

SUZUKI

OWNER'S MANUAL

GS1000/GS1000E

THANK YOU for choosing Suzuki. We at Suzuki have designed, tested and produced this motorcycle using the most modern technology available to provide you with many happy, enjoyable, safe miles of riding. Motorcycling is one of man's most exhilarating sports and to insure 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 insure a long trouble free operating life for your motorcycle. This motorcycle also conforms to the U.S. Environmental Protection Agency emission regulations which apply to new motorcycles manufactured after January 1, 1975. The proper adjustment of engine components is necessary for this motorcycle to comply with the EPA regulations. Therefore, please follow the maintenance instructions closely to insure emission compliance. Your Suzuki dealer has experienced technicians that are trained to provide your machine with the best possible service with the right tools and equipment.

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SUZUKI MOTOR CO., LTD.

This manual covers two models of the GS1000 series: GS1000 and GS1000E.

GS1000: Sport wheel model

GS1000E: Car wheel model

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 noticed.

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 safety procedures or practices that must be followed to avoid damaging the machine.

NOTE Special information to make maintenance easier or important instructions more clear.

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All information, illustrations, photographs and qualifications 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 in this manual. Suzuki reserves the right to make changes at any time.

SUZUKI MOTOR COMPANY

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Model Name: SUZUKI

Model Year: 2004

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DOUBLE OVERHEAD CAM (DOC)

The lightweight design valve train allows higher rpm's, greater reliability and superior performance.

SEALED DRIVE CHAIN

The GS1000 is equipped with a special heavy duty drive chain which has lubricating grease sealed inside the chain rollers which reduces maintenance requirements and prolongs chain life.

AIR FORKS

Allows the rider the option of adjusting the ride for smooth, comfortable touring or high performance riding.

DISC BRAKES

Disc brakes front and rear insure safe, fade free, stopping ability.

HANDLING AND LOW OVERALL WEIGHT

The lightweight GS1000 offers superior handling which increases rider confidence and control.

REAR SUSPENSION

The rear suspension shock absorbers allow full adjustability for rebound damping and spring preload.

TIRES

7" wide high speed tires are standard equipment to match the performance of the GS1000.

FUEL GAUGE

An accurate, electric gauge to monitor the fuel level to provide greater rider convenience.

CONSUMER INFORMATION

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 is stamped on the steering head tube and steering head I.D. plate. The engine serial number is stamped on the right side of the crankcase assembly.



Frame Number



Engine Number

When riding a load on the motorcycle, cargo should never exceed 100 lbs (45 kg) in total. An improperly loaded load can create a high center of gravity, which is very dangerous and may cause the motorcycle to tip or tumble. The use of "ballast" (such as sandbags or concrete) to stabilize the load is dangerous and should never be used. The use of tie-downs to stabilize the load is also dangerous and should never be used. If an attempt is made to load an area without the proper tie-down technique, the cargo will shift or fall, causing damage to the motorcycle and possibly injury to the rider. Always use proper tie-down technique to secure cargo. Always use proper tie-down technique to secure cargo. Always use proper tie-down technique to secure cargo.

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ACCESSORY INSTALLATION AND PRECAUTION SAFETY TIPS

There are a great variety of accessories available to Suzuki owners.

Suzuki cannot 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.

- 1) Never exceed the GVWR (Gross Vehicle Weight Rating) shown on the Safety Label Attached to the steering stem frame tube. The GVWR is the combined weight of the machine, accessories, payload, rider and passenger. When selecting your accessories, keep in mind the weight of the rider and passenger 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 axis.

GVWR INFORMATION

GVWR is the maximum weight of the motorcycle and accessories.

GVWR — GS1000 : 824 lbs (428 kg)

GVWR — GS1000S : 948 lbs (429 kg)

- 2) Anytime that additional weight or unbalanced 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 it feasible. The mounting brackets and other attachment hardware should be carefully checked to insure that it provides for a rigid, non-movable mount. Weak mounts can allow the shifting of the weight and create a dangerous/unstable condition.

- 3) Inspect for proper ground clearance and fork angle. An improperly mounted load could critically reduce these two safety factors. Also determine that the "load" does not interfere with the operation of the suspension, steering or other control operations.

- (4) Accessories fitted to the handlebars or the front fork area can create serious stability problems. The extra weight will cause the motorcycle to be less responsive to your steering control. The weight may also cause oscillations in the front end and lead to instability problems. Accessories added to the handlebars or front fork of the machine should be as light as possible and kept to a minimum.
- (5) Windshields, fairings, handbars, saddlebags, trunk boxes, etc., may affect the stability of the motorcycle due to their aerodynamic effects. The motorcycle may be affected by a lifting condition or by an instability in cross-wind 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.
- (6) Certain accessories displace the rider from his normal riding position. This limits the freedom of movement of the rider and may limit his control ability.
- (7) Additional electrical accessories may overload the existing electrical system. Excess overloads may damage the wiring harness or create a dangerous situation due to the loss of electrical power during the operation of the motorcycle.

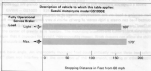
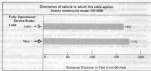
When carrying a load on the motorcycle, mount it as low as possible and as close as possible to the machine. An improperly mounted load can create a high center of gravity which is very dangerous and makes the motorcycle difficult to handle. The size of the "load" can also affect the aerodynamics and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



VEHICLE STOPPING DISTANCE

This figure indicates braking performance that can be met or exceeded by the vehicle to which it applies, without locking the wheels, under different condition of loading and with partial features of the braking system.

NOTICE: The information presented represents results obtainable by skilled driver under controlled road and vehicle conditions, and the information may not be correct under other conditions.

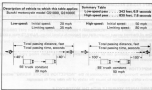


ACCELERATION AND PASSING ABILITY

The figure indicates passing times and distances that can be met or exceeded by the vehicle to which it applies, in the situations diagrammed.

The low-speed pass assumes an initial speed of 30 mph and a limiting speed of 35 mph. The high-speed pass assumes an initial speed of 50 mph and a limiting speed of 60 mph.

NOTE: The information presented represents results obtainable by skilled driver under controlled road and vehicle conditions, and the information may not be correct under other conditions.



STANDARD BUICK MOTORCYCLES ARE AVAILABLE IN ALL STATES. FOR MORE INFORMATION, CONTACT YOUR LOCAL BUICK MOTORCYCLE DEALER OR BUICK MOTORCYCLE DIVISION, GENERAL MOTORS CORPORATION, WARREN, MICHIGAN 48090.

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 insure the safety of the rider and passenger. These precautions are:

WEAR A HELMET

Motorcycle safety equipment starts with a quality safety 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.

WEAR APPAREL

Leather leams 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 insure the safety of the rider and its passenger.

FAMILIARIZE YOURSELF WITH THE MOTORCYCLE

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

KNOW YOUR LIMITS

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

BE EXTRA SAFETY CONSCIOUS ON BAD WEATHER DAYS

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

MOTORCYCLE SAFETY FOUNDATIONS "RIDING TIPS FOR THE MOTORCYCLIST" HANDBOOK

This special manual, supplied in the pouch with your Owner's Manual, contains safety tips on a wide variety of topics. This manual can increase your riding enjoyment and safety and should be read thoroughly.



The FRONT fork is mounted with two 45-degree legs. A control arm leg is a



control arm leg. A control arm leg is a



The REAR shock absorber has two

REAR WHEELS

An essential element of your

REAR WHEELS

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LOCATION OF PARTS

- | | |
|--------------------------------|--------------------------|
| ① Engine oil inspection window | ⑩ Footcandle |
| ② Center stand | ⑪ Ignition switch |
| ③ Head lamp cover | ⑫ Power brake lever |
| ④ Passenger footrest | ⑬ Throttle grip |
| ⑤ Fuel tank | ⑭ Speedometer |
| ⑥ Carburetor choke lever | ⑮ Clutch lever |
| ⑦ Gearshift lever | ⑯ Left handbrake switch |
| ⑧ Kick stand | ⑰ Right handbrake switch |

INSPECT BEFORE RIDE

Before every riding, check the following items and operate them to confirm the riding performance.

INSPECT BEFORE RIDING

Review thoroughly the instructions in the "INSPECT BEFORE RIDING" section of this manual. Do not forget to follow the instructions for inspection for safety of the rider and the passenger.

INSPECT BEFORE RIDING

The following items are checked by the rider before riding. The rider should check the items before riding. The rider should check the items before riding. The rider should check the items before riding.

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KEY (HANDLEBAR SWITCH)



The GS4000 comes equipped with two (2) identical keys. Keep the spare key in a safe place.

IGNITION SWITCH



The ignition switch has four (4) positions:

"OFF" POSITION

All electrical circuits are out off.

"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.

"PARKING" POSITION ("P" POSITION)

When parking the motorcycle, turn the handlebar all the way to the right or to

the left. Push down and turn the key to the parking position. The key can now be removed and the taillight will remain lit and the steering will be locked. This position is for night time outside parking to increase visibility.

"LOCK" POSITION

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

CAUTION:

Start the engine promptly after turning the ignition key to the "ON" position. The reason for this is that the headlight and taillight come on at the same time the ignition is turned on and will cause the battery to lose power.

WARNING:

Before turning the ignition switch to the (P) "PARK" or "LOCK" position, stop the motorcycle and place the motorcycle on either the side stand or the center stand.

INSTRUMENT PANEL

**SPEEDOMETER (2)**

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

TACHOMETER (1)

The tachometer indicates the engine speed in revolutions per minute (RPM).

ODOMETER (4)

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

TRIP METER (3)

The trip meter is a variable odometer located in the speedometer assembly. It can be used to indicate the distance traveled on short trips or between fuel stops. Turning the knob counter-clockwise will return the meter to zero.

