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.

SUZUKI MOTOR CORPORATION

TABLE OF CONTENTS

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.: 460 kg (1014 lbs)
at the tire pressure (cold)
Front: 225 kPa (2.25 kgf/cm^2, 33 psi)
Rear: 280 kPa (2.80 kgf/cm^2, 41 psi)

NOTICE

Riding of the motorcycle surpassing the G.V.W. may cause damage or failure of component parts of the drive system.

Be careful not to surpass the conditions established in G.V.W. when riding or loading the motorcycle.

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 6-33.
- 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.

⚠ WARNING

Placing objects in the space behind the fairing can interfere with steering and can cause loss of control.

Do not carry any objects in the space behind the fairing.

MODIFICATION

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

SAFE RIDING RECOMMENDATIONS 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.

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 non-traffic situation without obstacles until you are thoroughly familiar with your machine and its controls. Remember practice makes perfect.

KNOW YOUR LIMITS

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

BE EXTRA SAFETY CONSCIOUS ON BAD WEATHER DAYS

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

RIDE DEFENSIVELY

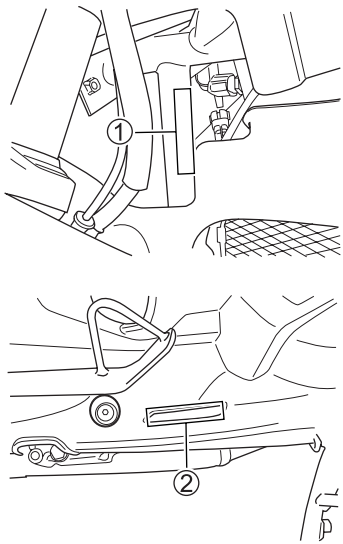
The most common type of motorcycle accident occurs when a car traveling towards a motorcycle turns round corner in front of the motorcyclist. Ride defensively. Wise motorcyclist uses a strategy of assuming they are invisible to other drivers, even in broad daylight. Wear bright, reflecting clothing. Turn on the headlight and taillight every time even on a bright, sunny day to attract driver's attention. Do not ride in another driver's blind spot.

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

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.



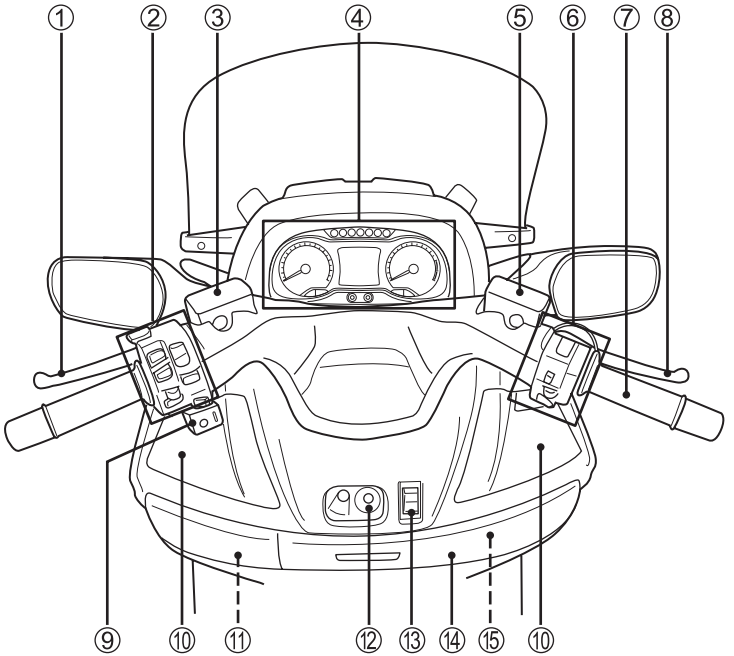
The frame number ① is stamped on the frame. The engine serial number ② is stamped on the engine.

Please write down the numbers here for your reference.

Frame No.:
Engine No.:

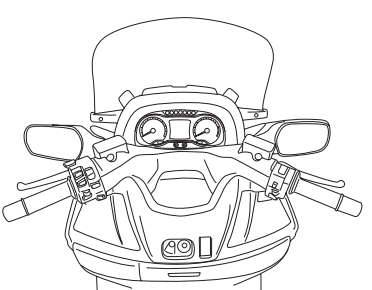
CONTROLS

LOCATION OF PARTS

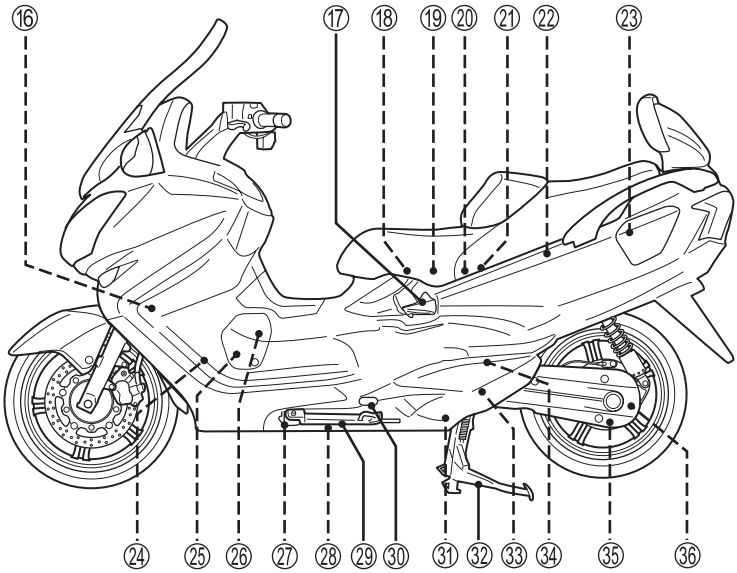


AN650Z

① Rear brake lever
② Left handlebar switches
③ Rear brake fluid reservoir
④ Instrument panel
⑤ Front brake fluid reservoir
⑥ Right handlebar switches
⑦ Throttle grip
⑧ Front brake lever
⑨ Grip heater switch (AN650Z)
⑩ Front small box
⑪ Air cleaner, Fuses
⑫ Ignition switch
⑬ Seat heater switch (AN650Z)
⑭ Front trunk
⑮ Output terminal

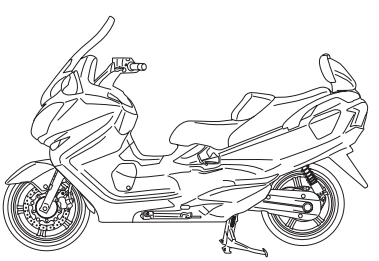


AN650

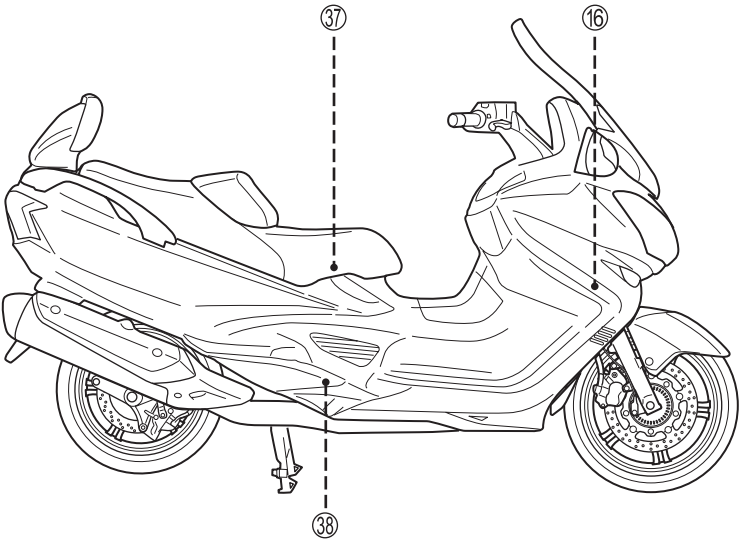


AN650Z

⑯ Air cleaner drain plugs
⑰ Brake lock lever
⑱ Battery
⑲ Tools
⑳ Helmet holder
㉑ Fuses
㉒ Trunk
㉓ Fuel tank cap
㉔ Spark plugs
㉕ Engine coolant reservoir
㉖ Engine oil filler cap
㉗ Engine oil filter
㉘ Engine oil drain plug
㉙ Side stand
㉚ Engine oil inspection window
㉛ Transmission oil drain plug
㉜ Center stand
㉝ Transmission oil level plug
㉞ Transmission oil filler plug
㉟ Final gear oil drain plug
㊱ Final gear oil level plug

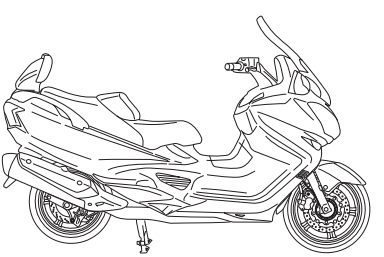


AN650



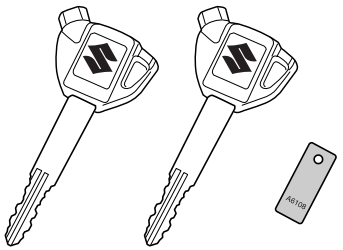
AN650Z

㊲ Main fuse, CVT fuse
㊳ CVT filter



AN650

KEY



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

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

Immobilizer equipped model
If the all keys are lost, the ECM should be replaced.

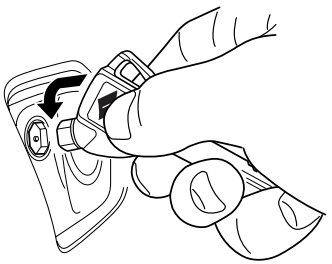
Key No.:

NOTE:

- *Immobilizer identification code is programmed into the key. Therefore, a key made by an ordinary locksmith will not work. Ask your Suzuki dealer if you need to make a spare key.*
- *If you lose the key, ask your Suzuki dealer to have the lost one deactivated.*
- *If you own other vehicles with immobilizer keys, keep those keys away from the ignition switch when using your motorcycle, or they may interfere with your motorcycle immobilizer system.*
- *Two keys are originally registered to the immobilizer system. It is possible to add two more keys. Ask your Suzuki dealer to make and register additional spare keys.*

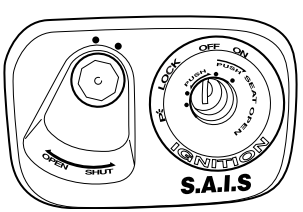
IGNITION SWITCH

To open the ignition key-hole shutter:

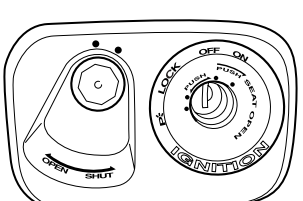


1. Match the ignition key head to the square hole on the ignition switch.
2. Turn the key to open and close the key-hole shutter.

NOTE: Apply anti-freeze lubricant when atmospheric temperature drops below freezing to avoid ignition key-hole shutter freezing.



Immobilizer equipped model



"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 key cannot be removed from the ignition switch.

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

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

"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 and taillight 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

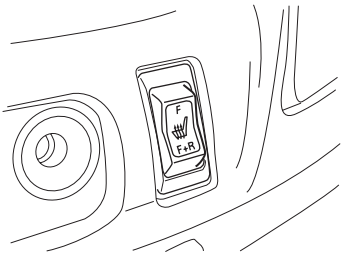
If the motorcycle falls down due to a slip or collision, unexpected damage to the motorcycle could cause the engine to keep running, which could result in a fire, or could result in injury from moving parts such as the rear wheel.

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

Seat Lock Release
Push the key in and turn it clockwise to release the seat lock.

NOTE:
- *Open the seat fully until it stops. If the seat is stopped halfway, seat can be closed with its weight.*
- *Push the center part of the seat rear end downward when closing the seat.*

SEAT HEATER SWITCH " " (AN650Z)



The seat heater warms front and rear seats. The seat heater switch is located on the front panel.

The seat heater switch has 3 positions: F, OFF and F + R.

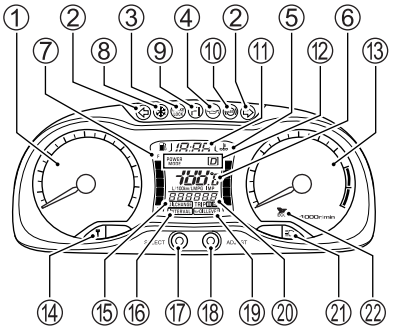
F (Front) position
The front seat will be warmed up.

OFF position
The seat heater switch will be cut off.

F (Front) + R (Rear) position
Both the front and rear seats will be warmed up.

