

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

IMPORTANT

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

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

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

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

▲ WARNING/▲ CAUTION/NOTICE/ NOTE

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

▲ WARNING

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

▲ CAUTION

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

NOTICE

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

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

FOREWORD

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

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

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

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



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CONSUMER INFORMATION

ACCESSORY USE AND MOTORCYCLE LOADING

ACCESSORY USE

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

WARNING

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

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

ACCESSORY INSTALLATION GUIDELINES

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

LOADING LIMIT

WARNING

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

Follow loading limits and loading guidelines in this manual.

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

G.V.W.: 420 kg (925 lbs)
at the tire pressure (cold)
Front: 225 kPa (2.25 kgf/cm², 33 psi)
Rear: 250 kPa (2.50 kgf/cm², 36 psi)

LOADING GUIDELINES

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

- Balance the load between the left and right side of the motorcycle and fasten it securely.
- Keep cargo weight low and as close to the center of the motorcycle as possible.
- Do not attach large or heavy items to the handlebars, front forks or rear fender.
- Do not install a luggage carrier or a luggage box protruding over the tail end of the motorcycle.
- Do not carry any items that protrude over the tail end of the motorcycle.
- Check that both tires are properly inflated to the specified tire pressure for your loading conditions. Refer to page 6-37.
- Improperly loading your motorcycle can reduce your ability to balance and steer the motorcycle. You should ride at reduced speeds, less than 130 km/h (80 mph), when you are carrying cargo or have added accessories.
- Adjust suspension setting as necessary.

MODIFICATION

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

SAFE RIDING RECOMMENDATION FOR MOTORCYCLE RIDERS

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

WEAR A HELMET

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

RIDING APPAREL

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

INSPECTION BEFORE RIDING

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

FAMILIARIZE YOURSELF WITH THE MOTORCYCLE

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

KNOW YOUR LIMITS

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

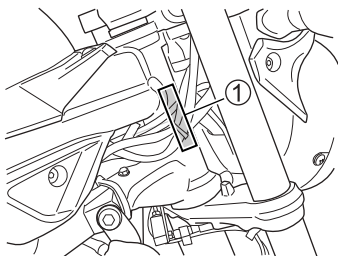
BE EXTRA SAFETY CONSCIOUS ON BAD WEATHER DAYS

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

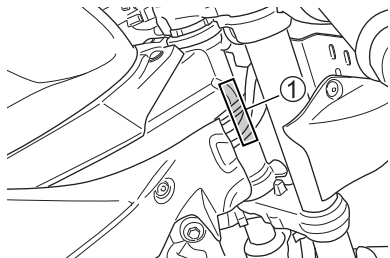
LABELS

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

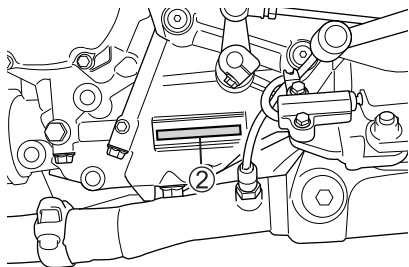
SERIAL NUMBER LOCATION



(SV650)



(SV650X)



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

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

Frame number:

Engine number:

NOISE CONTROL SYSTEM (AUSTRALIA ONLY)

TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED

Owners are warned that the law may prohibit:

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



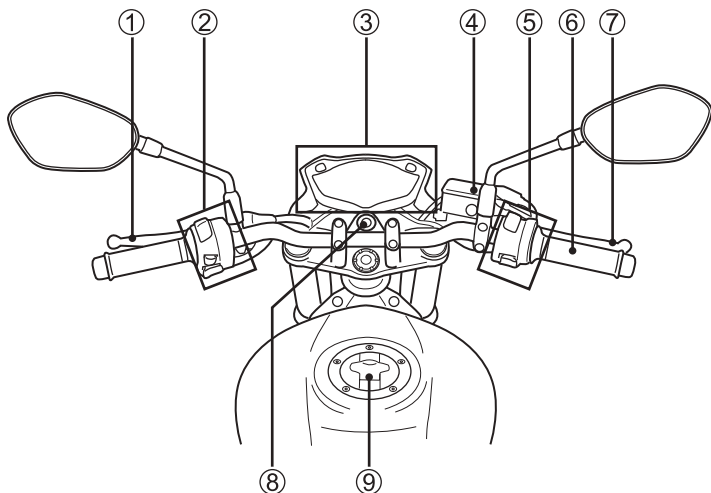


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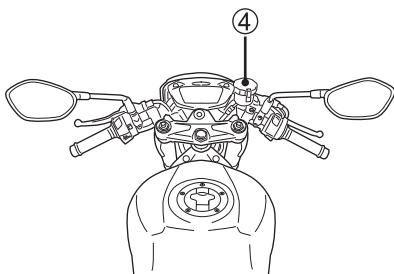
CONTROLS

LOCATION OF PARTS

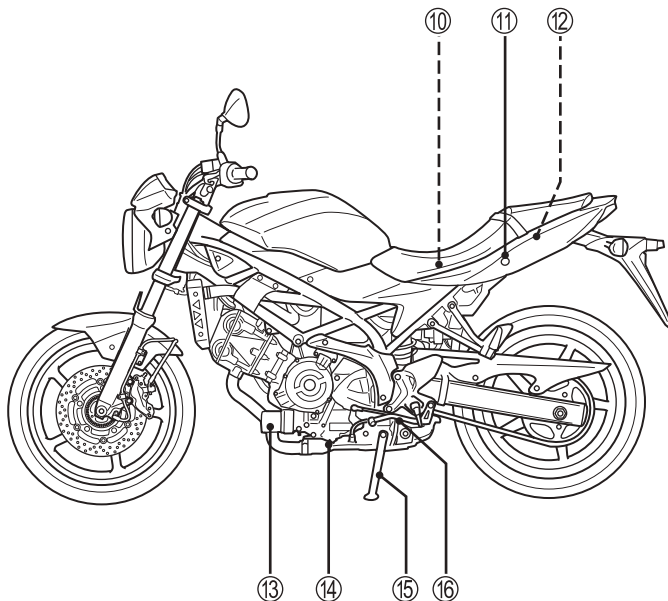


SV650

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

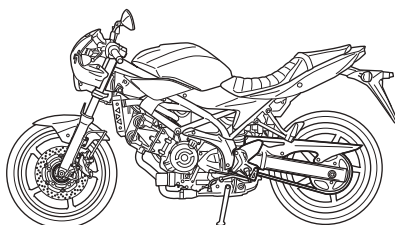


SV650X

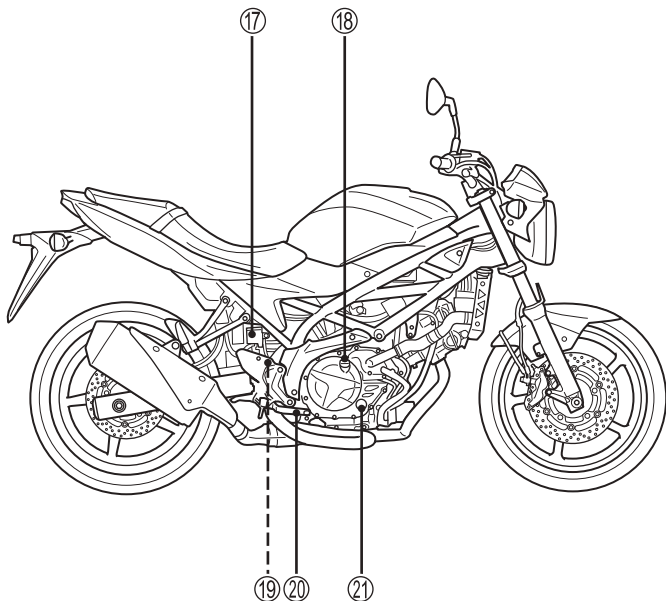


SV650

- ⑩ Battery and fuses
- ⑪ Seat lock
- ⑫ Tools
- ⑬ Engine oil filter
- ⑭ Engine oil drain plug
- ⑮ Side stand
- ⑯ Gearshift lever

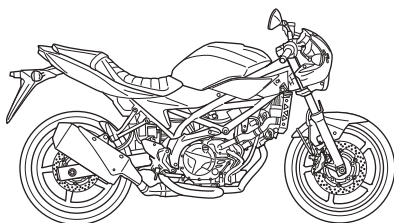


SV650X



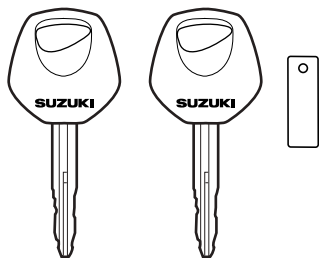
SV650

- ①⑦ Rear brake fluid reservoir
- ①⑧ Engine oil filler cap
- ①⑨ Rear brake light switch
- ①⑩ Rear brake pedal
- ①⑪ Engine oil inspection window

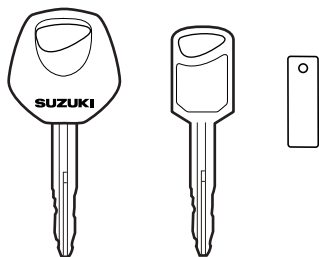


SV650X

KEY

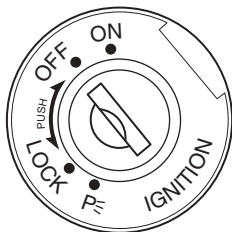


(EU)



This motorcycle comes equipped with a main ignition key and a spare one. Keep the spare key in a safe place.

IGNITION SWITCH



The ignition switch has four positions:

“OFF” POSITION

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

“ON” POSITION

The ignition circuit is completed and the engine can now be started. The headlight, position light (if equipped), speedometer, license plate light and taillight will automatically be turned on when the key is in this position. The key cannot be removed from the ignition switch in this position.

NOTE: Start the engine promptly after turning the key to the “ON” position, or the battery will lose power due to consumption by the headlight, position light (if equipped), speedometer, license plate light and taillight.



“LOCK” POSITION

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

NOTE:

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

“P” (Parking) POSITION

When parking the motorcycle, lock the steering and turn the key to the “P” position. The key can now be removed and the position light (if equipped), license plate light and tail-light will remain lit and the steering will be locked. This position is for night time roadside parking to increase visibility.

WARNING

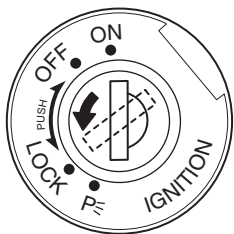
Turning the ignition switch to the “P” (PARKING) or “LOCK” position while the motorcycle is moving can be hazardous. Moving the motorcycle while the steering is locked can be hazardous. You could lose your balance and fall, or you could drop the motorcycle.

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

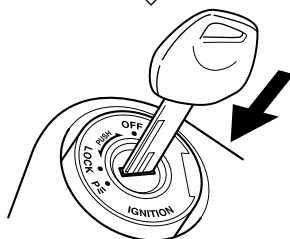
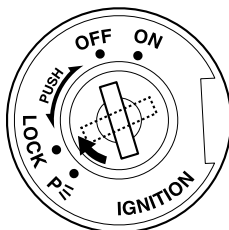
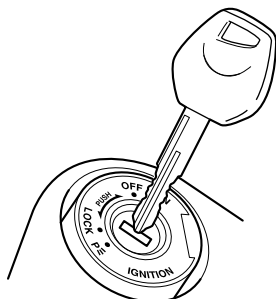
WARNING

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

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

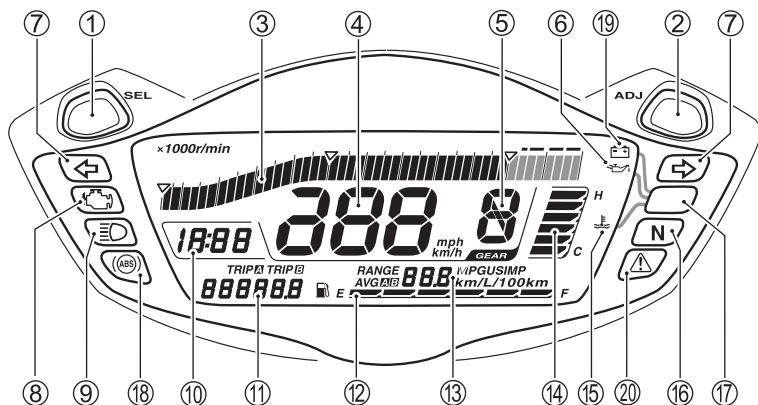


The key hole can be covered by turning the lid.



Align the lid hole position to the key hole position when inserting the key.

INSTRUMENT PANEL



- ① SEL button
- ② ADJ button
- ③ Tachometer (☞ 2-9)
- ④ Speedometer (☞ 2-9)
- ⑤ Gear position indicator (☞ 2-10)
- ⑥ Oil pressure warning indicator symbol (☞ 2-10)
- ⑦ Turn signal indicator light (☞ 2-10)
- ⑧ Malfunction indicator light (☞ 2-11)
- ⑨ High beam indicator light (☞ 2-13)
- ⑩ Clock (☞ 2-13)
- ⑪ Odometer / trip meter / instrument panel light brightness (☞ 2-14)
- ⑫ Fuel level indicator (☞ 2-16)
- ⑬ Instantaneous fuel consumption meter / average fuel consumption meter / driving range meter (☞ 2-17)
- ⑭ Engine coolant temperature indicator (☞ 2-22)
- ⑮ Engine coolant temperature warning indicator symbol (☞ 2-22)
- ⑯ Neutral indicator light (☞ 2-22)
- ⑰ Engine coolant temperature / oil pressure warning indicator light (Except for EU, UK)
Engine coolant temperature / oil pressure / battery charge malfunction warning indicator light (EU, UK)
- ⑱ ABS indicator light (☞ 2-23)
- ⑲ Battery charge malfunction warning indicator symbol (EU, UK) (☞ 2-23)
- ⑳ Master warning indicator light (EU, UK) (☞ 2-12)

By turning the ignition switch to ON, the meter will act as follows.

- All LCD segments appear and then show the normal display.
- The following indicator lights come on for 3 seconds.
 - Malfunction indicator light ⑧
 - Master warning indicator light (EU, UK) ⑩
- The following indicator lights come on.
 - Engine coolant temperature / oil pressure warning indicator light (Except for EU, UK) ⑰
 - Engine coolant temperature / oil pressure / battery charge malfunction warning indicator light (EU, UK) ⑱
 - ABS indicator light ⑲



When the ignition switch is turned on, all the LCD segments are displayed. At this time, if only km (km/h) is displayed on the LCD, switching to the mile (mph) indication is not available as the meter is of the km specification.

TACHOMETER ③

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

Press and hold the SEL button ① and turn on the ignition switch. Hold the SEL button ① for 4 seconds to switch tachometer display pattern setting mode.

To change the display pattern, push the SEL button ①. The display pattern changes in the order below.

