter has six functions and displays the following data.

- Speedometer
- Odometer
- Trip meters (A and B)
- Clock
- Stop watch
- Timer

As soon as the ignition switch is turned on, the display indicates the test pattern shown above for a second. And then the display indicates memorized data.



NOTE: After removing and replacing the battery or fuse:

- *The clock must be readjusted because it resets to "1:00 00".*
- *It is not necessary to readjust the trip meter A, trip meter B, addition/subtraction mode of trip meters and compensation coefficient of trip meters because they are memorized.*

⚠ WARNING

Changing the display while riding can be hazardous. Removing a hand from the handlebars can reduce your ability to control the motorcycle.

Never change the display while riding. Keep both hands on the handlebars.

SPEEDOMETER ⑤

The speedometer indicates the road speed in kilometers per hour.

ODOMETER/TRIP METERS ⑥ ⑦

The odometer registers the total distance that the motorcycle has been ridden. The odometer ranges from 0 to 99999.9.

NOTE: The odometer display locks at 99999.9 when the total distance exceeds 99999.9.

The two trip meters A and B are resettable odometers. They can register two-different distances at the same time. Both trip meters have three functions as below.

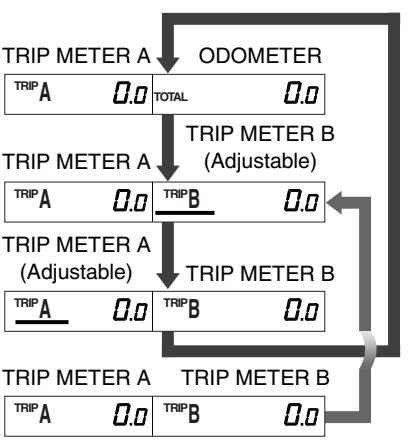
- The trip meters have two modes. "Addition mode" and "Subtraction mode".
- The registered kilometers can be changed.
- The trip meter kilometers can be adjusted to actual figures by its compensation function.

NOTE: When the trip meter exceeds 999.9, the trip meter will return to 0.0 and start counting again.

NOTE: The trip meter will be reset to zero when the battery is removed or battery is discharged.

Display Selection

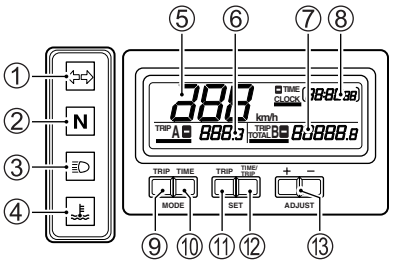
To change the display, push the **"MODE-TRIP" button** ⑨. The display-mode-changes in the order below.



The underline (–) indicates that the respective trip meter. Kilometers are adjustable in that mode.

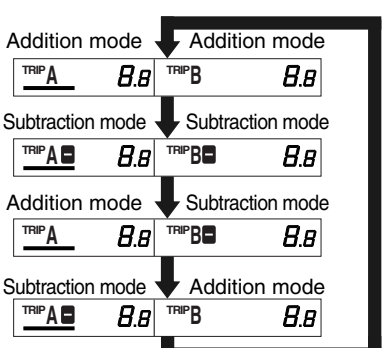
Resetting

To reset the trip meter to zero, push the **"SET-TRIP" button** ⑪ while the underline is indicated under the trip meter A or B.



Addition/Subtraction Mode Selection

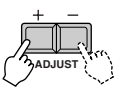
To change the addition/subtraction mode, push the **"SET-TIME/TRIP" button** ⑫ while the underline is indicated on the trip meter A or B. The display mode changes in the order below.



The symbol "−" beside A or B shows the trip meter is in the subtraction mode.

NOTE: The indication range of the trip meter is from – 999.9 km to 999.9 km. If the kilometer is beyond the range, the trip meter returns to 0.0. However, internal memory records the total distance.

Adjustment



To adjust the trip meter, push the **"ADJUST- +" button** or **"ADJUST- –" button** ⑬ while the underline is indicated on the trip meter A or B.

If the "ADJUST" button is pushed once, the trip meter is added or subtracted by the 0.1 km unit. If the "ADJUST" button is pushed continuously, the trip meter is added or subtracted quickly and continuously until the button is released.

Compensation
Usually, it is not necessary to change this setting. But, for off road use, the compensating function is provided to the trip meters.

The input kilometer from front wheel can be multiplied by compensation percentage and display actual distance.

Compensation range: 70 – 130%

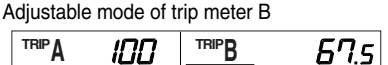
To change the compensation percentage, follow the procedure below:

1. Push the **"SET-TIME/TRIP" button** ⑫ for two seconds while the underline is indicated under the trip meter A or B. The display changes to setting mode for compensation percentage as below.

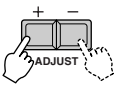
Adjustable mode of trip meter A

Compensation percentage of trip meter A

Adjustable mode of trip meter B



Compensation percentage of trip meter B



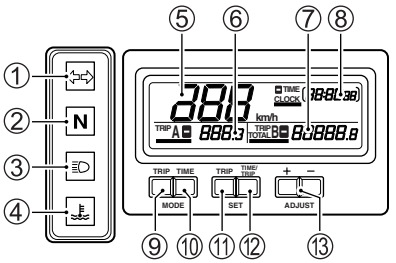
2. Set the compensation percentage by pushing the **"ADJUST- +" button** or **"ADJUST- –" button** ⑬.

If the "ADJUST" button is pushed once, the compensation percentage is added or subtracted by 1%. If the "ADJUST" button is pushed continuously, the compensation percentage is added or subtracted quickly and continuously until the button is released.

3. Push the **"SET-TIME/TRIP" button** ⑫. The display returns to normal (trip meter A and trip meter B) and shows the multiplied value.

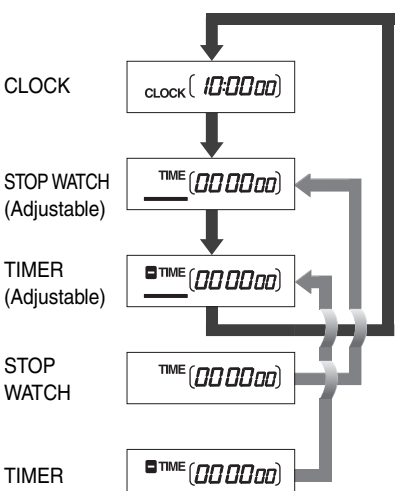
Adjusted kilometer= Input kilometer × Compensation percentage

(Example)
Input kilometer: 100 km
Compensation %: 90 %
Adjusted kilometer:
100 × 90 % = 90 km



CLOCK/STOP WATCH/TIMER ⑧
Display Selection

To change the display, push the **"MODE-TIME" button** ⑩. The display changes in the order below.



The underline "–" under the "TIME" or "– TIME" shows that its figure is adjustable.

Clock
The clock is 24 hour type.

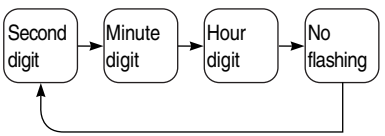
To adjust the clock, follow the procedure below:

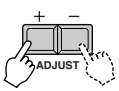
1. Push the **"MODE-TIME" button** ⑩ for two seconds while the display indicates the clock. The underline "–" is indicated under the "CLOCK" for adjustable mode.

NOTE: The clock stops while in adjustable mode.

2. Push the **"SET-TIME/TRIP" button** ⑫. The display of second digit is flashing and second digit is adjustable.

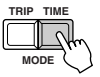
After that, adjustable digit can be changed by pushing the **"SET-TIME/ TRIP" button** ⑫ in the order below.





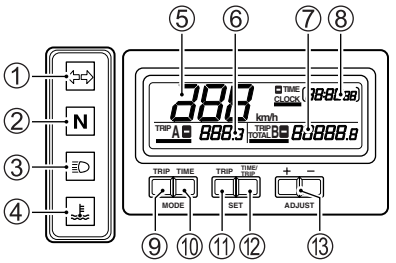
3. Set the time of adjustable digit by pushing the **"ADJUST- +" button or "ADJUST- –" button** ⑬.

If the "ADJUST" button is pushed once, the time of adjustable digit is added or subtracted by the second/ minute/hour. If the "ADJUST" button is pushed continuously, the time of adjustable digit is added or subtracted quickly and continuously until the button is released.



4. After adjustment, push the **"MODE-TIME" button** ⑩. The underline "**–**" disappears and the set time is registered.

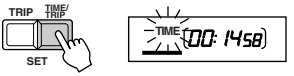
NOTE: This clock is powered by the battery of the motorcycle. If your motorcycle is to be left unused more than two months, remove the battery from the motorcycle.



Stop Watch (TIME)

The stop watch can count the time until 23 hours 59 minutes 59 seconds. If the time exceeds 24 hours, the stop watch returns to zero.

When the total time is less than one hour, the display shows the digit of minute, second and 0.01 second without colon. When the time is more than or equal to one hour, the display shows the digit of hour, minute and second with colon.



To start/stop the stop watch, push the **"SET-TIME/TRIP" button** ⑫ while the underline "**–**" indicates the stop watch. The display of "TIME" is flashing while the stop watch is counting time.

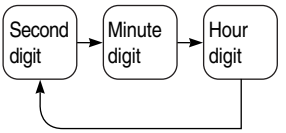
If the display is changed to other function while the stop watch is counting time, the stop watch counts continuously. Even if the ignition switch is turned off while the stop watch is counting time, the stop watch counts continuously for 24 hours. However, 1/100 seconds unit may not be accurate.

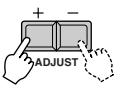
To reset the stop watch, push the **"SET-TIME/TRIP" button** ⑫ for two seconds while the underline "**–**" is indicated under the "TIME".

The starting time is adjustable. To adjust the starting time, follow the procedure below:

1. Push the **"SET-TRIP" button** ⑪ while the underline "**–**" is indicated under the stop watch. The display of second digit is flashing and second digit is adjustable.

Adjustable digit can be changed by pushing the **"SET-TIME/TRIP" button** ⑫ in the order below.

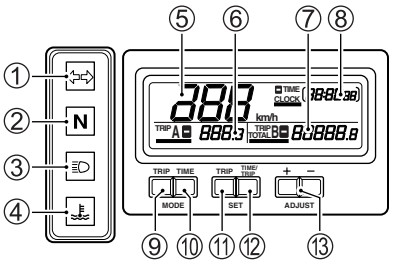




2. Set the time of adjustable digit by pushing the **"ADJUST- +" button or "ADJUST- –" button** ⑬.

If the "ADJUST" button is pushed once, the time of adjustable digit is added or subtracted by the second/ minute/hour. If the "ADJUST" button is pushed continuously, the time of adjustable digit is added or subtracted quickly and continuously until the button is released.

3. After adjustment is done, push the **"SET-TRIP" button** ⑪.



Timer (⊟ TIME)

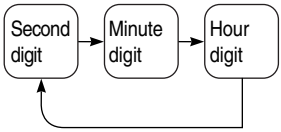
The timer can count time within 23 hours 59 minutes 59 seconds. If the time reaches zero, the timer stops counting and the display indicates zero.

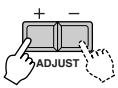
When the time is more than or equal to one hour, the display shows the digit of hour, minute and second with colon. When the time is less than one hour, the display shows the digit of minute, second and 0.01 second without colon.

To set the starting time, follow the procedure below:

1. Push the **"SET-TRIP" button** ⑪ while the underline "**–**" is indicated under the timer. The display of second digit is flashing and second digit is adjustable.

Adjustable digit can be changed by pushing the **"SET-TIME/TRIP" button** ⑫ in the order below.





2. Set the time of adjustable digit by pushing the **"ADJUST- +" button** or **"ADJUST- –" button** ⑬.

If the "ADJUST" button is pushed once, the time of adjustable digit is added or subtracted by the second/ minute/hour. If the "ADJUST" button is pushed continuously, the time of adjustable digit is added or subtracted quickly and continuously until the button is released.

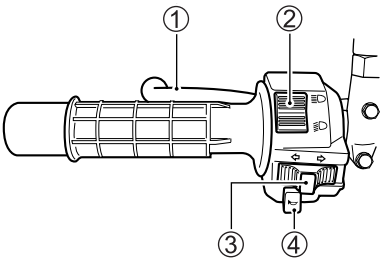
3. After adjustment is done, push the **"SET-TRIP" button** ⑪.

To start/stop the timer, push the **"SET-TIME/TRIP" button** ⑫ while the underline "**–**" is indicated under the timer. The display of "– TIME" is flashing while the timer is counting time.

If the display is changed to another function while the timer is counting the time, the timer counts continuously. Even if the ignition switch is turned off while the timer is counting the time, the timer counts continuously. However, 1/100 seconds unit may not be accurate.

To reset the timer (to zero), push the **"SET-TIME/TRIP" button** ⑫ for two seconds while the underline "**–**" is indicated under the timer.

LEFT HANDLEBAR



CLUTCH LEVER ①
The clutch lever is used for disengaging the drive to the rear wheel when starting the engine or shifting transmission gears. Squeezing the lever disengages the clutch.

DIMMER SWITCH ②
"≡D" position
The headlight low beam turns on.

"≡D" position
The headlight high beam turns on. The high beam indicator light also comes on.

NOTICE

Holding the dimmer switch between the "≡D" and "≡D" position will light both the high and low headlight beam. This improper operation can damage the motorcycle's headlight.

Use the dimmer switch to select only the "≡D" or "≡D" position.

NOTICE

Sticking tape or placing objects in front of the headlight can obstruct headlight heat radiation. This can result in headlight damage.

Do not stick tape on the headlight or place objects in front of the headlight.

NOTICE

Do not put objects in front of the headlight or taillight when they are on, and do not cover with clothes when the motorcycle is stopped.

This may cause melting of the lens or damage to the object by the heat from the lens.

TURN SIGNAL LIGHT SWITCH "⇦⇨" ③

Moving the switch to the "⇦" position will flash the left turn signals. Moving the switch to the "⇨" position will flash the right turn signals. The indicator light will also flash intermittently. To cancel turn signal operation, push the switch on.

⚠ WARNING

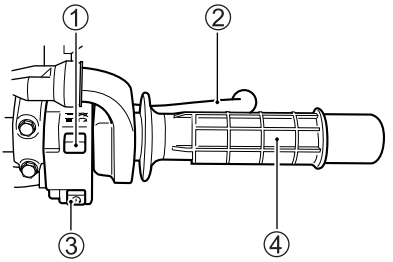
Failure to use the turn signals, and failure to turn off the turn signals can be hazardous. Other drivers may misjudge your course and this may result in an accident.

Always use the turn signals when you intend to change lanes or make a turn. Be sure to turn off the turn signals after completing the turn or lane change.

HORN SWITCH "📯" ④

Press the switch to sound the horn.

RIGHT HANDLEBAR



ENGINE STOP SWITCH ①

"⊗" position

The ignition circuit is off. The engine cannot start or run.

"⟳" position

The ignition circuit is on and the engine can run.

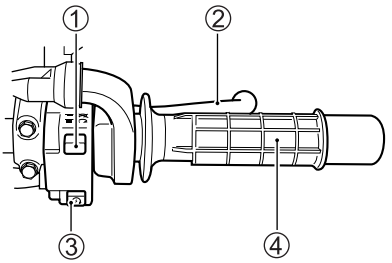
NOTICE

Changing the engine stop switch from ⟳ to ⊗ or from ⟳ to ⊗ to ⟳ while riding may damage to the engine or the catalytic converter (if equipped).

Do not use the engine stop switch except for an emergency.