FUEL GAUGE (5)

The fuel gauge indicates the amount of gasoline remaining in the fuel tank. The "E" mark indicates the tank is empty or nearly so. The "F" mark indicates the fuel tank is full.

NEUTRAL INDICATOR LIGHT (6)

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

HIGH BEAM INDICATOR LIGHT (7)

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

TURN SIGNAL INDICATOR LIGHT (8)

When the turn signals are being operated either to the right or left side, the amber indicator light will flash.

OIL PRESSURE INDICATOR LIGHT (9)

With the ignition switch in the "ON" position but the engine not started, the oil pressure indicator light should be lit. As soon as the engine is started, the light should go out.

CAUTION:

Whenever the oil pressure indicator lights up, indicating an oil pressure, stop the engine immediately. First check the oil level and determine if the proper amount of oil is in the engine. If the oil level is low, refill the engine to the correct level. If the light still does not go out, then have your authorized Suzuki dealer inspect your motorcycle to determine the difficulty. Do not operate the motorcycle when the light is lit as it may cause serious damage to the internal parts of the engine or transmission.

LEFT HANDLEBAR SWITCH



DIMMER SWITCH (1)

The headlight on the ES1000 will always be lit when the ignition switch is in the "ON" position. When the dimmer switch is moved to the "HIGH" position, the high beam will be lit. At the same time that the high beam is lit, the high beam indicator light will also light in the center instrument panel. When the dimmer switch is moved to the "LO" position, the low beam will be lit.

Consult your Owner's Manual for more information on the controls and features of your motorcycle.

TURN SIGNAL SWITCH (2/3/4)

Sliding the switch to the "L" position will flash the left turn signal. Moving the switch to the "R" position will flash the right turn signal. The pilot or indicator light will also flash intermittently and the turn signal buzzer will sound intermittently.

WARNING:

Always use the turn signal when you intend to change lanes or make a turn. **ALWAYS** be sure to turn the turn signal switch to the "OFF" position after completing the turn or lane change.

TURN SIGNAL SWITCH (2/3/4)

Sliding the switch momentarily to the "L" position will flash the left turn signal. Sliding the switch to the "R" position will flash the right turn signal. The switch will return automatically to the middle position after pushing the switch in either direction.

TURN SIGNAL SWITCH (2/3/4)

The signals will flash for nine seconds and then be automatically cancelled. The motorcycle must be operated at a speed greater than 15 km/h (9.3 mph) in order to activate the automatic cancelling system. If the motorcycle is stopped or moving below 9.3 mph the signals will continue to flash until manually cancelled by the rider. To manually cancel the signals momentarily push the turn signal switch downward.

WARNING:

Always use the turn signal when you intend to change lanes or make a turn.

HORN BUTTON (3)

Press the button to honk the horn.

CLUTCH LEVER (4)

The clutch lever is used to interrupt drive to the rear wheel when starting the engine or shifting the transmission gear.

Squeezing the lever disengages the clutch.

RIGHT HANDLE, REAR SWITCH



ENGINE KILL SWITCH (1)

The engine "kill switch" is located on the top of the right handlebar grip switch housing. This is a "rocker" style switch which pivots in the center.

In the "ON" position, the ignition circuit is on and the engine will operate. The switch is intended primarily as a safety or emergency switch. When the switch is in the "OFF" position, the starter motor cannot be engaged, nor will the ignition circuit be energized.



THROTTLE GRIP (2)

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

ELECTRIC STARTER BUTTON (3)

Push the electric starter button in to engage the starter motor.

The transmission should be in neutral for safety and the clutch disengaged during starting.

NOTE: The starter disengagement switch is equipped on this motorcycle if the clutch lever is not disengaged, the starter motor will not rotate.

CAUTION:

Do not engage the starter motor more than five (5) seconds at a time as it may overheat the wiring harness and starter motor. If the engine does not start after several attempts, check the fuel supply and ignition systems. (Refer to the troubleshooting section).

FRONT BRAKE LEVER (4)

The front brake is applied by squeezing the brake lever gently towards the throttle grip. The GS1000 is equipped with a disc brake and maximum pressure is not required to slow the machine down properly. The brake light will be lit when the lever is squeezed inward.

The motorcycle when the light is lit as it may cause serious damage to the internal parts of the engine or transmission.

FUEL TANK CAP



The fuel tank cap is a new low profile style which blends in smoothly with the lines of the fuel tank. To open the fuel tank cap insert the ignition key and turn the key clockwise. With the key still held in a clockwise position, lift up on the key and remove the filler cap. To install the fuel tank cap, simply line-up the fuel tank cap guide pins and push down until the locking pins click into position. The key must lie in the cap lock or turned before installing cap. Turn the key counter-clockwise and remove it.

WARNING:

When refueling, always shut the engine off and turn the ignition key to the "OFF" position. Never re-fuel around an open flame.

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CARBURETOR CHOKE KNOB



The 651000 carburetors are equipped with a "choke" system to provide easy starting. When starting a cold engine, pull the choke knob all the way up and engage the electric starter. After the engine starts, try to limit the engine RPM to approximately 2,000 RPM by varying the choke knob position. The choke system will operate only when the throttle is in the closed position as opening the throttle will bypass the choke system. When the engine is warm, the choke system does not need to be used for starting. Always be certain to push the choke knob back to its normal position after the engine reaches normal operating temperature.

FUELCOCK



The GS 1000 is equipped with an auto-matic type, diaphragm style fuelcock. There are three GS positions: "ON", "RESERVE" and "PRIME".

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

"RESERVE"

If the fuel level in the tank is too low, turn the lever to the "RESERVE" position to use the 4.0 liters of reserve fuel supply. In this position, no fuel will flow from the fuelcock to the carburetor unless the engine is running or being started.

"PRIME"

If the motorcycle has run out of fuel or has sat for an extended period, there may not be any gasoline in the carburetor. In this instance the fuelcock lever should be moved to the "PRIME" 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 "RESERVE" position.

CAUTION:

Leaving the fuelcock in the "PRIME" position may cause the carburetor to overflow and fuel to run into the engine. It is possible that fuel running into the engine may cause severe mechanical damage when the engine is started.

NOTE: After switching the fuel tank supply to the "RESERVE" position, it is probable that the tank be refilled at the closest gas station. After re-fueling, be sure to move the fuelcock to the "ON" position.



The 651000 is equipped with a 5-speed constant mesh transmission which operates as shown in the figure. The shift lever is attached to a racket type mechanism in the transmission. Each time that a gear is selected, the gear shift lever will return to its normal position ready to select the next gear. Neutral is located between low and 2nd gear. Low gear is engaged by depressing the lever downward from the neutral position. Shifting into the higher gears is accomplished by lifting up on the shift lever once for each gear. It is not possible to up shift or down shift more than one gear at a time due the racket mechanism being used. When shifting from low to 2nd gear or 2nd gear to low, neutral will be automatically stopped. When neutral is desired, depress or lift the lever to a position halfway between low and 2nd gear.



CAUTION:

When the transmission is in neutral the green indicator light will be lit on the instrument panel. However, even though the light is lit, carefully release the clutch lever slowly to determine whether the transmission is positively in neutral.

Reduce your road speed before downshifting. When down shifting, the engine RPM's should be increased before the clutch is engaged. This will prevent unnecessary wear on the drivetrain components and the tire.

REAR BRAKE PEDAL



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

WARNING: Do not touch the rear brake pedal when the engine is running.

NOTE: The correct position for the foot lock lever is on the "OFF" position. In this position, the foot will "snap" from the footlock to the "ON" position unless the engine is running or being started.

SEAT LOCK



The seat lock is located under the right side of the seat. To open the seat, insert the ignition key into the lock and turn the key clockwise until the lock is released. Raise the seat by hand. To lock the seat, push down firmly until the seat latch snaps into the locked position.

WARNING: Do not touch the seat lock when the engine is running.

NOTE: The correct position for the foot lock lever is on the "OFF" position. In this position, the foot will "snap" from the footlock to the "ON" position unless the engine is running or being started.

HELMET HOLDER



The helmet holder is located near the rear of the seat on the right side of the frame. With the seat open, hang the helmet fastener ring onto the helmet holder bracket. The helmet will be locked in position when the seat is closed.

WARNING:

Do not operate the motorcycle with a helmet fastened to the helmet holder. The helmet may be caught in the wheel casing as a rider, or interfere with safe operation of the motorcycle.

SUSPENSION

The front forks and rear shock absorbers are fully adjustable to compensate for rider, passenger, load, riding style, and road conditions. Please refer to the *Technical Maintenance Section*, page 158, for complete information and instructions.

For information on the correct way to use the suspension, see the *Operation and Maintenance Manual*, page 158. The correct way to use the suspension is to use the suspension to absorb bumps and potholes, not to use it to absorb the road.

When the suspension is properly adjusted, the motorcycle will ride smoothly and comfortably.

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STANDS



1	center stand	1000 mm	1000 mm
2	side stand	1000 mm	1000 mm
3	lift bar	1000 mm	1000 mm
4	hand rail	1000 mm	1000 mm

HOUSING

The motorcycle is equipped with both a center stand and a side stand. To place the motorcycle on the center stand, place your feet firmly on the stand extension and then rock the motorcycle to the rear and upward with the lift bar with your right hand, while steadying the handlebar with your left hand.

CAUTION:

The hand rail is designed to be used as a passenger hand hold only. Attempting to place or remove the motorcycle on or from the center stand using the passenger hand rail will damage it.

FUEL AND ENGINE OIL RECOMMENDATION

FUEL UNLEADED FUEL

Unleaded or low-lead type gasoline is recommended. The gasoline should be at least 85 - 88 octane. If your engine rings, a regular grade of fuel, may be substituted.

NOTE: Unleaded and low-lead gasoline will extend spark plug life.



