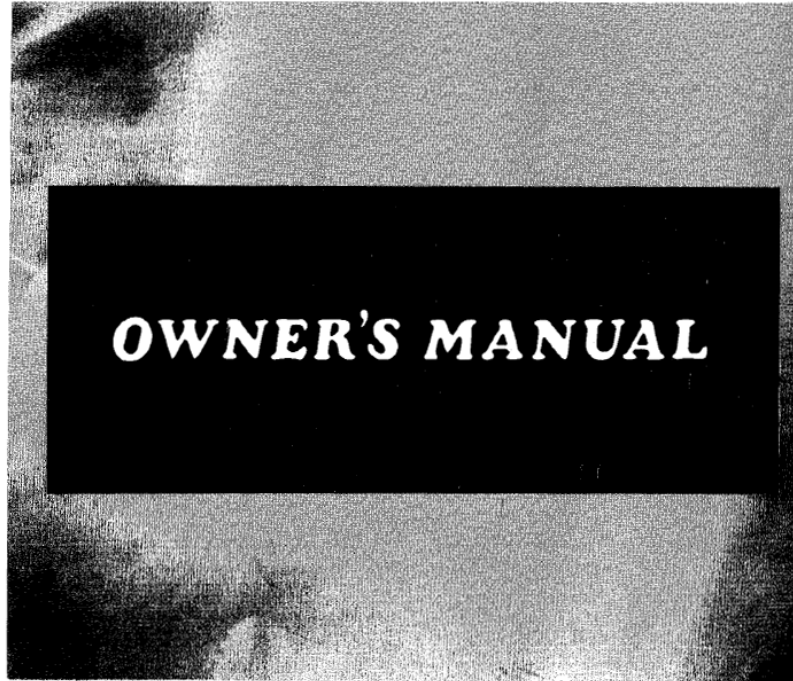


**SUZUKI**



**FA50**

## IMPORTANT

### BREAK-IN INFORMATION FOR YOUR MOTORCYCLE

The first 1 600 km (1 000 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" section for specific break-in recommendations.

### WARNING/CAUTION/NOTE

Please read this manual and follow its instructions carefully.

To emphasize special information the words WARNING, CAUTION and NOTE carry special meanings and should be carefully reviewed.

- WARNING** ..... The personal safety of the rider may be involved. Disregarding this information could result in injury to the rider.
- CAUTION** ..... These instructions point out special service procedures or precautions that must be followed to avoid damaging the machine.
- NOTE** ..... This provides special information to make maintenance easier or important instructions clearer.

This motorcycle is designed for operation by a solo rider only with a maximum weight of 85 kg (187 lbs).

## FOREWORD

*Thank you very much for choosing SUZUKI FA50 from among many others. This manual is specially intended for the riders of SUZUKI FA50.*

*Since almost all necessary instructions for the FA50 riding are here, please go through this manual before you rehearse riding, and familiarize yourself to the machine.*

*Avail yourself of SUZUKI dealer to perform inspections and maintenance of your machine to ensure safe riding. The dealer has a thorough knowledge of the maintenance standard of SUZUKI MOTOR CO., LTD.*

## SUZUKI MOTOR CO.,LTD.

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

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

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## CONSUMER INFORMATION

### 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. These precautions are:

**WARNING:**  
THIS MOTORCYCLE IS NOT EQUIPPED OR DESIGNED TO CARRY A PASSENGER.

### WEAR A HELMET

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

### RIDING APPAREL

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

### INSPECTION BEFORE RIDING

Review thoroughly the instructions in the "INSPECTION BEFORE RIDING" section of this manual. Do not forget to perform an 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 a non-traffic situation until you are thoroughly familiar with your machine and its controls. Remember practice makes perfect.

### KNOW YOUR LIMITS

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

### BE EXTRA SAFETY CONSCIOUS ON BAD WEATHER DAYS

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

### MOTORCYCLE SAFETY FOUNDATIONS "RIDING TIPS FOR THE MOTORCYCLIST" HANDBOOK

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

### TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED:

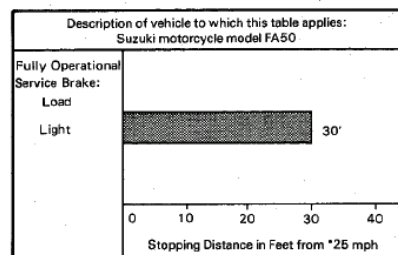
Federal law prohibits the following acts or the causing thereof: (1) the removal or rendering inoperative by any person other than for purposes of maintenance, repair, or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale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

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

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

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

### VEHICLE STOPPING DISTANCE



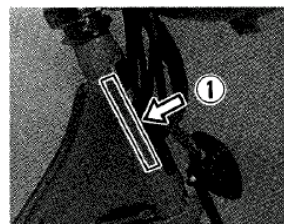
\* The maximum speed attainable by accelerating at maximum rate from a standing start for 1 mile.

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

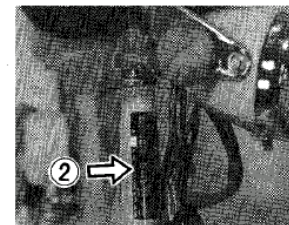
The information presented represents results obtainable by skilled drivers under controlled road and vehicle conditions, and the information may not be correct under other conditions.

### SERIAL NUMBER LOCATION

The frame and/or engine serial numbers are used to register the motorcycle. They are also used to assist your dealer when ordering parts or referring to special service information.

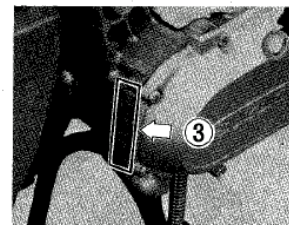


① Frame number



② I.D. plate

The frame number is stamped on the steering head tube ① and I.D. plate ②.



