



**SUZUKI**

*Home of world-champion motorcycles*

**SUZUKI MOTOR CO., LTD.**

# SUZUKI

# OWNER'S MANUAL

**SUZUKI**

**80**

**MODEL**

**K10**

**SUZUKI SPORTS**

**80**

**MODEL**

**K11**

CG6 32 C

## Foreword

We sincerely thank you for choosing this fine Suzuki motorcycle from among the many models available. Suzuki motorcycles, with high performance and modern lines resulting from top design and exhausting tests, are world champions.

You are assured of satisfactory performance in a Suzuki motorcycle which is manufactured with high engineering techniques such as won the Isle of Man T.T. and many Grand Prix races, is based on the company's rich experience gained since 1936 when it began making motorcycles and automobiles, and is produced by modern factory equipment.

Even an excellent motorcycle, however, cannot maintain peak performance unless it is serviced properly.

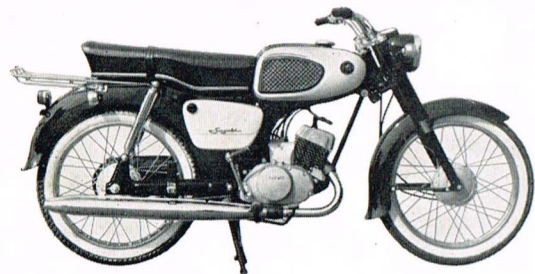
Read this rider's handbook and follow its instructions carefully. Treat your Suzuki motorcycle properly and ride it correctly. Enjoy the comfort and exhilaration of riding a Suzuki world champion motorcycle.

We thank you for your confidence in this Suzuki motorcycle and wish you "happy riding".

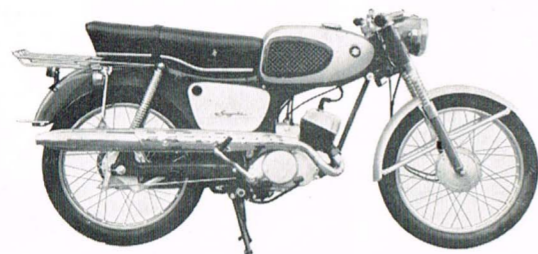


 **SUZUKI MOTOR CO., LTD.**

## I. LOCATION OF PARTS



Suzuki 80 Model K10



Suzuki Sports 80 Model K11

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## 1. LOCATION OF PARTS

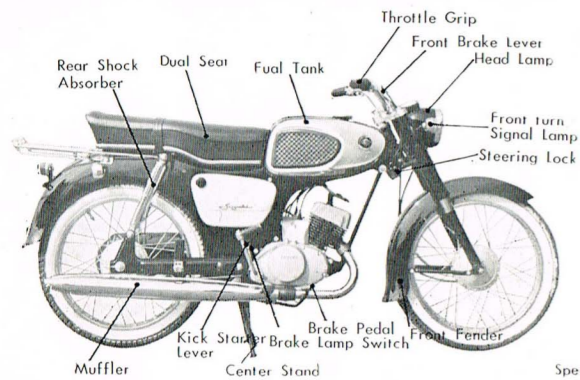


Fig. 1

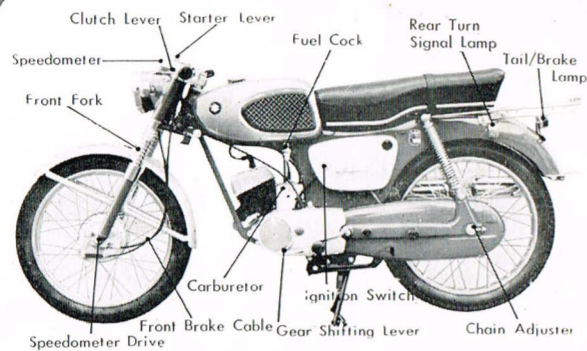


Fig. 2

## 2. SPECIFICATIONS

• Items marked with an asterisk\* are for model K11 only.

### ◇ Dimensions, Weight

Overall length.....	1,785 mm (70.3 in) *1,830 mm (72.1 in)
Overall width.....	613 mm (24.1 in) * 550 mm (21.6 in)
Overall height.....	935 mm (36.8 in) * 855 mm (33.6 in)
Wheelbase.....	1,160 mm (45.7 in)
Ground clearance.....	130 mm ( 5.1 in) * 135 mm ( 5.3 in)
Tire size (front & rear).....	2.50-17 in, 4 PR
Dry weight.....	70 kg (154 lb)

### ◇ Performance

Maximum speed.....	85 kph (53 mph) *95 kph (60 mph)
Fuel consumption.....	75 kph (177 mpg US, 211 mpg Imp) @ 30 kph (19 mph)
	*65 kph (154 mpg US, 184 mpg Imp) @ 30 kph (19 mph)
Climbing ability.....	16°
Braking distance.....	7 m (23 ft) @ 35 kph (22 mph)

### ◇ Engine

Type.....	2-cycle, air cooled gasoline engine
Piston displacement.....	79 cc (4.81 cu in)
Bore×stroke.....	45×50 mm (1.77×1.97 in)
Cylinder.....	single, inclined forward
Corrected compression ratio.....	6.7 : 1
Maximum horsepower.....	6.5 ph @ 6,000 rpm *7.3 hp @ 7,000 rpm

Maximum torque .....	0.81 kg-m (5.84 ft-lb) @ 5,000 rpm
	*0.75 kg-m (5.41 ft-lb) @ 6,000 rpm
Starting .....	kick

