



# GS500/F

*OWNER'S MANUAL*

Part No. 99011-01D70-01A  
July, 2008  EN

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/NOTE

Please read this manual and follow its instructions carefully. To emphasize special information, the words WARNING, CAUTION and NOTE carry special meanings and should be carefully reviewed.

### WARNING

The personal safety of the rider may be involved. Disregarding this information could result in injury to the rider.

### CAUTION

These instructions point out special service procedures or precautions that must be followed to avoid damaging the machine.

*NOTE: This provides special information to make maintenance easier or important 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 ESPAÑA, S. A.

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## CONSUMER INFORMATION

### ACCESSORY INSTALLATION AND PRECAUTION SAFETY TIPS

There are a great variety of accessories available to Suzuki owners. Suzuki can not have direct control over the quality or suitability of accessories you may wish to purchase. 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 for your Suzuki. We have developed some general guidelines which will aid you when deciding whether, and how to equip your motorcycle.

#### **WARNING**

**Improper accessories or modifications can make your motorcycle unsafe and can lead to an accident.**

**Never modify the motorcycle with improper or poorly installed accessories. Follow all instructions in this owner's manual regarding accessories and modifications. Use genuine SUZUKI accessories or equivalent that have been designed and tested for your motorcycle. Consult your SUZUKI dealer if you have any questions.**

- 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 steering ease.

G.V.W.: 380 kg (840 lbs)  
at the tire pressure (cold)  
Front: 225 kPa (2.25 kg/cm<sup>2</sup>, 33 psi)  
Rear: 280 kPa (2.80 kg/cm<sup>2</sup>, 41 psi)

- At any time that additional weight or aerodynamic affecting accessories are installed, they should be mounted as low as possible, as close to the motorcycle and as near the center of gravity as is feasible. The mounting brackets and other attachment hardware should be carefully checked to ensure that they provide for a rigid, non-movable mount. Weak mounts can allow the shifting of the weight and create a dangerous, unstable condition.
- Inspect for proper ground clearance and bank angle. An improperly mounted load could critically reduce these two safety factors. Also confirm that the "load" 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. This 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 handlebar or front fork should be as light as possible and kept to a minimum.
- The motorcycle may be affected by a lifting condition or by an instability in cross winds or when being passed or passing large vehicles. Improperly mounted or poorly designed accessories can result in an unsafe riding condition, therefore caution should be used when selecting and installing all accessories.
- 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.

When carrying a load on the motorcycle, mount it as low as possible and as close as possible to the machine. An improperly mounted load can create a high center of gravity which is very hazardous and makes the motorcycle difficult to handle. The size of the "load" can also affect the aerodynamics and handling of the motorcycle. Balance the load between the right and left sides of the motorcycle and fasten it securely.



## **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.

### **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.

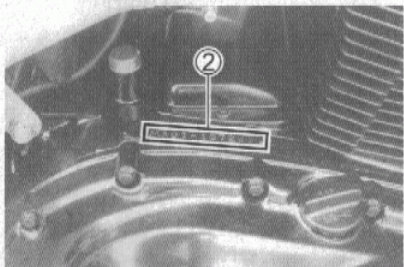
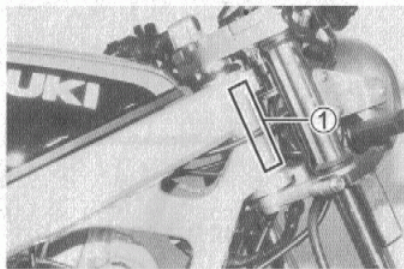
### **BE EXTRA SAFETY CONSCIOUS ON BAD WEATHER DAYS**

Riding on bad weather days, especially wet ones, requires extra caution. Braking distances double on a rainy day. Stay off 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.

## 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. 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:

## NOISE CONTROL SYSTEM (AUSTRALIA ONLY)

### TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED

Owners are warned that the law may prohibit:

- The removal or rendering inoperative by any person other than for purposes of maintenance, repair or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use; and
- The use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.





# CONTROLS

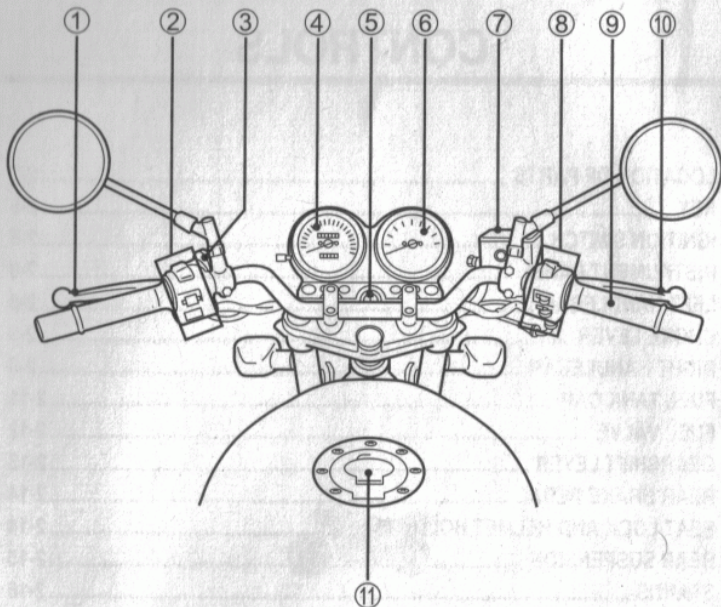
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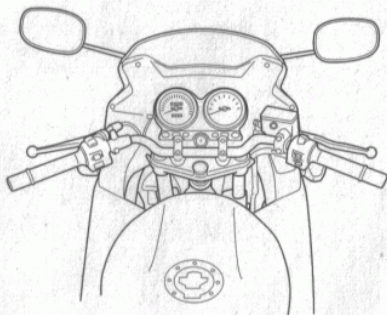
# CONTROLS

## LOCATION OF PARTS

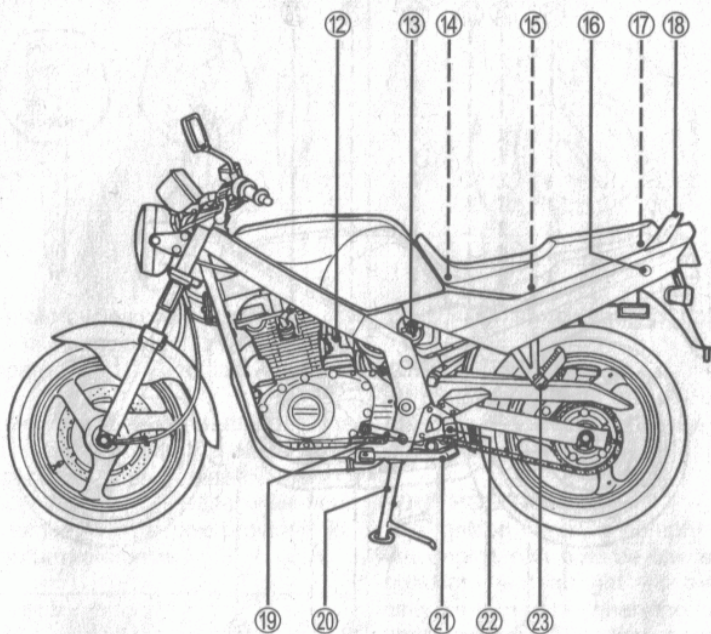


### GS500

- ① Clutch lever
- ② Left handlebar switches
- ③ Choke lever
- ④ Speedometer
- ⑤ Ignition switch
- ⑥ Tachometer
- ⑦ Front brake reservoir
- ⑧ Right handlebar switches
- ⑨ Throttle grip
- ⑩ Front brake lever
- ⑪ Fuel tank cap

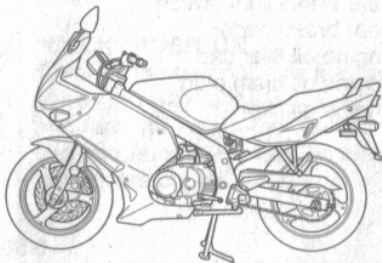


### GS500F



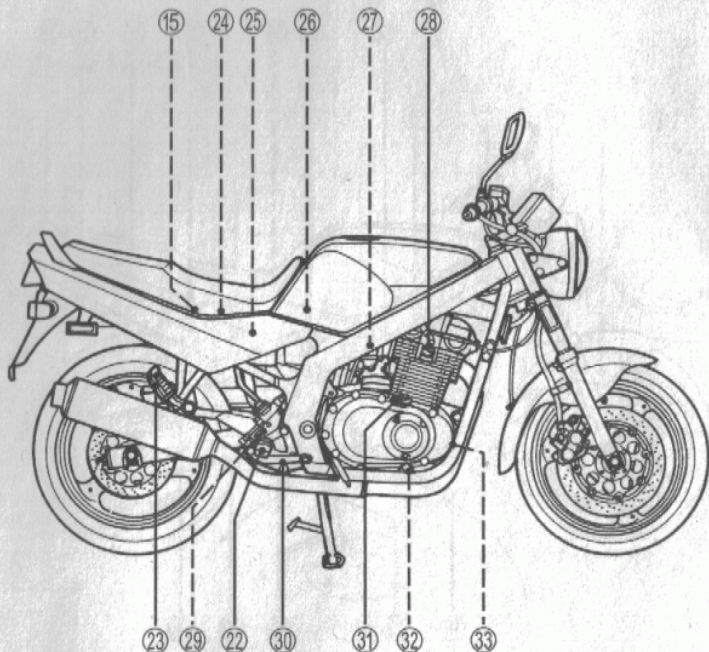
## GS500

- ⑫ Throttle stop screw
- ⑬ Fuel valve
- ⑭ Battery
- ⑮ Helmet holders
- ⑯ Seat lock
- ⑰ Tools
- ⑱ Passenger grab handle
- ⑲ Gearshift lever
- ⑳ Center stand
- ㉑ Side stand
- ㉒ Footrests
- ㉓ Passenger footrests



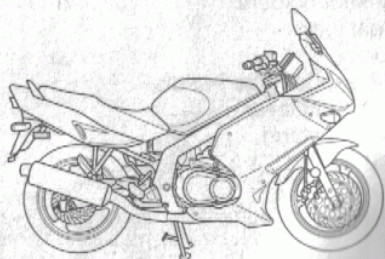
## GS500F





## GS500

- ②④ Rear brake fluid reservoir
- ②⑤ Fuse
- ②⑥ Air cleaner
- ②⑦ Carburetors
- ②⑧ Spark plug
- ②⑨ Rear brake light switch
- ③⑩ Rear brake pedal
- ③① Engine oil filler cap
- ③② Engine oil drain plug
- ③③ Engine oil filter



## GS500F

## KEY



This motorcycle comes equipped with a pair of identical ignition keys. Keep the spare key in a safe place.