③ Engine number

The engine serial number ③ is stamped on the left side of the crankcase assembly.

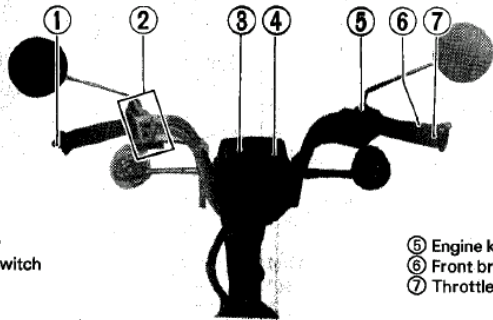
Please write down the serial numbers here for your future reference.

Frame No.:

Engine No.:

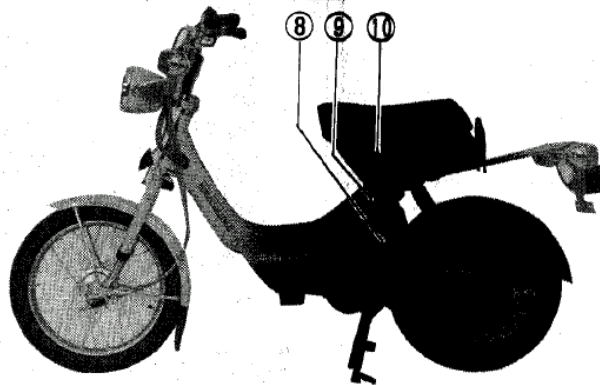


## LOCATION OF PARTS



- ① Rear brake lever
- ② Left handlebar switch
- ③ Speedometer
- ④ Ignition switch

- ⑤ Engine kill switch
- ⑥ Front brake lever
- ⑦ Throttle grip

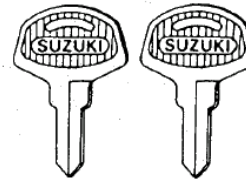


- ⑧ Kickstarter lever
- ⑨ Fuelcock

- ⑩ Engine oil gauge
- ⑪ Center stand

## CONTROLS

### KEY



This motorcycle comes equipped with two identical keys. Keep the spare key in a safe place. Your motorcycle ignition keys are stamped with an identifying number. This number is used when making replacement keys.

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

Key No.:

### IGNITION SWITCH

The ignition switch has two positions.



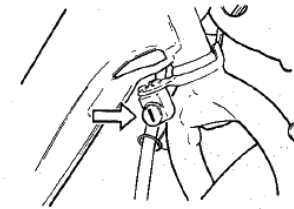
#### "OFF" POSITION

All electrical circuits are cut off.

#### "ON" POSITION

The ignition circuit is completed and the engine can now be started. The taillight will be lit when the ignition switch is in this position. The headlight will be lit when the engine starts and will remain lit as long as the engine is operating. The key cannot be removed from the ignition switch.

## STEERING LOCK

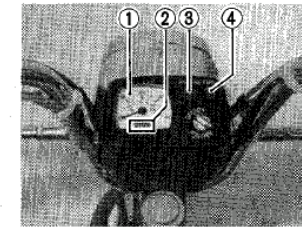


To lock the steering, turn the steering handlebar all the way to the left, insert the ignition switch key in the steering lock and turn it clockwise and pull it out. Do not forget to lock the steering when parking the motorcycle.

### WARNING:

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

## INSTRUMENT PANEL



### SPEEDOMETER ①

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

### ODOMETER ②

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

### HIGH BEAM INDICATOR LIGHT ③

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

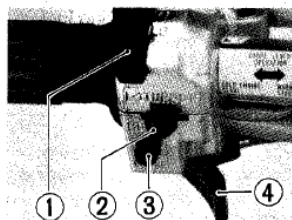
### TURN SIGNAL INDICATOR LIGHT ④

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

#### CAUTION:

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

### LEFT HANDLEBAR



### DIMMER SWITCH ①

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

### TURN SIGNAL SWITCH ②

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

#### WARNING:

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

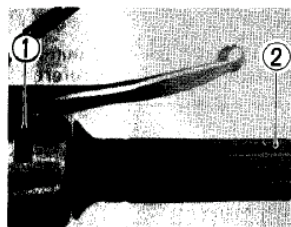
### HORN BUTTON ③

Press the button to operate the horn.

### CARBURETOR CHOKE LEVER ④

The carburetor of this motorcycle is equipped with a "choke" system to provide easy starting. When starting a cold engine, turn the choke lever all the way to the left. Immediately after the engine starts, return the choke lever halfway and let the engine run until the engine sufficiently warms up, thereafter turn the choke lever back to its normal disengaged position. The choke system will operate only when the throttle is in the closed position as opening the throttle will bypass the choke system. When the engine is warm, the choke system does not need to be used for starting.

### RIGHT HANDLEBAR



### ENGINE KILL SWITCH ①

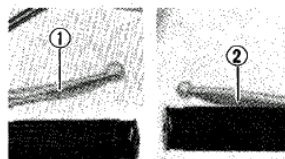
The engine kill switch is located on the top of the right handlebar grip switch housing. This is a "rocker" style switch which pivots in the center.

In the "RUN" position the ignition circuit is on and the engine will operate. The switch is intended primarily as a safety or emergency switch.

### THROTTLE GRIP ②

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

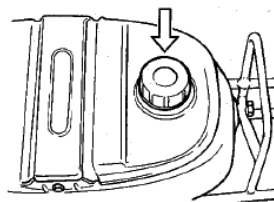
### BRAKE LEVERS



- ① Front brake lever
- ② Rear brake lever

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

### FUEL TANK CAP



The fuel tank cap is located under the seat. To open the fuel tank cap, turn it counterclockwise. To close the cap, turn it clockwise.