Normal → Peak hold → Normal

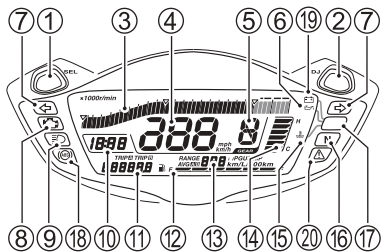
Push the ADJ button ② to exit the tachometer display pattern setting mode.

SPEEDOMETER ④

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

NOTE:

- Set the meter ⑪ to odometer, then press and hold the SEL button ① for 2 seconds to switch between km/h and mph. At the same time, the odometer will be changed between km and mile.
- Select km/h or mph, as appropriate, to comply with traffic regulations.
- Check km/h and mph display after adjusting the instrument panel display.






GEAR POSITION INDICATOR ⑤

The gear position indicator indicates gear position. This indicator displays “N” when the transmission is in neutral.

NOTE: When the display indicates “CHEC” in the odometer display area, the gear position indicator does not indicate a number but indicates “-”.

OIL PRESSURE WARNING INDICATOR SYMBOL “” ⑥

When the ignition switch is in the “ON” position but the engine has not been started, the symbol “” ⑥ in the display and the warning indicator light ⑰ comes on. As soon as the engine is started, the symbol “” ⑥ and the warning indicator light should go out.

When the engine oil pressure drops under the normal operating range, the symbol “” ⑥ in the display appears and the warning indicator light ⑰ comes on.

NOTICE

After starting the engine, opening the throttle or running the motorcycle with the oil pressure warning indicator light turned on may adversely affect the engine.


Make sure that the oil pressure warning indicator light has turned off before operating the throttle or running the motorcycle.

NOTICE

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

If the oil pressure warning indicator light comes on, indicating low oil pressure, stop the engine immediately. Check the oil level and add oil if necessary. If there is a proper amount of oil and the light still does not go out, have your authorized Suzuki dealer or a qualified mechanic inspect your motorcycle.

TURN SIGNAL INDICATOR LIGHT

“” ⑦

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

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

MALFUNCTION INDICATOR LIGHT “” ⑧ (Except for EU, UK)

FI

If the fuel injection system fails, the malfunction indicator light ⑧ comes on and the display indicates “FI” in the odometer display area in the following two modes;

- A. The display ⑪ in the odometer display area alternately indicates “FI” and the odometer/trip meter reading, and the malfunction indicator light ⑧ comes on and remains lit.
- B. The display ⑪ in the odometer display area indicates “FI” continuously and the malfunction indicator light ⑧ blinks.

The engine may continue to run in mode A, but the engine will not run in mode B.

NOTICE

The malfunction indicator light comes on to indicate a problem with the fuel injection system.


If the display indicates “FI” and the malfunction indicator light comes on, have your authorized Suzuki dealer or a qualified mechanic inspect the fuel injection system as soon as possible.

NOTE:

- If the display indicates “FI” continuously and the malfunction indicator light blinks, the engine will not start.
- If the malfunction indicator light comes on and fast blinks 3 times, the battery voltage is lower. Ask your authorized Suzuki dealer to inspect the motorcycle.



CHEC




When the display indicates “CHEC” in the odometer display area, check the following items;

- Make sure that the engine stop switch is in the “” position.
- Make sure that the transmission is in neutral or the side stand is fully up.

If the display still indicates “CHEC” after checking the above items, inspect the ignition fuse and the connection of the lead wire couplers.

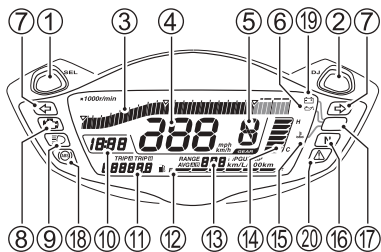
MALFUNCTION INDICATOR LIGHT “” ⑧ / MASTER WARNING INDICATOR “” ⑳ (EU, UK)

If a failure occurs in the motorcycle, the malfunction indicator light “” ⑧ or master warning indicator light “” ⑳ comes on. Also, the odometer ⑪ display indicates “FI”, “to” and “IG” every 2 seconds.

	Malfunction indicator light 	Master warning indicator 	Odometer display 
Engine system failure (Exhaust gas related)	Come on	–	FI
Engine system failure (Non exhaust gas related)	–	Come on	FI
Motorcycle tip over or TO (tip over) sensor failure	–	Come on	to
Ignition switch failure Theft judgment	–	Come on	IG
Controller communication failure	–	–	CHEC

NOTE:

- If the malfunction indicator light or master warning indicator is lit, consult your Suzuki Dealer immediately.
- When the odometer display indicates “CHEC”, check the following items;
 - Make sure that the ignition fuse is not blown.
 - Make sure that the lead wire couplers are connected.



HIGH BEAM INDICATOR LIGHT

“” ⑨

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

CLOCK ⑩

12:00

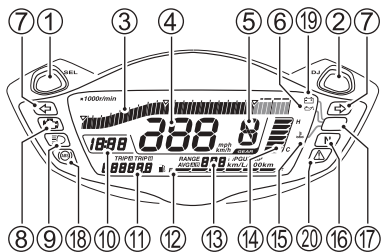
Time is shown when the ignition switch is in the “ON” position. The clock has a 12-hour display. Follow the procedure below to adjust the clock.

To adjust the clock, press and hold the SEL button ① and the ADJ button ② simultaneously for 2 seconds until the clock display blinks.

1. Push the SEL button ① to adjust the hour display.
2. Push the ADJ button ② to adjust the minute display.
3. Press and hold the SEL button ① and the ADJ button ② simultaneously for 2 seconds to return to the clock mode.

NOTE:

- When the SEL button ① or the ADJ button ② is pressed and held, the display will increase continuously.
- The clock can be adjusted when the ignition switch is in the “ON” position.
- This clock is powered by the battery of the motorcycle. If your motorcycle is to be left unused more than two months, remove the battery from the motorcycle.



ODOMETER/TRIP METER/ INSTRUMENT PANEL LIGHT BRIGHTNESS ⑪

The display has 4 functions; odometer, two trip meters, and instrument panel light brightness. When the ignition switch is turned to the "ON" position, the test pattern shown below is displayed for 3 seconds. After the test pattern is displayed, the display will show the function that was displayed the last time that the ignition switch was turned off.

TRIP A TRIP B
88888.8

NOTE:

- Set the meter ⑪ to odometer, then press and hold the SEL button ① for 2 seconds to switch between km and mile. At this time, the speedometer will be changed between km/h and mph and the instantaneous/average fuel consumption meter will be changed between km/L (L/100 km) and MPG.
- Select km or mile, as appropriate, to comply with traffic regulations.
- Check the km and mile display after adjusting the instrument panel display.

To change the display, push the SEL button ①. The display changes in the order below.

003231 ←

Odometer

TRIP A
303.2

Trip meter A

TRIP B
2308.4

Trip meter B

000000

Instrument panel light brightness

ODOMETER

The odometer registers the total distance that the motorcycle has been ridden. The odometer ranges from 0 to 999999.

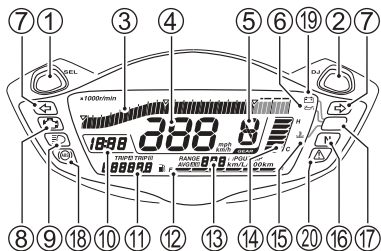
The odometer display locks at 999999 when the total distance exceeds 999999.

TRIP METERS









The two trip meters are resettable odometers. They can register two kinds of distances at the same time. For instance, trip meter A can register the trip distance and trip meter B can register the distance between fuel stops.

To reset a meter to zero, press and hold the SEL button ① for 2 seconds while the display indicates the trip meter A or B, you want to reset. When you reset the trip meter A or B, the fuel consumption meter will also be reset.

NOTE: When the trip meter exceeds 9999.9, the trip meter will return to 0.0 and start counting again.



INSTRUMENT PANEL LIGHT BRIGHTNESS

Set the meter to instrument panel light brightness, then press and hold the SEL button ① for 2 seconds until the “” mark indicators blink. Pushing the SEL button ① will change the instrument panel light brightness in 6 steps. The brightness indicator indicates brightness from “” (min) to “     ” (max). Press and hold the SEL button ① for 2 seconds to return to instrument panel light brightness mode.








WARNING

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

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

FUEL LEVEL INDICATOR “” ⑫

The fuel level indicator indicates the amount of fuel remaining in the fuel tank. The fuel level indicator displays all 6 segments when the fuel tank is full. The mark blinks when the fuel level drops below 4.2 L (4.4/3.7 US/Imp qt). The mark and segment blink when the fuel drops below 1.7 L (1.8/1.5 US/Imp qt).

Fuel tank	Approximately 1.7 L	Approximately 4.2 L	Full
Segment			
 mark			

NOTE:

- The fuel level indicator will not indicate correctly when the motorcycle is placed on the side stand. Turn the ignition switch to the “ON” position when the motorcycle is held upright.
- If the fuel mark blinks, fill the fuel tank immediately. Also, the last segment of the fuel level indicator blinks when the fuel tank is almost empty.

**INSTANTANEOUS FUEL
CONSUMPTION METER/AVERAGE
FUEL CONSUMPTION METER/
DRIVING RANGE METER ⑬**

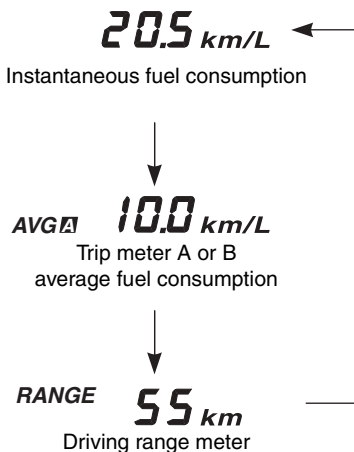
(Except for EU, UK)

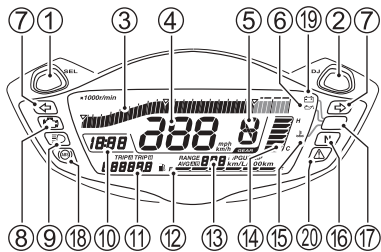
The display has 3 functions; instantaneous fuel consumption meter, average fuel consumption meter and driving range meter. When the ignition switch is turned to the "ON" position, the test pattern shown below is displayed for 3 seconds.

RANGE **888** *MPGUSIMP*
AVG **888** *km/L/100km*

After the test pattern is displayed, the display will show the function that was displayed the last time that the ignition switch was turned off.

To change the display, push the ADJ button ②. The display changes in the order below.





Instantaneous Fuel Consumption Meter and Average Fuel Consumption Meter

To change between “km/L (L/100 km)” and “MPG”, set the meter ⑪ to odometer, then press and hold the SEL button ① for 2 seconds. At the same time, the odometer will be changed between km and mile.

To change between “km/L” and “L/100 km”, “MPG IMP” and “MPG US”, set the meter ⑬ to either instantaneous fuel consumption meter or average fuel consumption meter and hold the ADJ button ② for 2 seconds.

Instantaneous fuel consumption meter

The instantaneous fuel consumption meter displays the fuel consumption value only when the motorcycle is moving. However, when the motorcycle is stopping, the fuel consumption meter displays “- - . -”. This meter ranges from 0.1 to 50.0 (km/L), from 2.0 to 50.0 (L/100 km), or from 0.1 to 99.9 (MPG IMP, US).

NOTE: The display shows estimated values. Indications may not be the same as actual values.

Average fuel consumption meter

The average fuel consumption meter displays average fuel consumption ratio of trip A or trip B. The average fuel consumption meter ranges from 0.1 to 50.0 (km/L), from 0.1 to 99.9 (MPG IMP, US) or from 2.0 to 50.0 (L/100 km). The average fuel consumption meter indicates “- - . -” when the trip meter indicates 0.0. To reset the fuel consumption meter, reset the trip meter.

NOTE: The display shows estimated values. Indications may not be the same as actual values.

Driving range meter

The driving range meter displays estimated driving range (distance) based on the remaining fuel within the range from 1 to 999 km (mile). The driving range is recalculated when you refuel, but the indication may not change when only a small amount of fuel is added.

The driving range will not be recalculated when the motorcycle is placed on the side stand. Check the estimated driving range (distance) when the side stand is retracted. When the battery is disconnected, the driving range meter will be reset. When this happens, the meter indicates “— — —” until the motorcycle is ridden for a certain distance.

NOTE:

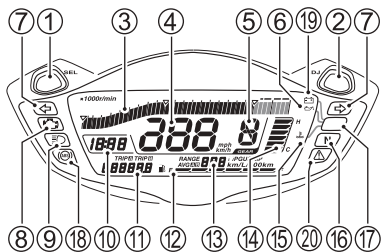
- *The driving range (distance) is an estimated value. The indication may not be the same as the actual driving distance.*
- *The meter does not use the average fuel consumption value to calculate driving range (distance) and the calculation result may not be the same as indicated by the average fuel consumption meter.*
- *To avoid running out of gasoline, you should not continue to ride the motorcycle until the estimated driving range drops to 1.*

INSTANTANEOUS FUEL CONSUMPTION METER/AVERAGE FUEL CONSUMPTION METER/VOLTMETER/DRIVING RANGE METER ^⑬ (EU, UK)

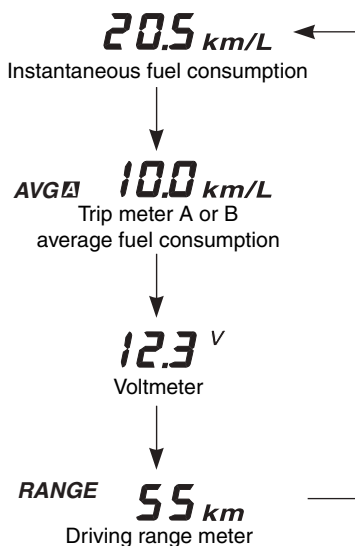
The display has 4 functions; instantaneous fuel consumption meter, average fuel consumption meter, voltmeter and driving range meter. When the ignition switch is turned to the “ON” position, the test pattern shown below is displayed for 3 seconds.

RANGE **88.8** **MPGUSIMP**
AVG **88.8** **km/L/100km**

After the test pattern is displayed, the display will show the function that was displayed the last time that the ignition switch was turned off.



To change the display, push the ADJ button ②. The display changes in the order below.



Instantaneous Fuel Consumption Meter and Average Fuel Consumption Meter

To change between “km/L (L/100 km)” and “MPG”, set the meter ⑪ to odometer, then press and hold the SEL button ① for 2 seconds. At the same time, the odometer will be changed between km and mile.

To change between “km/L” and “L/100 km”, “MPG IMP” and “MPG US”, set the meter ⑬ to either instantaneous fuel consumption meter or average fuel consumption meter and hold the ADJ button ② for 2 seconds.

Instantaneous fuel consumption meter

The instantaneous fuel consumption meter displays the fuel consumption value only when the motorcycle is moving. However, when the motorcycle is stopping, the fuel consumption meter displays “- - . -”. This meter ranges from 0.1 to 50.0 (km/L), from 2.0 to 50.0 (L/100 km), or from 0.1 to 99.9 (MPG IMP, US).