NOTE: The seat heater uses battery power. Turn off the seat heater switch when the engine is not running.

INSTRUMENT PANEL



SPEEDOMETER ①
The speedometer indicates road speed in km/h or mph.

If the meter needle does not point to zero, follow the procedure below to reset the meter.

1. Press and hold the ADJUST button ⑱ and turn on the ignition switch.
2. Hold the ADJUST button ⑱ for 4 seconds.

TURN SIGNAL INDICATOR LIGHT "⇦⇨" ②
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 will blink quickly to warn the rider of the existence of a problem.

BRAKE LOCK INDICATOR LIGHT ③
This light comes on when the parking brake is applied and the ignition switch is in the "ON" position.

OIL PRESSURE INDICATOR LIGHT "" ④

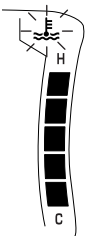
This indicator comes on when the engine oil pressure is below the normal operating range. This light should come on when the ignition switch is "ON" and the engine is not running. As soon as the engine starts, this indicator light should go out.

NOTICE

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

If the oil pressure 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.

COOLANT TEMPERATURE METER "" ⑤



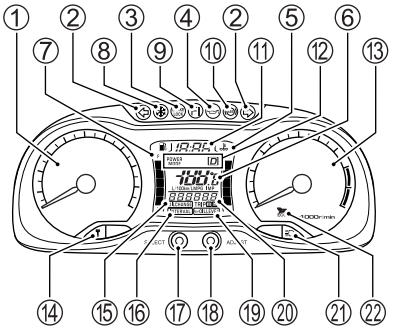
The coolant temperature is displayed by an LCD segment temperature indicator ⑤ and coolant temperature mark.

When the coolant temperature exceeds 120°C (248°F), all five LCD segments turn on and the coolant temperature mark blinks. If all five LCD segments for temperature indication ⑤ turn on and the coolant temperature mark blinks, stop the engine, wait until the engine is cooled, and check the coolant level.

NOTICE

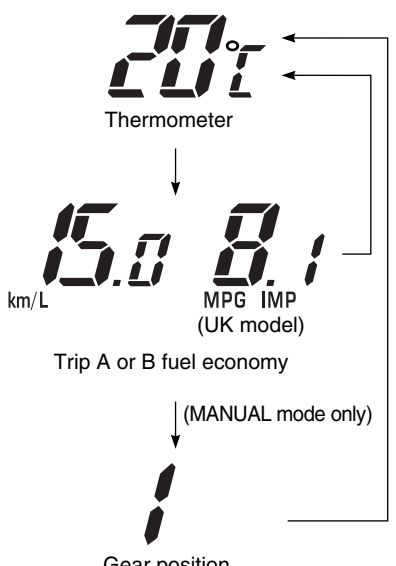
Riding the motorcycle with the coolant temperature mark blinking can cause serious engine damage due to overheating.

If the coolant temperature mark blinks, stop the engine to let it cool. Do not run the engine until the coolant temperature mark turns off.



THERMOMETER /FUEL ECONOMY METER /GEAR POSITION INDICATOR (MANUAL mode only) ⑥

To change the display, push the ADJUST button ⑱. The display change in the order below:



The display has three functions, thermometer, fuel economy meter and gear position indicator (MANUAL mode only).

Thermometer

The thermometer shows the ambient air temperature. When the ambient air temperature is below 3°C (38°F), the thermometer blinks in the display ⑥ and it comes on and remains lit after 30 seconds. Push the ADJUST button ⑱ to return to original reading. When the ambient air temperature is above 5°C (41°F), the display will return to original reading automatically.

NOTE:

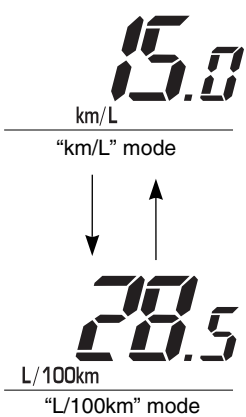
- *The thermometer will not indicate the actual ambient air temperature when riding at low speed or when stopped.*
- *The thermometer displays "Lo" when the ambient air temperature is below –10°C (14°F). The thermometer displays "HI" when the ambient air temperature is above 50°C (122°F).*
- *In gear position indicator mode, when the ambient air temperature is below 3°C (38°F), the thermometer blinks for 30 seconds, and then display will return to original reading automatically.*

Fuel Economy Meter
Fuel economy meter displays fuel economy ratio of trip A and trip B. The fuel economy meter ranges from 0.1 to 99.9 km/L (MPG IMP). The meter locks at 99.9. The fuel economy meter indicates "– – . –" when the trip meter indicates 0.0.

NOTE:
- *The display shows estimated values. Indications may not be the same as actual values.*
- *UK model is fixed to Imperial gallon.*

To change the km/L and L/100 km.

(Except for UK)



"km/L" mode

"L/100km" mode

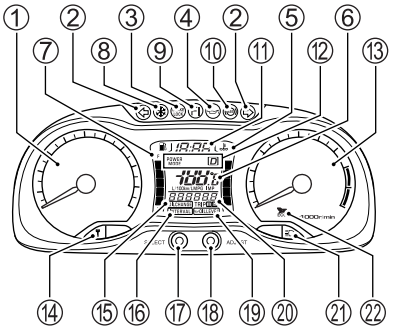
Push the SELECT button ⑰ for 2 seconds to change "km/L" mode to "L/100 km" mode.

⚠ 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.

Gear Position Indicator (MANUAL mode only)
The gear position indicator display indicates gear position when the MANUAL mode is selected.



FUEL METER "⛽" ⑦

The fuel meter indicates the amount of fuel remaining in the fuel tank. The fuel meter displays all 5 segments when the fuel tank is full. The mark blinks when the fuel level drops below 4.0 L (4.2/3.5 US/Imp qt). The mark and segment blink when the fuel drops below 2.0 L (2.1/1.8 US/Imp qt).

Fuel tank	Approximately 2.0 L	Approximately 4.0 L	Full
⛽ mark	Blink	Blink	
Fuel gauge	Blink		

NOTE: The fuel meter 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.

FREEZE INDICATOR LIGHT "❄" ⑧

The freeze indicator light ⑧ starts blinking when the ambient temperature falls below 3°C (38°F). The freeze indicator light keeps flashing for 30 seconds and then remains lit until the ambient temperature rises above 5°C (41°F).

Freeze indicator light ⑧ goes off when the ambient temperature becomes above 5°C (41°F).

FUEL INJECTION AND CVT SYSTEM INDICATOR LIGHT "FI" ⑨

If the fuel injection system or CVT system fails, the FI indicator light ⑨ comes on and the display ⑳ indicates "FI" in the odometer display area in following two modes;

A. The display ⑳ in the odometer display area indicates "FI" and the odometer/trip meter alternately, and the red indicator light ⑨ comes on and remains lit.

B. The display ⑳ in the odometer display area indicates "FI" continuously and the red indicator light ⑨ blinks.

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

NOTICE

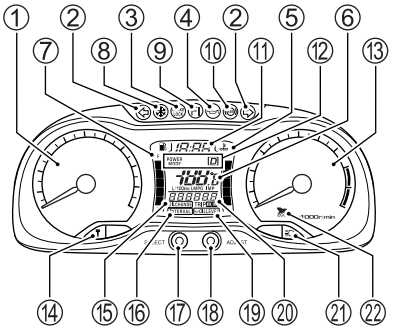
The fuel injection and CVT indicator light comes on to indicate a problem with the fuel injection system or CVT system. Riding the motorcycle with the indicator lit can damage the engine and CVT.

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

NOTE: If the display indicates "FI" and the odometer/trip meter alternately, and the red indicator light comes on and remains lit, keep the engine running and bring your motorcycle to an authorized Suzuki dealer. If the engine stalls, try restarting the engine after turning the ignition switch off and on.

When the display ⑳ indicates "CHEC", make sure that the engine stop switch is in the "↺" position.

If the display still indicates "CHEC" after above procedure, inspect the ignition fuse and connection of lead wire couplers.



ABS INDICATOR LIGHT "(ABS)" ⑩
This indicator normally comes on when the ignition switch is turned "ON" and goes off after the motorcycle speed exceeds 5 km/h (3 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 before starting the motorcycle, 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 starting the motorcycle. 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.*
- *When the motorcycle is placed on the center stand with the engine running after riding the motorcycle and racing the engine, the ABS indicator light can come on. In such a case, check if the ABS indicator light comes on by turning off and on the ignition switch. After that, check if the ABS indicator light goes out after the motorcycle speed exceeds 5 km/h (3 mph). If the ABS indicator light does not go out, 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.**

CLOCK ⑪

Press and hold the SELECT ⑰ and ADJUST ⑱ buttons simultaneously for 2 seconds until the clock display blinks when adjusting clock. Push the SELECT button ⑰ to adjust the hour display. Push the ADJUST button ⑱ to adjust the minute display. Press and hold the SELECT ⑰ and ADJUST ⑱ buttons simultaneously for 2 seconds to return to the clock mode.

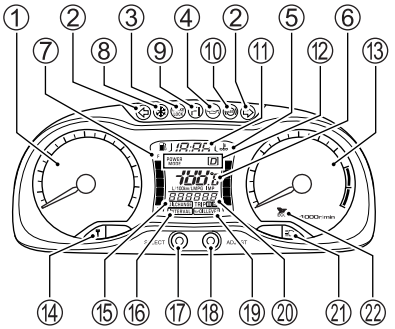
NOTE:

- *When the button is pressed and held, 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.*

DRIVE MODE INDICATOR ⑫

Drive mode: For normal riding and better fuel economy.

Power mode: For sport riding and getting more power.



TACHOMETER ⑬

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

If the meter needle does not point to zero, follow the procedure below to reset the meter.

1. Press and hold the ADJUST button ⑱ and turn on the ignition switch.
2. Hold the ADJUST button ⑱ for 4 seconds.

IMMOBILIZER INDICATOR "🔑" ⑭ (if equipped)

The immobilizer indicator blinks two times when the ignition switch is turned on. Then indicator comes on two seconds and goes off.

Immobilizer system is designed to help prevent motorcycle theft by electronically disabling the engine starting system. The engine can be started only with your original keys which have an electronic identification code programmed into it. The key communicates the identification code to the immobilizer controller when the key is turned to "ON" position.

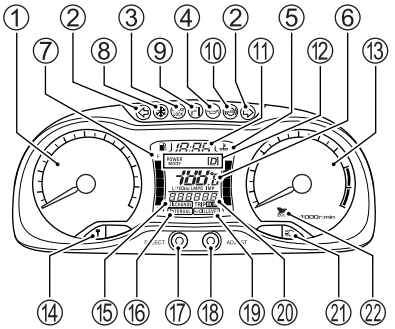
OIL CHANGE INDICATOR ⑮

The oil change indicator comes on to remind you to change the engine oil. The indicator comes on at initial 1000 km (600 miles) and preset intervals thereafter. The preset interval is adjustable between 500 km (300 miles) and 6000 km (3600 miles) in 500 km (300 mile) steps. Reset the indicator after changing the engine oil to turn off the indicator.

To reset the oil change indicator:
1. Turn off the ignition switch.
2. Press and hold the SELECT button ⑰ and turn the ignition switch to the "ON" position and hold the SELECT button ⑰ for 3 seconds.
3. The oil change counter will reset and the OIL CHANGE indicator ⑮ blinks 3 times and goes off.

To preset the oil change interval:
1. Set the meter to odometer, then press and hold the ADJUST button ⑱ for 2 seconds until the INTERVAL ⑯ and OIL CHANGE ⑮ indicators blink.
2. Push the SELECT button ⑰ to decrease the interval from 6000 km (3600 miles) to 500 km (300 miles) in 500 km (300 mile) steps.
3. Push the ADJUST button ⑱ to increase the interval from 500 km (300 miles) to 6000 km (3600 miles) in 500 km (300 mile) steps.
4. Press and hold the SELECT ⑰ and the ADJUST ⑱ buttons for 2 seconds.

NOTE:
- *The preset interval can be adjusted after odometer reaches 1000 km (600 miles).*
- *Reset the indicator after initial engine oil replacement.*
- *Reset the indicator after oil replacement even if the indicator is not displayed.*
- *Preset interval change does not reset the indicator.*



OIL LEVEL INDICATOR ⑲

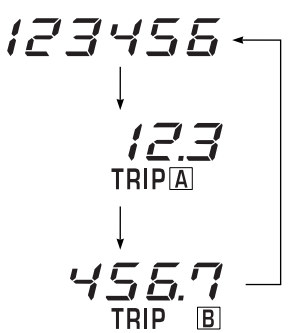
The oil level indicator comes on when the engine oil level is below the normal operating range. When the engine oil level indicator comes on, check the engine oil level through oil level inspection window described in this owner's manual. Add engine oil if the oil level is below the specified range.