### ◇ Fuel System

Carburetor .....	Amal VM 17 SC
Air cleaner .....	resin-processed filter
Fuel tank capacity.....	7 l (1.85 US gal, 1.54 Imp gal) including 1 l (0.26 US gal, 0.22 Imp gal)

### ◇ Lubrication

Crankshaft .....	gasoline/oil fuel mixture
Transmission gears .....	oil bath

### ◇ Ignition System

Ignition .....	flywheel magneto
Ignition timing .....	27° before TDC
Spark plug .....	NGK B-6
Generator .....	flywheel magneto

### ◇ Transmission System

Clutch .....	wet multi-disc
Gearbox .....	4-speed forward, constantmesh
Gear shifting .....	left foot, return shifting type (rotary shifting type also available)
Primary reduction ratio .....	73-tooth gear / 19-tooth pinion=3.842
Final reduction ratio .....	30-tooth rear sprocket / 13-tooth engine sprocket=2.307 *30/14 =2.142
Overall reduction ratio .....	9.5 (in top gear) *8.8

### ◇ Suspension

Front suspension .....	hydraulically damped bottom link
Rear suspension .....	hydraulically damped swinging arm

### ◇ Steering

Steering angle (right & left) .....	45°
Castor .....	60°
Trail .....	73 mm (2.87 in)
Turning radius .....	1,850 mm (73 in)

### ◇ Brakes

Front brake .....	right hand, internal expanding
Rear brake .....	right foot, internal expanding

### ◇ Electrical Equipment

Head lamp .....	6 V, 15/15 W
Tail lamp .....	6 V, 5 W
Brake lamp .....	6 V, 10 W
Speedometer lamp .....	6 V, 1.5 W
Neutral indicator lamp .....	6 V, 1.5 W
Turn signal lamps .....	6 V, 8 W×2×2
Battery .....	6 V, 4 AH
Fuse .....	15 A

### 3. OUTSTANDING FEATURES

#### ◇ Powerful and Efficient Engine

High output and maximum torque from the engine of your motorcycle are well above the average of other 125 cc class machines.

#### ◇ Easy to Ride

It is very easy to handle, as the weight (154.5 lb) of the model K10 (K11) is the same as a 50 cc motorcycle.

#### ◇ Primary Kick Starting System

A primary kick starting system has been used so that the engine can be started even when the cycle is in gear if the clutch is disengaged.

### 4. TIPS ON OPERATION

Follow these tips to keep the motorcycle in peak condition and giving top performance at all times.

◇ The life of the motorcycle depends on the breaking-in of the engine and the way the motorcycle is treated. During the breaking-in period, do not ride the motorcycle at high speeds or allow the engine to run wide open. Keep to the specified breaking-in speed limit. Gradually raise the top speed after the engine is broken in.

**for the first 1,000 km (620 mi) .....below 50 kph (30 mph)**

◇ A 2-cycle engine is seriously affected by the fuel mixture and quality of the oil, as is engine performance. Follow the prescribed fuel mixture ratios exactly.

**2-cycle oil or high grade motor oil**

**for first 1,000 km (620 mi) .....gasoline 15 : oil 1**

**after 1,000 km (620 mi).....gasoline 20 : oil 1**

If low grade oil or less oil than specified is used in an ill-advised attempt to save on fuel expenses, the engine will overheat and wear of engine parts will be hastened, requiring expensive repairs, so that actually it is more costly. High grade oil lubricates perfectly and prolongs the life of the engine, decreases maintenance expenses and increases engine performance. Two-cycle oil is recommended for the fuel mixture. These 2-cycle oils are recommended.

Shell 2T 2 Stroke Oil	Mobil Mix TT
Shell Outboard Engine Oil	Mobil Outboard
Caltex 2-T Plus Motor Oil	Esso 2-T Motor Oil

Read the "Mixing Fuel" section near the back of this rider's handbook carefully and follow the instructions for making a correct fuel mixture.

◇ Slow the engine when shifting gears. This motorcycle has a powerful engine mounted in a light frame, so that shifting gears at high engine rpm can cause dangerous sudden starts or spurts of acceleration. When shifting into low gear, twist the throttle grip all the way away from you and reduce the engine rpm.

• "Blipping" the engine unnecessarily has a bad effect on the engine and lowers fuel consumption. Do not "blip" the engine.

## 5. OPERATION OF IMPORTANT PARTS

### ◇ Engine and Frame Numbers

The engine and frame numbers of your machine are given on the identification plate on the left hand side of the frame. These numbers are required especially for licensing the machine and ordering spare parts. When writing to the factory or your dealer, never fail to mention them as well as the mileage reading.



Fig. 3

### ◇ Fuel Cock

The fuel cock on this motorcycle has three positions, 0 (closed), 1 (open) and 2 (reserve). Turn the fuel cock lever to position "1" when starting the engine. If you run low on fuel, turn the lever to position "2" which opens a tap to the reserve supply. When you have turned the lever to position "2", fill the fuel tank as soon as possible to avoid running out of fuel.

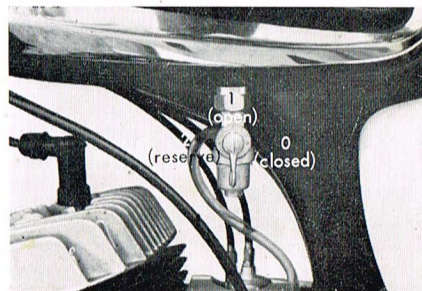


Fig. 4

### ◇ Ignition Switch

The ignition switch turns the engine ignition system and electric equipment on and off. The ignition switch key can be removed from the switch only in the "0" (off) position, as shown in Fig. 5. When the key is turned to the "1" (day) and "2" (night) positions, electrical equipment is turned on as shown in the chart.