NOTE: The display shows estimated values. Indications may not be the same as actual values.

Average fuel consumption meter

The average fuel consumption meter displays average fuel consumption ratio of trip A or trip B. The average fuel consumption meter ranges from 0.1 to 50.0 (km/L), from 0.1 to 99.9 (MPG IMP, US) or from 2.0 to 50.0 (L/100 km). The average fuel consumption meter indicates “- - . -” when the trip meter indicates 0.0. To reset the fuel consumption meter, reset the trip meter.

NOTE: The display shows estimated values. Indications may not be the same as actual values.

Voltmeter

The voltmeter displays the battery voltage within the range of 10.0 to 16.0V.

NOTE:

- *The displayed value may differ from the value of other instruments.*
- *If a voltage below 12.0 V is frequently displayed, have the motorcycle inspected by an authorized Suzuki dealer.*

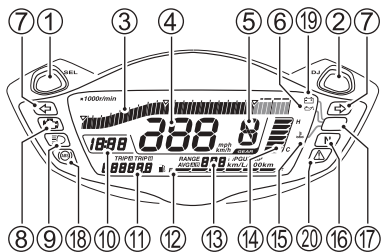
Driving range meter

The driving range meter displays estimated driving range (distance) based on the remaining fuel within the range from 1 to 999 km (mile). The driving range is recalculated when you refuel, but the indication may not change when only a small amount of fuel is added.

The driving range will not be recalculated when the motorcycle is placed on the side stand. Check the estimated driving range (distance) when the side stand is retracted. When the battery is disconnected, the driving range meter will be reset. When this happens, the meter indicates “- - -” until the motorcycle is ridden for a certain distance.

NOTE:

- *The driving range (distance) is an estimated value. The indication may not be the same as the actual driving distance.*
- *The meter does not use the average fuel consumption value to calculate driving range (distance) and the calculation result may not be the same as indicated by the average fuel consumption meter.*
- *To avoid running out of gasoline, you should not continue to ride the motorcycle until the estimated driving range drops to 1.*



NOTICE

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

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

ENGINE COOLANT TEMPERATURE INDICATOR “”

The engine coolant temperature is displayed by an LCD segment temperature indicator ⑭, engine coolant temperature warning indicator symbol ⑮, and warning indicator light ⑰.

When the engine coolant temperature exceeds 116°C (241°F), all six LCD segments turn on. When the engine coolant temperature comes to 120°C (248°F), the engine coolant temperature warning indicator symbol ⑮ blinks, and the warning indicator light ⑰ turns on. If all six LCD segments for the temperature indication ⑭ turn on, stop the engine, wait until the engine is cooled, and check the coolant level.

NEUTRAL INDICATOR LIGHT “N”

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

ABS INDICATOR LIGHT “” ⑱

This indicator normally comes on when the ignition switch is turned “ON” and goes off after the motorcycle speed exceeds 10 km/h (6 mph).

If there is a problem with the ABS (Anti-lock Brake System), this indicator light blinks or comes on. The ABS does not operate when the ABS indicator light is on or blinking.

NOTE: If the ABS indicator light goes off after you start the motorcycle but before you begin riding, check the ABS indicator light function by turning off and on the ignition switch. The ABS indicator light can go off if the engine is revved at high speed before you begin riding. If the ABS indicator light does not come on when the ignition switch is turned on, you should have the system checked by an authorized Suzuki dealer as soon as possible.

WARNING

Riding the motorcycle with the ABS indicator light on can be hazardous.

If the ABS indicator light blinks or comes on while riding, stop the motorcycle in a safe place and turn off the ignition switch. Turn the ignition switch “ON” after a while and check if the indicator light comes on.

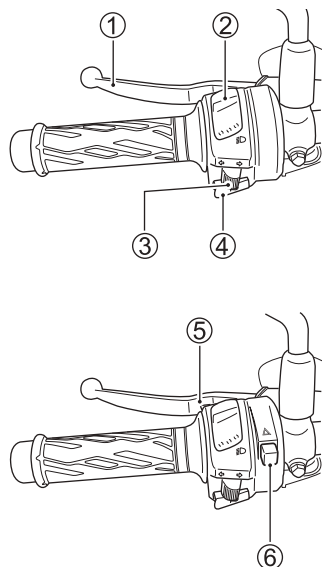
- **If the indicator light goes off after starting to ride, the ABS will be functioning.**
- **If it does not go off after starting to ride, ABS is not functioning, and the brakes provide normal stopping ability. You should have the system checked by an authorized Suzuki dealer as soon as possible.**

BATTERY CHARGE MALFUNCTION WARNING INDICATOR SYMBOL “” ⑲ (EU, UK)

This symbol comes on when a failure occurs in the charging system for the battery.

NOTE: Consult your Suzuki dealer if the symbol comes on.

LEFT HANDLEBAR



(EU, Australia)

CLUTCH LEVER ①

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

DIMMER SWITCH ②

“☰▷” position

The headlight low beam turns on.

“≡▷” position

The headlight high beam turns on. The high beam indicator light also comes on.

NOTICE

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

Use the dimmer switch to select only the “≡▷” or “☰▷” position.

NOTICE

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


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



NOTICE

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

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

TURN SIGNAL LIGHT SWITCH

“” ③

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

WARNING

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

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

HORN SWITCH “” ④

Press the switch to sound the horn.

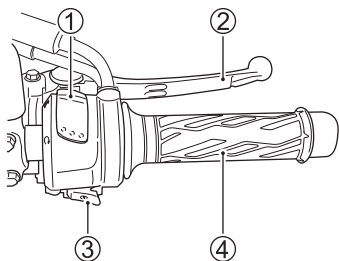
HEADLIGHT FLASHER SWITCH ⑤ (EU, Australia)

Press the switch to flash the headlight.

HAZARD WARNING SWITCH “” ⑥ (EU, Australia)

All four turn signal lights and indicators will flash simultaneously when the switch is turned on with the ignition switch in the “ON” or “P” position. Use the hazard warning lights to warn other traffic during emergency parking or when your vehicle could otherwise become a traffic hazard.

RIGHT HANDLEBAR



ENGINE STOP SWITCH ①





“” position

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

“” position

The ignition circuit is on and the engine can run.

NOTICE

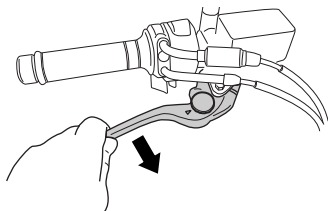
Changing the engine stop switch from  to  or from  to  while riding may damage to the engine or the catalytic converter (if equipped).

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

FRONT BRAKE LEVER ②

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

Front Brake Lever Adjustment



The distance between the throttle grip and the front brake lever is adjustable to 5 positions. To change the position, push the brake lever forward and turn the adjuster to the desired position. When changing the brake lever position, always be sure the adjuster stops in the proper position; a projection of the brake lever pivot should fit into the depression of the adjuster. This motorcycle is delivered from the factory with its adjuster set on position 3.


WARNING

Adjusting the front brake lever position while riding can be hazardous. Removing a hand from the handlebars can reduce your ability to control the motorcycle.

Never adjust the front brake lever position while riding. Keep both hands on the handlebars.

ELECTRIC STARTER SWITCH “”

③

This switch is used for operating the starter motor. With the ignition switch in the “ON” position, the engine stop switch in “” and the transmission in neutral, push the electric starter switch to operate the starter motor and start the engine.

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

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

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

NOTICE

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

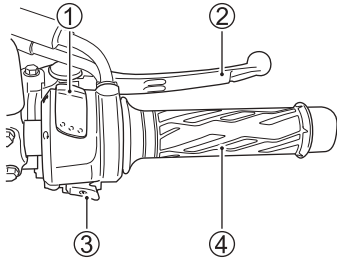
Do not engage the starter motor for more than five seconds at a time. If the engine does not start after several attempts, check the fuel supply and ignition system. Refer to the TROUBLESHOOTING section in this manual.

NOTICE

If the neutral indicator light and the gear position indicator are not giving proper indications, starting the engine can cause serious engine damage.

Before starting the engine, make sure of the followings:

- When the neutral indicator light comes on, the gear position indicator should indicate “N” (Neutral).
- When the neutral indicator light goes off, the gear position indicator should indicate either “1”, “2”, “3”, “4”, “5” or “6”.
- If the neutral indicator light and the gear position indicator are not working properly, consult your Suzuki dealer.



Suzuki Easy Start System

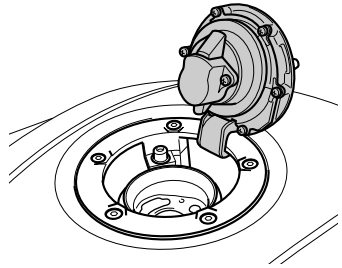
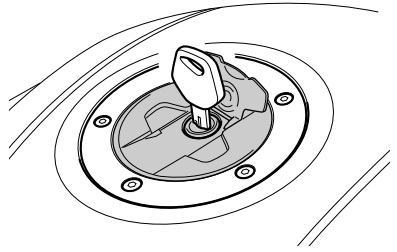
Suzuki Easy Start System permits engine start by simple one-push action on the electric starter switch. When the transmission is in neutral, the engine can be started without squeezing the clutch lever. When the transmission is in a position other than neutral, the engine can be started by squeezing the clutch lever.

NOTE: When the electric starter switch is pushed, the starter motor will continue turning for a few seconds even when you release your hand from the switch. After a few seconds, or when the engine is started, the starter motor will stop automatically.

THROTTLE GRIP ④

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

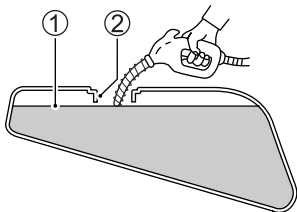
FUEL TANK CAP



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

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

Fuel tank capacity: 14.5 L (3.8/3.2 US/Imp. gal)



- ① Fuel level
- ② Filler neck

⚠ WARNING

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

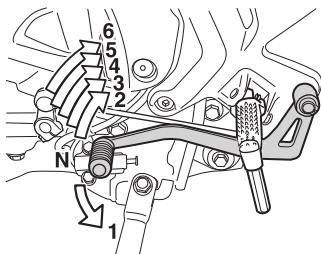
Stop adding fuel when the fuel level reaches the bottom of the filler neck.

⚠ WARNING

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

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

GEARSHIFT LEVER

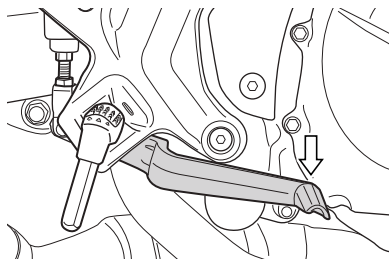


This motorcycle has a 6-speed transmission which operates as shown. To shift properly, squeeze the clutch lever and close the throttle at the same time you operate the gearshift lever. Lift the gearshift lever to upshift and depress the lever to downshift. Neutral is located between 1st and 2nd gear.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

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

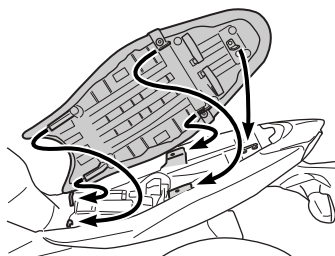
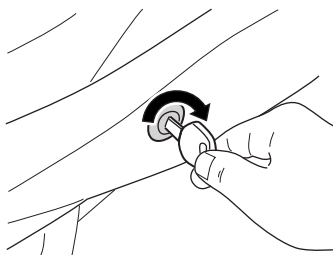
Reduce the motorcycle speed before down-shifting. When down-shifting, the engine speed should be increased before the clutch is engaged. This will prevent unnecessary wear on the drive train components and the rear tire.

REAR BRAKE PEDAL



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

SEAT LOCK



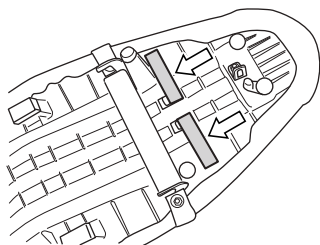
To unlock the seat lock, insert the ignition key into the lock and turn it clockwise. To lock the seat, slide the seat hooks into the seat hook retainers and push down firmly until the seat snaps into the locked position.

⚠ WARNING

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

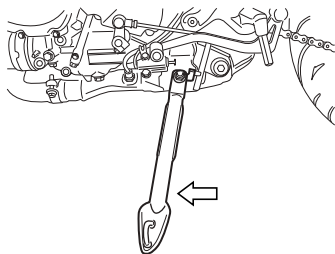
Latch the seat securely in its proper position.

LUGGAGE STRAPS



The luggage straps are folded under the seat. Extract the straps from the hooks and reinstall the seat with the straps out. Hook bands to the straps to fix luggage on the seat.

SIDE STAND



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

The side stand/ignition interlock system works as follows:

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

WARNING

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

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

NOTICE

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

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

SUSPENSION ADJUSTMENT

The standard settings for both the front and rear suspensions are selected to meet various riding conditions such as low to high motorcycle speed and light to heavy load on the motorcycle. The suspension settings can be adjusted and fine-tuned according to your preference.

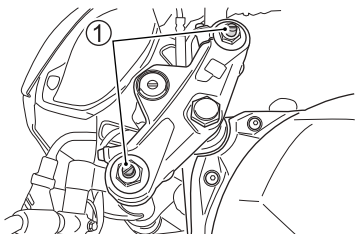
NOTICE

Turning adjusters by force can damage the suspensions.

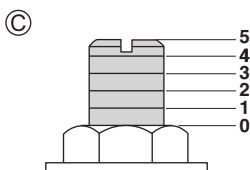
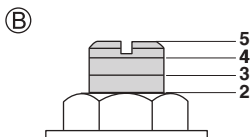
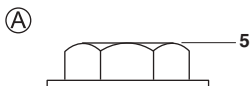
Do not turn adjusters beyond their natural limits.

FRONT SUSPENSION (SV650X)

Spring Pre-load Adjustment



To change the spring pre-load, turn the adjuster ① clockwise or counterclockwise. Turning the adjuster clockwise will increase the spring pre-load. Turning the adjuster counterclockwise will decrease the spring pre-load. There are 4 grooved lines on the side of the adjuster ① for reference. Position 0 provides the minimum spring pre-load and position 5 provides the maximum pre-load. This motorcycle is delivered from the factory with its adjuster set on position 2.



- (A) Position 5
- (B) Position 2
- (C) Position 0



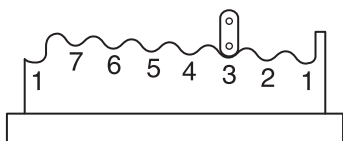
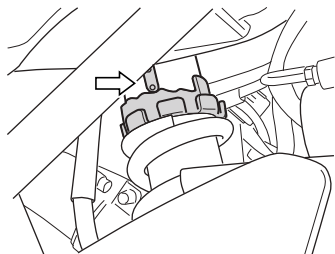
WARNING

Unequal suspension adjustment can cause poor handling and instability.

