


## IMPORTANT

### WARNING/CAUTION/NOTE

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

#### WARNING

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

#### CAUTION

Indicates a potential hazard that could result in motorcycle damage.

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

WARNINGS and CAUTIONS are arranged like this:

#### WARNING-or- CAUTION

The first part will describe a **POTENTIAL HAZARD** and **WHAT CAN HAPPEN** if you ignore the **WARNING** or **CAUTION**.

The second part will describe **HOW TO AVOID THE HAZARD**.

## FOREWORD

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

The proper care and maintenance that your motorcycle requires is outlined in this manual. By following these instructions explicitly you will ensure a long trouble-free operating life for your motorcycle. 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 authorized 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 CORPORATION

*New Rugs Pair felt  
14,000*

All information, illustrations, and specifications contained in this manual are based on the latest product information available at the time of publication. Due to improvements or other changes, there may be some discrepancies in this manual. Suzuki reserves the right to make production changes at any time, without notice and without incurring any obligation to make the same or similar changes to vehicles previously built or sold.

Suzuki Motor Corporation believes in conservation and protection of Earth's Natural resources. To that end, we encourage every vehicle owner to recycle, trade in, or properly dispose of, as appropriate, used motor oil, engine coolant, and other fluids, batteries, and tires.

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## THE SPORT OF MOTORCYCLING

Your motorcycle and this owner's manual have been designed by people like you who enjoy motorcycling. People become motorcyclists for many reasons. For starters, street riding is fun and invigorating. But no matter why you became a motorcyclist, or how experienced you are, you will eventually face some challenging situations.

In preparing for these challenges, you will be fine-tuning your coordination, concentration, and attitude. Learning the skills and strategies associated with motorcycling is the basis for safely participating in this sport. Many motorcyclists find that as they become better riders, they also get more enjoyment from the freedom unique to motorcycling.

Please remember:

Most accidents can be avoided. The most common type of motorcycle accident in the U.S. occurs when a car traveling toward a motorcycle turns left in front of the motorcycle. Is that because other drivers are out to get motorcyclists? No. Other drivers simply don't always notice motorcyclists. Ride defensively. Wise motorcyclists use a strategy of assuming they are invisible to other drivers, even in broad daylight. Pay careful attention to other motorists, especially at intersections, because they may not be paying attention to you. Select a lane position that gives you the best view of others, and other motorists the best view of you. Wear bright, reflective

clothing. Put reflective strips on your helmet.

**If you don't have a helmet: buy a helmet, and wear it EVERY TIME YOU RIDE.**

Most accidents occur within a few miles of home, and almost half occur at speeds of less than 30 mph. So even if you're just going on a quick errand, be prepared—strap on your helmet before you take off.

Helmets do not reduce essential vision or hearing. Generally, helmets do not cause or intensify injury if you crash. Helmets simply help your skull protect your intelligence, your memory, your personality, and your life.

Your eyesight is equally valuable. Wearing suitable eye protection can help keep your vision unblurred by the wind and save your eyes from airborne hazards like bugs, dirt, or pebbles kicked up by tires.

**If a collision is imminent, DO SOMETHING!**

Many riders fear locking up their brakes or haven't learned to swerve to avoid an accident. Many inexperienced riders (and too many seasoned riders) use only their rear brake in an emergency, resulting in unnecessary impacts in some cases and unnecessarily high impact speeds in other cases. Your rear brake can only provide about 30% of your motorcycle's potential stopping power. The front and rear brakes can and should be used together to maximize braking effectiveness.

Experienced motorcyclists learn to "cover" the front brake lever by lightly resting a couple of fingers over the lever when riding in traffic and near intersections to give them reaction time a head start.

Emergency stopping and swerving are techniques that you should practice and master before you find yourself in an emergency situation. The best place to practice such techniques is in a controlled environment such as the Motorcycle Safety Foundation's (MSF) rider training courses. The MSF's Motorcycle RiderCourses (fundamental techniques) and Experienced RiderCourses (advanced strategies) present hands-on instruction of the basic principles of motorcycling and a variety of accident avoidance maneuvers. Even a seasoned motorcyclist can improve his or her riding skills, and pick up a few new skills, through these courses. Some insurance companies even offer discounts to course graduates.

**Special situations require special care.**

Of course, there are some times when full-force braking is not the correct technique. When the road surface is wet, loose, or rough, you should brake with care. When you're leaned over in a corner, avoid braking. Straighten up before braking. Better yet, slow down before entering the corner.

In these situations, the traction available between your tires and the road surface is limited. Over-braking when traction is limited will cause your tires to skid, possibly resulting in loss of directional



control or causing you and your motorcycle to fall over.

### **Know your limits.**

Always ride within the boundaries of your own skills. Knowing these limits and staying within them will help you avoid accidents.

A major cause of accidents involving only a motorcycle (and no cars) is going too fast through a turn. Before entering a turn, select an appropriately low cornering speed.

Even on straight roads, ride at a speed that is appropriate for the traffic, visibility and road conditions, your motorcycle, and your experience.

Riding a motorcycle safely requires that your mental and physical skills are fully part of the experience. You should not attempt to operate a motor vehicle, especially one with two wheels, if you are tired or under the influence of alcohol or other drugs. Alcohol, illegal drugs, and even some prescription and over-the-counter drugs can cause drowsiness, loss of coordination, loss of balance, and especially the loss of good judgment. If you are tired or under the influence of alcohol or other drugs, PLEASE DO NOT RIDE your motorcycle.

### **Be extra safety-conscious on bad weather days.**

Riding on bad weather days, especially wet ones, requires extra caution. Braking distances increase on a rainy day. Stay off the painted surface marks, manhole covers, and greasy-appearing areas, as they can be especially slippery. Use extra

caution at railway crossings and on metal gratings and bridges. When it starts to rain, any oil or grease on the road rises to the surface of the water. Pull over and wait a few minutes until this oil film is washed away before riding. Whenever in doubt about road conditions, slow down!

### **Practice away from traffic.**

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. Again, consider taking one of the MSF's RiderCourses. Even experts will be pleased with the caliber of the information presented in these courses. As the MSF says: "The more you know, the better it gets!"

### **Inspection before riding.**

Review the instructions in the INSPECTION BEFORE RIDING section of this manual. Perform an entire pre-ride inspection before you head out on the road. Spending a few minutes preparing your machine for a ride can help prevent accidents due to mechanical failure or costly, inconvenient breakdowns far from home.

### **Accessories and Loading**

The accessories you use with your motorcycle and the manner in which you load your gear onto the bike might create hazards. Aerodynamics, handling, balance, and cornering clearance can suffer, and the suspension and tires can be overloaded. Read the ACCESSORY

## USE AND MOTORCYCLE LOADING section.

### **Carrying a Passenger**

Carrying a passenger, when done correctly, is a great way to share the joy of motorcycling. You will have to alter your riding style somewhat since the extra weight of a passenger will affect handling and braking. You may also need to adjust tire pressures and suspension; please refer to the Tire Pressure and Loading section and the Suspension section for more details.

A passenger needs the same protection that you do, including a helmet and proper clothing. The passenger should not wear long shoe laces or loose pants that could get caught in the wheel or the chain. Passengers must be tall enough that their feet reach the footrests.

### **Motorcycle Safety Foundation's "Riding Tips and Practice Guide" Handbook (for owners in USA).**

This special handbook, supplied with your owner's manual, contains a variety of safety tips, helpful hints, and practice exercises. This manual can increase your riding enjoyment and safety. You should read it thoroughly.

### **Be street smart**

Always heed speed limits, local laws, and the basic rules of the road. Set a good example for others by demonstrating a courteous attitude and a responsible riding style.

### **Conclusion**

Traffic, road and weather conditions vary. Other motorcyclists' actions are unpredictable. Your motorcycle's condition can change. These factors can best be dealt with by giving every ride your full attention.

Circumstances beyond your control could lead to an accident. You need to prepare for the unexpected by wearing a helmet and other protective gear, and learning emergency braking and swerving techniques to minimize the damage to you and your machine.

The best way to learn basic riding skills and evasive maneuvers or refresh your own riding skills is to take one of the courses offered by the Motorcycle Safety Foundation. Your authorized Suzuki dealer can help you locate the fundamental or advanced riding skills course nearest you, or you can call toll-free 1-800-446-9227.

Good riding on your new Suzuki!

## FUEL AND OIL RECOMMENDATION

### FUEL

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

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

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

#### **Gasoline containing MTBE**

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

#### **Gasoline/Ethanol Blends**

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

#### **Gasoline/Methanol Blends**

Fuel containing 5% or less methanol (wood alcohol) may be suitable for use in your motorcycle if they contain co-solvents and corrosion inhibitors. **DO NOT USE** fuels containing more than 5% methanol under any circumstances. Fuel system damage or motorcycle performance problems resulting from the use of such fuels are not the responsibility of Suzuki and may not be covered under the New Vehicle Limited Warranty or the Emission Control System Warranty.

#### **Fuel Pump Labeling**

In some states, pumps that dispense oxygenated fuels are required to be labeled for the type and percentage of oxygenate, and whether important additives are present. Such labels may provide enough information for you to determine if a particular blend of fuel meets the requirements listed above. In other states, pumps may not be clearly labeled as to the content or type of oxygenate and additives. If you are not sure that the fuel you intend to use meets these requirements, check with the service station operator or the fuel suppliers.

#### NOTE:

- To help clean the air, Suzuki recommends that you use the oxygenated fuels.
- Be sure that any oxygenated fuel you use has octane ratings of at least 87 pump octane ((R+M)/2 method).
- If you are not satisfied with the driveability or fuel economy of your motorcycle when you are using an oxygenated fuel, you should switch back to regular unleaded gasoline.
- If engine pinging is experienced, substitute another brand as there are differences between brands.

### ⚠ CAUTION

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

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

## ENGINE OIL



Suzuki recommends the use of SUZUKI PERFORMANCE 4 MOTOR OIL or an oil which is rated SF or SG under the API service classification. The recommended viscosity is SAE 10W-40. If an SAE 10W-40 oil is not available, select an alternative according to the following chart.

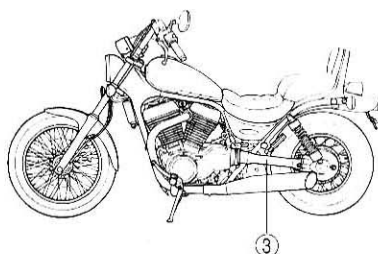
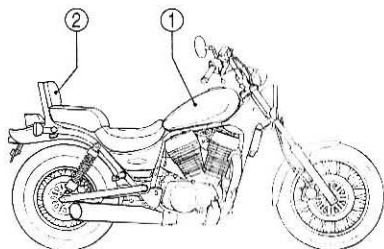
ENGINE OIL											
		20W - 50									
		15W - 40, 15W - 50									
		10W - 40, 10W - 50									
		10W - 30									
Temperature	°C	-30	-20	-10	0	10	20	30	40		
	°F	-22	-4	14	32	50	68	86	104		

## 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 (23°F), use SAE80 hypoid gear oil.

# LOCATION OF LABELS

Read and follow all of the warnings labeled on your motorcycle. Make sure you understand all of the labels. Keep the labels on your motorcycle. Do not remove them for any reason.



①

## ⚠ WARNING

Failure to follow these safety precautions may increase your risk of injury:

- Wear a helmet, eye protection, and bright protective clothing.
- Don't ride after consuming alcohol or other drugs.
- Slow down on slippery surfaces, unfamiliar terrain, or when visibility is reduced.
- Read owner's manual carefully.