The key number is stamped on a plate provided with the keys. This number is used when making replacement keys. Please write your key number in the box provided for your future reference.

Key number:

## IGNITION SWITCH



The ignition switch has four positions:

### "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.*

### "LOCK" POSITION

To lock the steering, turn the handlebar all the way to the left. Push down and turn the key to the "LOCK" position and remove the key. All electrical circuits are cut off.





### "P" (Parking) POSITION (Except for Australia)

When parking the motorcycle, turn the handlebar all the way to the left. Push down and turn the key to the parking position. The key can now be removed and the \*position light and taillight will remain lit and the steering will be locked. This position is for night time roadside parking to increase visibility.

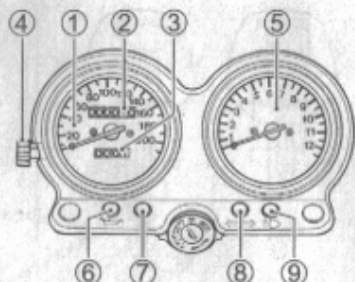
\* Canadian and Australian models of GS500 do not have position light.

## ⚠ WARNING

Turning the ignition switch to the "P" (PARKING) or "LOCK" position while the motorcycle is moving can be hazardous. Moving the motorcycle while the steering is locked can be hazardous. You could lose your balance and fall, or you could drop the motorcycle.

Stop the motorcycle and place it on the side stand or center stand before locking the steering. Never attempt to move the motorcycle when the steering is locked.

## INSTRUMENT PANEL



### SPEEDOMETER ①

The speedometer indicates the road speed in miles per hour and/or kilometers per hour.

### ODOMETER ②

The odometer registers the total distance that the motorcycle has been ridden.


### TRIP METER ③

The trip meter is a resettable odometer located in the speedometer assembly. It can be used for indicating the distance traveled on short trips or between fuel stops. Turning the knob ④ counterclockwise will return the meter to zero.

### TACHOMETER ⑤

The tachometer indicates the engine speed in revolutions per minute (r/min).

## OIL PRESSURE INDICATOR LIGHT

 ⑥

This indicator comes on when the engine oil pressure is below the normal operating range. This should come on when the ignition switch is "ON" and the engine is not running. As soon as the engine starts, this should go out.

## CAUTION

Riding the motorcycle with the oil pressure indicator light lit can damage the engine and transmission.

Whenever the oil pressure indicator lights up, indicating low oil pressure, stop the engine immediately. Check the oil level and determine if the proper amount of oil is in the engine. If the light still does not go out, have your authorized SUZUKI dealer or a qualified mechanic troubleshoot your motorcycle.

## NEUTRAL INDICATOR LIGHT "N"

 ⑦

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.

## TURN SIGNAL INDICATOR LIGHT

 ⑧

When the turn signals are being operated either to the right or to the left, the indicator will flash at the same time.

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

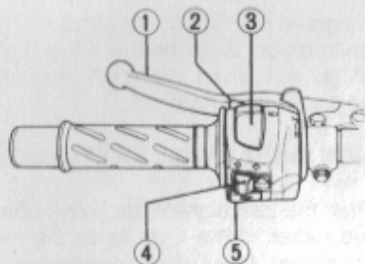
## HIGH BEAM INDICATOR LIGHT

 ⑨

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



## 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.

### HEADLIGHT FLASHER SWITCH ② (Except for Canada)

Press the switch to flash the headlight.

### DIMMER SWITCH ③





#### "" position



The headlight low beam and taillight turn on.

#### "" position

The headlight high beam and taillight turn on. The high beam indicator light also turns on.

## CAUTION

Holding the dimmer switch between "" and "" position will light both "" and "" headlight beam. This operation can damage the motorcycle.



Use the dimmer switch only at "" or "" position.

## CAUTION

Sticking some tape or placing objects in front of the headlight can damage the headlight.

Do not stick any tapes to the headlight. Do not place objects in front of the headlight.

### TURN SIGNAL SWITCH "" ④

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 in.

## ▲ 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.

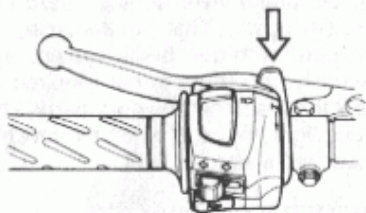
Always use the turn signals when you intend to change lanes or make a turn. Be sure to turn off the turn signals after completing the turn or lane change.

### HORN SWITCH "" ⑤

Press the switch to sound the horn.



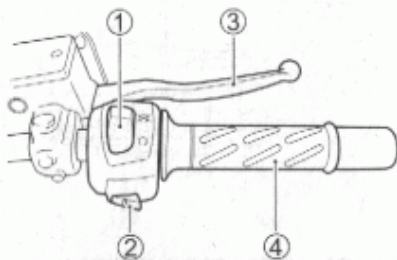
## CHOKE LEVER



The carburetor is equipped with a choke system to provide easy starting when the engine is cold. When starting the cold engine, turn the choke lever 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.*

## RIGHT HANDLEBAR



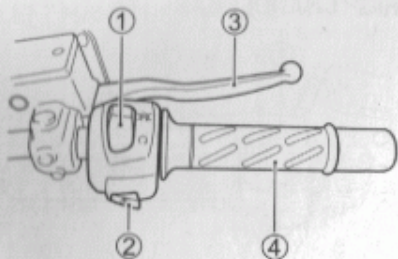
### ENGINE STOP SWITCH ①

#### “” position

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

#### “” position

The ignition circuit is on and the engine can run.



### ELECTRIC STARTER BUTTON

"**Ⓜ**" ②

This button is used for operating the starter motor. With the ignition switch in the "ON" position, the transmission in neutral, push the electric starter button to engage the starter motor and start the engine.

*NOTE: This motorcycle is equipped with interlock switches 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.

## CAUTION

To prevent electrical system damage, do not operate the starter motor 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.

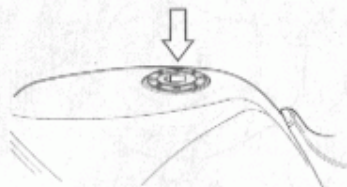
### FRONT BRAKE LEVER ③

The front brake is applied by squeezing the brake lever gently toward the throttle grip. This motorcycle is equipped with disk 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.

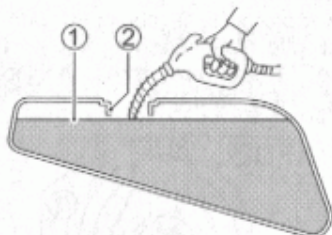
### THROTTLE GRIP ④

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

## FUEL TANK CAP



To open the fuel tank cap, insert the ignition key into the lock and turn it clockwise. With the key inserted, lift up with the key and open the fuel tank cap. To close the fuel tank cap, push the cap down firmly with the key in the cap lock.



- ① Fuel level
- ② Filler neck

### **⚠ WARNING**

Overfilling the fuel tank can cause the fuel to overflow when it expands due to heat from the engine or the sun. Spilled fuel can catch on fire.

Never fill the fuel above the bottom of the filler neck.

### **⚠ WARNING**

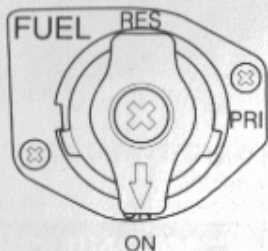
Fuel and fuel vapor are highly flammable and toxic. You can be burned or poisoned when refueling.

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



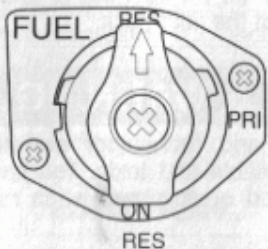
## FUEL VALVE

This motorcycle is equipped with an automatic type, diaphragm style fuel valve. There are three positions: "ON", "RES" and "PRI".



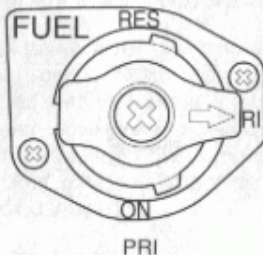
### "ON" POSITION

The normal position for the fuel valve lever is in the "ON" position. In this position, no fuel will flow from the fuel valve to the carburetor unless the engine is running or being started.



### "RES" (RESERVE) POSITION

If the fuel level in the tank is too low, turn the lever to the "RES" position to use the reserve fuel supply 4.3 L (1.1/0.9 US/Imp. gal). In this position, no fuel will flow from the fuel valve to the carburetor unless the engine is running or being started.



### "PRI" (PRIMING) POSITION

If the motorcycle has run out of fuel or has been stored for an extended period, there may not be any gasoline in the carburetor. In this instance, the fuel valve lever should be moved to the "PRI" position. This will allow the fuel to flow directly into the carburetor even though the engine is not operating. Upon starting the engine, be sure to return the lever to the "ON" position or if necessary, to the "RES" position.

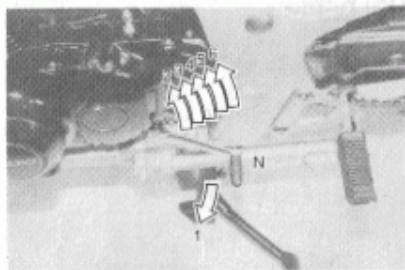
## ▲ WARNING

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.