Key Position	Ignition	Neutral Indicator Lamp	Horn	Brake Lamp	Turn Signal Lamps	Head Lamp	Tail Lamp
0 (Off)							
1 (Day)	o	o	o	o	o		
2 (Night)	o	o	o	o	o	o	o

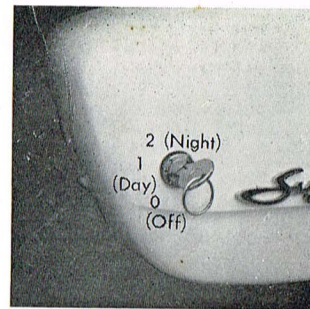


Fig. 5

### ◇ Carburetor Starter System

The carburetor starter system gives easy starts even in cold weather by supplying a rich fuel/air mixture to the engine. The starter system is operated by a lever fitted on the handlebar. When starting a cold engine, open the starter lever. Be sure to close it when the engine warms up and motorcycle is running. Do not open the throttle when the carburetor starter system lever is open. If the throttle is opened even a small amount, the carburetor starter system does not work.

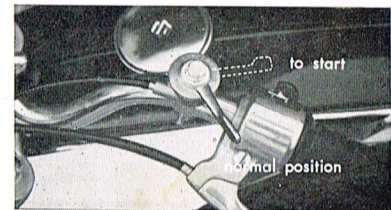


Fig. 6

### ◇ Kick Starter Lever

To start the engine, depress the kick starter lever sharply with the ignition key turned on.

As a primary kick starter system is used on this motorcycle the engine can be started with the transmission in any gear, if the clutch is disengaged by squeezing the clutch lever.



Fig. 7

### ◇ Clutch Lever

The clutch lever fitted on the left side of the handlebar is for disconnecting or connecting the engine with the rear wheel when starting or shifting gears.

Squeezing the lever disengages the clutch and releasing it connects the engine with the rear wheel.

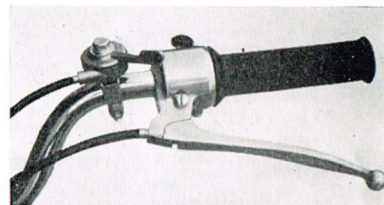


Fig. 8

### ◇ Gear Shifting Lever

Engine speed is controlled by the throttle grip on the right end of the handlebar. A transmission system is installed as the motorcycle requires more torque than speed when starting and more speed than torque when running. A left-foot operated gear shifting lever changes the transmission gears.

- Depressing lever.....shifts to higher gear
- Raising lever .....shifts to lower gear

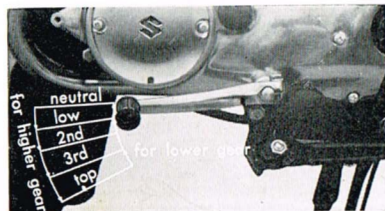


Fig. 9



Fig. 10

### ◇ Neutral Indicator Lamp

The neutral indicator lamp turns on when the gears are in neutral and off when the gears are engaged.

### ◇ Head Lamp

#### Dimmer Switch

- Pushing knob to left.....turns on high beam
  - Pushing knob to right .....turns on low beam
- Use low beam when running along illuminated roads or meeting over vehicles.

#### Adjusting Beam

The head lamp beam can be adjusted up and down by loosening the front turn signal lamp stays.

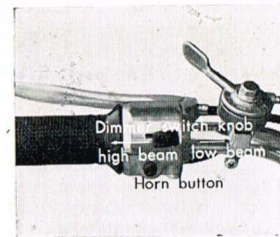


Fig. 11

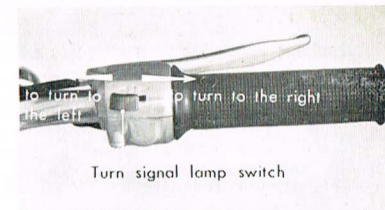


Fig. 12

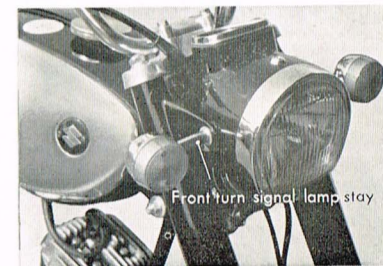


Fig. 13



## ◇ Tool Kit

A tool kit which includes all tools needed for daily maintenance is fitted inside the frame left cover.

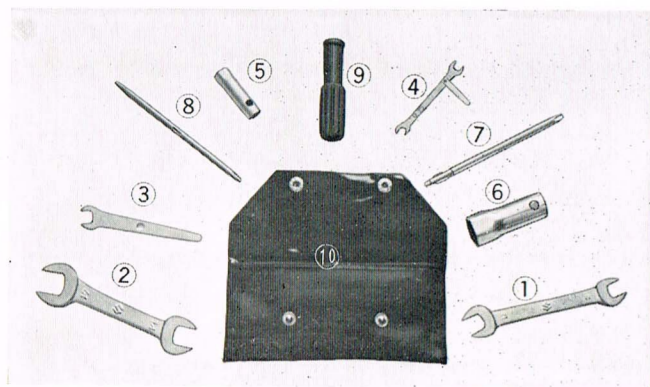


Fig. 14

- ① 10×12 mm Wrench
- ② 14×17 mm Wrench
- ③ 9 mm Wrench
- ④ Point Wrench
- ⑤ 10 mm Box Wrench
- ⑥ 21 mm Box Wrench
- ⑦ Plus Head Screw Driver
- ⑧ Combination Screw Driver
- ⑨ Screw Driver Handle
- ⑩ Tool Bag