NOTE: The engine oil level in the crankcase changes while riding. Quick acceleration, hard braking and hill climbing will change engine oil level. This oil level change can trigger the engine oil level indicator. The indicator will also come on it the motorcycle tips over. These cases are not oil level indicator malfunction.

ODOMETER/TRIP METER ⑳

The display has two functions, odometer and trip meter.

To change the display, push the SELECT button ⑰. The display changes in the order below:



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

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

Trip meter
The trip meter is a resettable odometer. It can be used for indicating the distance traveled on short trips or between fuel stops. To reset a trip meter to zero, push the ADJUST button ⑱ for 2 seconds.

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

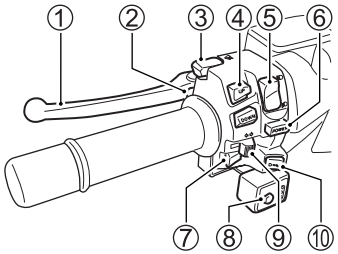
HIGH BEAM INDICATOR LIGHT "≡D" ㉑
The blue indicator light will be lit when the headlight high beam is turned on.

ECO DRIVE INDICATOR LIGHT "ECO" ㉒
The AN650/Z has an Eco Drive Indicator to encourage riding that may reduce environmental impacts. The Eco Drive Indicator light, located on the instrument panel, will come on when the motorcycle is operated in a fuel-efficient manner - and may help riders learn techniques to improve their fuel economy.

The Eco Drive Indicator is active when the AN650/Z is operated in the Drive mode, but disabled when in the Manual mode. The system monitors the motorcycle's real-time fuel consumption rate and illuminates the Eco Drive Indicator light when this rate is below predetermined fuel consumption rates.

The Eco Drive Indicator does not automatically improve fuel economy but may help riders refine their riding efficiency and improve fuel economy. Fuel economy can be affected by many outside factors, such as the distance traveled and traffic conditions, e.g., the number of starts from a stop. Equally important are other factors affecting fuel economy that are within the driver's control, including such things as the rate of acceleration (throttle use), chosen speed, and maintenance.

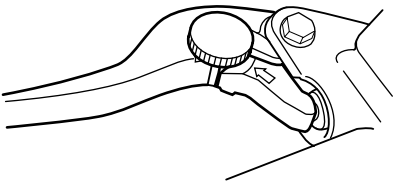
LEFT HANDLEBAR



REAR BRAKE LEVER ①

The rear brake is applied by squeezing the rear brake lever gently towards the grip. The brake light will be lit when the lever is squeezed inward.

Rear Brake Lever Adjustment



The distance between the grip and the rear 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.

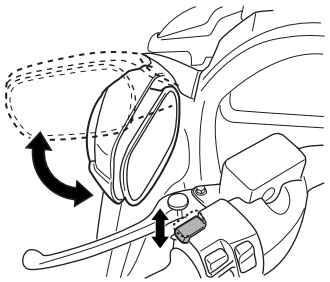
⚠ WARNING

Adjusting the rear 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 rear brake lever position while riding. Keep both hands on the handlebars.

HEADLIGHT FLASHER SWITCH ②
Press the switch to flash the headlight.

REAR VIEW MIRROR FOLDING SWITCH "" ③



Push the switch to fold the rear view mirrors backward for parking in restricted areas. Push the switch to extend the rear view mirrors.

⚠ WARNING

Riding the motorcycle with the rear view mirrors folded will be hazardous.

Extend both right and left rear view mirrors before starting off.

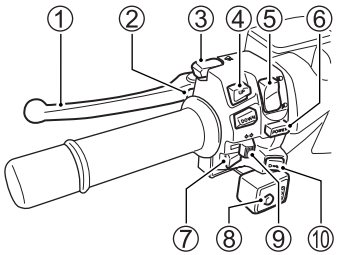
SHIFT SWITCH ④
In manual mode, pushing upper switch will shift up the transmission and pushing the lower switch will shift down the transmission. The transmission will be shifted down automatically when the motorcycle speed is decreased.

NOTE: Gear position indicator blinks 3 times when the shift change is not acceptable due to the desired gear being out of transmission speed range.

NOTICE

In manual mode, the transmission will not be shifted up automatically.

Never allow the engine to rev into the red zone.



DIMMER SWITCH ⑤
"≡D" position
The headlight low beam and taillight turn on.

"≡D" position
The headlight high beam and taillight turn on. The high beam indicator light also turns on.

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.

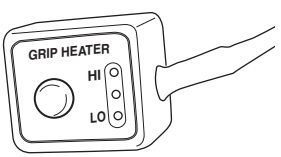
This may cause melting of the lens or damage to the object by the heat from the lens.

DRIVE MODE SWITCH ⑥
Drive mode: For normal riding and better fuel economy.

Power mode: For sport riding and getting more power.

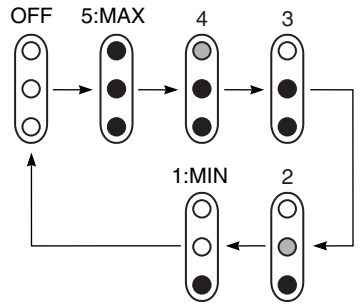
HORN SWITCH "" ⑦
Press the switch to sound the horn.

GRIP HEATER SWITCH ⑧
(AN650Z)



Grip heater warms right and left grips when the grip heater switch is turned on with the engine running. The grip heater switch will be turned off when the ignition switch is turned off.

The grip heater temperature can be adjusted in five steps by pushing the switch. Pushing the switch changes temperature as follows:



● : Full light
◍ : Half light
○ : Turn off

⚠ WARNING

Improperly using the grip heater can be hazardous. Rider can suffer burns even if the heating temperature is fairly low when the rider is wearing no gloves and leaves the heater on for long periods. Damaged grip can suffer burns or get an electrical shock.

- **Be sure to wear gloves to avoid burns.**
- **Replace the damaged grips to avoid burns or electrical shock.**

NOTE:

- *The grip heater has a built-in automatic switch to avoid unnecessary battery power consumption. The automatic switch turns off grip heater when the engine speed becomes lower at engine idling speed. When the engine speed increases, the automatic switch turns on grip heater.*
- *Pushing the switch will not turn on the grip heater when the engine speed is low. Increase the engine speed and push the switch again to turn on the grip heater.*

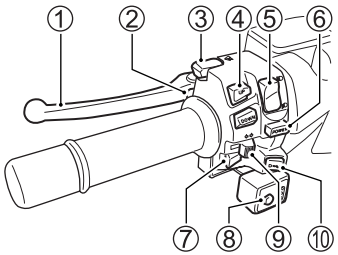
TURN SIGNAL LIGHT SWITCH "⇦⇨" ⑨

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. Push in the switch to cancel the turn signal operation.

⚠ 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.

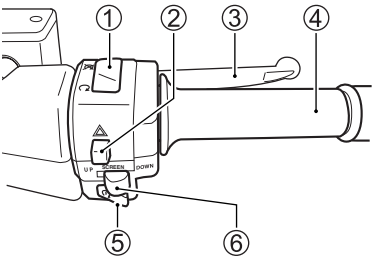


SHIFT MODE CHANGE SWITCH "D⇔M" ⑩
Push the shift mode change switch to change from DRIVE mode to MANUAL mode and vice versa.

DRIVE mode:
The drive mode indicator in the instrument panel shows D. The transmission shifts automatically.

MANUAL mode:
The gear position indicator shows a numeral. The transmission can be changed by pushing the shift switch ④.

RIGHT HANDLEBAR



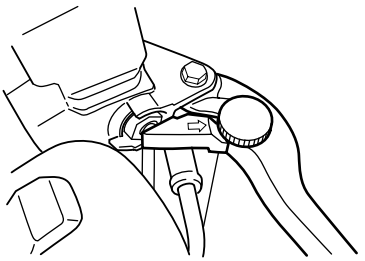
ENGINE STOP SWITCH ①
"⊗" position
The ignition circuit is off. The engine cannot start or run.

"○" position
The ignition circuit is on and the engine can run.

HAZARD WARNING SWITCH "⚠" ②
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.

FRONT BRAKE LEVER ③
The brake is applied by squeezing the front brake lever gently towards the grip. 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.

THROTTLE GRIP ④

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

ELECTRIC STARTER SWITCH "⏲" ⑤

Push in the electric starter switch to operate the starter motor.

NOTE: If the brake lever is not squeezed, the starter motor will not operate.

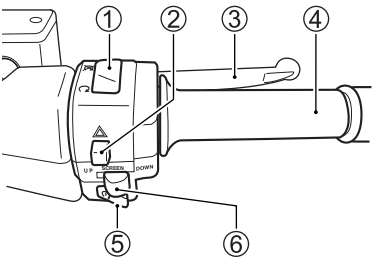
NOTE: This motorcycle is equipped with an interlock system for the ignition circuit and the starter circuit. The engine can only be started if the side stand is fully up.

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.



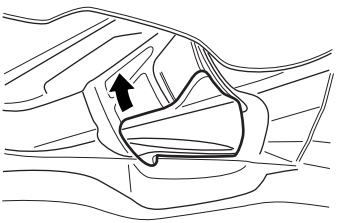
POWER WINDSHIELD SWITCH ⑥
Windshield height can be adjusted by power windshield switch.

⚠ WARNING

Operating power windshield on someone's hands or fingers can cause serious injury.

Make sure nobody is touching windshield before operating the power windshield switch.

BRAKE LOCK LEVER



Use the brake lock to help prevent the motorcycle from moving when it is parked, being started, or idling. To operate the brake lock lever, pull the lever all the way toward you. The brake lock indicator light will come on when the brake lock lever is engaged. To release the brake lock lever, pull the lever and release it.

⚠ WARNING

Riding the motorcycle with the brake lock lever engaged is hazardous. The rear brake will overheat and it will reduce braking performance.

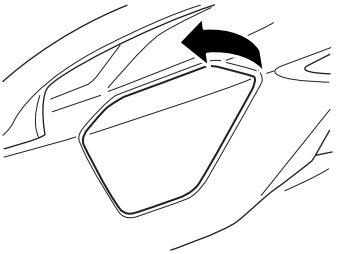
Use the brake lock lever only when parking and release the lever before riding.

⚠ WARNING

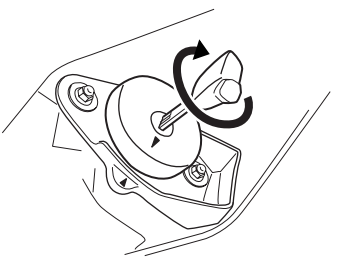
Operating the brake lock lever while riding can be hazardous. Removing a hand from the handlebars can reduce your ability to control the motorcycle. Operating the brake lock lever while riding can cause rear wheel skid and loss of control.

Always keep both hands on the handlebars during riding.

FUEL TANK CAP



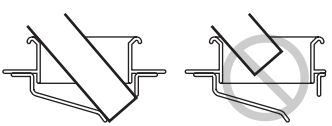
Open the lid.



Insert the key and turn it clockwise to open the fuel tank cap with the key still held in a position, lift up on the key and remove the cap. To install the fuel tank cap, face the triangle mark towards you and line up the fuel tank cap guide pins. Push down the fuel tank cap until the locking pins click into position. The key must be in the cap lock before installing the cap.

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.

NOTE: The fuel tank has a pressure regulator around the fuel tank inlet to release pressure when the fuel tank becomes hot. The fuel tank pressure regulator may whistle when it releases fuel tank pressure.



NOTE:

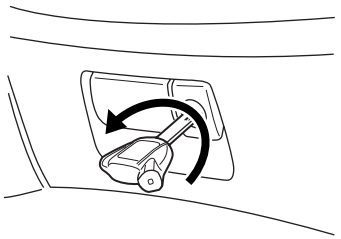
- *When refueling, hold the tip of fuel nozzle against crossbar in fuel inlet as illustration.*
- *Stop filling the fuel tank after the fuel nozzle automatically clicks off. Do not try to "top off" the fuel tank. Leave some room for the fuel to expand from temperature increase.*

⚠ 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.

FRONT TRUNK



To open the lid:
1. Insert the ignition key and turn it counterclockwise to unlock the latch lever.
2. Pull the latch lever.

To close the lid:
1. Push the box lid firmly until the latch snaps into the position.
2. Turn the ignition key clockwise to lock the latch lever.
3. Remove the key.
4. Pull the latch lever and check that the box lid is locked.