#### WARNING:

- Do not overfill the fuel tank. Avoid spilling fuel on the hot engine.
- When refueling, always shut the engine off and turn the ignition key to the "OFF" position. Never refuel near an open flame.

#### CAUTION:

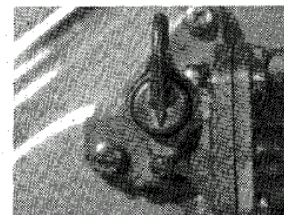
Take care not to spill gasoline during refueling. Some types of gasoline can cause paint damage. Such damage may not be covered under the limited warranty.

### FUELCOCK

This motorcycle is equipped with an automatic type, diaphragm style fuelcock. There are three positions in the fuelcock: "ON," "RESERVE" and "PRIME."



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

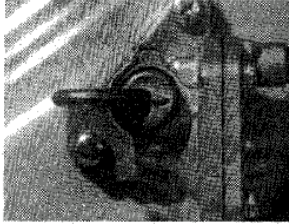


"RESERVE"

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

RESERVE FUEL SUPPLY: 0.4 L  
(0.4 US qt)





#### "PRIME"

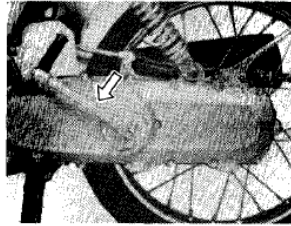
If the motorcycle has been stored for an extended period, there may not be any gasoline in the carburetor. In this instance the fuelcock should be moved to the "PRIME" position. This will allow the fuel to flow directly into the carburetor even though the engine is not operating. Upon starting the engine, be sure to return the fuelcock to the "ON" position or, if necessary, to the "RESERVE" position.

#### CAUTION:

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

*NOTE: After switching the fuel tank supply to the "RESERVE" position, it is advisable that the fuel tank be refilled at the closest gas station. After refueling, be sure to move the fuelcock lever to the "ON" position.*

#### KICK STARTER LEVER



This motorcycle is equipped with a kick starter located on the left side of the engine. To start the engine pull the front brake lever towards the grip and depress the kick starter lever forcefully.

#### WARNING:

After starting the engine, check that the kick starter lever is returned to its normal upright position.

## FUEL AND OIL RECOMMENDATION

### FUEL

SUZUKI recommends that you use unleaded gasoline containing no alcohol, with at least 85 pump octane ( $\frac{R+M}{2}$  method). Regular leaded gasoline containing no alcohol may also be used.

*NOTE: Unleaded gasoline will extend spark plug life.*

Blends of unleaded gasoline and ethanol (grain alcohol), also known as gasohol, are commercially available in some areas. These blends may be used, provided they contain no more than 5% ethanol. Be sure the gasoline-ethanol blend you use has at least 85 pump octane, as recommended for unleaded gasoline without any alcohol.

DO NOT USE GASOLINES CONTAINING METHANOL (methyl or wood alcohol), even if they contain cosolvents and corrosion inhibitors for methanol. Fuel system damage and performance problems resulting from the use of such fuels are not the responsibility of SUZUKI and may not be covered under the limited warranty.

In some states, fuel suppliers are required to label pumps which dispense gasoline/alcohol blends containing certain percentages of alcohol. Such labels may provide enough information for you to determine if the fuel is appropriate. In other states, pumps may not be clearly labeled as to the content or type of alcohol. If you are not sure about the content or type of alcohol in the fuel you buy, check with the service station operator.

### ENGINE OIL



Use SUZUKI CCI SUPER 2-CYCLE MOTOR LUBRICANT or an equivalent good quality synthetic based 2-cycle oil.

## BREAK-IN

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

### MAXIMUM THROTTLE OPERATION RECOMMENDATIONS

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

Initial	1 600 km (1 000 miles)	Below 4/5 throttle
---------	---------------------------	--------------------

### VARY THE ENGINE SPEED

The engine speed should be varied and not held at a constant speed. This allows the parts to be "loaded" with pressure, and then unloaded, allowing the parts to cool. This aids the mating process of the parts.

It is essential that some stress be placed on the engine components during break-in to ensure this mating process. Do not, though, apply excessive load on the engine.

### AVOID CONSTANT LOW SPEED

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

### CAUTION:

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

## INSPECTION BEFORE RIDING

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

WHAT TO CHECK	CHECK FOR:
Steering	1) Smoothness 2) No restriction of movement 3) No play or looseness
Brakes	1) Correct pedal and lever play 2) No dragging
Tires	1) Correct pressure 2) Adequate tread depth 3) No cracks or cuts
Fuel	Enough fuel for the planned distance of operation
Lighting	Operation of all lights — HEAD-LIGHT, TAILLIGHT, BRAKE LIGHT, TURN SIGNALS
Indicator lights	High beam, Turn signal
Horn and Kill switch	Correct function
Engine oil	Enough level
Transmission oil	Correct level
Throttle	1) Correct play in the throttle cable 2) Smooth operation and positive return of the throttle grip to the closed position

## RIDING TIPS

### WARNING:

- (1) If this is the first time that you have ridden a machine of this type, we suggest that you practice on a non-public road to become thoroughly familiar with the controls and operation of the motorcycle.
- (2) One-hand riding is extremely dangerous. Keep both hands firmly on the handlebars and both feet securely on the footrests. Under no circumstances should both hands be removed from the handlebars.
- (3) Don't brake hard in the midst of cornering. Slow down to a safe speed before negotiating a corner.
- (4) When the road surface is wet or slushy, there is a reduction in tire traction. You should reduce speed whenever these conditions exist as braking and cornering ability are reduced.
- (5) At side winds which may be experienced at the exits of tunnels, when passing by the cut of a hill, or when being overtaken by larger vehicles, you should reduce speed and ride alertly.
- (6) Obey the speed limit and traffic regulations at all times.