②

The owner's manual contains important safety information and instructions which should be read carefully before operating the vehicle.

If the vehicle has been resold, obtain the owner's manual from the previous owner or contact your local SUZUKI dealer for assistance.

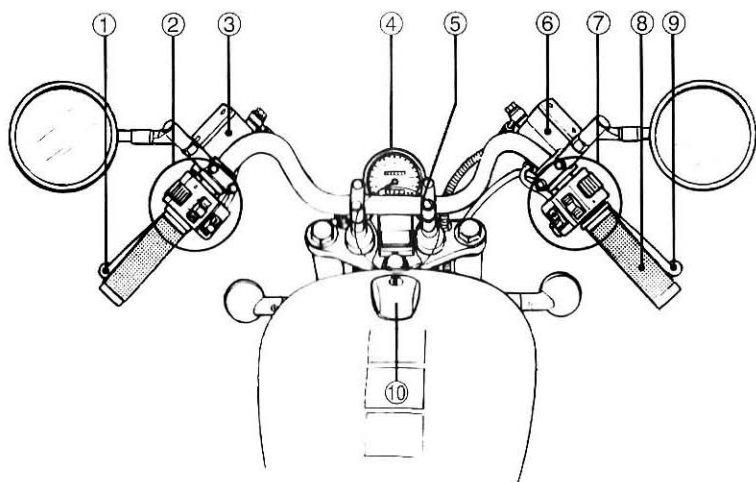
③

## ⚠ WARNING

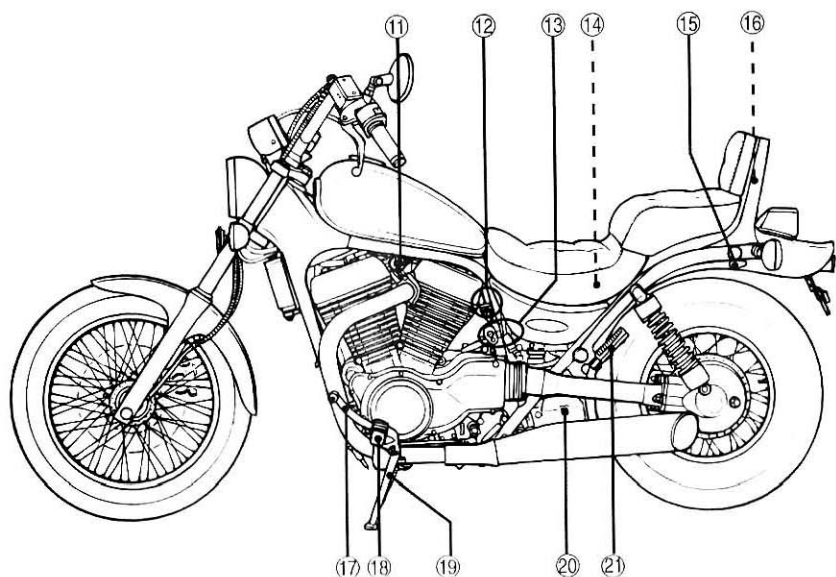
- Check tire condition, wear, and cold tire pressure before each ride.
- Replace only with tires of listed size and type.
- Read Owner's manual for more information.

COLD TIRE PRESSURE	SOLO RIDING			DUAL RIDING		
	kPa	kgf/cm <sup>2</sup>	psi	kPa	kgf/cm <sup>2</sup>	psi
FRONT	200	2.00	29	200	2.00	29
REAR	200	2.00	29	225	2.25	33
TIRE SIZE		FRONT		REAR		
		110/90-19 62H		170/80-15M/C 77H		
TYPE	BRIDGESTONE	L307		G544		

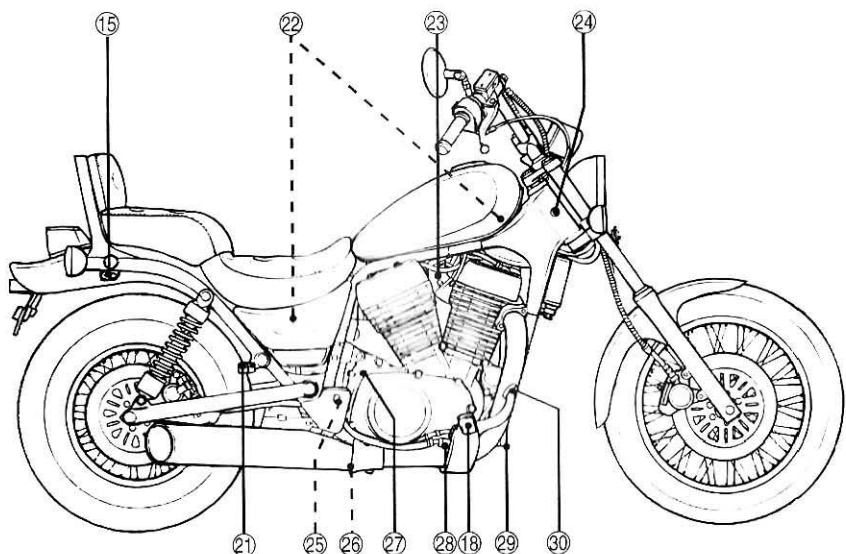
## LOCATION OF PARTS



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



- 11 Choke handle
- 12 Fuel valve
- 13 Ignition switch
- 14 Fuses
- 15 Helmet holders
- 16 Tools
- 17 Gearshift lever
- 18 Footrests
- 19 Side stand
- 20 Battery
- 21 Passenger footrests



- 22 Air cleaner
- 23 Throttle stop screw
- 24 **Steering lock**
- 25 Rear brake fluid reservoir
- 26 Engine oil drain plug
- 27 Engine oil filler cap
- 28 Rear brake light switch
- 29 Engine oil filter
- 30 Rear brake pedal



## CONTROLS, EQUIPMENT AND ADJUSTMENTS

### KEY



This motorcycle comes equipped with two pairs of keys, one for the ignition switch and the other for the steering lock.

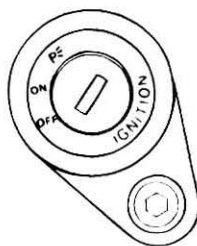
The ignition keys are stamped with an identifying number. The number of the steering lock keys is stamped on the plate provided with the keys; instead of on the keys.

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

Key No.	Ignition
	Steering

### IGNITION SWITCH

The ignition switch has three positions.



#### "OFF" position

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

#### "ON" position

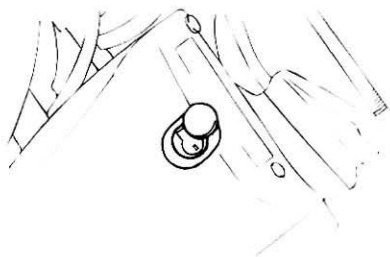
The ignition circuit is completed and the engine can be started. The headlight and taillight will automatically turn on. The key cannot be removed in this position.

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

#### "P" position

Taillight will come on to increase visibility for temporary road side parking at night. The key can be removed.

## STEERING LOCK



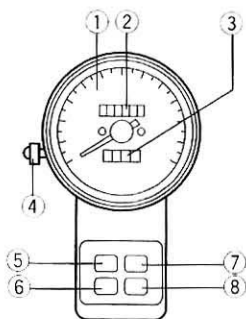
Turn the handlebars all the way to the left. Insert the steering lock key into the steering lock, turn it counterclockwise and push it further in. Turn the key clockwise (to normal position) and pull out the key. The steering is now locked.

### **WARNING**

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

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

## INSTRUMENT PANEL



### **Speedometer ①**

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

### **Odometer ②**

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

### **Trip Meter ③**

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

### **Oil Pressure Indicator Light ⑤**

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

## **⚠ CAUTION**

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

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

### **Turn Signal Indicator Light ⑥**

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

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

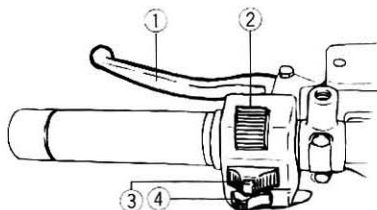
### **High Beam Indicator Light ⑦**

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

### **Neutral Indicator Light ⑧**

The green indicator 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**



### **Clutch Lever ①**

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

### **Dimmer Switch ②**

**"☰☐" position**

The headlight low beam and tail-light turn on.

**"☷☐" position**

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

### Turn Signal Switch ③

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

### WARNING

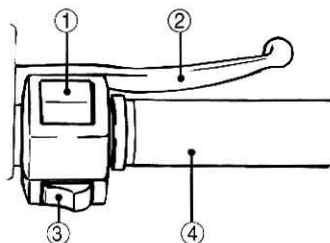
Failure to use the turn signals, and failure to turn off the turn signals can be hazardous. Other drivers may misjudge your course and this may result in an accident.

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


### Horn Button " " ④

Press the button to sound the horn.

## RIGHT HANDLEBAR



### Engine Stop Switch ①

"" position

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

"( )" position

The ignition circuit is on and the engine can run.

### Front Brake Lever ②

Apply the front brake by squeezing the front brake lever toward the grip. The brake light will come on when the lever is squeezed.

### Electric Starter Button "Ⓝ" ③

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

*NOTE: This motorcycle has a start-er interlock switches for the ignition and starter circuit. The engine can only be started if:*

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

### ⚠ CAUTION

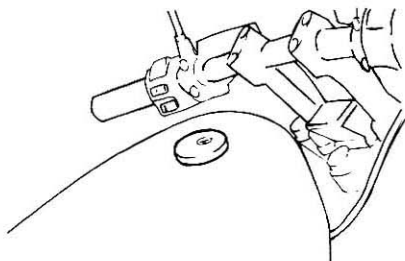
**To prevent electrical system damage, do not operate the starter motor more than five seconds at a time.**

**If the engine does not start after several attempts, check the fuel supply and ignition system. Refer to the TROUBLESHOOTING section in this manual.**

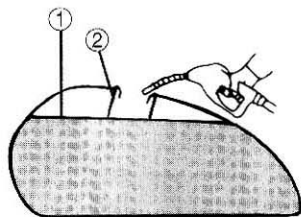
### Throttle Grip ④

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

### FUEL TANK CAP



To open the fuel tank cap, insert the ignition key into the lock and turn it clockwise. With the key inserted, remove the fuel tank cap. To close the fuel tank cap, line up the guide pins and push down until the locking pins click into position. The key must be in the cap before installing the cap. Turn the key counterclockwise and remove it from the cap.



- ① Fuel level
- ② Filler neck

## **⚠ WARNING**

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

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

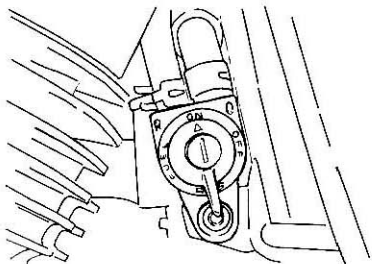
## **⚠ WARNING**

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

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

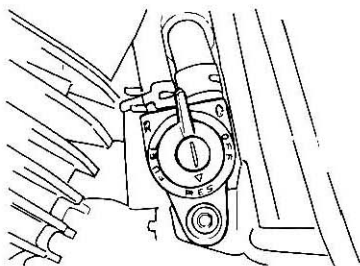
## **FUEL VALVE**

This motorcycle has a manually operated fuel valve. There are three positions: "ON," "RES" and "OFF."



### **"ON" Position**

To run the engine, turn the fuel valve lever to the "ON" position.