The box load capacity is 1.5 kg (3.0 lbs).

⚠ WARNING

If the box lid is not locked, it may open while riding.

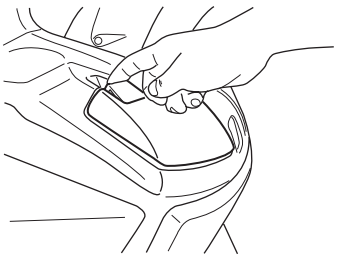
Make sure the box lid is closed and locked securely.

⚠ WARNING

Opening the box lid while riding can be hazardous. Removing a hand from the handlebars can reduce your ability to control the motorcycle.

Always keep both hands on the handlebars during operation.

FRONT SMALL BOX



Pull the latch lever to open the lid. Pull the latch lever and push the lid to close the lid.

The box load capacity is 0.5 kg (1 lbs).

⚠ WARNING

Opening the box lid while riding can be hazardous. Removing a hand from the handlebars can reduce your ability to control the motorcycle.

Always keep both hands on the handlebars during operation.

TRUNK

The trunk load capacity is 10 kg (22 lbs).

⚠ WARNING

Overloading the motorcycle will decrease riding stability and can lead to loss of control.

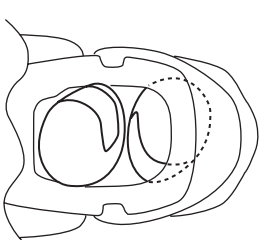
Never exceed the load capacity.

NOTE: Do not allow water to get inside the trunk, or damage may occur.

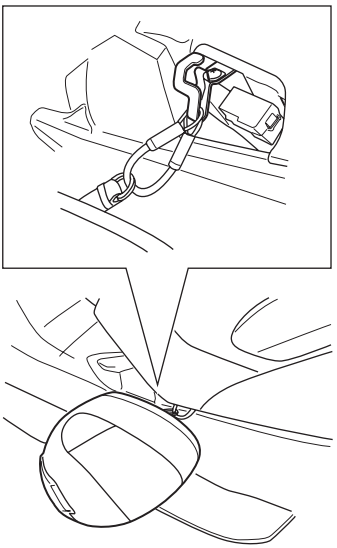
NOTE:

- *Do not keep any low heat-resistant items in the trunk since the trunk may get hot.*
- *Do not keep valuable items in the trunk when leaving the motorcycle unattended.*
- *Do not put valuable items in the trunk because the trunk is not watertight.*
- *Push down the rear end of the seat if the seat does not unlock with key operation.*

Place helmets as shown, or seat may not be completely locked.

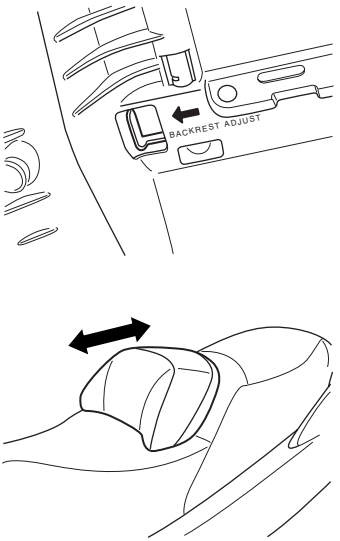


HELMET HOLDER



Use cable (included) and hook cable through helmet strap “D” rings and around helmet holder.

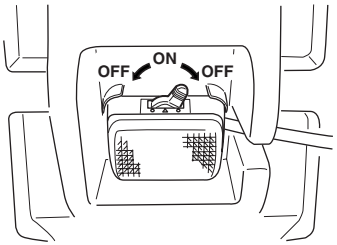
BACKREST ADJUSTMENT



The backrest adjustment lever is located under the seat. To adjust the backrest position, move the adjustment lever and slide the backrest forward or rearward. Try to move the backrest forward and rearward to ensure that it is securely latched.

NOTE: Return the adjustment lever by hand to lock the backrest.

TRUNK BOX LIGHT SWITCH

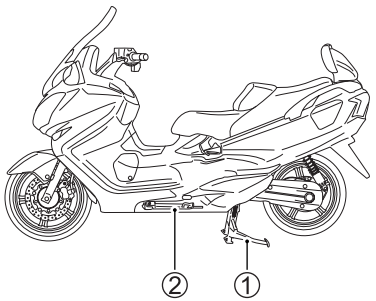


"ON" position
The trunk box light turns on.

"OFF" position
The trunk box light turns off.

STAND

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



CENTER STAND ①
To place the motorcycle on the center stand, place your foot on the stand extension and then rock the motorcycle to the rear and upward with the passenger hand rail with your right hand, while steadying the handlebars with your left hand.

NOTE: The transmission cannot shift when the motorcycle is placed on the center stand. Ride and move the motorcycle to inspect shift operation.

SIDE STAND ②
An interlock system is provided to cut off the ignition circuit when the side stand is down.

The side stand/ignition interlock system works as follows:

- If the side stand is down, the engine can not be started.
- If the engine is running and the side stand is put down, the engine will stop running.

⚠WARNING

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

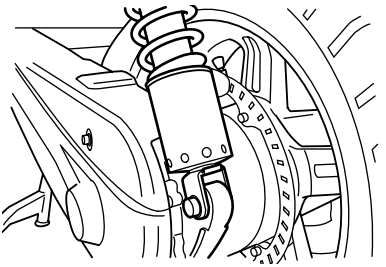
Check operation of the side stand/ ignition interlock system before riding. Always retract the side stand completely before starting off.

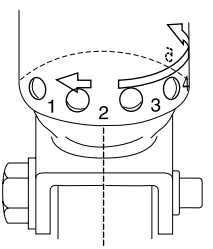
NOTICE

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

If you must park on an incline, aim the front of the motorcycle uphill and apply the brake lock to reduce the possibility of rolling off the side stand. For better security, place the motorcycle on the center stand.

REAR SUSPENSION
SPRING ADJUSTMENT





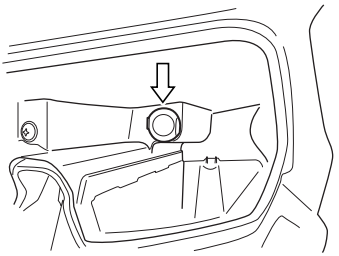
To adjust the spring pre-load, turn the adjuster clockwise or counterclockwise to the desired position. Position 1 provides the softest spring pre-load and position 5 provides the stiffest. This motorcycle is delivered from the factory with its adjuster set on position 2.

⚠WARNING

Unequal suspension adjustment can cause poor handling and instability.

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

OUTPUT TERMINAL



AN650/Z has an output terminal for attaching 12V electrical accessories. Total electrical accessory wattage should be less than 36W. Check electrical accessory voltage and wattage before attaching accessories to the output terminal.

NOTICE

Using improper electrical accessories can damage your motorcycle. Exceeding 36W or using other than a 12V accessory can seriously damage the electrical system and accessory.

Check voltage and wattage before connecting electrical accessories.

NOTE: The trunk lid may not latch closed if a long type plug is inserted into the output terminal.

FUEL, ENGINE OIL AND COOLANT RECOMMENDATIONS

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 and 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 MTBE or alcohol.

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

Gasoline/Ethanol Blends
Blends of unleaded gasoline and ethanol (grain alcohol), also known as GASOHOL, are commercially available in some areas. Blends of this type may be used in your motorcycle if they are no more than 10% ethanol (E10). Make sure this gasoline-ethanol blend has octane ratings no lower than those recommended for gasoline.

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

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

NOTE:

- *To help minimize air pollution, Suzuki recommends that you use oxygenated fuels.*
- *Be sure that any oxygenated fuel you use has recommended octane ratings.*
- *If you are not satisfied with the 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

Use Suzuki genuine engine oil or equivalent. If Suzuki genuine engine oil is not available, select a proper engine oil according to the following guideline.

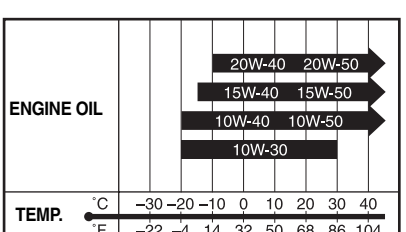
Oil quality is a major contributor to your engine's performance and life. Always select good quality engine oil. Use oil with an API (American Petroleum Institute) classification of SG, SH, SJ or SL with a JASO classification of MA.

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

API: American Petroleum Institute
JASO: Japanese Automobile Standards Organization

SAE Engine Oil Viscosity

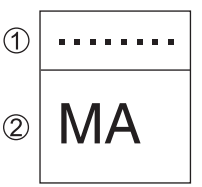
Suzuki recommends the use of SAE 10W-40 engine oil. If SAE 10W-40 engine oil is not available, select an alternative according to the following chart.



JASO T903

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

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



① Code number of oil sales company
② Oil classification

Energy Conserving

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

API SG, SH, SJ or SL

Recommended

API SH, SJ or SL

Not recommended

TRANSMISSION OIL

Use a good quality SAE 10W-40 multi-grade motor oil.

FINAL GEAR OIL

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

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 antifreeze 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):
1600 ml (1.7/1.4 US/Imp. qt)

50%	Water	800 ml (0.8/0.6 US/Imp. qt)
	Coolant	800 ml (0.8/0.6 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°C/–40°F) or 60% (–55°C/–67°F) coolant. The mixing ratio should not exceed 60% coolant.

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

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

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

MAXIMUM THROTTLE OPERATION RECOMMENDATION

This table shows the maximum recommended throttle operation during the break-in period.

Initial	800 km (500 miles)	Below 4000 r/min
Up to	1600 km (1000 miles)	Below 6000 r/min
Over	1600 km (1000 miles)	Below 8000 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 1600 km (1000 miles).

ALLOW THE ENGINE OIL TO CIRCULATE BEFORE RIDING

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

OBSERVE YOUR FIRST AND MOST CRITICAL SERVICE

The 1000 km (600 miles) service is the most important service your motorcycle will receive. During break-in all of the engine components will have worn in and all of the other parts will have seated in. All adjustments will be restored, all fasteners will be tightened, and the dirty oil will be replaced.

Timely performance of the 1000 km (600 miles) service will ensure optimum service life and performance from the engine.

NOTE: The 1000 km (600 miles) service should be performed as outlined in the Maintenance Schedule section of this Owner's Manual. Pay particular attention to the caution and warning messages in MAINTENANCE SCHEDULE 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 machine.

⚠ 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	• Smoothness • No restriction of movement • No play or looseness
Brakes (☞ 2-20, 2-24, 2-26, 6-29)	• Proper lever operation • Fluid level in the reservoir to be above “LOWER” line • No fluid leakage • Brake pads not worn down to the limit line • Correct lever play • No “sponginess” • No dragging • Brake lock operation
Tires (☞ 6-32)	• Proper pressure • Adequate tread depth • No cracks or cuts
Fuel (☞ 2-12)	Enough fuel for the planned distance of operation
Lighting (☞ 2-6, 2-8, 2-20, 2-24)	Operation of all lights and indicators
Horn (☞ 2-22)	Correct function
Engine oil (☞ 6-21)	Correct level
Throttle (☞ 6-16)	• Correct play in the throttle cable • Smooth operation and positive return of the throttle grip to the closed position
Side stand/ Ignition interlock system (☞ 6-35)	Proper operation
Windshield (☞ 2-26, 8-6)	Good visibility

NOTE: The transmission cannot shift when the motorcycle is placed on the center stand. Ride and move the motorcycle to inspect shift operation.

RIDING TIPS

STARTING THE ENGINE

Sit on the motorcycle and retract the side stand, or place the motorcycle on the center stand. Insert the ignition key into the ignition switch and turn it to the "ON" position. Set the brake lock.

⚠ WARNING

Starting the engine improperly can be hazardous. Starting the engine without engaging the brake lock can allow the motorcycle to move forward as soon as the engine starts.

Always set the brake lock and apply the rear brake before starting 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 side stand is fully up.

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

When the Engine is Cold:

1. Squeeze the front or rear brake lever.
2. Close the throttle completely and push the electric starter switch.
3. After the engine starts, let the engine run until the engine sufficiently warms up.

When the Engine is Warm:

1. Squeeze the front or rear brake lever.
2. Close the throttle completely and push the electric starter switch.
3. After the engine starts, let the engine run until the engine sufficiently warms up.

When a Warm Engine is Hard to Start:

1. Squeeze the front or rear brake lever.
2. Open the throttle grip 1/8 to 1/4, push the electric starter switch.
3. After the engine starts, let the engine run until the engine sufficiently warms up.