### STARTING THE ENGINE

#### WARNING:

Place the motorcycle on its center stand to prevent the motorcycle from moving forward when the engine is started.

#### When the engine is cold:

Turn the carburetor choke lever all the way to the left. Pull the rear brake lever towards the grip. Close the throttle completely. De-

press the kick starter lever forcefully and engine will start. Return the choke lever all the way back to its normal disengaged position approximately 30 seconds after the engine starts. In extremely cold weather it may be necessary to use the choke longer than 30 seconds.

#### When the engine is warm:

Pull the rear brake lever towards the grip. Open the throttle slightly and depress the kick starter lever forcefully. Operation of the carburetor choke system is usually not necessary when the engine is warm.

#### WARNING:

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

#### CAUTION:

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

### STARTING OFF

Twist the throttle grip toward you and the motorcycle will start moving forward.

#### WARNING:

Allow sufficient warm up time after cold engine starts up. If the center stand is released with the carburetor choke engaged, the motorcycle may start moving forward due to the engine's fast idle.

## STOPPING AND PARKING

- Twist the throttle grip away from yourself to close the throttle completely.
- Apply the front and rear brakes evenly and at the same time.

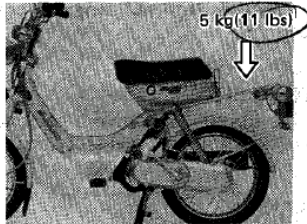
*NOTE: Inexperienced riders tend to use the rear brake only. This can lead to premature brake wear and excessive stopping distances.*

### WARNING:

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

- Select a level ground and place the motorcycle on its center stand.
- Turn the ignition key to the "OFF" position to stop the engine.
- Remove the ignition key from the switch.
- Turn the fuelcock lever to the "OFF" position.
- Lock the steering for security.

## LOADING



Do not load more than 5 kg (11 lbs) on the rear.

### WARNING:

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

## INSPECTION AND MAINTENANCE

### MAINTENANCE SCHEDULE

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

### WARNING:

Proper break-in maintenance (1 000 km or 600 miles) is a MANDATORY item for making certain that your machine is reliable and gives full performance at all times. Be sure that this periodic maintenance is performed thoroughly and in accordance with the instructions in this manual.

### CAUTION:

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

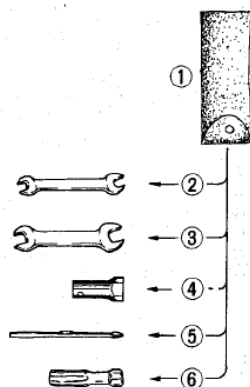
Interval This interval should be judged by odometer reading or months, whichever comes first.	mile	600	2 000	4 000
	km	1 000	3 000	6 000
	month	2	6	12
* Battery (Specific gravity of electrolyte)		I	I	I
* Cylinder head nuts & exhaust pipe bolts		T	T	T
Spark plug		C	C & A	R
* Fuel line	Replace every 4 years.			
Air cleaner		—	C	C
Cables; throttle		A	A	A
Transmission oil		R	R	R
Carburetor idle rpm		A	A	A
Brakes		A	A	A
Tires		I	I	I
* Steering		I	I	I
* Chassis bolts & nuts		T	T	T

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



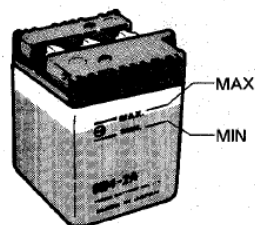
## TOOLS

To assist you in the performance of periodic maintenance, an OPTIONAL TOOL KIT is available through your SUZUKI dealer. The tool kit consists of the following items.



Ref. No.	Item
①	Tool Bag
②	10 x 12 mm Open End Wrench
③	14 x 17 mm Open End Wrench
④	Spark Plug Wrench
⑤	Combination Screwdriver
⑥	Screwdriver Handle

## BATTERY



The battery is located under the seat. The solution level must be kept between the MAX line and the MIN line at all times. If the solution level is below the MIN line, add ONLY distilled water up to the MAX limit line. NEVER use tap water.

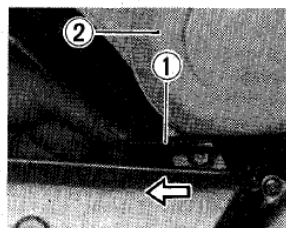
### CAUTION:

- Once the battery has been initially serviced, NEVER add diluted sulphuric acid.
- Do not bend, obstruct or change the routing of the air vent tube from the battery. Make certain that the vent tube is firmly attached to the battery vent fitting and that the opposite end is always open. Route the battery vent tube and located the battery properly.
- When attaching the wiring harness battery leads to the battery terminals, observe the correct polarity. The red lead must go to the (+) positive terminal and the black (or black with white tracer) lead must go to the (-) negative terminal. Reversing these connections will damage the charging system and the battery.

*NOTE: Check the specific gravity of the battery's cells with a battery hydrometer. This will determine the exact condition of each of the three cells.*

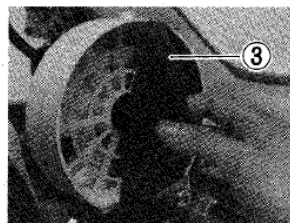
## AIR CLEANER

The air cleaner element used in this motorcycle is a polyurethane foam element. If the element has become clogged with dust, intake resistance will increase with a resultant decrease in power output and an increase in fuel consumption due to the richer mixture. Check and clean the air cleaner according to the following procedure.



① Fixing slipper  
② Air cleaner case cover

- (1) Remove the fixing slipper from the air cleaner case.
- (2) Remove the air cleaner case cover.