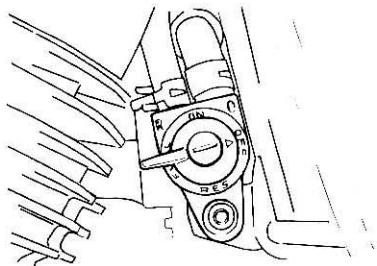


### **"RES" (RESERVE) Position**

If the fuel level in the fuel tank becomes too low for the engine to operate with the fuel valve lever in the "ON" position, turn the lever to the "RES" position to use the reserve fuel supply.

Reserve fuel supply: 3.0L(0.8 US gal)

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



#### "OFF" Position

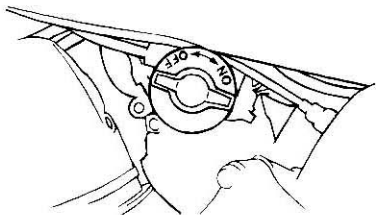
Turn the lever to the "OFF" position whenever stopping the engine for more than a few minutes. In this position, fuel supply to the carburetor will be shut off.

### **WARNING**

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

**Always move the fuel valve to the "OFF" position after turning off the engine.**

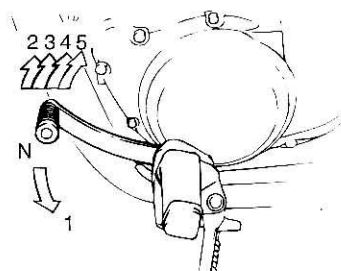
## **CHOKE LEVER**



This motorcycle has a choke system to provide easy starting when the engine is cold. When starting the cold engine, turn the choke lever clockwise. The choke works best when the throttle is in the closed position. When the engine is warm, you do not need to use the choke for starting.

**NOTE:** Refer to the *STARTING THE ENGINE* section of the manual for the engine starting procedure.

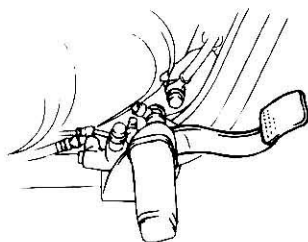
## GEARSHIFT LEVER



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

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

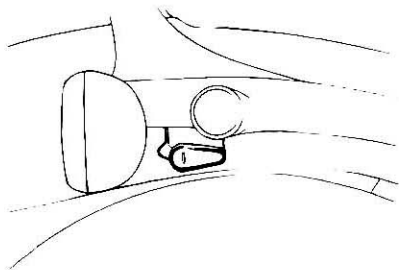
## REAR BRAKE PEDAL



Pressing the rear brake pedal will apply the rear brake. The brake light will come on when the rear brake is operated.



## HELMET HOLDER



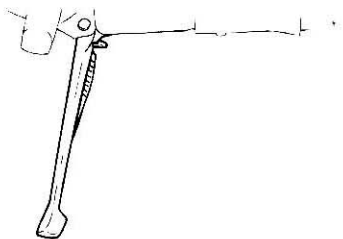
This motorcycle has two helmet holders. Insert the ignition key into the lock and turn it clockwise to open the latch. Hook your helmet fastener ring to the latch and turn the key back to lock the holder.

### **WARNING**

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

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

## SIDE STAND



The motorcycle has a side stand. To place the motorcycle on the side stand, place your right foot on the end of the side stand and push down firmly until the stand pivots fully through its arc and comes to rest against its stop.

An interlock system is provided to cut off the ignition circuit when the side stand is down and the transmission is in gear other than neutral.

The side stand/ignition interlock system works as follows:

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

## **⚠ WARNING**

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

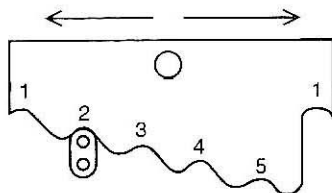
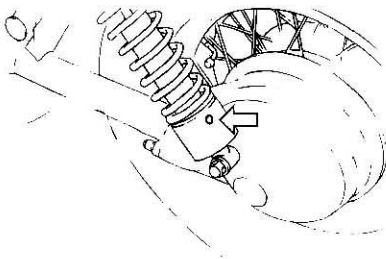
- Check operation of the side stand/ignition interlock system before riding.
- Always retract the side stand completely before starting off.

## **⚠ CAUTION**

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

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

## **REAR SUSPENSION**



The rear suspension spring pre-load is adjustable. The adjustment can be performed by changing the hidden adjuster position. Position 1 provides the softest spring pre-load and position 5 provides the stiffest. The spring pre-load is set on position 2 at the factory.

## **⚠ WARNING**

Unequal suspension adjustment can cause poor handling and loss of stability.

Adjust the right and left shock absorbers to the same settings.

## BREAK-IN

The first 800 km (500 miles) is the most important in the life of your motorcycle. Proper operation during this break-in period will help assure maximum life and performance from your new motorcycle. The following guidelines explain proper break-in procedures.

### Maximum Engine Speed Recommendation

The table below shows the maximum engine speed recommendation during the break-in period.

		Initial 500 miles (800 km)	Up to 1000 miles (1600 km)	Over 1000 miles (1600 km)
Maximum recommended engine speed		4000 r/min	5000 r/min	6000 r/min
Corresponding vehicle speed				
1st	miles/h	27	34	40
	km/h	40	50	65
2nd	miles/h	44	56	67
	km/h	70	90	105
3rd	miles/h	61	76	92
	km/h	95	120	145
4th	miles/h	75	91	110
	km/h	120	145	175
Top	miles/h	84	104	125
	km/h	135	165	200

### Vary the Engine Speed

Vary the engine speed during the break-in period. This allows the parts to "load" (aiding the mating process) and then "unload" (allowing the parts to cool). Although it is essential to place some stress on the engine components during break-in, you must be careful not to load the engine too much.

### Breaking in the New Tires

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

## ⚠ WARNING

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

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

### Allow the Engine Oil to Circulate before Riding

Allow enough idling time after warm or cold engine start up before revving the engine or placing the transmission in gear. This allows time for the lubricating oil to reach all critical engine components.

### **Observe Your Initial and Most Critical Service**

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

## **INSPECTION BEFORE RIDING**

### **⚠ WARNING**

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

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

### **⚠ WARNING**

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

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

Check the condition of the motorcycle to help make sure that you do not have mechanical problems or get stranded somewhere when you ride. Before riding the motorcycle, be sure to check the following items. Be sure your motorcycle is in good condition for the personal safety of the rider, passenger and protection of the motorcycle.

## **⚠ WARNING**

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

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

WHAT TO CHECK	CHECK FOR:
Steering	<ul style="list-style-type: none"> <li>● Smoothness</li> <li>● No restriction of movement</li> <li>● No play or looseness</li> </ul>
Brakes	<ul style="list-style-type: none"> <li>● Correct fluid level</li> <li>● No fluid leakage</li> <li>● No "sponginess"</li> <li>● Proper pedal and lever play</li> <li>● Brake pad wear</li> </ul>
Tires	<ul style="list-style-type: none"> <li>● Proper pressure</li> <li>● Enough tread depth</li> <li>● No cracks, rips, or other damage</li> </ul>
Fuel tank	Tank cap locked securely
Lighting	Proper operation of all lights-Headlight, Taillight, Brake light, Instrument lights, Turn signals, License plate light
Indicator Lights	Proper operation of all lights Oil pressure, High beam, Neutral, Turn signal
Engine stop switch	Proper operation
Horn	Correct function
Engine oil	Correct level
Gear oil	Correct level
Throttle	<ul style="list-style-type: none"> <li>● Proper play</li> <li>● Smooth response</li> <li>● Quick return to idle position</li> </ul>
Gearshift lever	<ul style="list-style-type: none"> <li>● No damage</li> <li>● Smooth operation</li> </ul>
Clutch	<ul style="list-style-type: none"> <li>● Correct fluid level</li> <li>● No fluid leakage</li> <li>● Correct function</li> <li>● Proper lever play</li> </ul>
Side stand/ignition interlock system	Proper operation
General condition	<ul style="list-style-type: none"> <li>● Bolts and nuts tightness</li> <li>● No rattle from any parts of machine with the engine running</li> <li>● No visible evidence of damage</li> </ul>

## RIDING TIPS

### STARTING THE ENGINE

Before attempting to start the engine, make sure:

- The transmission is in neutral.
- The fuel valve is in the "ON" position.
- The engine stop switch is in the "O" position.

*NOTE: This motorcycle has interlock switches for the ignition circuit and the starter circuit. The engine can only be started if:*

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

#### **When the Engine Is Cold:**

1. Turn the choke lever clockwise. Close the throttle completely.
2. Squeeze the clutch lever and push the electric starter button.
3. Immediately after the engine starts, keep the engine speed at 1050 r/min by varying the choke knob position.
4. Move the choke lever to the "OFF" position approximately 30 seconds after engine starts. It may be necessary to use the choke longer than 30 seconds in extremely cold weather.

#### **When the Engine Is Warm:**

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

### **WARNING**

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

**Only run the engine outdoors where there is fresh air.**

### **CAUTION**

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

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

## STARTING OFF AND SHIFTING

### WARNING

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

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

### WARNING

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

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

### WARNING

**Sudden side winds, which can occur when being passed by larger vehicles, at tunnel exits or in hilly areas, can upset your control.**

**Reduce your speed and be alert to side winds.**

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

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

## USING THE TRANSMISSION

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

### Shifting up schedule

Gear position	miles/h	km/h
1 st → 2nd	12	20
2nd → 3rd	19	30
3rd → 4th	25	40
4th → Top	31	50

### Shifting down schedule

Gear position	miles/h	km/h
Top → 4 th	19	30
4th → 3 rd	12	20

Disengage the clutch when the motorcycle speed drops below 20 km/h (12 miles/h).

## WARNING

**Downshifting when engine speed is too high can;**

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

**Reduce speed before downshifting.**

## WARNING

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

**Reduce your speed and downshift before entering the corner.**

## RIDING ON HILLS

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



## **STOPPING AND PARKING**

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

### **⚠ WARNING**

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

**Apply both brakes evenly and at the same time.**

### **⚠ WARNING**

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

**Brake before you begin to turn.**

### **⚠ WARNING**

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

**Brake lightly and with care on slippery or irregular surfaces.**

### **⚠ WARNING**

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

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

5. Park the motorcycle on a firm, flat surface where it will not fall over.
6. Turn the ignition switch to the "OFF" position.
7. Turn the handlebars all the way to the left and lock the steering for security.
8. Remove the keys.
9. Turn the fuel valve to the "OFF" position.

### **⚠ WARNING**

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

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

## CARRYING A PASSENGER

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

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

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

## ACCESSORY USE AND MOTORCYCLE LOADING

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 authorized Suzuki dealer can assist you in selecting quality accessories and installing them correctly.

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

### **WARNING**

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

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

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

GVWR: 1035 lbs (470 kg) at the tire pressure (cold)

Front: 29 psi (2.00 kg/cm<sup>2</sup>)

Rear : 33 psi (2.25 kg/cm<sup>2</sup>)

- Any time that additional weight or aerodynamic affecting accessories are installed, they should be mounted as low as possible, as close to the motorcycle and as near the center of gravity as is feasible. The mounting brackets and other attachment hardware should be carefully checked to ensure that they provide for a rigid mount. Weak mounts can allow the shifting of the weight and create a hazardous, unstable condition.
- Inspect for proper ground clearance and bank angle. 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.
- 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 handlebars or front fork of the machine should be as light as possible and kept to a minimum.
- Backrests, 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 by or passing large vehicles. Improperly mounted or poorly designed accessories can result in an unsafe riding condition, therefore caution should be used when selecting and installing all accessories.
- Certain accessories displace the rider from his or her normal riding position. This limits the freedom of movement of the rider and may limit rider's control ability.
- Additional electrical accessories may overload the existing electrical system. Severe overloads may damage the wiring harness or create a hazardous situation due to the loss of electrical power during the operation of the motorcycle.