ENGINE OIL

Using a premium quality four stroke motor oil will increase the service life of your motorcycle. Use only oils which are rated (S) under the API classification system. The viscosity rating should be (SAE) 10W-40; if the (SAE) 10W-40 motor oil is not available, select an alternate oil rating to the chart below.

SAE	40	30	20W-50	15W-50	10W-50	5W	10W	
Temperature	°C	-20	-10	0	10	20	30	40
	°F	-4	14	32	50	68	86	104

Some parts are manufactured with the best possible materials. All machined parts are finished to a very fine tolerance. It is necessary to allow these mating parts to "break-in" before subjecting the engine to full throttle stresses. The ultimate performance and reliability of the engine depends on the special care and proper restraint exercised during the break-in period. The general operating rules are as follows:

During the break-in period, the engine speed should be fluctuated and not held at a constant speed. This allows the engine parts to be "loaded" with pressure and then the pressure is decreased and the parts can 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 insure the mating process. Operating the engine at constant low rpm (light load) can cause the parts to glaze and not seat properly.

After the engine has been operated for 1,000 miles, the motorcycle can be subjected to full throttle operation for short periods of time. Under no circumstances should the engine red line of 6,500 rpm be exceeded.

Initial (500 miles 800 km)	Below 4,000 rpm
Up to 1,000 miles (1,600 km)	Below 5,000 rpm
Over 1,000 miles (1,600 km)	Below 6,500 rpm

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 machine.

WHAT TO CHECK	CHECK FOR:
Steering	1) Smoothness 2) No play or looseness 3) No restriction of movement
Brake	1) Proper pedal and lever play 2) No "sponginess" 3) No fluid leakage
Tires	1) Proper pressure 2) Adequate tread depth 3) No cracks or cut spots
Fuel	Enough fuel for the planned distance of operation.
Lighting	Operation of all lights – HEADLIGHT, TAILLIGHT, BRAKE LIGHT, LICENSE PLATE LIGHT, INSTRUMENT LIGHTS, TURN SIGNALS
Indicator Lights	Oil Pressure, High beam, Neutral, Turn signal
Kick and "Kill Switch"	Proper function
Engine Oil	Proper level
Throttle	1) Proper play in the throttle cable 2) Smooth operation and positive return of the throttle grip to the closed position
Clutch	1) Proper play in the cable 2) Smooth and progressive action
Drive Chain	1) Proper tension or slack 2) Adequate lubrication
Air Forks	Smooth movement, proper air pressure "top"

STARTING THE ENGINE

Check that the fuelcock lever is in the "OFF" position and that the engine kill switch is in the "RUN" position. Insert the ignition key into the ignition switch and turn it clockwise and push to the "ON" position. The neutral indicator light will light if the transmission is in neutral.

CAUTION:

Always start the engine with the transmission in neutral, the clutch lever pulled in, and the rider in the normal riding position.

When the engine is cold:

Pull the carburetor choke knob to the engaged position all the way. Close the throttle completely and squeeze the clutch lever. Push the electric starter button and the engine will start. Immediately after the engine starts, keep the engine revolutions to a maximum of 2,000 rpm's by using the choke knob position for throttle control.

Push the choke knob all the way back

to its normal disengaged position approximately 60 seconds after the engine starts. In extremely cold weather it may be necessary to use the choke longer than 60 seconds.

When the engine is warm:

Open the throttle 1/8th to 1/4th turn and push the electric starter button. Operation of the carburetor choke system is usually not necessary when the engine is warm.

WARNING:

Do not run the engine idly for a long time if there is little or no resistance available. Carbon monoxide fumes are extremely poisonous. Never leave the motorcycle running while unattended, even for a moment.

CLUTCH AND GEAR

STARTING OFF (PRIMARY GEAR CASE)

Pull the clutch lever in and gear momentarily. Engage first gear by depressing the gear shift 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 forward.

To shift to the next higher gear, accelerate gently, then close the throttle and pull the clutch lever in simultaneously. Lift the gear shift lever upward to select the next gear and release the clutch lever and open the throttle again. Select the gears in this manner until top gear is reached.

01 - 02	02 - 03	03 - 04	04 - 05	05 - 0	Clutch
---------	---------	---------	---------	--------	--------

USING THE TRANSMISSION

The transmission is provided to keep the engine operating smoothly in its normal operating rpm 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. The table below shows the approximate speed range for each gear.

Approximate speed ranges for each gear. Actual speed ranges will vary with engine speed, load, road conditions, altitude, and rider technique. Always use proper riding technique.

Model and Year Series: _____

mile/h	0 ~ 12	12 ~ 19	19 ~ 25	25 ~ 31	Over 31
Gear position	1st	2nd	3rd	4th	5th
km/h	0 ~ 20	20 ~ 30	30 ~ 40	40 ~ 50	Over 50

Use Factor: _____

Service measurement: _____

RIDING ON HILLS

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

WARNING:

- (1) If this is the first time that you have ridden a motorcycle of this type, we suggest that you practice on a non-public road to become thoroughly familiar with the controls and operation of the motorcycle.
- (2) Before starting off, always return the side stand to its normal "up" position.
- (3) Slow down to a safe speed before starting around a corner.
- (4) Don't down shift in the middle of cornering.
- (5) One-hand riding is extremely dangerous. Keep both hands firmly on the handlebars and both feet securely on the foot rests. Under no circumstances should both hands be removed from the handlebars.

DO NOT use a motorcycle in a wet condition when wet roads, mud, snow, or other poor riding conditions exist.

Always wear your seat belt and please don't drink and drive.

USING THE BRAKES AND PARKING

- Pull the throttle grip away from yourself to close the throttle completely.
- Apply the front and rear brakes evenly and at the same time.
- Downshift through the gears as road speed decreases.
- Select neutral with the clutch lever squeezed towards the grip (disengaged position) just before the motorcycle stops. Neutral position can be confirmed by observing the neutral indicator light.

NOTE: Inexperienced riders tend to use the rear brake only. This can lead to premature brake wear and excessive stopping distances.

WARNING:

Using only the front or rear brake is dangerous and can cause skidding and loss of control.

STOPPING THE MOTORCYCLE SAFELY AND CORRECTLY

- Apply the brakes lightly and with great care on wet highway pavement or other slippery surfaces and at all corners. Any abrupt braking on slippery or irregular roads can be particularly dangerous.
- If the motorcycle is to be parked on the side stand and on a slight slope, you may wish to leave the motorcycle in 1st gear to prevent it from rolling off of the side stand. Return to neutral before starting engine.
- Turn the ignition switch to the "OFF" position to stop the engine.
- Lock the steering for security.
- Remove the ignition key from the switch.

Interval	Oil	Oil Filter	Spark Plugs	Valve Clearance	Front Brake Pads	Rear Brake Pads	Front Brake Disc	Rear Brake Disc	Front Wheel Bearings	Rear Wheel Bearings	Chain and Sprockets	Front Fork	Rear Fork	Seat
10,000 miles (16,000 km)	Change	Change	Inspect	Adjust	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect
20,000 miles (32,000 km)	Change	Change	Change	Adjust	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect
30,000 miles (48,000 km)	Change	Change	Change	Adjust	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect
40,000 miles (64,000 km)	Change	Change	Change	Adjust	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect
50,000 miles (80,000 km)	Change	Change	Change	Adjust	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect
60,000 miles (96,000 km)	Change	Change	Change	Adjust	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect
70,000 miles (112,000 km)	Change	Change	Change	Adjust	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect
80,000 miles (128,000 km)	Change	Change	Change	Adjust	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect
90,000 miles (144,000 km)	Change	Change	Change	Adjust	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect
100,000 miles (160,000 km)	Change	Change	Change	Adjust	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect

Change every 2,000 miles (3,200 km), and inspect every 7,500 miles (12,000 km).

NOTE: I = Inspect, A = Adjust, C = Change, R = Replace, O = Oil.

HIGH SPEED RIDING

High speed riding requires that certain adjustments be made to the suspension system of the motorcycle to increase the stability. The front fork air pressure should be increased and the rear suspension setting should be adjusted to meet the expected road conditions and motorcycle speed. Tire pressure should also be increased for high speed riding as described on page 45.

CAUTION:

Never allow the engine to exceed 8,000 rpm's in any gear.

WARNING:

High speed cruising requires special care. Be sure that you review the pre-ride instruction chart and be sure that your machine is in top condition. Do not exceed the posted speed limits.

EMISSION INFORMATION

EPA EMISSIONS INFORMATION

Maintenance, replacement or repair of the emission control devices and systems may be performed by any motorcycle repair establishment or individual using any motorcycle part which has been certified under the provisions in the Clean Air Act Section 207 (a).

COMPLIANCE LABEL

The EPA compliance label is located on the rear fender. It provides much of the data required to perform an engine tuneup on your GS1000.

See your dealer for more information.

For more information, contact your local EPA office.

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VEHICLE EMISSIONS INFORMATION

ENGINE MODEL: GS1000

DISPLACEMENT: 1000 cc

EMISSIONS CONTROL SYSTEM: CARBURETOR

EMISSIONS CONTROL SYSTEM: CARBURETOR

EMISSIONS CONTROL SYSTEM: CARBURETOR

EMISSIONS CONTROL SYSTEM: CARBURETOR

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VEHICLE EMISSIONS CONTROL INFORMATION

ENGINE MODEL: GS1000

DISPLACEMENT: 1000 cc

EMISSIONS CONTROL SYSTEM: CARBURETOR

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PERIODIC MAINTENANCE SCHEDULE

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 operation in a dusty climate certain services should be performed more often to insure reliability of the machine as explained in the maintenance section. Your Suzuki dealer can provide you with further guidelines. Steering components, suspension 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.

WARNING:

Proper break-in maintenance (500 miles or 1,000 km) is a **MANDATORY** item for making certain that your machine is reliable and gives full performance at all times. Be sure that this periodic maintenance is performed thoroughly and in accordance with the instructions in this manual.