⚠ 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

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

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

STARTING OFF

⚠ WARNING

Riding 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.

Close the throttle and apply the brake when taking the motorcycle off the center stand. Release the brake lock. Open the throttle grip toward you and the motorcycle will start moving forward.

NOTE: When the CVT belt is new the engine rpm may jump briefly under hard acceleration due to the smoothness of the belt.

⚠ 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.

RIDING ON HILLS (MANUAL mode)

- 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 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 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

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 squeeze the front brake lever and rear brake lever, as forcefully as necessary for the situation, without pumping either one. It is normal for the brake levers 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 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.

⚠ 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 brake levers 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.

NOTICE

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

Use the brakes when stopping the motorcycle on inclines.

3. Park the motorcycle on a firm, flat surface where if will not fall over.
4. Apply the side stand or center stand.
5. Turn the ignition switch to the “OFF” position to stop the engine.
6. Turn the ignition switch to the “LOCK” position to lock the steering.
7. Set the brake lock.
8. Remove the ignition key from the switch.

NOTE: If an optional anti-theft lock such as an 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.

⚠ 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.

NOTICE

Direct sunlight magnified through windshields and other transparent parts can damage the motorcycle.

Park the motorcycle in the shade or cover it with a motorcycle cover.

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, suspension and wheel components are key items and require very special and careful servicing. For maximum safety we suggest that you have these items inspected and serviced by your authorized Suzuki dealer 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.

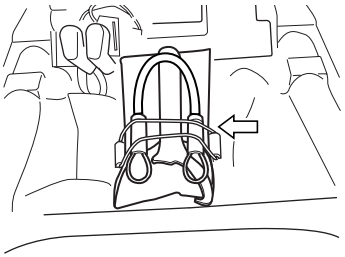
MAINTENANCE CHART

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

Item \ Interval		months	2	12	24	36	48
		km	1000	6000	12000	18000	24000
		miles	600	4000	7500	11000	14500
* Valve clearance			–	–	–	–	I
Spark plug (☞ 6-8)			–	I	R	I	R
* Exhaust pipe bolts and muffler bolts			T	–	T	–	T
Air cleaner element (☞ 6-12)			–	I	I	R	I
Throttle cable play (☞ 6-16)			I	I	I	I	I
* Throttle valve synchronization			–	–	I	–	I
* PAIR (air supply) system			–	–	I	–	I
CVT filter (☞ 6-17)			–	–	I	–	I
Radiator hose (☞ 6-20)			–	I	I	I	I
			* Replace every 4 years				
* Engine coolant (☞ 6-19)	"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
* Fuel hose			–	I	I	I	I
			Replace every 4 years				
Engine oil (☞ 6-21)			R	R	R	R	R
Engine oil filter (☞ 6-21)			R	–	–	R	–
Transmission oil (☞ 6-26)			R	–	R	–	R
Final gear oil (☞ 6-26)			R	–	R	–	R
* Brakes (☞ 6-29)			I	I	I	I	I
Brake hose (☞ 6-29)			–	I	I	I	I
			*Replace every 4 years				
Brake fluid (☞ 6-29)			–	I	I	I	I
			*Replace every 2 years				
* Steering			I	–	I	–	I
* Front forks			–	–	I	–	I
* Rear suspension (☞ 2-33)			–	–	I	–	I
Tires (☞ 6-32)			–	I	I	I	I
* Chassis bolts and nuts			T	T	T	T	T
Lubrication (☞ 6-5)			Lubricate every 1000 km (600 miles)				

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

TOOLS



A tool kit is supplied and located under the seat.

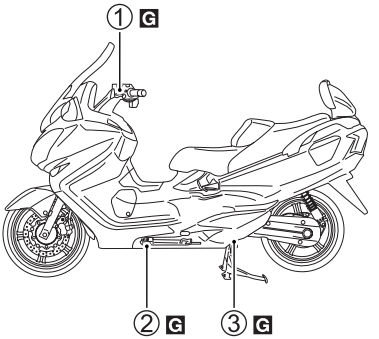
LUBRICATION POINTS

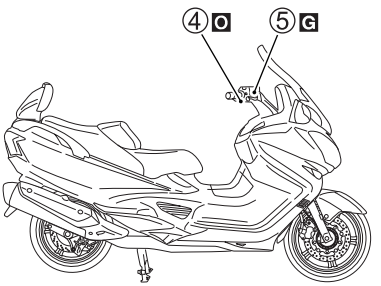
Proper lubrication is important for smooth and long life of each working part of your motorcycle and also for safe riding. It is a good practice to lubricate the motorcycle after a long rough ride and after getting it wet in the rain or after washing it. Major lubrication points are indicated below.

NOTICE

Lubricating electrical switches can damage the switches.

Do not apply grease or oil to electrical switches.





O .... Motor oil
G .... Grease

① .... Rear brake lever pivot
② .... Side stand pivot and spring hook
③ .... Center stand pivot and spring hook
④ .... Throttle cable
⑤ .... Front brake lever pivot

BATTERY

The battery is located under the seat. The battery is a sealed type battery and requires no maintenance of fluid level and gravity. However, have your dealer check charging condition periodically.

The standard charging rate is 1.4A × 5 to 10 hours and the maximum rate is 6A × 1 hour. Never exceed the maximum charging rate.

⚠ 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.

NOTICE

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

Never exceed the maximum charging rate for the battery.

⚠ WARNING

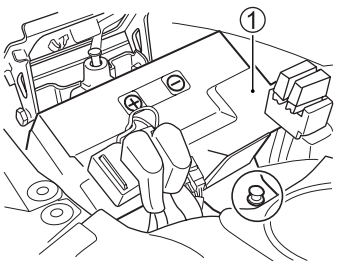
Wiping the battery with a dry cloth can cause a static electricity spark, which can start a fire.

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

BATTERY REMOVAL

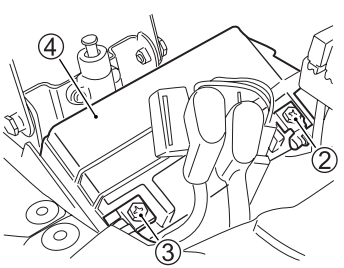
To remove the battery, follow the procedure below:

1. Open the seat.
2. Remove the tool kit.



3. Remove the fastener. Remove the battery cover ①.

NOTE: Do not remove the starter relay terminal.



4. Disconnect the negative (–) terminal ②.
5. Remove the cap. Disconnect the positive (+) terminal ③.
6. Remove the battery ④.

To install the battery:

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

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.

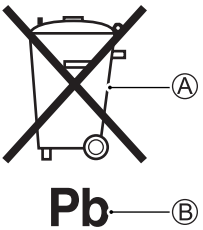
⚠ WARNING

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

An 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.

NOTE:

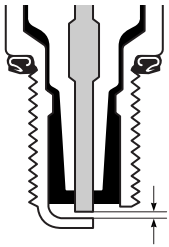
- *Select the same type MF battery when replacing the battery.*
- *Recharge the battery once a month if the motorcycle is not used for a long time.*



The crossed-out wheeled bin symbol Ⓐ located on the battery label indicates that an used battery should be collected separately from ordinary household waste.
The chemical symbol of “Pb” Ⓑ 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.

SPARK PLUG



Remove the carbon deposits from the spark plug with a spark plug cleaning machine. Readjust the spark plug gap to 0.7 – 0.8 mm (0.028 – 0.031 in) by using a spark plug gap thickness gauge. The spark plug should be replaced periodically.

Whenever removing the carbon deposits, be sure to observe the operational color of the 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 light brown or tan color. If the spark plug is very white or glazed appearing, then it has been operating much too hot. This spark plug should be replaced with a colder plug.

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.

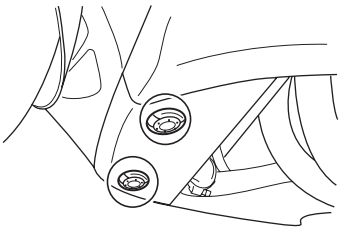
Use one of the spark plugs listed or their equivalent. Consult your Suzuki dealer if you are not sure which spark plug is correct for your type of usage.

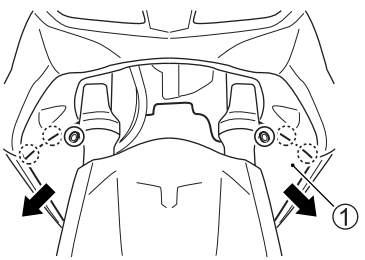
Plug Replacement Guide

NGK	DENSO	REMARKS
CR7E	U22ESR-N	If the standard plug is wet in appearance or very dark in color, replace with this plug.
CR8E	U24ESR-N	Standard
CR9E	U27ESR-N	If the standard plug is very white or glazed in appearance replace with this plug.

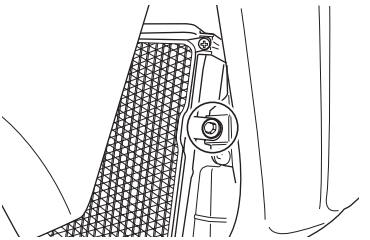
NOTE: This motorcycle uses a resistor-type spark plug to avoid jamming electronic parts. Improper spark plug selection may cause electronic interference with your motorcycle's ignition system, resulting in motorcycle performance problems. Use only the recommended spark plugs.

To remove the spark plug, follow the procedure below:





1. Remove the fasteners from the lower leg shield. Unhook the hooks and remove the lower leg shield forward ①.

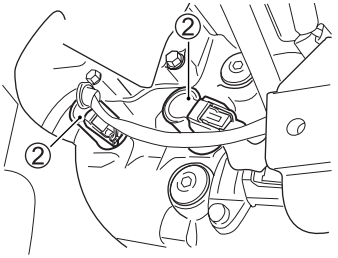


2. Remove the bolt. Pull the radiator forward.

⚠ 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.



3. Release the coupler locks and disconnect the couplers from the ignition coils.
4. Pull off the ignition coils ②.
5. Remove the spark plugs with a spark plug wrench.

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.

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.

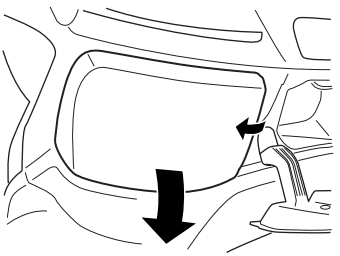
NOTICE

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.

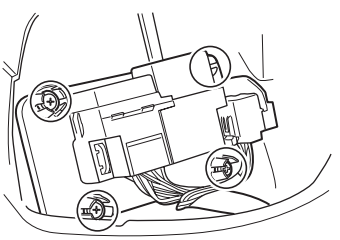
Always inspect the air cleaner element after riding in severe conditions. Clean or replace the element as necessary. If water gets in the air cleaner case, immediately clean the element and the inside of the case.

Follow the procedure below to remove the air cleaner element.

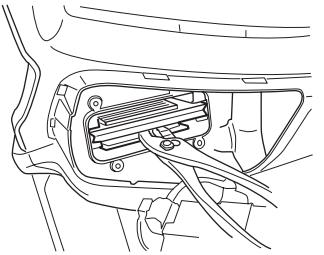
1. Open the front trunk.



2. Remove the air cleaner maintenance lid.

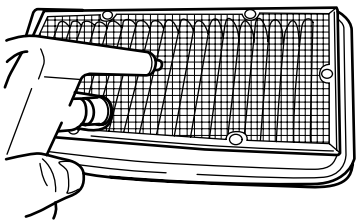


3. Remove the screws and air cleaner cap.



4. Pull out the air cleaner element with pliers.

CLEANING THE ELEMENT



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.

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.

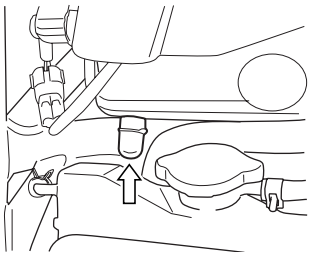
NOTICE

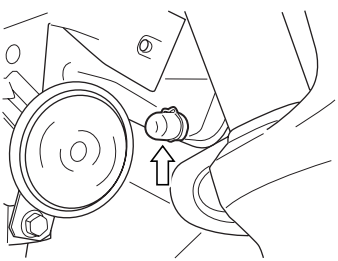
Failure to position the air cleaner element properly can allow dirt to bypass the air cleaner element. This will cause engine damage.

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.

AIR CLEANER DRAIN TUBES





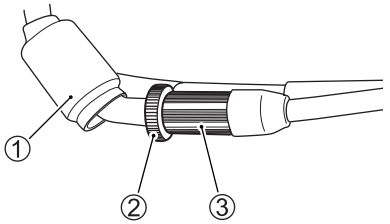
Remove the plugs and drain water and oil at the periodic maintenance interval.