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

### **MODIFICATION**

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

## **INSPECTION AND MAINTENANCE**

### **NOTICE**

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**

It is very important to inspect and maintain your motorcycle regularly. Follow the guidelines in the chart. The intervals between periodic services in kilometers, miles and months are shown. At the end of each interval, be sure to perform the maintenance listed.

## **WARNING**

**Improper maintenance or failure to perform recommended maintenance increases the chance of an accident or motorcycle damage.**

**Always follow the inspection and maintenance recommendations and schedules in this owner's manual. Ask your SUZUKI dealer or qualified mechanic to do the maintenance items marked with an asterisk (\*). You may perform the unmarked maintenance items by referring to the instructions in this section, if you have mechanical experience. If you are not sure how to do any of the jobs, have your SUZUKI dealer or qualified mechanic do them.**

## **WARNING**

**Never run the engine indoors or in a garage. Exhaust gas contains carbon monoxide, a gas that is colorless and odorless and can cause death or severe injury.**

**Only run the engine outdoors where there is fresh air.**

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

## **CAUTION**

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

**Use only genuine SUZUKI replacement parts or their equivalent.**

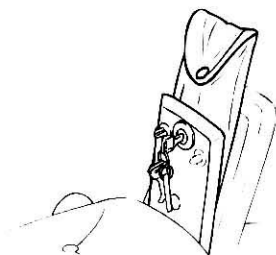
## MAINTENANCE CHART

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

Item	Interval	km	1000	6000	12000	18000	24000
		miles	600	4000	7500	11000	15000
		months	2	12	24	36	48
Battery			—	I	I	I	I
Air cleaner elements			Clean every 6000 km (4000 miles)				
Spark plugs			—	I	R	I	R
Fuel hose			I	I	I	I	I
Vapor hose (California model only)			*Replace every four years				
Engine oil and oil filter			R	R	R	R	R
Idle speed			I	I	I	I	I
*Automatic decompression cable			I	I	I	I	I
Final gear oil			R		I	—	I
Clutch hose			I	I	I	I	I
			*Replace every four years				
Clutch fluid			I	I	I	I	I
			*Replace every two years				
*Brakes			I	I	I	I	I
Brake fluid			I	I	I	I	I
			*Replace every four years				
Brake hose			I	I	I	I	I
			*Replace every two years				
Tires			I	I	I	I	I
*Steering			I	I	I	I	I
*Front forks			I	—	I	—	I
*Chassis bolts and nuts			T	T	T	T	T

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

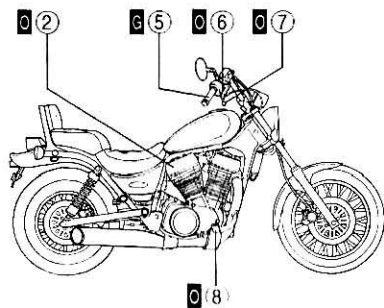
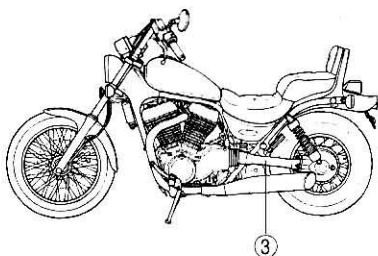
## TOOLS



A tool kit is provided with your motorcycle. It is stowed in the box behind the rear seat back pad. To open the box lid, pull off the pad, insert the ignition key into the lock and turn it clockwise.

## GENERAL LUBRICATION

Proper lubrication is important for safe, smooth operation and a long life for your motorcycle. Be sure that all lubrication is performed during periodic maintenance on the motorcycle. Increase frequency when you use your motorcycle in severe conditions.



- ① ... Clutch lever holder
- ② ... Decompression cable
- ③ ... Gearshift link pivots
- ④ ... Side stand pivot and spring hook
- ⑤ ... Throttle grip
- ⑥ ... Brake lever holder
- ⑦ ... Throttle cable
- ⑧ ... Brake pedal pivot

**O** ... Motor oil

**G** ... Grease

## BATTERY

The battery is a sealed type and requires no maintenance. The standard charging rate is 1.4 A x 5 hours and the maximum rate is 7.0 A x 1 hour.

### ⚠ WARNING

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

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

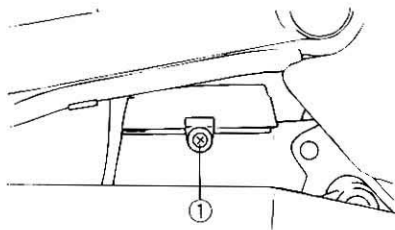
### ⚠ CAUTION

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

Never exceed the maximum charging rate.

### Battery Removal

1. Place the motorcycle on the side stand.

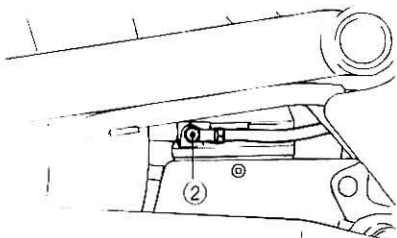


2. Remove two screws ① and battery cover.

### ⚠ WARNING

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

Wait until the muffler cools to avoid burns.



3. Remove the battery negative terminal screw ② and disconnect the lead wire.

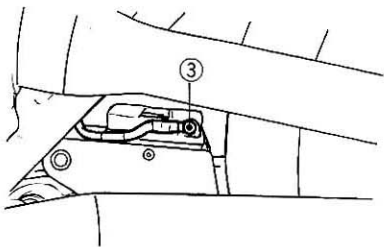
### ⚠ CAUTION

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

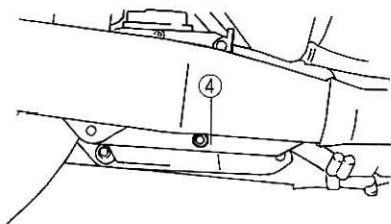
The red lead must go to the positive (+) terminal and the black (or black with white tracer) lead must go to the negative (-) terminal.

*NOTE: Remove negative terminal first and then remove the positive terminal.*

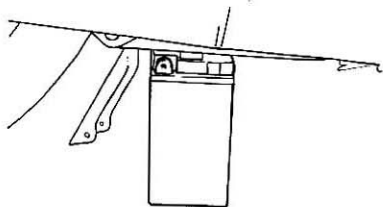




4. Remove the battery positive terminal screw ③.



5. Remove two bolts ④ (right and left) and battery case bottom plate.



6. Remove the battery.  
7. To reinstall the battery, reverse the procedure above.

## AIR CLEANER

The air cleaner element must be kept clean to provide good engine power and gas mileage. If you use your motorcycle under normal low-stress conditions, you should service the air cleaner at the intervals specified. If you ride in dusty, wet, or muddy conditions, you will need to inspect the air cleaner element much more frequently. Use the following procedure to remove the element and inspect it.

### **⚠ WARNING**

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

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

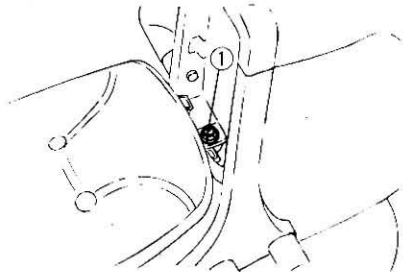
### **⚠ CAUTION**

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

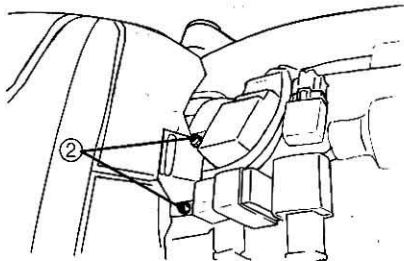
Clean the air cleaner case and element immediately if water gets in the air cleaner case.

## Air Cleaner Element Removal

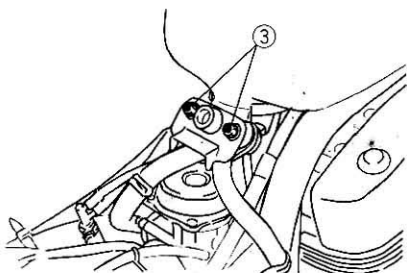
1. Place the motorcycle on the side stand.



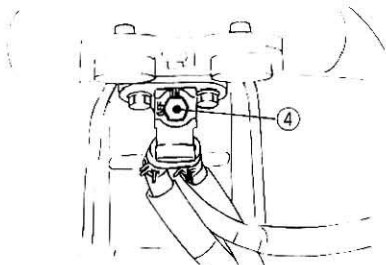
2. Remove the seat pad and tool cover by using the key. Remove the bolt ①. Remove the rear seat.



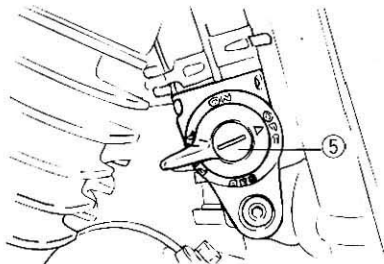
3. Remove two bolts ②. Disconnect lead wires under the front seat and remove the front seat.



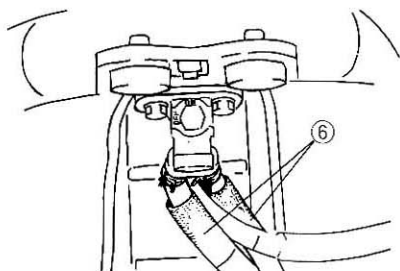
4. Remove two bolts ③. Pull the fuel tank backward and remove it.



5. Turn the fuel tank valve ④ clockwise to the "OFF" position with a screwdriver.



6. Check that the fuel valve ⑤ is in the "OFF" position, the fuel tank cap is locked, and the ignition switch is in the "OFF" position.

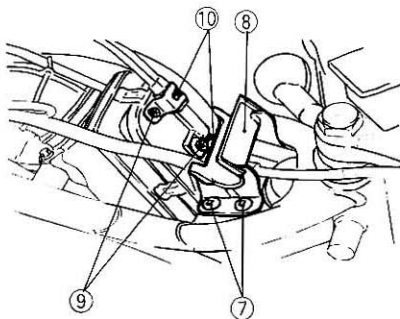


7. Remove the fuel hoses (6).

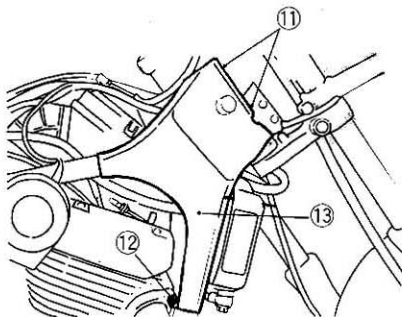
### **⚠ WARNING**

**Spilling fuel when disconnecting the fuel hose can be hazardous. Fuel can catch on fire if you do not handle it properly.**

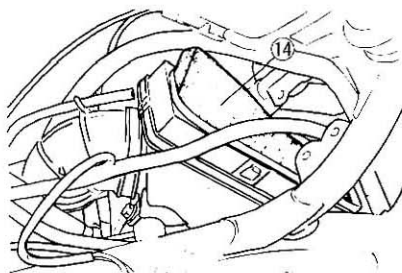
**When disconnecting the fuel hose, always shut the engine off. Do not smoke, and never drain or refuel in an area where there are open flames or sparks. Do not spill the fuel, or you may create a fire hazard. Dispose of drained fuel properly.**



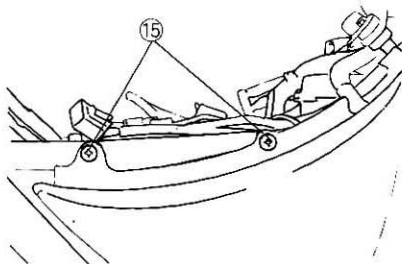
8. Remove screws (7) and the fuel tank bracket (8).  
9. Remove screws (9) and the cable holders (10).



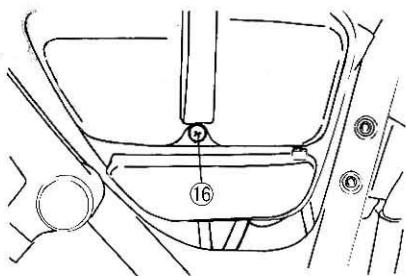
10. Remove screws (11) and (12). Remove frame head covers (13).



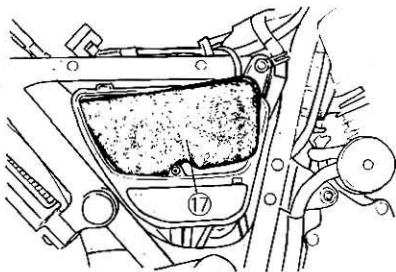
11. Remove the air cleaner case cover and air cleaner element (14).



12. Remove two screws (15) and right frame cover.



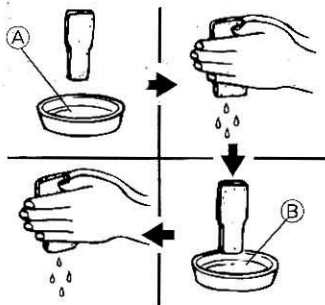
13. Remove screw 16 and cover.



14. Remove the air cleaner element 17.

### Air Cleaner Element Washing

Wash the air cleaner element as follows:



1. Fill a wash pan larger than the air cleaner element with a non-flammable cleaning solvent (A). Dip the air cleaner element in the solvent and wash it.
2. Squeeze the air cleaner element by pressing it between the palms of both hands to remove the excess solvent. Do not twist or wring the air cleaner element or it will develop cracks.
3. Dry the air cleaner element.
4. Immerse the element in a pool of motor oil (B).
5. Squeeze the air cleaner element to remove excess oil.

### **▲ CAUTION**

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

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

6. Clean any dirt or debris from inside the air cleaner case. Be sure no dirt enters the carburetor.
7. Reinstall the air cleaner element in reverse order of removal. Be sure that the air cleaner element is securely in position and is properly sealed.

### **⚠ WARNING**

New and used oil and solvent can be hazardous. Children and pets may be harmed by swallowing new or used oil or solvent. Continuous contact with used engine oil has been found to cause skin cancer in laboratory animals. Brief contact with used oil or solvent may irritate skin.

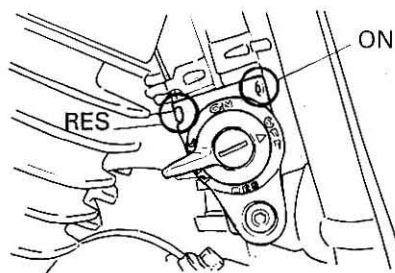
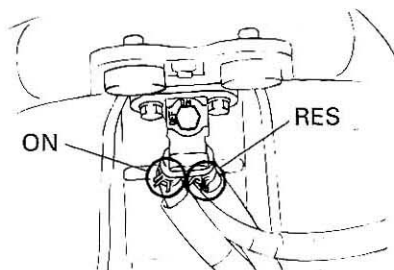
- Keep new and used oil and solvent away from children and pets.
- Wear a long-sleeve shirt and waterproof gloves.
- Wash with soap if oil or solvent contacts your skin.

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

### **⚠ CAUTION**

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

Be sure to properly install the air cleaner element.



*NOTE: Connect the fuel hoses correctly, or the fuel valve position "ON" and "RES" will be changed.*

## SPARK PLUG

Your motorcycle comes equipped with DENSO X24EPR-U9 or NGK DPR8EA-9 spark plugs. To determine if the standard spark plug is right for your usage, check the color of the plug's porcelain center electrode insulator after motorcycle operation. A light brown color indicates that the plug is correct. A white or dark insulator indicates that the engine may need adjustment, or another plug type may be needed. Consult your authorized Suzuki dealer or qualified mechanic if your plug insulator is not a light brown color.

### CAUTION

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

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

NGK	DENSO	Remarks
DPR7EA-9	X22EPR-U9	If the standard plug tends to run cold
DPR8EA-9	X24EPR-U9	Standard
DPR9EA-9	X27EPR-U9	If the standard plug tends to run hot

*NOTE: If the above-named plugs are not available, consult your authorized Suzuki dealer.*

### CAUTION

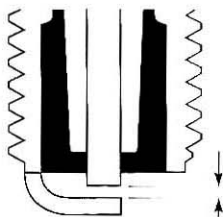
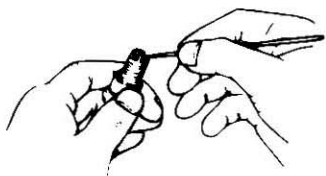
**A crossthreaded or overtightened spark plug will damage the aluminum threads of the cylinder head.**

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

### CAUTION

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

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



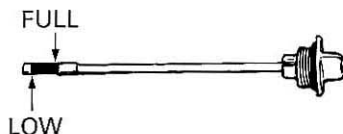
0.8 - 0.9 mm  
(0.031 - 0.035 in)

To maintain a hot, strong spark, keep the plug free from carbon. Remove carbon deposits from the plug with a wire or pin, and adjust the gap to 0.8–0.9 mm (0.031–0.035 in) for good ignition. Use a thickness (feeler) gauge to check the gap.

## ENGINE OIL

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

### Engine Oil Level Check



Check the engine oil level with the engine oil dipstick. The dipstick comes out together with the engine oil filler cap as shown. The level found in the dipstick should be between "L" (low) and "F" (full) lines.

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

1. Place the motorcycle on level ground on the side stand.
2. Start the engine and allow it to idle for a few minutes.
3. Stop the engine and wait approximately one minute.

4. Hold the motorcycle vertically and check the engine oil level. The filler cap threads should not be run in but just touching the filler hole upper edge.

### **⚠ CAUTION**

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

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

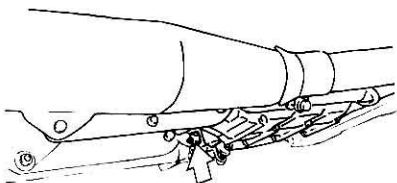
### **Engine Oil and Filter Change**

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

1. Place the motorcycle on level ground on the side stand.



2. Remove the oil filler cap.



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

### **⚠ WARNING**

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

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

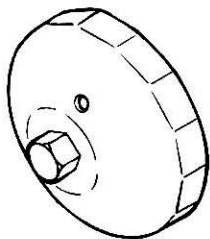
### **⚠ WARNING**

**New and used oil and solvent can be hazardous. Children and pets may be harmed by swallowing new or used oil or solvent. Continuous contact with used engine oil has been found to cause skin cancer in laboratory animals. Brief contact with used oil or solvent may irritate skin.**

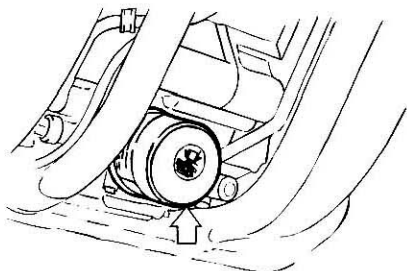
- **Keep new and used oil and solvent away from children and pets.**
- **Wear a long-sleeve shirt and waterproof gloves.**
- **Wash with soap if oil or solvent contacts your skin.**



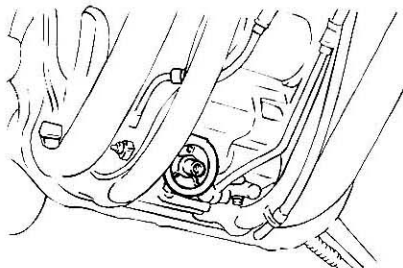
**NOTE :** *Recycle or properly dispose of used oil and solvent.*



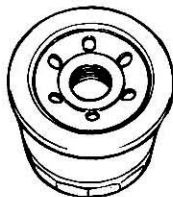
Oil filter wrench  
(Part No. 09915-40610)



4. Loosen the oil filter with a Suzuki "cap type" oil filter wrench or a "strap type" filter wrench of proper size and remove the oil filter.



5. Wipe off the mounting surface on the engine where the new filter will be seated with a clean rag.



6. Smear a little engine oil around the rubber gasket of the new oil filter.

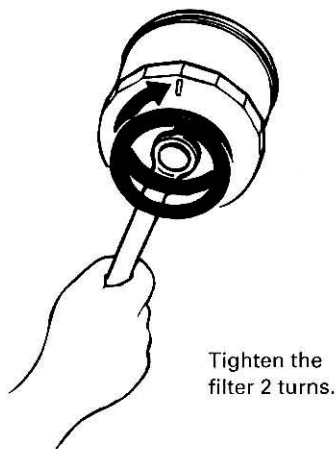
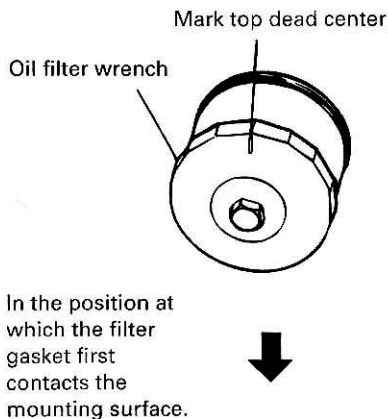
### **CAUTION**

**Using an oil filter with the wrong design or thread specifications can cause oil leaks or engine damage.**

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

7. Screw the new filter by hand until the filter gasket contacts the mounting surface (a small resistance will be felt).

**NOTE:** *To tighten the oil filter properly, it is important to accurately identify the position at which the filter gasket first contacts the mounting surface.*



8. Mark the top dead center position on the "cap" type filter wrench or on the oil filter. Use an oil filter wrench to tighten the filter 2 turns.

9. Reinstall the drain plug and tighten it securely. Pour about 4300 ml (4.5 US qt) of the specified oil in the filler hole. (See FUEL AND OIL RECOMMENDATION section.)

### **▲ CAUTION**

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

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

10. Start the engine (while the motorcycle is outside on level ground) and allow it to idle for a few minutes.
11. Turn the engine off and wait approximately one minute. Hold the motorcycle vertically and recheck the oil level with the engine oil dipstick. The oil level should be at the "F" (full) mark. If it is lower than the "F" mark, add oil until it reaches the "F" mark. Inspect the area around the drain plug and oil filter cover for leaks.

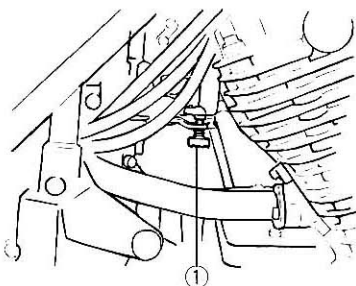
## CARBURETOR

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

### Idle Speed Adjustment

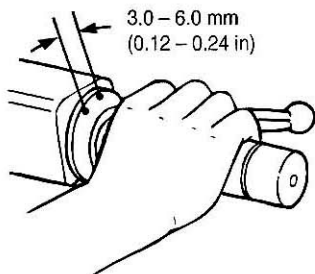
To adjust the idle speed properly, you need a tachometer. If you do not have one, ask your authorized Suzuki dealer or a qualified mechanic to perform this adjustment.

1. Start the engine and warm it up by running 2000 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).



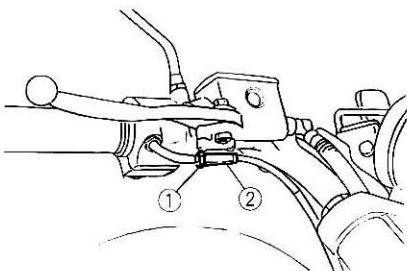
2. Turn the throttle stop screw ① in or out so that the engine idles at 950 – 1050 r/min.

### Throttle Cable Adjustment



Measure the throttle cable play by turning the throttle grip. The throttle grip should have 3 – 6 mm (0.12–0.24 in) play.

To adjust the throttle cable play:



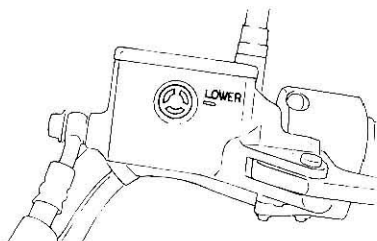
1. Loosen the lock nut ①.
2. Turn the adjuster ② in or out to obtain the proper amount of cable play.
3. Tighten the lock nut ①.
4. Recheck the throttle cable play. Readjust it if it is not within the correct limits.

## **⚠ WARNING**

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

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

## **CLUTCH** Clutch Fluid



Be sure to check the fluid level in the clutch fluid reservoir. If the level in the reservoir is below the lower mark, add DOT 4 brake fluid.

## **⚠ WARNING**

Brake fluid can be hazardous to humans and pets. Brake fluid is harmful or fatal if swallowed, and harmful if it comes in contact with skin or eyes.

Keep brake fluid away from children and pets. Call your doctor immediately if brake fluid is swallowed, and induce vomiting. Flush eyes or skin with water if brake fluid gets in eyes or comes in contact with skin.

## **⚠ WARNING**

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

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

## **⚠ CAUTION**

**Spilled brake fluid can damage painted surfaces and plastic parts.**

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

### **Clutch Hose**

Carefully inspect the clutch hose for cracks or other damage. If you find any damage, bring the motorcycle to your authorized Suzuki dealer or qualified mechanic to have the clutch hose replaced.

### **Clutch System**

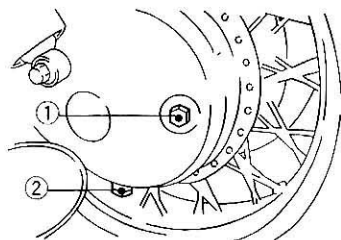
Inspect your clutch system before each use of the motorcycle, as follows:

- Inspect the clutch system for signs of fluid leakage.
- Inspect the clutch hose for damage.
- Check the clutch lever for proper stroke and firmness.

## FINAL GEAR OIL

Change the gear oil as follows:

1. Place the motorcycle on the side stand.



2. Remove the oil filler cap (1).
3. Drain the oil by removing the drain plug (2) 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. Hold the motorcycle vertically and pour fresh oil through the filler hole until the oil level reaches the oil filler hole. Approximately 200 – 220 ml (6.8 – 7.4 US oz) of oil will be required.
5. Reinstall the oil filler cap.

## WARNING

Operating the motorcycle with too little final gear oil can cause the final drive unit to lock up and cause an accident.

Check for leaks and correct level of final gear oil before each use and add oil if necessary. Tighten the drain plug securely after changing the gear oil.

## WARNING

New and used oil and solvent can be hazardous. Children and pets may be harmed by swallowing new or used oil or solvent. Continuous contact with used engine oil has been found to cause skin cancer in laboratory animals. Brief contact with used oil or solvent may irritate skin.

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

## BRAKES

This motorcycle has front and rear disk brakes.

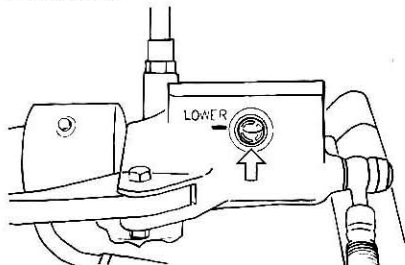
### **WARNING**

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

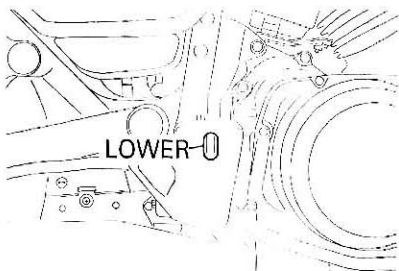
**Inspect the brake system before each use according to the INSPECTION BEFORE RIDING section. Follow the MAINTENANCE SCHEDULE section to maintain your brake system.**

*NOTE: Operating in mud, water, sand or other extreme conditions can cause accelerated brake wear. If you operate your motorcycle under these conditions, the brakes must be inspected more often than recommended in the MAINTENANCE SCHEDULE.*

## Brake Fluid



FRONT



REAR

Check the brake fluid level in both front and rear brake fluid reservoirs. If the level in either reservoir is below the lower mark, add DOT 4 brake fluid and inspect for brake pad wear and leaks.

## **⚠ WARNING**

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

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

## **⚠ WARNING**

Brake fluid can be hazardous to humans and pets. Brake fluid is harmful or fatal if swallowed, and harmful if it comes in contact with skin or eyes.

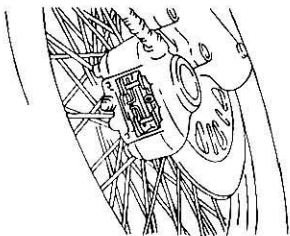
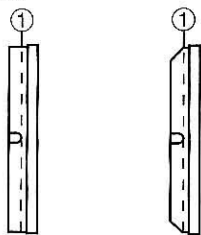
Keep brake fluid away from children and pets. Call your doctor immediately if brake fluid is swallowed, and induce vomiting. Flush eyes or skin with water if brake fluid gets in eyes or comes in contact with skin.

## **⚠ CAUTION**

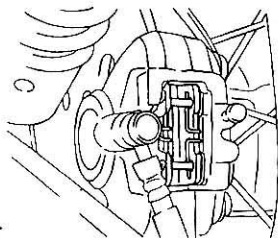
Spilled brake fluid can damage painted surfaces and plastic parts.

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

### **Brake Pads**



Front



Rear

Inspect the front and rear brake pads to see if they are worn down to the grooved wear limit line ①. If a pad is worn to the grooved wear limit line, it must be replaced with a new one. After replacing either the front or rear brake pads, the brake lever must be pumped several times. This will extend the pads to their proper position. During the first few uses, the braking force and feel of the new pads may differ from the previous worn-in ones.



## **⚠ WARNING**

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

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

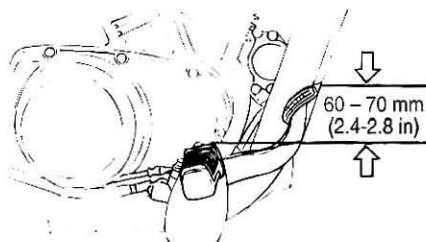
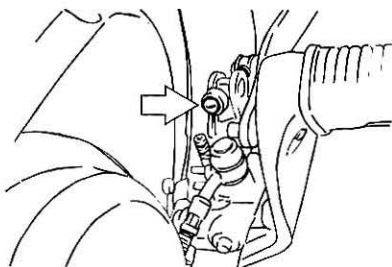
## **⚠ WARNING**

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

Before riding, "pump" the brake repeatedly until brake pads are pressed against the brake disks and proper lever/pedal stroke and firm feel are restored.

*NOTE: Do not squeeze/depress the brake lever/pedal when the pads are not in their positions. It is difficult to push the pistons back into position.*

## **Rear Brake Pedal Adjustment**



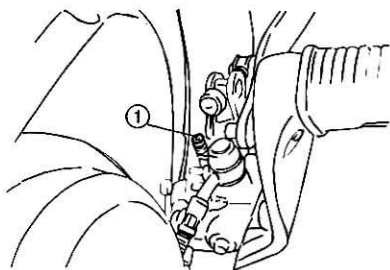
The rear brake pedal must be adjusted to set the clearance between the pedal and footrest. Adjust the brake pedal by turning the adjuster to locate the pedal 60 - 70 mm (2.4 - 2.8 in) above the top face of the footrest.

## **⚠ CAUTION**

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

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

## Rear Brake Light Switch



The rear brake light switch is located by the brake pedal pivot. To adjust the brake light switch, turn the screw ① clockwise or counter-clockwise so that the brake light will come on just before a pressure is felt when the brake pedal is depressed.

## TIRES

### **⚠ WARNING**

Failure to follow these warnings may result in an accident due to tire failure.

The tires on your motorcycle form the crucial link between your motorcycle and the road.

Follow these instructions :

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

### **⚠ WARNING**

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

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

### Tire Pressure and Loading

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

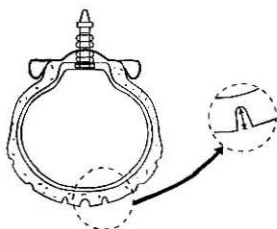
Check tire pressure each day before you ride, according to the table below. Tire pressure should only be checked and adjusted before riding since riding will heat up the tires and lead to higher inflation pressure readings.

LOAD TIRE	SOLO RIDING WITH LIGHT OR LITTLE CARGO LOAD	TWO-UP RIDING OR SOLO RIDING WITH HEAVY CARGO LOAD
FRONT	200kPa 2.00 kg/cm <sup>2</sup> 29 psi	200kPa 2.00 kg/cm <sup>2</sup> 29 psi
REAR	200kPa 2.00 kg/cm <sup>2</sup> 29 psi	225kPa 2.25 kg/cm <sup>2</sup> 33 psi

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

### Tire Condition and Type

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



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

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

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

	FRONT	REAR
SIZE	110/90-19 62H	170/80-15 M/C 77H
TYPE	BRIDGESTONE L307	BRIDGESTONE G544

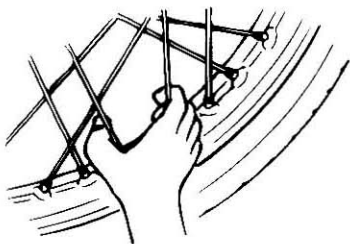
Always balance the wheel after repairing a puncture or replacing the tire. Proper wheel balance is important to avoid variable wheel-to-road contact, and to avoid uneven tire wear.

## **WARNING**

**An improperly repaired, installed, or balanced tire can cause loss of control or shorten tire life.**

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

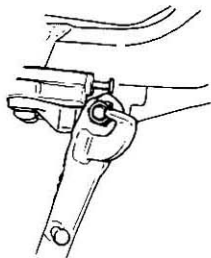
## SPOKE NIPPLE TIGHTNESS



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

To tighten the spoke nipples properly, tighten them equally to the specified torque. Loose and over-tightened spoke nipples may cause unequal spoke tension and may result in wheel rim distortion. Contact your authorized Suzuki dealer or qualified mechanic for this service.