*NOTE: After switching the fuel valve lever to the "RES" position, refill the tank at the closest gasoline station. After refueling, be sure to move the fuel valve to the "ON" position.*

## GEARSHIFT LEVER

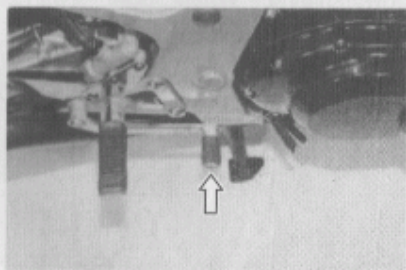


This motorcycle has a 6-speed transmission which operates as shown. To shift properly, pull the clutch lever and close the throttle at the same time you operate the gearshift lever. Lift the gearshift lever to upshift and depress the lever to downshift. Neutral is located between 1st and 2nd gear. When 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.

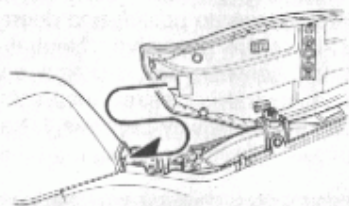
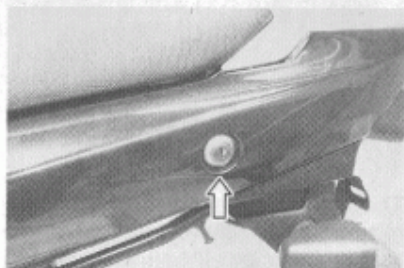
## REAR BRAKE PEDAL



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

## SEAT LOCK AND HELMET HOLDERS

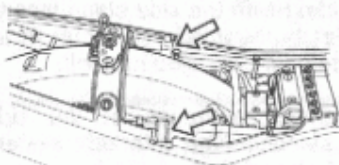
### Seat lock



To unlock the seat, insert the ignition key into the lock and turn it clockwise. To lock the seat, slide the seat hook into the seat hook retainer and push down firmly.



## Helmet holders



There are helmet holders under the seat. To use them, remove the seat, hook your helmet fastener ring to the holder and refit the seat.

### **⚠ WARNING**

Failure to install the seat properly could allow the seat to move and cause loss of rider control.

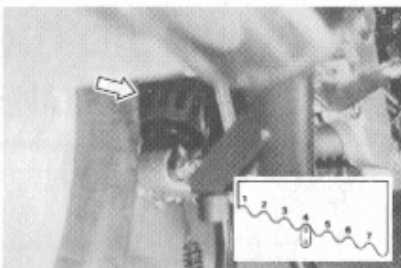
Fasten the seat securely in its proper position.

### **⚠ WARNING**

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

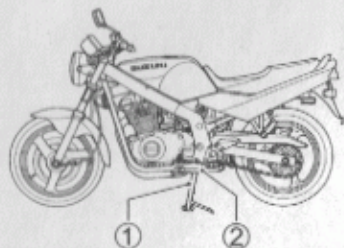
Never carry a helmet fastened to a helmet holder. Fix the helmet securely atop the seat if you must carry it.

## REAR SUSPENSION



The rear suspension spring pre-load is adjustable to compensate for rider, load, riding style and road conditions. The spring pre-load is adjustable to seven positions. To change the spring pre-load setting, place the motorcycle on the center stand. Twist the spring tension ring to the desired position with the adjuster provided in the tool kit. Position 1 provides the softest spring tension and position 7 provides the stiffest. This motorcycle is delivered from the factory with its adjuster set on the 4 position.

## STANDS



This motorcycle is equipped with a center stand and side stand.

### CENTER STAND ①

To place the motorcycle on the center stand, place your foot on the stand extension and then rock the motorcycle to the rear and upward with the side grip with your right hand, while steadying the handlebars with your left hand.

### SIDE STAND ②

An interlock switch 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 switch works as follows:

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

## CAUTION

Park the motorcycle on firm, level ground to help prevent it from falling over.

If you must park on an incline, put the front of the motorcycle toward uphill and put the transmission into 1st gear to reduce the possibility of rolling off the side stand.



# FUEL AND OIL RECOMMENDATION

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FUEL OCTANE RATING .....	3-2
OXYGENATED FUEL RECOMMENDATION .....	3-2
ENGINE OIL .....	3-3

## FUEL AND OIL RECOMMENDATION

### 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.

If pinking or knocking is experienced, substitute higher octane grade gasoline or another brand, because there are differences between brands.

#### (For 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.

## OXYGENATED FUEL RECOMMENDATION

### (For 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 MTBE or alcohol.*

### Gasoline Containing MTBE

Unleaded gasoline containing MTBE (Methyl Tertiary Butyl Ether) may be used in your motorcycle if the MTBE content is not greater than 15%. This oxygenated fuel does not contain alcohol.

### Gasoline/Ethanol Blends

Blends of unleaded gasoline and ethanol (grain alcohol), also known as "GASOHOL", may be used in your motorcycle if the ethanol content is not greater than 10%.

### Gasoline/Methanol Blends

Fuels containing 5% or less methanol (wood alcohol) may be suitable for use in your motorcycle if they contain co-solvents and corrosion inhibitors.

DO NOT USE fuels containing more than 5% methanol under any circumstances. Fuel system damage or motorcycle performance problems resulting from the use of such fuels are not the responsibility of Suzuki and may not be covered under the New Vehicle Limited Warranty or the Emission Control System Warranty.

**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 driveability 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.

**CAUTION**

Spilled gasoline containing alcohol can harm your motorcycle. Alcohol can damage painted surfaces.

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

**ENGINE OIL**

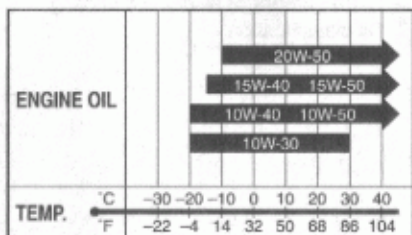
Oil quality is a major contributor to your engine's performance and life. Always select good quality engine oil. Use oil with an API (American Petroleum Institute) classification of SF/SG or SH/SJ, or with a JASO classification of MA.

SAE	API	JASO
10W-40	SF or SG	-
10W-40	SH or SJ	MA

API: American Petroleum Institute  
 JASO: Japanese Automobile Standards Organization

**SAE Engine Oil Viscosity**

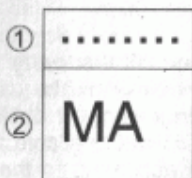
Suzuki recommends the use of SAE 10W-40 engine oil. If SAE 10W-40 engine oil is not available, select an alternative according to the following chart.



## 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 and MB. 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" oils. Some engine oils which have an API classification of SH or higher have an "ENERGY CONSERVING" indication in the API classification doughnut mark. These oils can affect engine life and clutch performance.



Not recommended



Recommended



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

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MAXIMUM ENGINE SPEED RECOMMENDATION .....	4-2
VARY THE ENGINE SPEED .....	4-2
BREAKING IN THE NEW TIRES .....	4-2
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## BREAK-IN (RUNNING-IN) AND INSPECTION BEFORE RIDING

The opening explains how important proper break-in is to achieving 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)	Below 5500 rpm
Up to	1600 km (1000 miles)	Below 8000 rpm
Over	1600 km (1000 miles)	Below 11000 rpm

### 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.

### BREAKING IN THE NEW TIRES

New tires need proper break-in to assure maximum performance, just as the engine does. Wear-in the tread surface by gradually increasing your cornering lean angles over the first 160 km (100 miles) before attempting maximum performance. Avoid hard acceleration, hard cornering, and hard braking for the first 160 km (100 miles).

### WARNING

Failure to perform break-in of the tires could cause tire slip and loss of control.

Use extra care when riding on new tires. Perform proper break-in of the tires as described in this section and avoid hard acceleration, hard cornering, and hard braking for the first 160 km (100 miles).

### 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 initial service (1000 km maintenance) is the most important service your motorcycle will receive. During break-in operation, all of the engine components will have mated together and seated. Maintenance required as part of the initial service includes correction of all adjustments, tightening of all fasteners and replacement of dirty oil. Timely performance of this service will help make sure you get the best 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 in that section.*

## INSPECTION BEFORE RIDING

### WARNING

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

Always perform a pre-ride inspection before each ride. Refer to the table on page 4-4 for check items. For further details, refer to the INSPECTION AND MAINTENANCE section.

### WARNING

Using worn, improperly inflated, or incorrect tires will reduce stability and can cause an accident.

Follow all instructions in the TIRES section in this owner's manual.

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 parts.

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



WHAT TO CHECK	CHECK FOR:
Steering	<ul style="list-style-type: none"> <li>• Smoothness</li> <li>• No restriction of movement</li> <li>• No play or looseness</li> </ul>
Throttle	<ul style="list-style-type: none"> <li>• Correct play in the throttle cable</li> <li>• Smooth operation and positive return of the throttle grip to the closed position</li> </ul>
Clutch	<ul style="list-style-type: none"> <li>• Correct play in the cable</li> <li>• Smooth and progressive action</li> </ul>
Brakes	<ul style="list-style-type: none"> <li>• Proper pedal and lever operation</li> <li>• Fluid level in the reservoir to be above "LOWER" line</li> <li>• Correct pedal and lever play</li> <li>• No "sponginess"</li> <li>• No fluid leakage</li> </ul>
Fuel	Enough fuel for the planned distance of operation
Battery	Solution level to be above "LOWER" line
Drive chain	<ul style="list-style-type: none"> <li>• Correct tension or slack</li> <li>• Adequate lubrication</li> </ul>
Tires	<ul style="list-style-type: none"> <li>• Correct pressure</li> <li>• Adequate tread depth</li> <li>• No cracks or cuts</li> </ul>
Engine oil	Correct level
Lighting	Operation of all lights and indicators
Horn	Correct function
Engine stop switch	Correct function
Side stand/ignition interlock switch	Proper operation





# RIDING TIPS

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STARTING THE ENGINE .....	5-2
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USING THE TRANSMISSION .....	5-4
RIDING ON HILLS .....	5-5
STOPPING AND PARKING .....	5-5

## RIDING TIPS

### STARTING THE ENGINE

Before attempting to start the engine, make sure:

1. The transmission is in neutral.
2. The fuel valve lever is in the "ON" position.
3. The engine stop switch is in the "O" position.