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

REAR SUSPENSION

Spring Pre-load Adjustment



The rear suspension spring pre-load is adjustable to compensate for rider, load, riding style and road conditions. The spring pre-load is adjustable to seven positions. To change the spring pre-load setting, place the motorcycle on the side stand. Twist the spring tension ring to the desired position with the spring adjuster. Position 1 provides the softest spring tension and position 7 provides the stiffest. This motorcycle is delivered from the factory with its adjuster set on position 3.

Rear Suspension Label

WARNING



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

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

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

FUEL, ENGINE OIL AND COOLANT RECOMMENDATIONS

FUEL OCTANE RATING 3-2
OXYGENATED FUEL RECOMMENDATION 3-2
ENGINE OIL 3-3
ENGINE COOLANT SOLUTION 3-5

FUEL, ENGINE OIL AND COOLANT RECOMMENDATIONS

FUEL OCTANE RATING

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

(Canada)

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

NOTE:

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

OXYGENATED FUEL RECOMMENDATION

(Canada, EU)

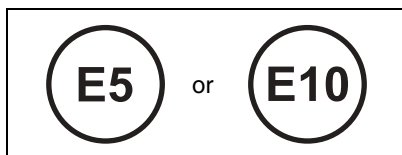
Oxygenated fuels which meet the minimum octane requirement and the requirements described below may be used in your motorcycle without jeopardizing the New Vehicle Limited Warranty or the Emission Control System Warranty.

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

Gasoline/Ethanol Blends

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

Use the recommended gasoline which conforms to the following labels. (EU)



NOTE:

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

NOTICE

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

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

NOTICE

Do not use leaded gasoline.

Use of leaded gasoline causes the catalytic converter to malfunction.

ENGINE OIL

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

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

SELECTING THE ENGINE OIL

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

< SUZUKI Genuine Oil >

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

< Equivalent Engine Oil >

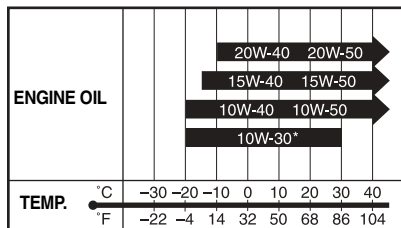
Equivalent Engine Oil means engine oil that meets the following standards.

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

API: American Petroleum Institute
JASO: Japanese Automobile Standards Organization

SAE Engine Oil Viscosity

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

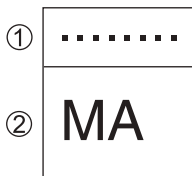


* USE ONLY SJ or SL.

JASO T903

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

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



- ① Code number of oil sales company
- ② Oil classification

Energy Conserving

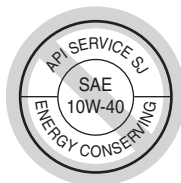
Suzuki does not recommend the use of "ENERGY CONSERVING" or "RESOURCE CONSERVING" oils. Some engine oils which have an API classification of SJ, SL, SM or SN have an "ENERGY CONSERVING" or "RESOURCE CONSERVING" indication in the API classification donut mark. These oils can affect engine life and clutch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

API SJ, SL, SM or SN



Recommended

API SJ, SL or SM



API SN



Not recommended

ENGINE COOLANT SOLUTION

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

WARNING

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

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

NOTICE

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

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

ENGINE COOLANT

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

SUZUKI SUPER LONG LIFE COOLANT (Blue)

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

SUZUKI LONG LIFE COOLANT (Green)

Water for mixing

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

Required amount of water/coolant

Solution capacity (total): 1850 ml
(2.0/1.6 US/Imp. qt)

50%	Water	925 ml (1.0/0.8 US/Imp. qt)
	Coolant	925 ml (1.0/0.8 US/Imp. qt)

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



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

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

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

MAXIMUM ENGINE SPEED RECOMMENDATION

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

Initial	800 km (500 miles)	Below 5000 r/min
Up to	1600 km (1000 miles)	Below 7500 r/min
Over	1600 km (1000 miles)	Below 10000 r/min

VARY THE ENGINE SPEED

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

BREAKING IN THE NEW TIRES

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

WARNING

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

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

AVOID CONSTANT LOW SPEED

Operating the engine at constant low speed (light load) can cause parts to glaze and not seat in. Allow the engine to accelerate freely through the gears, without exceeding the recommended maximum limits. Do not, however, use full throttle for the first 160 km (100 miles).

OBSERVE YOUR FIRST AND MOST CRITICAL SERVICE

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

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

INSPECTION BEFORE RIDING

WARNING

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

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

WARNING

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






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









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

WARNING

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

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

WHAT TO CHECK	CHECK FOR:
Steering	<ul style="list-style-type: none"> • Smoothness • No restriction of movement • No play or looseness
Throttle ( 6-25)	<ul style="list-style-type: none"> • Correct play in the throttle cable • Smooth operation and positive return of the throttle grip to the closed position
Clutch ( 6-26)	<ul style="list-style-type: none"> • Correct lever play • Smooth and progressive action
Brakes ( 2-26, 2-30, 6-32)	<ul style="list-style-type: none"> • Proper pedal and lever operation • Fluid level in the reservoir to be above "LOWER" line • Correct pedal and lever play • No "sponginess" • No fluid leakage • Brake pads not worn down to the limit line
Suspension ( 2-32)	Smooth movement
Fuel ( 2-16, 2-28)	Enough fuel for the planned distance of operation

Drive chain ( 6-28)	<ul style="list-style-type: none"> • Correct tension or slack • Adequate lubrication • No excessive wear or damage
Tires ( 6-36)	<ul style="list-style-type: none"> • Correct pressure • Adequate tread depth • No cracks or cuts
Engine oil ( 6-20)	Correct level
Cooling system ( 6-27)	<ul style="list-style-type: none"> • Proper coolant level • No coolant leakage
Lighting ( 2-5, 2-8, 2-24)	Operation of all lights and indicators
Horn ( 2-25)	Correct function
Engine stop switch ( 2-26)	Correct function
Side stand/ Ignition interlock system ( 6-40)	Proper operation

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RIDING TIPS

STARTING THE ENGINE

Before attempting to start the engine, make sure:

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

NOTE: This motorcycle is equipped with an interlock system for the ignition circuit and the starter circuit.

The engine can only be started if:

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

NOTE: The fuel supply system stops the engine when the motorcycle is overturned. Turn off the ignition switch before restarting the engine.

NOTICE

If the neutral indicator light and the gear position indicator are not giving proper indications, starting the engine can cause serious engine damage.

Before starting the engine, make sure of the followings:

- **When the neutral indicator light comes on, the gear position indicator should indicate "N" (Neutral).**
- **When the neutral indicator light goes off, the gear position indicator should indicate either "1", "2", "3", "4", "5" or "6".**
- **If the neutral indicator light and the gear position indicator are not working properly, consult your Suzuki dealer.**

When the Engine is Cold or Warm:

Close the throttle completely and push the electric starter switch.

When the Engine is Hard to Start:

Open the throttle slightly and push the electric starter switch.

⚠ WARNING

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

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

NOTICE

After starting the engine, opening the throttle or running the motorcycle with the oil pressure warning indicator light turned on, may adversely affect the engine.

Make sure that the oil pressure warning indicator light has turned off before operating the throttle or running the motorcycle.

NOTICE

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

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

Suzuki Easy Start System

Suzuki Easy Start System permits engine start by simple one-push action on the electric starter switch. When the transmission is in neutral, the engine can be started without squeezing the clutch lever. When the transmission is in a position other than neutral, the engine can be started by squeezing the clutch lever.

NOTE: When the electric starter switch is pushed, the starter motor will continue turning for a few seconds even when you release your hand from the switch. After a few seconds, or when the engine is started, the starter motor will stop automatically.

(EU, UK)

NOTE: Depending on the condition of the battery, the engine might not start easily by Suzuki Easy Start System. If the engine is difficult to start, squeeze the clutch lever with the transmission in neutral and continue pressing the electric starter switch to start the engine. If the engine fails to start, the battery will most likely lose power. In this case, charge or change the battery.

STARTING OFF

WARNING

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

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

WARNING

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

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

WARNING

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

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

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

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

USING THE TRANSMISSION

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

(Canada)

The table below shows the approximate speed range for each gear.

Shifting up schedule

Gear position	km/h	mph
1st → 2nd	18	11
2nd → 3rd	32	20
3rd → 4th	43	27
4th → 5th	55	34
5th → 6th	67	42

Shifting down schedule

Gear position	km/h	mph
6th → 5th	64	40
5th → 4th	52	32
4th → 3rd	41	25

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

WARNING

Downshifting when engine speed is too high can:

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

Reduce speed before downshifting.

WARNING

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

Reduce your speed and downshift before entering a corner.

NOTICE

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

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

NOTICE

Improper gearshift lever operation can damage the transmission.

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

RIDING ON HILLS

- When climbing steep hills, the motorcycle may begin to slow down and show lack of power. At this point you should shift to a lower gear so that the engine will again be operating in its normal power range. Shift rapidly to prevent the motorcycle from losing momentum.
- When descending a long, steep slope, use the engine compression to assist the brakes by shifting to a lower gear. Continuous brake application can overheat the brakes and reduce their effectiveness.
- Be careful, however, not to allow the engine to over rev.

STOPPING AND PARKING

Anti-lock Brake System (ABS)

This model is equipped with an Anti-lock Brake System (ABS) designed to help prevent wheel lock up during hard braking or during braking on slippery surfaces while riding in a straight line.

The ABS will operate whenever it senses that the wheels are locking up. You may feel the brake lever and/or the brake pedal pulsate lightly while the ABS is operating.

Even though ABS helps prevent wheel lock-up, you must still be careful when braking in curves. Hard braking while turning could cause wheel skidding and loss of control, whether or not your motorcycle is equipped with ABS. Having ABS does not mean you can take unnecessary risks. ABS will not compensate for poor judgment, incorrect braking techniques, or not slowing down over bad roads or in poor weather conditions.

You must still ride sensibly and alertly.

On regular paved roads, some riders may be able to obtain slightly shorter stopping distances with conventional brake systems than with ABS.

NOTE: In some situations, a motorcycle with ABS may require a longer stopping distance to stop on loose or uneven surfaces than an equivalent motorcycle without ABS.

WARNING

Inexperienced riders tend to under utilize 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

Braking while turning the motorcycle can be hazardous, whether or not your motorcycle is equipped with ABS. ABS can not control wheel side-slips that occur when you brake hard while turning and the side-slips could cause loss of control.

Slow down sufficiently in a straight line before you begin to turn and avoid other than slight braking while turning.

WARNING

Failure to use good judgment with ABS can be hazardous. ABS cannot make up for bad road conditions, bad judgement, or improper operation of the brakes.

Remember that ABS will not compensate for poor judgment, incorrect braking techniques, or the need to slow down over bad roads or in poor weather conditions. Use good judgment and do not ride faster than conditions will safely allow.

How the ABS Works

ABS works by electronically controlling braking pressure. A computer monitors wheel rotation speed. If the computer detects that a braked wheel has slowed suddenly, indicating a skidding situation, the computer will reduce braking pressure to prevent that wheel from locking up. ABS works automatically, so you do not need any special braking technique. Just apply the front and rear brakes, as forcefully as necessary for the situation, without pumping either one. It is normal for the brake lever/pedal to pulsate while the ABS is operating.

Non-recommended tires can affect wheel speed and may confuse the computer.

ABS does not work at very low speed, less than about 8 km/h (5 mph), and does not work with a discharged battery.

Stopping and Parking

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

WARNING

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

Apply both brakes evenly and at the same time.

WARNING

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

Brake before you begin to turn.

WARNING

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

Brake lightly and with care on slippery or irregular surfaces.

WARNING

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

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

WARNING

Sudden braking and sudden downshifting can impair riding stability and cause side-slips and tumbles.

Avoid unnecessary sudden braking and sudden downshift. Extreme caution is required when riding on slippery or poorly maintained roads while tilting the motorcycle to the side.

NOTICE

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

Use the brakes when stopping the motorcycle on inclines.

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

CAUTION

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

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

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

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

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

INSPECTION AND MAINTENANCE

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INSPECTION AND MAINTENANCE

MAINTENANCE SCHEDULE

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

WARNING

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

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

WARNING

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

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

NOTICE

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

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

NOTICE

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

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

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

MAINTENANCE CHART

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

Interval	months	2	12	24	36	48
	km	1000	6000	12000	18000	24000
Item	miles	600	4000	7500	11000	14500
Air cleaner element (🔧 6-13)		–	I	I	R	I
* Exhaust pipe bolts and muffler bolts		T	–	T	–	T
* Valve clearance		Inspect every 24000 km (15000 miles)				
Spark plugs (🔧 6-16)		–	I	R	I	R
Fuel hose (🔧 6-19)		–	I	I	I	I
		*Replace every 4 years				
* Evaporative emission control system (if equipped)		–	–	I	–	I
Engine oil (🔧 6-20)		R	R	R	R	R
Engine oil filter (🔧 6-20)		R	–	–	R	–
Throttle cable play (🔧 6-25)		I	I	I	I	I
* Throttle valve synchronization		–	–	I	–	I
* PAIR (air supply) system (if equipped)		–	–	I	–	I
* Engine coolant (🔧 6-27)	"SUZUKI SUPER LONG LIFE COOLANT" (Blue)	Replace every 4 years or 48000 km (29000 miles)				
	"SUZUKI LONG LIFE COOLANT" (Green) or an engine coolant other than "SUZUKI SUPER LONG LIFE COOLANT" (Blue)	–	–	R	–	R
Radiator hose (🔧 6-27)		–	I	I	I	I
Clutch cable play (🔧 6-26)		–	I	I	I	I
Drive chain (🔧 6-28)		I	I	I	I	I
		Clean and lubricate every 1000 km (600 miles)				
* Brakes (🔧 6-32)		I	I	I	I	I
Brake fluid (🔧 6-32)		–	I	I	I	I
		*Replace every 2 years				
Brake hose (🔧 6-32)		–	I	I	I	I
		*Replace every 4 years				
Tires (🔧 6-36)		–	I	I	I	I
* Steering		I	–	I	–	I
* Front forks (🔧 2-33)		–	–	I	–	I
* Rear suspension (🔧 2-34)		–	–	I	–	I
* Chassis bolts and nuts		T	T	T	T	T
Lubrication (🔧 6-9)		Lubricate every 1000 km (600 miles)				

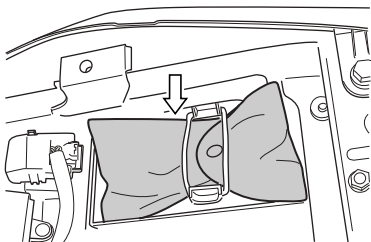
NOTE: I= Inspect and clean, adjust, replace or lubricate as necessary;
R= Replace; T= Tighten