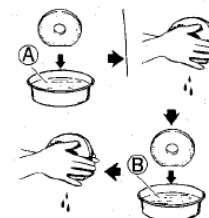


③ Polyurethane foam element

- (3) Take off the polyurethane foam element.

## WASHING THE ELEMENT

Wash the element as follows:



Ⓐ Non-flammable cleaning solvent  
Ⓑ Motor oil

- (1) Fill a washing pan of a proper size with non-flammable cleaning solvent. Immerse the element in the solvent and wash it clean.
- (2) Squeeze the solvent off the washed element by pressing it between the palms of both hands. Do not twist and wring the element or it will develop fissure.
- (3) Immerse the element in a pool of motor oil and squeeze the oil off the element to make it slightly wet with the oil.

### CAUTION:

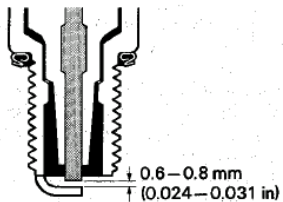
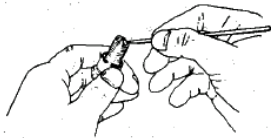
Before and during the cleaning operation, carefully examine the element for any tears in the material. A torn element must be replaced with a new one.

- (4) Reinstall the cleaned element in reverse order of removal. Be absolutely sure that the element is securely in position and is sealing properly.

### CAUTION:

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

## SPARK PLUG



Remove the carbon deposits from the spark plug with a small wire brush or a spark plug cleaning machine. Readjust the spark plug gap to 0.6–0.8 mm (0.024–0.031 in) by using a spark plug gap thickness gauge.

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

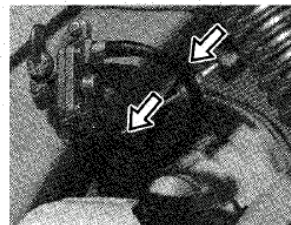
## Plug replacement guide

NGK	NIPPON DENSO	REMARKS
BP2HA	W9FP-UL	If the standard plug is apt to get wet, replace it with this plug.
BP4HA	W14FP-UL	Standard
BP5HA	W16FP-UL	If the standard plug is apt to overheat, replace it with this plug.

*AUTOLITE 275*  
**CAUTION: CHAMPION 929**

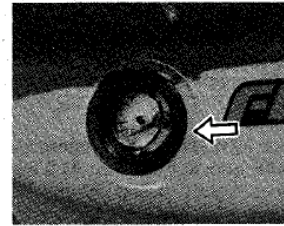
- The standard spark plug for this motorcycle has been carefully selected to meet the vast majority of all operational ranges. If the spark plug color indicates that other than a standard spark plug be used, it is best to consult your Suzuki dealer before changing to a different heat range spark plug. The selection of an improper spark plug can lead to severe engine damage.
- Do not overtorque or cross thread the spark plug or the aluminum threads of the cylinder head will be damaged. Do not allow contaminants to enter the engine through the spark plug hole when the plug is removed.

## FUEL LINE



Replace the fuel line every 4 years.

## ENGINE OIL GAUGE

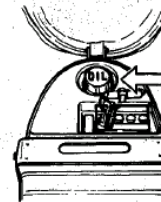


Be sure to check the oil level in the oil tank before starting engine. The "E" mark indicates the tank is empty or nearly so. The "F" mark indicates the engine oil tank is full. If the oil level is found below the "E" mark replenish the oil tank with the recommended oil. The oil tank holds 0.7 L (0.7 US qt) of oil.

### CAUTION:

A burnt engine is usually a result of engine starting with no oil in the oil tank. Check the oil level before starting and avoid costly damage.

## ENGINE OIL TANK CAP

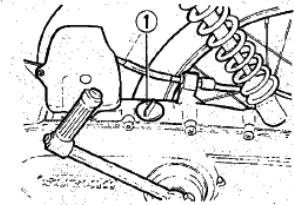


To open the engine oil tank cap, turn the cap counterclockwise and remove it. To install the cap, turn it clockwise.

Engine oil tank capacity: 0.7 L (0.7 US qt)

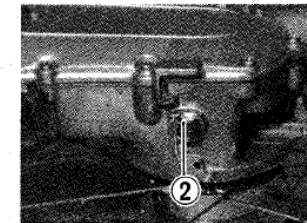
## TRANSMISSION OIL

Oil in the transmission deteriorates and its lubricating performance decreases if it is used too long.



① Oil filler cap

- (1) Place the motorcycle on the center stand.
- (2) Remove the oil filler cap and the oil drain plug located on the bottom of the engine and drain all the used oil. To accomplish this completely and quickly, drain the used oil while the engine is warm and the viscosity is low.



② Drain plug

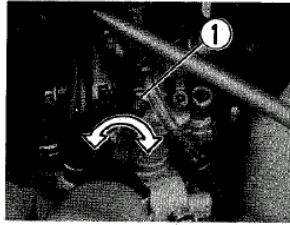
- (3) Reinstall the drain plug. Be sure to fit the gasket when refitting the drain plug.
- (4) Measure 500 ml (1.06 US pt) of SAE 20W/40 multi-grade motor oil and pour it into the transmission slowly.
- (5) Refit the oil filler cap.

## CARBURETOR

The carburetor is pre-set at the factory for proper carburetion. Do not tamper with the mixture adjustments.

Two adjustments are required: engine idle speed and throttle cable play.

## ENGINE IDLE SPEED ADJUSTMENT



① Throttle stop screw

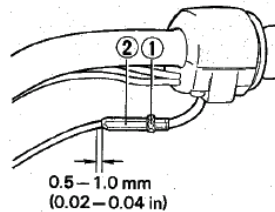
- (1) Start up the engine and warm it up.
- (2) After engine warms up, turn the throttle stop screw in or out so that engine may run at 1 350–1 650 r/min.