FRONT BRAKE LEVER ②

The front brake is applied by squeezing the brake lever gently toward the throttle grip. This motorcycle is equipped with disc brake system and excessive pressure is not required to slow the machine down properly. The brake light will be lit when the lever is squeezed inward.



ELECTRIC STARTER SWITCH "⏲" ③

Use this switch to operate the starter motor. With the ignition switch in the "ON" position, the engine stop switch in the "⟳" position, and the transmission in neutral, pull in the clutch lever and push the electric starter switch to start the engine.

NOTE: This motorcycle is equipped with an interlock system for the ignition circuit and the starter circuit. The engine can only be started if:

- *The transmission is in neutral and the clutch is disengaged, or*
- *The transmission is in gear, the side stand is fully up and the clutch is disengaged.*

NOTE: The headlight will go off when the electric starter switch is pushed.

NOTICE

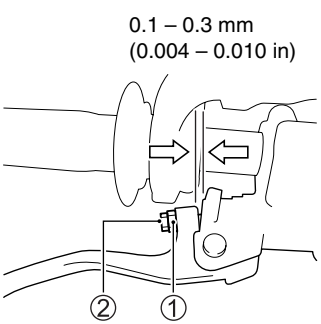
Engaging the starter motor for more than five seconds at a time can damage the starter motor and wiring harness from overheating.

Do not engage the starter motor for more than five seconds at a time. If the engine does not start after several attempts, check the fuel supply and ignition system. Refer to the TROUBLESHOOTING section in this manual.

THROTTLE GRIP ④

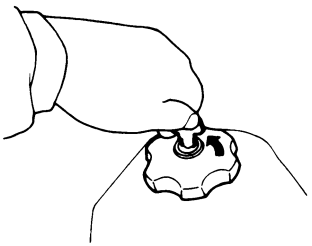
Engine speed is controlled by the position of the throttle grip. Turn it toward you to increase engine speed. Turn it away from you to decrease engine speed.

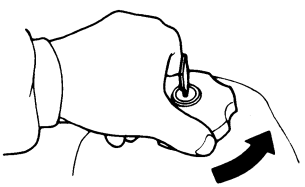
BRAKE LEVER PLAY ADJUSTMENT



1. Loosen the lock nut ①.
2. Turn the adjusting screw ② in/out to obtain the correct play of 0.1 – 0.3 mm (0.004 – 0.010 in).
3. Tighten the lock nut securely.

FUEL TANK CAP

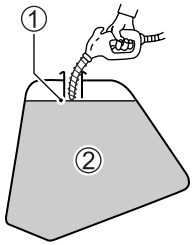




To open the fuel tank cap, insert the ignition key and turn it counterclockwise. Turn the fuel tank cap counterclockwise and remove it. To close the fuel tank cap, turn it clockwise. The key must be in the cap lock before installing cap. Turn the key clockwise and remove it.

Use fresh gasoline when filling up the fuel tank. Do not use bad gasoline which is contaminated with dirt, dust, water or other liquid. Be careful that dirt, dust or water does not enter the fuel tank when refueling.

Fuel tank capacity:
10.0 L (2.6/2.2 US/Imp. gal)



① Bottom of the filler neck
② Fuel

⚠ WARNING

If you overfill the fuel tank, fuel may overflow when it expands due to engine heat or heating by the sun. Fuel that overflows can catch fire.

Stop adding fuel when the fuel level reaches the bottom of the filler neck.

⚠ WARNING

Failure to follow safety precautions when refueling could result in a fire or cause you to breathe toxic fumes.

Refuel in a well ventilated area. Make sure the engine is off and avoid spilling fuel on a hot engine. Do not smoke, and make sure there are no open flames or sparks in the area. Avoid breathing gasoline vapors. Keep children and pets away when you refuel the motorcycle.

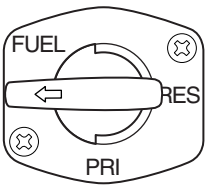
NOTICE

Filling the fuel tank with more than the specified amount of fuel may cause engine failure or make it difficult to start.

Do not refuel above the bottom of the filler neck.

FUEL VALVE

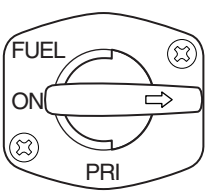
There are three positions: “ON”, “RES” and “PRI”.



ON

“ON” POSITION

The normal operating position for the fuel valve lever is in the “ON” position.

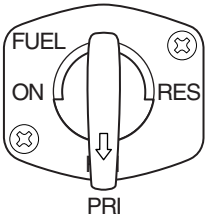


RES

“RES” (RESERVE) POSITION

If the fuel level in the tank is too low, turn the lever to the “RES” position to use the 2.3 L (0.6/0.5 US/Imp. gal) of reserve fuel supply.

NOTE: After switching the fuel valve lever to the “RES” position, it is advisable that the tank be refilled at the closest gasoline station. After refueling, be sure to turn the fuel valve to the “ON” position.



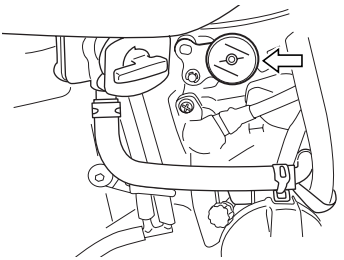
"PRI" (PRIMING) POSITION
When there is no fuel in the carburetor, turn the lever to the "PRI" position. Upon starting the engine, be sure to return the lever to the "ON" position.

⚠ WARNING

Leaving the fuel valve in "PRI" position when the engine is off can be hazardous. The carburetor may overflow and fuel may run into the engine. This can cause a fire or cause severe damage when you start the engine.

Always leave the fuel valve in the "ON" or "RESERVE" position.

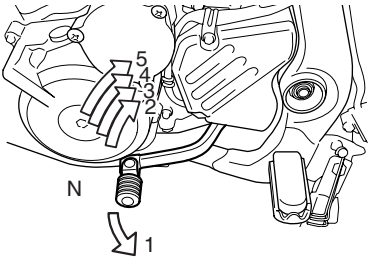
CHOKE KNOB "⍱"



The carburetor is equipped with a choke system to provide easy starting when the engine is cold. When starting the cold engine, pull the choke knob all the way toward you. The choke works best when the throttle is in the closed position. When the engine is warm, you do not need to use the choke system for starting.

NOTE: Refer to the RIDING TIPS section of this manual for the engine starting procedure.

GEARSHIFT LEVER

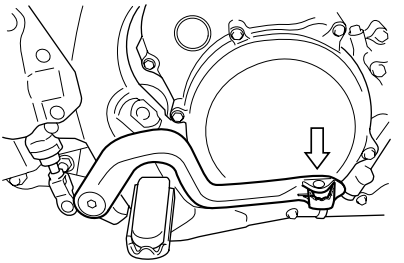


This motorcycle has a 5-speed transmission which operates as shown. To shift properly, squeeze the clutch lever and close the throttle at the same time you operate the gearshift lever. Lift the gearshift lever to upshift and depress the lever to downshift. Neutral is located between 1st and 2nd gear. When neutral is desired, depress or lift the lever halfway between 1st and 2nd gear.

NOTE: When the transmission is in neutral, the green indicator light on the instrument panel will be lit. However, even though the light is illuminated, cautiously and slowly release the clutch lever to make sure that the transmission is positively in neutral.

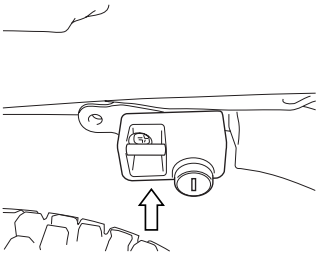
Reduce the motorcycle speed before down-shifting. When down-shifting, the engine speed should be increased before the clutch is engaged. This will prevent unnecessary wear on the drive train components and the rear tire.

REAR BRAKE PEDAL



Depressing the rear brake pedal will apply the rear brake. The brake light will be illuminated when the rear brake is operated.

HELMET HOLDER



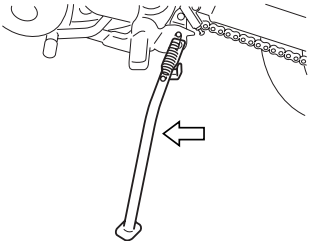
To open the latch of the helmet holder, insert the ignition key into the lock and turn it clockwise. To close the latch, turn the key counterclockwise.

⚠ WARNING

Riding with a helmet fastened to the helmet holder can interfere with rider control.

Never carry a helmet fastened to the helmet holder. Fix the helmet securely atop the seat if you must carry it.

SIDE STAND



This motorcycle is equipped with a side stand to support the motorcycle when parking. An interlock system is provided to cut off the ignition circuit when the side stand is down and the transmission is in any gear other than neutral.

The side stand/ignition interlock system works as follows:

1. If the side stand is down and the transmission is in gear, the engine can not be started.
2. If the engine is running and the transmission is shifted into gear with the side stand down, the engine will stop running.
3. If the engine is running and the side stand is put down with the transmission in gear, the engine will stop running.

⚠ WARNING

Riding with the side stand incompletely retracted can result in an accident when you turn left.

Check operation of the side stand/ ignition interlock system before riding. Always retract the side stand completely before starting off.

NOTICE

If you do not take proper precautions when parking, the motorcycle can fall over.

Park the motorcycle on firm, level ground whenever possible. If you must park on an incline, aim the front of the motorcycle uphill and put the transmission into 1st gear to reduce the possibility of rolling off the side stand.

NOTE: After riding the motorcycle under the muddy condition, clean and lubricate the side stand pivot and interlock switch.

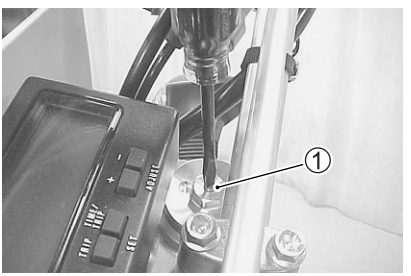
SUSPENSION ADJUSTMENT

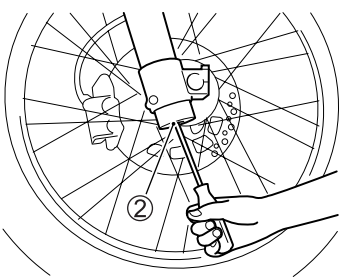
NOTICE

Turning adjusters by force can damage the suspensions.

Do not turn adjusters beyond their natural limits.

FRONT SUSPENSION
Damping Force Adjustment





The rebound and compression damping force can be individually adjusted by turning the respective adjusters. The rebound damping force adjuster ① is located at the top of the front fork. The compression damping force adjuster ② is located at the bottom of the front fork.

To adjust the damping force turn in the adjuster fully and turn it out. As you turn the adjuster, you will notice the clicks. Count the number of clicks from the fully turned-in position. Fully turned-in position provides stiffest damping force and turning out the adjuster will soften damping force. The rebound damping force is set on 16 clicks position at the factory. The compression damping force is set on 13 clicks position at the factory.

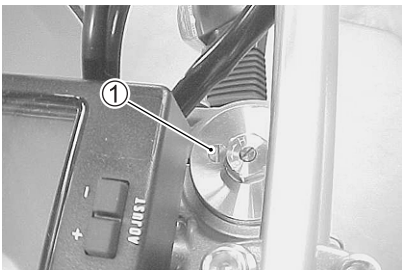
⚠ WARNING

Unequal suspension adjustment can cause poor handling and instability.

Adjust the right and left front forks to the same setting.

Air Pressure Adjustment

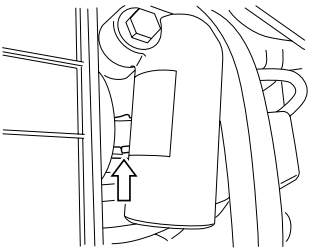
1. Place a block under the chassis tube to lift the front wheel off the ground.



2. Remove the air bleed screw ① and equalize the air pressure in the front forks to atmospheric pressure.
3. Refit the air bleed screw. Standard air pressure:
   0 kPa (0 kgf/cm^2, 0 psi)

REAR SUSPENSION

Spring Pre-load Adjustment



Spring pre-load adjuster ring

The adjustment can be performed by changing the adjuster ring position. However, Suzuki recommends that this adjustment be done by your authorized Suzuki dealer, since a special tool is needed for this job.

Rear Suspension Label

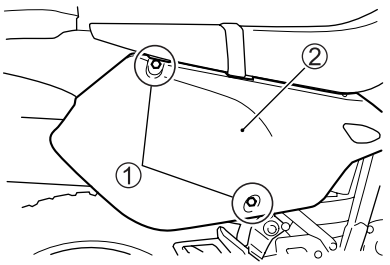
⚠ WARNING

This unit contains high-pressure nitrogen gas.
Mishandling can cause explosion.

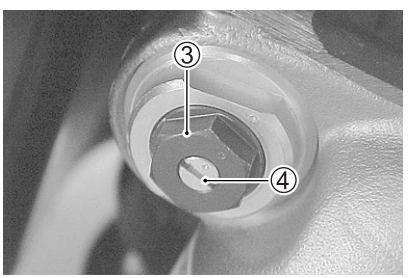
- **Keep away from fire and heat.**
- **Read owner's manual for more information.**

NOTE: Ask your Suzuki dealer to dispose of the rear suspension unit.

Compression Damping Force Adjustment



1. Remove the bolts ① and right side frame cover ②.



Compression damping force can be adjusted in two stages by turning the two adjusters; high stroke speed damping force adjuster ③ and low stroke speed damping force adjuster ④.

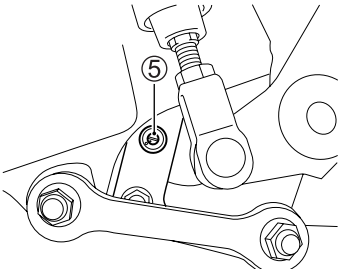
High stroke speed damping force adjuster ③

To adjust the damping force, turn in the adjuster fully and turn it out. Fully turned-in position provides stiffest damping force and turning out the adjuster will soften damping force. Count the number of turns from the fully turned-in position. The high stroke speed damping force is set on 1-1/4 turns out at the factory.

Low stroke speed damping force adjuster ④

To adjust the damping force, turn in the adjuster fully and turn it out. Fully turned-in position provides stiffest damping force and turning out the adjuster will soften damping force. Count the number of clicks from the fully turned-in position. The low stroke speed damping force is set on 9 clicks at the factory.

Rebound Damping Force Adjustment



To adjust the rebound damping force, turn in the adjuster ⑤ fully and turn it out. Fully turned-in position provides stiffest damping force and turning out the adjuster will soften damping force. Count the number of clicks from the fully turned-in position. The rebound damping force is set on 15 clicks out at the factory.

⚠ WARNING

Improper servicing of the rear shock absorber assembly is hazardous. The rear shock contains high pressure nitrogen gas and can explode if improperly disassembled or disposed of.

Service or disposal should only be done by your authorized Suzuki dealer or a qualified mechanic.

FUEL, ENGINE OIL AND COOLANT RECOMMENDATIONS

FUEL, ENGINE OIL AND COOLANT RECOMMENDATIONS

FUEL OCTANE RATING

Use unleaded gasoline with an octane rating of 91 or higher (Research method). Unleaded gasoline can extend spark plug life and exhaust components life.

(Canada)
Your motorcycle requires unleaded gasoline with a minimum pump octane rating of 87 ((R+M)/2 method). In some areas, the only fuels that are available are oxygenated fuels.

