SUZUKI

OWNER'S MANUAL

RS250

FOREWORD

Congratulations on the purchase of your new RS model and thank you for selecting a Suzuki! We know that you are as excited about your new Suzuki as we are about your joining the team of satisfied Suzuki owners. We also want to ensure that your excitement grows and evolves into the satisfaction of owning the most carefully crafted and best performing motorcycle in its class.

While Suzuki has utilized only the finest materials, engineering and workmanship, your Suzuki still requires proper break-in and careful periodic maintenance to keep it in top, safe operating order. All of us at Suzuki wish you many miles of riding enjoyment with your new RS. To further enhance your RS satisfaction this comprehensive booklet was developed just for the RS buyer such as yourself. Many valuable tips and special instructions have been compiled into this booklet by Suzuki's off-road testing team. Please take the time to carefully review the important information contained in this booklet.

The new line of RS model Suzuki's were designed for the avid off-road riding enthusiast. RS motorcycles were developed with the same high engineering goals as were the RM and PE racing machines. Lessons learned from the development and successes of the RM and PE were used to develop and refine the design of the new RS models. While your RS has a racing heritage it is intended only for sport type riding and not for competition. While your RS will not be used for racing purposes the rigors of off road performance riding may approach the same levels of maintenance demands. Proper break-in and required maintenance are vital to the useful life of your RS model.

Most important are the guidelines to be followed during the break-in period. During the break-in period certain clearances adjustments and the tightness of fasteners will change and require servicing or inspection. It is vital that these services be done as required to ensure the reliability of your new RS and to help maintain its performance potential.

SUZUKI MOTOR CO.,LTD.

IMPORTANT NOTICE

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 reuslt 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 . . . . . .Special information to make maintenance easier or important instructions more clear.

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.

CONTENTS

FUEL

The RS250 is of the two-stroke design, which requires a premixture of gasoline and oil.
Premium gasoline should be used.

ENGINE OIL

SUZUKI strongly recommends the use of SUZUKI CCI SUPER 2-CYCLE MOTOR LUBRICANT.
If this oil is not available, use an equivalent high quality Two Cycle Racing Lubricant, at a 20 to one ratio only.

CAUTION: Do not allow two different brands to get mixed in the fuel-oil mixture.

MIXING RATIO

20 parts gasoline to 1 part oil is the correct gasoline to oil mixture ratio for your engine. For proper engine performance, it is essential that the above gas/oil mixture should be maintained.

CAUTION:
A mixture containing too little oil with cause overheating of the engine. Too much oil will cause excessive carbon formation resulting in preignition, fouled spark plug and loss of engine power.

FUEL OIL MIXTURE RATIO OF 20 : 1

GASOLINE (qt)	OIL (oz)	GASOLINE (qt)	OIL (oz)
0.5	0.8	5.5	8.8
1.0	1.6	6.0	9.6
1.5	2.4	6.5	10.4
2.0	3.2	7.0	11.2
2.5	4.0	7.5	12.0
3.0	4.8	8.0	12.8
3.5	5.6	8.5	13.6
4.0	6.4	9.0	14.4
4.5	7.2	9.5	15.2
5.0	8.0	10.0	16.0

GASOLINE L	OIL (ml)	GASOLINE L	OIL (ml)
0.5	25	5.5	275
1.0	50	6.0	300
1.5	75	6.5	325
2.0	100	7.0	350
2.5	125	7.5	375
3.0	150	8.0	400
3.5	175	8.5	425
4.0	200	9.0	450
4.5	225	9.5	475
5.0	250	10.0	500

MIXING PROCEDURE

To mix gasoline and oil, always use a separate, clean container. Pour the full amount of oil required for the total mixture into the container, add approximately half the amount of gasoline to be mixed and shake thoroughly. Add the remainder of the gasoline and again thoroughly agitate the container.

TRANSMISSION OIL

Use a good quality SAE 20W/40 multi-grade motor oil.

FRONT FORK OIL

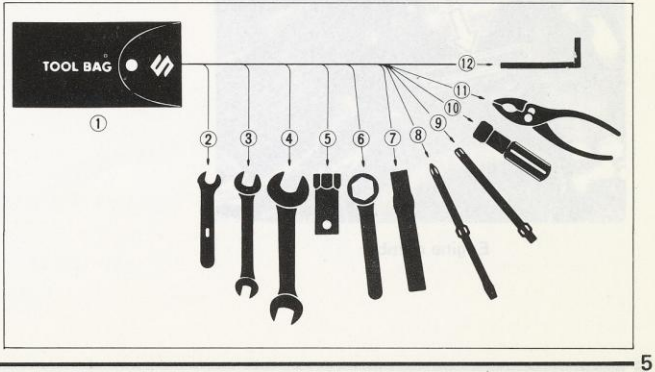
For the oils in the two legs, use a high quality fork oil of SAE 10.

USE OF GENUINE SUZUKI PARTS

To replace any part of the machine, use a genuine SUZUKI replacement part. Imitation parts or parts supplied from any other source than SUZUKI, if used to replace parts of SUZUKI origine in the machine, will lower the inherent capability of the machine and, for worse, could induce costly mechanical trouble.

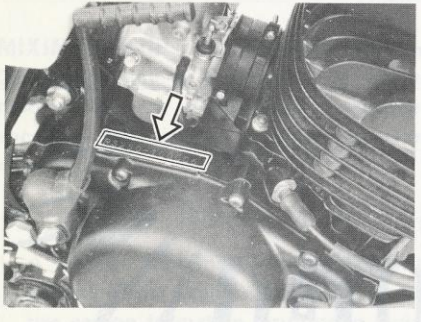
The tool kit supplied with the RS250 contains the following tools.

① Tool bag
② 8 mm Open end wrench
③ 10 x 12 mm Open end wrench
④ 14 x 17 mm Open end wrench
⑤ 21 mm Box wrench
⑥ 24 mm Offset wrench
⑦ Offset wrench handle
⑧ Combination screwdriver
⑨ Cross head screwdriver
⑩ Screwdriver handle
⑪ Pliers
⑫ 6 mm hexagon L type wrench



SERIAL NUMBER LOCATION

Frame number



Engine number

Frame serial number is stamped on steering head pipe. Engine serial number is located on the right crankcase.
When registering your machine and making orders for spare parts, cite these two numbers.