For Europe and Oceania countries

Interval		months	2	12	24	36	48
		km	1000	12000	24000	36000	48000
Item		miles	600	7500	15000	22500	30000
Air cleaner element (🔧 6-13)			–	I	I	R	I
* Exhaust pipe bolts and muffler bolts			T	T	T	T	T
* Valve clearance		Inspect every 24000 km (15000 miles)					
Spark plugs (🔧 6-16)			–	R	R	R	R
Fuel hose (🔧 6-19)			–	I	I	I	I
		*Replace every 4 years					
* Evaporative emission control system (if equipped)			–	–	I	–	I
Engine oil (🔧 6-20)			R	R	R	R	R
Engine oil filter (🔧 6-20)			R	–	R	–	R
Throttle cable play (🔧 6-25)			I	I	I	I	I
* Throttle valve synchronization			–	I	I	I	I
* PAIR (air supply) system (if equipped)			–	–	I	–	I
* Engine coolant (🔧 6-27)	"SUZUKI SUPER LONG LIFE COOLANT" (Blue)		–	–	–	–	R
	"SUZUKI LONG LIFE COOLANT" (Green) or an engine coolant other than "SUZUKI SUPER LONG LIFE COOLANT" (Blue)		–	–	R	–	R
Radiator hose (🔧 6-27)			–	I	I	I	I
Clutch cable play (🔧 6-26)			–	I	I	I	I
Drive chain (🔧 6-28)			I	I	I	I	I
		Clean and lubricate every 1000 km (600 miles)					
* Brakes (🔧 6-32)			I	I	I	I	I
Brake fluid (🔧 6-32)		Inspect every year or 6000 km (4000 miles) *Replace every 2 years					
Brake hose (🔧 6-32)			–	I	I	I	I
		*Replace every 4 years					
Tires (🔧 6-36)			–	I	I	I	I
* Steering			I	I	I	I	I
* Front forks (🔧 2-33)			–	I	I	I	I
* Rear suspension (🔧 2-34)			–	I	I	I	I
* Chassis bolts and nuts			T	T	T	T	T
Lubrication (🔧 6-9)		Lubricate every 1000 km (600 miles)					

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

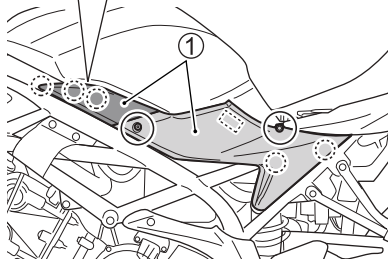
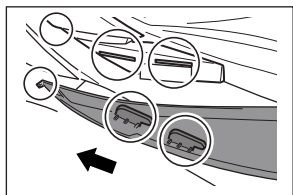
TOOLS



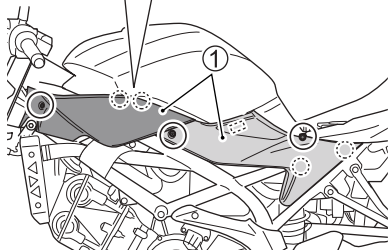
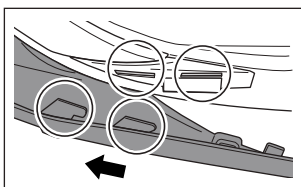
A tool kit is provided with your motorcycle. It is located under the seat.

FUEL TANK LIFT

1. Place the motorcycle on the side stand.
2. Remove the seat by referring to the SEAT LOCK section.

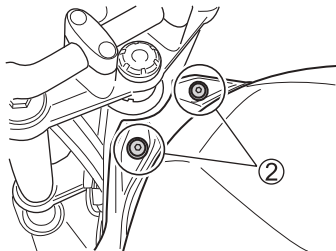


(SV650)

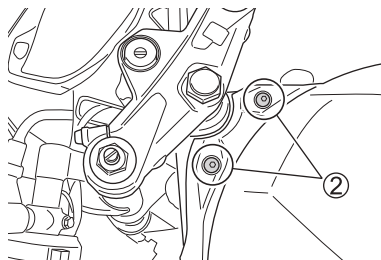


(SV650X)

3. Remove the bolts and fasteners. Remove the right and left frame covers ① by unhooking the frame covers.

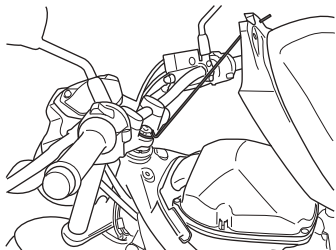


(SV650)

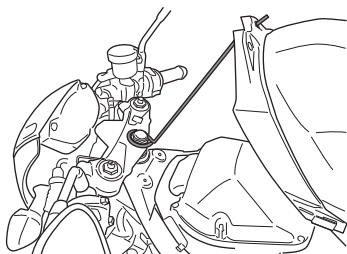


(SV650X)

4. Remove the bolts ②.



(SV650)



(SV650X)

5. Lift the front end of the fuel tank and prop it up as shown above. Put the circle end of the prop stay onto the steering stem nut.

NOTE: A prop stay is available at your Suzuki dealer. The prop stay part number is 44560-23H00.

WARNING

If you lift up the fuel tank when it is full, fuel can seep out from the fuel tank cap, creating a fire hazard.

Reduce the fuel level to less than 1/4 full before lifting up the fuel tank. The fuel indicator on the instrument panel will blink or remain lit when the fuel level is less than 1/4 full.

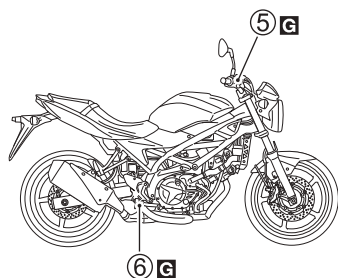
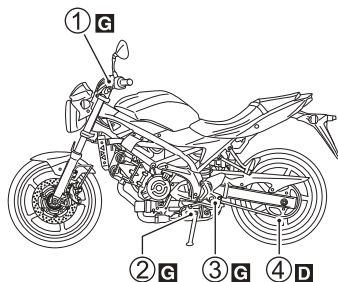
LUBRICATION POINTS

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

NOTICE

Lubricating electrical switches can damage the switches.

Do not apply grease or oil to electrical switches.



- G** Grease
- D** Drive chain lubricant

- ① Clutch lever pivot
- ② Side stand pivot and spring hook
- ③ Gearshift lever pivot and footrest pivot
- ④ Drive chain
- ⑤ Brake lever pivot
- ⑥ Brake pedal pivot and footrest pivot

BATTERY

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

NOTE:

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

WARNING

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

Wash hands after handling any parts containing lead.

WARNING

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

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

WARNING

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

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

WARNING

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

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

NOTICE

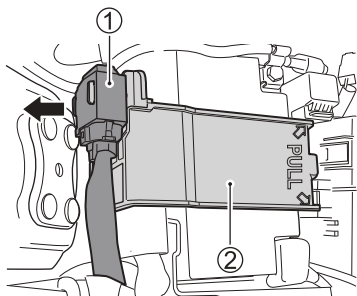
Exceeding the maximum charging rate for the battery can shorten its life.

Never exceed the maximum charging rate for the battery.

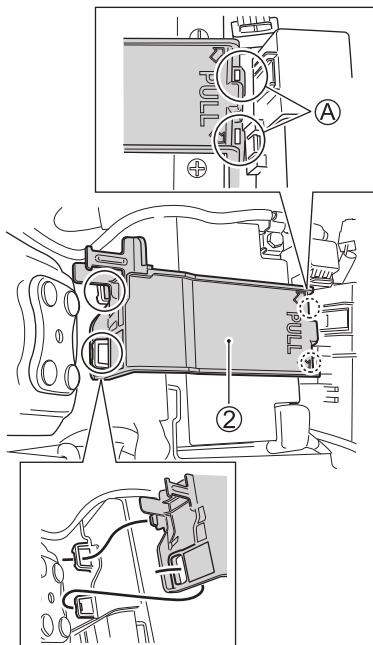
BATTERY REMOVAL

To remove the battery, follow the procedure below:

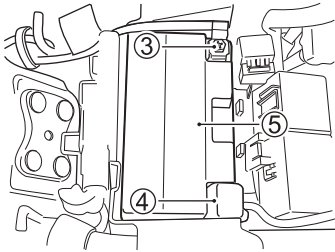
1. Place the motorcycle on the side stand.
2. Remove the seat by referring to the SEAT LOCK section.



3. Remove the fuel cut sensor ① from the battery holder ②.



4. Pull off the battery holder hooks ①. Remove the battery holder ②.



5. Disconnect the negative (-) terminal ③.
6. Remove the cap. Disconnect the positive (+) terminal ④.
7. Remove the battery ⑤.

To install the battery:

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

⚠ WARNING

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

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

NOTICE

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

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

NOTE:

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



The crossed-out wheeled bin symbol **A** located on the battery label indicates that a used battery should be collected separately from ordinary household waste.

The chemical symbol of "Pb" **B** indicates the battery contains more than 0.004% lead.

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

AIR CLEANER

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

WARNING

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

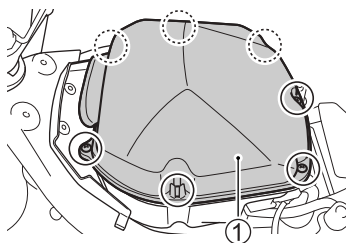
Never run the engine without the air cleaner element in place.

NOTICE

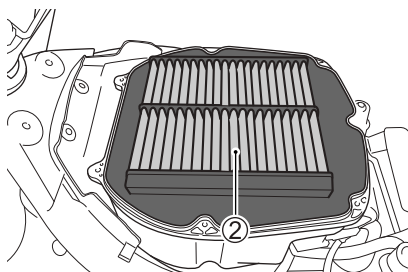
Failure to inspect the air cleaner element frequently if the vehicle is used in dusty, wet, or muddy conditions can damage your motorcycle. The air cleaner element can become clogged under these conditions, and engine damage may result.

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

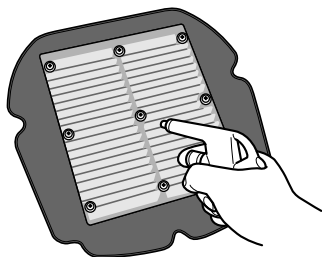
1. Lift the fuel tank by referring to the FUEL TANK LIFT section.



2. Remove the seven screws.
3. Pull up the air cleaner cover ①.



4. Remove the air cleaner element ②.



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

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

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

NOTICE

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

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

NOTICE

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

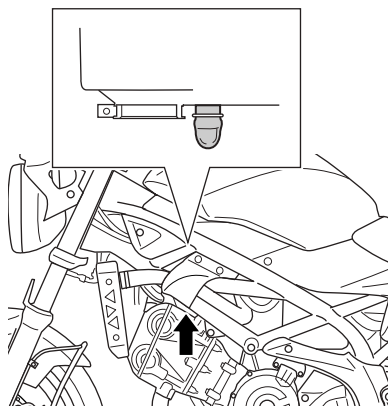
Be sure to properly install the air cleaner element.

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

Reinstall the fuel tank.

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

Air Cleaner Drain Plug



Remove the plug and drain water and oil at the periodic maintenance interval. The air cleaner drain plug is located beneath the air cleaner box.

SPARK PLUGS

REMOVAL

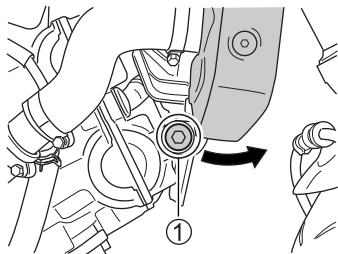
To remove the spark plugs, follow the procedure below:

CAUTION

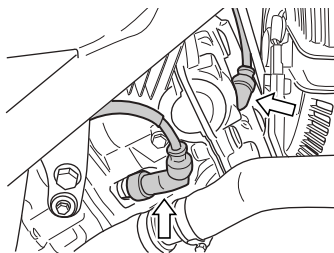
A hot radiator and hot engine can burn you.

Wait until the radiator and engine are cool enough to touch with bare hands before starting this work.

Front Side



1. Remove the bolt ①. Pull the lower part of the radiator forward.

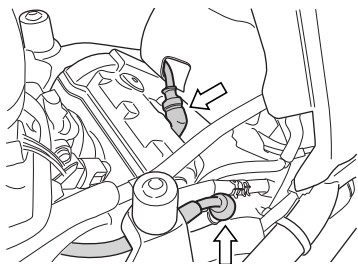


2. Pull off the spark plug caps.
3. Remove the spark plugs with a spark plug wrench.

NOTE: Be careful not to damage the radiator fins.

Rear Side

1. Lift the fuel tank by referring to the FUEL TANK LIFT section.



2. Pull off the spark plug caps.
3. Remove the spark plugs with a spark plug wrench.

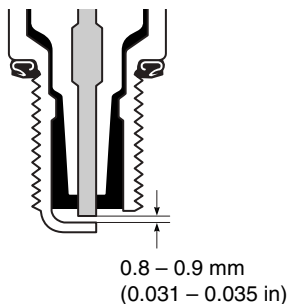
NOTE: Pry up the spark plug cap with a screwdriver or a bar if it is hard to remove by hand. Do not pull the spark plug cord.

NOTICE

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

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

INSPECTION



Adjust the spark plug gap to 0.8 – 0.9 mm (0.031 – 0.035 in) by using a spark plug gap thickness gauge.

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

Plug Replacement Guide

NOTICE

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

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

(Except for EU, UK)

NGK	REMARKS
MR8E-9	Standard

(EU, UK)

NGK	DENSO	REMARKS
CR7EIA-9	IU22D	If the standard plug tends to run cold.
CR8EIA-9	IU24D	Standard
CR9EIA-9	IU27D	If the standard plug tends to run hot.

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

Installation

NOTICE

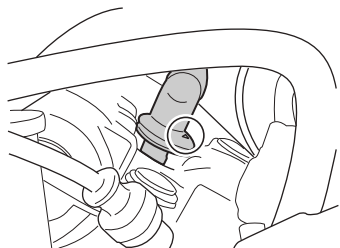
Improper installation of the spark plug can damage your motorcycle. An overly-tight or cross-threaded spark plug will damage the aluminum threads of the cylinder head.

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

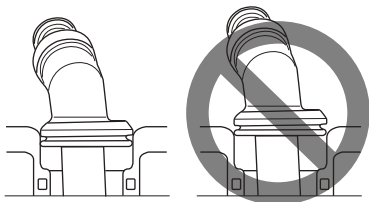
NOTICE

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

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



NOTE: When installing the spark plug caps, point the arrow marks on the spark plug caps to the exhaust side.



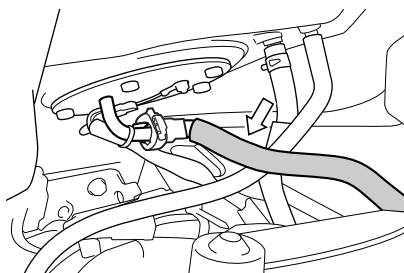
NOTE: Insert the plug caps to the dead end.