*NOTE: This motorcycle is equipped with interlock switches 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. Turn the choke lever all the way towards you. Close the throttle completely.
2. Push the electric starter button.
3. Immediately after the engine starts, keep the engine speed at 2000 – 3000 r/min by varying the choke lever position.
4. Move the choke lever 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:**

Use of the choke should not be necessary. Open the throttle 1/8 to 1/4 turn and push the electric starter button.

## **WARNING**

Running the engine indoors or in a garage can be hazardous. Exhaust gas contains carbon monoxide, a gas that is colorless and odorless and can cause death or severe injury.

Only run the engine outdoors where there is fresh air.

## **CAUTION**

Running the engine too long without riding may cause the engine to overheat. Overheating can result in damage to internal engine components and discoloration of exhaust pipes.

Shut the engine off if you cannot begin your ride promptly.

## STARTING OFF

### WARNING

Riding this motorcycle at excessive speed increases your chances of losing control of the motorcycle. This may result in an accident.

Always ride within the limits of your skills, your motorcycle, and the riding conditions.

### WARNING

Removing your hands from the handlebars or feet from the footrests during operation can be hazardous. If you remove even one hand or foot from the motorcycle, you can reduce your ability to control the motorcycle.

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 upset your control.

Reduce your speed and be alert to side winds.

Pull the clutch lever in and pause momentarily. Engage first gear by depressing the gearshift lever downward. Twist the throttle grip toward you and at the same time release the clutch lever gently and smoothly. As the clutch engages, the motorcycle will start moving forward. To shift to the next higher gear, accelerate gently, then close the throttle and pull the clutch lever in simultaneously. Lift the gearshift lever upward to select the next gear, release the clutch lever and open the throttle again. Select higher gears in this manner until top gear is reached.

*NOTE: This motorcycle is equipped with a side stand/ignition interlock switch. 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.

### 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.

## CAUTION

Revvng the engine into the red zone can cause severe engine damage.

Never allow the engine to rev into the red zone in any gear.



## 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 descending a long, steep slope, use engine compression to assist the brakes by shifting to a lower gear. Continuous brake application can overheat the brakes and reduce their effectiveness.
- 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) just before the motorcycle stops. 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

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.

Be sure you have a safe stopping distance between you and the vehicle in front of you.

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

## WARNING

A hot muffler can burn you. The muffler will be hot enough to burn you 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 engine.*

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

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

# INSPECTION AND MAINTENANCE

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## 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 increases the chance of an accident or motorcycle damage.

Always follow the inspection and maintenance recommendations and schedules in this owner's manual. Ask your SUZUKI dealer or a qualified mechanic to do 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, have your SUZUKI dealer or a qualified mechanic do them.

### WARNING

Running the engine indoors or in a garage can be hazardous. Exhaust gas contains carbon monoxide, a gas that is colorless and odorless and can cause death or severe injury.

Only run the engine outdoors where there is fresh air.



## CAUTION

Using poor quality replacement parts can cause your motorcycle to wear more quickly and may shorten its useful life.

Use only genuine Suzuki replacement parts or their equivalent.

*NOTE: The MAINTENANCE CHART specifies 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.*



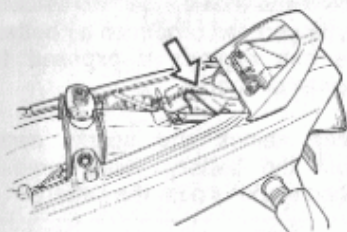
## MAINTENANCE CHART

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

Item	Interval		1000	6000	12000	18000	24000	
	km							
	miles	months	600	4000	7500	11000	14500	
Battery (Specific gravity of electrolyte)			-	I	I	I	I	
Air cleaner element	Clean every 3000 km (2000 miles) and replace every 12000 km (7500 miles)							
* Exhaust pipe bolts and muffler bolts			T	T	T	T	T	
* Valve clearance			I	I	I	I	I	
Spark plugs			-	I	R	I	R	
Fuel line			I	I	I	I	I	
	*Replace every 4 years							
Engine oil and oil filter			R	R	R	R	R	
Idle speed			I	I	I	I	I	
Throttle cable play			I	I	I	I	I	
PAIR (air supply) system			-	-	I	-	I	
Clutch cable play			I	I	I	I	I	
Drive chain			I	I	I	I	I	
	Clean and lubricate every 1000 km (600 miles)							
* Brakes			I	I	I	I	I	
Brake hose			I	I	I	I	I	
	*Replace every 4 years							
Brake fluid			-	I	I	I	I	
	*Replace every 2 years							
Tires			I	I	I	I	I	
* Steering			I	I	I	I	I	
* Front forks			I	-	I	-	I	
* Rear suspension			I	-	I	-	I	
* Chassis bolts and nuts			T	T	T	T	T	

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

## TOOLS



A tool kit is supplied and located behind the seat.

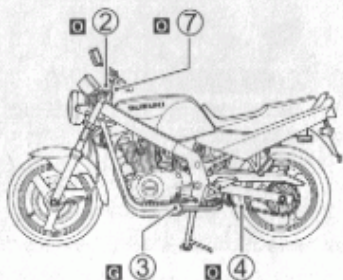
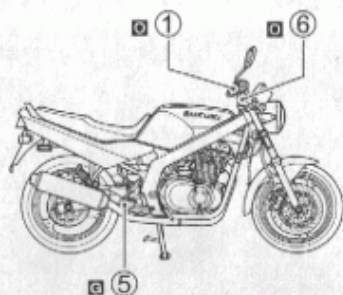
## LUBRICATION POINTS

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.

### CAUTION

Lubricating switches can damage the switches.

Do not apply grease and oil to the switches.

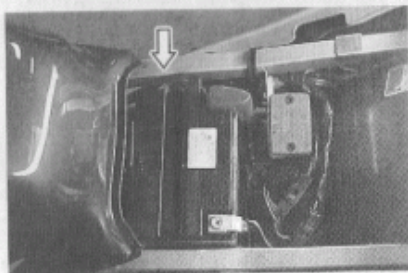


- ⓪ ... Motor oil
- Ⓞ ... Grease

- ① Brake lever holder
- ② Clutch lever holder and clutch cable
- ③ Side stand pivot and spring hook
- ④ Drive chain
- ⑤ Brake pedal pivot
- ⑥ Throttle cable
- ⑦ Choke cable



## BATTERY



The battery is located under the seat. The solution level must be kept between the UPPER and LOWER level lines at all times. If the solution level is below the LOWER limit line, add ONLY distilled water up to the UPPER limit line. NEVER use tap water.

### **▲ WARNING**

Battery acid is harmful to eyes, skin and clothing.

If battery acid gets in eyes or comes in contact with skin, flush eyes or skin with water and call your physician immediately. Never add battery acid to your battery.

### **▲ WARNING**

Hydrogen gas produced by batteries can explode if exposed to flames or sparks.

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

If the battery is discharged, recharge the battery at the standard charging rate of 1.1A  $\times$  10 hours. Never exceed the standard charging rate.

### **CAUTION**

Exceeding the standard charging rate for the motorcycle battery can shorten its life.

Never exceed the standard charging rate.

### **CAUTION**

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

The red lead must go to the positive (+) terminal and the black (or black with white tracer) lead must go to the negative (-) terminal.





## CAUTION

Battery acid can damage your motorcycle's finish.

Route the battery breather pipe as shown.

*NOTE: Initial 1000 km (600 miles) and every 5000 km (3000 miles), have your dealer check the specific gravity of the battery's cells with a battery hydrometer. This will determine the exact condition of each of the six cells.*

## AIR CLEANER

The air cleaner is located under the fuel tank. If the element has become clogged with dust, intake resistance will increase with a resultant decrease in output and an increase in fuel consumption. If riding under dusty conditions, the air cleaner element must be cleaned or replaced more frequently than it is with periodic maintenance. Check and clean the air cleaner element periodically according to the following procedure.

## ⚠ WARNING

Operating the engine without the air cleaner element in place could allow a flame to spit back from the engine to the air cleaner, or could allow dirt to enter the engine. This could cause a fire or severe engine damage.

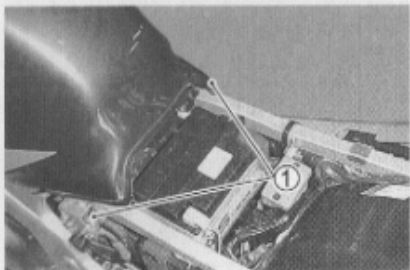
Never run the engine without the air cleaner element properly installed.

## CAUTION

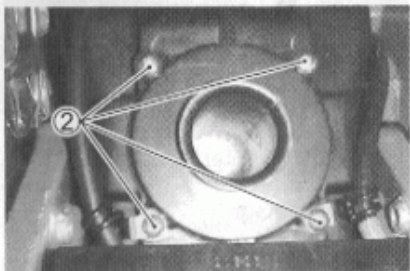
Clean or replace the air cleaner element frequently if the motorcycle is used in dusty, wet or muddy conditions. The air cleaner element will clog under these conditions, and this may cause engine damage, poor performance, and poor fuel economy.

Clean the air cleaner case and element immediately if water gets in the air cleaner box.

1. Remove the seat.

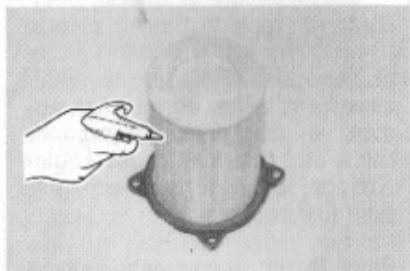


2. Loosen the two bolts ①. Lift up the rear end of the fuel tank.



3. Loosen the four bolts ② and remove the air cleaner element.

### Cleaning the Element



1. Carefully use an air hose to blow the dust from the air cleaner element.

*NOTE: Always apply air pressure to the mesh side of the air cleaner element only. If you apply air pressure to the fabric side, dirt will be forced into the pores of the element, restricting the air flow through the element.*

## CAUTION

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

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

2. Reinstall the cleaned element or new air cleaner element in reverse order of removal. Be absolutely sure that the element is securely in position and is sealing properly.