BREAK-IN PROCEDURE

Proper break-in of your new RS is essential to ensure maximum performance as well as exceptional reliability.

Suzuki Genuine Parts are manufactured from the finest materials to exacting tolerances. All parts are finished to such a fine tolerance that it is necessary and vital to allow the components to wear or "break-in" to each other before subjecting the engine to full throttle stresses. The ultimate performance and reliability of the entire motorcycle depends on proper restraint exercised during the break-in period.

The engine should have approximately 2 tanks of fuel burned as a guide to a reasonable break-in period. After 2 tanks of fuel consumption the engine may be subjected to full throttle operation for short periods of time.

The chassis and suspension components also require careful breaking in procedures. Most of the components will "seat" in during the first day's ride and must be checked approximately every 15 minutes. During the initial ride the following items should be inspected every 15 minutes and the necessary adjustment or tightening performed.

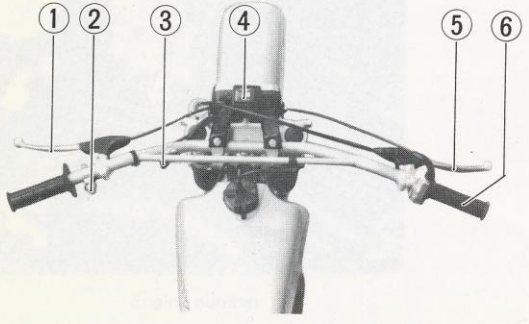
1. Spoke Tension
2. Chain Adjustment
3. Brake Adjustment
4. Rear Sprocket Bolt Tightness
5. All Nuts & Bolts Including
   Engine Mount Bolts
   Cylinder Head Bolts

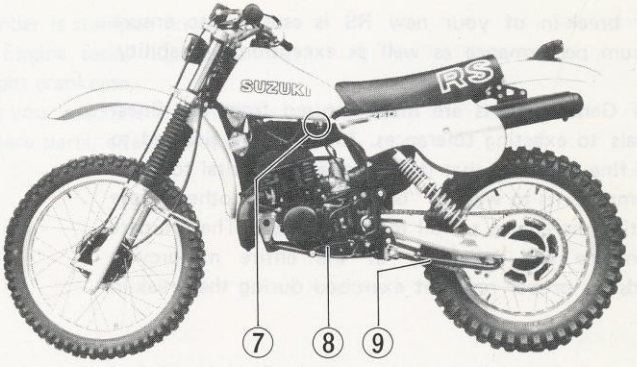
The items listed above are subject to severe stresses and do require special attention during the initial break-in. Continue to inspect these items every 15 minutes until you are satisfied that they may be inspected after each day's ride due to the "seating in" process being completed.

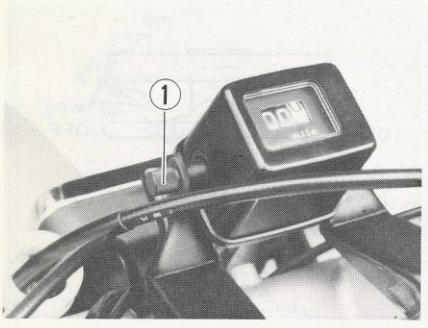
Take the time of familiarize yourself with the operating principles of the following motorcycle components.

LOCATION OF PARTS

① Clutch lever
② Engine stop switch
③ Dimmer switch
④ Trip meter
⑤ Front brake lever
⑥ Throttle grip
⑦ Fuelcock
⑧ Gearshift lever
⑨ Side stand
⑩ Kick starter lever
⑪ Rear brake lever



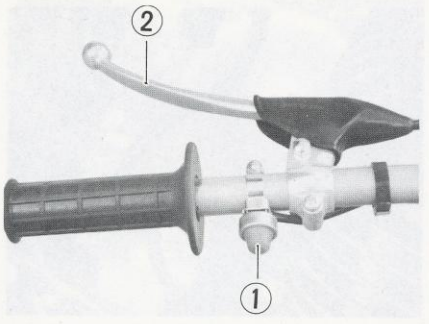




① Reset knob

TRIP METER

The trip meter can be used to indicate the distance traveled. Pulling and turn the knob clockwise or counterclockwise will turn the meter to zero. After resetting the meter, push back the knob.



① Engine stop switch
② Clutch lever

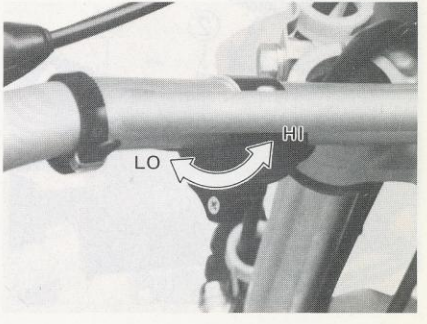
ENGINE STOP SWITCH

No ignition switch is provided. To start the engine, just depress the kick starter lever. To stop the engine, push the engine stop switch as shown in photo.

CLUTCH LEVER

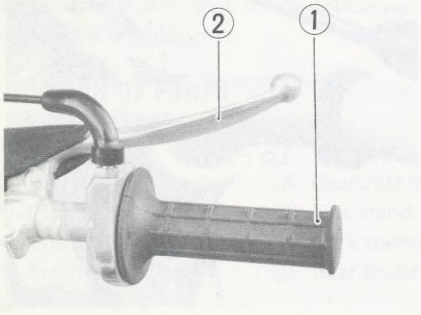
Clutch lever is used to interrupt the flow of drive from engine, so that transmission can be shifted.

Squeezing the lever disengages and releasing it engages the clutch.



DIMMER SWITCH

The headlight beam can be changed both downward and upward by operating the dimmer switch to the "LO" and "HI" positions.



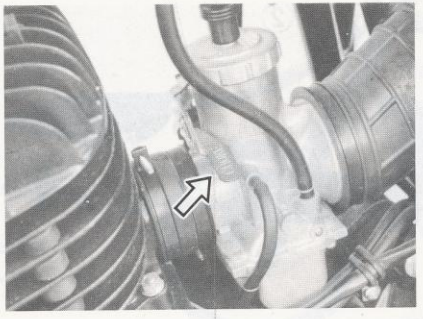
① Throttle grip
② Front brake lever

THROTTLE GRIP

Engine speed is controlled by the throttle grip. If the throttle grip is twisted inward toward you, engine speed rises.