**NOTE:** If you have a tachometer, you can do this adjustment by referring to the procedures described above.

### CAUTION:

The engine idle speed should be adjusted after the engine warms up.

## THROTTLE CABLE ADJUSTMENT



- ① Lock nut  
② Adjuster

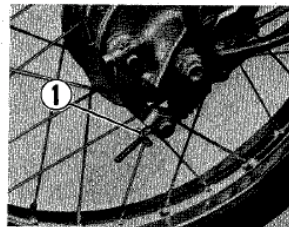
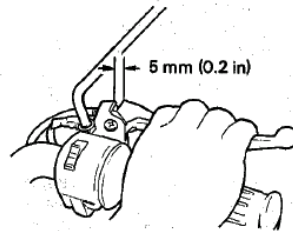
- (1) Loosen the lock nut.
- (2) Adjust the cable slack by turning adjuster in or out to obtain the correct slack of 0.5–1.0 mm (0.02–0.04 in).
- (3) After adjusting the slack, tighten the lock nut.

## BRAKES

**WARNING:**  
Brakes are items of personal safety and should always be maintained in proper adjustment.

The brake lever play as measured at the lever holder should be 5 mm (0.2 in) when the lever is lightly pulled in towards the grip. Check the play every time before riding and adjust it if necessary, as follows:

## FRONT BRAKE ADJUSTMENT

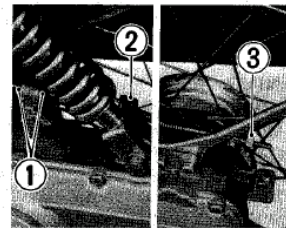
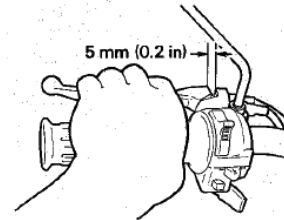


① Front brake adjusting nut

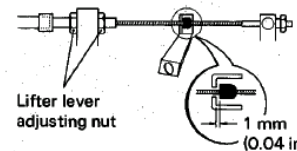
- (1) Turn the front brake adjusting nut clockwise or counterclockwise to obtain the specified play. Turning the adjusting nut clockwise will decrease the play.

- (2) After adjusting the play, check that there is no dragging when turning the front wheel with the wheel off the ground and that there is enough clearance between the front brake lever and throttle grip when the lever is tightly squeezed.

## REAR BRAKE ADJUSTMENT



- ① Lifter lever adjusting nuts  
② Kick starter lifter lever  
③ Rear brake adjusting nut



- (1) The rear brake cable is linked to the kickstarter lifter lever, first adjust with the adjusting nut so that the lifter lever play is 1 mm (0.04 in).
- (2) Turn the rear brake adjusting nut clockwise or counterclockwise to obtain the specified play. Turning the adjusting nut clockwise will decrease the play.
- (3) After adjusting the play, check that there is no dragging when turning rear wheel with the wheel off the ground and that there is enough clearance between the rear brake lever and grip when the lever is tightly squeezed.

## BRAKE LINING WEAR LIMIT

This motorcycle is equipped with the brake lining wear limit indicators on front and rear brakes. To check wear of the brake lining, perform the following:

### Front brake

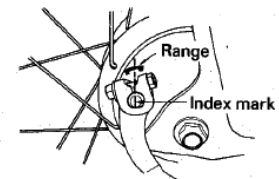


Fig. A The extension line of the index mark is within the range.

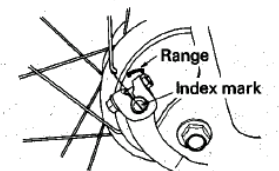


Fig. B The extension line of the index mark is out of the range.



- (1) Check if the brake system is properly adjusted.
- (2) While fully applying the brake, check to see that the extension line of the index mark is within the range on the brake panel as shown in the Fig. A.
- (3) If the extension line is beyond the range as shown in the Fig. B, have the brake shoe assembly replaced by your Suzuki dealer to insure safe operation.

#### Rear brake

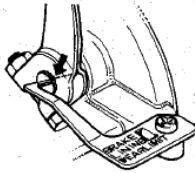


Fig. C Index mark is located behind the indicator.

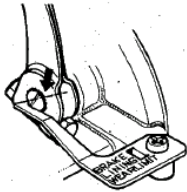


Fig. D Index mark is located forward the indicator.

- (1) Check if the brake system is properly adjusted.
- (2) While operating the brake, check if the index mark is located behind the indicator as shown in Fig. C.
- (3) If the index mark is located forward the indicator as shown in Fig. D, have the brake shoe assembly replaced by your SUZUKI dealer to insure safe operation.

#### TIRES

Check the tire inflation pressure and tire tread condition. For maximum safety and good tire life, the tire pressures should be inspected more often.

#### TIRE PRESSURE

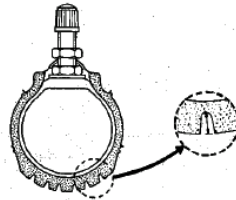
Insufficient air pressure in the tires not only hastens tire wear, but also seriously affects the stability of the motorcycle. Underinflated tires make smooth cornering difficult and overinflated tires decrease the amount of tire in contact with the ground which can lead to skids and loss of control. 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	FRONT	REAR
	150 kPa 1.50 kg/cm <sup>2</sup> 21 psi	200 kPa 2.00 kg/cm <sup>2</sup> 28 psi

#### WARNING:

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

#### TIRE TREAD CONDITION



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

#### WARNING:

The standard tire on your motorcycle is 2.25-14 4PR in front and rear. The use of a tire other than standard may cause trouble. It is highly recommended to use the standard tire supplied by SUZUKI.