## SIDE STAND/IGNITION INTERLOCK SYSTEM



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

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

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

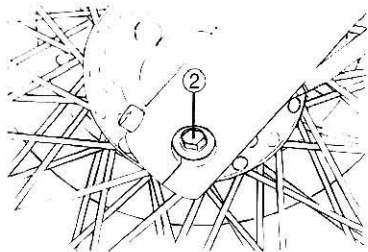
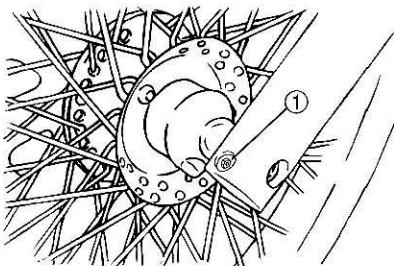
## **⚠ WARNING**

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

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

## **FRONT WHEEL REMOVAL**

1. Place the motorcycle on the side stand.



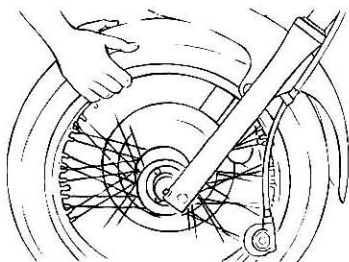
2. Loosen the axle holder bolt ①. Loosen the axle ② temporarily.
3. Place an accessory service stand or equivalent under the swing arm to help stabilize the rear end. Carefully position a jack under the engine and raise until the front wheel is slightly off the ground.

## **⚠ CAUTION**

Improper jacking may cause damage to the oil filter.

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

4. Turn the axle counterclockwise and draw it out.



5. Slide the front wheel forward.

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

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

## **⚠ WARNING**

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

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

## **⚠ WARNING**

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

**Torque bolts and nuts to the proper specifications. If you are not sure of the proper procedure, have your authorized SUZUKI dealer or qualified mechanic do this.**

Front axle tightening torque:

44 N-m

[ 4.4 kg-m  
32.0 lb-ft ]

Front axle holder bolt tightening torque:

20 N-m

[ 2.0 kg-m  
14.5 lb-ft ]

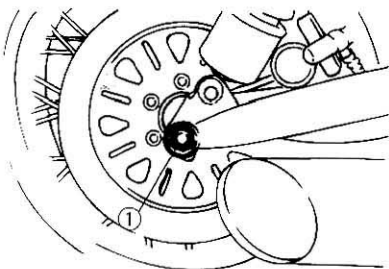
## REAR WHEEL REMOVAL

1. Place the motorcycle on the side stand.

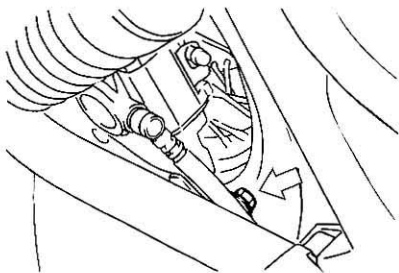
### WARNING

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

Wait until the muffler cools to avoid burns.



2. Remove the cap and loosen the axle nut ①.

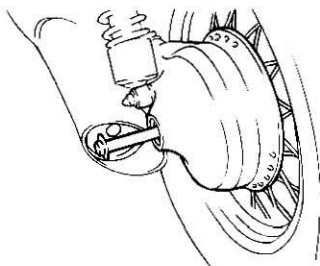


3. Remove the brake caliper mounting holder bolt.
4. Place an accessory service stand or equivalent under the swing arm to help stabilize the rear end.

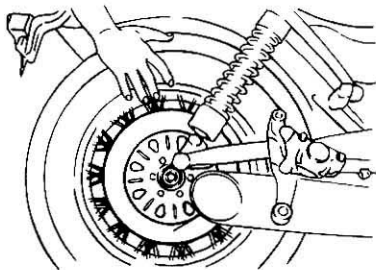
### CAUTION

Improper jacking may cause damage to the oil filter.

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



5. Draw out the axle.



6. Remove the wheel from the splined drive gear and set the wheel assembly on the ground.
7. Pull the wheel assembly rearward.
8. To replace the wheel reverse the complete sequence described above.



## **WARNING**

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

**Torque bolts and nuts to the proper specifications. If you are not sure of the proper procedure, have your authorized SUZUKI dealer or qualified mechanic do this.**

Rear axle nut tightening torque:

78 N·m  
[ 7.8 kg-m ]  
56.5 lb-ft ]

## **LIGHT BULB REPLACEMENT**

The wattage rating of each bulb is shown in the following chart. When replacing a burned out bulb, always use the same wattage rating.

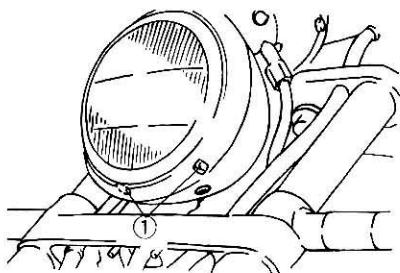
### **CAUTION**

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

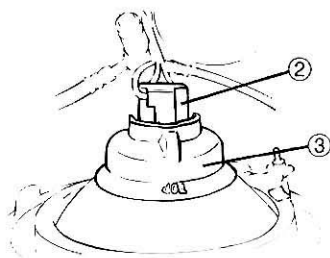
**Always use the specified light bulb.**

Headlight	12V 60/55W
Turn signal light	Front 12V 5/21W Rear 12V 21W
Brake light/Taillight	12V 27/8W
License plate light	12V 7.5W

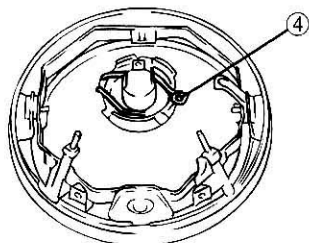
## Headlight



1. Remove two screws ①. Remove the headlight assembly.



2. Disconnect socket ② from the headlight and roll up rubber cap ③.



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

### **⚠ CAUTION**

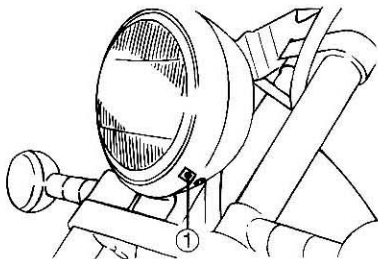
Oil from your skin may damage the headlight bulb or shorten its life.

Grasp the new bulb with a clean cloth.

### Headlight Beam Adjustment

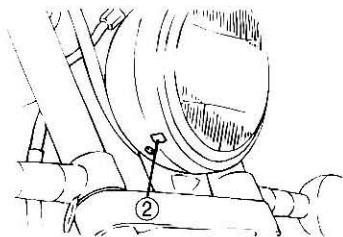
The headlight beam can be adjusted both horizontally and vertically if necessary.

To adjust the beam horizontally:



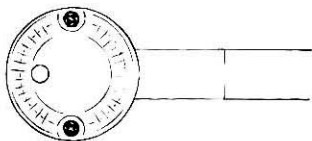
Turn the adjuster ① clockwise or counterclockwise.

To adjust the beam vertically:

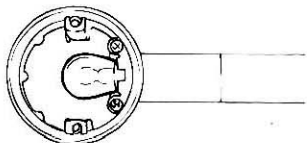


Turn the adjuster ② clockwise or counterclockwise.

### Turn Signal Light



1. Remove the screws and the lens.



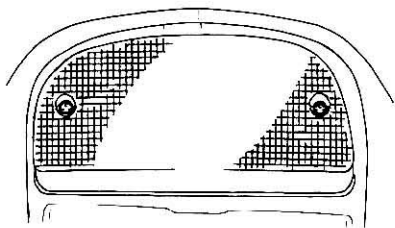
2. Push in on the bulb, turn it to the left, and pull it out.

### **▲ CAUTION**

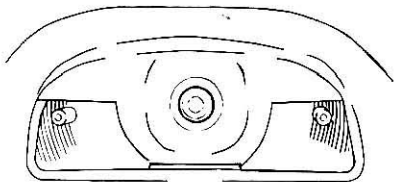
**Overtightening the screws may cause the lens to crack.**

**Tighten the lens screws only until they are snug.**

## Brake light/Taillight



1. Loosen the two screws and remove the lens.



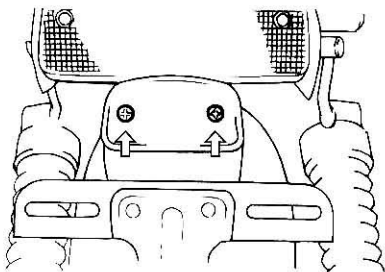
2. Push in on the bulb, turn it to the left, and pull it out.

### CAUTION

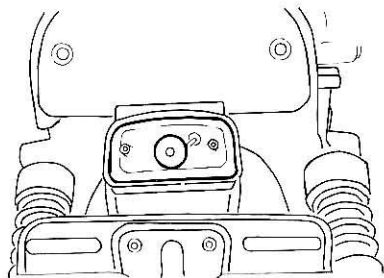
Overtightening the screws may cause the lens to crack.

Tighten the screws only until they are snug.

## License Plate Light



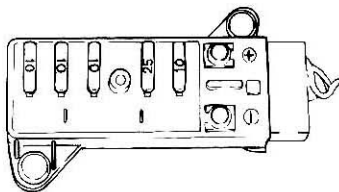
1. Loosen the screws and remove the lens.



2. Push in on the bulb, turn it to the left and pull it out.

## FUSES/OUTPUT TERMINAL

### Fuses



The fuses are located inside the left frame cover. To access fuses, remove the right frame cover. The fuses are designed to open when a circuit overload exists in individual electrical system circuits. If any electrical system fails to operate, then the fuses must be checked.

### **▲ CAUTION**

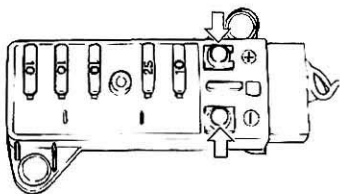
Installing a fuse of incorrect rating or using aluminum foil or wire instead of a fuse may seriously damage the electrical system.

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

### Fuse List

- 25A MAIN fuse protects all electrical systems.
- 10A HEAD fuse protects the headlight and high beam indicator light.
- 10A SIGNAL fuse protects the turn signal light, turn signal indicator light, brakelight and horn.
- 10A IGNITION fuse protects the ignition system, electric start system and fuel pump.
- 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, remove the output terminal cover and 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 (-) terminal. After that, replace the output terminal cover.

### **CAUTION**

**Using electrical accessories over 120W may seriously damage the electrical system.**

**Always use electrical accessories less than 120W.**

## TROUBLESHOOTING

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

### **CAUTION**

**Failure to troubleshoot a problem correctly can damage your motorcycle. Improper repairs or adjustments may damage the motorcycle instead of fixing it. Such damage may not be covered under warranty.**

**If you are not sure about the proper action, consult your authorized Suzuki dealer or qualified mechanic about the problem.**

**COMPLAINT: Engine is hard to start or does not start at all.**

Something is probably wrong with the fuel system or ignition system.

### **Fuel System Check**

1. Make sure there is enough fuel in the fuel tank.
2. Make sure there is enough fuel reaching the carburetor from the fuel valve.
  - a. Turn the fuel valve lever to the "OFF" position.
  - b. Loosen the drain screw located under the carburetor. Drain the fuel from the carburetor into a container.