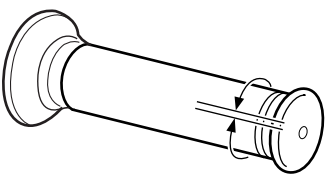
ENGINE IDLE SPEED INSPECTION

Inspect the engine idle speed. The engine idle speed should be 1100 – 1300 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)

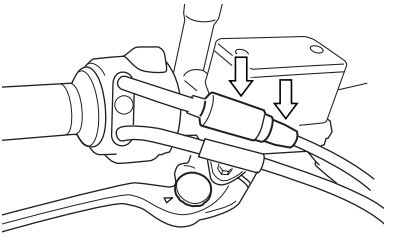
To adjust the cable play:
1. Remove the boot ①.
2. Loosen the lock nut ②.
3. Turn the adjuster ③ so that the throttle grip has 2.0 – 4.0 mm (0.08 – 0.16 in) play.
4. Tighten the lock nut ②.
5. Reinstall the boot ①.

⚠ 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

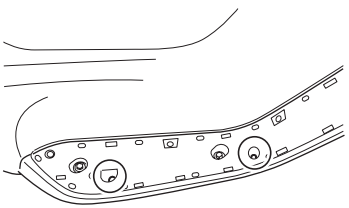


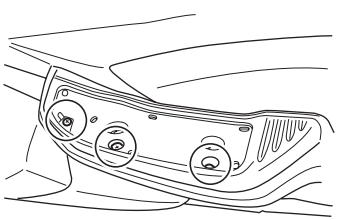
The throttle cable has a boots. Check that the boots are fit securely. Do not apply water directly to the boots when washing. Wipe off dirt from the boots with a wet cloth when the boots are dirty.

CVT FILTER

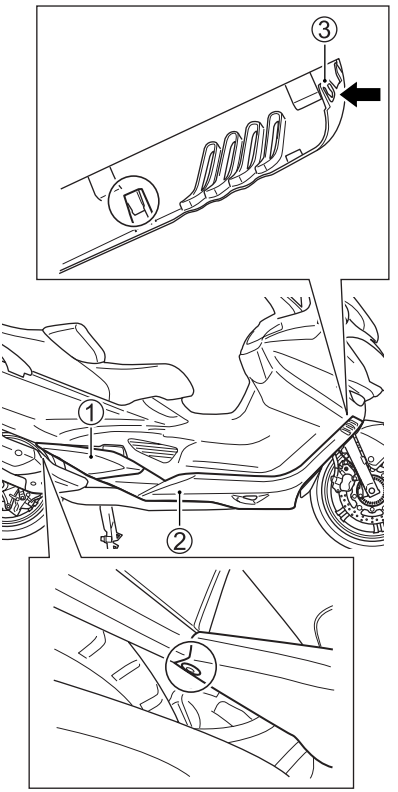
RIGHT SIDE LEG SHIELD REMOVAL

1. Remove the lower leg shield by referring to the SPARK PLUG section.
2. Remove the floor mats.





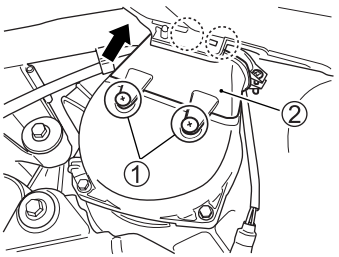
3. Remove the screws.



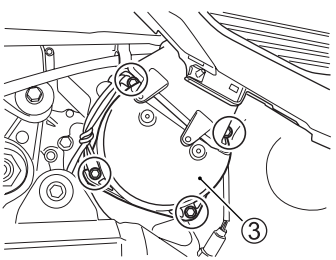
4. Remove the fastener.
5. Unhook the hooks and remove the right side rear lower footboard ①.
6. Unhook the hooks and remove the right side leg shield ②.

NOTE: To remove the right side leg shield ②, push the hook ③ located inside the front side of leg shield and pull it towards you.

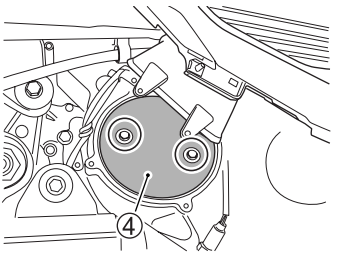
CVT FILTER REPLACEMENT



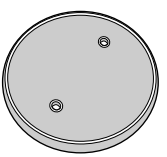
1. Remove the screws ①.
2. Unhook the hooks and move the CVT filter lid ②.



3. Remove the bolts and CVT filter cover ③.

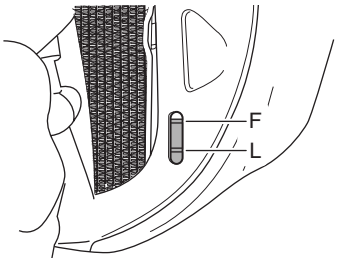


4. Remove the bolts and CVT filter ④.



5. Inspect the CVT filter for damage and dirt. If any defects are found, the CVT filter must be replaced.

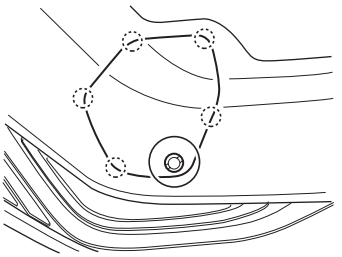
ENGINE COOLANT
COOLANT LEVEL



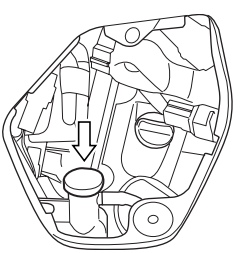
The coolant should be kept between the “F” (FULL) and the “L” (LOW) level lines in the reservoir tank at all times. Inspect the level every time before riding with the motorcycle held vertically. If the coolant is found lower than the “L” level line, add specified engine coolant through the filler hole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

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

To add specified engine coolant:
1. Place the motorcycle on the center stand.



2. Remove the fastener. Unhook the hooks and remove the maintenance lid.



3. 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.

⚠ 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 1600 ml (1.7/1.4 US/ Imp. qt) of coolant will be 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.

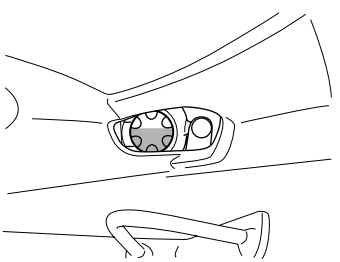
ENGINE OIL

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. Place the motorcycle on the center stand.
2. Start the engine and run it for three minutes.
3. Stop the engine and wait three minutes.



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

NOTICE

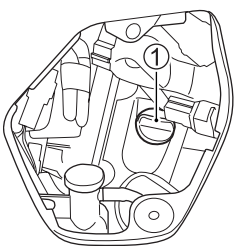
Operating the motorcycle with too little or too much oil can damage the engine.

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.

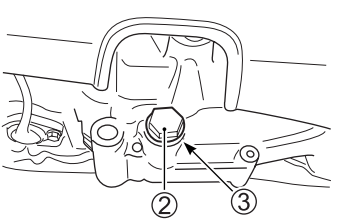
ENGINE OIL AND FILTER CHANGE

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 center stand. Remove the maintenance lid.



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.

⚠ CAUTION

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

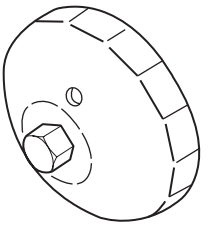
Wait until the muffler cools to avoid burns.

⚠ WARNING

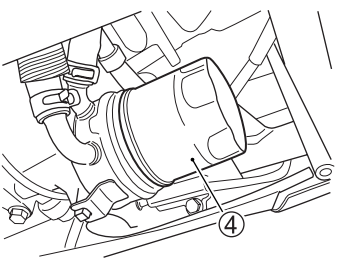
Children and pets may be harmed by swallowing new or used oil. Repeated, prolonged contact with used engine oil may cause skin cancer. Brief contact with oil may irritate skin.

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.

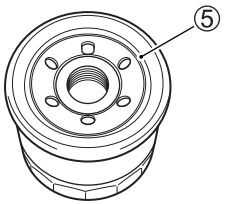
NOTE: Recycle or properly dispose of used oil.



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 on the engine where the new filter will be seated with a clean rag.



6. Smear a little engine oil around the rubber gasket ⑤ of the new oil filter.

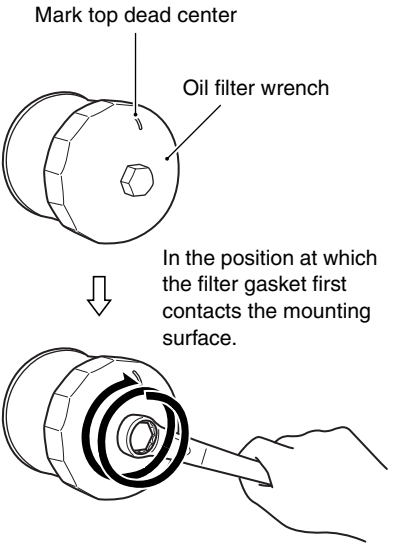
NOTICE

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.

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

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



8. Mark the top dead center position on the "cap type" filter wrench or on the oil filter. Use an oil filter wrench to tighten the filter 2 turns 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 plug securely with a torque wrench. Pour 2900 ml (3.1/2.6 US/Imp. qt) of new 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:
23 N·m (2.3 kgf-m, 16.5 lbf-ft)

NOTE: About 2600 ml (2.7/2.3 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, ENGINE OIL AND COOLANT RECOMMENDATIONS section.

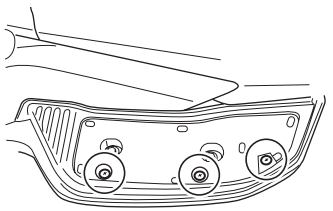
10. Start the engine (while the motorcycle is outside on level ground) and allow it to idle for three minutes.
11. Turn the engine off and wait approximately three minutes. Recheck the oil level on the engine oil inspection window while holding the motorcycle vertically. If it is lower than the "L" line, 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.

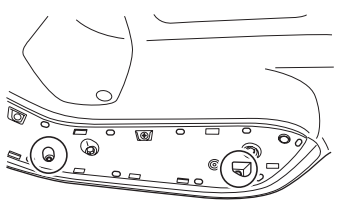
NOTE: If you do not have a proper oil filter wrench, have your Suzuki dealer perform this service.

TRANSMISSION OIL AND FINAL GEAR OIL

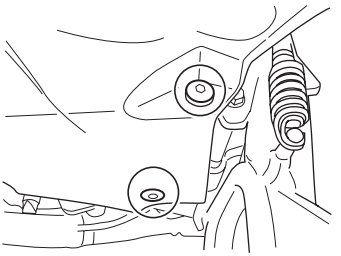
LEFT SIDE LEG SHIELD REMOVAL

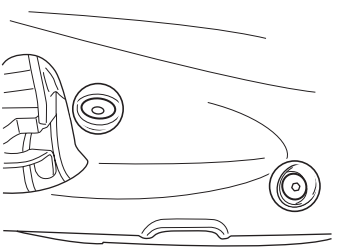
1. Remove the lower leg shield by referring to the SPARK PLUG section.
2. Remove the floor mats.

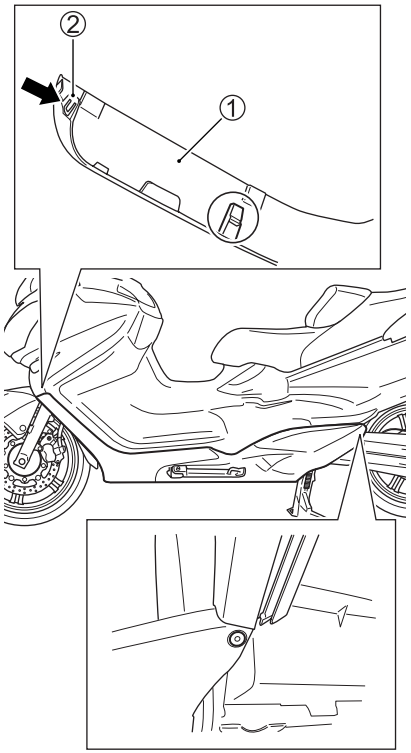




3. Remove the screws.





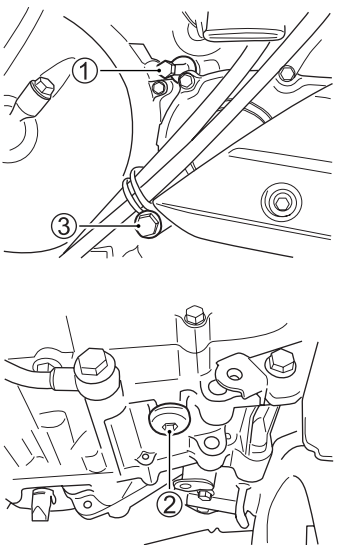


4. Remove the bolts and fasteners.
5. Unhook the hooks and remove the left side lower footboard, under cover and left side leg shield ①.