Remount the radiators and tighten the mounting bolts securely.

Reinstall the fuel tank.

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

FUEL HOSE



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

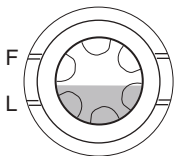
ENGINE OIL

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

ENGINE OIL LEVEL CHECK

Follow the procedure below to inspect the engine oil level.

1. Start the engine and run it for three minutes.
2. Stop the engine and wait three minutes.



3. Hold the motorcycle vertically and inspect the engine oil level through the engine oil level inspection window on the right side of the engine.

NOTICE

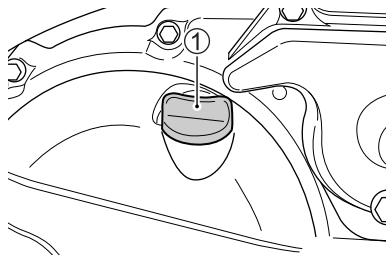
Operating the motorcycle with too little or too much oil can damage the engine.

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

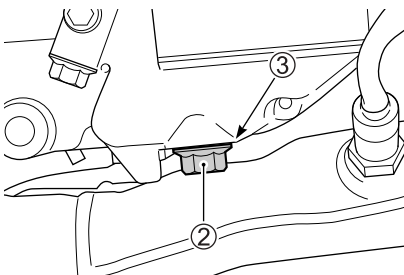
ENGINE OIL AND FILTER CHANGE

Change the engine oil and oil filter at the scheduled time. The oil should be changed when the engine is warm so that the oil will drain thoroughly from the engine. The procedure is as follows:

1. Place the motorcycle on the side stand.



2. Remove the oil filler cap ①.



3. Remove the drain plug ② and gasket ③ from the bottom of the engine and drain the engine oil into a drain pan.

▲ CAUTION

Hot engine oil and exhaust pipes can burn you.

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

▲ WARNING

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

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

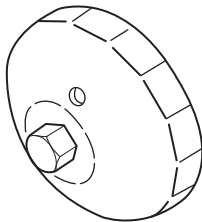
NOTICE

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

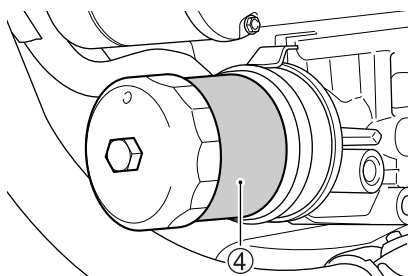
Do not use the electric starter switch during engine oil replacement work.

NOTE:

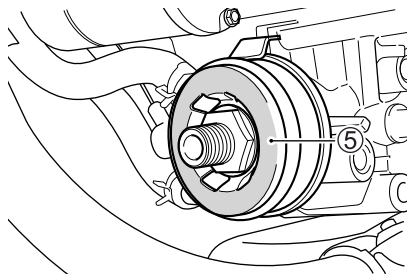
- *Recycle or properly dispose of used oil.*
- *Before starting the work, check that there is not any dust, mud, or foreign object inside the oil jug or on the oil filter mounting surface.*



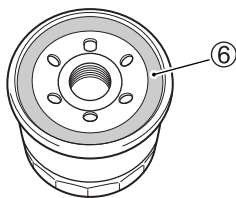
Available from Suzuki dealer
Oil filter wrench (Part No. 09915-40620)



4. Turn the oil filter ④ counterclockwise and remove it with a Suzuki “cap type” oil filter wrench or a “strap type” filter wrench of the proper size.



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



6. Smear a little engine oil around the rubber gasket ⑥ of the new oil filter.
7. Screw the new filter by hand until the filter gasket contacts the mounting surface (a small resistance will be felt).

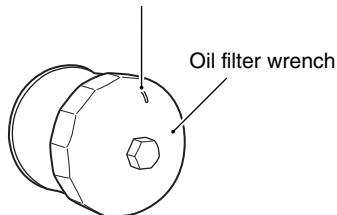
NOTICE

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

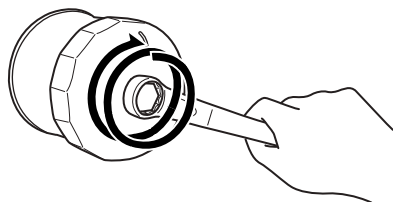
Be sure to use a genuine Suzuki oil filter or an equivalent one designed for your motorcycle.

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.

Mark top dead center



In the position at which the filter gasket first contacts the mounting surface.



Tighten the filter 2 turns or to specified torque.

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 or to specified torque.

Oil filter tightening torque:
20 N·m (2.0 kgf·m, 14.5 lbf·ft)

9. Replace the drain plug gasket ③ with a new one. Reinstall the drain plug ② and gasket ③. Tighten the drain plug securely with a torque wrench. Pour 2750 ml (2.9/2.4 US/Imp. qt) of new engine oil through the filler hole and install the filler cap. Be sure to always use the specified engine oil described in the FUEL, ENGINE OIL AND COOLANT RECOMMENDATIONS section.

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

NOTE: About 2400 ml (2.5/2.1 US/Imp. qt) of oil will be required when changing oil only.

NOTICE

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

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

10. Start the engine (while the motorcycle is outside on level ground) and allow it to idle for three minutes.
11. Turn the engine off and wait approximately three minutes. Recheck the oil level on the engine oil inspection window while holding the motorcycle vertically. If it is lower than the “L” line, add oil until the oil level is between the “L” line and the “F” line. Inspect the area around the drain plug and oil filter for leaks.

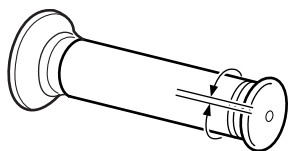
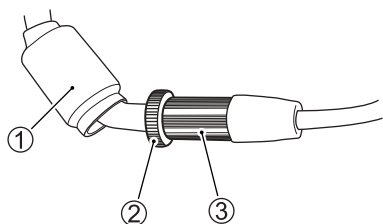
NOTE: If you do not have a proper oil filter wrench, have your Suzuki dealer perform this service.

ENGINE IDLE SPEED INSPECTION

Inspect the engine idle speed. The engine idle speed should be 1200 – 1400 r/min when the engine is warm.

NOTE: If the engine idle speed is not within the specified range, ask your Suzuki dealer or a qualified mechanic to inspect and repair the motorcycle.

THROTTLE CABLE PLAY



2.0 – 4.0 mm
(0.08 – 0.16 in)

To adjust the cable play:

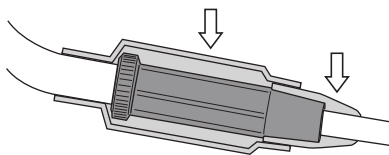
1. Remove the boot ①.
2. Loosen the lock nut ②.
3. Turn the adjuster ③ so that the throttle grip has 2.0 – 4.0 mm (0.08 – 0.16 in) play.
4. Tighten the lock nut ②.
5. Reinstall the boot ①.

WARNING

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

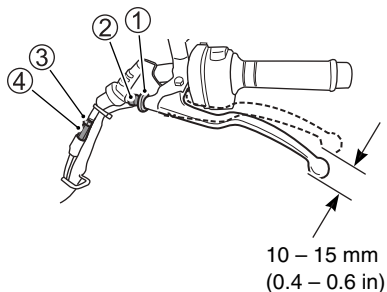
Adjust the throttle cable play so that engine idle speed does not rise due to handlebar movement.

THROTTLE CABLE BOOTS

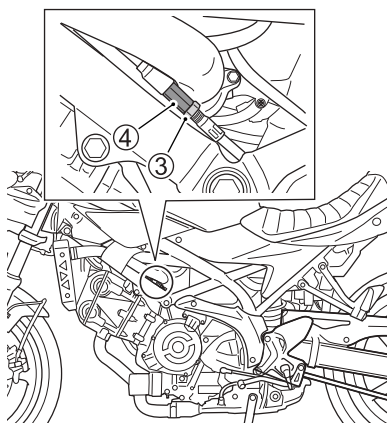
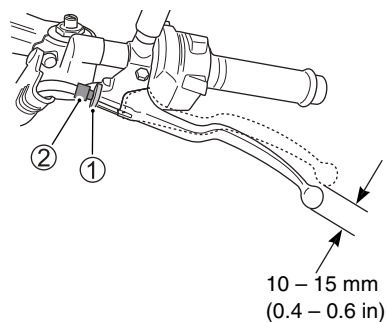


The throttle cable has boots. Check that the boots are fit securely. Do not apply water directly to the boots when washing. Wipe off dirt from the boots with a wet cloth when the boots are dirty.

CLUTCH



(SV650)



(SV650X)

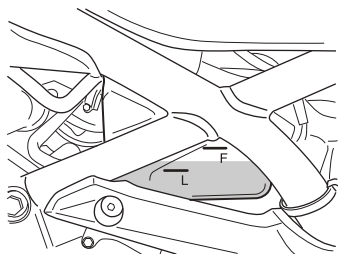
At each maintenance interval, adjust the clutch cable play with the clutch cable adjuster. The cable play should be 10 – 15 mm (0.4 – 0.6 in) as measured at the clutch lever end before the clutch begins to disengage. If you find that the amount of clutch cable play is incorrect, adjust it in the following way:

1. Loosen the lock nut ①.
2. Turn the clutch lever adjuster ② clockwise as far as it will go.
3. Loosen the cable adjuster lock nut ③, and turn the cable adjuster ④ to obtain approximately 10 – 15 mm (0.4 – 0.6 in) of free play at the clutch lever end as indicated.
4. Minor adjustment can now be made with the adjuster ②.
5. Tighten the lock nuts, ① and ③, after finishing adjustment.

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

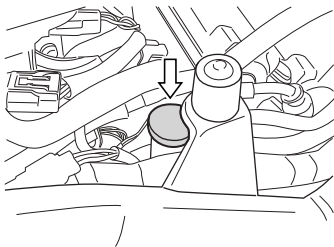
COOLANT

COOLANT LEVEL



The coolant should be kept between the “F” (FULL) and “L” (LOW) level lines in the reservoir tank at all times. Inspect the level every time before riding with the motorcycle held vertically. If the coolant is found lower than the “L” level line, add specified engine coolant in the following way:

1. Lift the fuel tank by referring to the FUEL TANK LIFT section.



2. Remove the filler cap and add specified engine coolant through the filler hole until it reaches the “F” line. Refer to the FUEL, ENGINE OIL AND COOLANT RECOMMENDATIONS section.

NOTE:

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

WARNING

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

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

NOTE: Adding only water will dilute the engine coolant and reduce its effectiveness. Add specified engine coolant.

CHANGING THE COOLANT

Change the coolant periodically.

NOTE: About 1850 ml (2.0/1.6 US/ Imp. qt) of coolant will required when filling the radiator and reservoir tank.

RADIATOR HOSE INSPECTION

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

DRIVE CHAIN

This motorcycle has a riveted master link type drive chain. We recommend that you take your motorcycle to an authorized Suzuki dealer or a qualified mechanic if the drive chain needs to be replaced.

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

WARNING

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

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

Inspecting the Drive Chain

When inspecting the chain, look for the following:

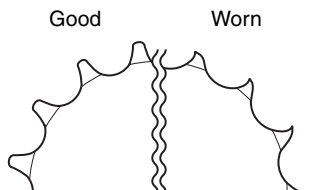
- Loose pins
- Damaged rollers
- Dry or rusted links
- Kinked or binding links
- Excessive wear
- Improper chain adjustment

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

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

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

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



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

▲ WARNING

Improperly installing a replacement chain, or using a joint-clip type chain, can be hazardous. An incompletely riveted master link, or a joint-clip type master link, may come apart and cause an accident or severe engine damage.

Do not use a joint-clip type chain. Chain replacement requires a special riveting tool and a high-quality, non-joint-clip type chain. Ask an authorized Suzuki dealer or a qualified mechanic to perform this work.

DRIVE CHAIN CLEANING AND OILING

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

NOTICE

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

- Do not use a volatile solvent such as paint thinner, kerosene and gasoline.
 - Do not use a high pressure cleaner to clean the drive chain.
 - Do not use a wire brush to clean the drive chain.
3. Use a soft brush to clean the drive chain. Be careful not to damage the seal ring even though using a soft brush.
 4. Wipe off water and neutral detergent.
 5. Lubricate with a motorcycle sealed drive chain lubricant or high viscosity oil (#80 – 90).

NOTICE

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

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

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

DRIVE CHAIN ADJUSTMENT

Adjust the drive chain slack to the proper specification. The chain may require more frequent adjustments than indicated in the periodic maintenance schedule depending upon your riding conditions.

WARNING

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

Inspect and adjust the drive chain slack before each use.

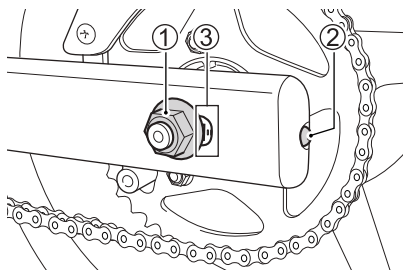
To adjust the drive chain, follow the procedure below:

▲ CAUTION

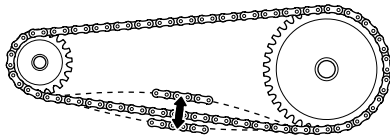
A hot muffler can burn you. The muffler will be hot enough to burn you for some time after stopping the engine.

Wait until the muffler cools before adjusting the drive chain.

1. Place the motorcycle on the side stand.



2. Loosen the axle nut ①.



20 – 30 mm
(0.8 – 1.2 in)

3. Adjust the drive chain slack by turning the right and left chain adjuster bolts ②. At the same time that the chain is being adjusted, the rear sprocket must be kept in perfect alignment with the front sprocket. To assist you in performing this procedure, there are reference marks ③ on the swingarm and each chain adjuster which are to be aligned with each other and to be used as a reference from one side to the other.
4. Tighten the axle nut ① securely.
5. Recheck the chain slack after tightening and readjust if necessary.
6. Tighten the right and left adjuster bolts ② securely.

Rear axle nut tightening torque:
100 N·m (10.0 kgf·m, 72.5 lbf·ft)

BRAKES

This motorcycle utilizes front and rear disk brakes. Proper operation of brake systems are vital to safe riding. Be sure to perform the brake inspection as scheduled.