## 6. TIPS ON RIDING

### ◇ Starting Engine

When engine is cold :

- Turn the fuel cock lever to position "1".
- Insert the ignition key into the ignition switch and turn it to the right one notch to the "day" position, and the neutral indicator lamp will turn on if the gears are in neutral. (It is good practice to shift the gears into neutral before starting the engine.)
- Turn the carburetor starter system lever to the open position. Close the throttle completely. (If the throttle is open even a small amount, the starter system will not work.)
- Depress the kick lever. The engine will start.
- When the engine starts, allow it to warm up at idling speed for 1~2 minutes. Do not close the carburetor starter system lever until the engine has warmed up. If the motorcycle is started before the engine is warmed up, it will affect the engine adversely.

When engine is already warm :

- Open the throttle 1/8 to 1/4. Depress the kick starter. The engine will start easily. Operation of the carburetor starter lever is not necessary.

### ◇ Starting Motorcycle

- Disengage the clutch by means of the clutch lever on the left side of the handlebar and depress the gear shifting lever to put the cycle in low gear.
- Twist the throttle grip inward toward you gradually, releasing the clutch lever slowly. The motorcycle will start.  
If the throttle is opened rapidly or the clutch lever is released too rapidly, the motorcycle will start with jerky spurts or stall suddenly.
- When the speed of motorcycle reaches about 15 kph (10 mph), twist the throttle grip outward away from you to reduce

engine speed while disengaging the clutch at the same time and shift into second gear by pressing the gear shifting lever. Once the cycle is in gear, engage the clutch slowly and open the throttle again.

When the speed of motorcycle reaches about 25 kph (16 mph) do the same to shift into third gear and when the speed gets to about 35 kph (22 mph) put the cycle into top gear.

- After shifting into top gear, the speed of motorcycle is controlled by the throttle.

### ◇ Riding Tips

This motorcycle is very safe and easy to ride if these riding tips are followed carefully.

- Be careful to apply the brakes slowly and smoothly when riding in rain or on wet roads to prevent a skid on the slippery surface.
- If the speed of the motorcycle decreases when riding up a hill, shift down into a lower gear. Shift gears rapidly to prevent the motorcycle from losing momentum.
- When riding down a hill or slope, shift to a lower gear and close the throttle to utilize engine brake. If only engine brake is used when riding down slopes, a sufficient amount of lubrication oil is not supplied to the engine and the piston can seize. Lightly apply front and rear brakes alternately and "blip" the engine occasionally to supply lubrication oil to the engine.

### ◇ Stopping

Always take care when stopping and apply the brakes smoothly and evenly to prevent the wheels from skidding.

- Turn the throttle grip outward away from you to close the throttle completely.
- Apply front and rear brakes evenly at the same time. The motorcycle will stop smoothly and safely. Using only the front or rear brake is dangerous and can cause the motorcycle to skid and fall. Make it a rule to always apply both brakes at the same time.
- Apply brakes lightly and with great care on wet highway or other slippery surfaces and on corners. Abrupt braking on slippery roads or corners is particularly dangerous.
- After the motorcycle stops, it is better to shift the gears into neutral.

- Turn the ignition key to the "off" position to stop the engine.  
When parking the motorcycle, take the following steps without fail.
- Remove the ignition key from the switch.
- Shut the fuel cock.
- Lock the steering head. (The ignition switch key can be used for both the ignition switch and the steering head lock.)

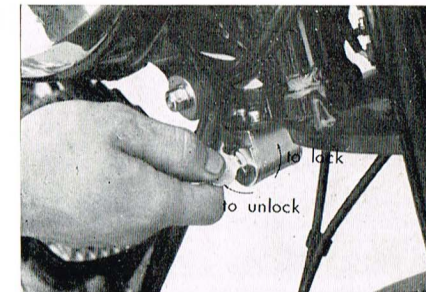


Fig. 15

## 7. INSPECTION AND MAINTENANCE

### Daily Inspection

Check these things on the motorcycle yourself every day before riding it.

- Brake pedal travel.....20~30 mm (0.8~1.2 in)
- Brake lever play.....20 mm (0.8 in) between lever and grip when brake applied
- Clutch lever play .....4 mm (0.16 in) (see Fig. 27 on page 25)
- Front tire air pressure .....24 psi
- Rear tire air pressure .....30~32 psi
- Fuel .....check amount in tank  
Fuel tank capacity: 7 l including 1 l reserve
- Horn.....be sure it sounds
- Head lamp, turn signal lamps, tail lamp  
and brake lamp.....check to see they turn on properly

### Periodical Inspection

Even an excellent motorcycle will develop troubles if proper inspection and maintenance are not performed. Periodical inspection is the most important thing to prolong the life on the motorcycle. Make proper inspections and maintenance according to the distance the motorcycle is ridden as shown in the inspection chart on page 43. Take your motorcycle to your Suzuki dealer for these inspections.

### Inspection and Maintenance Tips

#### ◇ Adjusting Carburetor

The throttle cable, pilot air adjusting screw and throttle valve stop screw can get out of adjustment from vibrations when the motorcycle is running, so periodical inspection and adjusting are necessary.

- Inspection interval.....at first 500 km (300 mi) thereafter, every 3,000 km (2,000 mi)

#### 1. Adjusting Throttle Cable

A proper play is required in the throttle cable. Adjust the cable before adjusting the carburetor. Adjust the throttle cable play to 5~10 mm (0.02~0.04 in) by turning the throttle cable adjuster.

- Turning adjuster out.....decreases play
- Turning adjuster in .....increases play
- Take the air cleaner tube off of the carburetor and check to see if the throttle valve moves up and down smoothly when the throttle grip is turned inward and outward. If the movement is not smooth, lubricate the cable and make sure it is not bent or twisted.
- Tighten the throttle cable adjuster lock nut firmly and reattach the air cleaner tube.

#### 2. Adjusting Pilot Air Adjusting Screw

Start the engine and allow it to warm up at idling speed for several minutes.

- Turn the pilot air adjusting screw in all the way until it seats and then back it out  $1\frac{1}{2}$  turn. (In case of K 11,  $1\frac{1}{4}$  turns.)
- Adjust the engine idling speed to the lowest rpm possible with the throttle valve stop screw.

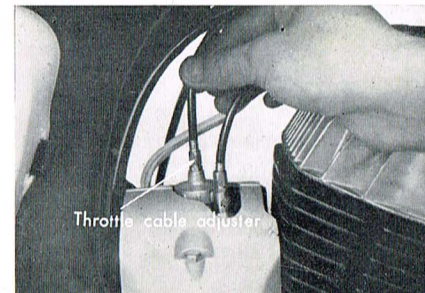


Fig. 16



Fig. 17

- Turn the pilot air adjusting screw in and out 1/2 of a turn from its position backed off 1 1/2 turn. The speed of the engine idling increases and decreases according to the turning of the pilot air adjusting screw. Find the position where the engine runs most smoothly and fix the pilot air adjusting screw.

- Adjust the engine idling again with the throttle valve stop screw. When the motorcycle is given hard use, such as running at high speeds, carrying heavy loads or climbing steep slopes, the pilot air adjusting screw can be turned in slightly from its normal position. To save fuel, it can be turned out slightly from its normal position. If the pilot air adjusting screw is turned either in or out too much, trouble will occur.

- Turned in too much .....fuel consumption increases
- Turned out too much .....fuel consumption increases and engine overheats

### 3. Jet Needle Position

The jet needle is clipped into the second groove (for K11, 3rd groove) from the top. The jet needle meters the fuel/air mixture ratio at medium to high speeds.

Adjusting of the jet needle is seldom needed, so do not change the adjustment unless there is an urgent necessity because incorrect adjustment of the jet needle adversely affect carburetor performance.

Change the position of the jet needle only if the motorcycle is subjected to very hard use such as constant climbing of steep hills or running at top speed all the time and the engine overheats. Clip the jet needle in the third (fourth) groove from the top for these service conditions.

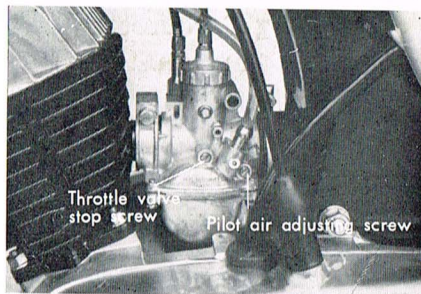


Fig. 18

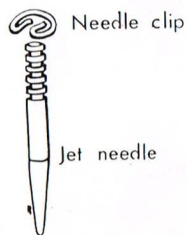


Fig. 19

### ◇ Adjusting Ignition Timing

Incorrect ignition timing decreases engine performance and shortens the life of the engine. Particularly when the motorcycle is given hard use, overheating, wearing of important parts and damage to other engine components without good engine performance developing will result if the ignition timing is not correct. Therefore, check the ignition timing periodically.

When adjusting the ignition timing, adjust the contact breaker points gap first and then adjust the ignition timing. If the ignition timing is adjusted first, adjusting the points gap will make the ignition timing incorrect again.

- Remove the crankshaft left cover.
- Turn the crankshaft and find the position where the contact breaker points gap is the largest.
- Check the points gap with the feeler gauge on the points wrench. The standard gap is 0.35 mm (0.014 in). If the gap is too large or too small, adjust it to the standard.
- Loosen screw "a". Adjust the gap to 0.35 mm (0.014 in) by inserting a screw driver in slot "b" and turning it. Tighten screw "a" securely after the adjustment is made. After the points gap is adjusted, adjust the ignition timing



Fig. 20

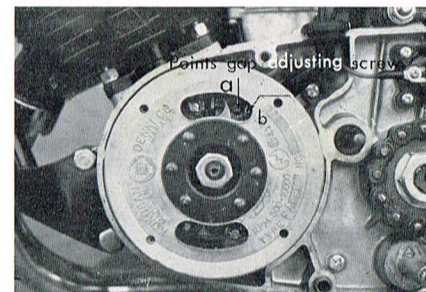


Fig. 21

- Turn the flywheel by hand to the point at which the contact breaker points just begin to open. Check to see if arrow "A" aligns with line "B". If line "B" is on the side of the dotted line, ignition timing is too advanced.

- If ignition timing is slightly retarded, adjust by setting the contact breaker points gap larger than standard but not more than 0.4 mm (0.016 in).

If ignition timing is slightly advanced, adjust by setting the points gap smaller than standard but not less than 0.3 mm (0.012 in). Check again to make sure "A" aligns perfectly with "B".