CAUTION:

Periodical inspections may reveal one or more parts that may need replacement. Whenever replacing parts on your motorcycle, it is recommended that you use Genuine Suzuki replacement parts or their equivalent. Whether you are an expert or do-it-yourself mechanic, Suzuki recommends that those items on the Inspection Chart marked with an asterisk (*), be performed by your authorized Suzuki dealer. You may perform the unmarked items easily by referring to the instructions in this section.

INTERVAL: THIS INTERVAL SHOULD BE JUDGED BY ODOMETER READING OR MONTHS, WHICHEVER COMES FIRST	miles	500	4,000	7,500	11,000	18,000	
	km	1,000	6,300	12,000	18,000	24,000	
	months	3	12	24	36	48	
Battery		—	I	I	I	I	
*Cylinder head nuts & exhaust pipe bolts		T	T	T	T	T	
Oil change (check)			Clean every 3,000 miles (3,000 km), and replace every 7,500 miles (12,000 km).				

NOTE: T = Tighten, A = Adjust, I = Inspect, R = Replace, C = Clean

INTERVAL - THIS INTERVAL SHOULD BE JUDGED BY ODOMETER READING OR MONTHS/WHICHEVER COMES FIRST	mile	800	4,000	7,500	11,000	15,000
	km	1,280	6,400	12,000	18,000	24,000
	months	2	12	24	30	40
¹ Taper clearance		I	I	I	I	I
Spark plug		-	C	R	C	R
² Fuel line		Replace every two years				
³ Contact breaker points		I	I	I	I	I
⁴ Ignition timing		I	I	I	I	I
Engine oil		Change oil at initial 800 miles (1,280 km) and initial 2,000 miles (3,200 km), and thereafter change every 2,000 miles (3,200 km).				
Engine oil filter		R	R	R	R	R
Carburetor idle jets		A	A	A	A	A
Clutch		I	I	I	I	I
Drive chain		Clean and lubricate every 800 miles (1,280 km)				
⁵ Brake hose		Replace every two years				
⁶ Brake		I	I	I	I	I
Tire		I	I	I	I	I
⁷ Steering		I	I	I	I	I
Front lock		-	-	I	-	I
⁸ Chain bolts and nuts		Check air pressure every 8 months				
		I	I	I	I	I

NOTE: I = Tighten, A = Adjust, I = Inspect, R = Replace, C = Clean

TOOLS

To assist you in the performance of periodic maintenance, a tool kit is supplied and is located in the rear tail section under the seat. The tool kit consists of the following items:

Ref. No.	Item
1.	Tool Bag
2.	Basic Open End Wrench
3.	10/12 x 13mm Open End Wrench
4.	14 x 13mm Open End Wrench
5.	Spark Plug Socket Wrench
6.	18mm Ring Wrench
7.	24mm Ring Wrench
8.	Ring Wrench Handle
9.	Socket Wrench Handle
10.	Combination Screw Driver
11.	Cross Head Screw Driver
12.	Screw Driver Handle
13.	Pliers
14.	Front Fork Air Pressure Gauge



Image 1000020

OILING CHART

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 oil the machine after a long rough ride and after getting it wet in the rain or after washing it. Major oiling points are indicated below.


Brake lever rubber

Side stand pivot

Clutch lever fulcrum

Rear brake rod link

Clutch cable

Drive chain

BATTERY



The battery solution level may be inspected by removing the right frame cover. 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:

Once the battery has been initially serviced, **NEVER** add diluted sulphuric acid.



CAUTION:

Be careful not to bend, obstruct, or change the routing of the air vent tube from the battery. Make certain that the vent tube is attached to the battery vent fitting and that the opposite end is always open.

WARRANTY

NOTE: Every 4,000 miles (6,000 km) 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 (6) cells.



Figure 10-10 Battery hydrometer

DO NOT use lower electrolyte levels than are specified in these ratings or 2000-2005 unless advised. DO NOT allow electrolyte removed or spilled from a fully charged battery to be absorbed on any surface. Electrolyte spilled onto any surface will corrode the surface. The spill must be cleaned and the electrolyte replaced with distilled water. Electrolyte spilled onto any surface will corrode the spill area. Use distilled water to clean up spilled electrolyte. Do not use a pressure washer to clean up spilled electrolyte.

AIR CLEANER



- 1 Air cleaner case cover
- 2 Screw

The air cleaner element used in the GS1000 is a paper type. If the element has become clogged with dust, intake resistance will increase with a resultant decrease in power output and an increase in fuel consumption due to the richer mixture. Check and clean the air cleaner element every 1,000 miles (1,600km) according to the following procedure.



- 1 Spring tool
 - 2 Spring retainer
- (1) Open the case and remove the air cleaner case cover by unscrewing the one (1) Phillips head screw.
 - (2) Remove the air cleaner element by pulling up on the spring retainer bracket.
 - (3) Carefully use an air hose to blow the dust from the air cleaner element.



CAUTION:

Always apply air pressure to the inside of the air cleaner element only. If air pressure is used on the outside, dirt will be forced into the pores of the cleaner element restricting the air flow through the cleaner element.



CAUTION:
If driving under dusty conditions, the air cleaner element must be cleaned or replaced more frequently. **NEVER OPERATE THE ENGINE WITHOUT THE ELEMENT IN POSITION.** Operating the engine without the air cleaner element will increase engine wear. Always be sure that the air cleaner element is in excellent operational condition at all times. The life of the engine depends largely on this single component.

- (2) Reinstall the cleaned element or new air cleaner element in reverse order of removal, taking care to make sure that the spring loader is properly engaged with the securing spring. Be absolutely sure that the element is securely in position and is sealing properly. Replace the air cleaner element with a new one every 3,000 miles (4,000 km).



...the engine compartment...
...the air filter...
...the engine compartment...
...the air filter...
...the engine compartment...
...the air filter...

...the engine compartment...
...the air filter...
...the engine compartment...
...the air filter...

SPARK PLUGS



At 4,000 miles (6,000km), remove the carbon deposits from the spark plug with a small wire brush or a spark plug cleaning machine. Reseal the spark plug(s)

to 0.6 - 0.8 mm (0.024 - 0.031 in.) by using a spark plug gap thickness gauge. The spark plug should be replaced every 7,500 miles (12,000km).

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. If the standard plug is wet appearing or very dark in color, the hotter spark plug may be more suitable. A normal operating spark plug should be very light grey in color. If the spark plug is very white or glazed appearing, then it has been operating much too hot. This spark plug should be replaced with the colder plug.

CAUTION:

The standard spark plug for the GS 1800 has been carefully selected to meet the vast majority of all operational ranges. If the spark plug color indicates that other than a standard spark plug be used, it is best to consult your Suzuki dealer before changing to a different heat range spark plug. The selection of an improper spark plug can lead to severe engine damage. Selecting another brand of spark plug other than NGK or Nippon Denso, may also lead to operational difficulties. You should consult your authorized Suzuki dealer before selecting an alternate brand.

NGK	NIPPON DENSO	REMARKS
RC6E	W60E2	If the standard plug is wet or get wet, replace with this plug.
RC6E	W60E2	Standard
RC6E	W61E2	If the standard plug is apt to overheat, replace with this plug.

ENGINE OIL



Drain plug

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

CAUTION:

Never operate the motorcycle if the engine oil level is below the "L" (low) line in the inspection window. Never fill the engine oil level above the "F" (full) line.

Indicating oil level symbols at rear oil level gauge are indicated for engine

OPERATION



Oil filler cap

ENGINE OIL (ORANGE) (Without Filter Change)

Change the engine oil at the initial 800 miles (1,000km) and also at the initial 2,000 miles (3,000km) check up. Thereafter, the oil should be changed every 2,000 miles (3,000km). The oil should always 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.
- (3) Drain the oil by removing the drain plug from the bottom of the engine.
- (4) Replace the drain plug and tighten securely after all the oil has been

OPERATING PRECAUTIONS AND SYMBOLS



Engine oil inspection window

drained out. Add fresh oil through the filler hole. Approximately 2.425 qt (2.3 US qt.) of oil will be required.

- (5) Start the engine and allow it to idle for several seconds.
- (6) Turn the engine off and wait approximately one (1) minute, then recheck the oil level in the engine oil inspection window. The oil level should be at the "F" mark. If lower than the "F", add oil until it reaches the "F" mark.

CAUTION:

Be sure to always use the specified engine oil described on page 23.

ENGINE OIL AND FILTER CHANGE



1 Drain plug 2 Filter cap

Change the oil filter at the initial 500 miles (1,000km) inspection and every 4,000 miles (6,000km) thereafter. The procedure is as follows:

- 1) Place the motorcycle on the center stand.
- 2) Drain the engine oil by removing the drain plug from the bottom of the engine.
- 3) Remove the three (3) nuts holding the filter cap in place.



3 Oil filter

- 4) Remove the filter cap, pull out the element and replace with a new oil filter element. The rubber sealing ring is installed facing the engine.
- 5) Before replacing the oil filter cover, check to be sure that the filter spring and the cap "O" ring are installed correctly.
- 6) Replace the oil filter cover and tighten the nuts securely.
- 7) Replace the drain plug and tighten it securely. Add fresh oil through the filler tube approximately 1,000 cc (35.00 US qt.) until the required



2 Filter cap 3 O-ring 4 O-ring

- 8) Start the engine and allow it to idle for several seconds.
- 9) Turn the engine off and wait approximately (5) minutes, then recheck the oil level in the engine oil inspection window. The oil level should be at the "F" mark. If lower than the "F" mark, add oil until it reaches the mark.

CAUTION:

Be sure to always use the specified engine oil described on page 21.

- (1) Tighten the carburetor idle speed adjustment nut at 1000 rpm (1500 rpm for 1.8L) and every 4000 miles (6400 km).
- (2) Loosen the carburetor idle speed adjustment nut at 1500 rpm (2000 rpm for 1.8L) and every 4000 miles (6400 km).