BRAKE SYSTEM

⚠ WARNING

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

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

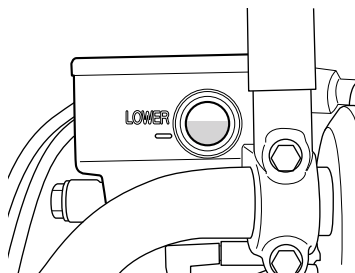
Inspect your brake system for the following items daily:

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

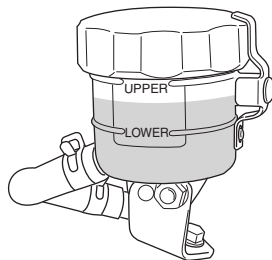
BRAKE HOSE INSPECTION

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

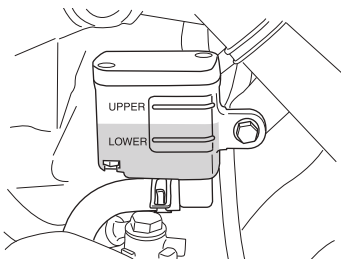
BRAKE FLUID



FRONT (SV650)



FRONT (SV650X)



REAR

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

WARNING

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

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

WARNING

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

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

WARNING

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

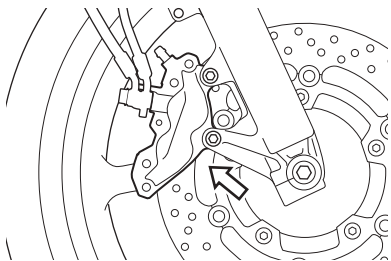
If brake fluid is swallowed, do not induce vomiting. Immediately contact a poison control center or a physician. If brake fluid gets in eyes, flush eyes with water and seek medical attention. Wash thoroughly after handling. Keep out of the reach of children and animals.

NOTICE

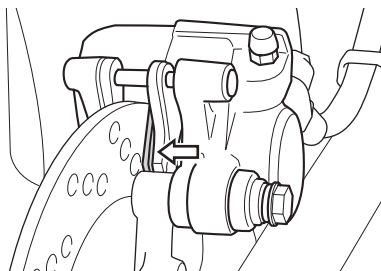
Spilled brake fluid can damage painted surfaces and plastic parts.

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

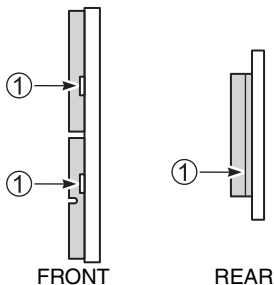
BRAKE PADS



FRONT



REAR



Inspect the front and rear brake pads by noting whether or not the friction pads are worn down to the grooved wear limit line ①. If a front or rear pad is worn to the grooved wear limit line, both front or both rear pads must be replaced with new ones by your authorized Suzuki dealer or a qualified service mechanic.

▲ WARNING

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

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

▲ WARNING

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

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

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

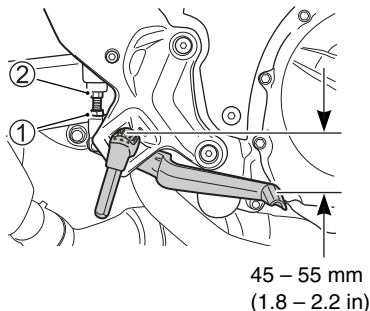
⚠ WARNING

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

Always replace both pads together.

REAR BRAKE PEDAL ADJUSTMENT

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



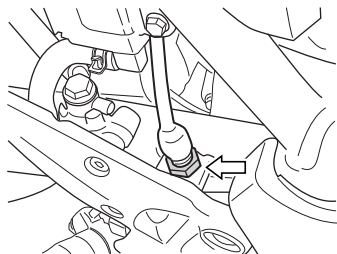
1. Loosen the lock nut ①, and rotate the push rod ② to locate the pedal 45 – 55 mm (1.8 – 2.2 in) below the top face of the footrest.
2. Retighten the lock nut ① to secure the push rod ② in the proper position.

NOTICE

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

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

REAR BRAKE LIGHT SWITCH



To adjust the brake light switch, hold the switch body and turn the adjuster so that the brake light will come on just before a pressure rise is felt when the brake pedal is depressed.

TIRES

WARNING

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

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

WARNING

Failure to perform break-in of the tires could cause tire slip and loss of control, which could result in an accident.

Use extra care when riding on new tires. Perform proper break-in of the tires referring to the **BREAK-IN** section of this manual 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, and be sure the pressure is correct for the vehicle load according to the table below. Tire pressure should only be checked and adjusted before riding, since riding will heat up the tires and lead to higher inflation pressure readings.

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

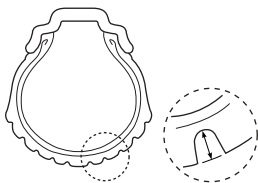
Cold Tire Inflation Pressure

LOAD TIRE	SOLO RIDING	DUAL RIDING
FRONT	225 kPa 2.25 kgf/cm ² 33 psi	225 kPa 2.25 kgf/cm ² 33 psi
REAR	250 kPa 2.50 kgf/cm ² 36 psi	250 kPa 2.50 kgf/cm ² 36 psi

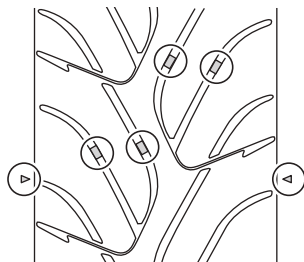
NOTE: When you detect drops in tire pressure, check the tire for nails or other punctures, or a damaged wheel rim. Tubeless tires sometimes lose pressure gradually when punctured.

TIRE CONDITION AND TYPE

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



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

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

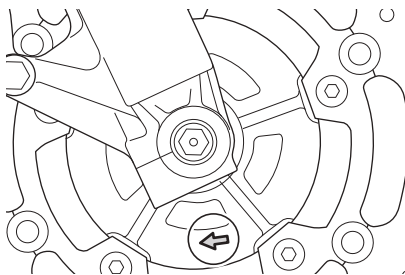
	FRONT	REAR
SIZE	120/70ZR17M/C (58W)	160/60ZR17M/C (69W)
TYPE	DUNLOP ROADSMART III J	DUNLOP ROADSMART III J

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

⚠ WARNING

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

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



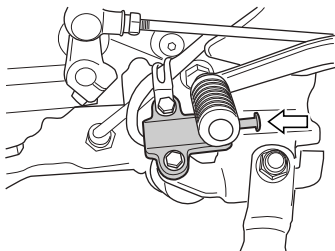
NOTE: The wheel has arrow marks showing the rotating direction. The arrow marks on the tire and on the wheel should be in the same direction.

⚠ WARNING

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

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

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 a qualified service mechanic.

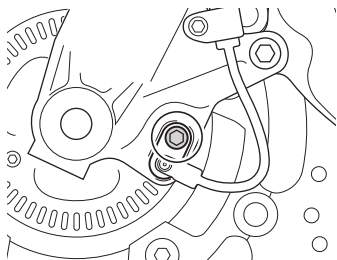
WARNING

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

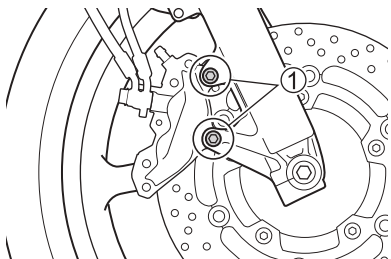
Check the side stand/ignition interlock system for proper operation before riding. Check that the side stand is returned to its full up position before starting off.

FRONT WHEEL REMOVAL

1. Place the motorcycle on the side stand.

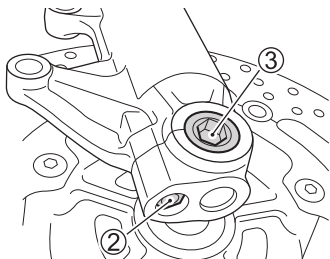


2. Remove the front wheel speed sensor by removing the mounting bolt.



3. Remove both brake calipers from the front forks by removing two mounting bolts ① on each of the calipers.

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



4. Loosen the axle holder bolt ② on the right front fork.
5. Loosen the axle shaft ③ temporarily.

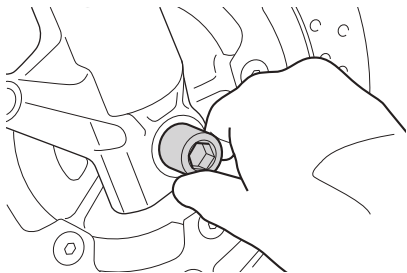
NOTE: A special tool is necessary to loosen the shaft ③. The special tool is available at your Suzuki dealer.

6. Place an accessory service stand or equivalent under the swingarm to help stabilize the rear end.
7. Carefully position a jack under the exhaust pipe and raise until the front wheel is slightly off the ground.

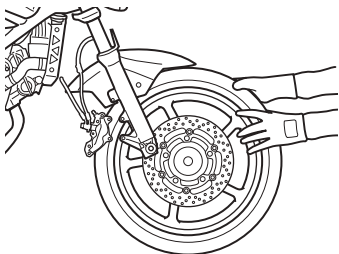
NOTICE

Improper jacking may cause damage to the oil filter.

Do not place the jack under the oil filter when jacking up the motorcycle.



8. Turn the axle shaft counterclockwise and draw it out.



9. Slide the front wheel forward.
10. To reinstall the wheel assembly, reverse the sequence described above.
11. After installing the wheel, apply the front brake several times to restore the proper lever stroke.

⚠ WARNING

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

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

⚠ WARNING

Installing the front wheel in the reverse direction can be hazardous. The tire for this motorcycle is directional. Therefore, the motorcycle may have unusual handling if the wheel is installed incorrectly.

Install the front wheel so that the tire rotates in the specified direction, as indicated by the arrow on the sidewall of the tire.

WARNING

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

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

Front axle tightening torque:
65 N·m (6.5 kgf·m, 47.0 lbf·ft)

Front axle holder bolt
tightening torque:
23 N·m (2.3 kgf·m, 16.5 lbf·ft)

Front brake caliper mounting bolt
tightening torque:
39 N·m (3.9 kgf·m, 28.0 lbf·ft)

REAR WHEEL REMOVAL

CAUTION

A hot muffler can burn you.

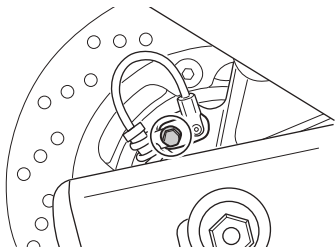
Wait until the muffler cools before removing the axle nut.

NOTICE

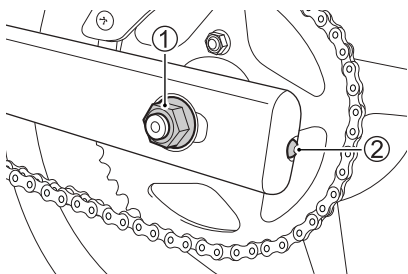
Removing the rear wheel without use of an accessory stand can result in your motorcycle falling over and being damaged.

Do not attempt roadside removal of the rear wheel. Only remove the rear wheel at a properly equipped servicing facility using an accessory service stand.

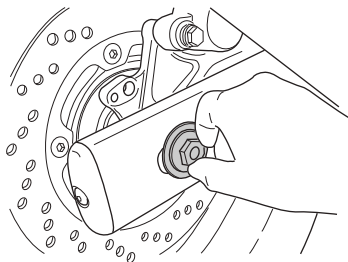
1. Place the motorcycle on the side stand.



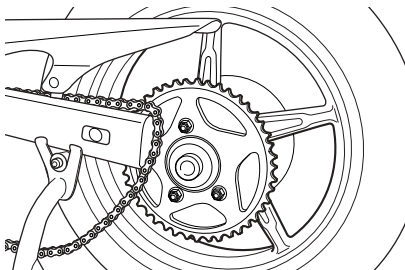
2. Remove the rear wheel speed sensor by removing the mounting bolt.



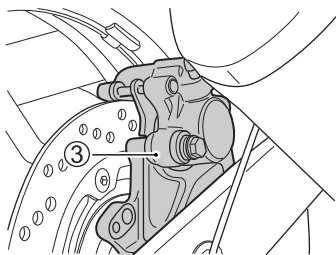
3. Remove the axle nut ①.
4. Place an accessory service stand or equivalent under the swingarm to lift the rear wheel slightly off the ground.
5. Loosen the right and left chain adjusting bolts ②.



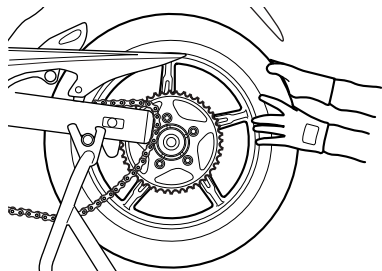
6. Draw out the axle shaft.



7. With the wheel moved forward, remove the chain from the sprocket.



8. Remove the rear brake caliper assembly ③.



9. Pull the rear wheel assembly rearward.

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

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

⚠ WARNING

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

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

Rear axle nut tightening torque:
100 N·m (10.0 kgf·m, 72.5 lbf·ft)

⚠ WARNING

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

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

LIGHT BULB REPLACEMENT

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

NOTICE

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

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

Headlight	12V 60/55W (H4)
Position light (if equipped)	12V 5W
Turn signal light	12V 21W
Brake light/Taillight	LED
License plate light	12V 5W

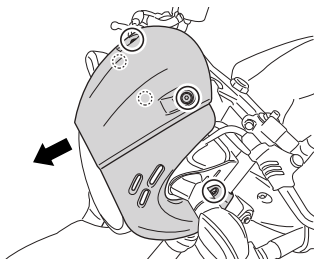
LED LIGHTING

This motorcycle is equipped with LED lighting. Because LED light have been attached in the integrated units, the replacement of LED light only is not available. If the LED light cannot be turned on, consult with your Suzuki dealer.

HEADLIGHT/ POSITION LIGHT (if equipped)

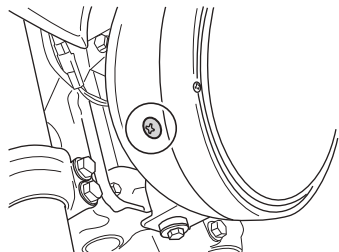
To replace the headlight bulb and position light bulb, perform the following steps:

Headlight

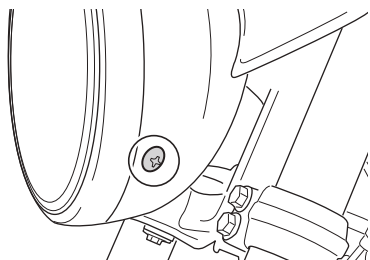


(SV650X)

1. (SV650X) Remove the right and left bolts. Unhook the hooks and remove the headlight cover forward.

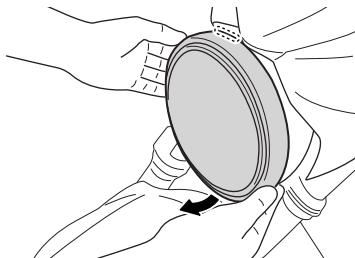


Right

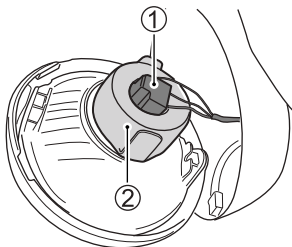


Left

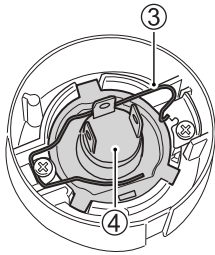
2. Remove the right and left screws.