NOTE:

- *If the engine develops some trouble like lack of acceleration or insufficient power, the cause may be due to the fuel the motorcycle uses. In such case, try changing to a different gas station. If the situation is not improved by changing, consult your Suzuki dealer.*
- *If pinking or knocking is experienced, substitute higher octane grade gasoline or another brand, because there are differences between brand.*

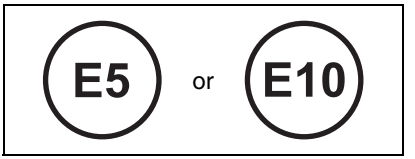
OXYGENATED FUEL RECOMMENDATION

(Canada)
Oxygenated fuels which meet the minimum octane requirement and the requirements described below may be used in your motorcycle without jeopardizing the New Vehicle Limited Warranty or the Emission Control System Warranty.

NOTE: Oxygenated fuels are fuels which contain oxygen carrying additives such as alcohol.

Gasoline/Ethanol Blends
Blends of unleaded gasoline and ethanol (grain alcohol), also known as "GASOHOL", are commercially available in some areas. Blends of this type may be used in your motorcycle if they are no more than 10% ethanol. Make sure this gasoline-ethanol blend has octane ratings no lower than those recommended for gasoline.

Use the recommended gasoline.



NOTE:

- *To help minimize air pollution, Suzuki recommends that you use oxygenated fuels.*
- *Be sure that any oxygenated fuel you use has recommended octane ratings.*
- *If you are not satisfied with the drivability of fuel economy of your motorcycle when you are using an oxygenated fuel, or if engine pinging is experienced, substitute another brand as there are differences between brands.*

NOTICE

Spilled gasoline containing alcohol can damage the painted surfaces of your motorcycle.

Be careful not to spill any fuel when filling the fuel tank. Wipe spilled gasoline up immediately.

NOTICE

Do not use leaded gasoline.

Use of leaded gasoline causes the catalytic converter to malfunction.

ENGINE OIL

DESCRIPTION

Engine life depends on oil amount and quality. Daily oil level checks and periodic changes are two of the most important maintenance items to be performed.

NOTE: Before adding, draining, or replacing engine oil, read cautions on the engine oil container and instructions in this section.

SELECTING THE ENGINE OIL

Suzuki recommends the use of SUZUKI Genuine Oil or Equivalent Engine Oil.

< SUZUKI Genuine Oil >

Standard / Oil	SAE	JASO
ECSTAR R9000	10W-40	MA
ECSTAR R7000	10W-40	MA
ECSTAR R5000	10W-40	MA

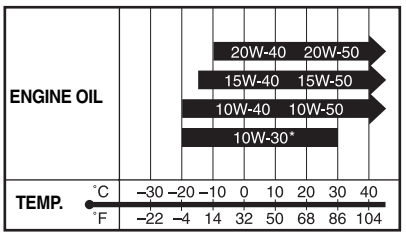
< Equivalent Engine Oil >

Equivalent Engine Oil means engine oil that meets the following standards.

SAE	API	JASO
10W-40	SJ, SL, SM or SN	MA (MA1, MA2)

API: American Petroleum Institute
JASO: Japanese Automobile Standards Organization

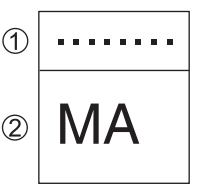
SAE Engine Oil Viscosity
If SAE 10W-40 engine oil is not available, select an alternative according to the following chart.



* USE ONLY SJ or SL.

JASO T903
The JASO T903 standard is an index to select engine oils for 4-stroke motorcycle and ATV engines. Motorcycle and ATV engines lubricate clutch and transmission gears with engine oil. JASO T903 specifies performance requirements for motorcycle and ATV clutches and transmissions.

There are two classes, MA (MA1, MA2) and MB. For example, the oil container shows the classification as follows.



① Code number of oil sales company
② Oil classification

Energy Conserving

Suzuki does not recommend the use of "ENERGY CONSERVING" or "RESOURCE CONSERVING" oils. Some engine oils which have an API classification of SJ, SL, SM or SN have an "ENERGY CONSERVING" or "RESOURCE CONSERVING" indication in the API classification donut mark. These oils can affect engine life and clutch performance.

API SJ, SL, SM or SN

Recommended

API SJ, SL or SM

API SN

Not recommended

ENGINE COOLANT SOLUTION

Use "SUZUKI SUPER LONG LIFE COOLANT" or "SUZUKI LONG LIFE COOLANT". If "SUZUKI SUPER LONG LIFE COOLANT" and "SUZUKI LONG LIFE COOLANT" are not available, use a glycol-based antifreeze compatible with an aluminum radiator mixed with distilled water only at the ratio of 50:50.

⚠ WARNING

Engine coolant is harmful or fatal if swallowed or inhaled. Solution can be poisonous to animals.

Do not drink antifreeze or coolant solution. If swallowed, do not induce vomiting. Immediately contact a poison control center or a physician. Avoid inhaling mist or hot vapors; if inhaled, remove to fresh air. If coolant gets in eyes, flush eyes with water and seek medical attention. Wash thoroughly after handling. Keep out of the reach of children and animals.

NOTICE

Spilled engine coolant can damage the painted surfaces of your motorcycle.

Be careful not to spill any fluid when filling the radiator. Wipe spilled engine coolant up immediately.

ENGINE COOLANT
Engine coolant performs as a rust inhibitor and water pump lubricant as well as an anti-freeze solution. Therefore engine coolant should be used at all times even though the atmospheric temperature in your area does not go down to the freezing point.

SUZUKI SUPER LONG LIFE COOLANT (Blue)
"SUZUKI SUPER LONG LIFE COOLANT" is pre-mixed to the proper ratio. Add only "SUZUKI SUPER LONG LIFE COOLANT" if coolant level drops. It is not necessary to dilute "SUZUKI SUPER LONG LIFE COOLANT" when replacing coolant.

SUZUKI LONG LIFE COOLANT (Green)

Water for mixing
Use distilled water only. Water other than distilled water can corrode and clog the aluminium radiator.

Required amount of water/coolant
Solution capacity (total):
1250 ml (1.3/1.1 US/Imp. qt)

50%	Water	625 ml (0.7/0.5 US/Imp. qt)
	Coolant	625 ml (0.7/0.5 US/Imp. qt)

NOTE: This 50% mixture will protect the cooling system from freezing at temperatures above –31°C (–24°F). If the motorcycle is to be exposed to temperature below –31°C (–24°F), this mixing ratio should be increased up to 55% (–40°C/–40°F) or 60% (–55°C/–67°F) coolant. The mixing ratio should not exceed 60% coolant.

BREAK-IN (RUNNING-IN) AND INSPECTION BEFORE RIDING

BREAK-IN (RUNNING-IN) AND INSPECTION BEFORE RIDING

The opening explains how important proper break-in is to achieve maximum life and performance from your new Suzuki. The following guidelines explain proper break-in procedures.

MAXIMUM ENGINE SPEED RECOMMENDATION

This table shows the maximum recommended engine speed during the break-in period.

Initial	800 km (500 miles)	Less than 1/2 throttle
Up to	1600 km (1000 miles)	Less than 3/4 throttle

VARY THE ENGINE SPEED

The engine speed should be varied and not held at a constant speed. This allows the parts to be "loaded" with pressure, and then unloaded, allowing the parts to cool. This aids the mating process of the parts. It is essential that some stress be placed on the engine components during break-in to ensure this mating process. Do not, though, apply excessive load on the engine.

AVOID CONSTANT LOW SPEED

Operating the engine at constant low speed (light load) can cause parts to glaze and not seat in. Allow the engine to accelerate freely through the gears, without exceeding the recommended maximum limits. Do not, however, use full throttle for the first 1600 km (1000 miles).

ALLOW THE ENGINE OIL TO CIRCULATE BEFORE RIDING

Allow sufficient idling time after warm or cold engine start-up before applying load or revving the engine. This allows time for the lubricating oil to reach all critical engine components.

OBSERVE YOUR FIRST AND MOST CRITICAL SERVICE

The 1000 km (600 miles) service is the most important service your motorcycle will receive. During break-in all of the engine components will have worn in and all of the other parts will have seated in. All adjustments will be restored, all fasteners will be tightened, and the dirty oil and oil filter will be replaced. Timely performance of the 1000 km (600 miles) service will ensure optimum service life and performance from the engine.

NOTE: The 1000 km (600 miles) service should be performed as outlined in the INSPECTION AND MAINTENANCE section of this Owner's Manual. Pay particular attention to the CAUTION and WARNING messages in that section.

INSPECTION BEFORE RIDING

⚠ WARNING

Failure to inspect your motorcycle before riding and to properly maintain your motorcycle increases the chances of an accident or equipment damage.

Always inspect your motorcycle each time you use it to make sure it is in safe operating condition. Refer to the INSPECTION AND MAINTENANCE section in this owner's manual.

⚠ WARNING

If you operate this motorcycle with improper tires or improper or uneven tire pressure, you may lose control of the motorcycle. This will increase your risk of an accident.

Always use tires of the size and type specified in this owner's manual. Always maintain proper tire pressure as described in the INSPECTION AND MAINTENANCE section.

Before riding the motorcycle, be sure to check the following items. Never underestimate the importance of these checks. Perform all of them before riding the motorcycle.

⚠ WARNING

Checking maintenance items when the engine is running can be hazardous. You could be severely injured if your hands or clothing get caught in moving engine parts.

Shut the engine off when performing maintenance checks, except when checking the lights, engine stop switch, and throttle.

WHAT TO CHECK	CHECK FOR:
Steering	• Smoothness • No restriction of movement • No play or looseness
Throttle (☞ 6-19)	• Correct play in the throttle cable • Smooth operation and positive return of the throttle grip to the closed position
Clutch (☞ 6-21)	• Correct play in the cable • Smooth and progressive action
Brakes (☞ 2-19, 2-24, 6-26)	• Proper pedal and lever operation • Fluid level in the reservoir to be above “LOWER” line • No fluid leakage • Brake pads not worn down to the limit line • Correct pedal and lever play • No “sponginess”
Suspensions (☞ 2-26)	Smooth movement
Fuel (☞ 2-7)	Enough fuel for the planned distance of operation
Drive chain (☞ 6-21)	• Proper tension or slack • Adequate lubrication
Tires (☞ 6-30)	• Correct pressure • Adequate tread depth • No cracks or cuts
Engine oil (☞ 6-15)	Correct level
Cooling system (☞ 6-24)	• Enough coolant in radiator • No leaks or damage
Lighting (☞ 2-5, 2-7, 2-18)	Operation of all lights and indicators
Horn (☞ 2-19)	Correct function
Engine stop switch (☞ 2-19)	Correct function
Side stand/ Ignition interlock system (☞ 6-32)	Proper operation

RIDING TIPS

ENGINE STARTING

1. Check that the fuel valve is in the "ON" position and that the engine stop switch is in the "⟳" position.
2. Insert the ignition key into the ignition switch and turn it to the "ON" position.
3. Set the transmission into neutral.

NOTE: This motorcycle is equipped with an interlock system for the ignition circuit and the starter circuit. The engine can only be started if:

- *The transmission is in neutral and the clutch is disengaged, or*
- *The transmission is in gear, the side stand is fully up and the clutch is disengaged.*

When the Engine is Cold:

1. Pull the choke knob all the way up (full choke position).
2. **With the throttle grip in the fully closed position**, push the electric starter switch.
3. Immediately after the engine starts, keep the engine speed at 1800 – 2000 r/min by varying the choke knob position.
4. Move the choke knob to the "OFF" position approximately 30 seconds after engine starts. It may be necessary to use the choke longer than 30 seconds in extremely cold weather.

When a cold Engine is Hard to Start:

1. Pull the choke knob all the way up (full choke position).
2. **With the throttle grip opened 1/8 to 1/4**, push the electric starter switch.
3. Immediately after the engine starts, keep the engine speed at 1800 – 2000 r/min by varying the choke knob position.
4. Move the choke knob to the "OFF" position approximately 30 seconds after engine starts. It may be necessary to use the choke longer than 30 seconds in extremely cold weather.

When the Engine is Warm:

1. Confirm that the choke knob is in the "OFF" position.
2. **With the throttle grip in the fully closed position**, push the electric starter switch.

NOTE: Operation of the carburetor choke system is not necessary when the engine is warm.

When a Warm Engine is Hard to Start:

1. Confirm that the choke knob is in the “OFF” position.
2. **With the throttle grip opened 1/8 to 1/4**, push the electric starter switch.

⚠ WARNING

Exhaust gas contains carbon monoxide, a dangerous gas that is difficult to detect because it is colorless and odorless. Breathing carbon monoxide can cause death or severe injury.

Never start the engine or let it run indoors or where there is little or no ventilation.

NOTICE

Leaving the engine running for an extended period or keeping the throttle opened, without traveling, in order to charge the battery, etc., may cause the engine to overheat. Overheating may damage engine parts or motorcycle parts, and cause the exhaust pipe to change color.

Stop the engine if you do not intend to begin riding promptly.

STARTING OFF

⚠ WARNING

Riding at excessive speeds increases your chances of losing control of the motorcycle, which can result in an accident.

Always ride at a speed that is proper for the terrain, visibility and operating conditions, and your skills and experience.

⚠ WARNING

If you remove even one hand or foot from the motorcycle, you can reduce your ability to control the motorcycle. This could cause you to lose your balance and fall off the motorcycle. If you remove a foot from a footrest, your foot or leg may come in contact with the rear wheel. This could injure you or cause an accident.

Always keep both hands on the handlebars and both feet on the footrests of your motorcycle during operation.

⚠ WARNING

Sudden side winds, which can occur when being passed by larger vehicles, at tunnel exits or in hilly areas, can cause you to lose control of the motorcycle.

Reduce your speed and be alert to the possibility of sudden side winds.

1. Warm up the engine.
2. Squeeze the clutch lever and depress the gearshift lever downward.
3. Turn the throttle grip toward you. At the same time, release the clutch lever gently, and the motorcycle will move forward.
4. As speed increases, change up to the next higher gear. Close the throttle and squeeze the clutch lever simultaneously. Lift the gearshift lever upward. Release the clutch lever gently and open the throttle grip again.

NOTE: This motorcycle is equipped with a side stand/ignition interlock system. If you shift the transmission into gear when the side stand is down, the engine will stop running.

USING THE TRANSMISSION

The transmission is provided to keep the engine operating smoothly in its normal operating speed range. The gear ratios have been carefully chosen to meet the characteristics of the engine. The rider should always select the most suitable gear for the prevailing conditions. Never slip the clutch to control road speed, but rather downshift to allow the engine to run within its normal operational range.

(Canada)

The table below shows the shifting point for each gear.

Shifting up schedule

Gear position	km/h	mph
1st → 2nd	22	13
2nd → 3rd	34	21
3rd → 4th	43	26
4th → 5th	54	33

Shifting down schedule

Gear position	km/h	mph
5th → 4th	43	26
4th → 3rd	34	21
3rd → 2nd	22	13

Disengage the clutch when the motorcycle speed drops below 15 km/h (9 mph).

⚠ WARNING

Downshifting when engine speed is too high can:

- **cause the rear wheel to skid and lose traction due to increased engine braking, resulting in an accident; or**
- **force the engine to overrev in the lower gear, resulting in engine damage.**

Reduce speed before downshifting.

⚠ WARNING

Downshifting while the motorcycle is leaned over in a corner may cause rear wheel skid and loss of control.

Reduce your speed and downshift before entering a corner.

NOTICE

Improper gearshift lever operation can damage the transmission.