NOTE: To remove the left side leg shield ①, push the hook ② located inside the front side of leg shield and pull it towards you.

TRANSMISSION OIL REPLACEMENT

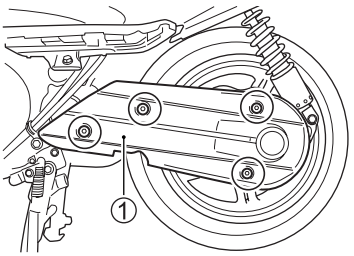
1. Place the motorcycle on level ground on the center stand. Hold the motorcycle vertically and check the transmission oil.

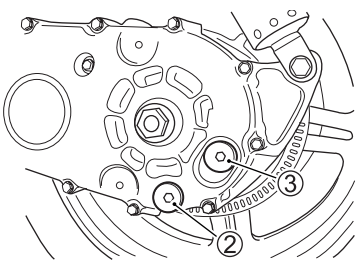


2. Remove the oil filler plug ①.
3. Remove the drain plug ② from the bottom of the engine and drain the transmission oil into a drain pan.
4. Reinstall the drain plug ②. Tighten the plug securely with a wrench.
5. Remove the oil level plug ③ and inspect the oil level. If the level is below the level hole, add oil until oil flows from the level hole.
6. Tighten the oil level plug ③ and oil filler plug ①.

FINAL GEAR OIL REPLACEMENT

1. Place the motorcycle on level ground on the center stand. Hold the motorcycle vertically and check the final gear oil.





2. Remove the bolts and final gear case cover ①.
3. Place an oil pan below the final gear case.
4. Remove the oil drain plug ② and oil level plug ③.
5. Tighten the oil drain plug ② and pour fresh oil through the oil level hole until the oil level reaches the oil level hole.
6. Tighten the oil level plug ③.

⚠ WARNING

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

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

NOTE: Recycle or properly dispose of used oil.

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.

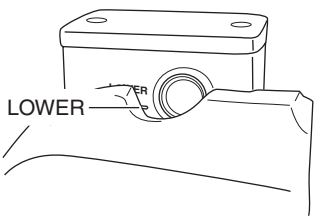
Inspect your brake system for the following items daily:

- 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 levers should have the proper stroke and be firm at all times.
- Check the wear of the disk brake pads.

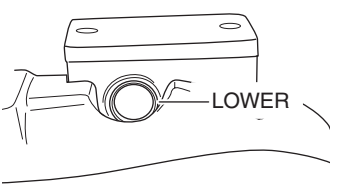
BRAKE HOSE INSPECTION

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



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.

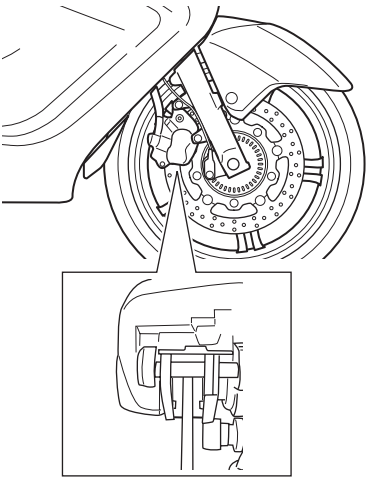
If brake fluid is swallowed, do not induce vomiting. Immediately contact a poison control center or a physician. If brake fluid gets in eyes, flush eyes with water and seek medical attention. Wash thoroughly after handling. Keep out of the reach of children and animals.

NOTICE

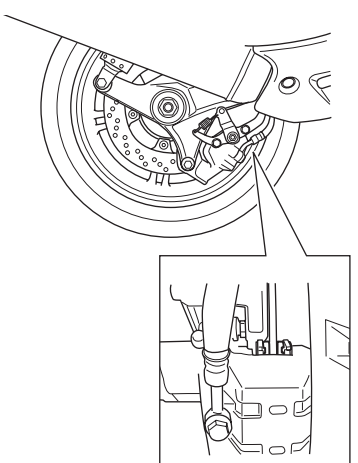
Spilled brake fluid can damage painted surfaces and plastic parts.

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

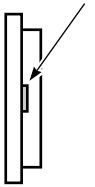
BRAKE PAD



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. 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, you may get poor braking performance which could result in an accident.

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

NOTE: Do not squeeze the brake lever 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.

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

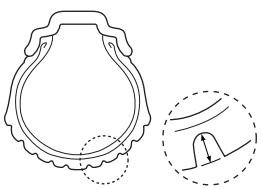
Insufficient air pressure in the tires not only hastens tire wear but also seriously affects the stability of the motorcycle. Under inflated tires make smooth cornering difficult and overinflated tires decrease the amount of tire in contact with the ground which can lead to skids and loss of control.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

Cold Inflation Tire Pressure

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	280 kPa 2.80 kgf/cm^2 41 psi	280 kPa 2.80 kgf/cm^2 41 psi

TIRE TREAD CONDITION

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



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

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

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

	FRONT	REAR
SIZE	120/70R15M/C 56H	160/60R14M/C 65H
TYPE	BRIDGESTONE TH01F	BRIDGESTONE TH01R M

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

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

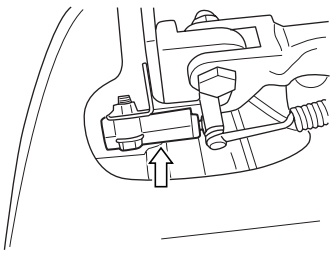
- **Ask your Suzuki dealer or a qualified mechanic to perform tire repair, replacement, and balancing because proper tools and experience are required.**
- **Install tires according to the rotation direction shown by arrows on the sidewall of each tire.**

⚠ 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.**

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. Squeeze the front or rear brake lever and start the engine.
3. While continuing to hold the brake lever, 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, 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.

LIGHT BULB REPLACEMENT

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

NOTICE

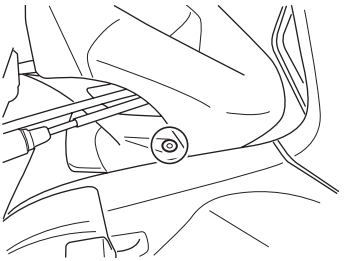
Failure to use a light bulb with the correct wattage rating can overload the electrical system of your motorcycle or cause the bulb to burn out sooner.

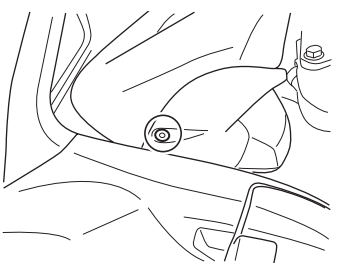
Use only the light bulbs shown in the chart as replacement bulbs.

Headlight	12V 60/55W (H4) × 2
Front turn signal light	12V 21W × 2
Rear turn signal light	12V 21W × 2
Brake light/Taillight	12V 21/5W × 2
License plate light	12V 5W

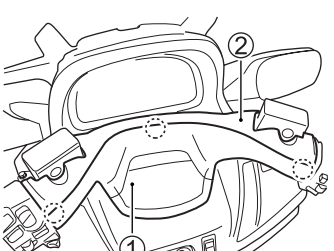
HEADLIGHT BULB REPLACEMENT

To replace the headlight bulb, follow the procedure below:

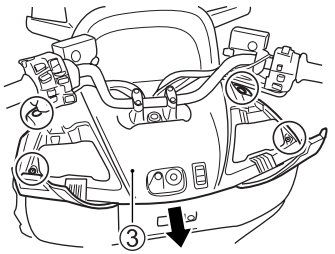




1. Remove the right and left fasteners.

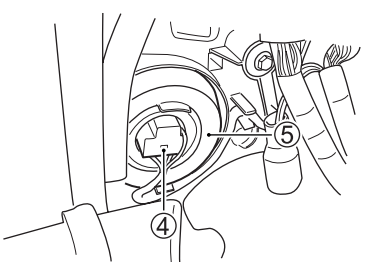


2. Unhook the hooks and remove the rear handle cover ①.
3. Remove the front handle cover ②.

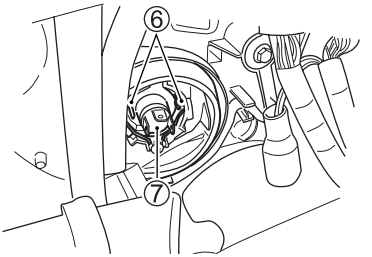


4. Open the right and left front small box. Remove the screws and fasteners. Unhook the hooks. Pull the front panel ③ backward and remove it.

NOTE: It is not necessary to disconnect the seat heater switch coupler. (AN650Z)



5. Disconnect the socket ④ from the headlight.
6. Remove the rubber cap ⑤.



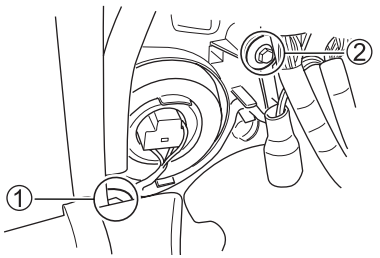
7. Unhook the bulb holder spring ⑥ and pull out the bulb socket ⑦.
8. Fit the new bulb.
9. To reinstall the headlight, reverse the sequence described above.

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.

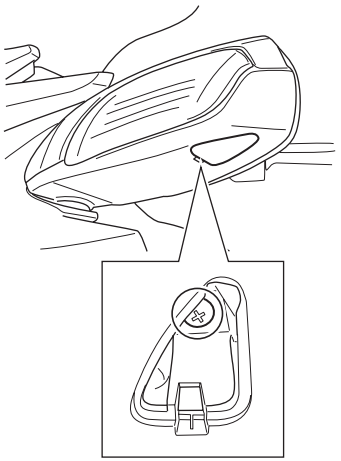
Headlight Beam Adjustment
The headlight beam can be adjusted both up and down or right and left if necessary.



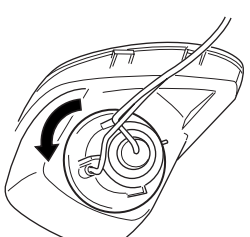
To adjust the beam up and down:
Turn the adjuster ① clockwise or counterclockwise.

To adjust the beam right and left:
Turn the adjuster ② clockwise or counterclockwise.

FRONT TURN SIGNAL LIGHT BULB REPLACEMENT
To replace the front turn signal light bulb, follow the procedure below:



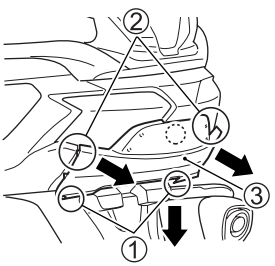
1. Remove the cap.
2. Remove the screw and take off the front turn signal assembly.



3. Turn the socket counterclockwise and remove it.
4. Push in on the bulb, twisting it to the left, and pull it out.

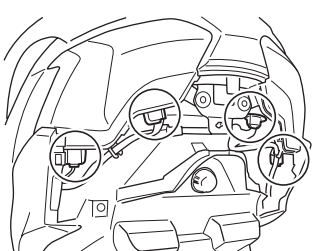
BRAKE LIGHT/TAILLIGHT, REAR TURN SIGNAL LIGHT AND LICENSE PLATE LIGHT BULB REPLACEMENT

To replace the brake light/taillight bulb, rear turn signal light bulb and license plate light bulb, follow the procedure below:

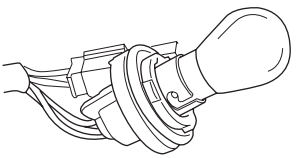


1. Remove the fasteners ①. Unhook the hooks ②. Pull the under frame cover ③ backward and remove it.

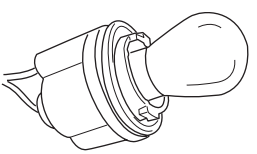
Brake Light/Taillight /Rear Turn Signal Light



2. Turn the socket counterclockwise and remove the socket.



Brake light/Taillight bulb

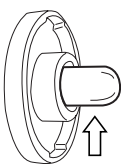


Rear turn signal light bulb

3. Turn the socket counterclockwise and remove the socket.
4. Push in on the burned-out bulb, turn it to the left, and pull it out.
5. To fit the replacement bulb, push it in and turn it to the right while pushing.