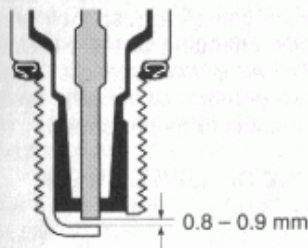
## CAUTION

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.



## SPARK PLUGS



Adjust the spark plug gap to 0.8 - 0.9 mm (0.031 - 0.035 in) by using a spark plug gap thickness gauge. The spark plug should be replaced every 12000 km (7500 miles).

Whenever removing the carbon deposits, be sure to observe the operational color of each spark plug's porcelain tip. This color tells you whether or not the standard spark plug is suitable for your type of usage. A normal operating spark plug should be very light brown in color. If the spark plug is very white or glazed appearing, it has been operating much too hot. This spark plug should be replaced with the colder plug.

### CAUTION

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

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

## Plug Replacement Guide

NGK	DENSO	REMARKS
DPR7EA-9	X22EPR-U9	If the standard plug is apt to get wet, replace with this plug.
DPR8EA-9	X24EPR-U9	Standard
DPR9EA-9	X27EPR-U9	If the standard plug is apt to overheat, replace with this plug.

### CAUTION

A crossthreaded or overtightened spark plug will damage the aluminum threads of the cylinder head.

Follow the procedure below to tighten the spark plug properly.

Carefully turn the spark plug by hand into the threads until it is finger tight. 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.

### CAUTION

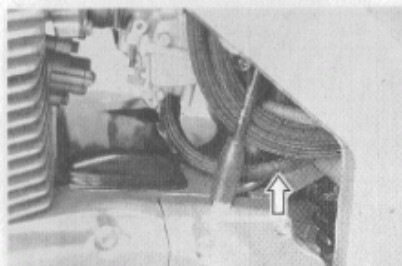
Dirt can damage your engine if it enters an open spark plug hole.

Cover the spark plug hole whenever the spark plug is removed.

*NOTE: This motorcycle uses 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.*



## FUEL HOSE

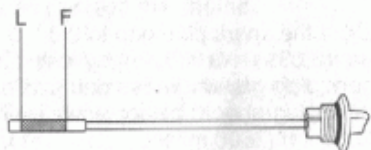


Inspect the fuel hose for damage and fuel leakage. If any defects are found, the fuel hose must be replaced.

## 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



Check the engine oil level with the engine oil dipstick. The dipstick comes out together with the oil filler cap as shown. The level on the dipstick should be between the "L" (Low) and "F" (Full) lines.

The oil level inspection should be performed under the following conditions:

1. Hold the motorcycle vertically without the center stand.
2. The oil filler cap threads are not run in but touching the filler hole upper edge.

## CAUTION

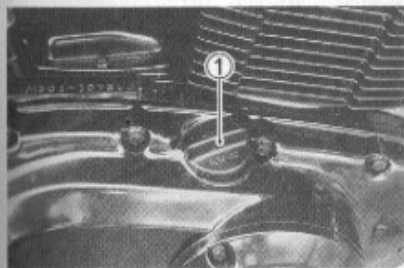
The engine oil level must be between the "L" (Low) line and "F" (Full) line, or engine damage may occur.

Check the oil level with the dipstick, with the motorcycle held vertically on level ground before each use of the motorcycle.

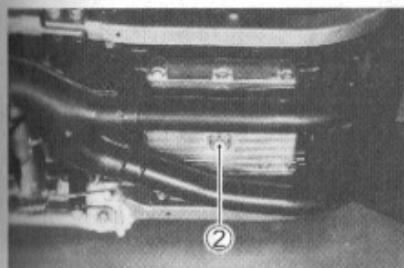
## ENGINE OIL AND FILTER CHANGE

Change the engine oil and oil filter at the initial 1000 km (600 miles) and at each maintenance interval. The oil should be changed when the engine is hot so that the oil will drain thoroughly from the engine. The procedure is as follows:

1. Place the motorcycle on the center stand.



2. Remove the oil filler cap ①.
3. Place a drain pan under the drain plug.



4. After removing the drain plug ② from the bottom of the engine, drain the engine oil.

## WARNING

Engine oil and exhaust pipes can be hot enough to burn you.

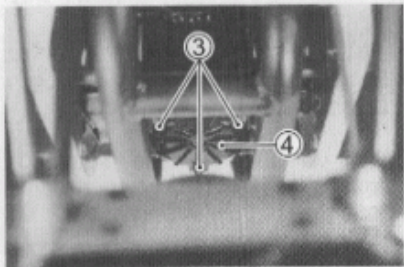
Wait until the oil drain plug and exhaust pipes are cool enough to touch with bare hands before draining oil.

## WARNING

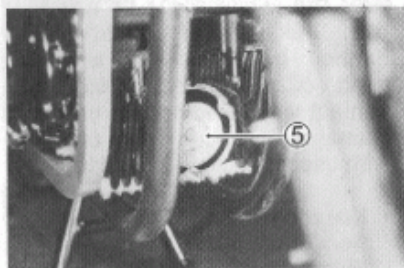
New and used oil can be hazardous. Children and pets may be harmed by swallowing new or used oil. Repeated, prolonged contact with used engine oil may cause skin cancer. Brief contact with used oil may irritate skin.

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

*NOTE: Recycle or properly dispose of used oil.*



5. Remove the three nuts ③ holding the filter cap ④ in place.



6. Remove the filter cover, pull out the element ⑤ and replace with a new oil filter element.

## CAUTION

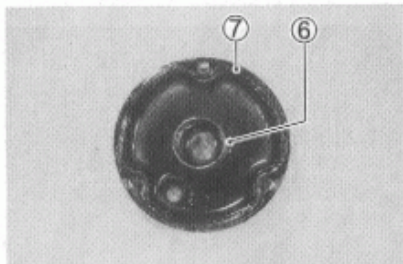
Using an oil filter with the wrong design can cause engine damage.

Use a genuine SUZUKI oil filter or an equivalent filter designed for your motorcycle.

## CAUTION

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

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



7. Before replacing the oil filter cover, be sure to check that the filter spring ⑥ and the "O" ring ⑦ are installed correctly.

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

8. Replace the oil filter cover and tighten the screws securely but do not overtighten them.
9. Replace the drain plug and tighten it securely. Pour fresh oil through the filler hole. Approximately 2900 ml (3.1/2.6 US/Imp qt) will be required.

*NOTE: About 2600 ml (2.7/2.3 US/Imp. qt) of oil will be required when changing oil only.*



## CAUTION

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

Use the oil specified in the FUEL AND OIL RECOMMENDATION section.

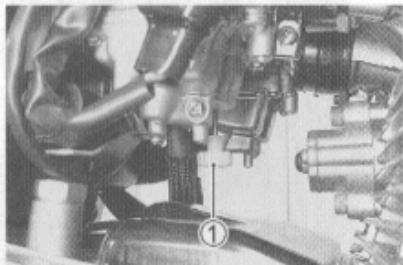
10. Tighten the oil filler cap.
11. Start the engine and allow it to idle for a few minutes.
12. Check the oil level according to Oil Level Check procedure.

*NOTE: Check to see that no oil is leaking from the oil filter cover.*

## CARBURETOR

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

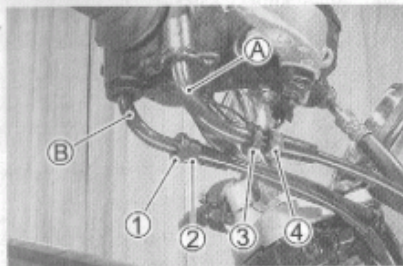
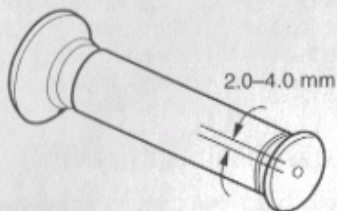
### IDLE SPEED ADJUSTMENT



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 1100 – 1300 r/min.

*NOTE: The idle speed should be adjusted with the engine fully warm.*

## THROTTLE CABLE ADJUSTMENT



This motorcycle has a twin throttle cable system. Cable **A** is for pulling and cable **B** is for returning.

To adjust the cable play:

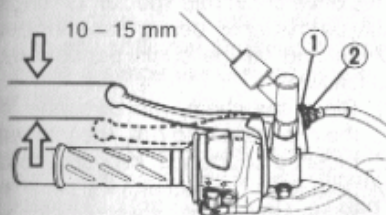
1. Loosen the lock nut **1**.
2. Turn in the adjuster **2** fully.
3. Loosen the lock nut **3**.
4. Turn the adjuster **4** so that the throttle grip has 2.0 - 4.0 mm (0.08 - 0.16 in) play.
5. Tighten the lock nut **3**.
6. While holding the throttle grip at the closed position, turn out the adjuster **2** to feel resistance.
7. Tighten the lock nut **1**.

## **▲** WARNING

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

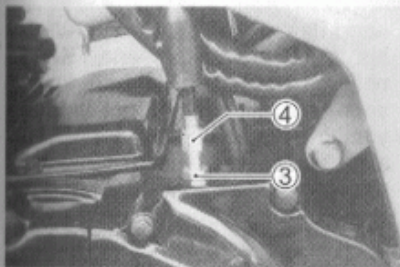
Adjust the throttle cable play so that engine idle speed does not rise due to handlebar movement.

## CLUTCH



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 the play of the clutch 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 nuts ③ and relocate 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.

**NOTE:** Any maintenance of the clutch other than the clutch cable play adjustment should be performed by your Suzuki dealer.

## DRIVE CHAIN

This motorcycle has an endless drive chain constructed from special materials. It does not use a master link. We recommend that you take your motorcycle to an authorized Suzuki dealer or a qualified mechanic if the drive chain needs to be replaced.

The condition and adjustment of the drive chain should be checked each day before you ride. Always follow the guide lines for inspecting and servicing the chain.