- **Do not rest your foot on the gearshift lever.**
- **Do not use force to shift gears.**

RIDING ON HILLS

- When climbing steep hills, the motorcycle may begin to slow down and show lack of power. At this point you should shift to a lower gear so that the engine will again be operating in its normal power range. Shift rapidly to prevent the motorcycle from losing momentum.
- When riding down a steep hill, the engine may be used for braking by shifting to a lower gear.
- Be careful, however, not to allow the engine to overrev.

STOPPING AND PARKING

1. Turn the throttle grip away from you to close the throttle completely.
2. Apply the front and rear brakes evenly and at the same time.
3. Downshift through the gears as road speed decreases.
4. Select neutral with the clutch lever squeezed toward the grip (disengaged position) when the motorcycle is almost completely stopped. The neutral position can be confirmed by observing the neutral indicator light.

⚠ WARNING

Inexperienced riders tend to underutilize the front brake. This can cause excessive stopping distance and lead to a collision. Using only the front or rear brake can cause skidding and loss of control.

Apply both brakes evenly and at the same time.

⚠ WARNING

Hard braking while turning may cause wheel skid and loss of control.

Brake before you begin to turn.

⚠ WARNING

Continuous brake application for a long time can overheat the brakes and reduce their effectiveness, which can result in an accident.

Slow down sufficiently before approaching a slope.

⚠ WARNING

Hard braking on wet, loose, rough, or other slippery surfaces can cause wheel skid and loss of control.

Brake lightly and with care on slippery or irregular surfaces.

⚠ WARNING

Following another vehicle too closely can lead to a collision. As vehicle speeds increase, stopping distance increases progressively.

Always maintain a safe stopping distance between you and the vehicle in front of you.

NOTICE

Holding the motorcycle stopped with throttle and clutch lever operation on inclines can damage the motorcycle's clutch.

Use the brakes when stopping the motorcycle on inclines.

5. Park the motorcycle on a firm, flat surface where it will not fall over.

⚠ CAUTION

A hot muffler can cause severe burns. The muffler will be hot enough to cause burns for some time after stopping the engine.

Park the motorcycle where pedestrians or children are not likely to touch the muffler.

NOTE: If the motorcycle is to be parked on the side stand on a slight slope, the front end of the motorcycle should face "up" the incline to avoid rolling forward off the side stand. You may leave the motorcycle in 1st gear to help prevent it from rolling off the side stand. Shift to neutral before starting the engine.

6. Turn the ignition key to the "OFF" position.
7. Remove the keys.
8. Turn the handlebars all the way to the left and lock the steering for security.

NOTE: If an optional anti-theft lock such as a U-shape lock, brake disc lock or chain is used to avoid theft, be sure to remove the anti-theft lock before moving the motorcycle.

CARRYING A PASSENGER

Before you invite someone to be a passenger on your motorcycle, you need to be thoroughly familiar with motorcycle operation. Adjust tire pressures and suspension according to the Tire Pressure and Loading section and the Suspension section of this manual.

The passenger should always hold onto your waist or hips, or onto the seat strap or grab bar, as equipped. Ask your passenger not to make any sudden movements. When you lean going around a corner, the passenger should lean with you. The passenger should always keep his or her feet on the footrests, even when you are stopped at a light.

To help prevent burn injuries, warn your passenger not to contact the muffler when mounting or dismounting your motorcycle.

Although your Dual Sport motorcycle is equipped to carry a passenger, carrying a passenger or cargo while riding in rough terrain could be hazardous. Carrying a passenger or strapping cargo to the passenger seat can greatly reduce your ability to balance and steer the motorcycle and deal with quickly changing off-road conditions. Ride at a reduced speed and limit your off-road riding to smooth, level surfaces when carrying a passenger or cargo.

⚠ WARNING

Carrying a passenger or attaching cargo to the seat can greatly reduce your ability to balance and steer this motorcycle on rough terrain. You may need the full length of the seat to change position to maneuver the motorcycle and deal with quickly changing off-road conditions, and a passenger or cargo may interfere with your movement. If you lose control of the motorcycle, both you and the passenger can be severely injured.

Never carry a passenger or cargo on the seat when riding on rough terrain. Reduce your speed and avoid uneven surfaces, hills, narrow trails, and other rough terrain when you carry a passenger or cargo off-road.

INSPECTION AND MAINTENANCE

MAINTENANCE SCHEDULE

The chart indicates the intervals between periodic services in miles, kilometers and months. At the end of each interval, be sure to inspect, check, lubricate and service as instructed. If your motorcycle is used under high stress conditions such as continuous full throttle operation, or is operated in a dusty climate, certain services should be performed more often to ensure reliability of the machine as explained in the maintenance section. Your Suzuki dealer can provide you with further guidelines. Steering components, suspensions and wheel components are key items and require very special and careful servicing. For maximum safety we suggest that you have these items inspected and serviced by your authorized Suzuki dealer or a qualified service mechanic.

⚠ WARNING

Improper maintenance or failure to perform recommended maintenance can lead to an accident.

Keep your motorcycle in good condition. Ask your Suzuki dealer or a qualified mechanic to perform the maintenance items marked with an asterisk (*). You may perform the unmarked maintenance items by referring to the instructions in this section, if you have mechanical experience. If you are not sure how to do any of the jobs, ask your Suzuki dealer to do the maintenance.

⚠ WARNING

Exhaust gas contains carbon monoxide, a dangerous gas that is difficult to detect because it is colorless and odorless. Breathing carbon monoxide can cause death or severe injury.

Never start the engine or let it run indoors or where there is little or no ventilation.

NOTICE

Servicing electric parts with the ignition switch in the "ON" position can damage the electric parts when the electric circuit is shorted.

Turn off the ignition switch before servicing the electric parts to avoid short-circuit damage.

NOTICE

Poorly-made replacement parts can cause your motorcycle to wear more quickly and may shorten its useful life.

When replacing parts on your vehicle, use only genuine Suzuki replacement parts or their equivalent.

NOTE: The MAINTENANCE CHART specified the minimum requirements for maintenance. If you use your motorcycle under severe conditions, perform maintenance more often than shown in the chart. If you have any questions regarding maintenance intervals, consult your Suzuki dealer or a qualified mechanic.

MAINTENANCE CHART

Interval: This interval should be judged by number of months or odometer reading, whichever comes first.

Item \ Interval		months	2	12	24	36	48
		km	1000	6000	12000	18000	24000
		mile	600	4000	7500	11000	15000
Air cleaner (☞ 6-8)			–	I	I	R	I
* Exhaust pipe bolts and muffler bolts			T	–	T	–	T
* Valve clearance			–	–	–	–	I
Spark plug (☞ 6-11)			–	I	R	I	R
Spark arrester (☞ 6-33)			–	C	C	C	C
Fuel hose (☞ 6-14)			–	I	I	I	I
			*Replace every 4 years (Except for Canada)				
Engine oil (☞ 6-15)			R	R	R	R	R
Engine oil filter (☞ 6-15)			R	–	–	R	–
Engine oil hoses			I	I	I	I	I
* Engine coolant (☞ 6-24)	"SUZUKI SUPER LONG LIFE COOLANT" (Blue)		Replace every 4 years or 48000 km (29000 miles)				
	"SUZUKI LONG LIFE COOLANT" (Green) or an engine coolant other than "SUZUKI SUPER LONG LIFE COOLANT" (Blue)		–	–	R	–	R
Radiator hose (☞ 6-25)			–	I	I	I	I
Idle speed (Carburetor) (☞ 6-19)			I	I	I	I	I
Throttle cable play (Carburetor) (☞ 6-20)			I	I	I	I	I
Clutch (☞ 6-21)			–	I	I	I	I
Drive chain (☞ 6-21)			I	I	I	I	I
			Clean and lubricate every 1000 km (600 miles)				
* Brakes (☞ 6-26)			I	I	I	I	I
Brake hose (☞ 6-26)			–	I	I	I	I
			* Replace every 4 years				
Brake fluid (☞ 6-27)			–	I	I	I	I
			* Replace every 2 years				
Tires (☞ 6-30)			–	I	I	I	I
Spoke nipples (☞ 6-32)			I	I	I	I	I
* Steering			I	–	I	–	I
* Front fork (☞ 2-26)			–	–	I	–	I
* Rear suspension (☞ 2-28)			–	–	I	–	I
* Chassis nuts and bolts			T	T	T	T	T
Lubrication (☞ 6-5)			Lubricate every 1000 km (600 miles)				
* PAIR (Air supply) system			–	–	I	–	I

NOTE: I= Inspect and clean, adjust, replace or lubricate as necessary, R= Replace; T= Tighten; C= Clean

TOOLS

A tool kit is supplied.

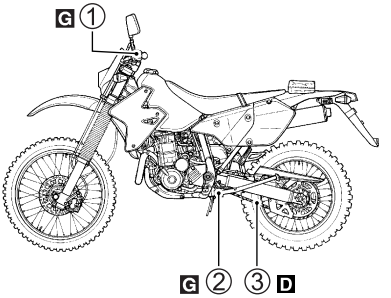
LUBRICATION POINTS

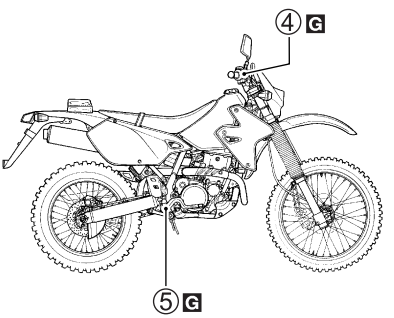
Proper lubrication is important for smooth operation and long life of each working part of your motorcycle and also for safe riding. It is a good practice to lubricate the motorcycle after a long rough ride and after getting it wet in the rain or after washing it. Major lubrication points are indicated below.

NOTICE

Lubricating electrical switches can damage the switches.

Do not apply grease or oil to electrical switches.





G .... Grease
D .... Drive chain lubricant

① .... Clutch lever pivot
② .... Side stand pivot and spring hook
③ .... Drive chain
④ .... Brake lever pivot
⑤ .... Brake pedal pivot

BATTERY

The battery is a sealed type battery and requires no maintenance. Have your dealer check the battery's state of charge periodically.

NOTE:

- *For charging a sealed type battery, use a battery charger applicable to a sealed type battery.*
- *If you cannot charge the battery, consult your authorized Suzuki dealer.*

⚠ WARNING

Battery posts, terminals, and related accessories contain lead and lead compounds. Lead is harmful to your health if it gets into your blood stream.

Wash hands after handling any parts containing lead.

⚠ WARNING

Diluted sulfuric acid from the battery can cause blindness or severe burns.

When working near the battery, use proper eye protection and gloves. Flush eyes or body with ample water and get medical care immediately if you suffer injury. Keep batteries out of reach of children.

⚠ WARNING

Batteries produce flammable hydrogen gas which can explode if exposed to flames or sparks.

Keep flames and sparks away from the battery. Never smoke when working near the battery.

⚠ WARNING

Wiping the battery with a dry cloth can cause a static electricity spark, which can start a fire.

Wipe the battery with a damp cloth to avoid static electricity build up.

NOTICE

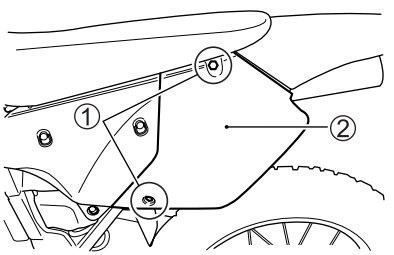
Exceeding the maximum charging rate for the battery can shorten its life.

Never exceed the maximum charging rate for the battery.

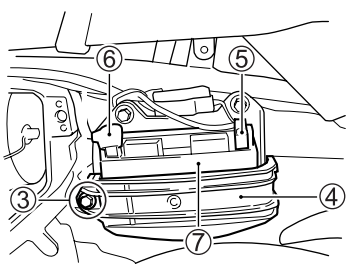
BATTERY REMOVAL

To remove the battery, follow the procedure below:

1. Place the motorcycle on the side stand.



2. Loosen the bolts ① and remove the frame cover ②.



3. Loosen the bolt ③ and remove the battery cover ④.
4. Disconnect the negative (–) terminal ⑤.
5. Remove the cap. Disconnect the positive (+) terminal ⑥.
6. Remove the battery ⑦.

To install the battery:

1. Install the battery in the reverse order of removal.
2. Connect the battery terminals securely.

NOTICE

Reversing the battery lead wires can damage the charging system and the battery.

Always attach the red lead to the (+) positive terminal and the black (or black with white tracer) lead to the (–) negative terminal.

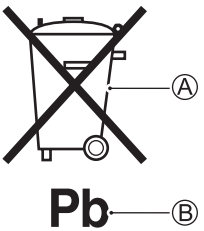
⚠ WARNING

Batteries contain toxic substances including sulfuric acid and lead. They could cause injury to humans or could damage the environment.

A used battery must be disposed of or recycled according to local law and must not be discarded with ordinary household waste. Make sure not to tip over the battery when you remove it from the vehicle. Otherwise, sulfuric acid could run out and you might be injured.

NOTE:

- *Select the same type MF battery when replacing the battery.*
- *Recharge the battery once a month if the motorcycle is not used for a long time.*



The crossed-out wheeled bin symbol Ⓐ located on the battery label indicates that a used battery should be collected separately from ordinary household waste.
The chemical symbol of “Pb” Ⓑ indicates the battery contains more than 0.004% lead.

By ensuring the used battery is disposed of or recycled correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of the battery. The recycling of materials will help to conserve natural resources. For more detailed information about disposing or recycling of the used battery, consult your Suzuki dealer.

AIR CLEANER

If the elements have become clogged with dust, intake resistance will increase with a resultant decrease in power output and an increase in fuel consumption. If you use your motorcycle under normal low-stress conditions, you should service the air cleaner at the intervals specified. If you ride in dusty, wet or muddy conditions, you will need to inspect the air cleaner element much more frequently. Use the following procedure to remove the element and inspect it.

⚠ WARNING

Operating the engine without the air cleaner element in place can be hazardous. A flame can spit back from the engine to the air intake box without the air cleaner element to stop it. Severe engine damage can also occur if dirt enters the engine due to running the engine without the air cleaner element.

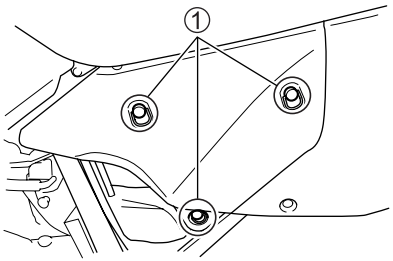
Never run the engine without the air cleaner element in place.

NOTICE

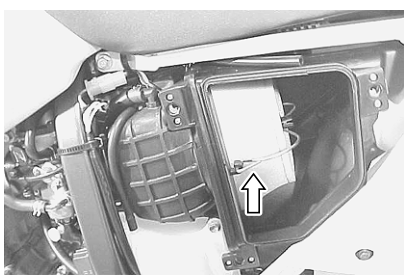
Failure to inspect the air cleaner element frequently if the vehicle is used in dusty, wet, or muddy conditions can damage your motorcycle. The air cleaner element can become clogged under these conditions, and engine damage may result.

Always inspect the air cleaner element after riding in severe conditions. Clean or replace the element as necessary. If water gets in the air cleaner case, immediately clean the element and the inside of the case.