If ignition timing cannot be adjusted correctly by changing the points gap within the limits of 0.3~0.4 mm (0.012~0.016 in) adjustment inside the magneto is required. Take your motorcycle to your Suzuki dealer and have him adjust the ignition timing.

- Points surface which are burned, pitted or coated with oil cause defective engine operation. Check the points perfectly and clean them when they are dirty. Polish the points with fine emery paper when they are burned. Keep the points clean at all times. Be careful not to let oil get on the points.

### ◇ Spark Plug

The standard spark plug for this motorcycle is NGK B-6. When carbon accumulates on the spark plug, hot, strong sparks will not be produced. Check spark plug every 500 km (300 mi). Remove carbon deposits with a

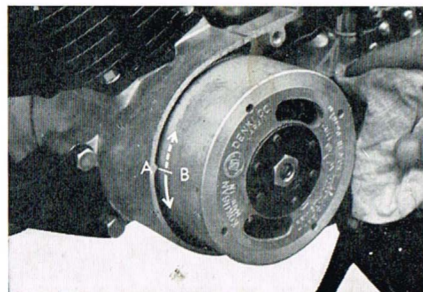


Fig. 22

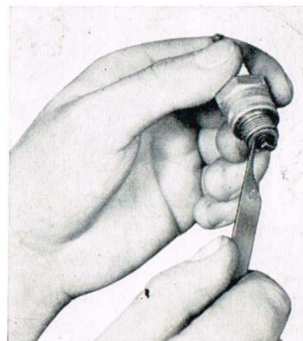


Fig. 23

wire or pin. Be careful not to damage the porcelain core when removing carbon from inside the spark plug. Gently striking or prying the side electrode, adjust the spark plug gap to 0.5~0.6 mm (0.020~0.024 in). Measure with a wire gauge.

When the standard spark plug is not available, the following spark plugs can be used:

Champion	J-7 or J-6
AC	45 or 45-Com
KLG	TFS 50
Autolite	A-5
Bosch	W 175 T 3
Lodge	Can or Cany

Both the size of the threaded part and the heat range must be correct. The wrong heat range spark plug causes overheating, hard starting, etc.

- Spark plug diameter.....14 mm (0.55 in)
- Spark plug reach .....9.5 mm (3/8 in)

### ◇ Cleaning Air Cleaner

The air cleaner is fitted with two screws on the frame on the right side, with access through the frame right cover.

- Remove the air cleaner cover and take out the element.
- Clean the element with a brush. As the element is made of paper, it takes a long time to dry if washed with gasoline, so clean it by brushing off dirt and dust particles.

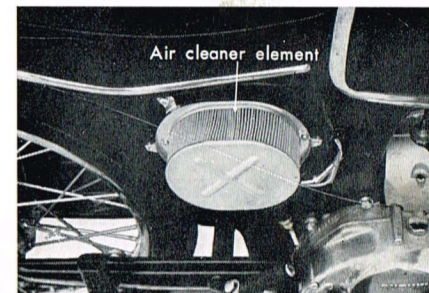


Fig. 24

## ◇ Changing Gearbox Oil

Oil in the gearbox deteriorates and its lubricating performance decreases if it is used too long. Change oil after the first 500 km (300 mi) every 3,000 km (2,000 mi) after the first oil change.

- Use a good brand of SAE #30 or 40 motor oil.
- In regions where the temperature falls below 10°C (50°F) in the morning, however, use SAE #20W/40 multi-grade motor oil.
- The gearbox holds 650 cc (1.4 US pt, 1.1 Imp pt) of oil.

To drain gearbox oil, remove the oil filler hole cap and oil drain plug located on the bottom of the engine.

To fill the gearbox with oil, replace the oil drain plug, remove the oil level screw and pour oil in through the oil filler hole until it runs out of the oil level screw hole.

Replace the oil level screw and oil filler hole cap.

## ◇ Adjusting Clutch

The clutch inner wire stretches as the bike's mileage increases, and the clutch facings also wear more or less, with a consequent increase of the amount of the play in the clutch cable.

It should be adjusted periodically.

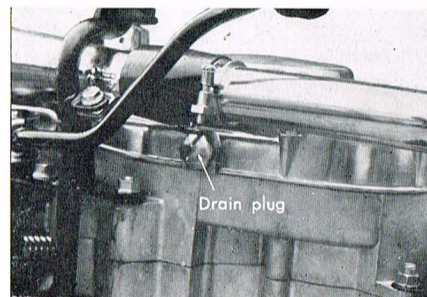


Fig. 25

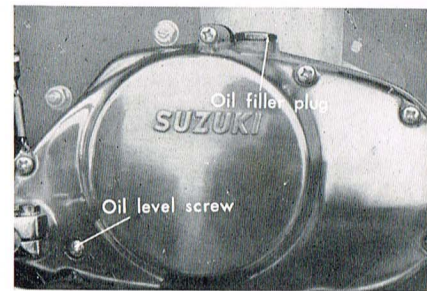


Fig. 26

Adjust the clutch with both the clutch cable adjuster and release adjusting screw. Note that if you try to adjust the clutch with only one of them, various troubles such as incomplete clutching, clutch slipping, etc. will occur.

The play of the clutch should be 4 mm (0.16 in) as shown in Fig. 27.

- If the play is too great, the clutch will not disengage completely.
- If it is too small, the clutch will slip.

If you find the play of the clutch incorrect, adjust it in the following way.

- Loosen the clutch cable adjuster lock nut and screw the clutch cable adjuster all the way in temporarily.