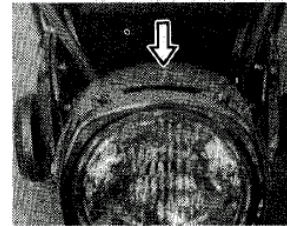
#### LIGHT BULB REPLACEMENT

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

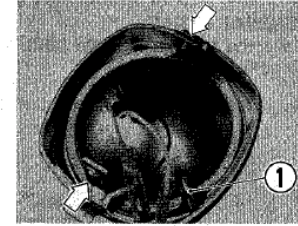
Headlight	6V 20/20W
Turn signal light	6V 17W (21 cp)
Tail/Brake light	6V 5.3/17W (3/21 cp)

#### HEADLIGHT

To remove the headlight perform the following steps:



- (1) Remove the screw from the outer headlight ring. Remove the headlight assembly.
- (2) Remove the headlight from the wiring harness connectors.



① Horizontal line adjusting screw

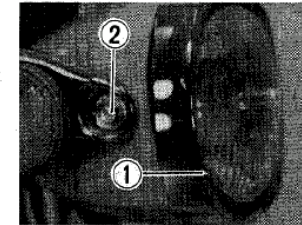
- (3) Remove the horizontal line adjusting screw and securing screws.
- (4) To reinstall the headlight assembly, simply reverse the above sequence listed.

#### WARNING:

After remounting the headlight assembly, be sure to check the headlight beam adjustment.

#### HEADLIGHT BEAM ADJUSTMENT

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



① Horizontal line adjusting screw  
② Headlight fitting bolt

#### To adjust the beam horizontally:

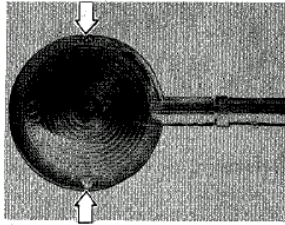
Turn the adjusting screw ① located on the right side of the headlight unit clockwise or counterclockwise.

#### To adjust the beam vertically:

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

### TURN SIGNAL LIGHT

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



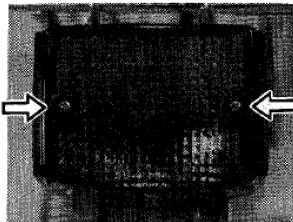
- (1) Remove the two screws and take off the lens.
- (2) Push in on the bulb, twisting it to the left, and pull it out.
- (3) To fit the replacement bulb, push it in and twist it to the right while pushing.

#### CAUTION:

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

### TAIL/BRAKE LIGHT

To replace the tail/brake light bulb, follow these directions:



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

#### CAUTION:

When replacing the lens, do not overtighten the two securing screws lest the lens should break.

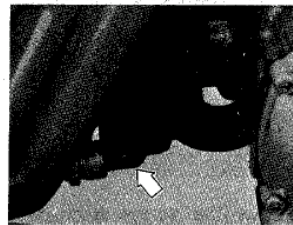
## TROUBLESHOOTING

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

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

#### WARNING:

Do not allow the fuel to spill, catch the fuel in a container. Do not allow any fuel to come in contact with the hot engine or exhaust system. Extinguish any smoking materials before performing this check, and stay away from any other fire or heat source.



- (1) Remove a spark plug and re-attach it to the spark plug lead.
- (2) While holding the spark plug firmly against the engine, crank the engine by the kick starter with the ignition switch in the "ON" position and the engine kill switch in the "RUN" position. If the ignition system is operating properly, a blue spark should jump across the spark plug gap. If there is no spark, consult your Suzuki dealer for repairs.

#### WARNING:

- Do not hold the spark plug close to the open spark plug hole in the cylinder head as gasoline vapor inside the cylinder could be ignited, creating a fire hazard.
- To reduce the chance of electrical shock, hold the metal shell of the spark plug against a metal portion of the engine. Due to the possibility of electrical shock, anyone with a heart condition or pacemaker should avoid this check.

### ENGINE STALLING

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

#### CAUTION:

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

## STORAGE PROCEDURES

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

### MOTORCYCLE

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

### FUEL

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

#### CAUTION:

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

### ENGINE

Drain the transmission oil thoroughly and refill the transmission with the fresh transmission oil all the way up to the filler hole.

### BATTERY

- Remove the battery from the motorcycle.

#### CAUTION:

Be sure to remove the negative terminal first, then remove the positive terminal.

- Clean the outside of the battery with a mild detergent and remove any corrosion from the terminals and wiring harness connections.
- Store the battery in a room above freezing.

## TIRE

Inflate the tires to the normal specifications.

## EXTERNAL

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

## PROCEDURE DURING STORAGE

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

## PROCEDURE FOR RETURNING TO SERVICE

- Clean the entire motorcycle.
- Remove the spark plug. Turn the engine a few times by depressing the kick starter lever. Reinstall the spark plug.
- Drain the transmission oil thoroughly. Fill the transmission with fresh oil as outlined in this manual.
- Reinstall the battery.

## CAUTION:

Make sure that the battery vent hose is routed properly.

- Lubricate all places as instructed in this manual.
- Do the "INSPECTION BEFORE RIDING" as listed in this manual.