## **⚠ WARNING**

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

**When draining the carburetor :**

- **Stop the engine and keep flames, sparks, and heat sources away.**
  - **Drain fuel only outdoors or in a well-ventilated area.**
  - **Do not smoke.**
  - **Wipe up spills immediately.**
  - **Avoid breathing fuel vapor.**
  - **Keep children and pets away.**
  - **Dispose of drained fuel properly.**
- c. Tighten the drain screw.  
d. Turn the fuel valve lever to the "ON" position.  
e. Turn the engine stop switch to the "○" position and the ignition switch to the "ON" position.  
f. Turn the ignition switch to the "OFF" position several seconds later.  
g. Loosen the drain screw and check that the carburetor is filled back up with fuel.  
h. Tighten the drain screw.
3. If fuel is reaching the carburetor, ignition system should be checked next.

### **Ignition System Check**

1. Remove the spark plugs and reattach them to the spark plug leads.

2. Put the engine stop switch in the "○" position and ignition switch in the "ON" position. While holding the spark plug with its base firmly against the engine, push the electric starter button. If the ignition system is operating properly, a blue spark should jump across the spark plug gap. If there is no spark, take your machine to your authorized Suzuki dealer or qualified mechanic.

## **⚠ WARNING**

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

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

### **COMPLAINT: Engine stalls**

- **Make sure there is enough fuel in the fuel tank.**
- **Check to see that the spark plug is not fouled. Remove the plug and clean it. Replace it, if necessary.**
- **Make sure the fuel valve is not clogged. Also check that the air vent hose connected to the fuel tank is not clogged.**
- **Check the idle speed. If necessary, adjust it using a tachometer. The correct idle speed is 950 -1050 r/min.**

## STORAGE PROCEDURE

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

### MOTORCYCLE

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

### FUEL

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

## **▲ WARNING**

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

**When draining the carburetor :**

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

### ENGINE

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

### BATTERY

1. Remove the battery from the motorcycle.
2. Clean the outside of the battery with a mild soap and remove corrosion from the terminals and wiring harness.
3. Store the battery in a room above freezing.



## **TIRES**

Inflate tires to the normal pressure.

## **EXTERNAL**

1. Spray all vinyl and rubber parts with rubber protectant.
2. Spray unpainted surfaces with rust preventative.
3. Coat painted surfaces with car wax.

## **MAINTENANCE DURING STORAGE**

Once a month, recharge the battery. The standard charging rate is 1.4 A x 5 hours.

## **PROCEDURE FOR RETURNING TO SERVICE**

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

## **APPEARANCE CARE**

### **CORROSION PREVENTION**

It is important to take good care of your motorcycle to protect it from corrosion.

Listed below are instructions for how to maintain your motorcycle to prevent corrosion and keep it looking new for years to come.

### **Important Information About Corrosion**

Common causes of corrosion

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

Road salt, dust-control chemicals, sea air, industrial pollution and high humidity will all contribute to, or accelerate, corrosion.

The above signifies the necessity of keeping your motorcycle as clean and dry as possible. It is equally important to repair any damage to the paint or protective coatings as soon as possible.

### **How to Help Prevent Corrosion**

**Wash your motorcycle frequently**  
The best way to preserve the finish on your motorcycle and to help avoid corrosion is to keep it clean with frequent washing. Wash your motorcycle at least once a month. Keep your motorcycle as dry and clean as possible.

**Remove foreign material deposits**  
Foreign material such as salt, chemicals, road oil or tar, tree sap, bird droppings and industrial fall-out may damage the finish of your motorcycle if it is left on painted surfaces. Remove these types of deposits as quickly as possible. If these deposits are difficult to wash off, an additional cleaner may be required. Be sure that any cleaner you use is not harmful to painted surfaces and is specifically intended for your purposes. Follow the manufacturer's directions when using these special cleaners.

### **Repair finish damage**

Carefully examine your motorcycle for damage to the painted surfaces. Should you find any chips or scratches in the paint, touch them up immediately to prevent corrosion from starting. If the chips or scratches have gone through to the bare metal, have an authorized Suzuki dealer or qualified mechanic make the repair.

**Store your motorcycle in a dry, well-ventilated area**

Do not park your motorcycle in a damp, poorly ventilated area. If you often wash your motorcycle in the garage or if you frequently drive it in when wet, your garage may be damp. The high humidity in the garage may cause or accelerate corrosion. A wet motorcycle may corrode even in a heated garage if the ventilation is poor.

### **Cover your motorcycle**

Years of exposure to mid-day sun can cause the colors in paint, plastic parts, and instrument faces to fade. Covering your motorcycle with a high-quality, "breathable" motorcycle cover can help protect the finish from the harmful UV rays in sunlight, and can reduce the amount of dust and air pollution reaching the surface. Your authorized Suzuki dealer can help you select the right cover for your motorcycle.

## MOTORCYCLE CLEANING

### Washing the Motorcycle

When washing the motorcycle, follow the instructions below:

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

### **⚠ CAUTION**

**Radiator and oil cooler fins can be damaged by spraying high pressure water on them.**

**Do not spray high pressure water on the radiator and oil cooler fins.**

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

- Ignition switch
  - Spark plugs
  - Fuel tank cap
  - Carburetors
  - Brake master cylinders
3. Once the dirt has been completely removed, rinse off the detergent with running water.
  4. After rinsing, wipe off the motorcycle with a wet chamois or cloth and allow it to dry in the shade.
  5. Check carefully for damage to painted surfaces. If there is any damage, obtain "touch-up" paint and "touch-up" the damage following the procedure below:

- a. Clean all damaged spots and allow them to dry.
- b. Stir the paint and "touch-up" the damaged spots lightly with a small brush.
- c. Allow the paint to dry completely.

### Waxing the Motorcycle

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

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

## INSPECTION AFTER CLEANING

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

### **⚠ WARNING**

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

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

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

## CONSUMER INFORMATION

### EMISSION CONTROL WARRANTY

Suzuki Motor Corporation 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 occurs 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)

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

### 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.

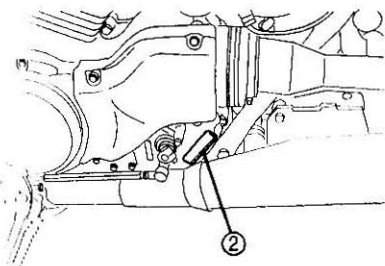
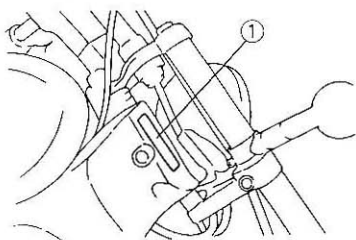
Among those acts presumed to constitute tampering are the acts listed below:

- 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 genuine Suzuki replacement parts or their equivalent.

## SERIAL NUMBER LOCATION

You need to know the frame and engine serial numbers to get title documents for your motorcycle. You also need these numbers to help your authorized Suzuki dealer when you order parts.



The frame number ① is stamped on the steering head as shown in the illustration. The engine serial number ② is stamped on the right side of the crankcase assembly.

Write down the serial numbers here for your future reference.

Frame No:

Engine No:

## REPORTING SAFETY DEFECTS

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying American Suzuki Motor Corp.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your authorized Suzuki dealer, or American Suzuki Motor Corp.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 (or 366-0123 in Washington, D.C. area) or write to: NHTSA, U.S. Department of Transportation, Washington, D.C. 20590. You can also obtain other information about motor vehicle safety from the Hotline.

To contact American Suzuki, owners in the continental United States can call toll-free 1-800-444-5077, or write to: American Suzuki Motor Corporation Motorcycle Customer Service P.O. Box 1100, Brea, CA 92822-1100

For owners outside the continental United States, please refer to the distributor's address listed on your Warranty Information brochure.

# SPECIFICATIONS

## DIMENSIONS AND DRY MASS

Overall length .....	2335 mm (91.9 in)
Overall width .....	770 mm (30.3 in)
Overall height .....	1220 mm (48.0 in)
Wheelbase .....	1620 mm (63.8 in)
Ground clearance .....	150 mm (5.9 in)
Seat height .....	735 mm (28.9 in)
Dry mass .....	243 kg (535 lbs)
	244 kg (537 lbs) For California model

## ENGINE

Type .....	Four stroke, air-cooled with SACS, OHC, 45-degree V-twin
Number of cylinders .....	2
Bore .....	94.0 mm (3.701 in)
Stroke .....	98.0 mm (3.858 in)
Displacement .....	1360 cm <sup>3</sup> (83.0 cu.in)
Compression ratio .....	9.3 : 1
Carburetor, front .....	MIKUNI BDS36, single
rear .....	MIKUNI BS36, single
Air cleaner .....	Polyurethane foam element
Starter system .....	Starter motor
Lubrication system .....	Wet sump

## TRANSMISSION

Clutch .....	Wet multi-plate type
Transmission .....	5-speed constant mesh
Gearshift pattern .....	1-down, 4-up
Primary reduction ratio .....	1.645 (79/48)
Secondary reduction ratio .....	0.852 (29/34 · 19/19)
Final reduction ratio .....	2.666 (32/12)
Gear ratios, Low .....	3.000 (36/12)
2nd .....	1.823 (31/17)
3rd .....	1.333 (28/21)
4th .....	1.086 (25/23)
Top .....	0.960 (24/25)
Drive system .....	Shaft drive

## CHASSIS

Front suspension .....	Telescopic, coil spring, oil damped
Rear suspension .....	Swing arm, coil spring, oil damped, spring pre-load 5-way adjustable
Steering angle .....	40° (right & left)
Caster .....	36°
Trail .....	166 mm (6.5 in)
Turning radius .....	2.8 m (9.2 ft)
Front brake .....	Disk brake
Rear brake .....	Disk brake
Front tire size .....	110/90-19 62H
Rear tire size .....	170/80-15 M/C 77H

## ELECTRICAL

Ignition type .....	Electronic ignition (Transistorized)
Spark plug .....	NGK DPR8EA-9 or DENSO X21H PR11U
Battery .....	12V 50.4 kC (14 Ah)/10HR
Generator .....	Three-phase A.C. generator
Fuse .....	25/10/10/10/10 A
Headlight .....	12V 60/55W
Brake light/Tail light .....	12V27/8W
Front turn signal light .....	12V 5/21W
Rear turn signal light .....	12V 21W
License plate light .....	12V 7.5 W
Speedometer light .....	12V 3.4 W
Neutral indicator light .....	12V 1.7W
High beam indicator light .....	12V 1.7W
Turn signal indicator light .....	12V 1.7W
Oil pressure indicator light .....	12V 1.7W

## CAPACITIES

Fuel tank, including reserve .....	13.0 L (3.4 US gal)
Reserve .....	3.0 L (0.8 US gal)
Engine oil, without filter change .....	3700 ml (3.9 US qt)
with filter change .....	4300 ml (4.5 US qt)
Final gear oil .....	200-220 ml (6.8-7.4 US oz)
Front fork oil (each leg) .....	354 ml (12.0 US oz)

Prepared by

**SUZUKI MOTOR CORPORATION**

Motorcycle Service Department

May, 1998

Part No. 99011-38B62-03A

Printed in Japan





Scott McRae  
357-9999

## OWNER'S MANUAL

This owner's manual contains  
important safety information.  
Please read it carefully.

### ⚠ WARNING

Failure to follow these safety precautions may increase your risk of injury:

- Wear a helmet, eye protection, and bright protective clothing.
- Don't ride after consuming alcohol or other drugs.
- Slow down on slippery surfaces, unfamiliar terrain, or when visibility is reduced.
- Read owner's manual carefully.

VS1400GL



W,X



Part No. 99011-38B62-03A  
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03A

# VS1400GLP

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