- Check the play of the clutch wire, and loosen the clutch cable adjuster until there is no play left in the cable. Fix the clutch adjuster with the clutch cable adjuster lock nut.

After the cable has been adjusted, adjust the play of the clutch with the release adjusting screw.

- The play should be 4 mm (0.16 in) at the clutch lever.
- If the release adjusting screw is turned clockwise, the play will decrease (the clutch will be easy to be disengaged).
- If the release adjusting screw is turned counterclockwise, the play will increase (the clutch will be difficult to be disengaged). Finally,

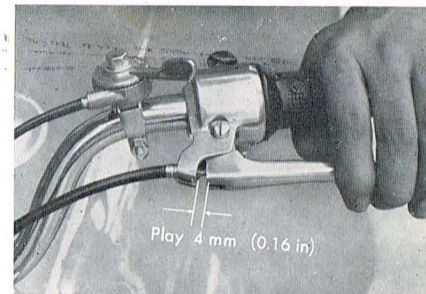


Fig. 27

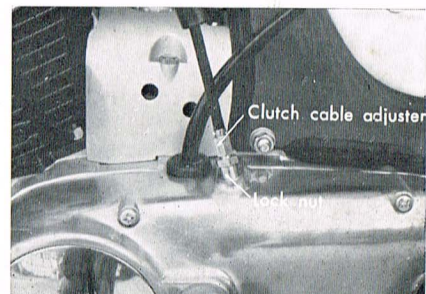


Fig. 28

fix the release adjusting screw with the lock nut.

### ◇ Cleaning Exhaust Pipe and Muffler

Carbon produced when fuel is burned in the engine accumulates in the exhaust pipe and on the baffle pipe of the muffler. This carbon deposit increases resistance to the passage of exhaust gas and causes a loss in engine power and overheating of the engine.

When the engine overheats or a poor grade oil is used, particularly, carbon accumulates rapidly.

Clean carbon deposits from the exhaust pipe and muffler baffle pipe every 6,000 km (4,000 mi).

To clean the carbon deposits from the exhaust pipe, remove the clamp and disconnect the exhaust from the cylinder. Scrape off the carbon with a screw driver or similar tool.

To clean the muffler baffler pipe, remove the fitting screw and washer at the end of the muffler and pull out the baffle pipe with pliers.

Remove carbon deposit by gently striking the baffle pipe. Wash the baffle pipe with gasoline or cleaning solvent.

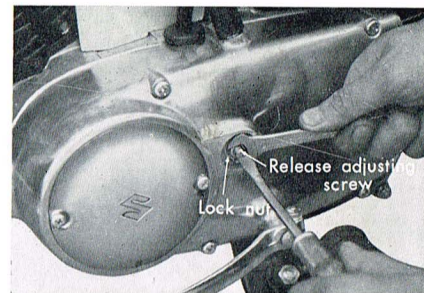


Fig. 29

Fig. 30

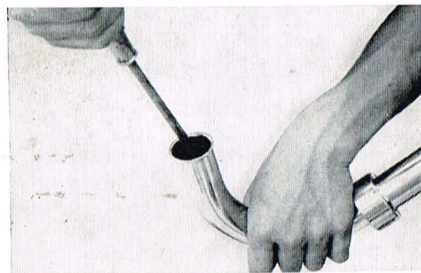
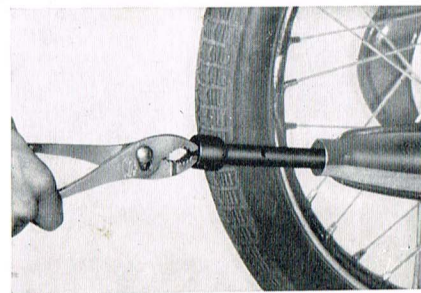


Fig. 31



If the carbon deposit is hard and cannot be removed from the baffle pipe by striking it gently, heat it with a burner until flames cease to be seen on the baffle pipe and then strike it gently.

The carbon can be removed easily in this manner.

### ◇ Battery

The battery is fitted inside the frame left cover.

Battery electrolyte solution decreases gradually from evaporation. The solution must be kept above the lower limit line at all times. If the solution level is below the lower limit line, add pure distilled water only up to the upper limit line.

Do not add diluted sulphuric acid.

Check the battery every two weeks when the daytime temperature is over 25°C (77°F) and every three weeks when the temperature is lower than this.

- Keep the battery clean.
- Be careful not to bend the battery breather tube sharply.
- Never add diluted sulphuric acid to the battery solution.
- Add only pure distilled water.

### ◇ Adjustig Drive Chain

If the drive chain is too tight it results in an increased mechanical loss of power. A drive chain which is too loose causes unpleasant noise. Either a tight or loose drive chain wears fast.

Put the motorcycle on the center stand.

Remove the chain inspection hole cap.

Loosen the rear axle nut.



Fig. 32

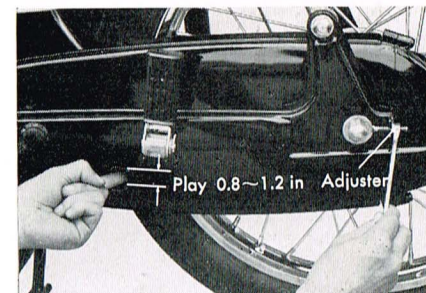


Fig. 33

Adjust the drive chain with the chain adjusters until the play at the center of the drive chain is 20~30 mm (0.8~1.2 in).