## SPECIFICATIONS

### DIMENSIONS AND DRY MASS

Overall length	1 620 mm (63.8 in)
Overall width	670 mm (26.4 in)
Overall height	970 mm (38.2 in)
Wheelbase	1 040 mm (40.9 in)
Ground clearance	120 mm ( 4.7 in)
Dry mass	46 kg (101 lbs)

### ENGINE

Type	Two-stroke cycle, air-cooled
Intake system	Reed valve
Number of cylinder	1
Bore	41.0 mm (1.614 in)
Stroke	37.4 mm (1.472 in)
Piston displacement	49 cm <sup>3</sup> (3.0 cu. in)
Compression ratio	8.5 : 1
Carburetor	MIKUNI VM12SH, single
Air cleaner	Polyurethane foam element
Starter system	Primary kick
Lubrication system	SUZUKI "CCI"

### TRANSMISSION

Clutch	Wet shoe, automatic, centrifugal type
Transmission	1-speed
Gearshift pattern	Automatic type
Primary reduction	1.000
Final reduction	5.664
(Chain)	2.384 (31/13)
(Gear)	2.333 (56/24)
Drive chain	DAIDO D.I.D.270H, 64 links

### CHASSIS

Front suspension	Telescopic
Rear suspension	Swinging arm, oil dampened
Steering angle	45° (right and left)
Caster	65° 00'
Trail	70 mm (2.76 in)
Turning radius	1.4 m (4.6 ft)
Front brake	Internal expanding
Rear brake	Internal expanding
Front tyre size	2.25-14 4PR
Rear tyre size	2.25-14 4PR

### ELECTRICAL

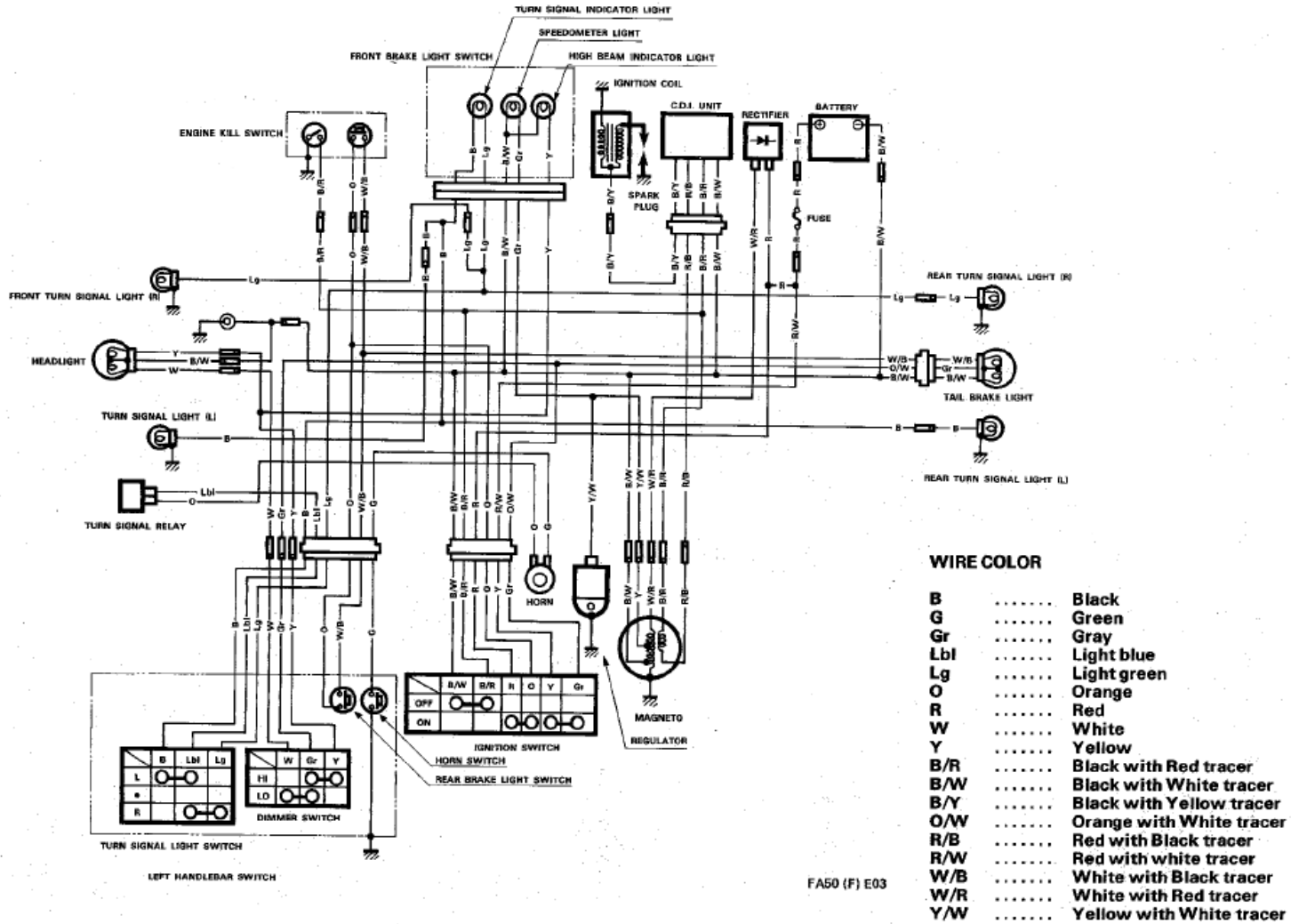
Ignition type	SUZUKI "PEI" (Pointless Electronic Ignition)
Ignition timing	25° B.T.D.C. at 4 000 r/min
Spark plug	NGK BP4HA or NIPPON DENSO, W14FP-UL
Battery	6V 7.2 kC (2 Ah)/10 H
Fuse	10A
Headlight	6V 20/20W
Tail/Brake light	6V 5.3/17W (3/21 cp)
Speedometer light	6V 1.5W
High beam indicator light	6V 1.7W
Turn signal indicator light	6V 17W (21 cp)

### CAPACITIES

Fuel tank including reserve	2.5 L (2.6 US qt)
reserve	0.4 L (0.4 US qt)
Engine oil tank	0.7 L (0.7 US qt)
Transmission oil	500 ml (1.06 US pt)



# WIRING DIAGRAM



FA50 (F) E03

Prepared by

**SUZUKI MOTOR CO.,LTD.**

Service Publications Department

Overseas Service Division

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