3. Unhook the hooks and remove the headlight assembly.



4. Disconnect the socket ① from the headlight and remove the rubber cap ②.



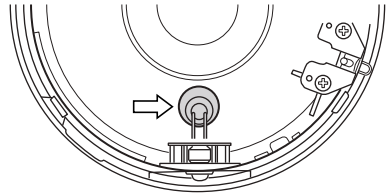
5. Unhook the bulb holder spring ③ and pull out the bulb ④.
6. To replace the headlight bulb, reverse the above sequence.

NOTICE

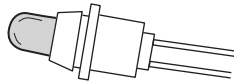
The headlight bulb's life may be shortened by oil from your fingers if you touch it.

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

Position light (if equipped)



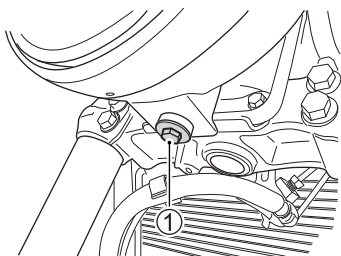
1. Pull out the socket.



2. Pull off the bulb from the socket.

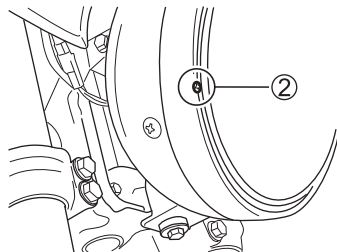
HEADLIGHT BEAM ADJUSTMENT

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



To adjust the beam up and down:

Loosen the adjuster ①. To adjust the beam, move the headlight assembly forward or backward.

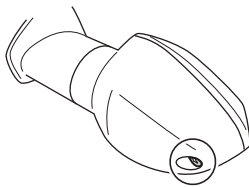


To adjust the beam right and left:

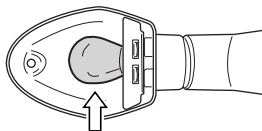
Turn the adjuster ② clockwise or counterclockwise.

TURN SIGNAL LIGHT

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



1. Remove the screw and take off the lens.



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

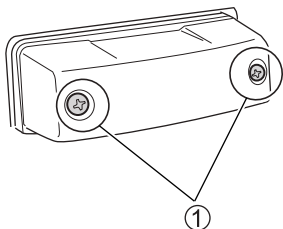
NOTICE

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

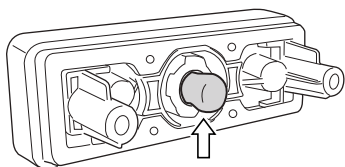
Tighten the screws only until they are snug.

LICENSE PLATE LIGHT

To replace the license plate light bulb, follow the procedure steps:



1. Remove the screws ① and take off the cover with the lens.



2. Pull off the bulb from the socket.
3. To replace the license plate light, reverse the above steps.

FUSES

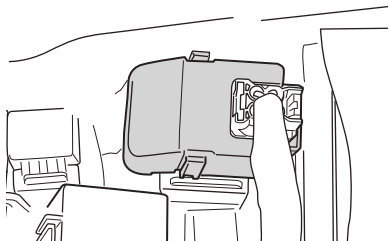
If something electrical on your motorcycle stops working, the first thing you should check for is a blown fuse. The electrical circuits on the motorcycle are protected from overload by fuses in the circuits.

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

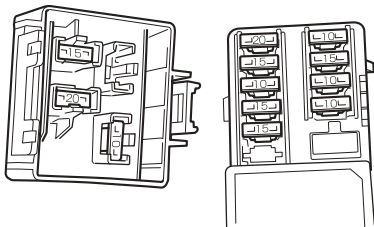
WARNING

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

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



The main fuse is located under the seat. To access the fuse, remove the seat by referring to the SEAT LOCK section. One 30A spare fuse is located in the starter relay box.



The fuses are located under the seat. Three spare fuses (one 10A, one 15A and one 20A) are provided inside the fuse box cover.

FUSE LIST

- 30A MAIN fuse protects all electrical circuits.
- 10A HEAD-HI fuse protects the headlight high beam and speedometer.
- 10A HEAD-LO fuse protects the headlight low beam.
- 15A IGNITION fuse protects the cooling fan relay, oxygen sensor, ECM, solenoid, fuel pump relay, starter relay, side stand relay, ignition coils and canister purge solenoid (if equipped).
- 15A SIGNAL fuse protects the speedometer, brake light and horn.
- 10A FUEL fuse protects the ECM, speedometer, fuel pump and injectors.
- 15A FAN fuse protects the cooling fan motor.
- 10A PARK fuse protects the turn signal light, position lights (if equipped), taillight and license light.
- 20A ABS MOTOR fuse protects ABS system.
- 15A ABS VALVE use protects ABS system.

CATALYTIC CONVERTER

The purpose of the catalytic converter is to minimize the amount of harmful pollutants in your motorcycle's exhaust. Use of leaded fuel in motorcycles equipped with catalytic converters is prohibited because lead deactivates the pollutant-reducing components of the catalyst system.

The converter is designed to last the life of the motorcycle under normal usage and when unleaded fuel is used. Not special maintenance is required on the converter. However, it is very important to keep the engine properly tuned. Engine misfiring, which can result from an improperly tuned engine, may cause overheating of the catalyst. This may result in permanent heat damage to the catalyst and other motorcycle components.

WARNING

If you park or operate the motorcycle in areas where there are combustible materials such as dry grass or leaves, these materials may come in contact with the catalytic converter or other hot exhaust components. This can cause a fire.

Avoid parking or operating your vehicle in areas with any combustible materials.

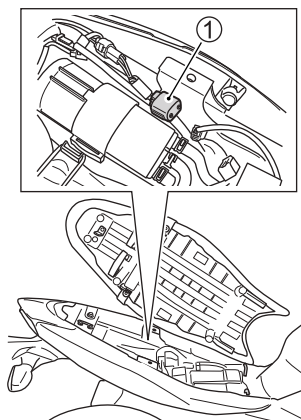
NOTICE

Improper motorcycle operation can cause catalyst or other motorcycle damage.

To avoid damage to the catalyst or other related components, you should take the following precautions:

- **Maintain the engine in the proper operating condition.**
- **In the event of an engine malfunction, particularly one involving engine misfire or other apparent performance loss, stop riding the motorcycle and turn off the engine and have the motorcycle serviced promptly.**
- **Do not shut off the engine or interrupt the ignition when the transmission is in gear and the motorcycle is in motion.**
- **Do not try to start the engine by pushing the motorcycle or by coasting down a hill.**
- **Do not idle the engine with any spark plug wires disconnected or removed, such as during diagnostic testing.**
- **Do not idle the vehicle for prolonged periods if idling seems rough or there are other malfunctions.**
- **Do not allow the fuel tank to get near the empty level.**

DIAGNOSTIC CONNECTOR



Diagnostic connector ① is located under the seat.

NOTE: Diagnostic connector is used by Suzuki dealer or a qualified service mechanic.





TROUBLESHOOTING

FUEL SUPPLY CHECK	7-2
IGNITION SYSTEM CHECK	7-3
ENGINE STALLING	7-4

TROUBLESHOOTING

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

NOTICE

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

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

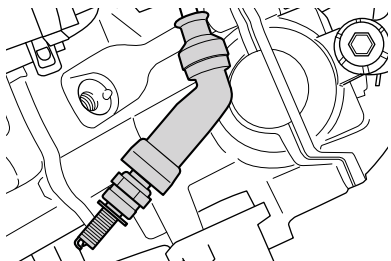
If the engine refuses to start, perform the following inspections to determine the cause.

FUEL SUPPLY CHECK

If the odometer displays "F1" and malfunction indicator light comes on, trouble in the fuel injection system, take your machine to an authorized Suzuki dealer. Refer to the "INSTRUMENT PANEL" section for an explanation of the malfunction indicator light.

IGNITION SYSTEM CHECK

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



2. While holding the spark plug firmly against the crank case of the engine, push the starter switch with the ignition switch in the "ON" position, the engine stop switch in the "O" position, the transmission in neutral, and the clutch disengaged. If the ignition system is operating properly, a blue spark should jump across the spark plug gap.
3. If there is no spark, clean the spark plug. Replace it if necessary. Retry the above procedure with the cleaned spark plug or a new one.
4. If there is still no spark, consult your Suzuki dealer for repairs.

WARNING

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

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

ENGINE STALLING

1. Make sure there is enough fuel in the fuel tank.
2. If the odometer displays “FI” and malfunction indicator light comes on, trouble in the fuel injection system, take your machine to an authorized Suzuki dealer. Refer to the “INSTRUMENT PANEL” section for an explanation of the malfunction indicator light.
3. Check the ignition system for intermittent spark.
4. Check the idle speed. The correct idle speed is 1200 – 1400 r/min.



STORAGE PROCEDURE AND MOTORCYCLE CLEANING

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PROCEDURE FOR RETURNING TO SERVICE	8-3
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MOTORCYCLE CLEANING	8-4
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STORAGE PROCEDURE AND MOTORCYCLE CLEANING

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 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.

FUEL

1. Fill the fuel tank to the top with fuel mixed with the amount of gasoline stabilizer recommended by the stabilizer manufacturer.
2. Run the engine for a few minutes until the stabilized gasoline fills the fuel injection system.

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 by referring to the BATTERY section.
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

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

MAINTENANCE DURING STORAGE

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

PROCEDURE FOR RETURNING TO SERVICE

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

CORROSION PREVENTION

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

Important Information About Corrosion

Common causes of corrosion

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

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

How to Help Prevent Corrosion

- Wash your motorcycle frequently, at least once a month. Keep your motorcycle as clean and dry as possible.
- Remove foreign material deposits. Foreign material such as road salt, chemicals, road oil or tar, tree sap, bird droppings and industrial fall-out may damage your motorcycle's finish. Remove these types of deposits as quickly as possible. If these deposits are difficult to wash off, an additional cleaner may be required. Follow the manufacturer's directions when using these special cleaners.

- Repair finish damage as soon as possible. Carefully examine your motorcycle for damage to the painted surfaces. Should you find any chips or scratches in the paint, touch them up immediately to prevent corrosion from starting. If the chips or scratches have gone through to the bare metal, have a Suzuki dealer make the repair.
- Store your motorcycle in a dry, well-ventilated area. If you often wash your motorcycle in the garage or if you frequently park it inside when wet, your garage may be damp. The high humidity may cause or accelerate corrosion. A wet motorcycle may corrode even in a heated garage if the ventilation is poor.
- Cover your motorcycle. Exposure to mid-day sun can cause the colors in paint, plastic parts, and instrument faces to fade. Covering your motorcycle with a high-quality, "breathable" motorcycle cover can help protect the finish from the harmful UV rays in sunlight, and can reduce the amount of dust and air pollution reaching the surface. Your Suzuki dealer can help you select the right cover for your motorcycle.

MOTORCYCLE CLEANING

WASHING THE MOTORCYCLE

When washing the motorcycle, follow the instructions below:

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

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

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

- Ignition switch
- Spark plugs
- Fuel tank cap
- Fuel injection system
- Brake master cylinders
- Air intake duct
- Throttle cable boots

NOTICE

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

Do not use high pressure washers to clean your motorcycle. Do not use parts cleaner on throttle body and fuel injection sensors.

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.

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

NOTICE

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

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

PLASTIC PARTS

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

NOTICE

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

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

WAXING THE MOTORCYCLE

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

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

SPECIAL CARE FOR MATTE FINISH PAINT

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

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

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

INSPECTION AFTER CLEANING

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

WARNING

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

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

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



SPECIFICATIONS

DIMENSIONS AND CURB MASS

Overall length	2140 mm (84.3 in)
Overall width.....	760 mm (29.9 in) ... SV650
	730 mm (28.7 in) ... SV650X
Overall height	1090 mm (42.9 in)
Wheelbase	1445 mm (56.9 in)
Ground clearance.....	135 mm (5.3 in)
Curb mass	198 kg (437 lbs) (Except for EU, UK)
	200 kg (441 lbs) (EU, UK)

ENGINE

Type	Four-stroke, liquid-cooled, DOHC, 90° V-twin
Number of cylinders	2
Bore	81.0 mm (3.189 in)
Stroke	62.6 mm (2.465 in)
Displacement.....	645 cm ³ (39.4 cu. in)
Compression ratio	11.2 : 1
Fuel system	Fuel injection
Air cleaner	Non-woven fabric element
Starter system	Electric
Lubrication system	Wet sump

DRIVE TRAIN

Clutch	Wet multi-plate type
Transmission	6-speed constant mesh
Gearshift pattern	1-down, 5-up
Primary reduction ratio	2.088 (71/34)
Gear ratios, Low	2.461 (32/13)
2nd	1.777 (32/18)
3rd	1.380 (29/21)
4th	1.125 (27/24)
5th	0.961 (25/26)
Top.....	0.851 (23/27)
Final reduction ratio.....	3.066 (46/15)
Drive chain	DID520V0, 112 links

CHASSIS

Front suspension	Telescopic, coil spring, oil damped
Rear suspension	Link type, coil spring, oil damped
Front fork stroke	125 mm (4.9 in)
Steering angle	33° (right and left) ... SV650
	30° (right and left) ... SV650X
Front brake	Disk brake, twin
Rear brake.....	Disk brake
Front tire size.....	120/70ZR17M/C (58W), tubeless
Rear tire size	160/60ZR17M/C (69W), tubeless

ELECTRICAL

Ignition type	Electronic ignition (Transistorized)
Spark plug	NGK MR8E-9 (Except for EU, UK)
	NGK CR8EIA-9 (EU, UK)
	DENSO IU24D (EU, UK)
Battery	12V 36 kC(10 Ah)/10 HR
Generator	Three-phase A.C. generator
Fuse	30/10/10/15/15/10/15/10A
ABS fuse	20/15A
Headlight	12V 60/55W (H4)
Position light (if equipped)	12V 5W
Brake light/Taillight.....	LED
License plate light.....	12V 5W
Turn signal light	12V 21W
Speedometer light	LED
Tachometer light	LED
Turn signal indicator light.....	LED
Neutral indicator light.....	LED
High beam indicator light.....	LED
Engine coolant temperature /	
Oil pressure warning indicator light	LED (Except for EU, UK)
Engine coolant temperature / oil pressure /	
battery charge malfunction	
warning indicator light.....	LED (EU, UK)
Malfunction indicator light.....	LED
ABS indicator light.....	LED

CAPACITIES

Fuel tank.....	14.5 L (3.8/3.2 US/Imp. gal)
Engine oil, without filter change.....	2400 ml (2.5/2.1 US/Imp. qt)
With filter change	2750 ml (2.9/2.4 US/Imp. qt)
Engine coolant.....	1850 ml (2.0/1.6 US/Imp. qt)

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