FRONT BRAKE LEVER

Squeezing this lever brakes front wheel.



CARBURETOR CHOKE LEVER

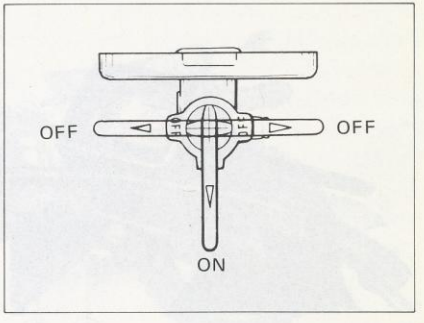
WHEN THE ENGINE IS COLD:

Push down the choke lever. Depress the kick starter lever without opening the throttle.

Even opening the throttle slightly may make the engine hard to start. Always return the choke lever to the original position when the engine warms up.

WHEN THE ENGINE IS WARM:

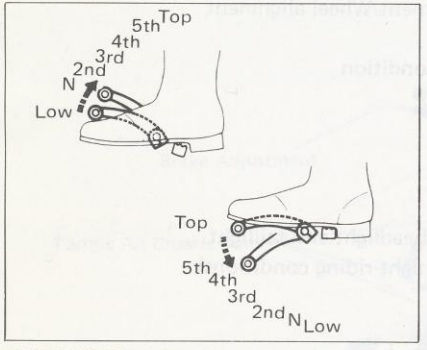
Using the choke knob is not necessary. To start a warm engine, open the throttle 1/8 to 1/4 and kick-start the engine.



FUELCOCK LEVER

The fuelcock lever has two positions, ON and OFF.

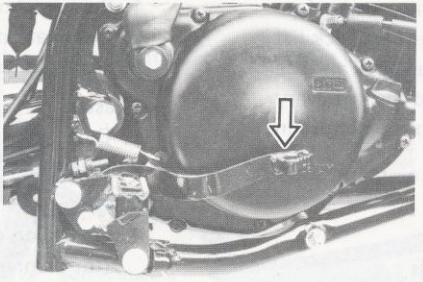
WARNING:
The fuelcock should be turned off whenever the motorcycle is stopped for any length of time.
This is especially important whenever the motorcycle is stopped.



GEARSHIFT LEVER

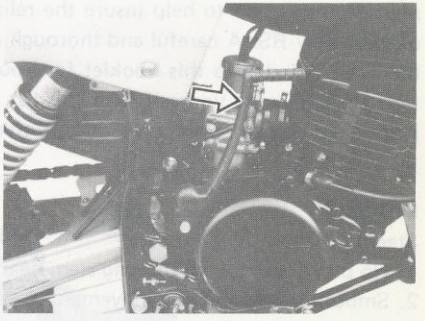
The RS250 is equipped with a 6-speed transmission which operates as shown in figure.

Neutral is located between low and 2nd. Low gear is located by fully depressing the lever from the neutral position. Shifting into succeedingly higher gears is accomplished by pulling up on the shift lever once for each gear. When shifting from low to 2nd, neutral is automatically missed. When neutral is wanted for stopping, depress or raise the lever a half of a stroke between low and 2nd.



REAR BRAKE PEDAL

Depressing this pedal brakes rear wheel.



KICK STARTER LEVER

The engine is started by kicking this lever. You need not shift the transmission to neutral before kicking: just squeeze the clutch lever if the transmission is on any gear.

WARNING:
After firing up the engine, be sure to return the kick starter lever to its normal position (shown in the photo).

PRE-RIDE INSPECTION

Proper, periodic maintenance is very important but so is a pre-ride inspection to help insure the reliability and safety of your new RS. A careful and thorough pre-ride check list has been included in this booklet for your usage. Take the time to familiarize yourself with this list and inspect every item listed below before each ride. (Refer to the picture in the next page.)

CHASSIS

Steering

1. No play/looseness in steering stem bearings
2. Smoothness of steering movement
3. No restriction of movement in either direction

Brakes

1. Proper pedal position and lever play
2. Firm feeling, no sponginess
3. Check operation
4. Inspect wear indicator position

Tires

1. Proper pressure
2. Tread condition
3. No cracks or cut areas
4. Rim lock tightness
5. Valve stem angle

***Wheels**

1. Spoke tightness
2. Axle nuts and cotter pins

***Drive Chain**

1. Proper adjustment/Wheel alignment
2. Lubrication
3. Guide roller condition

***Fasteners**

1. Cotter pins
2. Clevis pins

***Lighting**

1. Operation of headlight and taillight (for planned night riding conditions)

ENGINE

***Engine Stop Switch**

1. Operation
2. Position

***Throttle**

1. Automatic return to closed position
2. Smoothness of operation
3. Cable free play/routing

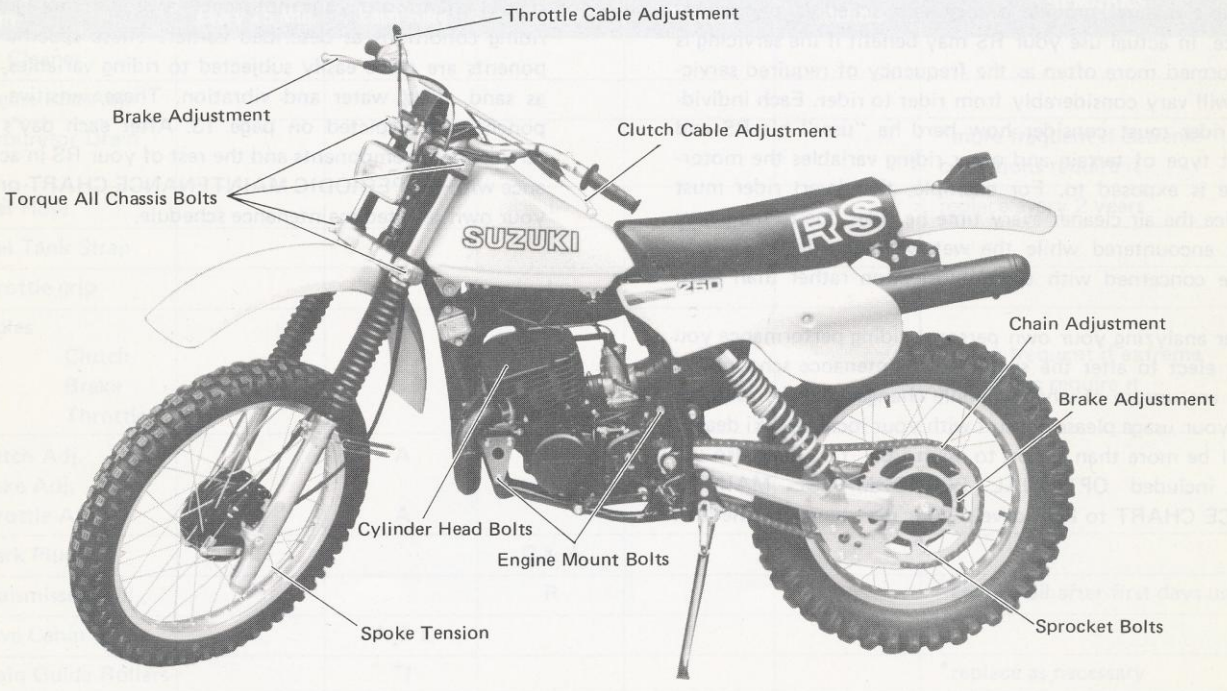
Clutch

1. Proper cable play/routing
2. Smooth engagement

***Fuel**

1. Adequate supply of fuel
2. Pre-mixed with 20:1 CCI Super 2 or equivalent lubricant

*Marked items should be inspected each time the rider has stopped to rest.


Throttle Cable Adjustment
Brake Adjustment
Clutch Cable Adjustment
Torque All Chassis Bolts
SUZUKI
RS
Chain Adjustment
Brake Adjustment
Cylinder Head Bolts
Engine Mount Bolts
Spoke Tension
Sprocket Bolts

PERIODIC MAINTENANCE

The periodic maintenance guidelines found in this RS owner's manual provide a *suggested* schedule of maintenance. In actual use your RS may benefit if the servicing is performed more often as the frequency of required servicing will vary considerably from rider to rider. Each individual rider must consider how hard he "uses" his RS and what type of terrain and other riding variables the motorcycle is exposed to. For example, the desert rider must service the air cleaner every time he rides due to the heavy dust encountered while the wet weather rider is perhaps more concerned with chain lubrication rather than dust.

After analyzing your own personal riding performance you may elect to alter the suggested maintenance schedule. If you are unsure of what schedule changes may be required for your usage please consult with your local Suzuki dealer. He'll be more than happy to assist you. You may also use the included OPTIONAL PERFORMANCE MAINTENACE CHART to help develp your maintenance schedule.

Certain components of your new RS will require extra, special sttention if your motorcycle is used in more adverse riding conditions as described earlier. These specific components are more easily subjected to riding variables, such as sand, dust, water and vibration. These sensitive components are depicted on page 13. After each day's ride, service these components and the rest of your RS in accordance with the PERIODIC MAINTENANCE CHART or with your own selected maintenance schedule.

PERIODIC MAINTENANCE SCHEDULE

Interval / Item	Break-In Every 15 Min	After Each Ride	Each Month	Three Months	Six Months	REMARKS
Air Cleaner		C				
Engine Idle Adj.		A				
Carburetor Drain		*C				*more frequent if extreme conditions require it
Fuel Hose			I			replace every 2 years
Fuel Tank Strap		I				
Throttle grip			L			
Cables Clutch Brake Throttle			 *L *L *L			 *more frequent if extreme conditions require it
Clutch Adj. Brake Adj. Throttle Adj	 A	A A				
Spark Plug			C & A		R	
Transmission Oil	*		R			*change oil after first days usage
Drive Cahin	I	A & L				
Chain Guide Rollers		*I				*replace as necessary

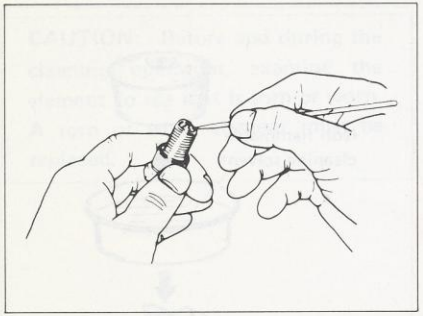
*See Remark Column at Right

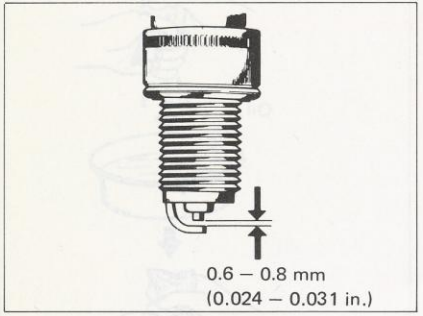
C = Clean A = Adjust R = Replace I = Inspect T = Tighten L = Lube

Item \ Interval	Break-In Every 15 Min	After Each Ride	Each Month	Three Months	Six Months	REMARKS
Brake Shoe			I			replace as necessary
Spokes	T	T				
Rear Sprocket Nuts	T	T				
Steering Stem		I & A		L		
Nuts & Bolts	*T	T				*tighten after initial ride
Engine Mount Bolts	T	T				
De-Carbonization				C		
Torque Head	*T		T			*tighten after initial ride
Fork Oil				R		
Chassis Lube						
Brake Pedal Pivot				*L		*more frequent if extreme conditions require it
Swing Arm Bearings				*L		*more frequent if extreme conditions require it
Full Floating Heim Joint			*L			*more frequent if extreme conditions require it
Brake Cam Lube			*L			*more frequent if extreme conditions require it
Tires		I				

*See Remark Column At Right

C = Clean A = Adjust R = Replace I = Inspect T = Tighten L = Lube





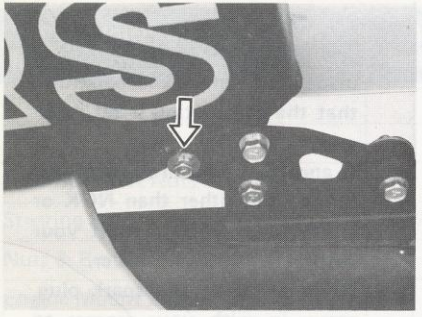
SPARK PLUG

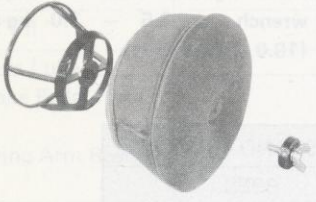
When carbon accumulates on the spark plug, a hot, strong spark will not be produced. Remove carbon deposists with a wire or pin and adjust the spark plug gap to 0.6 – 0.8 mm (0.024 – 0.031 in.) by measuring with a feeler gauge. Generally, when the spark plug heat range is correct, the plug electrode shows a light brown or tan color. Spark plug of a different heat may be chosen according to the following table.

CAUTION:

1. **The heat range selection may be made only under the condition that the carburetion is set properly.**
2. **If another brand of spark plug is to be used other than NGK or NIPPON DENSO, consult your authorized SUZUKI dealer.**
3. **When installing the spark plug, screw in with your fingers to prevent stripping the threads, then tighten with a torque wrench to 2.5 – 3.0 kg-m (18.0 – 22.0 lb-ft).**

	HOT TYPE	STANDARD TYPE
NGK	B8ES	B9ES
NIPPON DENSO	W24ES	W27ES





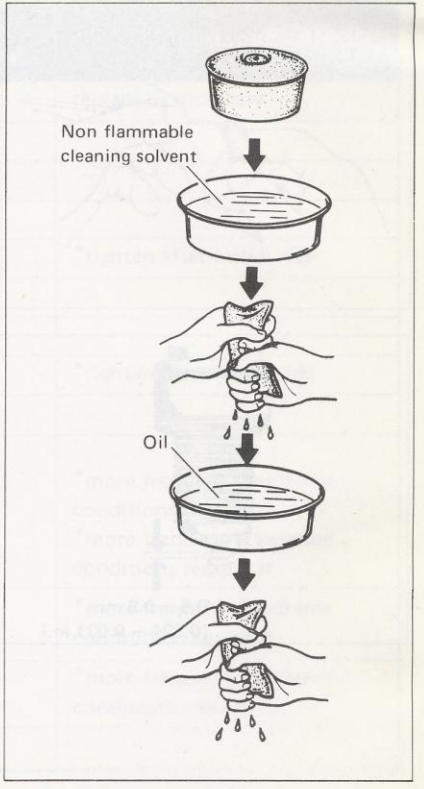
AIR CLEANER

A clogged air cleaner is often responsible for poor engine performance. Open the air cleaner and clean its element at regular intervals. Here's how to do this job:

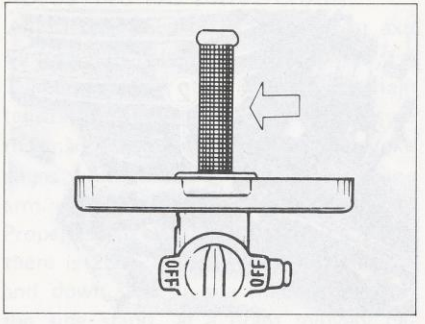
1. Remove the seat securing bolts from both sides.
2. Draw out the cleaner case cap.
3. Remove the bolt and draw out the element.

How to clean the element

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 hands: do not twist and wring the element, or it may be torn.
3. Immerse the element in a pool of motor oil, and squeeze the oil off the element to make it slightly wet with motor oil.



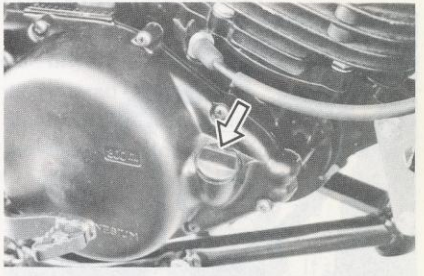
CAUTION: Before and during the cleaning operation, examine the element to see if it is torn or worn. A torn or worn element must be replaced.

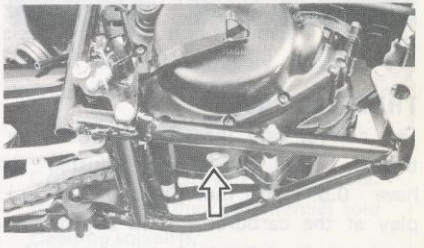


FUEL FILTER

The fuel filter is incorporated in the fuel cock which is mounted on the bottom of the fuel tank at the left side. Accumulation of dirt in the filter will restrict the flow of the fuel and cause the carburetor to malfunction, therefore, the fuel filter should be serviced periodically.

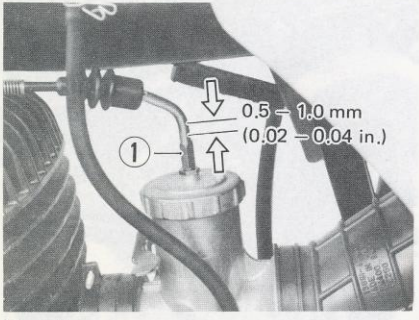
1. Drain the fuel from the fuel tank.
2. Remove the fuelcock by unscrewing the fitting screws.
3. Wash the screen filter in cleaning solvent.





TRANSMISSION OIL

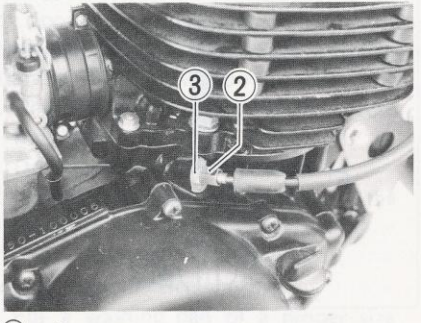
To change the transmission oil, remove the filler cap and drain plug and drain the oil. Install the drain plug and measure **800 ml (1.69 US pt)** of a good quality **SAE 20W/40** multigrade motor oil, then pour it into the transmission slowly.



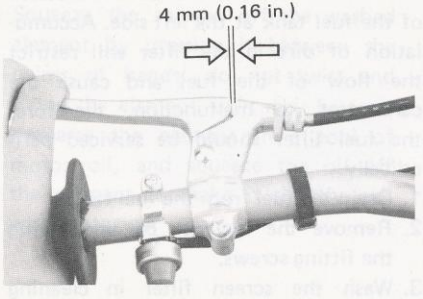
① Adjuster

THROTTLE CABLE

For correct safe throttle operation the throttle cable should be adjusted to have **0.5 – 1.0 mm (0.02 – 0.04 in.)** play at the carburetor. This adjustment can be made at the cable adjuster on the carburetor cap.



② Adjuster
③ Lock nut



CLUTCH

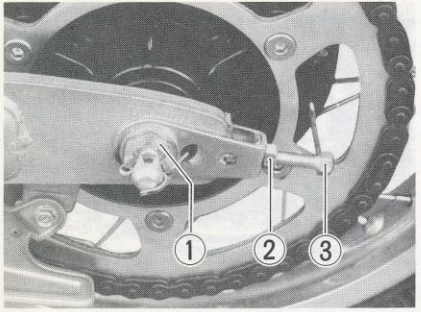
Adjust the clutch with the clutch cable adjuster by loosening lock nut. The play of the clutch cable should be **4 mm (0.16 in.)** measured at the clutch lever holder before pressure can be felt indicating disengagement of the clutch.

DRIVE CHAIN

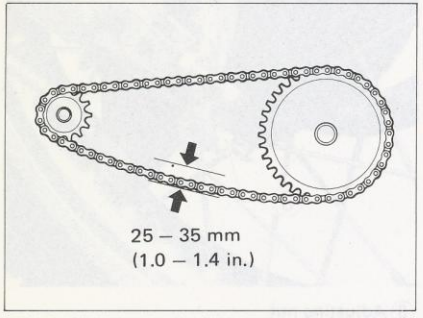
ADJUSTING THE DRIVE CHAIN:

Adjust the drive chain at the rear axle by loosening axle nut.

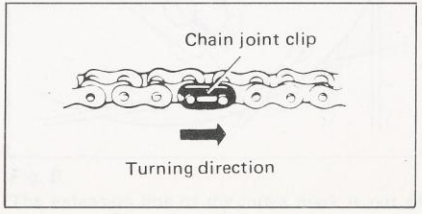
Then loosen lock nut and adjust the chain tension by turning bolt in or out. Be sure the marks stamped on the adjuster yoke aligns with the same mark on the swing arm on both sides of the motorcycle. Proper chain tension is obtained when there is **25 – 35 mm (1.0 – 1.4 in)** up and down slack in the chain with using the side stand, at a point midway between the sprockets.



① Axle nut ③ Adjusting bolt
② Lock nut



CAUTION: When refitting the drive chain, be sure the drive chain joint clip is attached in the way that the slit end will face opposite to the turning direction.



CLEANING THE CHAIN:

This motorcycle is equipped with a special drive chain which is constructed of the sintered metal.

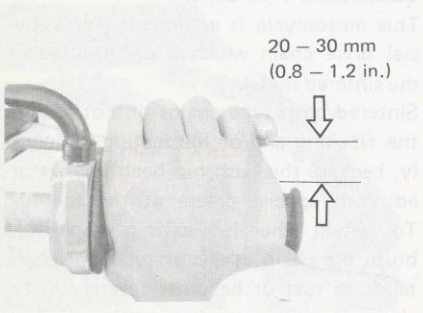
Sintered bush type chains do not require the cleaning and/or lubricating frequently, because the bush has been impregnated with special grease at the factory. To retain the lubrication, wipe and brush the chain as necessary. If the chain tends to rust or becomes severely dirty, clean it with non-flammable cleaning solvent. After thoroughly washing the chain and allowing it to dry, oil the links with a heavy weight gear oil SAE 90.

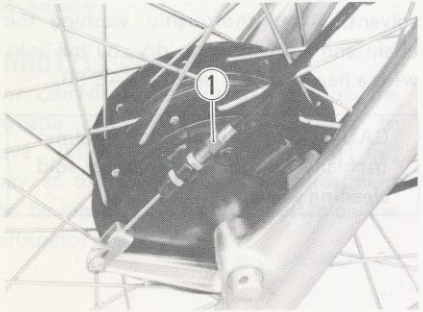
CAUTION: Do not use gasoline: trichlene or other commercial sold cleaning solvents.

FRONT BRAKE

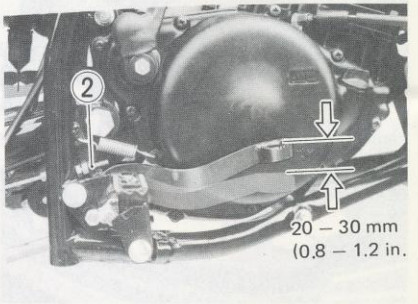
Measure the amount of the front brake lever distance between the brake lever end and throttle grip. The distance should be **20 – 30 mm (0.8 – 1.2 in.)**. If adjustment is necessary, turning the front brake adjuster in the counterclockwise direction will increase the distance. The lock nut must be loosened before adjusting.

CAUTION: Be sure to retighten the lock nut after performing the adjustment.

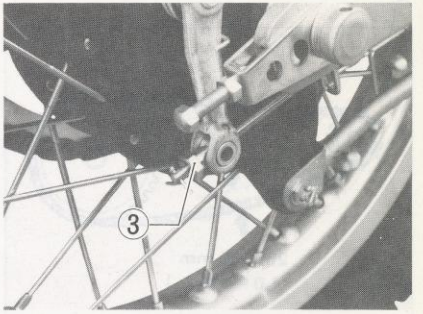




① Adjuster



② Pedal adjuster



③ Adjusting nut

REAR BRAKE

Before adjusting the brake pedal travel, adjust the brake pedal position with the brake pedal adjuster until the most suitable position is obtained for quick operation.

After adjustment of the brake pedal position completed, adjust the brake pedal travel with the brake adjusting nut to **20 – 30 mm (0.8 – 1.2 in.)**.

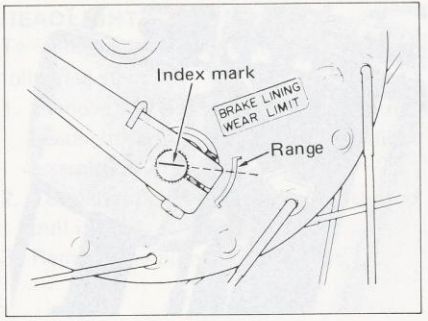


Fig. A
The extension line of the index mark is within the range.