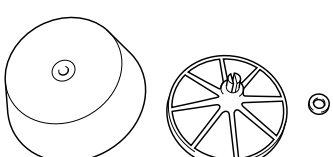
To remove the air cleaner:



1. Loosen the quick release bolts ① and remove the left side frame cover.

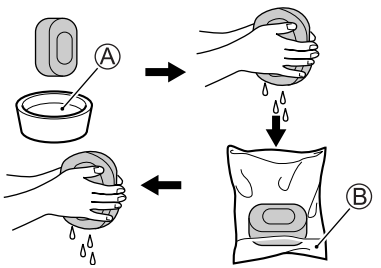


2. Unhook the hook and remove the element assembly.



3. Separate the polyurethane foam element from the element frame.

WASHING THE ELEMENT



Wash the element as follows:

1. Fill a washing pan of a proper size with nonflammable cleaning solvent Ⓐ. Immerse the element in the solvent and wash it clean.
2. Squeeze the solvent off the washed element by pressing it between the palms of both hands. Do not twist and wring the element, or it will develop fissures.
3. Immerse the element in a pool of motor oil Ⓑ, and squeeze the oil off the element to make it slightly wet with the oil.

⚠ WARNING

New and used oil and solvent can be hazardous. Children and pets may be harmed by swallowing new or used oil or solvent. Repeated, prolonged contact with used engine oil may cause skin cancer. Brief contact with used oil or solvent may irritate skin.

- **Keep new and used oil and solvent away from children and pets.**
- **Wear a long-sleeve shirt and waterproof gloves.**
- **Wash with soap if oil or solvent contacts your skin.**

NOTE: Recycle or properly dispose of used oil and solvent.

NOTICE

A torn air cleaner element will allow dirt to enter the engine and can damage the engine.

Replace the air cleaner element with a new one if it is torn. Carefully examine the air cleaner element for tears during cleaning.

NOTICE

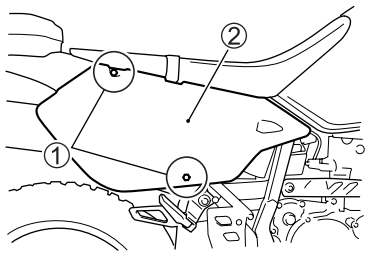
Failure to position the air cleaner element properly can allow dirt to bypass the air cleaner element. This will cause engine damage.

Be sure to properly install the air cleaner element.

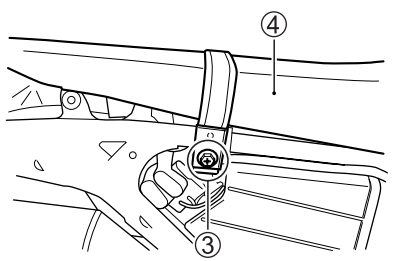
NOTE: Be careful not to spray water on the air cleaner box when cleaning the motorcycle.

SPARK PLUG

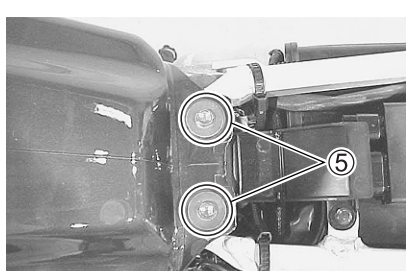
To remove the spark plug, follow the procedure below.



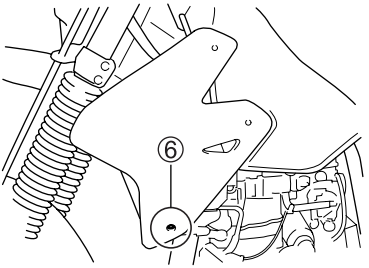
1. Loosen the bolts ① on the right and left frame covers and remove the frame cover ②.



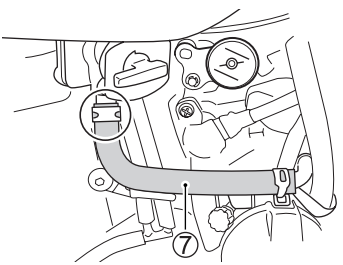
2. Loosen the bolt ③ and remove the seat ④.



3. Loosen the bolts ⑤.



4. Loosen the screws ⑥ (right and left.)

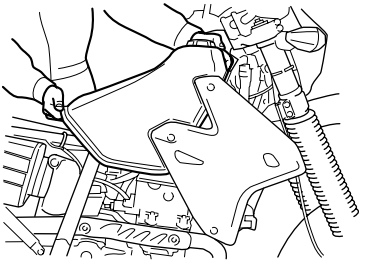


5. Turn the fuel valve to the “ON” or “RES” position.
6. Disconnect the fuel hose ⑦.

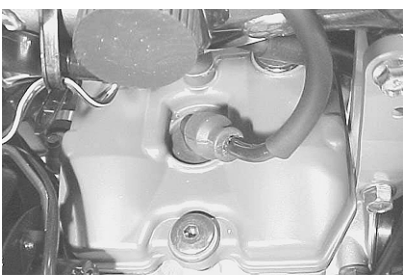
⚠ WARNING

Fuel spilled from the fuel hose can catch on fire.

Stop the engine before disconnecting the fuel hose. Keep flames, sparks, and heat sources away. Do not smoke. Catch fuel in a container and dispose of drained fuel properly.



7. Remove the fuel tank by pulling it backward.



8. Pull off the spark plug cap.
9. Remove the spark plug with a spark plug wrench.

A normally operating spark plug is very light-brown in color. If the standard plug is not suitable for your riding, change it according to the following chart:

Plug Replacement Guide

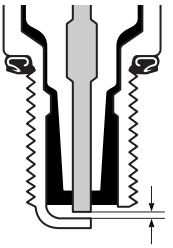
NGK	DENSO	REMARKS
CR7E	U22ESR-N	If the standard plug is wet in appearance or very dark in color, replace with this plug.
CR8E	U24ESR-N	Standard
CR9E	U27ESR-N	If the standard plug is glazed appearing or very white, replace with this plug.

NOTE: This motorcycle uses a resistor-type spark plug to avoid jamming electronic parts. Improper spark plug selection may cause electronic interference with your motorcycle's ignition system, resulting in motorcycle performance problems. Use only the recommended spark plugs.

NOTICE

An improper spark plug may have an incorrect fit or inappropriate heat range for your engine. This may cause severe engine damage which may not be covered under warranty.

Use one of the spark plugs listed or their equivalent. Consult your Suzuki dealer if you are not sure which spark plug is correct for your type of usage.



0.7 – 0.8 mm
(0.028 – 0.031 in)

A spark plug heavily carboned or otherwise fouled will not produce strong sparking. Remove carbon deposits and adjust the spark plug gap to 0.7 – 0.8 mm (0.028 – 0.031 in) by measuring with a thickness gauge.

INSTALLATION

NOTICE

Improper installation of the spark plug can damage your motorcycle. An overly-tight or cross-threaded spark plug will damage the aluminum threads of the cylinder head.

Carefully turn the spark plug by hand into the threads. If the spark plug is new, tighten it with a wrench about 1/2 turn past finger tight. If you are reusing the old spark plug, tighten it with a wrench about 1/8 turn past finger tight.

NOTICE

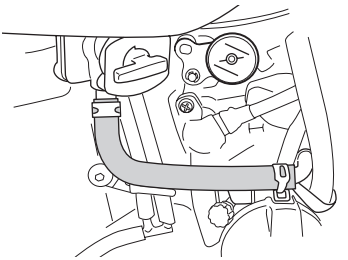
Dirt can damage the moving engine parts of your motorcycle if it enters an open spark plug hole.

Cover the spark plug hole while the spark plug is out of the hole.

Reinstall the fuel tank.

NOTE: Check that the fuel tank drain hose and breather hose are not bent before reinstalling the fuel tank.

FUEL HOSE



Inspect the fuel hose for damage and fuel leakage. If any defects are found, the fuel hose must be replaced.

ENGINE OIL

Long engine life depends much on the selection of a quality oil and the periodic changing of the oil. Daily oil level checks and periodic changes are two of the most important maintenance items to be performed.

ENGINE OIL LEVEL CHECK

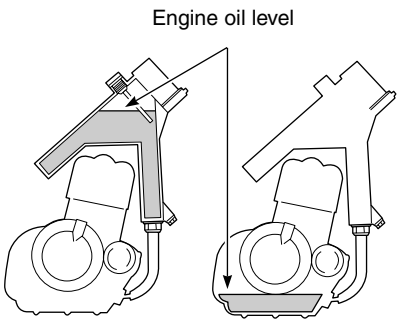


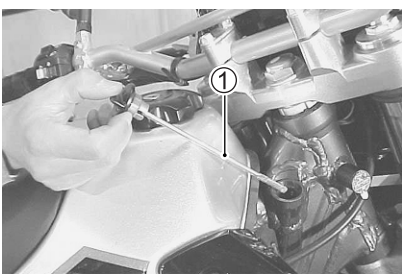
Fig. A Fig. B

Fig.A When the engine has just been run.

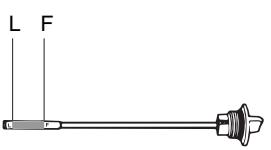
Fig.B When the engine has been off for a week.

The oil is pumped up to the oil tank while the engine is running. The engine oil tank of this motorcycle is located at the upper part of the frame. The engine oil in the frame oil tank decreases when the engine is left unused. The engine oil in the frame oil tank drips to the crankcase. To check the oil level, follow the procedure below:

1. Place the motorcycle on the side stand.
2. Start the engine and allow it to idle for three minutes.



① Oil filler cap and dipstick



3. Stop the engine and wait three minutes.
4. Remove the oil filler cap ①. The engine oil dipstick comes out together with the oil filler cap.
5. Wipe the oil from the dipstick using a clean rag.

6. Holding the motorcycle vertically, reinsert the dipstick until the threads touch the filler neck, but do not screw the cap in.
7. Draw out the dipstick and check the oil level. The level found on the dipstick should be between the "L" (Low) and the "F" (Full) lines. If the oil level is below the "L" line, add fresh oil from the filler hole until the oil level is between the "L" line and the "F" line.

NOTE: Engine oil expands and oil level increases when the engine oil is hot. Check and adjust engine oil level when the engine oil is not hot.

NOTICE

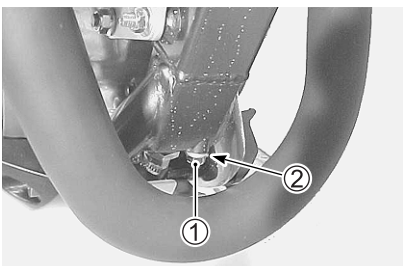
Operating the motorcycle with too little or too much oil can damage the engine.

Place the motorcycle on level ground. Check the oil level with the engine oil dipstick before each use of the vehicle. Be sure the engine oil level is always above the "L" (low) line and not higher than the "F" (full) line.

ENGINE OIL AND FILTER CHANGE

Change the engine oil and oil filter at the scheduled times. The engine should always be warm when the oil is changed so the oil will drain easily. The procedure is as follows:

1. Place the motorcycle on the side stand.
2. Remove the oil filler cap.

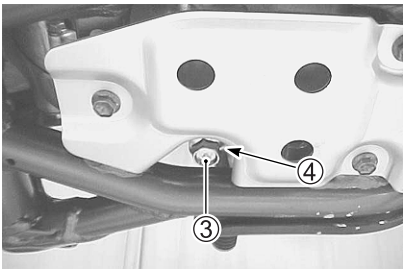


3. Remove the frame tube drain plug ① and gasket ② from the frame and drain the engine oil into a drain pan.

⚠ CAUTION

Hot engine oil and exhaust pipes can burn you.

Wait until the engine oil drain plug and exhaust pipes cool before draining oil.



4. Remove the drain plug ③ and gasket ④ from the bottom of the engine and drain the engine oil into a drain pan.

⚠ WARNING

Children and pets may be harmed by swallowing new or used oil. Repeated, prolonged contact with used engine oil may cause skin cancer. Brief contact with oil may irritate skin.

Keep new and used oil and used oil filters away from children and pets. To minimize your exposure to used oil, wear a long-sleeve shirt and moisture-proof gloves (such as dishwashing gloves) when changing oil. If oil contacts your skin, wash thoroughly with soap and water. Launder any clothing or rags if wet with oil. Recycle or properly dispose of used oil and filters.

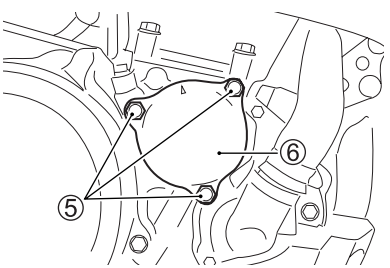
NOTICE

Turning the engine while draining the engine oil will cause oil film shortage and adversely affect the engine.

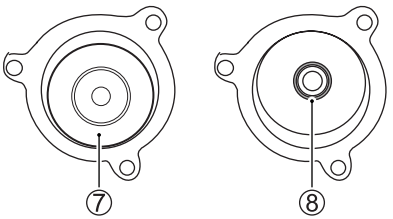
Do not use the electric starter switch during engine oil replacement work.

NOTE:

- *Recycle or properly dispose of used oil.*
- *Before starting the work, check that there is not any dust, mud, or foreign object inside the oil jug or on the oil filter mounting surface.*



5. Remove the three nuts ⑤ and filter cap ⑥.



6. Replace the engine oil filter ⑦ and the O-ring ⑧ with a new one.

NOTICE

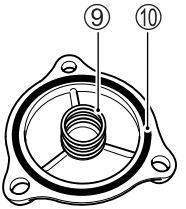
Failure to use an oil filter with the correct design can damage your motorcycle's engine.

Be sure to use a genuine Suzuki oil filter or an equivalent one designed for your motorcycle.

NOTICE

Failure to insert the new oil filter correctly can damage the engine. No oil flow will result if the oil filter is inserted backwards.

Insert the open end of the new oil filter into the engine.



7. Before replacing the oil filter cap, be sure to check that the filter spring ⑨ and the O-ring ⑩ are installed correctly.

NOTE: Insert a new O-ring each time the filter element is replaced.

8. Replace the oil filter cap and tighten the nuts securely but do not overtighten them.
9. Replace the drain plug gaskets ②, ④ with a new one. Reinstall the drain plugs ①, ③ and gaskets ②, ④. Tighten the plug securely with a torque wrench. Pour 1800 ml (1.9/1.6 US/Imp.qt) of new engine oil through the filler hole and install the filler cap. Be sure to always use the specified engine oil described in the FUEL, ENGINE OIL AND COOLANT RECOMMENDATIONS section.

Frame tube drain plug ① tightening torque:
18 N·m (1.8 kgf-m, 13.0 lbf-ft)

Drain plug ③ tightening torque:
21 N·m (2.1 kgf-m, 15.0 lbf-ft)

NOTE: About 1700 ml (1.8/1.5 US/ Imp.qt) of oil will be required when changing oil only.

NOTICE

Engine damage may occur if you use oil that does not meet Suzuki's specifications.

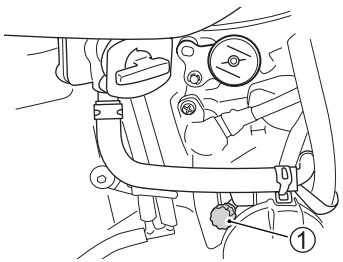
Be sure to use the oil specified in the FUEL, OIL AND ENGINE COOLANT RECOMMENDATIONS section.

10. Start the engine (while the motorcycle is outside on level ground) and allow it to idle for three minutes.
11. Turn the engine off and wait approximately three minute. Recheck the oil level according to oil level check procedure. Inspect the area around the drain plugs and oil filter cap for leaks.

CARBURETOR

The carburetor is factoryset for the best carburetion. Do not attempt to alter its setting. There are two items of adjustment, however, under your care: idle speed and throttle cable play.

IDLE SPEED ADJUSTMENT



To adjust the engine idle speed properly, you need a tachometer. If you do not have one, ask your Suzuki dealer or a qualified mechanic to perform this adjustment.

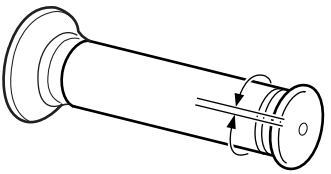
1. Start up the engine and let the engine run until it warms up fully.
2. After engine warms up, turn the throttle stop screw ① located on the carburetor in or out so that engine may run at 1400 – 1600 r/min.

NOTICE

Adjusting the engine idle speed below the specified value can cause engine stalling and adjusting the engine idle speed above the specified value can cause engine overheating and possible damage.

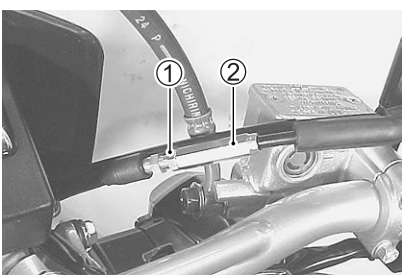
Do not change the idle speed setting outside the specified range. Do not change the idle speed setting unless you have an appropriate tachometer to measure engine speed.

THROTTLE CABLE ADJUSTMENT



2.0 – 4.0 mm
(0.08 – 0.16 in)

Measure the throttle cable play by turning the throttle grip. The throttle grip should have 2.0 – 4.0 mm (0.08 – 0.16 in) play.



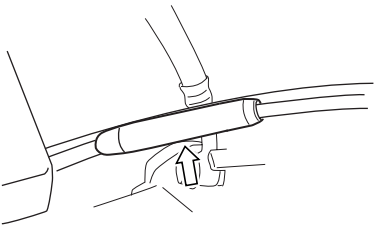
1. Loosen the lock nut ①.
2. Adjust the cable play by turning the adjuster ② in or out to obtain the correct play.
3. After adjusting the play tighten the lock nut.

⚠ WARNING

Inadequate throttle cable play can cause engine speed to rise suddenly when you turn the handlebars. This can lead to loss of control and an accident.

Adjust the throttle cable play so that engine idle speed does not rise due to handlebar movement.

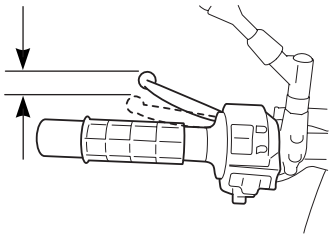
THROTTLE CABLE BOOTS



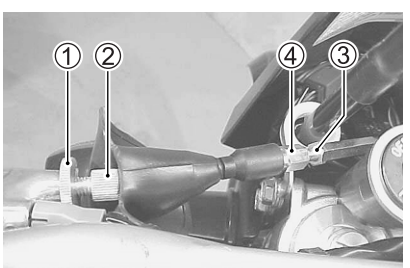
The throttle cable has a boots. Check that the boots are fit securely. Do not apply water directly to the boots when washing. Wipe off dirt from the boots with a wet cloth when the boots are dirty.

CLUTCH

10 – 15 mm (0.4 – 0.6 in)



The play of the clutch lever should be 10 – 15 mm (0.4 – 0.6 in) as measured at the clutch lever end. If you find that the amount of clutch cable play is incorrect, adjust it in the following way.



1. Loosen the lock nut ① and turn in the adjuster ② as far as it will go.
2. Loosen the lock nut ③ and turn the adjuster ④ to obtain the correct play.
3. Minor adjustment can be made with the clutch lever side adjuster ②.
4. Tighten the lock nuts ① and ③.

DRIVE CHAIN

This motorcycle is equipped with a special drive chain. It is an endless type that does not use a master link. We recommend that you take your motorcycle to your authorized Suzuki dealer to have the drive chain replaced when it becomes worn. The drive chain is also constructed of special materials and has grease permanently sealed inside it by the use of special sealing “O” rings.

⚠ WARNING

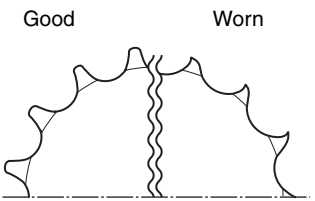
Riding with the chain in poor condition or improperly adjusted can lead to an accident.

Inspect, adjust, and maintain the chain properly before each ride, according to the instructions in this section.

At the periodic inspections, the drive chain should be inspected for the following conditions:

1. Loose pins
2. Damaged rollers
3. Dry or rusted links
4. Kinked or binding links
5. Excessive wear
6. Improper chain adjustment

If the drive chain has any of these condition, then there is a strong possibility that the sprockets will have some damage to them also. Inspect the sprockets for the following:



1. Excessively worn teeth
2. Broken or damaged teeth
3. Loose sprocket mounting nuts

NOTE: The two sprockets should be inspected for wear when a new chain is installed and replaced if necessary.

DRIVE CHAIN CLEANING AND OILING

1. Remove dirt and dust from the drive chain. Be careful not to damage the seal ring.
2. Clean the drive chain with a sealed drive chain cleaner, or water and neutral detergent.

NOTICE

Cleaning the drive chain improperly can damage seal rings and ruin the drive chain.

- **Do not use a volatile solvent such as paint thinner, kerosene and gasoline.**
- **Do not use a high pressure cleaner to clean the drive chain.**
- **Do not use a wire brush to clean the drive chain.**

3. Use a soft brush to clean the drive chain. Be careful not to damage the seal ring even though using a soft brush.
4. Wipe off water and neutral detergent.
5. Lubricate with a motorcycle sealed drive chain lubricant or high viscosity oil (#80 – 90).

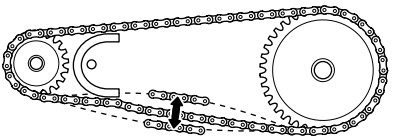
NOTICE

Some drive chain lubricant contains solvents and additives which could damage the seal rings in the drive chain.

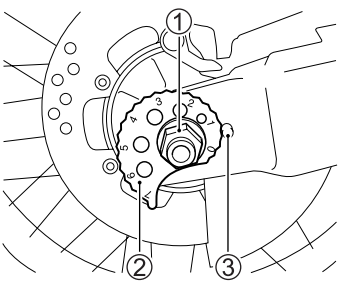
Use sealed drive chain lubricant which is specifically intended for use with sealed drive chains.

6. Lubricate both front and back plates of the drive chain.
7. Wipe off excess lubricant after lubricating all around the drive chain.

DRIVE CHAIN ADJUSTMENT



40 – 50 mm
(1.6 – 2.0 in)



Check the drive chain slack at the middle between the chain buffer and rear sprocket. The chain may require more frequent adjustments than it is with periodic maintenance depending upon your riding conditions.

⚠ WARNING

Too much chain slack can cause the chain to come off the sprockets, resulting in an accident or serious damage to the motorcycle.

Inspect and adjust the drive chain slack before each use.

The slack of the drive chain should be 40 – 50 mm (1.6 – 2.0 in) as measured at the mid-point between the chain buffer and rear sprocket.

1. Place the motorcycle on the side stand.
2. Loosen the axle nut ①.
3. Turn the right and left adjuster ② until the chain has 40 – 50 mm (1.6 – 2.0 in) of slack halfway between the engine sprocket and rear sprocket. At the same time that the chain is being adjusted, the rear sprocket must be kept in perfect alignment with the front sprocket. To assist you in performing this procedure, numbers are stamped on the adjusters for reference. Align both right and left adjusters to the same position against the stoppers ③ on the swingarm by referring to the numbers on the adjusters.
4. Tighten the axle nut securely.
5. Recheck the chain slack after tightening and readjust if necessary.

NOTE: The chain is an endless type chain (no master link) for maximum strength. Chain replacement requires that the swingarm be removed. Trust this work only to a qualified technician. Do not install a master link type chain.

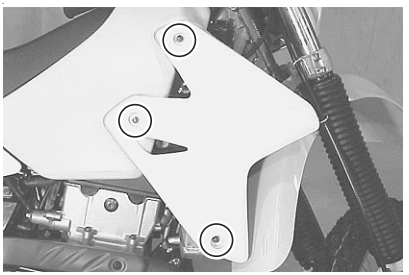
Rear axle nut tightening torque:
110 N·m (11.0 kgf-m, 79.5 lbf-ft)

ENGINE COOLANT

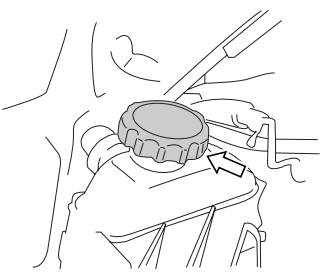
The engine coolant in the radiator will overflow to the coolant reservoir if the engine overheats. Overflowed engine coolant goes back to the radiator when the engine cools. If engine coolant remains in the engine coolant reservoir, replenish the radiator with specified engine coolant.

NOTE:

- *Check the coolant level when the engine is cold.*
- *If the engine coolant reservoir is empty, check the radiator coolant level.*



1. Remove the bolts and radiator cover.



2. Loosen the screw and turn the radiator cap counterclockwise and remove it.

⚠ WARNING

You can be injured by scalding fluid or steam if you open the radiator cap when the engine is hot.

Do not open the radiator cap when the engine is hot. Wait until engine cools.

3. Replenish the radiator with specified engine coolant described in the FUEL, ENGINE OIL AND COOLANT RECOMMENDATIONS section. Engine coolant must be filled up to the bottom of the inlet hole.
4. Tighten the radiator cap securely, and then tighten the screw securely.

RADIATOR HOSE INSPECTION

Inspect the radiator hoses for cracks, damage or engine coolant leakage. If any defects are found, ask your Suzuki dealer to replace the radiator hose with a new one.

BRAKES

This motorcycle utilizes front and rear disc brakes. Properly operating brake systems are vital to safe riding. Be sure to perform the brake inspection as scheduled.

BRAKE SYSTEM

⚠ WARNING

Failure to properly inspect and maintain your motorcycle's brake systems can increase your chance of having an accident.

Be sure to inspect the brakes before each use according to the INSPECTION BEFORE RIDING section. Always maintain your brakes according to the MAINTENANCE SCHEDULE.

Inspect your brake system for the following items daily:

1. Inspect the fluid level in the reservoirs.
2. Inspect the front and rear brake system for signs of fluid leakage.
3. Inspect the brake hose for leakage or a cracked appearance.
4. The brake lever and pedal should have the proper stroke and be firm at all times.
5. Check the wear of the disc brake pads.

BRAKE HOSE INSPECTION

Inspect the brake hoses and hose joints for cracks, damage or brake fluid leakage. If any defects are found, ask your Suzuki dealer to replace the brake hose with a new one.

⚠ WARNING

Brake fluid will gradually absorb moisture through the brake hoses. Brake fluid with high water content lowers the boiling point and can cause brake system malfunction due to corrosion of brake components. Boiling brake fluid or brake system malfunction could result in an accident.

Replace the brake fluid every two years to maintain braking performance.

⚠ WARNING

The use of any fluid except DOT4 brake fluid from a sealed container can damage the brake system and lead to an accident.

Clean filler cap before removing. Use only DOT4 brake fluid from a sealed container. Never use or mix with different types of brake fluid.

⚠ WARNING

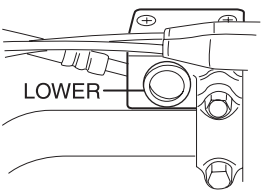
Brake fluid is harmful or fatal if swallowed, and harmful if it comes in contact with skin or eyes. Solution can be poisonous to animals.

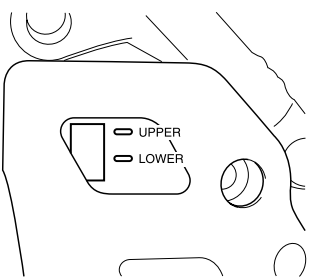
If brake fluid is swallowed, do not induce vomiting. Immediately contact a poison control center or a physician. If brake fluid gets in eyes, flush eyes with water and seek medical attention. Wash thoroughly after handling. Keep out of the reach of children and animals.

NOTICE

Spilled brake fluid can damage painted surfaces and plastic parts.

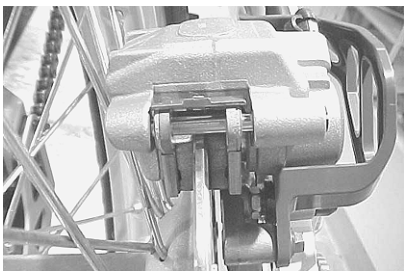
Be careful not to spill any fluid when filling the brake fluid reservoir. Wipe spilled fluid up immediately.





Check the brake fluid level in both the front and rear brake fluid reservoirs. If the level in either reservoir is below the lower mark, inspect for brake pad for wear and leaks.

BRAKE PAD

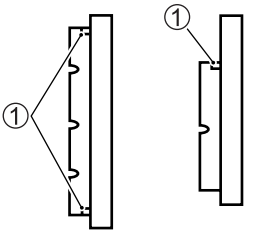


Inspect the front and rear brake pads by noting whether or not the friction pads are worn down to the grooved wear limit line. If a front or rear pad is worn to the grooved wear limit line, both front or both rear pads must be replaced with new ones by your authorized Suzuki dealer or a qualified service mechanic.

⚠ WARNING

Failure to inspect and maintain the brake pads and replace them when recommended can increase your chance of having an accident.

If you need to replace brake pads, have your Suzuki dealer do this work. Inspect and maintain the brake pads as recommended.



① Grooved wear limit line

⚠ WARNING

If you ride this motorcycle after brake system repair or brake pad replacement without pumping the brake lever/pedal, you may get poor braking performance which could result in an accident.

After brake system repair or brake pad replacement, pump the brake lever/pedal several times until brake pads are pressed against the brake discs and proper lever/pedal stroke and firm feel are restored.

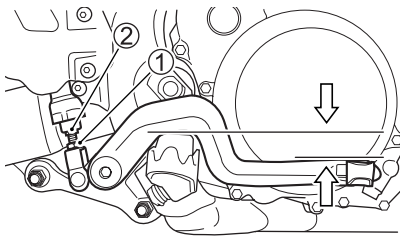
NOTE: Do not squeeze/depress the brake lever/pedal when the pads are not in their positions. It is difficult to push the pistons back and brake fluid leakage may result.

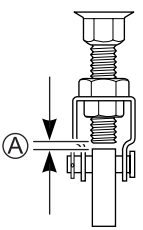
⚠ WARNING

Replacing only one of the two brake pads can result in uneven braking action and can increase your chance of having an accident.

Always replace both pads together.

REAR BRAKE PEDAL ADJUSTMENT





The rear brake pedal position must be properly adjusted at all times or the disc brake pads will rub against the disc causing damage to the pads and to the disc surface. Adjust the brake pedal position in the following manner:

1. Loosen the lock nut ①.
2. Adjust the brake pedal height by turning the adjuster ② to locate the pedal 5 mm (0.2 in) below the top face of the footrest.
3. Check that the clearance of Ⓐ is at least 0.5 mm (0.02 in).
4. Tighten the lock nut ①.

NOTICE

An incorrectly adjusted brake pedal may force brake pads to continuously rub against the disc, causing damage to the pads and disc.

Follow the steps in this section to adjust the brake pedal properly.

TIRES

⚠ WARNING

The tires on your motorcycle form the crucial link between your motorcycle and the road. Failure to take the precautions below may result in an accident due to tire failure.

- **Check tire condition and pressure before each ride, and adjust pressure if necessary.**
- **Avoid overloading your motorcycle.**
- **Replace a tire when worn to the specified limit, or if you find damage such as cuts or cracks.**
- **Always use the size and type of tires specified in this owner's manual.**
- **Balance the wheel after tire installation.**
- **Read this section of the owner's manual carefully.**

TIRE PRESSURE AND LOADING

Proper tire pressure and proper tire loading are important factors. Overloading your tires can lead to tire failure and loss of vehicle control.

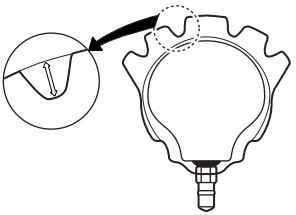
Check tire pressure each day before you ride, and be sure the pressure is correct for the vehicle load according to the table below. Tire pressure should only be checked and adjusted before riding, since riding will heat up the tires and lead to higher inflation pressure readings.

Cold Tire Inflation Pressure

	SOLO RIDING	DUAL RIDING
FRONT	125 kPa 1.25 kgf/cm^2 18 psi	125 kPa 1.25 kgf/cm^2 18 psi
REAR	150 kPa 1.50 kgf/cm^2 22 psi	175 kPa 1.75 kgf/cm^2 25 psi

Under-inflated tires make smooth cornering difficult, and can result in rapid tire wear. Over-inflated tires cause a smaller amount of tire to be in contact with the road, which can contribute to skidding and loss of control.

TIRE TREAD CONDITION



Operating the motorcycle with excessively worn tires will decrease riding stability and can lead to loss of control. It is recommended that a tire be replaced when the remaining depth of tire tread becomes 4.0 mm (0.16 in) or less.

NOTE: These wear limits will be reached before the wear bars molded into the tire make contact with the road.

When you replace a tire, be sure to replace it with a tire of the size and type listed below. If you use a different size or type of tire, motorcycle handling may be adversely affected, possibly resulting in loss of motorcycle control.

	FRONT	REAR
SIZE	80/100-21M/C 51P	120/90-18M/C 65P
TYPE	BRIDGESTONE TRAIL WING-41	BRIDGESTONE TRAIL WING-42

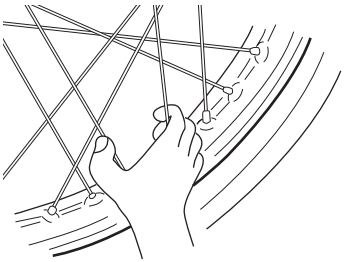
Be sure to balance the wheel after repairing a puncture or replacing the tire. Proper wheel balance is important to avoid variable wheel-to-road contact, and to avoid uneven tire wear.

⚠ WARNING

An improperly repaired, installed, or balanced tire can cause loss of control and an accident, or can wear out sooner.

- **Ask your Suzuki dealer or a qualified mechanic to perform tire repair, replacement, and balancing because proper tools and experience are required.**
- **Install tires according to the rotation direction shown by arrows on the sidewall of each tire.**

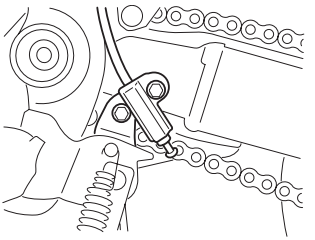
SPOKE NIPPLE TIGHTNESS



Check the tension of spokes to verify the tightness of the spoke nipples. The tension of the spokes can be checked by squeezing the spokes with your fingers. If a spoke nipple is loose, the spoke will bend more than the others. The tension can also be checked by hitting the spokes with a small metal bar. If the spoke nipple is loose, its sound will be dull.

To tighten the spoke nipples properly, tighten them equally to the specified torque. Loosened and overtightened spoke nipples may cause unequal tension of spokes and may result in distortion of the wheel rim. Contact your Suzuki dealer for this service to be performed.

SIDE STAND/IGNITION INTERLOCK SYSTEM



Check the side stand/ignition interlock system for proper operation as follows:

1. Sit on the motorcycle in the normal riding position, with the side stand up.
2. Shift into first gear, hold the clutch in, and start the engine.
3. While continuing to hold the clutch in, move the side stand to the down position.

If the engine stop running when the side stand is moved to the down position, then the side stand/ignition interlock system is working properly. If the engine continues to run with the side stand down and the transmission in gear, then the side stand/ignition interlock system is not working properly. Have your motorcycle inspected by an authorized Suzuki dealer or a qualified service mechanic.

⚠ WARNING

If the side stand/ignition interlock system is not working properly, it is possible to ride the motorcycle with the side stand in the down position. This may interfere with rider control during a left turn and could cause an accident.

Check the side stand/ignition interlock system for proper operation before riding. Check that the side stand is returned to its full up position before starting off.

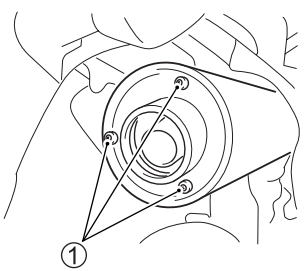
SPARK ARRESTER

The muffler has a spark arrester which must be periodically cleaned to maintain good efficiency. At the intervals shown in the maintenance chart, clean the spark arrester as follows.

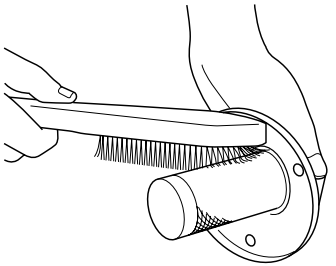
⚠ CAUTION

A hot muffler can burn you. The muffler will be hot enough to burn you for some time after stopping the engine.

Wait until the muffler cools to avoid burns.



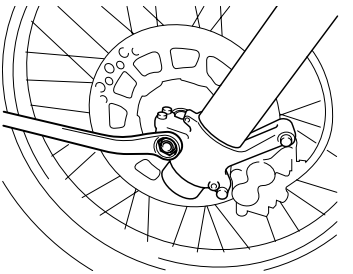
1. Remove the bolts ① and spark arrester.



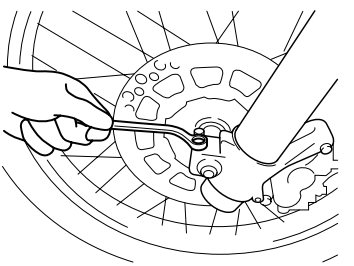
2. Use a brush to remove carbon deposits from the spark arrester screen. Be careful not to damage the spark arrester screen. Check that the screen has no holes or tears. Replace the screen if necessary.

FRONT WHEEL REMOVAL

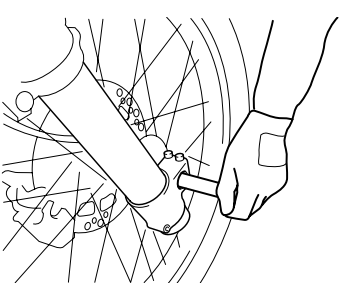
1. Place the motorcycle on the side stand.



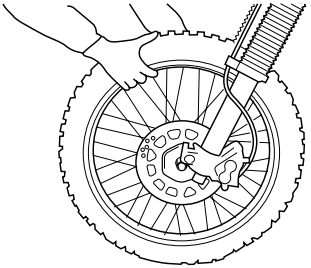
2. Loosen the axle nut.



3. Loosen the two axle holder bolts.
4. Lift the front end of the motorcycle up and place a jack or a block under the engine or chassis tube.



5. Draw out the axle.



6. Slide the front wheel forward.

NOTE: Never squeeze the front brake lever with the front wheel removed. It is very difficult to force the pads back into the caliper assembly and brake fluid leakage may result.

7. To reinstall the wheel assembly reverse the sequence described above.
8. After installing the wheel, apply the brake several times to restore the proper lever stroke.

⚠ WARNING

Failure to extend brake pads after installing the wheel can cause poor braking performance and may result in an accident.

Before riding, "pump" the brake lever repeatedly until brake pads are pressed against the brake discs and proper lever stroke and firm feel are restored. Also check that the wheel rotates freely.

⚠ WARNING

If the bolts and nuts are not properly tightened, the wheel can come off, causing an accident.

Be sure to tighten the bolts and nuts to the specified torque. If you do not have a torque wrench or do not know how to use one, ask your authorized Suzuki dealer to check the bolts and nuts.

Front axle nut tightening torque:
39 N·m (3.9 kgf-m, 28.0 lbf-ft)

Front axle holder bolts tightening torque:
18 N·m (1.8 kgf-m, 13.0 lbf-ft)

NOTE: Be careful not to damage the oil seal when installing the front wheel.

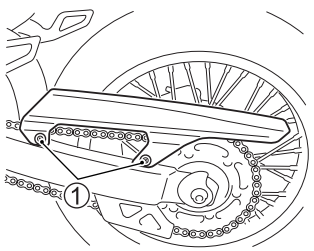
REAR WHEEL REMOVAL

⚠ CAUTION

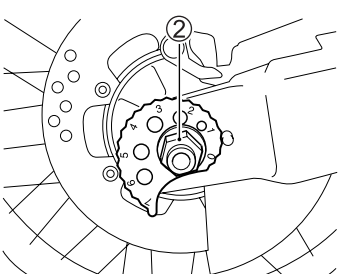
A hot muffler can burn you. The muffler will be hot enough to burn you for some time after stopping the engine.

Wait until the muffler cools to avoid burns.

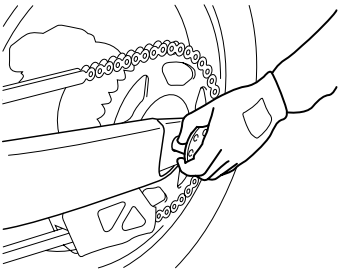
1. Place the motorcycle on the side stand.



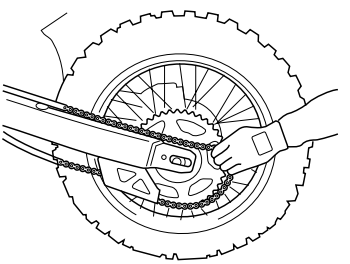
2. Remove the two chain guard screws ① and then remove the chain guard.



3. Remove the axle nut ②.
4. Lift the rear end of the motorcycle up and place a jack or a block under the engine or chassis tubes.



5. Draw out the axle shaft.
6. With the wheel moved forward, remove the chain from the sprocket.



7. Pull the rear wheel assembly rearward.

NOTE: Never depress the rear brake pedal with the rear wheel removed. It is very difficult to force the pads back into the caliper assembly.

8. To replace the wheel, reverse the complete sequence listed.
9. After installing the wheel, apply the brake several times and then check the wheel rotates freely.

⚠ WARNING

Failure to adjust the drive chain and failure to torque bolts and nuts properly could lead to an accident.

- **After installing the rear wheel, adjust the drive chain as described in the DRIVE CHAIN ADJUSTMENT section.**
- **Torque bolts and nuts to the proper specifications. If you are not sure of the proper procedure, have your authorized Suzuki dealer or a qualified mechanic do this.**

⚠ WARNING

Failure to extend brake pads after installing the wheel can cause poor braking performance and may result in an accident.

Before riding, "pump" the brake pedal repeatedly until the brake pads are pressed against the brake discs and proper pedal stroke and firm feel are restored. Also check that the wheel rotates freely.

Rear axle nut tightening torque:
110 N·m (11.0 kgf-m, 79.5 lbf-ft)

LIGHT BULB REPLACEMENT

The wattage rating of each bulb is shown on the chart below. When replacing a burned-out bulb, always use the exact same wattage rating. Using other than the specified rating can result in overloading the electrical system or premature failure of a bulb.

NOTICE

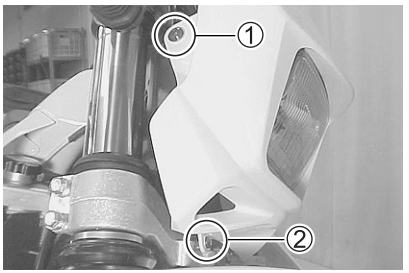
Failure to use a light bulb with the correct wattage rating can overload the electrical system of your motorcycle or cause the bulb to burn out sooner.

Use only the light bulbs shown in the chart as replacement bulbs.

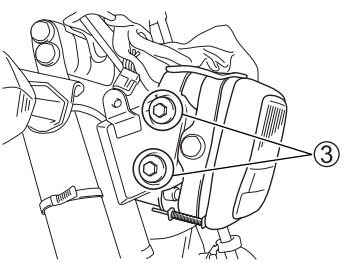
Headlight	12V 60/55W (H4)
Turn signal light	12V 21W
Brake light/Taillight	12V 21/5W

HEADLIGHT

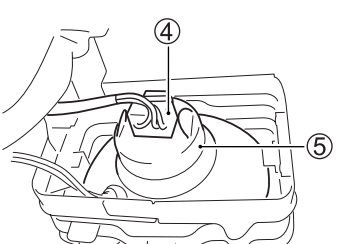
To replace the headlight bulb, follow the procedure below:



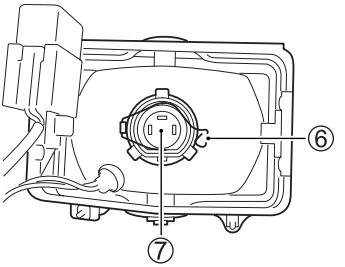
1. Remove the right and left screws ①, ② and take off the headlight cover.



2. Remove the right and left bolts ③.



3. Disconnect the coupler ④ from the headlight.
4. Remove the rubber cap ⑤.



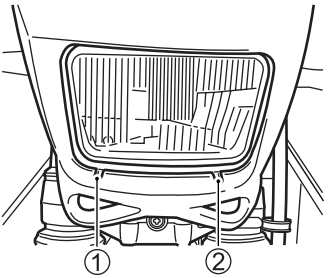
5. Unhook the bulb holder spring ⑥ and remove the bulb ⑦.
6. To reinstall the headlight, reverse the sequence described above.

NOTICE

The headlight bulb's life may be shortened by oil from your fingers if you touch it.

When replacing the headlight bulb, be careful not to touch the glass. Grasp the new bulb with a clean cloth.

HEADLIGHT BEAM ADJUSTMENT



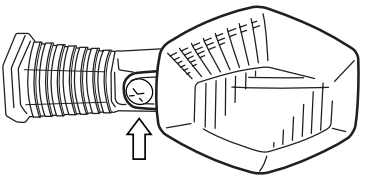
The headlight beam can be adjusted both up and down or right and left if necessary.

To adjust the beam up and down:
Turn the adjuster ① and ② clockwise or counterclockwise.

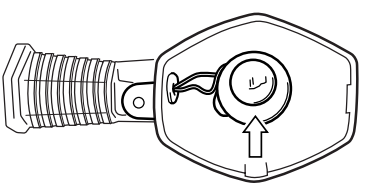
To adjust the beam right and left:
Turn the adjuster ② clockwise or counterclockwise.

TURN SIGNAL LIGHT

To replace the turn signal light bulb, follow these directions:



1. Remove the screw and take off the lens.



2. Push in on the bulb, turn it to the left, and pull it out.
3. To fit the replacement bulb, push it in and turn it to the right while pushing.

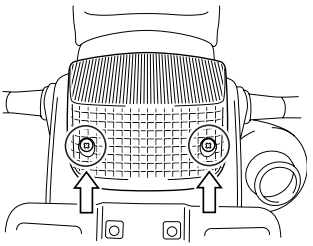
NOTICE

Overtightening the screws when reinstalling the lens may cause the lens to crack.

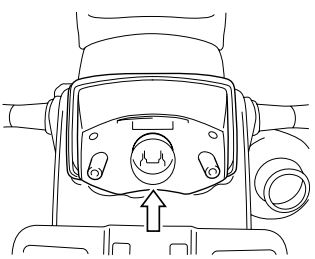
Tighten the screws only until they are snug.