License Plate Light

2. Turn the license plate lens counterclockwise and remove it.



3. Pull off the bulb from the socket.

FUSES

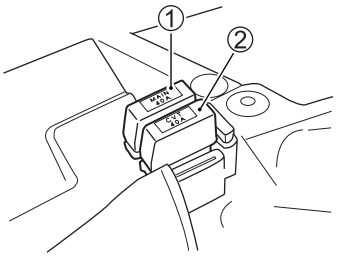
If something electrical on your motorcycle stops working, the first thing you should check for is a blown fuse. The electrical circuits on the motorcycle are protected from overload by fuses in the circuits.

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.

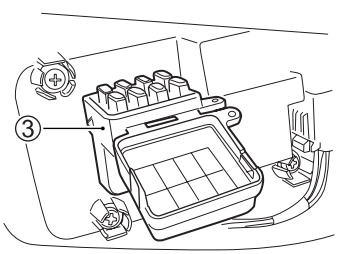
If the new fuse blows in a short time, the electrical problem may not be fixed. Have your motorcycle inspected immediately by your Suzuki dealer.



The fuses ① and ② are located under the seat.

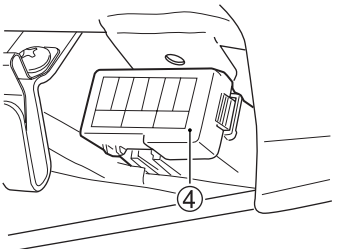
40A MAIN fuse ① protects all electrical circuits.

40A CVT fuse ② protects CVT circuits.



Fuse box ③ is located under the air cleaner maintenance lid. To access the fuse box, remove the lid by referring to the AIR CLEANER section.

Fuse box ③ has HEAD-HI, HEAD-LO, FUEL, ABS-V, ABS-M and FAN fuses.



Fuse box ④ is located under the seat.

Fuse box ④ has MIRROR, OUTLET, SCREEN, S-HEATER (AN650Z), IGNITION and SIGNAL fuses.

- 15A HEAD-HI fuse protects the headlight high beam and high beam indicator light.
- 15A HEAD-LO fuse protects the headlight low beam.
- 10A FUEL fuse protects the fuel pump, fuel injector, trunk box light and ECM.
- 10A IGNITION fuse protects the ignition coil, ECM, oxygen sensor, starter relay, side stand relay, fuel pump relay and immobilizer (if equipped).
- 15A SIGNAL fuse protects the horn, turn signal lights, stop light, taillight, cooling fan relay, solenoid, speedometer, ECM and position light.
- 15A FAN fuse protects the cooling fan motor.
- 15A OUTLET fuse protects the output terminal and grip heater (AN650Z).
- 15A ABS-V fuse protects the ABS controller.
- 20A ABS-M fuse protects the ABS controller.
- 3A MIRROR fuse protects the mirror motor.
- 20A SCREEN fuse protects the screen relay and screen.
- 5A SEAT HEATER fuse protects the seat heater. (AN650Z)

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.

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:

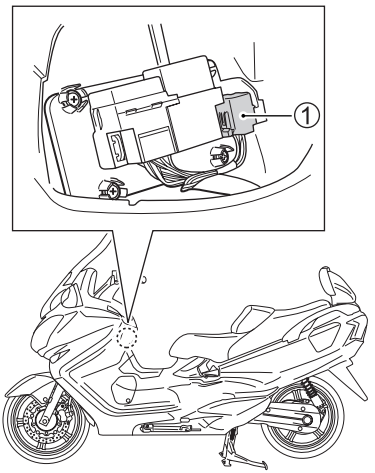
- **Maintain the engine in the proper operating condition.**
- **In the event of an engine malfunction, particularly one involving engine misfire or other apparent performance loss, stop riding the motorcycle and turn off the engine and have the motorcycle serviced promptly.**
- **Do not shut off the 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.**

⚠ 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.

DIAGNOSTIC CONNECTOR



Diagnostic connector ① is located under the air cleaner maintenance lid.

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

TROUBLESHOOTING

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.

IGNITION SYSTEM CHECK

1. Remove the spark plugs and reattach them to the spark plug leads.
2. While holding a spark plug firmly against the engine, crank the engine with the ignition switch in the "ON" position. If the ignition system is operating properly, a blue spark should jump across the spark plug gap. If there is no spark, consult your Suzuki dealer for repairs.

⚠ WARNING

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

STORAGE PROCEDURE AND MOTORCYCLE CLEANING

STORAGE PROCEDURE AND MOTORCYCLE CLEANING

STORAGE PROCEDURE

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

MOTORCYCLE

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

FUEL

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

BATTERY

1. Remove the battery from the motorcycle by referring to the BATTERY section.
2. Clean the outside of the battery with a mild detergent and remove any corrosion from the terminals and wiring harness connections.
3. Store the battery in a room above freezing.

TIRES

Inflate the tires to the normal specifications.

EXTERNAL

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

PROCEDURE DURING STORAGE

Once a month, recharge the battery with a specified charging rate (Ampere). Standard charging rate is 1.4A × 5 to 10 hours.

PROCEDURE FOR RETURNING TO SERVICE

- Clean the entire motorcycle.
- Reinstall the battery by referring to the BATTERY section.
- Adjust the pressure of tires as described in the TIRE section.
- Lubricate all places as instructed in this manual.
- Do the “INSPECTION BEFORE RIDING” as listed 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*
- *CVT cooling louver*
- *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 chamoise 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.

WINDSHIELD CLEANING

Clean the windshield with a soft cloth and warm water with a mild detergent. If scratched, polish with a commercially available plastic polish. Replace the windshield if it becomes scratched or discolored so as to obstruct view. When replacing the windshield, use a Suzuki replacement windshield.

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	2265 mm (89.2 in)
Overall width	810 mm (31.9 in)
Overall height	1420 mm (55.9 in)
Wheelbase	1585 mm (62.4 in)
Ground clearance	125 mm (4.9 in)
Seat height	755 mm (29.7 in)
	760 mm (29.9 in) ... AN650Z
Curb mass	275 kg (606 lbs)
	277 kg (611 lbs) ... AN650Z and Australia

ENGINE

Type	4-stroke, liquid-cooled, DOHC
Number of cylinders	2
Bore	75.5 mm (2.972 in)
Stroke	71.3 mm (2.807 in)
Displacement	638 cm^3 (38.9 cu. in)
Compression ratio	11.2 : 1
Fuel system	Fuel injection
Air cleaner	Non-woven fabric element
Starter system	Electric starter
Lubrication system	Wet sump

DRIVE TRAIN

Clutch	Wet multi-plate, automatic, centrifugal type
Primary reduction ratio	1.333 (88/66)
Gearshift pattern	Automatic and Manual shift
Automatic transmission ratio	Variable (1.800 – 0.465)
Secondary reduction ratio	3.934 (39/31 × 43/25 × 40/22)
Final reduction ratio	1.580 (32/31 × 31/32 × 34/31 × 49/34)
Drive system	Gear drive

CHASSIS

Front suspension	Telescopic, coil spring, oil damped
Rear suspension	Swingarm type, coil spring, oil damped
Front fork stroke	110 mm (4.3 in)
Rear wheel travel	100 mm (3.9 in)
Caster	25°25'
Trail	103 mm (4.06 in)
Steering angle	41° (right and left)
Turning radius	2.7 m (8.9 ft)
Front brake	Disk brake, twin
Rear brake	Disk brake
Front tire size	120/70R15M/C 56H, tubeless
Rear tire size	160/60R14M/C 65H, tubeless

ELECTRICAL

Ignition type	Electronic ignition (Transistorized)
Spark plug	NGK CR8E or DENSO U24ESR-N
Battery	12V 43.2 kC (12 Ah)/10HR
Generator	Three-phase A.C. Generator
Main fuse	40A
CVT fuse	40A
Fuse	15/15/10/10/15/15/15/15/20/3/20A 15/15/10/10/15/15/15/15/20/3/20/5A ... AN650Z
Headlight	12V 60/55W (H4) × 2
Position light	LED
Brake light/Taillight	12V 21/5W × 2
License plate light	12V 5W
Trunk box light	12V 5W
Turn signal light	12V 21W
Instrument panel light	LED
Coolant temperature indicator light	LED
Fuel injection indicator light	LED
Oil pressure indicator light	LED
Brake lock indicator light	LED
High beam indicator light	LED
Turn signal indicator light	LED
Freeze indicator light	LED
ABS indicator light	LED
Immobilizer indicator light (if equipped)	LED

CAPACITIES

Fuel tank	15.0 L (4.0/3.3 US/Imp. gal)
Engine oil, oil change	2600 ml (2.7/2.3 US/Imp. qt)
With filter change	2900 ml (3.1/2.6 US/Imp. qt)
Transmission oil, oil change	360 ml (12.2/12.7 US/Imp. oz)
Overhaul	400 ml (13.5/14.1 US/Imp. oz)
Final gear oil, oil change	300 ml (10.1/10.6 US/Imp. oz)
Overhaul	430 ml (14.5/15.1 US/Imp. oz)
Coolant	1600 ml (1.7/1.4 US/Imp. qt)

INDEX

ASAHI DENSO

6-2-1 Somejidai, Hamakita-ku, Hamamatsu, Shizuoka 434-0046, Japan

DECLARATION of CONFORMITY
For

CE0891

Product: Immobilizer
Model: SZ135

Supplied by
ASAHI DENSO CO., LTD.
6-2-1 Somejidai, Hamakita-ku,
Hamamatsu, Shizuoka, 434-0046 Japan

Technical Construction File held by
ASAHI DENSO CO., LTD.
6-2-1 Somejidai, Hamakita-ku,
Hamamatsu, Shizuoka, 434-0046 Japan

Notified Body - R&TTE Directive
TRaC Global
100 Frobisher Business Park, Leigh Sinton Road,
Malvern, Worcestershire, WR14 1BX, UK

Standard used for comply

R&TTE Directive (Article 3.1(a) Safety)	EN60065:2002+A1:2006+A.2:2010+(Incl.A12:2011)
R&TTE Directive (Article 3.1(b) EMC)	EN301-489-1 V1.8.1:2008 EN301-489-3 V1.4.1:2002
R&TTE Directive (Article 3.2 Spectrum)	EN 300 330-1 V1.7.1 : 2010-02 EN 300 330-2 V1.5.1 : 2010-02

Means of Conformity

We declare under our sole responsibility that the Product (s) is conformity with the essential requirements and other relevant requirements of the Radio and Telecommunication Terminal Equipment (R&TTE) Directive (1999/5/EC).

Date of issue: June 27, 2011

Signature of Responsible Person:

Michiyuki Suzuki
Section chief
Engineering Department

CE0891

Hereby, ASAHI DENSO CO., LTD, declares that this Immobilizer for Motor Cycle (SZ135) is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Hierbij verklaart ASAHI DENSO CO., LTD dat het toestel Immobilizer for Motor Cycle (SZ135) in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG

Bij deze verklaart ASAHI DENSO CO., LTD dat deze Immobilizer for Motor Cycle (SZ135) voldoet aan de essentiële eisen en aan de overige relevante bepalingen van Richtlijn 1999/5/EC.

Par la présente ASAHI DENSO CO., LTD déclare que l'appareil Immobilizer for Motor Cycle (SZ135) est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE

Par la présente, ASAHI DENSO CO., LTD déclare que ce Immobilizer for Motor Cycle (SZ135) est conforme aux exigences essentielles et aux autres dispositions de la directive 1999/5/CE qui lui sont applicables

Härmed intygar ASAHI DENSO CO., LTD att denna Immobilizer for Motor Cycle (SZ135) står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Undertegnede ASAHI DENSO CO., LTD erklærer herved, at følgende udstyr Immobilizer for Motor Cycle (SZ135) overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF

Hiermit erklärt ASAHI DENSO CO., LTD, dass sich dieser Immobilizer for Motor Cycle (SZ135) in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet". (BMWi)

Hiermit erklärt ASAHI DENSO CO , LTD die Übereinstimmung des Gerätes Immobilizer for Motor Cycle (SZ135) mit den grundlegenden Anforderungen und den anderen relevanten Festlegungen der Richtlinie 1999/5/EG. (Wien)

Con la presente ASAHI DENSO CO., LTD dichiara che questo Immobilizer for Motor Cycle (SZ135) è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

Por medio de la presente ASAHI DENSO CO., LTD declara que el Immobilizer for Motor Cycle (SZ135) cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE