SUZUKI

SUZUKI MOTOR CO.,LTD.

OWNER'S MANUAL

99011-05A21-03A

F

GV1200GL

IMPORTANT

BREAK-IN INFORMATION FOR YOUR MOTORCYCLE

The first 1 000 miles (1 600 km) are the most important in the life of your motorcycle. Proper break-in operation during this time will help ensure maximum life and performance from your new motorcycle. Suzuki parts are manufactured of high quality materials, and machined parts are finished to close tolerances. Proper break-in operation allows the machined surfaces to polish each other and mate smoothly.
Vehicle reliability and performance depend on special care and restraint exercised during the break-in period. It is especially important that you avoid operating the engine in a manner which could expose the engine parts to excessive heat.
Please refer to the Break-In section for specific break-in recommendations.

WARNING / CAUTION / NOTE

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

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

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

NOTE.....This provide special information to make maintenance easier or important instructions clearer.

EMISSION CONTROL WARRANTY

Suzuki Motor Co., Ltd. warrants to the ultimate purchaser and each subsequent purchaser that this vehicle 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 its useful life. Useful life is defined for each class of motorcycle as 5 years or the corresponding number of kilometers (miles) shown in the chart below, whichever occrus first.

Vehicle Class	Engine Displacement	Useful Life Distance
Class I	50 to 169 cc	12 000 km (7 456 miles)
Class II	170 to 279 cc	18 000 km (11 185 miles)
Class III	280 cc and over	30 000 km (18 641 miles)

Failures, other than those resulting from defects in material or workmanship, which arise solely as a result of owner abuse and/or lack of porper maintenance are not covered by the warranty.

FOREWORD

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 riding. Motorcycling is one of the 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. 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 ensure 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.

SUZUKI MOTOR CO.,LTD.

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CONSUMER INFORMATION

ACCESSORY INSTALLATION AND PRECAUTION SAFETY TIPS

There are a great variety of accessories available to Suzuki owners. Suzuki can not have direct control over the quality or suitability of accessories you may wish to purchase. The addition of unsuitable accessories can lead to unsafe operating conditions. It is not possible for Suzuki to test each accessory on the market or combinations of all the available accessories; however, your dealer can assist you in selecting quality accessories and installing them correctly.

Use extreme caution when selecting and installing the accessories for your Suzuki. We have developed some general guidelines which will aid you when deciding whether, and how to equip your motorcycle.

(1) Never exceed the GVWR (Gross Vehicle Weight Rating) of this motorcycle. The GVWR is the combined weight of the machine, accessories, payload and rider. When selecting your accessories, keep in mind the weight of the rider as well as the weight of the accessories. The additional weight of the accessories may not only create an unsafe riding condition but may also affect the steering ease.
GVWR—GV1200GL: 1070 lbs (485kg)
at the tire pressure (cold)
Front 32 psi (2.25 kg/cm^2),
Rear 40 psi (2.80 kg/cm^2)

(2) Anytime that additional weight or aerodynamic affecting accessories are installed, they should be mounted as low as possible, as close to the motorcycle and as near the center of gravity as is feasible. The mounting brackets and other attachment hardware should be carefully checked to ensure that 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 bank 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. This extra weight will cause the motorcycle to be less responsive to your steering control. The weight may also cause oscillations in the front end and lead to instability problems. Accessories added to the handlebar or front fork of the machine should be as light as possible and kept to a minimum.

(5) Windshields, fairings, saddlebags, travel trunks, 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 winds or when being passed or passing large vehicles. Improperly mounted or poorly designed accessories can result in an unsafe riding condition, therefore caution should be used when selecting and installing all accessories.

(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. Severe overloads may damage the wiring harness or create a dangerous situation due to the loss of electrical power during the operation of the motorcycle.

When carrying a load on the motorcycle, mount it as low as possible and as close as possible to the machine. An improperly mounted load can create a high center of gravity which is very 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.

MODIFICATION

Modification of the motorcycle, or removal of original equipment may render the vehicle unsafe or illegal. Obey all applicable equipment regulations in your area.

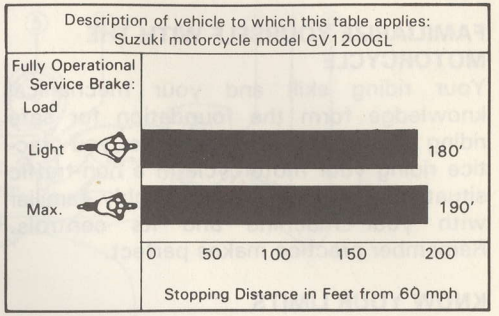
TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED:

Federal law prohibits the following acts or the causing thereof: (1) the removal or rendering inoperative by any person other than for purposes of maintenance, repair, or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use, or (2) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.
Among those acts presumed to constitute tampering are the acts listed below:

- removing or puncturing the muffler, baffles, header pipes, or any other component which conducts exhaust gases
- replacing the exhaust system or muffler with a system or muffler not marked with the same model specific code as the code listed on the Motorcycle Noise Emission Control Information label, and certified to appropriate EPA noise standards
- removing or puncturing the air cleaner case, air cleaner cover, baffles, or any other component which conducts intake air

Whenever replacing parts on your motorcycle, Suzuki recommends that you use enuine Suzuki replacement parts or their equivalent.

VEHICLE STOPPING DISTANCE



This figure indicates braking performance that can be met or exceeded by the vehicle to which it applies under different conditions of loading.

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

SAFE-RIDING RECOMMENDATION FOR MOTORCYCLE RIDERS

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

WEAR A HELMET

Motorcycle safety equipment starts with a quality 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.

RIDING APPAREL

Loose, fancy clothing can be uncomfortable and unsafe when riding your motorcycle. Choose good quality motorcycle riding apparel when riding your motorcycle.

INSPECTION BEFORE RIDING

Review thoroughly the instructions in the "INSPECTION BEFORE RIDING" section of this manual. Do not forget to perform an en-

tire safety inspection to ensure the safety of the rider and its passenger.

FAMILIARIZE YOURSELF WITH THE MOTORCYCLE

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

KNOW YOUR LIMITS

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

BE EXTRA SAFETY CONSCIOUS ON BAD WEATHER DAYS

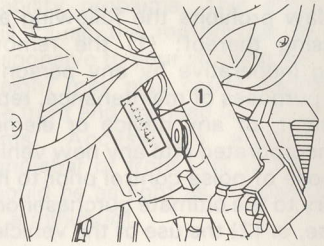
Riding on bad weather days, especially wet ones, requires extra caution. Braking distances double on a rainy day. Stay off of the painted surface marks, manhole covers and greasy appearing areas as they can be especially slippery. Use extreme caution at railway crossings and on metal gratings and bridges.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

MOTORCYCLE SAFETY FOUNDATIONS "RIDING TIPS FOR THE MOTORCYCLIST" HANDBOOK (for owners in USA)

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

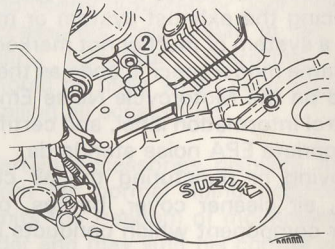
SERIAL NUMBER LOCATION

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.



(1) Frame number

The frame number is stamped on the steering head tube.



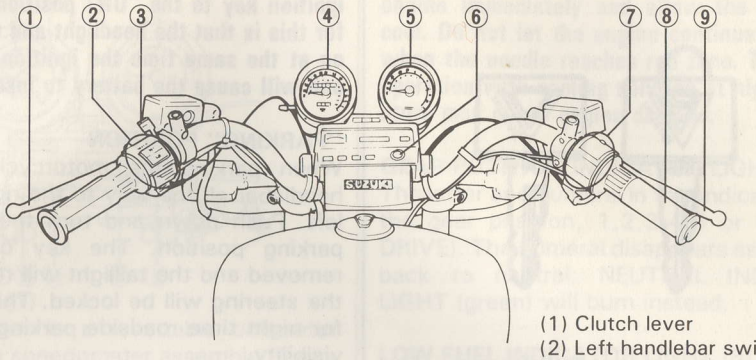
(2) Engine number

The engine serial number is stamped on the right side of the crankcase assembly.

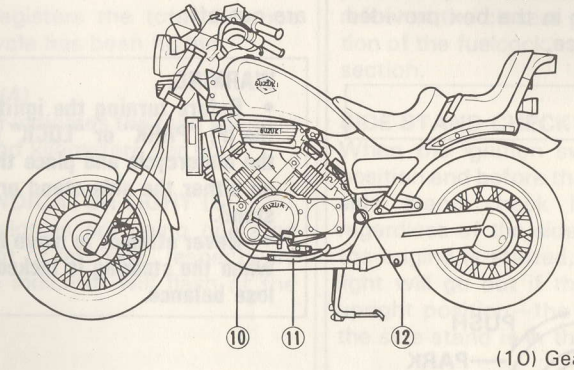
Please write down the numbers in the box provided below for your future reference.

Frame No.:
Engine No.:

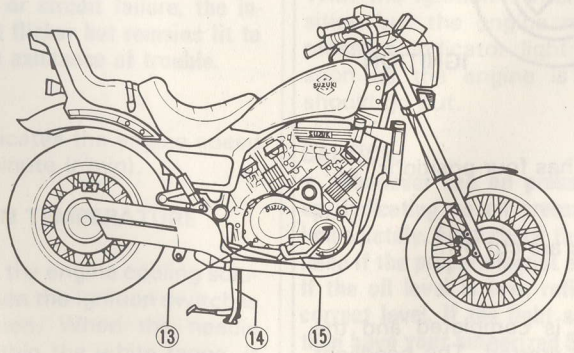
LOCATION OF PARTS



(1) Clutch lever
(2) Left handlebar switch
(3) Carburetor choke lever
(4) Speedometer
(5) Tachometer
(6) Ignition switch
(7) Right handlebar switch
(8) Throttle grip
(9) Front brake lever



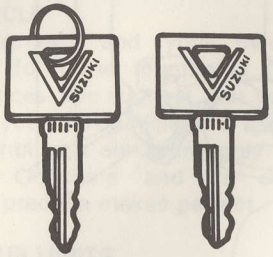
(10) Gearshift lever
(11) Side stand
(12) Fuelcock



(13) Engine oil inspection window
(14) Center stand
(15) Rear brake pedal

CONTROLS

KEY

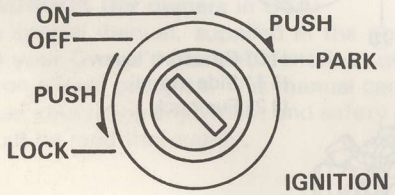


This motorcycle comes equipped with a pair of identical ignition keys. Keep the spare key in a safe place.

Your motorcycle igniton keys are stamped with an identifying number. This number is used when making replacement keys. Please write your key number in the box provided for your future reference.

Key No.:

IGNITION SWITCH



The ignition switch has four positions:

"OFF" POSITION
All electrical circuits are cut 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.

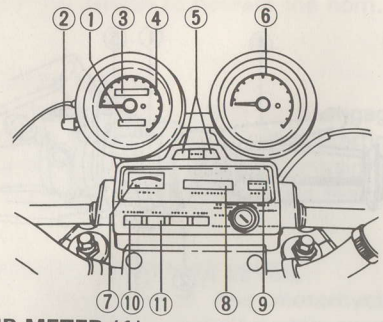
CAUTION:
- **Start the engine promptly after turning the ignition key to the "ON" position. The reason for this is that the headlight and taillight come on at the same time the ignition is turned on and will cause the battery to lose power.**

"PARKING" 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 roadside 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 cut off.

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.**
- **Never attempt to move the motorcycle when the steering is locked, or you may lose balance.**

INSTRUMENT PANEL



TRIP METER (1)
The trip meter is a resettable 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 (2)** counterclockwise will return the meter to zero.

ODOMETER (3)
The odometer registers the total distance that the motorcycle has been ridden.

SPEEDOMETER (4)
The speedometer indicates the road speed in miles per hour and kilometers per hour.

TURN SIGNAL INDICATOR LIGHT (5)
When the turn signals are being operated either to the right or left side, respectively right or left side indicator will flash at the same time.

CAUTION:
- **If turn signal light is not operating properly due to bulb filament or circuit failure, the indicator light does not flicker but remains lit to warn the rider of the existance of trouble.**

TACHOMETER (6)
The tachometer indicates the engine speed in revolutions per minute (r/min).

COOLING SOLUTION TEMPERATURE METER (7)
This meter indicates the engine cooling solution temperature when the ignition switch is in the "ON" position. When the needle points anywhere within the white range, it shows that the engine cooling solution is in the normal operating temperature. The cooling solution temperature will vary with changes in weather and engine load.

CAUTION:
- **If the needle reaches the red zone, stop the engine immediately and allow the engine to cool. Do not let the engine continue operating when the needle reaches red zone. The engine operation with cooling solution at high temperature may cause engine damage.**

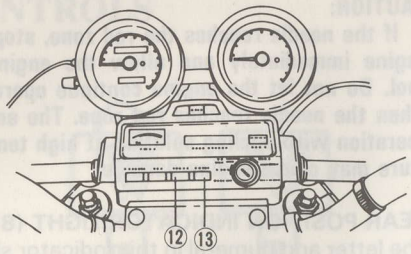
GEAR POSITION INDICATOR LIGHT (8)
The letter and numeral in this indicator show the gear position, 1,2,3,4,5 or D (OVER DRIVE). The numeral disappears as you shift back to neutral; NEUTRAL INDICATOR LIGHT (green) will burn instead.

LOW FUEL INDICATOR LIGHT (9)
The low fuel indicator light comes on when the main fuel supply in the tank has become low. If this light is illuminated while driving, stop your motorcycle as soon as it is safe to do so and turn the fuelcock to the RESERVE position to use the reserve fuel supply. Then refuel at the closest gas station. For operation of the fuelcock, refer to the FUELCOLCK section.

SIDE STAND CHECK LIGHT (10)
When the ignition switch is in the "ON" position and before the engine is started, the side stand check light will remain on regardless of the side stand position. After the engine is started, the side stand check light will go out if the side stand is in full upright position—the light will remain on if the side stand is in the down position.

OIL PRESSURE INDICATOR LIGHT (11)
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 no 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.**



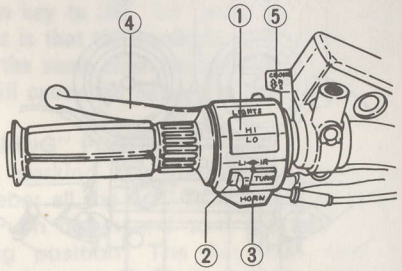
HIGH BEAM INDICATOR LIGHT (12)

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

NEUTRAL INDICATOR LIGHT (13)

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.

LEFT HANDLEBAR



(1) Dimmer switch
(2) Turn signal switch
(3) Horn switch
(4) Clutch lever
(5) Carburetor choke lever

DIMMER SWITCH

When the switch is in "HI" position, the high beam will be lit. At the same time that the high beam is lit, the high beam indicator will also light in the instrument panel. When the switch is in "LO" position, the low beam will be lit.

TURN SIGNAL SWITCH

Pushing the switch all the way to the right or left lights up the right-hand or left-hand turn signal respectively, in that order. The switch knob returns and stops halfway to the center position when your finger is released from the switch. Returning the switch knob to center position puts out the signal, but you need not do so since a self-cancelling device is provided on the machine. After running for approx. 10 seconds total with a speed of 15 km/h (9 mph) or higher after switching on a turn signal, the cancelling device automatically turns off the light switch. The cancelling device works like a timer, but any duration below this speed is not counted.

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

HORN SWITCH

Press the switch to operate the horn.

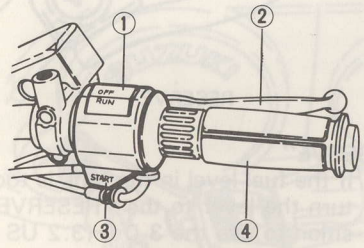
CLUTCH LEVER

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

CARBURETOR CHOKE LEVER

The carburetors of this motorcycle are equipped with a "choke" system to provide easy starting. When starting a cold engine, turn the choke lever all the way toward you and engage the electric starter. After the engine starts, try to limit the engine speed to approximately 2 000 r/min by varying the choke lever 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 return the choke lever back to its normal disengaged position after the engine reaches normal operating temperatures.

RIGHT HANDLEBAR



(1) Engine kill switch
(2) Front brake lever
(3) Electric starter switch
(4) Throttle grip

ENGINE KILL SWITCH

The engine kill switch is located on the top of the right handlebar grip switch housing. In the "RUN" position the ignition circuit is on and the engine will operate. The switch is intended primarily as a emergency switch. When the switch is in the "OFF" position neither the starter motor nor the ignition circuit will be energized.

FRONT BRAKE LEVER

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

ELECTRIC STARTER SWITCH

Push the electric starter switch in to engage the starter motor.The transmission should be in neutral for safety and the clutch must be disengaged during starting.

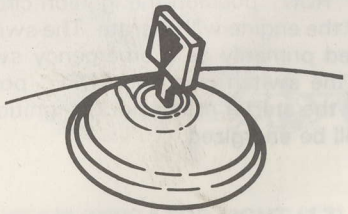
NOTE: The starter interlock switch is equipped on this motorcycle. If the clutch lever is not squeezed, the starter motor will not rotate.

CAUTION:
• Do not engage the starter motor for more than five 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 system. (Refer to the TROUBLESHOOTING section.)

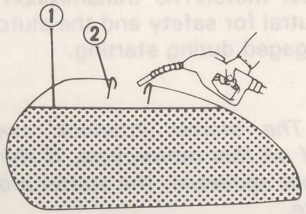
THROTTLE GRIP

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

FUEL TANK CAP



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 be in the cap lock before installing cap.



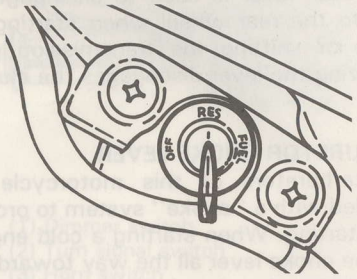
(1) Fuel level
(2) Filler tube

WARNING:

- **Do not overfill the fuel tank. Avoid spilling fuel on the hot engine. Do not fill the fuel tank above the bottom of the filler tube as shown in the illustration or it may overflow when the fuel heats up later and expands.**
- **When refueling, always shut the engine off and turn the ignition key to the "OFF" position. Never refuel near an open flame.**

FUELCOCK

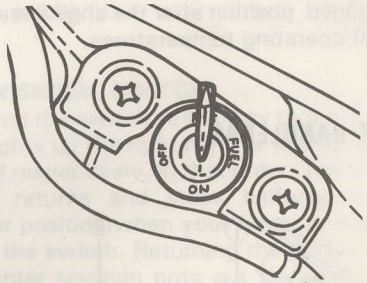
This motorcycle is equipped with a manually operated fuelcock. There are three positions: "ON," "RESERVE" and "OFF."



ON

"ON"

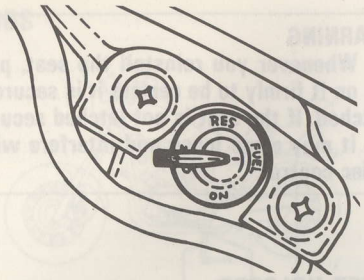
The normal operating position for the fuelcock lever is in the "ON" position. In this position, fuel will flow from the fuelcock to the carburetor whenever the fuel level in the carburetor drops.



RESERVE

"RESERVE"

If the fuel level in the tank is too low, turn the lever to the "RESERVE" position to use the 3.0 L (3.2 US qt) of reserve fuel supply.



OFF

"OFF"

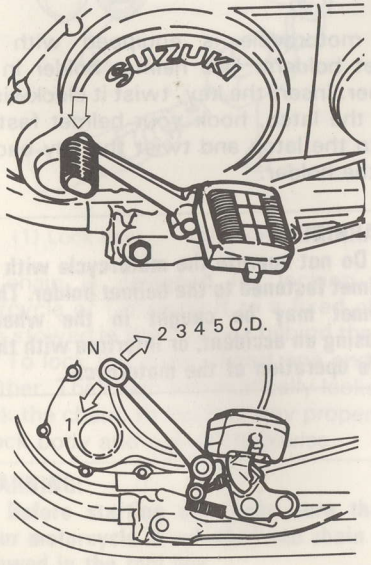
Turn the lever to the "OFF" position whenever stopping the engine for more than a few minutes.

CAUTION:

- **Leaving the fuelcock lever in the "ON" or "RESERVE" 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 fuelcock lever to the "RESERVE" position, it is advisable that the tank be refilled at the closest gas station. After refueling, be sure to move the fuelcock to the "ON" position.

GEARSHIFT LEVER



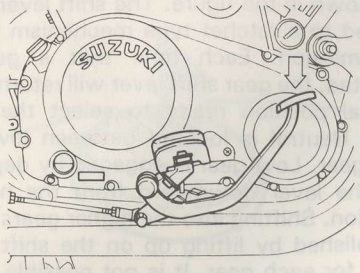
This motorcycle is equipped with a 6 speed constant mesh transmission which operates as shown in the figure. The shift lever is attached to a ratchet type mechanism in the transmission. Each time that a gear is selected, the gear shift lever will return to its normal position ready to select the next 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 to the ratchet mechanism being used. When shifting from low to 2nd gear or 2nd gear to low, neutral will be automatically skipped. 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 on the instrument panel will be lit. However, even though the light is illuminated, cautiously release the clutch lever slowly to determine whether the transmission is positively in neutral.**

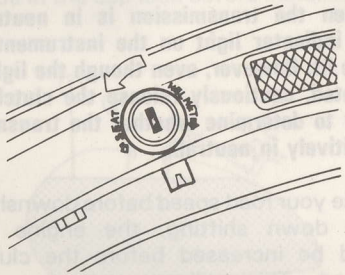
Reduce your road speed before downshifting. When down shifting, the engine speed should be increased before the clutch is engaged. This will prevent unnecessary wear on the drivetrain components and rear tire.

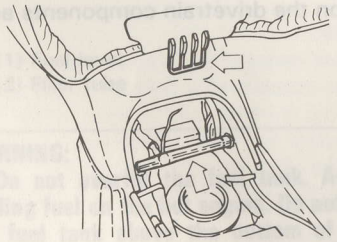
REAR BRAKE PEDAL



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

FRONT SEAT REMOVAL



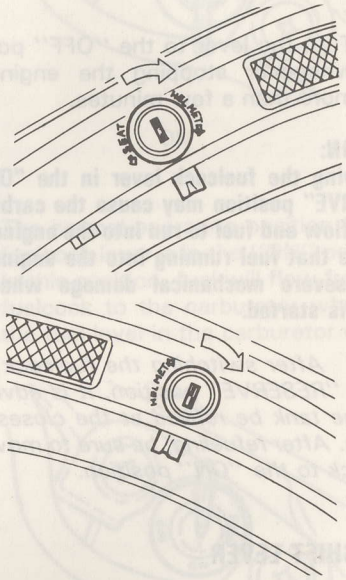


The front seat lock is located under the left side of the seat. To remove the seat, insert the ignition key into the lock and turn it counterclockwise until the lock is released. Lift and slide the seat back. Unhook the seat from the seat holding bracket. To lock the seat, hook the seat into the seat holding bracket and push down firmly until the seat latch snaps into the locked position.

WARNING

- **Whenever you reinstall the seat, pull up on it firmly to be certain it is securely latched. If the seat is not latched securely, it may come loose and interfere with rider control.**

HELMET HOLDERS

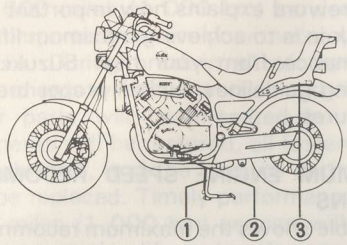


This motorcycle is equipped with two helmet holders. Use helmet holder in this manner. Insert the key, twist it clockwise to open the latch, hook your helmet fastener ring to the latch and twist the key back to lock the holder.

WARNING:

- **Do not operate the motorcycle with a helmet fastened to the helmet holder. The helmet may be caught in the wheel causing an accident, or interfere with the safe operation of the motorcycle.**

STANDS



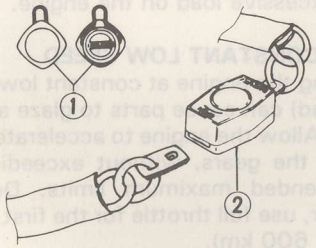
(1) Center stand (2) Side stand (3) Lift bar

The motorcycle is equipped with both a center stand and a side stand. To place the motorcycle on the center stand, place your foot 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 handlebars with your left hand.

WARNING:

- **Before starting off, check that the side stand is returned to its full up position and is not hanging down.**

SECURITY CHAIN & LOCK



(1) Lock key (2) Lock body

This chain is designed for locking your motorcycle or fastening it to a fixed object and is stowed in the tool box behind the rear seat. To lock the chain, insert one end into the other. The chain automatically locks. To unlock the chain, fit the lock key properly to the lock body and turn it clockwise.

WARNING:

- **Before starting off, make sure that your motorcycle is unlocked and chain is stowed in the tool box.**

FUEL, OIL AND COOLING SOLUTION RECOMMENDATIONS

FUEL

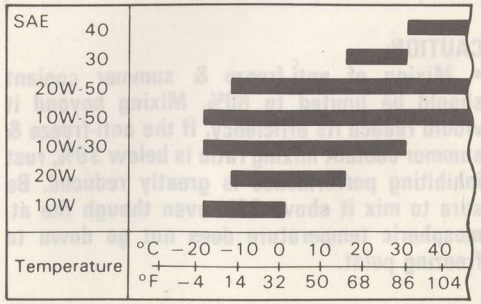
Use only unleaded or low-lead type gasoline of at least 85—95 pump octane ($\frac{R+M}{2}$ method) or 89 octane or higher rated by the Research method. If engine pinging is experienced, substitute another brand as there are differences between brands.

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

ENGINE OIL

SUZUKI recommends the use of **SUZUKI PERFORMANCE 4 MOTOR OIL** or an oil which is rated SE or SF under the API (American Petroleum Institute) classification system. The viscosity rating should SAE 10W-40. If an SAE 10W-40 oil is not available, select an alternate according to the chart below.

This is a very high performance, SAE 10W-40 SF oil with special friction modifier added.



GEAR OIL

Use an SAE90 hypoid gear oil which is rated GL-5 under the API classification system. If you operate the motorcycle where ambient temperature is below 0°C (32°F), use an SAE80 hypoid gear oil.

COOLING SOLUTION

Use an anti-freeze & Summer coolant compatible with aluminum radiator, mixed with distilled water only, at the ratio of 50 : 50.

Water for mixing

Use distilled water only. Water other than distilled water can corrode and clog the aluminum radiator.

Anti-freeze & Summer coolant

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

Suzuki recommends the use of SUZUKI GOLDEN CRUISER 1 200 anti-freeze & summer coolant. If this is not available, use an equivalent which is compatible with aluminum radiator.

Required amount of water/coolant

Solution capacity (total): 3 550 ml (7.50 US pt)

30%	Water	2 485 ml (5.25/4.37 US pt)
	Coolant	1 065 ml (2.25/1.87 US pt)
40%	Water	2 130 ml (4.50/3.75 US pt)
	Coolant	1 420 ml (3.00/2.50 US pt)
50%	Water	1 775 ml (3.75/3.12 US pt)
	Coolant	1 775 ml (3.75/3.12 US pt)

CAUTION:

• Mixing of anti-freeze & summer coolant should be limited to 60%. Mixing beyond it would reduce its efficiency. If the anti-freeze & summer coolant mixing ratio is below 30%, rust inhibiting performance is greatly reduced. Be sure to mix it above 30% even though the atmospheric temperature does not go down to freezing point.

BREAK-IN

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

MAXIMUM ENGINE SPEED RECOMMENDATIONS

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

Initial 500 miles (800 km)	Below 4 000 r/min
Up to 1 000 miles (1 600 km)	Below 6 000 r/min
Over 1 000 miles (1 600 km)	Below 9 500 r/min

VARY THE ENGINE SPEED

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

AVOID CONSTANT LOW SPEED

Operating the engine at constant low speed (light load) can cause parts to glaze and not seat in. Allow the engine to accelerate freely through the gears, without exceeding the recommended maximum limits. Do not, however, use full throttle for the first 1 000 miles (1 600 km).

ALLOW THE ENGINE OIL TO CIRCULATE BEFORE RIDING

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

OBSERVE YOUR FIRST, AND MOST CRITICAL, SERVICE

The 600 miles (1 000 km) service is the most important service your motorcycle will receive. During break-in all of the engine components will have worn in and all of the other parts will have seated in. All adjustments will be restored, all fasteners will be tightened, and the dirty oil and oil filter will be replaced. Timely performance of the 600 miles (1 000 km) service will ensure optimum service life and performance from the engine.

CAUTION:

• The 600 miles (1 000 km) service should be performed as outlined in the Maintenance Schedule section of this Owner's Manual. Pay particular attention to the CAUTION and WARNING in that section.

INSPECTION BEFORE RIDING

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 restriction of movement 3) No play or looseness
Brakes	1) Correct pedal and lever play 2) No "sponginess" 3) No fluid leakage
Clutch	1) Fluid level in the reservoir to be above "LOWER" line 2) No fluid leakage 3) Smooth and sure action of clutch lever
Tires	1) Correct pressure 2) Adequate tread depth 3) No cracks or cuts
Fuel	Enough fuel for the planned distance of operation
Lighting	Operation of all lights—HEADLIGHT, TAILLIGHT, BRAKE LIGHT, INSTRUMENT LIGHTS, TURN SIGNALS
Indicator Lights	Oil pressure, High beam, Neutral, Turn signal, Gear position, Side stand, Low fuel indicator light
Horn and Kill Switch	Correct function
Engine Oil	Correct level
Gear Oil	Correct level
Cooling Solution	Correct level
Throttle	1) Correct play in the throttle cable 2) Smooth operation and positive return of the throttle grip to the closed position
Front Fork Air Pressure	1) Smooth movement 2) Recommended air pressure

RIDING TIPS

WARNING:

(1) If this is the first time that you have ridden a machine 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) One-hand riding is extremely dangerous. Keep both hands firmly on the hadlebars and both feet securely on the footrests. Under no circumstances should both hands be removed from the handlebars.

(3) Do not down shift in the midst of cornering. Slow down to a safe speed before negotiating a corner.

(4) When the road surface is wet or slushy, there is a reduction in tire traction. You should reduce speed whenever these conditions exist as braking and cornering ability are reduced.

(5) At side winds which may be experienced at the exits of tunnels, when passing by the cut of a hill, or when being overtaken by larger vehicles, you should reduce speed and ride alertly.

(6) Obey the speed limit and traffic regulations at all times.

STARTING THE ENGINE

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

WARNING:

• Always start the engine with the transmission in neutral, the clutch lever pulled in to prevent the motorcycle from moving forward when the engine is started.

When the engine is cold:

Turn the carburetor choke lever to the engaged position. Close the throttle completely. Push the electric starter switch and the engine will start. Immediately after the engine starts, keep the engine revolutions to a maximum of 2 000 r/min by using the choke lever position for throttle control. Return the choke lever all the way back to its normal disengaged position approximately 30 seconds after the engine starts. In extremely cold weather it may be necessary to use the choke longer than 30 seconds.

When the engine is warm:

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

WARNING:

• Do not run the engine indoors where there is little or no ventilation available. Carbon monoxide fumes are extremely poisonous. Never leave the engine running while unattended, even for a moment.

CAUTION:

• Do not let the engine run too long without riding, or it will overheat and may damage internal engine components.

STARTING OFF

Pull the clutch lever in and pause 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 moving 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.

WARNING:

• Before starting off, always return the side stand to its full up position and is not hanging down.

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.

Shifting up schedule

miles/h	Gear position	km/h
0—12	1st	0—20
12—19	2nd	20—30
19—25	3rd	30—40
25—31	4th	40—50
31—37	5th	50—60
Over 37	O.D.	Over 60

Shifting down schedule

miles/h	Gear position	km/h
25	O.D.→ 5th	40
19	5th→4th	30
12	4th→3rd	20

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

CAUTION:

• Never allow the engine to rev up to red zone in the tachometer in any gear.

RIDING ON HILLS

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

STOPPING AND PARKING

- Twist 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.

WARNING:

• As vehicle speed increases, stopping distance increases progressively. Be sure you have a safe stopping distance between you and the vehicle or object ahead of you.

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

• Using only the front or rear brake is dangerous and can cause skidding and loss of control. Apply the brakes lightly and with great care on a wet highway pavement or other slippery surfaces and at all corners. Any abrupt braking on slippery or irregular roads can cause loss of rider control.

- Park the motorcycle on a firm, flat surface.
- If the motorcycle is to be parked on the side stand on a slight slope, the front end of the motorcycle should face "up" the incline to avoid rolling forward off the

side stand. You may leave the motorcycle in 1st gear to help prevent it from rolling off the side stand. 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.
- Turn the fuelcock lever to the "OFF" position.

INSPECTION AND MAINTENANCE

NOTICE (to owner's in USA)

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 Sec. 207 (a)(2).

MAINTENANCE SCHEDULE

The chart indicates the intervals between periodic services in miles (kilometers) and months. At the end of each interval, be sure to inspect, check, lubricate and service as instructed. If your motorcycle is used under high stress conditions such as continuous full throttle operation, or is operated in a dusty climate, certain services should be performed more often to 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.

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 or qualified service mechanic. You may perform the unmarked items easily by referring to the instructions in this section.

WARNING:

• Proper break-in maintenance (600 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.

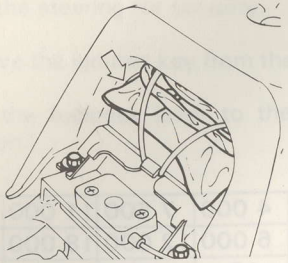
INSPECTION CHART

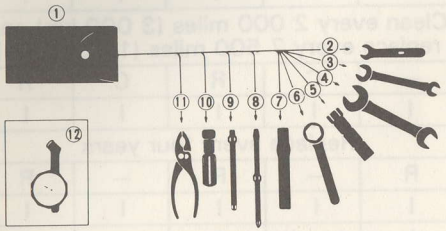
Interval: This interval should be judged by odometer reading or months, whichever comes first.						
	miles	600	4 000	7 500	11 000	15 000
	km	1 000	6 000	12 000	18 000	24 000
	months	2	12	24	36	48
Battery (Specific gravity of electrolyte)		—	I	I	I	I
Air cleaner element		Clean every 2 000 miles (3 000 km) and replace every 7 500 miles (12 000 km)				
Spark plugs		—	C	R	C	R
*Fuel line		I	I	I	I	I
*Vapor hose (California model only)		Replace every four years				
Engine oil and oil filter		R	—	R	—	R
Carburetor idle rpm		I	I	I	I	I
*Clutch hose		I	—	I	—	I
		Replace every four years				
*Clutch fluid		Change every two years				
*Radiator hose		I	—	I	—	I
		Replace every four years				
*Cooling solution		Change every two years				
Secondary and final gear oil		R	—	I	—	I
*Brake hoses		I	I	I	I	I
		Replace every four years				
*Brake fluid		Change every two years				
*Brakes		I	I	I	I	I
Tires		I	I	I	I	I
*Steering stem		I	I	I	I	I
Front fork		—	—	I	—	I
		Check air pressure every 6 months				
*Chassis bolts and nuts		T	T	T	T	T

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

TOOLS

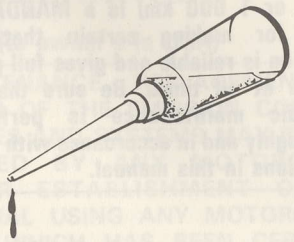
To assist you in the performance of periodic maintenance, a tool kit is supplied and is stowed under the rear seat. The tool kit consists of the following items.



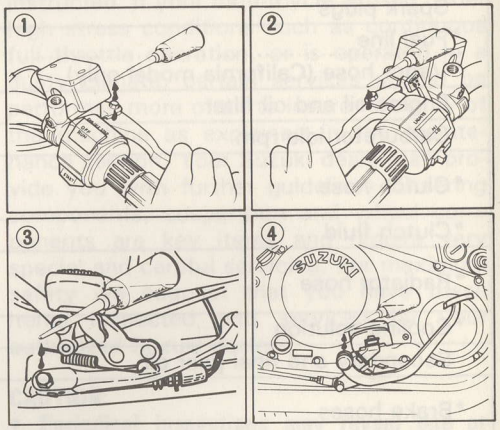


Ref. No.	Item
1.	Tool Bag
2.	8 mm Open End Wrench
3.	10 x 12 mm Open End Wrench
4.	14 x 17 mm Open End Wrench
5.	Spark Plug Wrench
6.	24 mm Ring Wrench
7.	Ring Wrench Handle
8.	Combination Screwdriver
9.	Cross Head Screwdriver
10.	Screwdriver Handle
11.	Pleirs
12.	Front Fork Air Pressure Gauge

OILING POINTS

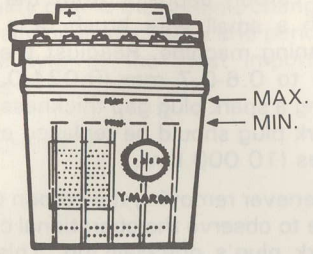


Proper lubrication is important for smooth operation and long life of each working part of your motorcycle and also for safe riding. It is a good practice to oil the machine after a long rough ride and after getting it wet in the rain or after washing it. Major oiling points are indicated below.

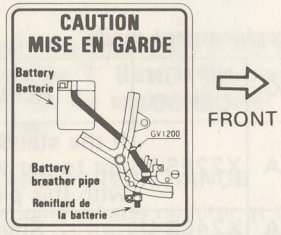


(1) Brake lever holder
(2) Clutch lever holder
(3) Side stand pivot
(4) Rear brake rod link

BATTERY



The battery solution level may be inspected by opening the seat. The solution level must be kept between the MAX. and MIN. level lines at all times. If the solution level is below the MIN. level line, add ONLY distilled water up to the MAX. level line. NEVER use tap water.



CAUTION:

- **Once the battery has been initially serviced, NEVER add diluted sulphuric acid.**
- **Do not 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. Route the battery vent tube and locate the battery exactly as shown.**
- **When attaching the wiring harness battery leads to the battery terminals, observe the correct polarity. The red lead must go to the (+) positive terminal and the black (or black with white tracer) lead must go to the (–) negative terminal. Reversing these connections will damage the charging system and the battery.**

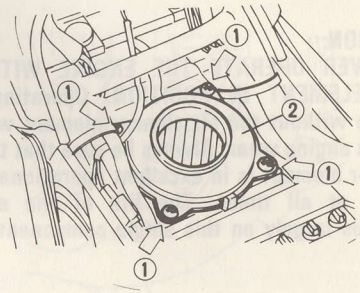
NOTE: At each maintenance interval, have your dealer check the specific gravity of the battery's cells with a battery hydrometer. This will determine the exact condition of each of the six cells.

AIR CLEANER

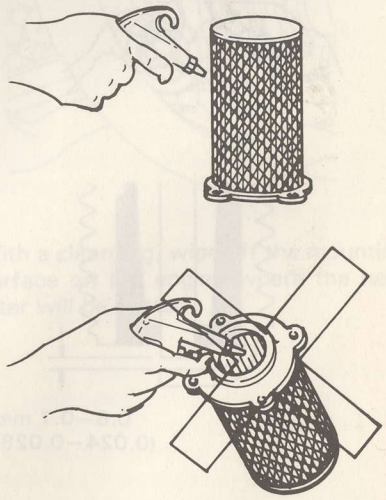
The air cleaner element used in this motorcycle is a paper foam type. If the element has become clogged with dust, intake resistance will increase with a resultant decrease in power output and an increase in fuel consumption. Check and clean the cleaner every 2 000 miles (3 000 km) according to the following procedure.

CAUTION:

- **If driving under dusty conditions, the air cleaner element must be cleaned more frequently than it is with periodic maintenance.**



(1) Remove the front seat and take out the element (2) by removing four screws (1).
(2) Carefully use an air hose to blow the dust from the air cleaner element.



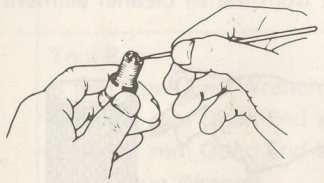
CAUTION:
• Always apply air pressure to the outside of the air cleaner element only. If air pressure is used on the inside, dirt will be forced into the pores of the cleaner element restricting the air flow through the cleaner element.

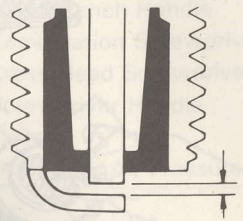
(3) Reinstall the cleaned element or new air cleaner element in reverse order of removal. Be absolutely sure that the element is securely in position and is sealing properly.

NOTE: Replace the air cleaner element with a new one every 7 500 miles (12 000 km).

CAUTION:
• 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.

SPARK PLUGS





0.6—0.7 mm
(0.024—0.028 in)

Initial 600 miles (1 000 km) and every 3 000 miles (5 000 km) thereafter, remove the carbon deposits from the spark plug with a small wire brush or a spark plug cleaning machine. Readjust the spark plug gap to 0.6-0.7 mm (0.024-0.028 in) by using a spark plug gap thickness gauge. The spark plug should be replaced every 6 000 miles (10 000 km).

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 brown 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.

Plug replacement guide

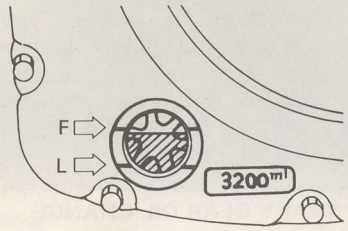
NGK	NIPPON DENSO	REMARKS
D7EA	X22ES-U	If the standard plug is apt to get wet, replace with this plug.
D8EA	X24ES-U	Standard
D9EA	X27ES-U	If the standard plug is apt to overheat, replace with this plug.

CAUTION:
• Do not overtorque or cross thread the spark plugs or the aluminum threads of the cylinder head will be damaged. Do not allow contaminants to enter the engine through the spark plug holes when the plugs are removed.
• The standard spark plug for this motorcycle 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 selecting an alternate plug or heat range. The selection of an improper spark plug can lead to severe engine damage.

ENGINE OIL

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

OIL LEVEL CHECK



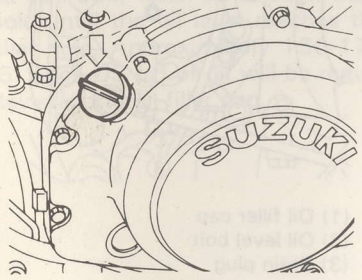
Engine oil inspection window

CAUTION:
• Never operate the motorcycle if the engine oil level is below the "L" (Low) in the inspection window. Never fill the engine oil level above the "F" (Full) line.

ENGINE OIL AND FILTER CHANGE

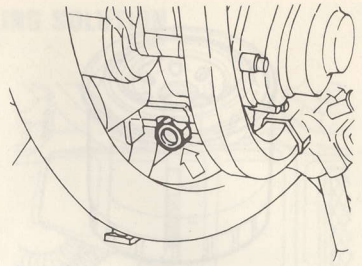
Change the engine oil and oil filter at the initial 600 miles (1 000 km) and at each maintenance interval. The oil should always be changed when the engine is hot so that the oil will drain thoroughly from the engine. The procedure is as follows.

(1) Place the motorcycle on the center stand.



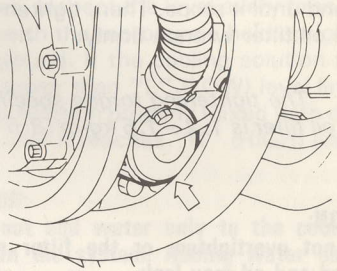
Oil filler cap

(2) Remove the oil filler cap.

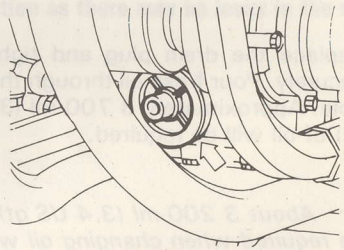


Drain plug

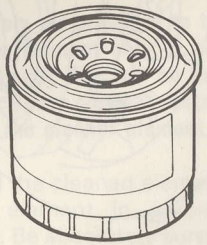
(3) Drain the engine oil by removing the drain plug from the bottom of the engine.



(4) Turn the oil filter counterclockwise using an oil filter wrench and remove it.



(5) With a clean rag, wipe off the mounting surface on the engine where the new filter will be seated.



(6) Smear a little engine oil on the rubber gasket on the new oil filter.

(7) Turn in the new filter all the way by hand until it stops. Then, tighten it with an oil filter wrench firmly.

NOTE: The tightening torque specification of the oil filter is 1.2—1.6 kg-m (8.5—11.5 lb-ft).

CAUTION:
- **Do not overtighten, or the filter may be damaged and oil may leak.**
- **Do not use other than Suzuki genuine engine oil filter.**
- **Do not apply the jack head to the oil filter when jacking up the motorcycle.**

(8) Replace the drain plug and tighten it securely. Pour fresh oil through the filler hole. Approximately 3 700 ml (3.9 US qt) of oil will be required.

NOTE: About 3 200 ml (3.4 US qt) of oil will be required when changing oil without replacing the oil filter.

(9) Start the engine and allow it to idle for several seconds. Check to see that no oil is leaking from the oil filter.

(10) Turn the engine off and wait approximately one minute, then recheck the oil level in the engine oil inspection window. The oil level should be at the "F" line. If the oil level is lower than the "F" line, add fresh oil until it reaches the "F' line.

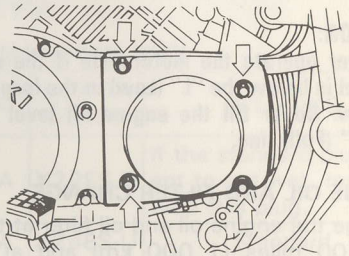
CAUTION:
- **Be sure to always use the specified engine oil described in FUEL AND OIL RECOMMENDATION section.**

GEAR OIL CHANGE

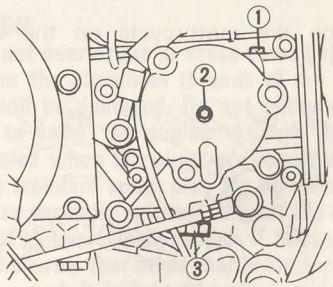
Change the gear oil at initial 600 miles (1 000 km), and thereafter every 7 500 miles (12 000 km). Use SAE 90 hypoid gear oil which is rated GL-5 under API classification system. If you operate the motorcycle where ambient temperature is below 0°C (32°F), use SAE 80 hypoid gear oil. The procedure is as follows:

SECONDARY GEAR OIL CHANGE

(1) Place the motorcycle on the center stand.



(2) Take off the secondary gear case cover by removing the four fitting bolts.

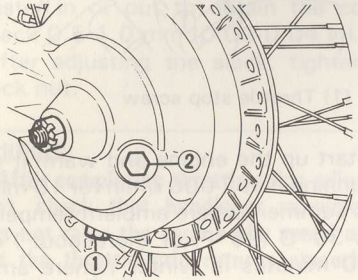


(1) Oil filler cap
(2) Oil level bolt
(3) Drain plug

(3) Remove the oil filler cap.
(4) Drain the oil by removing the drain plug from the bottom of the secondary gear case.
(5) Reinstall the drain plug and tighten it securely after all the oil has been drained out.
(6) Remove the oil level bolt and pour fresh oil through the filler hole until the oil flows out from the oil level hole. Approximately 230-250 ml (7.8-8.5 US oz) of oil will be required.
(7) Reinstall the oil level screw and the oil filler cap.

FINAL GEAR OIL CHANGE

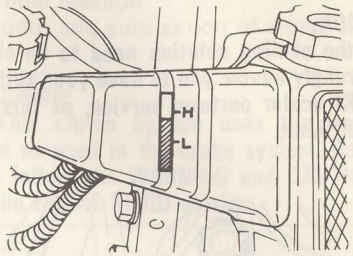
(1) Place the motorcycle on the center stand.



(1) Drain plug
(2) Oil filler cap

(2) Remove the oil filler cap.
(3) Drain the oil by removing the drain plug from the bottom of the final gear case.
(4) Reinstall the drain plug and tighten it securely after all the oil has been drained out. Pour fresh oil through the filler hole untill the oil level reaches the oil filler hole. Approximately 150-170 ml (5.1-5.7 US oz) of oil will be required.
(5) Reinstall the oil filler cap.

COOLING SOLUTION



COOLING SOLUTION LEVEL

The solution level should be kept between the "H" (HIGH) and "L" (LOW) level lines at all times. Inspect the level every time before riding with the motorcycle held upright on a level ground. If the cooling solution level is found lower than "L" (LOW) level line, add cooling solution properly mixed with distilled water until it reaches "H" (HIGH) line.

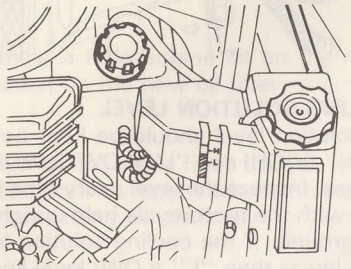
CAUTION:
- **Do not add water only to the cooling solution in the system. Adding water only will dilute the cooling solution and lower its performance.**
- **If cooling solution loss should be found to become frequent during the usage, take your motorcycle to the Suzuki authorized dealer for inspection as there may be leaks in the system.**

CHANGING COOLING SOLUTION

Change the cooling solution every 2 years.

CAUTION:

• If the cooling solution need to be changed we strongly advise you to have your authorized SUZUKI dealer perform service, as this job is very difficult.



WARNING:

• Do not open the radiator cap when the engine is hot, as you may be injured by escaping hot liquid or vapor.

• Do not open or loose the radiator cap even when the engine is cold or the radiator tank may overflow.

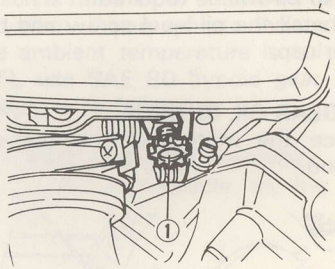
• Cooling solution may be harmful if swallowed or if it comes in contact with skin or eyes. Contact your physician immediately. If swallowed induce vomiting. If cooling solution gets into the eyes or in contact with the skin, it should be flushed thoroughly with plenty of water.

NOTE: About 3 550 ml (7.50 US pt) of cooling solution may be needed when filling the radiator and reservoir tank.

CARBURETOR

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

ENGINE IDLE SPEED ADJUSTMENT



(1) Throttle stop screw

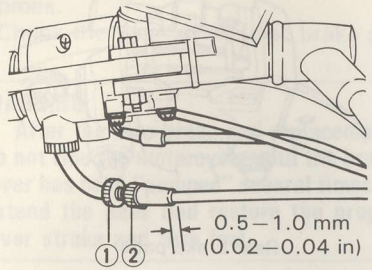
(1) Start up the engine and warm it up by running it at 2 000 r/min for 10 minutes in summer (where ambient temperature is 30°C (86°F) or thereabout) or for 20 minutes in winter (where ambient temperature is down to −5°C (23°F) or thereabout).

(2) After engine warms up, turn the throttle stop screw (1) located on the carburetor in or out so that engine may run at 950-1 150 r/min.

CAUTION:

• The engine idle speed should be adjusted with the engine fully warm.

THROTTLE CABLE ADJUSTMENT



(1) Adjuster
(2) Lock nut

(1) Loosen the lock nut.

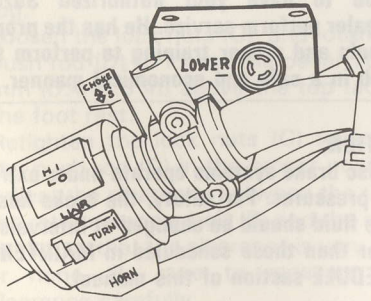
(2) Adjust the cable slack by turning adjuster in or out to obtain the correct slack 0.5-1.0 mm (0.02-0.04 in).

(3) After adjusting the slack, tighten the lock nut.

WARNING:

• After completing throttle cable adjustment, check that handlebar movement does not raise the engine idle speed and that the throttle grip returns smoothly and automatically.

CLUTCH



The clutch release mechanism of this motorcycle is operated by hydraulic pressure. There is no adjustment needed on the clutch release system because the system is self-adjusting. However, inspect the following each time before driving to make sure that the system is in good condition and functioning properly.

- Fluid level in the reservoir to be above "LOWER" line
- No fluid leakage
- Smooth and sure action of clutch lever

WARNING:

• This clutch system uses the same fluid as used in the brake system. Read and follow the WARNING and CAUTION in the BRAKE FLUID section.

BRAKES

This motorcycle utilizes front and rear disc brakes. Properly operating brake systems are vital to safe riding. Be sure to perform the brake inspection requirements as scheduled. The brakes should be inspected at periodic inspection by your authorized Suzuki dealer.

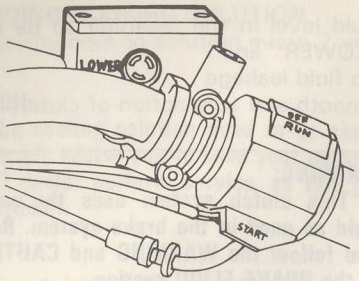
BRAKE FLUID

WARNING:

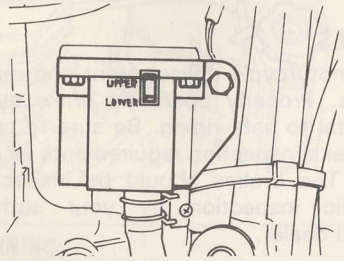
• Brake fluid may be harmful if swallowed or if it comes in contact with skin or eyes. Contact your physician immediately. If swallowed induce vomiting. If brake fluid gets into the eyes or in contact with the skin, it should be flushed thoroughly with plenty of water.

CAUTION:

• This motorcycle 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 unsealed 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.



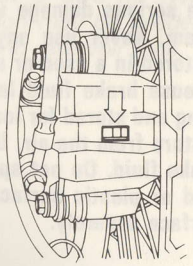
Front reservoir



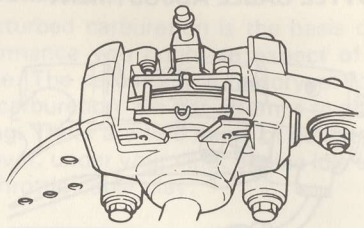
Rear reservoir

Be sure to check the brake fluid level in the front and rear reservoir. If the level was found to be lower than the LOWER 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.

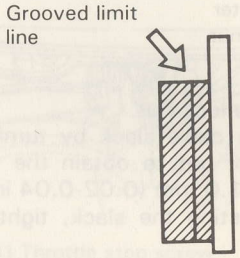
BRAKE PADS



Front brake pads



Rear brake pads



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

BRAKE SYSTEM

WARNING:
• If the brake system or pads need to be repaired or serviced we strongly advise you to have your authorized Suzuki dealer perform service. 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 those scheduled in MAINTENANCE SCHEDULE section of this manual.

Inspect your brake system for the following items daily.

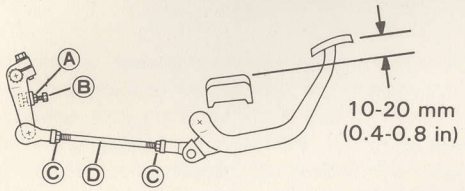
(1) Inspect the front and rear brake system for signs of fluid leakage.
(2) Inspect the brake hose for leakage or a cracked appearance.

(3) The brake lever and pedal should have the proper stroke and be firm at all times.
(4) Check the wear of the disc brake pads.

WARNING:
• After the disc brake pad replacement, do not ride the motorcycle until the brake lever has been "pumped" several times to extend the pads and restore the proper lever stroke and firm feel.

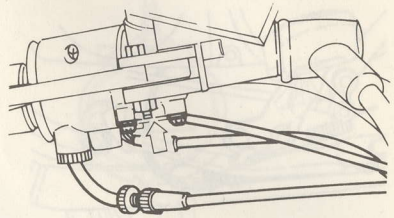
REAR BRAKE PEDAL ADJUSTMENT

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



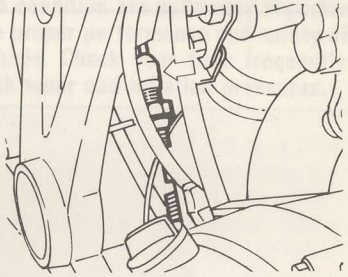
(1) Loosen the lock nut (A) and turn the stopper bolt (B) away from the stopper lug.
(2) Loosen the lock nuts (C), and rotate the push rod (D) to locate the pedal 10-20 mm (0.4-0.8 in) above the top face of the foot rest.
(3) Retighten the lock nuts (C) to secure the push rod (D) in the proper position.
(4) Adjust the clearance between the tip of the return stopper bolt (B) and the stopper lug so that the clearance is very little or none. Be sure to measure this clearance carefully.
(5) Retighten the lock nut (A).

FRONT BRAKE LIGHT SWITCH



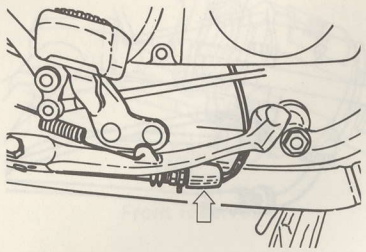
The front brake light switch is located beneath the front brake lever. Loosen the switch fitting screws and adjust the actuating point by moving the switch body to the right or to the left so that the brake light will come on just before a pressure rise is felt at the lever.

REAR BRAKE 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.

SIDE STAND CHECK LIGHT SWITCH



To adjust the side stand check light switch, move the switch fore or aft so that the check light in the instrument panel will turn off when the side stand is returned to its normal up position.

WARNING:
- **Be careful not to touch the exhaust pipe when it is hot; a hot exhaust pipe can burn your body.**

TIRES

Check the tire inflation pressure and tire tread condition at the periodic inspection. For maximum safety and good tire life, the tire pressures should be inspected more often than it is with periodic maintenance.

WARNING:
- **The use of a tire other than original equipment can lead to serious stability problems and possible loss of control. Suzuki strongly recommends that you use only the specified 110/80-19 59H front tire and 140/80-16 68H rear tire due to our familiarity with their performance.**

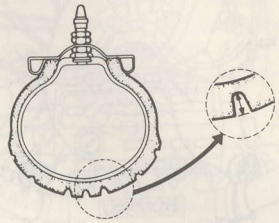
TIRE PRESSURE

Insufficient air pressure in the tires not only hastens tire wear but also seriously affects the stability of the motorcycle. Under inflated tires make smooth cornering difficult and overinflated 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. Tire pressure should only be adjusted when the tires are cold.

COLD INFLATION TIRE PRESSURE

	SOLO RIDING	DUAL RIDING
FRONT	2.00 kg/cm^2 200 kPa 28 P.S.I.	2.25 kg/cm^2 225 kPa 32 P.S.I.
REAR	2.25 kg/cm^2 225 kPa 32 P.S.I.	2.80 kg/cm^2 280 kPa 40 P.S.I.

TIRE TREAD CONDITION

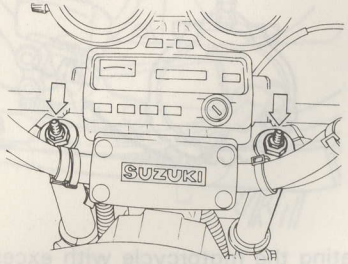


Operating the motorcycle with excessively worn tires will decrease riding stability and can lead to loss of control. It is recommended that a front tire be replaced when the remaining depth of tire tread becomes 1.6 mm (0.06 in) or less. The rear tire should be replaced when the tread becomes 2.0 mm (0.08 in) or less.

WARNING:
- **Tire inflation pressures 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 pressures.**

FRONT SUSPENSION

CHECKING THE AIR PRESSURE



This motorcycle is delivered with 0.3 kg/cm^2 (4.3 psi) of air pressure in the front forks. To check the front fork air pressure, the motorcycle should be on its center stand and all weight removed from the front end by placing a jack under the front of the chassis or engine. Remove the air valve protection cap, and use the air pressure gauge to check the front fork air pressure. Use a hand pump to increase the air pressure. To lower the pressure, bleed the air out from the valve.

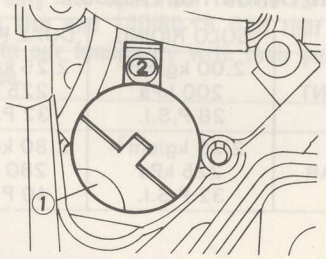
CAUTION:

- **Do not apply the jack head to the oil filter when jacking up the motorcycle.**
- **A hand type pump must be used so that no damage will occur to the fork assembly. Never use any air containing inflammable gases. When pumping air in, never increase the pressure beyond 2.5 kg/cm^2 (35.6 psi). This is the maximum permissible pressure to avoid fork oil seal and valve damage.**
- **Do not select different air pressure settings. Be sure to keep the front fork air pressure always at 0.3 kg/cm^2 (4.3 psi).**
- **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.**
- **Equalize the air pressure of the right and left suspensions.**

NOTE: Fork air pressure, as with tire pressure, should be checked periodically and especially after periods of non-use. When checking the pressure, use the gauge supplied with the motorcycle or a similar low pressure gauge. Apply the pressure gauge squarely 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 loss ranges from 0.05 to 0.10 kg/cm^2. Take this loss of air pressure into consideration when adjusting for your final air pressure.

REAR SUSPENSION

SPRING ADJUSTMENT

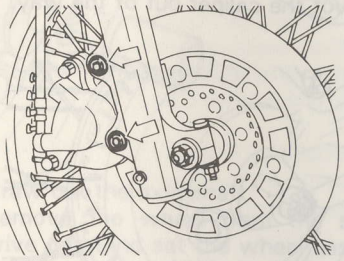


To change the spring pre-load, place the motorcycle on its center stand. Use adjusting handle (1) to turn the pre-load adjuster. To stiffen the spring pre-load, turn the adjusting handle clockwise. To soften the spring pre-load, turn it counterclockwise. The numeral in this indicator shows the strength of spring pre-load. Position "1" provides the least spring pre-load and position "5" provides the maximum spring pre-load.

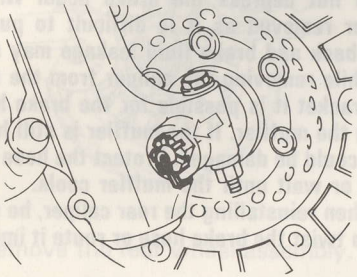
This motorcycle is delivered from the factory with its adjuster set on 2 position.

FRONT WHEEL REMOVAL

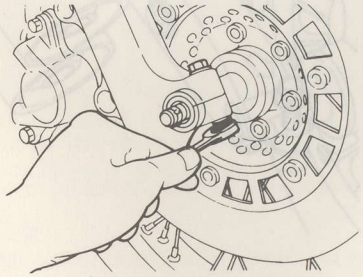
(1) Place the motorcycle on the center stand.



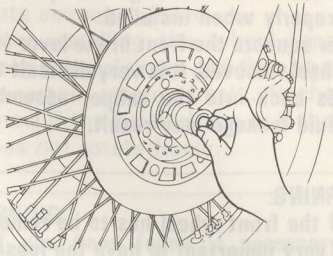
(2) Remove either one of two calipers, left or right, from the fork by unfastening its two mounting bolts.



(3) Remove the cotter pin that locks the axle nut into positions, then loosen the axle nut.



(4) Loosen the clamp nut.

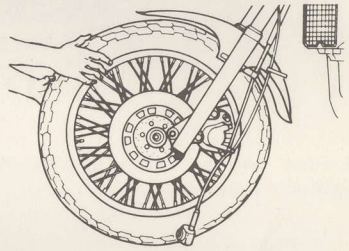


(5) Lift the front end of the motorcycle up and place a jack or a block under the engine or chassis tubes.

CAUTION:

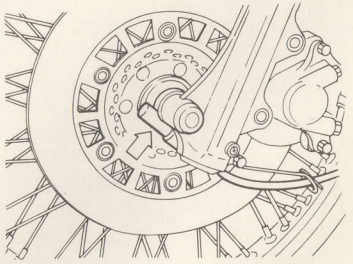
- **Do not apply the jack head to the oil filter when jacking up the motorcycle.**

(6) Draw out the axle shaft.



(7) Slide the front wheel forward. To reinstall the wheel assembly, reverse the sequence as described.

(8) After installing the wheel, apply the brake several times to restore the proper lever stroke.



CAUTION:

- **Locate the speedmeter drive gear box so that the cable is routed smoothly without an ex-**

cessive bent. This will align the speedomenter cable properly when installed.

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

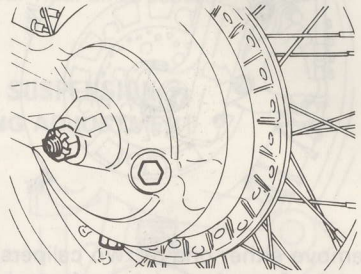
WARNING:

- **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 an authorized Suzuki dealer.**
- **Do not ride the motorcycle until the brake lever has been "pumped" several times to extend the pads and restore the proper lever stroke and firm feel.**

REAR WHEEL REMOVAL

(1) Place the motorcycle on the center stand.

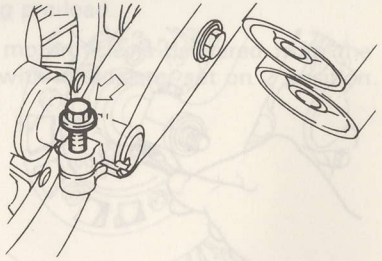
(2) Remove the caliper mounting bolts. Pivot the caliper out of the way.



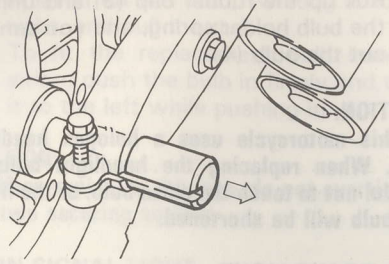
CAUTION:

- **Do not depress the brake pedal with the caliper removed as it is difficult to push the pads back and brake fluid leakage may result.**
- **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 wait until the muffler cools.**
- **When reinstalling the rear caliper, be careful not to twist the brake hose or route it improperly.**

(3) Remove the axle nut after pulling off the cotter pin.

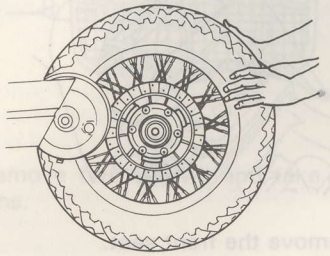


(4) Loosen the axle shaft holder bolt.



(5) Draw out the axle shaft.

(6) Remove the wheel from the splined drive gear and set the wheel assembly on the ground.



(7) Remove the rear wheel assembly.

(8) To replace the wheel reverse the complete sequence listed.

(9) After installing the wheel, apply the brake several times and then check that the wheel rotates freely. Recheck the wheel if the brake drags or if the wheel does not rotate freely.

WARNING:

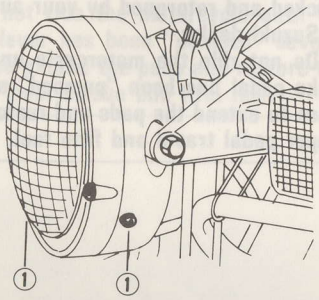
- **If you have found it necessary to remove the rear wheel, it is very important that the nuts and bolts be torqued to the proper specification. We strongly recommend that you have these bolts checked and retorqued by your authorized Suzuki dealer.**
- **Do not ride the motorcycle until the brake pedal has been "pumped" several times to extend the pads and restore the proper pedal travel and firm feel.**

LIGHT BULB REPLACEMENT

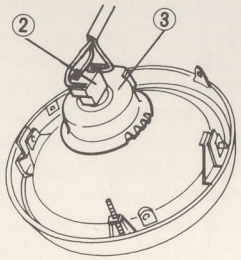
The wattage rating of each bulb is shown on the chart below. When replacing a burned out bulb, always use the exact same wattage rating. Using other than the specified rating can result in overloading the electrical system or premature failure of a bulb.

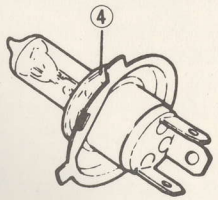
Headlight	12V 60/55W
Tail/Brake light	12V 8/23W
Turn signal light	12V 23W

HEADLIGHT



(1) Remove two screws (1); take off the headlight assembly.





(2) Disconnect socket (2).

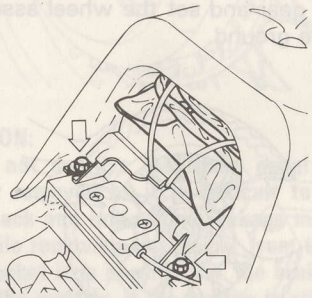
(3) Roll up the rubber cap (3) and unhook the bulb holder spring, and you can pull out the bulb (4).

CAUTION:

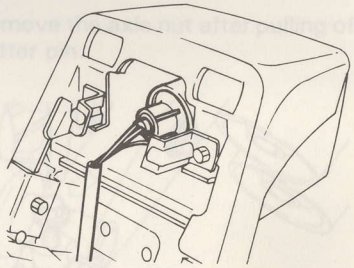
• This motorcycle uses a halogen headlight bulb. When replacing the headlight bulb, be careful not to touch the glass bulb, or the life of the bulb will be shortened.

TAIL/BRAKE LIGHT

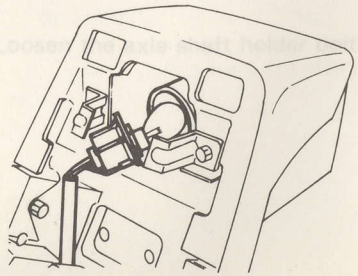
To replace the tail/brakelight bulb, follow these directions:



(1) Remove the front seat.
(2) Take off the rear seat by removing two fitting bolts.



(3) Remove the socket, twisting it to the left.

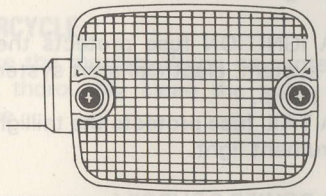


(4) Push in on the bulb, twisting it to the right, and pull it out.
(5) To fit the replacement bulb into position, push the bulb in firmly and twist it to the left while pushing in.

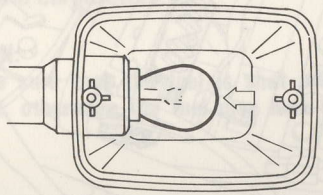
CAUTION:

• When replacing the lens, do not overtighten the two securing screws.

TURN SIGNAL LIGHT



(1) Remove two screws and take off the lens.



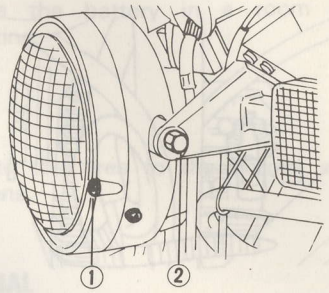
(2) Push in on the bulb, twisting it to the left, and pull it out.
(3) To fit the replacement bulb, push it in and twist it to the right while pushing.

CAUTION:

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

HEADLIGHT BEAM ADJUSTMENT

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

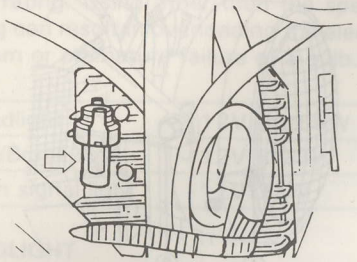


To adjust the beam horizontally:
Turn cross head screw (1) located on the left side of the headlight unit clockwise or counterclockwise.

To adjust the beam vertically:
Loosen headlight housing fitting bolt (2) and move the headlight housing up or down as required.

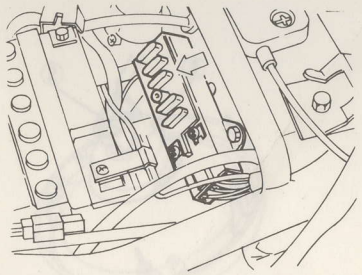
CIRCUIT BREAKER/FUSES/OUTPUT TERMINAL

CIRCUIT BREAKER



The circuit breaker is located inside the right frame cover. This is a circuit protection device designed to operate when the main circuit load exceeds the rated amperage. When overloaded, a red button on the breaker pops out apporximately 1-2 mm (0.04-0.08 in). The circuit remains open until the overload is corrected and the breaker is reset. To reset, wait apporximately for 10 minutes to cool the breaker and push in the red button.

FUSES



The fuses are located under the seat. They are designed to open when a circuit overload exists in individual electrical system circuits. If any electreical system fails to operate, then the fuses must be checked. There is a spare fuse located in the fuse box cover.