BRAKE LIGHT/TAILLIGHT

To replace the brake light/taillight bulb, follow the procedure below:



1. Remove the two screws and remove the lens.



2. Push in on the bulb, turn it to the left, and pull it out.
3. To fit the replacement bulb, push it in and turn it to the right while pushing.

NOTICE

Overtightening the screws when reinstalling the lens may cause the lens to crack.

Tighten the screws only until they are snug.

FUSE

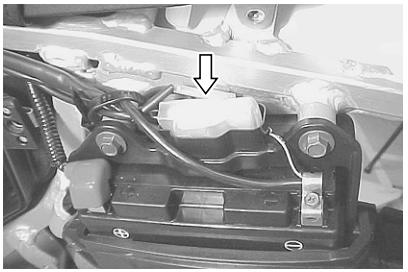
If something electrical on your motorcycle stops working, the first thing you should check for is a blown fuse. The electrical circuits on the motorcycle are protected from overload by fuses in the circuits.

If a blown fuse is found, then the electrical problem must be inspected and repaired before replacing the blown fuse with a new fuse. Consult your Suzuki dealer for the electrical system check and repair.

⚠ WARNING

Replacing a fuse with a fuse that has an incorrect amperage rating or substitute, e.g. aluminum foil or wire, may cause serious damage to the electrical system and possibly fire. Always replace a blown fuse with a fuse of the same amperage rating.

If the new fuse blows in a short time, the electrical problem may not be fixed. Have your motorcycle inspected immediately by your Suzuki dealer.



The fuse is located under the left side frame cover. To access the fuse, remove the left side frame cover by referring to the BATTERY REMOVAL section. One 20A spare fuse is located in the fuse box.

TROUBLESHOOTING

TROUBLESHOOTING

This troubleshooting guide is provided to help you find the cause of some common complaints.

NOTICE

Improper repairs or adjustments may damage the motorcycle instead of fixing it. Such damage may not be covered under warranty.

If you are not sure about the proper action, consult your Suzuki dealer about the problem.

If the engine refuses to start, perform the following inspections to determine the cause.

FUEL SYSTEM CHECK

1. Make sure there is enough fuel in the fuel tank.
2. Check that the fuel valve is in the "ON" position.
3. Make sure there is enough fuel reaching the carburetor from the fuel valve.
   a. Loosen the drain screw located under the carburetor. Drain the fuel from the carburetor into a container.

⚠ WARNING

Fuel and fuel vapor are highly flammable and toxic. You can be burned or poisoned when handling fuel.

When draining the carburetor:
- **Stop the engine and keep flames, sparks, and heat sources away.**
- **Drain fuel only outdoors or in a well-ventilated area.**
- **Do not smoke.**
- **Wipe up spills immediately.**
- **Avoid breathing fuel vapor.**
- **Keep children and pets away.**
- **Dispose of drained fuel properly.**

   b. Place the empty container under the carburetor. Turn the fuel valve to the "PRI" position and see if the fuel flows from the drain hole.
   c. Turn the fuel valve lever to the "ON" position.
   d. Drain the fuel and tighten the drain screw.
   e. Push the electric starter switch for several seconds to crank the engine referring to the STARTING THE ENGINE section.
   f. Loosen the drain screw and check that the carburetor is filled back up with fuel.
   g. Tighten the drain screw.
4. If fuel is reaching the carburetor, ignition system should be checked next.

IGNITION SYSTEM CHECK

1. Remove the spark plug and reattach it to the spark plug cap.

2. While placing the spark plug firmly on the engine, push the starter switch with the ignition switch in the “ON” position, the engine stop switch in the “” position, the transmission in neutral, and the clutch disengaged. If the ignition system is operating properly, a blue spark should jump across the spark plug gap. If there is still no spark, take your motorcycle to an authorized Suzuki dealer.

⚠ WARNING

Performing the spark test improperly can be hazardous. You could get a high voltage electrical shock if you are not familiar with this procedure.

Do not perform this check if you are not familiar with the procedure. Do not point the spark plug near the spark plug hole during this test. Do not perform this test if you have a heart condition or wear a pacemaker.

ENGINE STALLING

1. Check the fuel supply in the fuel tank.
2. Check the ignition system for intermittent spark.
3. Check the idle speed.

STORAGE PROCEDURE AND MOTORCYCLE CLEANING

STORAGE PROCEDURE AND MOTORCYCLE CLEANING

STORAGE PROCEDURE

If the motorcycle is to be left unused for extended period of time for winter storage or any other reason, the machine needs special servicing requiring appropriate materials, equipment and skill. For this reason, Suzuki recommends that you trust this maintenance work to your Suzuki dealer. If you need to service the machine for storage yourself, follow the general guidelines below.

MOTORCYCLE

Clean the entire motorcycle. Place the motorcycle on the side stand on a firm, flat surface where it will not fall over. Turn the handlebars all the way to the left and lock the steering, and remove the ignition key.

FUEL

1. Fill the fuel tank to the top with fuel mixed with the amount of gasoline stabilizer recommended by the stabilizer manufacturer.
2. Drain the carburetor or run the engine for a few minutes until the stabilized gasoline fills the carburetor.

⚠ WARNING

Fuel and fuel vapor are highly flammable and toxic. You can be burned or poisoned when handling fuel.

When draining the carburetor:

- **Stop the engine and keep flames, sparks, and heat sources away.**
- **Drain fuel only outdoors or in a well-ventilated area.**
- **Do not smoke.**
- **Wipe up spills immediately.**
- **Avoid breathing fuel vapor.**
- **Keep children and pets away.**
- **Dispose of drained fuel properly.**

ENGINE

1. Pour one tablespoon of motor oil into each spark plug hole. Reinstall the spark plug and crank the engine a few times.
2. Drain the engine oil thoroughly and refill the crankcase with fresh engine oil all the way up to the filler hole.
3. Cover the air cleaner intake and the muffler outlet with oily rags to prevent humidity from entering.

BATTERY

1. Remove the battery from the motorcycle by referring to the BATTERY section.
2. Clean the outside of the battery with mild detergent and remove any corrosion from the terminals and wiring harness connections.
3. Store the battery in a room above freezing.

TIRES

Inflate the tires to the normal specifications.

EXTERNAL

- Spray all vinyl and rubber parts with rubber preservative.
- Spray the unpainted surfaces with rust preventative.
- Coat the painted surfaces with car wax.

PROCEDURE DURING STORAGE

Once a month, recharge the battery by referring to the BATTERY section. If you cannot charge the battery, consult your authorized Suzuki dealer.

PROCEDURE FOR RETURNING TO SERVICE

1. Clean the entire motorcycle.
2. Remove the oily rags from the air cleaner intake and muffler outlet.
3. Drain all the engine oil. Install a new oil filter and fill the engine with fresh oil as outlined in this manual.
4. Remove the spark plug. Turn the engine a few times. Reinstall the spark plug.
5. Reinstall the battery by referring to the BATTERY section.
6. Make sure that the motorcycle is properly lubricated.
7. Perform the INSPECTION BEFORE RIDING as listed in this manual.
8. Start the motorcycle as outlined in this manual.

CORROSION PREVENTION

It is important to take good care of your motorcycle to protect it from corrosion and keep it looking new for years to come.

Important Information About Corrosion

Common causes of corrosion

- Accumulation of road salt, dirt, moisture, or chemicals in hard-to-reach areas.
- Chipping, scratches, and any damage to treated or painted metal surfaces resulting from minor accidents or impacts from stones and gravel.

Road salt, sea air, industrial pollution, and high humidity will all contribute to corrosion.

How to Help Prevent Corrosion

- Wash your motorcycle frequently, at least once a month. Keep your motorcycle as clean and dry as possible.
- Remove foreign material deposits. Foreign material such as road salt, chemicals, road oil or tar, tree sap, bird droppings and industrial fall-out may damage your motorcycle's finish. Remove these types of deposits as quickly as possible. If these deposits are difficult to wash off, an additional cleaner may be required. Follow the manufacturer's directions when using these special cleaners.
- Repair finish damage as soon as possible. Carefully examine your motorcycle for damage to the painted surfaces. Should you find any chips or scratches in the paint, touch them up immediately to prevent corrosion from starting. If the chips or scratches have gone through to the bare metal, have a Suzuki dealer make the repair.
- Store your motorcycle in a dry, well-ventilated area. If you often wash your motorcycle in the garage or if you frequently park it inside when wet, your garage may be damp. The high humidity may cause or accelerate corrosion. A wet motorcycle may corrode even in a heated garage if the ventilation is poor.
- Cover your motorcycle. Exposure to mid-day sun can cause the colors in paint, plastic parts, and instrument faces to fade. Covering your motorcycle with a high-quality, "breathable" motorcycle cover can help protect the finish from the harmful UV rays in sunlight, and can reduce the amount of dust and air pollution reaching the surface. Your Suzuki dealer can help you select the right cover for your motorcycle.

MOTORCYCLE CLEANING

WASHING THE MOTORCYCLE

When washing the motorcycle, follow the instruction below:

1. Remove dirt and mud from the motorcycle with cool running water. You may use a soft sponge or brush. Do not use hard materials which can scratch the paint.
2. Wash the entire motorcycle with a neutral detergent using a sponge or soft cloth. The sponge or cloth should be frequently soaked in the soap solution.

NOTE: Clean the motorcycle with cool water immediately after riding on road salt or riding along the coast. Be sure to use cool water because warm water can hasten corrosion.

NOTICE

Radiator fins can be damaged by spraying high pressure water on them.

Do not spray high pressure water on the radiator fins.

NOTE: Avoid spraying or allowing water to flow over the following places:

- *Ignition switch*
- *Spark plug*
- *Fuel tank cap*
- *Carburetor*
- *Brake master cylinders*
- *Throttle cable boots*

NOTICE

High pressure washers such as those found at coin-operated car washes have enough pressure to damage the parts of your motorcycle. It may cause rust, corrosion and increase wear. Parts cleaner can also damage motorcycle parts.

Do not use high pressure washers and use parts cleaner to clean your motorcycle.

3. Once the dirt has been completely removed, rinse off the detergent with plenty of water.

NOTE: The detergent used to wash the motorcycle can negatively affect plastic parts if the detergent is not fully rinsed off. Make sure to fully rinse off all detergent with plenty of water after washing the motorcycle.

4. After rinsing, wipe off the motorcycle with a wet chamois or cloth and allow it to dry in the shade.
5. Check carefully for damage to painted surfaces. If there is any damage, obtain “touch-up” paint and “touch-up” the damage following the procedure below:
   a. Clean all damaged spots and allow them to dry.
   b. Stir the paint and “touch-up” the damaged spots lightly with a small brush.
   c. Allow the paint to dry completely.

NOTE: The headlight lens can be fogged after washing the motorcycle or riding in the rain. Headlight fogging will be cleared gradually when the headlight is turned on. When clearing the headlight lens fogging, run the engine to avoid battery discharge.

NOTICE

Cleaning your motorcycle with any alkaline or strong acid cleaner, gasoline, brake fluid, or any other solvent will damage the motorcycle parts.

Make sure to fully rinse off all detergent with plenty of water after washing the motorcycle.

PLASTIC PARTS

Plastic parts such as headlight lens and speedometer display, are easy to be damaged. When such part is cleaned, wash it using water after cleaning it using neutral detergent or soapy water, and wipe it with a soft cloth.

NOTICE

When any of the following substances is attached to the plastic part such as headlight lens or speedometer display, it might cause a scratch or damage to the part.

- **Wax compound**
- **Chemical supplies such as oil film removing agent or repellents**
- **Acidic or alkaline detergent**
- **Brake fluid, gasoline, alcohol or organic solvent, etc.**

WAXING THE MOTORCYCLE

After washing the motorcycle, waxing and polishing are recommended to further protect and beautify the paint.

- Only use waxes and polishes of good quality.
- When using waxes and polishes, observe the precautions specified by the manufacturers.

SPECIAL CARE FOR MATTE FINISH PAINT

Do not use polishing compounds or waxes that contain polishing compounds on surfaces which have a matte finish. The use of polishing compounds will change the appearance of the matte finish.

Solid type waxes may be difficult to remove from surfaces with a matte finish.

Only use cleaners and paint protection products that are specifically designed for matte finishes.

Friction while riding, excessive rubbing or polishing of a surface with a matte finish will change its appearance.

INSPECTION AFTER CLEANING

For extended life of your motorcycle, lubricate it according to the "LUBRICATION POINTS" section.

⚠ WARNING

Operating the motorcycle with wet brakes can be hazardous. Wet brakes may not provide as much stopping power as dry brakes. This could lead to an accident.

Test your brakes after washing the motorcycle, while riding at slow speed. If necessary, apply the brakes several times to let friction dry out the linings.

Follow the procedures in the "INSPECTION BEFORE RIDING" section to check your motorcycle for any problems that may have arisen during your last ride.

SPECIFICATIONS

DIMENSIONS AND CURB MASS

Overall length	2310 mm (90.9 in)
Overall width	875 mm (34.4 in)
Overall height	1230 mm (48.4 in)
Wheelbase	1485 mm (58.5 in)
Ground clearance	300 mm (11.8 in)
Seat height	935 mm (36.8 in)
Curb mass (weight)	146 kg (322 lbs)

ENGINE

Type	Four-stroke, liquid-cooled, DOHC
Number of cylinders	1
Bore	90.0 mm (3.543 in)
Stroke	62.6 mm (2.465 in)
Displacement	398 cm^3 (24.3 cu. in)
Compression ratio	11.3 : 1
Carburetor	MIKUNI BSR36, single
Air cleaner	Polyurethane foam element
Starter system	Electric
Lubrication system	Dry sump

DRIVE TRAIN

Clutch	Wet multi-plate type
Transmission	5-speed constant mesh
Gearshift pattern	1-down, 4-up
Primary reduction ratio	2.960 (74/25)
Gear ratios, Low	2.285 (32/14)
2nd	1.733 (26/15)
3rd	1.375 (22/16)
4th	1.090 (24/22)
Top	0.863 (19/22)
Final reduction ratio	2.933 (44/15)
Drive chain	RK520KZO1, 112 links

CHASSIS

Front suspension	Telescopic, coil spring, oil damped
Rear suspension	Link type, coil spring, oil damped
Front suspension stroke	288 mm (11.3 in)
Rear wheel travel	295 mm (11.6 in)
Caster	27° 10’
Trail	107 mm (4.21 in)
Steering angle	45° (right & left)
Turning radius	2.2 m (7.2 ft)
Front brake	Disc
Rear brake	Disc
Front tire size	80/100-21M/C 51P, tube type
Rear tire size	120/90-18M/C 65P, tube type

ELECTRICAL

Ignition type	Electronic ignition (CDI)
Spark plug	NGK CR8E or DENSO U24ESR-N
Battery	12V 21.6 kC(6 Ah)/10 HR
Generator	Three-phase A.C. generator
Fuse	20A
Headlight	12V 60/55W (H4)
Turn signal light	12V 21W × 4
Brake light/Taillight	12V 21/5W
Speedometer light	LED
Neutral indicator light	LED
High beam indicator light	LED
Turn signal indicator light	LED
Water temperature indicator light	LED

CAPACITIES

Fuel tank,	including reserve	10.0 L (2.6/2.2 US/Imp. gal)
	Reserve	2.3 L (0.6/0.5 US/Imp. gal)
Engine oil,	oil change	1700 ml (1.8/1.5 US/Imp. qt)
	With filter change	1800 ml (1.9/1.6 US/Imp. qt)
Coolant		1250 ml (1.3/1.1 US/Imp. qt)

INDEX