Throttle Cable Play

- (1) Initial adjustment (1,000 miles and every 4,000 miles (6,400 km), when you return to normal after a long cold start):
 - (a) Set the throttle cable adjuster to 2 turns (50mm) of free slack measured at the cable end handle. When the slack begins to disappear, if you find the play at the adjuster handle, adjust it at the throttle end.
- (2) Loosen throttle cable adjuster (see 10-12).

CARBURETOR



Throttle adjustment

Unadjusted carburetion is the bane of the performance you ought to expect of your engine. The carburetor is factory-set for the best carburetion. Do not attempt to alter its setting. There are few items of adjustment, however, under your care: carburetor idle rpm and throttle cable play.

Adjust the carburetor idle rpm and throttle cable play at initial 500 miles (1,000 km) and every 4,000 miles (6,400 km).

CARBURETOR IDLE RPM ADJUSTMENT

- (1) Start up the engine and warm it up by running it at 1,500 rpm for 10 minutes in summer (before ambient temperature is 30°C (86°F) or thereabout) or for 20 minutes in winter (before ambient temperature is down to -6°C (20°F) or thereabout).
- (2) After engine warms up, turn the throttle stop screw located under the carburetor in or out so that engine may run at 1,000 ± 100 rpm.

CAUTION:

The carburetor idle rpm should be adjusted after the engine warms up.

When you adjust the carburetor, the engine may vibrate and you may experience shock, all of which is from adjusting the float properly. An improperly adjusted float can cause severe engine damage.



THROTTLE CABLE ADJUSTMENT

A twin throttle cable system is used in your SE1000. One cable (2) is for pulling and the other cable (3) for returning.

Putting cable play

The throttle cable should be adjusted to have a slack (1) of 3–5 mm (0.12–0.20 in.) at the middle point between adjusting holder (2) and throttle cable end (3) of the returner side.



NOTE: Inspect the cable slack at times, and if necessary, adjust it to the specified value. The cable end should come out when the key is inserted.

- (1) Loosen lock nut (5).
- (2) Turn adjusting nut (4) to introduce a cable play (7) of 3.0–5.0 mm (0.12–0.20 in.).
- (3) Tighten lock nut (5).

CAUTION: Do not adjust the throttle cable when the engine is running. If the throttle cable is adjusted while the engine is running, the throttle cable may become loose and the throttle may not operate properly.

Restoring cable play

- (1) Reduce the play (7) to zero by turning the adjusting nut, and securely tighten the lock nut.



- (2) Turn the lock nut (5) clockwise to tighten the cable.
- (3) Turn the lock nut (5) clockwise until the lock washer (6) comes in contact with the lock nut (5). The lock washer (6) must be in the "V" mark. It must be in the "V" mark, not at the end of the lock nut.

CAUTION

Do not be careless and the specified torque all described on page 22.

CLUTCH ADJUSTMENT



① Check cable play.

At initial 800 miles (1,300 km) and every 4,000 miles (6,000 km), adjust the clutch by means of clutch cable adjuster.

The play ① of the clutch should be 2 - 3 mm (0.88 - 0.12 in) as measured at the clutch lever holder before the clutch begins to disengage. If you find the play of the clutch incorrect, adjust it in the following way.

② Loosen clutch cable adjuster lock nut ②.

REVERSE CLUTCH CHAIN



① Lock nut ② Chain adjuster

② Turn the clutch cable adjuster ② to provide the specified play ② - 3 mm.

③ Tighten the lock nut ①.

At the same intervals, lubricate the clutch cable with motor oil.

CAMSHAFT DRIVE CHAIN TENSIONER



The camshaft drive chain is kept in proper adjustment by an AUTOMATIC camshaft drive chain tensioner. This automatic tensioner never needs servicing by the customer and the camshaft drive chain itself need not be checked for stretch or wear.

CAUTION:

Never attempt to turn the tensioner wheel in either direction. Turning the wheel even slightly can jam the mechanism which will prevent it from adjusting the chain properly. An improperly adjusted chain can cause severe engine damage.

DRIVE CHAIN

The GS1000 is equipped with a special drive chain. It is an endless type that does not use a master link. We recommend that you take your GS1000 to your authorized Suzuki dealer to have the drive chain replaced when it becomes worn.

The drive chain is also constructed of special materials and has gears permanently sealed inside it by the use of special sealing "O" rings.

WARNING:

For maximum safety, the drive chain condition and adjustment should be checked prior to operating the motorcycle. Always follow the manufacturer's recommendations for replacement and for proper lubrication.

Always wear your seat belt when riding a motorcycle. Always wear your seat belt when riding a motorcycle.

At the periodic inspections, performed at the initial 600 miles (1,000 km) and every 4,000 miles (6,000 km), the drive chain should be inspected for the following conditions:

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

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

- (1) Excessively worn teeth
- (2) Broken or damaged teeth
- (3) Loose sprocket mounting nut(s)



DRIVE CHAIN CLEANING AND OILING

Gears is permanently sealed inside the rollers of the GS1000 chain by the use of special "O" rings. At intervals of 800 miles (1,000 km) clean and oil the chain, as follows:

- (1) Dipping the chain with kerosene is strongly recommended. 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.

CAUTION:

Do not use gasoline, kerosene or other commercial cleaning solvents. These fluids have a strong dissolving power that could damage the "O" rings in the chain. This will allow the grease to run out of the chain and the chain would have to be replaced.

- (2) Oiling the chain. After thoroughly washing the chain and allowing it to dry, oil the links with a heavy weight motor oil, 40 or 50 weight.

CAUTION:

Do not use any of said commercially as drive chain oil. These oils contain solvents and additives which could damage the "O" rings in the chain.

ADJUSTING DRIVE CHAIN

- 1 Chain adjuster nut
2 Chain adjuster pin
3 Drive sprocket
4 Chain
5 Sprocket nut
6 Sprocket pin



At the initial 800 miles (1,000 km) and a minimum of every 4,000 miles (6,000 km) adjust the drive chain to the proper specification. The chain may require more frequent adjustments depending upon your riding conditions.

WARNING:

These recommendations are the maximum intervals between the adjustment periods. The drive chain adjustment should be checked every time that the machine is operated. Excessive chain slack could cause the chain to come off the sprockets and result in an accident or serious engine damage. To adjust the drive chain, follow these steps:

- (1) Place the machine on the center stand.
- (2) Remove the center pin and loosen the adjuster.

Adjust the chain to the proper specification by measuring around the sprockets.

- (3) Loosen the lock nuts.
- (4) Adjust the slack in the drive chain by turning the right and left chain adjuster bolts in after loosening the lock nut. 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 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. After slipping and adjusting the slack in the drive chain to 20 mm (0.8 in.), retighten the axle nut securely and replace the cotter pin with a new one. Tighten the chain adjuster lock nuts and perform a final inspection.



CAUTION:

Never allow the drive chain slack to exceed 50 mm (2 in.). If the slack is allowed to be greater than this figure, the chain may come off the sprockets and cause severe engine damage or an accident. When the indicator mark on the chain adjuster aligns with the end of the swing arm, the drive chain should be replaced with a new one as it has become worn extensively. Refer to the drive chain information label on the chain guard.

CAUTION:

The drive chain for the EC1000 is made of a special material. The chain should be replaced with either a **DAIDO D100EY1** or a **TAKAGAKI K02B009**. Use of another chain may lead to premature chain failure.

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

BRAKES



The GS1000 utilizes front and rear disc brakes. Properly operating brake systems are vital to safe riding. Be sure to perform the brake inspection requirements as outlined. The brakes should be inspected at the initial 600 miles (1,000 km) inspection and every 4,000 miles (6,000 km) thereafter. By your authorized Suzuki dealer.



BRAKE FLUID

WARNING:

Brake fluid may be harmful if swallowed or if it comes in contact with skin or eyes. Contact your physician immediately. If swallowed induce vomiting. If brake fluid gets into the eyes or in contact with the skin, it should be flushed thoroughly with plenty of water.

CAUTION:

The GS1000 uses a glycol-based brake fluid. Do not use or mix different types of brake fluid such as silicone-based or petroleum-based fluid, otherwise serious damage will result to the brake system. Never use any brake fluid that has been stored in a used or washed container. Never reuse brake fluid left over from the last servicing and stored for long periods as it absorbs moisture from the air. Use only DOT 3 or DOT 4 brake fluid. Do not spill any brake fluid on painted or plastic surfaces as it will damage the surface severely.

Be sure to check the brake fluid level in the front and rear reservoirs. If the level was found to be lower than the full mark, replenish with the proper brake fluid that meets Suzuki's requirements. As the brake pads wear, the fluid level will drop to compensate for the new position of the brake pads. Replenishing the brake fluid reservoir is considered normal periodic maintenance.



Inspect the front brake pads by noting whether or not the friction pads are worn down to the red limit line. If a pad is worn to the red limit line it must be replaced with a new one.



Inspect the rear brake pads for wear by noting whether or not the pad is worn down to the shoulder of each pad. If the shoulder is gone or nearly gone, the pad must be replaced with a new one. It is necessary to remove the pad inspection cap.

WARNING:

If the brake system or pads need to be repaired or serviced we strongly advise you to have your authorized Suzuki dealer perform repairs. He has the proper tools and proper training to perform the job in a safe and economical manner.



CAUTION:

Disc brake systems operate under extremely high pressures. For safety, the brake hose and brake fluid should be changed at intervals of no longer than two (2) years. Inspect your brake system for the following items daily.

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



FRONT BRAKE LIGHT SWITCH

The front brake light switch (1) is located beneath the front brake lever. Loosen the switch fitting screws and adjust the actuating point by moving the switch body to the right or to the left so that the brake light will come on just before a pressure rise is felt at the lever.