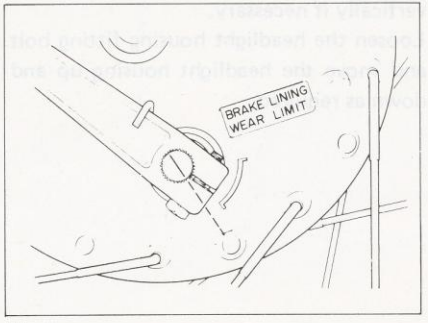


Fig. B
The extension line of the index mark is out of the range.

BRAKE LINING WEAR LIMIT INDICATOR

See Fig. A. You can easily check to see if brake linings are worn down to the limit or not on both front and rear brakes. Here's the procedure.

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

TIRE PRESSURE

Inflate the tires properly, depending on the weight of the rider. Too high an inflating pressure makes the machine bounce up and down; too low a pressure makes steering hard. In either case, tire life will be shortened.

Cold inflation tire pressure:

Front 1.0 kg/cm^2 (14 psi)
Rear 1.0 kg/cm^2 (14 psi)

Standard tire size:

Front 3.00-21 4PR, Full knobby
Rear 5.10-18 4PR, Full knobby

HEADLIGHT

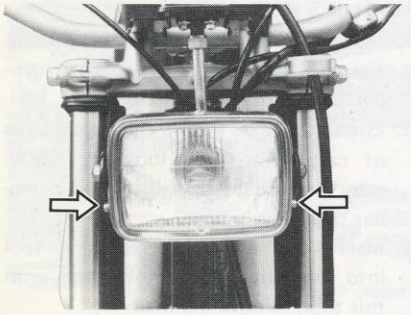
The headlight beam can be adjusted vertically if necessary.

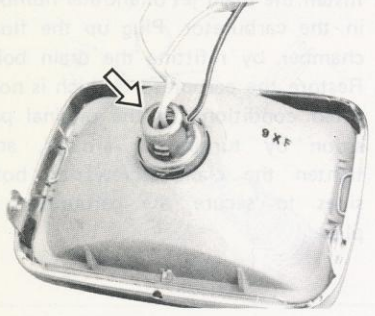
Loosen the headlight housing fitting bolt and move the headlight housing up and down as required.

LIGHT BULB REPLACEMENT

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

Headlight	6V 15/15W
Taillight	6V 5W

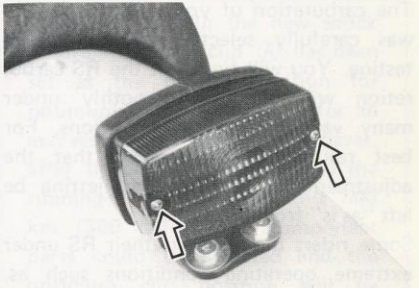




HEADLIGHT

To remove the headlight perform the following steps:

1. Remove the two screws from the outer headlight ring. Remove the headlight assembly.
2. Turn the socket counterclockwise, and pull it off.
3. Remove the bulb and replace it.



TAILLIGHT

To replace the taillight 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. To fit the replacement bulb into position, push bulb in firmly and twist it to the right while pushing in.

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

CARBURETOR

The carburetion of your new RS Suzuki was carefully selected after extensive testing. You will find that the RS carburetion will function smoothly under many varied operating conditions. For best results we recommend that the adjustments and carburetion jetting be left "as is" from the factory.

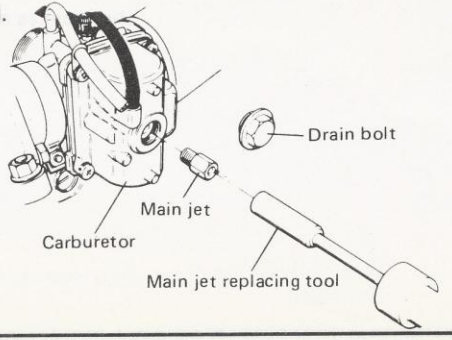
Some riders may operate their RS under extreme operating conditions such as; very high altitudes or extreme cold and hot temperatures. In these circumstances the jetting of the carburetor or other adjustments may need to be altered slightly. Riders who are not familiar with the operation and jetting procedures of the RS Mikuni carburetor should have their local authorized Suzuki dealer perform these alterations.

Mechanically experienced riders can alter the carburetor settings based on the following information and specifications.

CARBURETOR SPECIFICATIONS

Bore	36 mm
Main jet	#260
Jet needle	5DH20-2
Needle jet	P–8
Cut-away	2.0
Pilot jet	#37.5
Pilot air adjusting screw	1-1/2 turn back open
Float level	10.7 mm (0.42 in)
Optional main jets	
#240, #250, #270, #280 and #290	

The main jet is usually the component which is most often changed. A convenient method of replacement is provided.



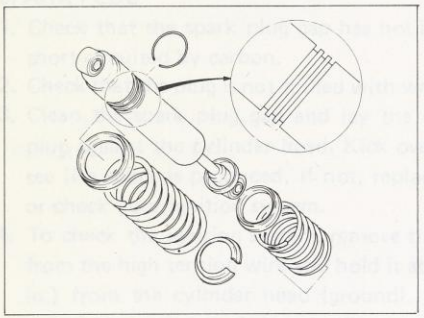
MAIN JET REPLACING

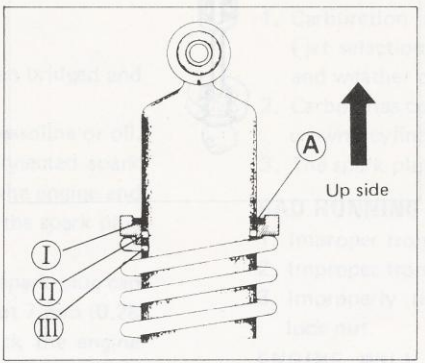
1. Move fuelcock lever to OFF position.
2. Remove the drain bolt on float chamber to empty the chamber of fuel.
3. Loosen clamp screws on both sides of carburetor, and turn the carburetor around to bring its float chamber toward you.
4. Insert the main jet replacing tool into the drain bolt hole and, with this tool, remove the main jet.
5. Install the main jet of another number in the carburetor. Plug up the float chamber by refitting the drain bolt.
6. Restore the carburetor (which is now tilted condition) to the original position by turning it around, and tighten the clamp screws on both sides to secure the carburetor in place.