### **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 this section.**

### **Inspecting the drive chain**

When inspecting the chain, look for the following:

- Loose pins
- Damaged rollers
- Dry or rusted links
- Kinked or binding links
- Excessive wear
- Improper chain adjustment

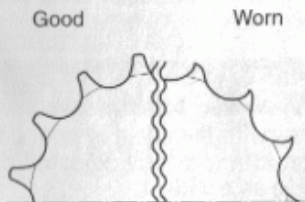
If you find anything wrong with the drive chain condition or adjustment, correct the problem if you know how. If necessary, consult your authorized Suzuki dealer or a qualified mechanic.



Damage to the drive chain means that the sprockets may also be damaged. Inspect the sprockets for the following:

- Excessively worn teeth
- Broken or damaged teeth
- Loose sprocket mounting nuts

If you find any of these problems with your sprocket, consult your-Suzuki dealer or a qualified mechanic.



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

*NOTE: The chain is an endless type chain (no master link) for maximum strength. Chain replacement requires the swing arm removal. Trust this work only to a qualified mechanic. Never install a master link type chain.*

## DRIVE CHAIN CLEANING AND OILING

This drive chain has special "O" rings that permanently seal grease inside. Clean and oil the chain periodically, as follows:

1. Clean the chain with kerosene. If the chain tends to rust, the interval must be shortened. Kerosene is a petroleum product and will provide some lubrication as well as cleaning action.

### **▲ WARNING**

Kerosene can be hazardous. Kerosene is flammable. Children or pets may be harmed from contact with kerosene.

Keep flames and smoking materials away from kerosene. Keep children and pets away from kerosene. If swallowed, do not induce vomiting. Call a physician immediately. Dispose of used kerosene properly.

### **CAUTION**

Cleaning the chain with gasoline or commercial cleaning solvents can damage O-rings and ruin the chain.

Clean the drive chain with kerosene only.

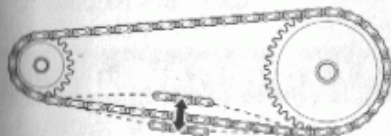
2. After thoroughly washing the chain and allowing it to dry, oil the links with Suzuki chain lube or an equivalent lubricant.

## CAUTION

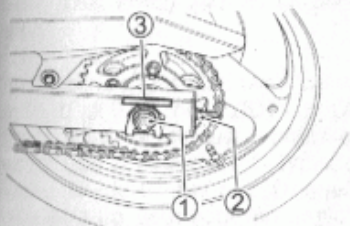
Some drive chain lubricants contain solvents and additives which could damage the O-rings in your chain.

Use Suzuki chain lube or an equivalent lubricant that is specifically intended for use with O-ring chains.

## DRIVE CHAIN ADJUSTMENT



20 - 30 mm



Check the drive chain slack at the middle between the two sprockets. The chain may require more frequent adjustment than periodic maintenance depending on 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.

## ⚠ WARNING

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. Loosen the axle nut ①.
3. Adjust the slack in the drive chain by turning the right and left chain adjuster bolts ②. 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, there are reference marks ③ on the swing arm and each chain adjuster which are to be aligned with each other and to be used as a reference from one side to the other.
4. Tighten the axle nut ① securely.
5. Recheck the chain slack after tightening and readjust if necessary.

Rear axle nut tightening torque:  
78 N·m (7.8 kgf·m, 56.5 lbf·ft)

## BRAKES

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

### BRAKE SYSTEM

#### **WARNING**

Failure to inspect and properly maintain the brakes increases your chance of having an accident.

Inspect the brake system before each use according to the **INSPECTION BEFORE RIDING** section. Follow the **MAINTENANCE SCHEDULE** section to maintain your brake system.

Inspect your brake system for the following items daily:

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



### **▲ WARNING**

Brake fluid is harmful or fatal if swallowed, and harmful if it comes in contact with skin or eyes.

If 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. Solution can be poisonous to animals. Keep out of the reach of children and animals.

### **▲ WARNING**

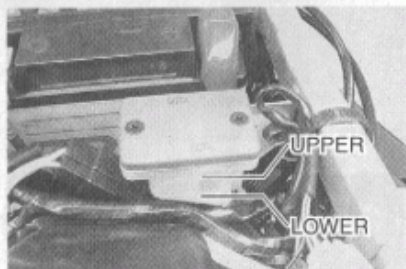
Failure to keep the brake fluid reservoir full with proper brake fluid can be hazardous. The brakes may not work correctly without the proper amount and type of brake fluid. This could lead to an accident.

Inspect the brake fluid level before each use. Use only DOT4 brake fluid from a sealed container. Never use or mix different types of brake fluid. If there is frequent loss of fluid, take your motorcycle to a SUZUKI dealer or a qualified mechanic for inspection.

### **CAUTION**

Spilled brake fluid can damage painted surfaces and plastic parts.

Avoid spilling any fluid when filling the reservoir. Wipe up spills immediately.

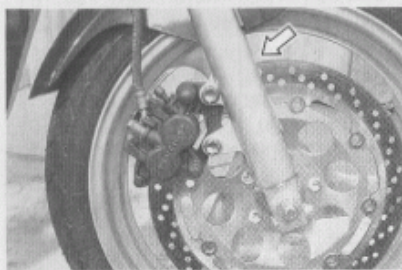


Check the brake fluid level in both the front and rear brake fluid reservoirs and inspect for brake pad wear and leaks.

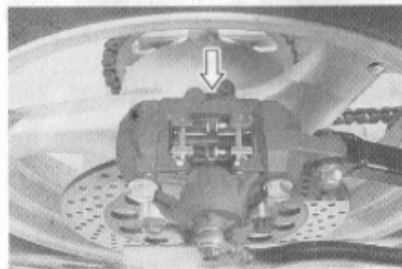
*NOTE: Rear brake fluid reservoir is located under the seat.*

## BRAKE PADS

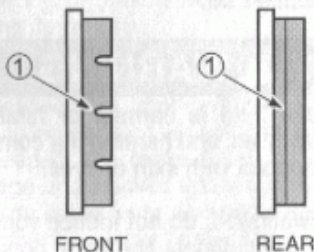
### FRONT



### REAR



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



① Limit line

## ▲ WARNING

Riding with worn brake pads will reduce braking performance and will increase your chance of having an accident.

Inspect brake pad wear before each use. Ask your SUZUKI dealer or a qualified mechanic to replace brake pads if any pad is worn to the limit.

## ▲ WARNING

Failure to extend brake pads after repair or replacement can cause poor braking performance and may result in an accident.

Before riding, "pump" the brake lever/pedal repeatedly until the brake pads are pressed against the brake disks 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.*

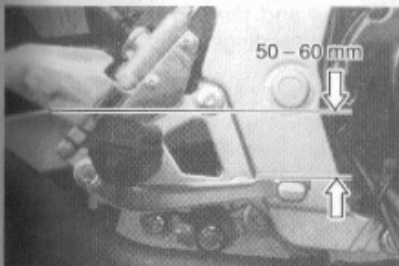


## **⚠ WARNING**

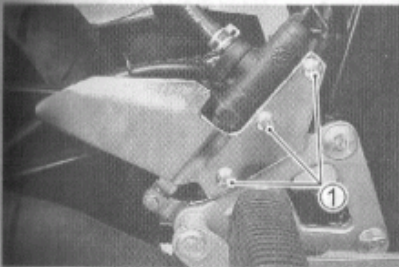
Replacing only one or the two brake pads can result in uneven braking action.

Replace both pads together.

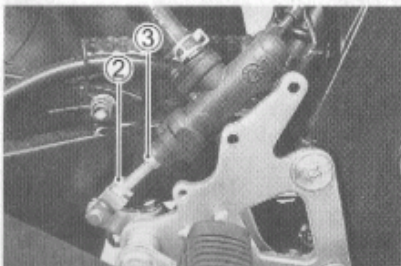
### **REAR BRAKE PEDAL ADJUSTMENT**



The rear brake pedal position must be properly adjusted at all times. Adjust the brake pedal position in the following manner:



1. Loosen the three bolts ①.



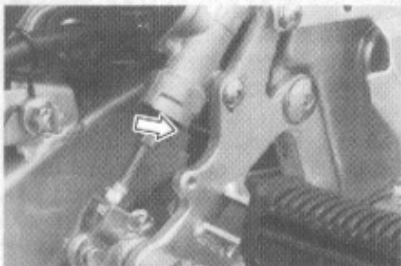
2. Loosen lock nut ②, and rotate push rod ③ to locate the pedal 50 – 60 mm (2.0 – 2.4 in) below the top face of the footrest.
3. Retighten lock nut ② to secure push rod ③ in the proper position.

## **CAUTION**

An incorrectly adjusted brake pedal may force brake pads to rub against the disk at all times, causing damage to the pads and disk.

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

### **REAR BRAKE LIGHT SWITCH**



The rear brake light switch is located under the right frame cover. To adjust the brake light switch, raise or lower the switch so that the brake light will come on just before a pressure rise is felt when the brake pedal is depressed.



## TIRES

### **WARNING**

Failure to follow these warnings may result in an accident due to tire failure. The tires on your motorcycle form the crucial link between your motorcycle and the road.

Follow these instructions:

- Check tire condition and pressure, and adjust pressure before each ride.
- 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.

### **WARNING**

Failure to perform break-in of the tires could cause tire slip and loss of control.

Use extra care when riding on new tires. Perform proper break-in of the tires referring to the **BREAK-IN** section and avoid hard acceleration, hard cornering, and hard braking for the first 160 km (100 miles).

## 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 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.

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.

### Cold Tire Inflation Pressure

LOAD \ TIRE	SOLO RIDING	DUAL RIDING
FRONT	225 kPa 2.25 kgf/cm <sup>2</sup> 33 psi	225 kPa 2.25 kgf/cm <sup>2</sup> 33 psi
REAR	250 kPa 2.50 kgf/cm <sup>2</sup> 36 psi	280 kPa 2.80 kgf/cm <sup>2</sup> 41 psi

*NOTE: When you detect drops in tire pressure, check the tire for nails or other punctures, or a damaged wheel rim. Tubeless tires sometimes lose pressure gradually when punctured.*

## TIRE CONDITION AND TYPE

Tire condition and tire type affect motorcycle performance. Cuts or cracks in the tires can lead to tire failure and loss of motorcycle control. Worn tires are susceptible to puncture failures and subsequent loss of vehicle control. Tire wear also affects the tire profile, changing vehicle handling characteristics.