REAR BRAKE PEDAL ADJUSTMENT

The rear brake pedal must have a specified amount of clearance at all times or the disc brake pads will rub the disc causing damage to the pads and to the disc surface. Adjust the brake pedal in the following manner:

- (1) Loosen lock nut (A) and turn the stopper foot (B) away from the stopper leg.
- (2) Loosen lock nut (C), and rotate the push rod (D) to locate the pedal 20 mm below the top face of the foot nut.



(3) Be sure to measure this clearance carefully.

- (4) Tighten lock nut (C) to secure the push rod (D) in the present position.
- (5) Adjust the clearance between the top of the return stopper foot (B) and the stopper leg so that the clearance is zero. Tighten the lock nut (A).



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.

TIRE

Check the tire inflation pressure and tire tread condition at the initial 500 miles (1,000 km) and each 4,000 miles (8,000 km) inspection. For maximum safety and good tire life, the tire pressures should be inspected more often.

Insufficient air pressure in the tires not only reduces tire wear but also seriously affects the stability of the motorcycle. Under-inflated tires make smooth cornering difficult and over-inflated tires decrease the amount of tire in contact with the ground which can lead to skids and loss of control. Be sure that the tire pressure is within the specified limits at all times. The pressure should only be adjusted when the tires are cold.

TIRE APPLICATION (See Manual)	FRONT				REAR	
	MOTORCYCLE		DUAL PURPOSE		DUAL PURPOSE	DUAL PURPOSE
	P.S.I. (kPa)	PSI (kPa)	PSI (kPa)	PSI (kPa)	P.S.I. (kPa)	P.S.I. (kPa)
Normal Riding	20 (1.35)	25 (1.72) 25 (1.72)	25 (1.72) 25 (1.72)	20 (1.35) 20 (1.35)	20 (1.35)	20 (1.35)
Tire Pressure when Pedal is Depressed	20 (1.35)	25 (1.72) 25 (1.72)	25 (1.72) 25 (1.72)	20 (1.35) 20 (1.35)	20 (1.35)	20 (1.35)

1. The front tire pressure should have the proper inflation and be firm at all times.

TIRE PRESSURE

Insufficient air pressure in the tires not only reduces tire wear but also seriously affects the stability of the motorcycle. Under-inflated tires make smooth cornering difficult and over-inflated tires decrease the amount of tire in contact with the ground which can lead to skids and loss of control. Be sure that the tire pressure is within the specified limits at all times. The pressure should only be adjusted when the tires are cold.

2. The brake lever should have the proper tension and be firm at all times.

3. Check the wear of the drive chain.



WARNING: GS1000

The use of a tire type which is other than original equipment can lead to serious stability problems and possibly loss of control. Use only a 2.25V19-4PR front tire and a 4.00V18-4PR rear tire. V-rated tires are used on the GS1000 due to the high speed capability and handling ability of the GS1000. Suzuki strongly recommends that you use I.R.E. brand V-rated tires on your GS1000.

WARNING:

Tire inflation pressure and the general tire condition are extremely important to the proper performance and safety of the vehicle. Check your tires frequently for both wear and inflation pressure.

NOTE: Refer to the tire information label on the chain guard.

WARNING: GS1000E

The use of a tire type which is other than original equipment can lead to serious stability problems and possibly loss of control. Use only a 2.25V19-4PR front tire and a 4.00V17-4PR rear tire. V-rated tires are used on the GS1000E due to the high speed capability and handling ability of the GS1000E. Suzuki strongly recommends that you use I.R.E., Bridgestone or Dunlop brand V-rated tires on your GS1000E.

TIRE TREAD CONDITION

Operating the motorcycle with excessively worn tires will decrease riding stability and can lead to loss of control. It is recommended that the front tire be replaced when the remaining depth of the tread becomes 1.0 mm (0.04 in.) or less. The rear tire should be replaced when the tread becomes 2.0 mm (0.08 in.) or less.

FRONT SUSPENSION

The GS1000 front suspension is a pneumatic (air) spring or more commonly referred to as "air" forks. Each fork tube contains compressed air and a light coil spring as well as fork oil. The air pressure is adjustable so that you can obtain the degree of softness or firmness suitable to your type of riding and comfort.

The GS1000 is serviced at the factory with $0.8\text{kg}/\text{cm}^2$ (11psi) of air pressure in the front forks. This is the optimum pressure setting for the average rider in solo riding on the highway at about 55 mph (90 km/h), with no accessories added to the motorcycle.

This factory air pressure may be too "soft" for later or high performance cruising. The pressure should be increased to make the suspension more firm when you are planning on operating the machine hard or at a high speed.



- (1) Air valve protection cap (2) Air valve
(2) Air pressure gauge

ADJUSTING FORK AIR PRESSURE

The motorcycle should be placed on its center stand and all weight removed from the front end by jacking up the front of the chassis or engine. Remove the air valve protection caps and use the air pressure gauge to check the front fork air pressure. To raise the pressure, use a hand pump to add air to each fork leg. To lower the pressure, bleed the air out from the valve. Double check the pressure and make sure that it is at the setting you desire.

CAUTION:

Do not attempt to alter the front fork air pressure setting by using a high pressure tire filler such as is available in gas stations. A hand type pump must be used so that no damage will occur to the fork assembly. Never use any air containing inflammable gas. Instead of ordinary air, nitrogen gas may be substituted if available. When pumping air in, never increase the pressure above $2.5\text{kg}/\text{cm}^2$ (35 psi). This is the maximum permissible pressure to avoid fork oil seal and valve damage. Never allow the operational fork air pressure to drop below $0.8\text{kg}/\text{cm}^2$ (11psi) or to exceed $1.2\text{kg}/\text{cm}^2$ (17psi) as internal fork damage will result.

WARNING:

- (1) Equalize the air pressure of the two fork tubes. The maximum allowable difference is 0.1kg/cm² (1.4psi). This will prevent unnecessary stress on the front axle and on the fork leg assembly.
- (2) Be sure to balance the suspension between the front and rear. Changing the air pressure setting on the front suspension requires that the spring and damper settings of the rear shock absorbers be altered according to the guidelines of this manual. For soft and comfortable riding, the recommended air pressure range is from 8.8 to 1.2kg/cm² (13-17 psi).

NOTE: Fork air pressure, as with tire pressure, should be checked periodically (monthly) and especially after periods of in-use. When checking the pressure, be sure to apply the pressure gauge axially to the air valve. After taking a reading, remove the gauge quickly. This must be done as some pressure is lost when removing the gauge. The best range from 0.08 to 0.10 kg/cm² (0.7-1.4 psi). Take this loss of air pressure into consideration when adjusting for your final air pressure.

By using shock with the correct settings, the shock is balanced and the riding will be



more comfortable to the rider. The correct settings for adjusting the rear shock absorbers are given in the factory set-up manual. Changes to the shock's air pressure will affect the suspension's performance. The compression of spring and damper will give maximum control and handling for the average rider (140-170 lbs) if it should be set at 1.0 kg/cm² (14 lbs) for the high rider (170-200 lbs) and 0.8 kg/cm² (11 lbs) for the high rider without any pressure control.

riding style of various conditions will adjust themselves and they provide the correct action for different riding style, position, performance, condition of detailed settings. If you have a 100, 110, 120, etc. if you, the change of pressure will be different from that of your shock absorbers. Adjusting the shock absorbers to suit your riding style will be different from the 100, 110, 120, etc.

REAR SUSPENSION

The rear shock absorber's spring preload and damping rate are adjustable. Spring preload can be altered to five different settings and the damping rate to four different settings.

These two variables can be adjusted to optimize the handling of the machine and the smoothness of the ride based on the speed, load, and road conditions.

When the machine is used as a loader in the field, turn the adjustment knob one setting for the stiffer setting. The riding on the highway is about 25 mph (40 km/h), with the accessories added to the machine.

When the machine is used, it may be too "soft" for loaded or high performance driving. The pressure should be increased to make the suspension stiffer than when you are plowing or spreading the machine load or at a high speed.



Adjusting the rear shock absorber spring preload.



the valve. Double-check the pressure and make sure that it is at the setting you desire.

SPRING ADJUSTMENT

Turn the bottom spring seat, as shown in the photo, to the desired notch. This will change the preload on the spring and increase or decrease the stiffness of the ride. The GS1800 as delivered from the factory is adjusted so that both springs are on the number 1 notch for the softest possible ride.





DAMPING ADJUSTMENT

Pull the rubber dust cap up and away from the adjusting ring. To increase or decrease the damping force, turn this adjusting ring as shown in the photo. Damping adjustments are indicated by the numbers 1 thru 4 engraved on the adjusting ring. As you turn the adjusting ring, you will notice a click as you reach each number position. When changing the damping, always be sure that the adjusting ring stops with the number visible, that a click is noticed and the ring feels as if it were being locked in a notch.

Position 1 (softest) provides for the smallest amount of damping force, and position 4 (hardest) for the largest amount. The GS4000 is delivered from the factory with both rear dampers adjusted to the number 1 position (softest position). This combination of spring and damper will give maximum comfort and handling for the average solo rider of 80kg (175 lbs) at about 55 mph (90 km/h) on the highway without any accessories mounted.



CAUTION

Do not operate rear damper units in any position other than the click or detented positions. If position 3 1/2, 3 1/2, etc. is used, the damping force will automatically have the same damping force as number 4 (hardest) position.

The rear suspension must be made stiffer if two persons are to ride the motorcycle or if accessories have been fitted to the motorcycle.

If the machine is to be used for high-performance cruising, then the rear suspension should also be stiffened. A list of the recommended combinations is provided and should be followed.