REAR SHOCK ABSORBER

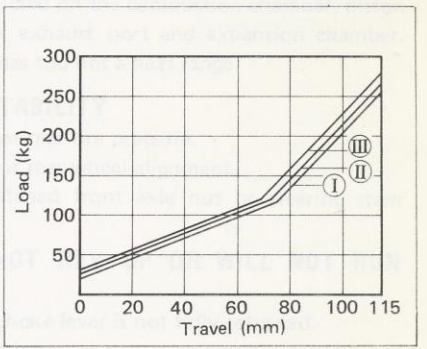
DISASSEMBLY

1. Remove the upper and lower rear shock absorber bolts and dismount the shock absorber.
2. While compressing the spring, remove the upper spring seat.
3. Each unit has three grooves for changing spring tension. The higher the clip position, the less tension.

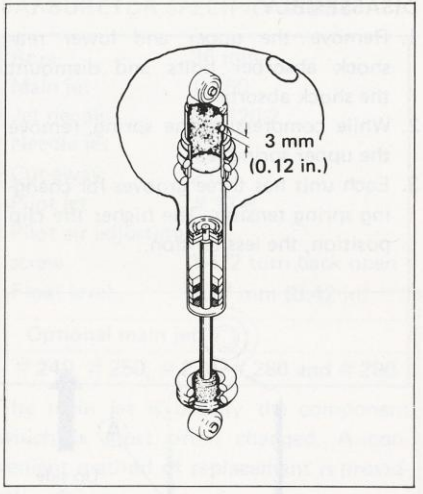




CAUTION: In the new shock absorber unit the clip Ⓐ has been set at the highest position for optimum shock absorption for an average rider's weight. However, after the machine has covered the running-in mileage of about 500 km (300 miles), the component parts could be adjusted and the optimum clip position will be changed to the groove one step down – the middle groove.



CAUTION: Never throw away this absorber without depressurizing it when it becomes so used-up that it no longer serves its purpose. To depressurize it, place the gas tank in a plastic bag with a corner cut off, and drill into the tank, at the location indicated, through the bag, using a 3-mm drill. The bag is for protection; it prevents the drill clips from flying off when the gas rushes out.



There can be various causes for problems which might occur on the motorcycle. The following procedures may be used to troubleshoot possible trouble spots.

ENGINE WILL NOT START

FUEL SYSTEM

1. Check that the there is sufficient gasoline in the fuel tank.
2. Make sure the fuelcock lever and fuel tank breather hose are not clogged.

SPARK PLUG

1. Check that the spark plug gap has not been bridged and short circuited by carbon.
2. Check that the plug is not fouled with wet gasoline or oil.
3. Clean the spark plug gap and lay the connected spark plug against the cylinder head. Kick over the engine and see if a spark is produced. If not, replace the spark plug or check your ignition system.
4. To check the ignition system, remove the spark plug cap from the high tension wire and hold it about 7 mm (0.28 in.) from the cylinder head (ground). Kick the engine over and see if a spark jumps this gap. If so, the system is functioning and the problem is probably in the spark plug cap. If this does not produce a spark, have your SUZUKI dealer check your ignition system.

CLUTCH SLIPPAGE

1. If there is no clutch lever play, adjust the cable adjuster for 4 mm (0.16 in.) play.
2. The clutch will also slip if the plates are worn or the springs have weakened. If so, these items must be replaced.

EXCESSIVE ENGINE VIBRATION

1. Loose engine mounting bolt.
2. Crack in the frame.

ENGINE OVERHEATS

1. Carburetion is lean caused by the carburetor setting (jet selection) not being suitable for running conditions and weather or due to an air leak.
2. Carbon has collected on the combustion chamber, piston crown, cylinder exhaust port and expansion chamber.
3. The spark plug has too hot a heat range.

BAD RUNNING STABILITY

1. Improper front or rear tire pressure.
2. Improper front or rear wheel alignment.
3. Improperly tightened front axle nut or steering stem lock nut.

ENGINE WILL NOT REV UP OR WILL NOT RUN SMOOTHLY

1. The carburetor choke lever is not fully returned.
2. Too rich carburetion.
3. Clogged air cleaner element.
4. Clogged muffler

SPECIFICATIONS

DIMENSIONS AND WEIGHT

Overall length	2 130 mm (83.9 in)
Overall width	870 mm (34.3 in)
Overall height	1 195 mm (47.0 in)
Wheelbase	1 430 mm (56.3 in)
Ground clearance	300 mm (11.8 in)
Dry mass (weight)	109 kg (241 lbs)

ENGINE

Type	Two-stroke cycle, air cooled
Intake system	Piston and reed valve
Number of cylinder	1
Bore	67.0 mm (2.638 in)
Stroke	70.0 mm (2.756 in)
Piston displacement	246 cm^3 (15.0 cu. in)
Corrected compression ratio	7.3 : 1
Carburetor	MIKUNI VM36SS, single
Air cleaner	Polyurethane foam element
Starter system	Primary kick
Lubrication system	Fuel/oil premixture of 20 : 1

TRANSMISSION

Clutch	Wet multi-plate type
Transmission	6-speed constant mesh
Gearshift pattern	1-down 5-up
Primary reduction	2.727 (60/22)
Final reduction	4.000 (52/13)
Gear ratios, Low	2.384 (31/13)
2nd	1.750 (28/16)
3rd	1.352 (23/17)
4th	1.095 (23/21)
5th	0.904 (19/21)
Top	0.760 (19/25)
Drive chain	DAIDO D.I.D.520UB, 110 links

CHASSIS

Front suspension	Telescopic, oil dampened
Rear suspension	Swinging arm, gas/oil dampened, spring 3-way adjustable
Front brake	Internal expanding
Rear brake	Internal expanding
Front tire size	3.00-21-4PR
Rear tire size	5.10-18-4PR
Steering angle	45° (right and left)
Caster	61° 45′
Trail	117 mm (4.61 in)
Turning radius	2.3 m (7.5 ft)

ELECTRICAL SYSTEM

Ignition type	SUZUKI "PEI" (Pointless Electronic Ignition)
Ignition timing	13.5° B.T.D.C. at 6 000 rpm
Spark plug	NGK B8ES or NIPPON DENSO W24ES

CAPACITIES

Fuel tank	8.5L (2.2 US gal)
Transmission oil	800 ml (1.69 US pt)
Front fork oil	284 ml (9.60 US oz)

Prepared by

SUZUKI MOTOR CO.,LTD.

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Overseas Operations Division
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