Check the condition of your tires each day before you ride. Replace tires if tires show visual evidence of damage, such as cracks or cuts, or if tread depth is less than 1.6 mm (0.06 in) front, 2.0 mm (0.08 in) rear.



**NOTE:** The "Triangle mark" indicates the place where the wear bars are molded into the tire. When the wear bars contact the road, it indicates that the tire wear limit has been reached.

Whenever you replace a tire, use 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	110/70-17M/C 54H	130/70-17M/C 62H
TYPE	BRIDGESTONE BATTMAX BT45F G	BRIDGESTONE BATTMAX BT45R G

Always 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 or shorten tire life.

- 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.

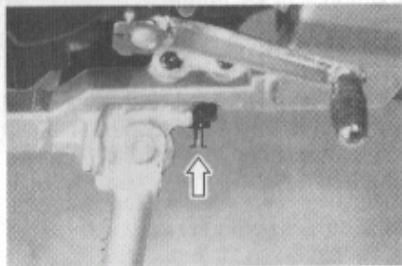


## **⚠ WARNING**

Failure to follow these instructions about tubeless tires may result in an accident due to tire failure. Tubeless tires require different service procedures than tube tires.

- Tubeless tires require an air tight seal between the tire bead and wheel rim. Special tire irons and rim protectors or a specialized tire mounting machine must be used for removing and installing tires to prevent tire or rim damage which could result in an air leak.
- Repair punctures in tubeless tires by removing the tire and applying an internal patch.
- Do not use an external repair plug to repair a puncture since the plug may work loose as a result of the cornering forces experienced by a motorcycle tire.
- After repairing a tire, do not exceed 80 km/h (50 mph) for the first 24 hours, 130 km/h (80 mph) thereafter. This is to avoid excessive heat build-up which could result in a tire repair failure and tire deflation.
- Replace the tire if it is punctured in the sidewall area, or if a puncture in the tread area is larger than 6 mm (3/16in). These punctures cannot be repaired adequately.

## **SIDE STAND/IGNITION INTERLOCK SWITCH**



Check the side stand/ignition interlock switch 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 stops running when the side stand is moved to the down position, then the side stand/ignition interlock switch 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 switch is not working properly. Have your motorcycle inspected by an authorized Suzuki dealer or a qualified service mechanic.



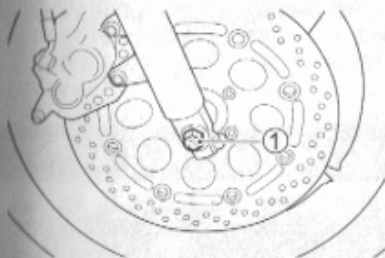
## **▲ WARNING**

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.

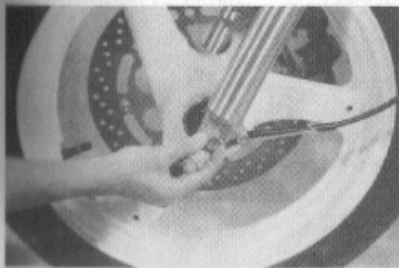
Check the side stand/ignition interlock system for proper operation before riding. Check that the side stand is returned to its full up position before starting off.

### **FRONT WHEEL REMOVAL**

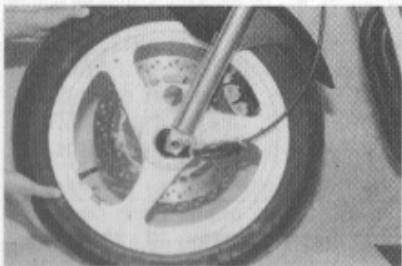
1. Place the motorcycle on the center stand.



2. Remove the axle nut ①.



3. Lift the front end of the motorcycle up and place a jack or a block under the engine or chassis tube.
4. Draw out the axle.



5. 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.*

6. To reinstall the wheel assembly, reverse the sequence described above.
7. 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 repeatedly until the brake pads are pressed against the brake disks and proper lever stroke and firm feel are restored. Also check that the wheel rotates freely.

## **▲ WARNING**

Failure to torque bolts and nuts properly could lead to an accident.

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.

Front axle nut tightening torque:  
49 N·m (4.9 kgf·m, 35.5 lbf·ft)

### NOTE:

- Locate the speedometer drive gear box so that the cable is routed smoothly without an excessive bend.
- Do not twist or bend the brake hoses excessively when installing the brake calipers.
- Be careful not to damage the oil seal when installing the front wheel.

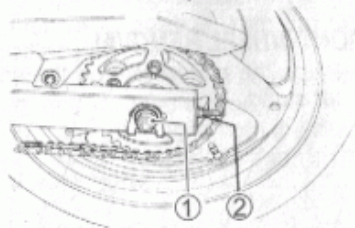
## REAR WHEEL REMOVAL

## **▲ WARNING**

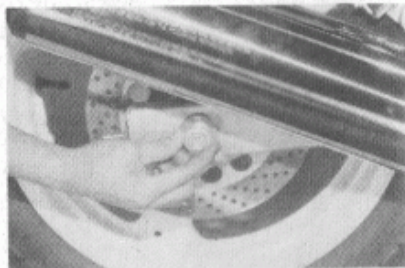
A hot muffler can burn you. The muffler will be hot enough to burn you for some time after stopping the engine.

Wait until the muffler cools to avoid burns.

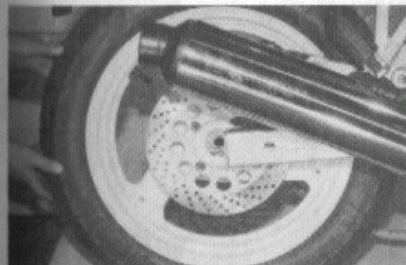
1. Place the motorcycle on the center stand.



2. Remove the axle nut ①.
3. Loosen the chain adjuster nut ②.



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



6. 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.*

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

## **WARNING**

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

- Adjust the drive chain as described in **DRIVE CHAIN ADJUSTMENT** section after installing the rear wheel.
- 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.

Rear axle nut tightening torque:  
78 N·m (7.8 kgf·m, 56.5 lbf·ft)

## **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 repeatedly until brake pads are pressed against the brake disks and proper lever/pedal stroke and firm feel are restored. Also check that the wheel rotates freely.



## 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.

### CAUTION

Using a light bulb with the wrong wattage rating can cause electrical system damage or shorten bulb life.

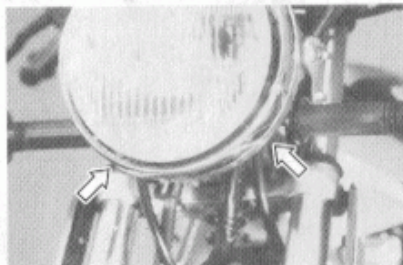
Always use the specified light bulb.

Headlight	12V 60/55W
Brake light/Taillight	12V 21/5W ... Others 12V 32/3 cp ... For Canada
Turn signal light	12V 21W

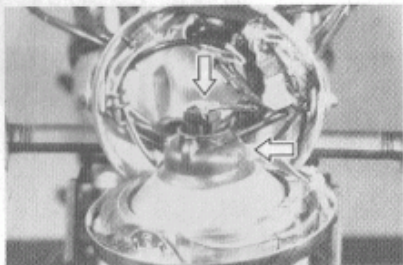
### HEADLIGHT

To replace the headlight bulb, perform the following steps:

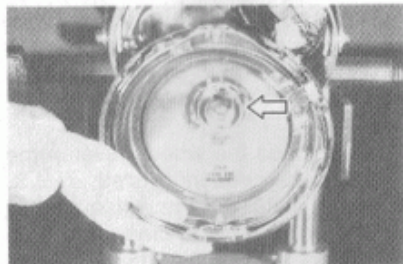
#### GS500



1. Remove the two screws from the headlight outer ring.



2. Disconnect the socket and remove the socket cover.

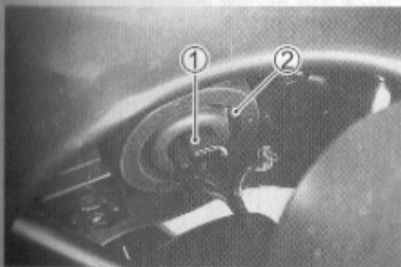


3. Unhook the bulb holder spring, and pull out the bulb.

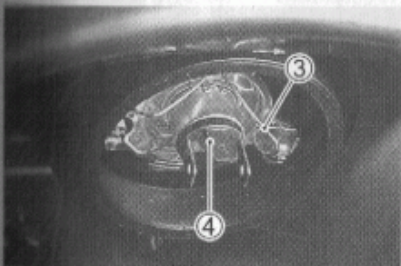
### CAUTION

Oil from your skin may damage the headlight bulb or shorten its life.

Grasp the new bulb with a clean cloth.



1. Disconnect the socket ① and remove the rubber cap ②.



2. Unhook the bulb holder spring ③, and pull out the bulb ④.

## CAUTION

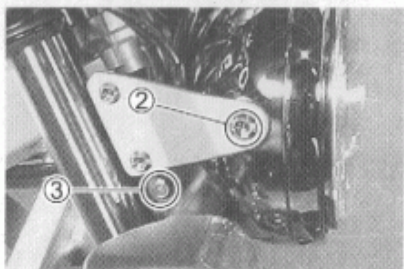
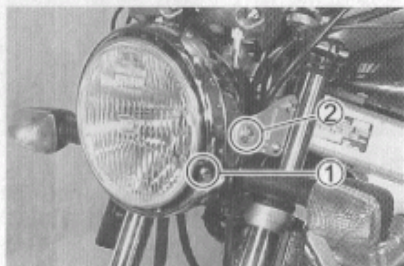
Oil from your skin may damage the headlight bulb or shorten its life.

Grasp the new bulb with a clean cloth.

## HEADLIGHT BEAM ADJUSTMENT

The headlight beam can be adjusted both horizontally and vertically if necessary.