Spring Setting	Damper Setting
I	1 or 2
II	3 or 3
III	3 or 4
IV	3 or 4
V	4

WARNING:

- (1) Any combination other than those listed can be extremely dangerous and lead to loss of control of the motorcycle. For safe riding, be sure to follow the recommendations.
- (2) Be sure to adjust the springs and dampers of the two shock absorbers equally. Making one shock absorber harder than the other will severely disturb the running stability of the machine.
- (3) Match the front suspension to the rear suspension for a balanced ride and stability. Adjusting the shock absorbers alone or the front forks alone can be very dangerous. Always set the front and rear suspension according to the recommended list.

MATCH THE FRONT AND REAR SUSPENSION

Spring Setting	Damper Setting	Front Fork Air Pressure
I	1	0.8 kg/cm ² (11 psi)
I	2	0.8 – 0.9 kg/cm ² (11 – 13 psi)
II	2	0.8 – 0.9 kg/cm ² (11 – 13 psi)
II	3	0.8 – 0.9 kg/cm ² (11 – 13 psi)
III	3	1.0 – 1.1 kg/cm ² (14 – 16 psi)
III	4	1.0 – 1.1 kg/cm ² (14 – 16 psi)
IV	3	1.0 – 1.1 kg/cm ² (14 – 16 psi)
IV	4	1.0 – 1.1 kg/cm ² (14 – 16 psi)
V	4	1.2 kg/cm ² (17 psi)

CAUTION

Fork oil viscosity and level is critical to proper air fork operation. Draining or adding fork oil is best left to your Suzuki dealer as special tools and knowledge are necessary to perform this task.



Front fork oil level and oil weight.

Properly setting the front fork air pressure is very important. The correct air pressure for the suspension is very critical to the handling, look and the riding quality.

FRONT WHEEL REMOVAL



(1) Place the bike on the center stand.

(2) Remove either one of two calipers, left or right, from the fork by undoing its two mounting bolts. (only for Q61-800E).



(3) Disconnect the speedometer cable from the front wheel. When the cable is released, prevent the inner drive cable from sliding out of the outer cable housing.



(4) Remove the axle holders, both right and left by undoing the two nuts on each of the axle holder caps.





- 02 Lift the front end of the motorcycle up and place a jack or a block under the engine or chassis tubes.



- 03 Slide the front wheel forward. To re-install the wheel assembly reverse the sequence as described.

WARNING:

If the front wheel has to be removed, it is very important to have the loosened nuts and bolts torqued to the proper specifications. We suggest that you have this performed by a authorized Suzuki Dealer.

CAUTION:

Before tightening the axle holders in place, locate the speedometer drive gear box so that the arrow on the gear box housing points up. This will align the speedometer cable properly when installed. To secure the axle properly, the axle holders should be tightened down so that the gap on each side of the cap is equal.

CAUTION:

Never operate the front brake lever with the front wheel removed. It is very difficult to force the pads back into the caliper assembly.

REAR WHEEL REMOVAL



- 1) Place the machine on the center stand.
- 2) Remove the two chain guard bolts and then remove the chain guard cover.



- 1) Brake pin
 - 2) Axle nut
 - 3) Brake bolt
 - 4) Caliper mounting bolt
 - 5) Caliper
 - 6) Torque link bolt
- 8) Remove the center pin that links the axle nut into position, then loosen the axle nut.
 - 9) Remove the caliper mounting bolts, the torque link bolt, center pin and the torque link bolt. Place the caliper out of the way.



- 10) Place the chain adjusters down, allowing the wheel to be pulled forward.



- (E) Remove the support bolts from each chain adjuster block and remove the adjuster block from swing arm.
- (F) With the wheel moved forward, remove the chain from the sprocket by slowly rotating the wheel, at the same time pulling the chain to the side.



- (G) Pull the wheel assembly rearward and remove it from the swingarm. Slide the drive chain off of the hub when the wheel is far enough to the rear to provide the clearance required.
- (H) To replace the wheel reverse the complete sequence listed.

WARNING:

If you have found it necessary to remove the rear wheel, it is very important that the nuts and bolts be torqued to the proper specification. We strongly recommend that you have these bolts checked and retorqued by your authorized Suzuki Dealer.

CAUTION:

- (1) When reinstalling the rear wheel, be sure to follow the procedure outlined in the drive chain adjustment article. Double check all nuts, bolts and cotter pins after re-installing the rear wheel.
- (2) While removing the caliper from the mounting bracket it is possible for the brake hose to touch the muffler. If the muffler is still hot, the hose could be damaged. Protect the hose with a cloth or seal until the muffler cools.
- (3) When reinstalling the rear caliper, be careful not to twist the brake hose or make it improperly.

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.

Headlight	12V 80/50W
Turn/side light	12V 8/30W (30W opt)
License plate light	12V 8W (3-watt)
Turn-signal light	12V 21W 120 volt

HEADLIGHT



- 1) Remove these screws (1) to take off the headlight assembly.
- 2) Roll up the rubber cap (2) and unhook the bulb holder spring, and you can pull out the bulb (3).

CAUTION:

In this model G31000, the halogen light is used for the headlight. When replacing the headlight bulb, be careful not to touch the lens of the bulb.

TAIL/BRAKE LIGHT



- 1) License plate light
- 2) Turn/side light

To replace the tailbrake light bulb or 9-candle glass light bulb, follow these steps:

- (1) Remove the four screws and take off the lens.
- (2) Push the bulb in, twisting it to the left until the engagement pins are disengaged and remove the bulb. To fit the replacement bulb into position, push the bulb in firmly and twist it to the right while pushing.

CAUTION:

When replacing the lens, do not overtighten the four securing screws.

TURN SIGNAL LIGHT

- (3) Remove two screws and take off the lens.
- (2) Push the bulb, twisting it to the left, and pull it off.
- (2) To fit the replacement bulb, push it in and twist it to the right while pushing.

CAUTION:

After setting the lens, be careful not to overtighten the two securing screws but the lens should break.

OUTPUT TERMINAL

For attaching electric accessories, this output terminal is provided under frame cover.

When feeding current to an electric accessory from this output terminal, first remove terminal cover. Then, connect it to the terminal with extreme care not to confuse its positive (+) and negative (-), following marks positive (+) and negative (-) on the terminal. After that, replace the terminal cover. The allowable current is 10A (12V).

CAUTION:

This output terminal is strictly provided for electric accessories, and so, any other usage are forbidden. In actual use for any electric accessory, please consult Suzuki dealer. It should be noted that a burnt out fuse should be replaced, removing terminal cover.

CAUTION:

Like other fuses, use none other than specified 10A fuse.

HEADLIGHT



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

To adjust beam horizontally:

Turn the cross head screw (1) located on the left side of the headlight unit clockwise or counter-clockwise.

To adjust beam vertically:

Loosen the headlight housing fitting bolt (2) and move the headlight housing up and down as required.

FUSE



The fuse box (1) is located inside the left hand frame cover. There are four fuses. If there is a sudden halting of the engine while running or any electrical system failure then the fuses must be checked. In case one or more of the fuses blow there are two fuses (2) - a 15A and a 10A fuses, located in the fuse box cover.

CAUTION

CAUTION:

Always be sure to replace the blown fuse with the correct amperage fuse. Never use a substitute, for example aluminum foil or wire, to replace a blown fuse. If the spare fuse installed blows out in a short period of time it means that you could have a major electrical problem. You should consult your (DUCATI) dealer immediately.

FUSE LIST

1. 15A (15A) fuse protects all electrical systems.
2. 10A (10 A) fuse protects headlight, taillights, license plate light, instrument lights and high beam indicator light.
3. 10A (10A) fuse protects brake light, turn signal lights, turn signal indicator light, turn signal buzzer and horn.
4. 10A (10A) fuse protects the ignition system and electrical start system.

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

- (1) Is there enough fuel in the fuel tank?
- (2) Is the fuel reaching the carburetor from the fuelcock?
- (3) Disconnect the fuel line from the carburetor, turn the fuelcock to the "PRIME" position and see if gasoline flows from the hose.
- (4) Then turn the fuelcock to the "Off" position and crank the engine for a brief moment and see if fuel still flows.
- (5) If it has been determined that fuel is reaching the carburetor, the ignition system should be checked next.

WARNING:

Do not allow the fuel to spill, catch the fuel in a container.

- (1) Remove a spark plug and install it to the spark plug lead.
- (2) While holding the spark plug firmly against the engine, push the starter button with the ignition switch in the "On" position and the engine "kill" switch in the "RUN" position. 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:

Do not hold the spark plug close to the open spark plug hole in the cylinder head as gasoline vapor inside the cylinder could be ignited, creating a fire hazard.



ENGINE STALLING

- (1) Check the fuel supply in the fuel tank.
- (2) Check the ignition system for improper spark.
- (3) Check the engine idle speed.

It is best to consult your Suzuki dealer before attempting to troubleshoot any problem. If the machine is still within the warranty, then the Suzuki dealer should definitely be consulted before any repairs are attempted on the machine by yourself. Tampering with the machine while in warranty may affect warranty considerations.

PROCEDURE FOR STORAGE

Materials Needed

1. Motor Oil.
2. Commercial Gasoline Stabilizer.
3. Commercial Rust Preventative Fogging Oil, (synthetic motor type)
4. Commercial Annual Rust Preventative, (moisture displacing lubricant)
5. Commercial Vinyl and Rubber Preservative.
6. Hydrometer for Checking Battery Condition.
7. 1 Amp Battery Charger.

1. Place the motorcycle on its center stand.
2. Thoroughly clean the entire motorcycle. Run the bike until all traces of moisture are gone.
3. Pour the gasoline stabilizer into the fuel tank using the amount of stabilizer recommended by its manufacturer. Unstabilized fuel will form "gum" or "varnish" deposits that will plug the fuel cock and carburetor passages.

NOTE: Make sure that the fuelcock lever

is in the "on" or "reserve" position. If the lever is left in the prime position, fuel may leak into the engine.