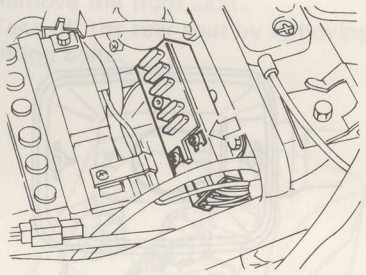
CAUTION:

- **Never use other than specified 10A fuse for the output terminal.**
- **Always be sure to replace the blown fuse with the correct amperage fuse. Never use a substitute, for example, aluminum foil or a wire to replace a blown fuse. If a fuse blows out or the breaker reset opens in a short period of time, it means that you could have a major electrical problem. You should consult your Suzuki dealer immediately.**

FUSE LIST

1. 10A HEAD fuse protects the headlight and high beam indicator light.
2. 10A SIGNAL fuse protects the turn signal light, turn signal indicator lights, brakelight and horn.
3. 10A IGNITION fuse protects the ignition system, electrical start system and fuel pump.
4. 10A TAIL fuse protects the taillight and instrument light.
5. 10A POWER SOURCE fuse protects the electrical accessories connected to output terminal.

OUTPUT TERMINAL



An output terminal is provided for attaching electrical accessories. To attach an electrical accessory to this output terminal, first remove terminal cover. Next attach the wires to the terminal being certain to connect the positive wire of the accessory to the positive (+) output terminal and the negative wire of the accessory to the negative (−) output terminal. After that, replace the terminal cover.

CAUTION:

- **This output terminal is provided only for electrical accessories. Any other usages are forbidden. In actual use for any electrical accessory, please consult Suzuki dealer.**

STORAGE PROCEDURE

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

MOTORCYCLE

- Place the motorcycle on its center stand and thoroughly clean the entire motorcycle.

FUEL

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

CAUTION:

- **Make sure that the fuel is shut off at the fuelcock, otherwise the fuel may leak into the engine.**

ENGINE

- Pour one tablespoon of motor oil into the spark plug holes. Reinstall the spark plugs and crank the engine a few times.
- Drain the engine oil thoroughly and remove the oil filter. It is not necessary to install an oil filter. Refill the crankcase with the fresh engine oil all the way up to the filler hole.

BATTERY

- Remove the battery from the motorcycle.

CAUTION:

- **Be sure to remove the negative terminal first, then remove the positive terminal.**
- Clean the outside of the battery with a mild detergent and remove any corrosion from the terminals and wiring harness connections.
- Store the battery in a room above freezing.

TIRE

- Inflate the tires to the normal specifications.

EXTERNAL

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

PROCEDURE DURING STORAGE

- Once a month, carry out the following steps:
- Recharge the battery with a charging rate (Ampere) of 1/10 of its capacity (Ah) as shown in the specifications page.

PROCEDURE FOR RETURNING TO SERVICE

- Clean the entire motorcycle.
- Remove the spark plugs. Turn the engine a few times by putting the transmission in top gear and turning the rear wheel. Reinstall the spark plugs.
- Drain the engine oil thoroughly. Install a new oil filter and fill the engine with fresh oil as outlined in this manual.
- Reinstall the battery.

CAUTION:

- **Make sure that the battery vent hose is routed properly.**

- Lubricate all places as instructed in this manual.
- Do the "Inspection Before Riding" as listed in this manual.

SPECIFICATIONS

DIMENSIONS AND DRY MASS

Overall length	2 225 mm (87.6 in)
Overall width	870 mm (34.3 in)
Overall height	1 215 mm (47.8 in)
Wheelbase	1 575 mm (62.0 in)
Ground clearance	145 mm (5.7 in)
Seat height	770 mm (30.3 in)
Dry mass	245 kg (540 lbs), 246 kg (542 lbs)...California model

ENGINE

Type	Four-stroke, water-cooled, DOHC, TSCC, 82-degree V-four
Number of cylinder	4
Bore	78.0 mm (3.071 in)
Stroke	61.0 mm (2.402 in)
Piston displacement	1 165 cm^3 (71.1 cu. in)
Compression ratio	10.5 : 1
Carburetor	MIKUNI BDS36SS, four
Air cleaner	Paper type
Starter system	Electric
Lubrication system	Wet sump

TRANSMISSION

Clutch		Wet multi-plate type
Transmission		6-speed constant mesh
Gearshift pattern		1-down, 5-up
Primary reduction		1.756 (72/41)
Secondary reduction		1.066 (16/15)
Final reduction		2.909 (32/11)
Gear ratios,	Low	2.500 (35/14)
	2nd	1.777 (32/18)
	3rd	1.380 (29/21)
	4th	1.125 (27/24)
	5th	0.923 (24/26)
	O.D.	0.750 (21/28)
Drive system		Shaft drive

CHASSIS

Front suspension	Telescopic, pneumatic/coil spring, oil damped
Rear suspension	Full-floating suspension, oil damped, spring pre-load fully adjustable
Steering angle	37° (right & left)
Caster	60°30'
Trail	116 mm (4.57 in)
Turning radius	3.0 m (9.8 ft)
Front brake	Disc brake, twin, hydraulically operated
Rear brake	Disc brake, hydraulically operated
Front tire size	110/80-19 59H
Rear tire size	140/80-16 68H
Front fork stroke	160 mm (6.3 in)
Rear wheel travel	115 mm (4.5 in)

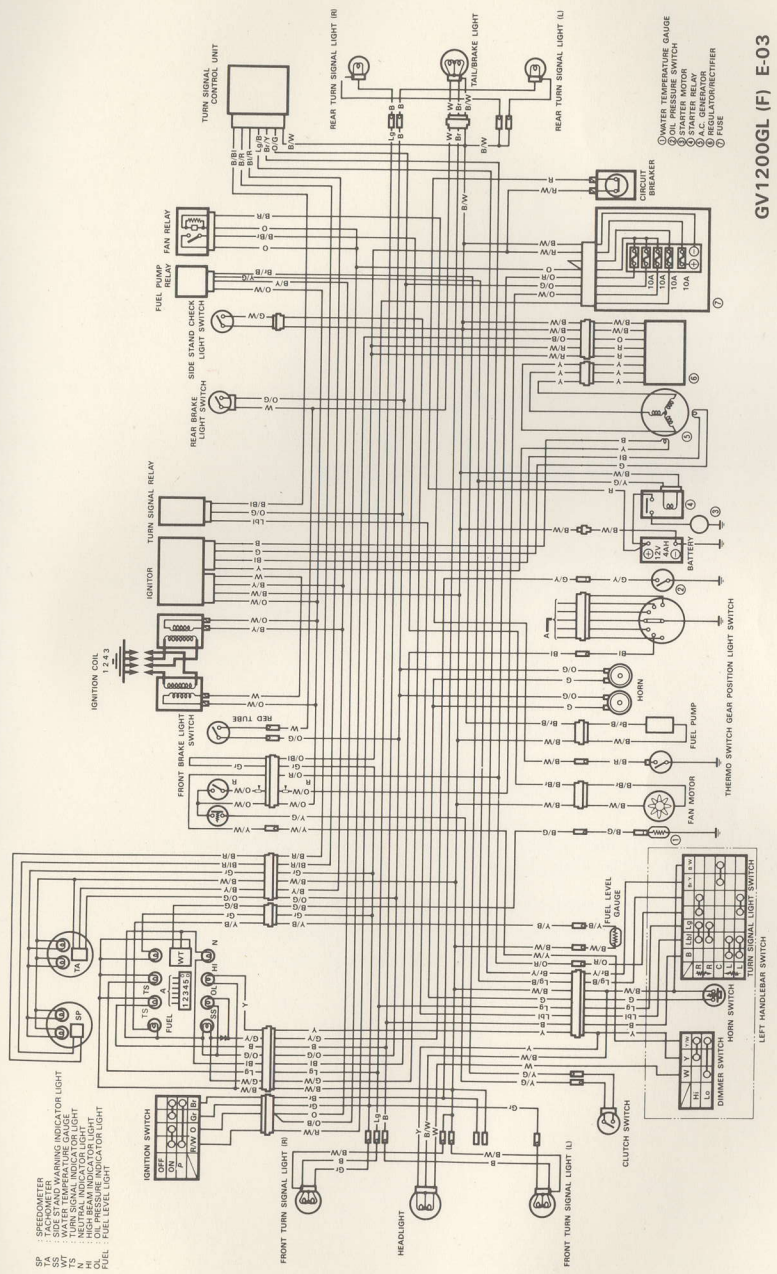
ELECTRICAL

Ignition type	Transistorized
Ignition timing	10° B.T.D.C. below 1 500 r/min and 35° B.T.D.C. above 3 800 r/min
Spark plug	NGK D8EA or NIPPON DENSO X24ES-U
Battery	12V 50.4 kC(14 Ah)/10 HR
Generator	Three-phase A.C. generator
Fuse	10/10/10/10/10A
Circuit breaker	30A
Headlight	12V 60/55W
Tail/Brake light	12V 8/23W (3/32 cp)
Turn signal light	12V 23W (32 cp)
Speedometer light	12V 3.4W
Tachometer light	12V 3.4W
Neutral indicator light	12V 3W
High beam indicator light	12V 1.7W
Turn signal indicator light	12V 3W
Side stand check light	12V 3W
Cooling solution temperature meter	12V 3W
Low fuel indicator light	12V 3.4W
Oil pressure indicator light	12V 3W

CAPACITIES

Fuel tank including reserve	13.0 L (3.4 US gal), 12.0 L (3.2 US gal)...California model
reserve	3.0 L (3.2 US qt)
Engine oil	3.2 L (3.4 US qt)
Secondary gear oil	230-250 ml (7.8-8.5 US oz)
Final gear oil	150-170 ml (5.1-5.7 US oz)
Cooling solution	3 550 ml (7.50 US qt)

WIRING DIAGRAM



WIRE COLOR			
B	Black	Y	Yellow
Bl	Blue	B/Bl	Black with Blue tracer
Br	Brown	B/Br	Black with Brown tracer
G	Green	B/G	Black with Green tracer
Gr	Gray	B/R	Black with Red tracer
Lbl	Light blue	B/W	Black with White tracer
Lg	Light green	B/Y	Black with Yellow tracer
O	Orange	Bl/R	Blue with Red tracer
R	Red	Br/B	Brown with Black tracer
W	White	Br/Y	Brown with Yellow tracer
		G/W	Green with White tracer
		G/Y	Green with Yellow tracer
		Lg/B	Light green with Black tracer
		O/B	Orange with Black tracer
		O/Bl	Orange with Blue tracer
		O/G	Orange with Green tracer
		O/R	Orange with Red tracer
		O/W	Orange with White tracer
		R/W	Red with White tracer
		Y/B	Yellow with Black tracer
		Y/G	Yellow with Green tracer
		Y/W	Yellow with White tracer