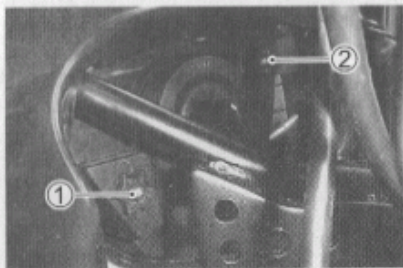
### GS500



To adjust the beam horizontally:  
Turn the cross head screw ① located on the left side of the headlight unit clockwise or counterclockwise.

To adjust the beam vertically:  
Loosen the headlight housing fitting bolt ②, turn the bolt ③ and then and move the headlight housing up or down as required.

## GS500F

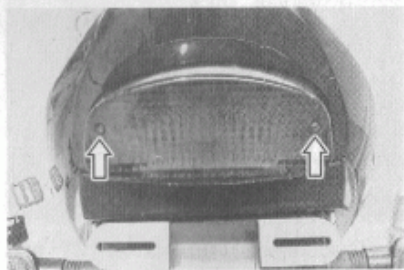


To adjust the beam horizontally:  
Turn the adjuster ① clockwise or counterclockwise.

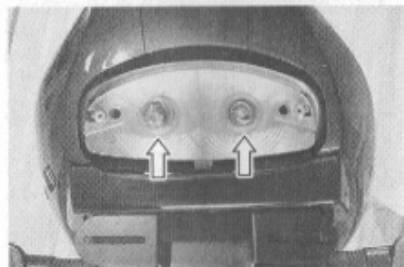
To adjust the beam vertically:  
Turn the adjuster ② clockwise or counterclockwise.

## BRAKE LIGHT/TAILLIGHT

To change the brake light/taillight bulb, perform the following steps:



1. Remove the screws and the lens.



2. Push in the bulb, twist it to the left and pull it off.

## CAUTION

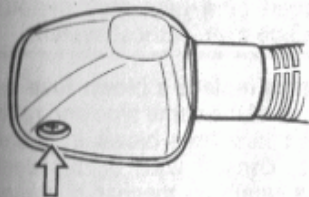
Overtightening the screws when reinstalling the lens may cause the lens to crack.

Tighten the screws only until they are snug.

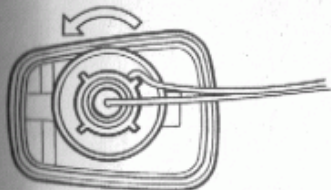


## TURN SIGNAL LIGHT

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



1. Remove the screw and the lens.



2. Turn the socket counterclockwise and remove it.



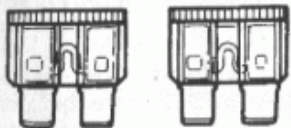
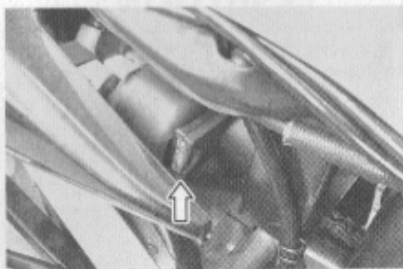
3. Pull off the bulb.

## CAUTION

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

Tighten the screws only until they are snug.

## FUSE



The fuse is designed to open when an overload exists in electrical system circuits. If any electrical system fails to operate, then the fuse must be checked.

## CAUTION

Installing a fuse of incorrect rating or using aluminum foil or wire instead of a fuse may seriously damage the electrical system.

Always replace a blown fuse with a fuse of the same type and rating. If the new fuse blows in a short time, consult your Suzuki dealer or a qualified mechanic immediately.

# TROUBLESHOOTING

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IGNITION SYSTEM CHECK .....	7-3
ENGINE STALLING .....	7-3



## TROUBLESHOOTING

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

### CAUTION

Failure to troubleshoot a problem correctly can damage your motorcycle. 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 or a qualified mechanic about the problem.

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

### FUEL SUPPLY 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 button 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 plugs and reattach them to the spark plug leads.
2. While holding the spark plug firmly against the engine, push the starter switch with the ignition switch in the "ON" position, the engine stop switch in the "O" 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 no spark, consult your Suzuki dealer for repairs.

### WARNING

Performing the spark test improperly can cause a high voltage electrical shock or an explosion.

Avoid performing this check if you are not familiar with this procedure, or if you have a heart condition or wear a pacemaker. Keep the spark plug away from the spark plug hole during this test.



## ENGINE STALLING

- Check the fuel supply in the fuel tank.
- Check the ignition system for intermittent spark.
- Check the idle speed.





# MOTORCYCLE CLEANING AND STORAGE PROCEDURE

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MOTORCYCLE CLEANING .....	8-2
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PROCEDURE FOR RETURNING TO SERVICE .....	8-5

## MOTORCYCLE CLEANING AND STORAGE PROCEDURE

### MOTORCYCLE CLEANING

#### Washing the Motorcycle

When washing the motorcycle, follow the instruction below:

1. Remove dirt and mud from the motorcycle with 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 mild detergent or car wash soap using a sponge or soft cloth. The sponge or cloth should be frequently soaked in the soap solution.

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

- Ignition switch
- Spark plugs
- Fuel tank cap
- Carburetors
- Brake master cylinders

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

### CAUTION

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

Clean only with soft cloth and warm water with mild detergent.

### 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.

### Inspection after Cleaning

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

## WARNING

**Wet brakes can cause poor braking performance and may lead to an accident.**

**Avoid a possible accident by expecting longer stopping distances after washing your motorcycle. Apply brakes several times to let heat dry the brake pads or shoes.**

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

### 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 center 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 plugs and crank the engine a few times.
2. Drain the engine oil thoroughly. Refill the crankcase with the fresh engine oil all the way up to the filler hole.

### **BATTERY**

1. Remove the battery from the motorcycle.

*NOTE: Be sure to remove the negative terminal first, then remove the positive terminal.*

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 with a specified charging rate (Ampere). Standard charging rate is  $1.1A \times 10$  hours.

## PROCEDURE FOR RETURNING TO SERVICE

- Clean the entire motorcycle.
- Reinstall the battery.

### NOTE:

- *Make sure that the battery vent hose is routed properly.*
- *Be sure to connect the positive terminal first, then connect the negative terminal.*
- Remove the spark plugs. Turn the engine a few times by putting the transmission in top gear and turning the rear wheel. Reinstall the spark plugs.
- Drain the engine oil thoroughly. Replace the oil filter with a new one and pour fresh oil as outlined in this manual.
- Adjust the pressure of tires as described in the TIRES section.
- Lubricate all places as instructed in this manual.
- Do the "INSPECTION BEFORE RIDING" as listed in this manual.

# SPECIFICATIONS

## DIMENSIONS AND CURB MASS

Overall length .....	2080 mm (81.9 in)
Overall width .....	800 mm (31.5 in)
Overall height .....	1060 mm (41.7 in) ... GS500
	1150 mm (45.3 in) ... GS500F
Wheelbase .....	1405 mm (55.3 in)
Ground clearance .....	150 mm (5.9 in) ... GS500
	120 mm (4.7 in) ... GS500F
Seat height .....	790 mm (31.1 in)
Curb mass .....	193 kg (425 lbs) ... GS500
	198 kg (436 lbs) ... GS500F

## ENGINE

Type .....	Four-stroke, air-cooled, DOHC
Number of cylinders .....	2
Bore .....	74.0 mm (2.913 in)
Stroke .....	56.6 mm (2.228 in)
Displacement .....	487 cm <sup>3</sup> (29.7 cu. in)
Compression ratio .....	9.0 : 1
Carburetor .....	MIKUNI BSR34, twin
Air cleaner .....	Non-woven fabric element
Starter system .....	Electric
Lubrication system .....	Wet sump

## DRIVE TRAIN

Clutch .....	Wet multi-plate type
Transmission .....	6-speed constant mesh
Gearshift pattern .....	1-down, 5-up
Primary reduction ratio .....	2.714 (76/28)
Gear ratios, Low .....	2.461 (32/13)
2nd .....	1.777 (32/18)
3rd .....	1.360 (29/21)
4th .....	1.125 (27/24)
5th .....	0.961 (25/26)
Top .....	0.851 (23/27)
Final reduction ratio .....	2.437 (39/16)
Drive chain .....	D.I.D. 520VM, 110 links

## CHASSIS

Front suspension .....	Telescopic, coil spring, oil damped
Rear suspension .....	Link type, coil spring, oil damped
Front suspension stroke .....	120 mm (4.7 in)
Rear wheel travel .....	115 mm (4.5 in)
Caster .....	25° 05'
Trail .....	97 mm (3.82 in)
Steering angle .....	35° (right and left)
Turning radius .....	2.7 m (8.9 ft)
Front brake .....	Disk brake
Rear brake .....	Disk brake
Front tire size .....	110/70-17 M/C 54H, tubeless
Rear tire size .....	130/70-17 M/C 62H, tubeless



## ELECTRICAL

Ignition type .....	Electronic ignition (Transistorized)
Spark plug .....	NGK DPR8EA-9 or DENSO X24EPR-U9
Battery .....	12V 39.6 kC (11 Ah)/10 HR
Generator .....	Three-phase A.C. generator
Fuse .....	20A
Headlight .....	12V 60/55W
Position light .....	12V 5W ... GS500F
Turn signal light .....	12V 21W
Brake light/Tailight .....	12V 21/5W x 2 ... Except for Canada 12V 32/3 cp x 2 ... For Canada
Speedometer light .....	12V 1.7W
Tachometer light .....	12V 1.7W
Neutral indicator light .....	12V 1.7W
High beam indicator light .....	12V 1.7W
Turn signal indicator light .....	12V 1.7W
Oil pressure indicator light .....	12V 1.7W

## CAPACITIES

Fuel tank, including reserve .....	20 L (5.3/4.4 US/Imp. gal)
Reserve .....	4.3 L (1.1/0.9 US/Imp. gal)
Engine oil, without filter change .....	2600 ml (2.7/2.3 US/Imp. qt)
With filter change .....	2900 ml (3.1/2.6 US/Imp. qt)

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**K9**

WK (01/01.12.97)

**SUZUKI MOTOR CORPORATION**

300 TAKATSUKA, MINAMI, HAMAMATSU, JAPAN

Printed in Spain

GS500/F

990T1-01D70-01A