NOTE: Steps 4a and 4b are for protecting the top end engine components from rust and corrosion. Step 4b is to be used only if fogging oil is not available. Do either 4a or 4b, but **DO NOT** do both.

- 4a. Remove the air cleaner element. While the engine is running at idle, spray the rust preventative fogging oil into the air cleaner box. Try to give each cylinder equal amounts of fogging oil. Do this until the engine stalls or smokes stacks.
- 4b. Run the engine for a few minutes to get the stabilized fuel into the carburetors. Then, remove the spark plug and pour 1 to 2 tablespoons of motor oil into each spark plug hole. Reinstall the spark plug. **DO NOT** reinstall the spark plug caps at this time. Turn the engine over a few times with the electric starter. Now reinstall the spark plug caps.

5. Drain the old engine oil and remove the oil filter, but **DO NOT** replace it at this time. Wash fresh oil, refill the crankcase all the way up to the filler cap hole. This step is necessary because the old oil contains acid, moisture and other contaminants that will damage the engine while it is stored.
6. Refill the fuel tank as completely as possible to eliminate any air space and to reduce the chance of the fuel becoming contaminated.
7. Remove the battery. Make sure to remove the negative terminal before the positive terminal. This will remove the battery from the circuit and will eliminate the chance of grounding the positive terminal with the alternator or wires. Clean the outside of the battery with a mild baking soda and water solution and dry it carefully. Be sure not to get any solution inside the cells. Remove any corrosion from the terminals and from the wiring harness connections. Store the battery in a room that

steps above freezing, off the floor, and preferably on a wooden dolly.

1. Spray all of the vinyl and rubber parts with the rubber preservative.
2. Spray the unpainted surfaces of the motorcycle with the rust preservative.
10. Deflate the tires to approximately 20 PSI and block up the front of the motorcycle so both front and rear tires are off of the ground. This will keep the tires from developing permanent "flat" spots.

STORAGE AND CARE

During the storage period, be sure to do the following things:

Once A Week

Turn the engine over a few times by removing the spark plug and putting the transmission in 5th gear and turning the rear wheel. This will keep the piston rings free and top end coated with oil. Reinstall the spark plug and visually inspect your machine for any other things that would be detrimental to the condition of your GS1000.

Once A Month

Recharge the battery with the car and

battery charger until it is fully charged. If the battery is not kept fully charged, it may become permanently damaged and will have to be replaced.

PROCEDURE FOR RETURNING TO SERVICE

1. Clean the entire motorcycle.

NOTE: Use of a commercial degreaser may stain the finish on the engine. Instead, use a mild detergent and water solution.

2. Drain the oil that was in the engine during the storage period. Install a new oil filter and fill the engine with oil as outlined in your owner's manual.
3. Reinstall the battery. Make sure that the vent hose is connected and routed properly. Install the positive terminal before the negative terminal.
4. Lubricate all points as instructed in the lubrication table in the owner's manual.
5. Inflate the tires to the correct pressure.

6. Before starting the engine, remove the fuel spark plugs and slowly turn the engine over by putting it in 5th gear and turning the rear wheel. Listen for any abnormal noises and check for smooth movement. If you think a problem has occurred, consult your local authorized Suzuki dealer for assistance. If there are no problems, reinstall the spark plugs and return the transmission to neutral.

3. Do the "Inspections Before Riding" as listed in the owner's manual.

Often times it's easier to let these sort of services be done by your dealer. Most dealers in the area where motorcycle storage is common are set up to properly prepare motorcycles for storage. Whether you do it yourself, or have your dealer do it, we sincerely hope you follow our suggestions. This is the only way that your GS can serve you in the manner it was designed. If your dealer does the service for you, you should be among the first to be back on the road when winter becomes spring.

CAUTION:

Clean the brake disc with alcohol only. This will ensure positive braking.

GENERAL INFORMATION

DIMENSIONS AND WEIGHT

Overall length	2,228 mm (87.8 in)
Overall width	890 mm (35.0 in)
Overall height	1,185 mm (46.7 in)
Wheelbase	1,305 mm (51.3 in)
Ground clearance	188 mm (7.4 in)
Dry weight	230 kg (507 lbs) ... G51800
	234 kg (516 lbs) ... G51800E

ENGINE

Type	Four-stroke cycle, air-cooled, OHC
Number of cylinders	4
Bore	79.8 mm (3.141 in)
Stroke	65.8 mm (2.591 in)
Piston displacement	607 cm ³ (36.9 cu. in)
Compression ratio	9.2 : 1
Carburetor	MIKUNI VM2665, four
Air cleaner	Paper element
Starter system	Electric
Lubrication system	Wet sump

TRANSMISSION

Clutch	Wet multi-plate type
Transmission	5-speed constant mesh
Gearshift pattern	1-down 4-up
Primary reduction	1.775 (37/20)
Final reduction	2.800 (42/15)
Gear ratios, Low	2.500 (25/10)
2nd	1.771 (32/18)
3rd	1.350 (27/20)
4th	1.125 (22/20)
Top	0.861 (23/26)
Drive chain	DAIDO (D.I.D. 530Y), or YAMAGUCHI (YAMAGUCHI) 95 links

CHASSIS

Front suspension	Telescopic, pneumatic-foil spring, oil damped
Rear suspension	Swinging arm, oil damped, damper 4-way locking 5-way adjuster

WEIGHTS

Steering angle	40° (right & left)
Center	61"
Tire	112 mm (4.41 in) . . . GS1000 140 mm (5.51 in) . . . GS1000H
Turning radius	2.6 m (8.5 ft)
Front brake	Disc brake, single . . . GS1000 Disc brake, twin . . . GS1000H
Rear brake	Disc brake
Front tire size	2.25V18-8PR . . . GS1000 2.50V18-8PR . . . GS1000H
Rear tire size	4.00V18-8PR . . . GS1000 4.50V17-8PR . . . GS1000H

FLUIDS

Fuel	15/15/15/15A
Headlight	12V 60/80W
Tail/brake light	12V 60/80W (3/32 sp)
Turn signal light	12V 20W (33 sp)
Lenser plate light	12V 8W (33 sp)
Speedometer light	12V 3.6W
Tachometer light	12V 3.6W
Neutral indicator light	12V 3.6W
High beam indicator light	12V 3.6W
Turn signal indicator light	12V 3.6W
Oil P. indicator light	12V 3.6W

ELECTRICAL

Ignition type	Battery ignition
Ignition timing	17° B.T.D.C. before 1,800 rpm and 27° B.T.D.C. above 2,500 rpm
Spark plug	NGK BR8C or NIPPON DENSO ACRES
Battery	12V 14Ah/18hours
Generator	Three-phase A.C. generator

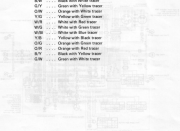
CAPACITIES

Fuel tank including reserve	19 lit (5.0 US gal)
main	4.8 lit (1.3 US gal)
Engine oil when changing	3.4 lit (0.9 US gal)
Front fork oil	240 cc (8.5 US oz) in each leg

WIRE COLOR

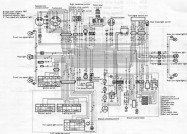
B	.....	Black
W	.....	White
Y	.....	Yellow
R	.....	Red
O	.....	Orange
G	.....	Green
Lg	.....	Light green
Br	.....	Brown
Gr	.....	Grey
Bl	.....	Blue
LM	.....	Light blue

B/W	.....	Black with White tracer
G/Y	.....	Green with Yellow tracer
O/W	.....	Orange with White tracer
Y/G	.....	Yellow with Green tracer
W/R	.....	White with Red tracer
W/G	.....	White with Green tracer
W/B	.....	White with Blue tracer
Y/B	.....	Yellow with Black tracer
O/G	.....	Orange with Green tracer
O/R	.....	Orange with Red tracer
B/Y	.....	Black with Yellow tracer
G/W	.....	Green with White tracer



WIRING DIAGRAM(GS1000E)

WIRING DIAGRAM




WINE COLOR

B Black
W White
Y Yellow
R Red
O Orange
G Green
Lg Light green
Bn Brown
Gr Gray
Bl Blue
LM Light Blue

B/W Black with White trace
O/Y Orange with Yellow trace
O/W Orange with White trace
Y/O Yellow with Orange trace
W/Y White with Red trace
W/O White with Green trace
W/B White with Blue trace
Y/B Yellow with Black trace
O/G Orange with Green trace
O/R Orange with Red trace
B/Y Black with Yellow trace
G/W Green with White trace
B/R Black with Red trace
B/B Black with Blue trace
B/R Blue with Red trace
B/Y Blue with Yellow trace
B/W Blue with White trace
Y/R Yellow with White trace
Bn/Y Brown with Yellow trace
Lg/B Light green with Black trace

This information is provided for
 reference in the case of any
 discrepancy between the
 actual color of the wine and
 the color of the label. It is
 not intended to be used as a
 guide for the purchase of
 wine. The color of the wine
 may vary from the color of
 the label due to the natural
 aging process of the wine.


 Prepared by
SUZUKI MOTOR CO., LTD.
 Service Department
 Customer Operations Division
 July, 1978
 Part No. 99011-99002-81A
 Printed in Japan

DAEWOO MOTOR CO., LTD. warrants to the ultimate purchaser and each subsequent purchaser that his vehicle (DAEWOO or DAEWOO) is designed, built, and equipped so as to conform at the time of sale with all U.S. emission standards applicable at the time of manufacture and that it is free from defects in materials and workmanship which would cause it not to meet these standards within the period of 5 years or 100,000 km (70,000 miles), whichever occurs first. Failures, other than those resulting from defects in material or workmanship, which arise solely as a result of wear, abuse and/or lack of proper maintenance are not covered by the warranty.

SUZUKI MOTOR CO., LTD.

N

Form No. 80001-1-80001-004
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Gifu-shi, Gifu