- Turning adjuster in .....tightens chain
- Turning adjuster out.....loosens chain

After the drive chain adjustment is correct, tighten the rear axle nut firmly. If the nut is not tightened firmly, it could become loose while you are riding the motorcycle and cause a dangerous situation.

Adjust and lubricate the drive chain periodically without fail. Adjust and lubricate at the first 500 km (300 mi) and every 2,500 km (1,500 mi) afterward. Use spindle oil for lubricating the drive chain.



Fig. 34

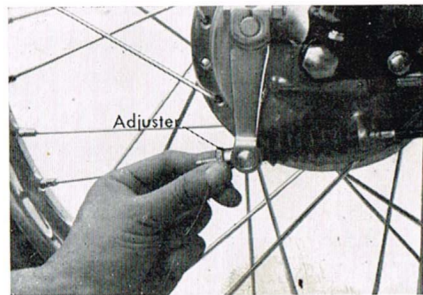


Fig. 35

## ◇ Adjusting Brakes

Brakes are most important for safe riding. Always check the brakes before riding the motorcycle.

### Front Brake

Adjust the brake cable with the adjuster so that there is 20 mm (0.8 in) of clearance between the front brake lever and the throttle grip when the brake engages.

- Turning adjust in .....increases clearance
- Turning adjuster out.....decreases clearance

### Rear Brake

Adjust the travel of the brake pedal with the brake rod adjusting nut to 20~30 mm (0.8~1.2 in).

- Turning adjusting nut in.....decreases travel
- Turning adjusting nut out.....increases travel

When carrying a passenger or heavy load, increase brake pedal travel slightly.

Fig. 36

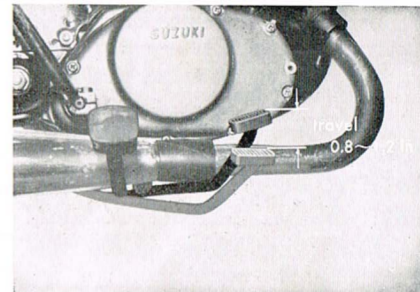
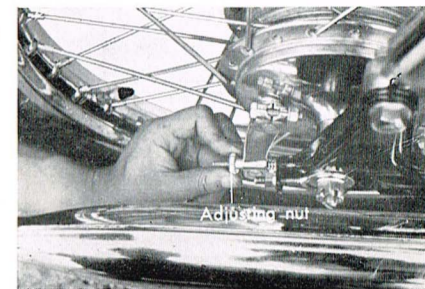


Fig. 37



## ◇ Adjusting Brake Lamp Switch

The brake lamp lets traffic behind you know the rear brake has been applied, so be sure that the switch works properly at all times. Move the switch up and down to adjust it until the switch operates and turns on the brake lamp about 5 mm (0.2 in) before the brake pedal is fully depressed.

## ◇ Tire Pressures

Insufficient air pressure in the tires hastens tire wear and increases road resistance of the motorcycle. Soft tires also make smooth cornering difficult.

Over-inflated tires decrease the amount of tire in contact with the

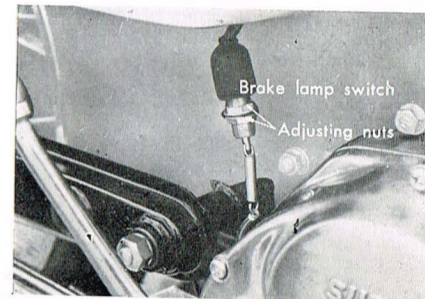


Fig. 38



ground and cause skids when the brakes are applied, as well as subjecting the tire to stress, which is bad for it. Hard tires also tend to throw the motorcycle into slides on corners.

Be sure that tire pressure is correct at all times.

- Front.....20~26 psi
- Rear .....29~40 psi

### ◇ Changing Front Fork Oil

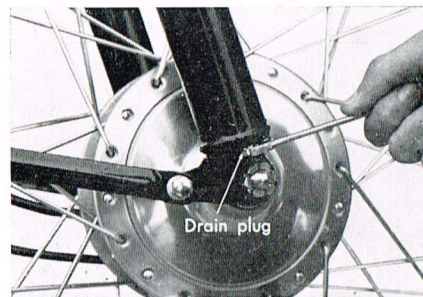


Fig. 39

The front fork is a telescopic type with oil dampers. To change oil of the front fork,

- Remove the drain plug at the end of the leg. Refit the drain plug when the oil inside has been completely drained out.
- Loosen the two fork fitting bolts and pour in oil.
- Oil should be a mixture of #30 motor oil and #60 spindle oil mixed in a ratio of 8 parts of motor oil to 2 parts of spindle oil.
- The quantity of oil to be poured in should be 125 cc (0.26 us pt) for each leg.
- The more oil is poured in the stiffer the suspension becomes, while the less it is poured in the softer the suspension becomes. Too little oil, however, causes abnormal noise when running on bad roads.

### ◇ Lubrication

Rotating and rubbing parts must be lubricated periodically. Insufficient lubrication will cause rapid wear and severe damage can result. Lubricate these parts periodically.

What to lubricate	When to lubricate	Kind of oil
Speedometer drive	6,000 km (4,000 mi)	Grease
Front brake cam shaft	3,000 km (2,000 mi)	Grease
Rear brake cam shaft	3,000 km (2,000 mi)	Grease
Clutch cable & brake cable	3,000 km (2,000 mi)	Motor oil
Drive chain	2,500 km (1,500 mi)	Spindle oil
Throttle grip	6,000 km (4,000 mi)	Grease

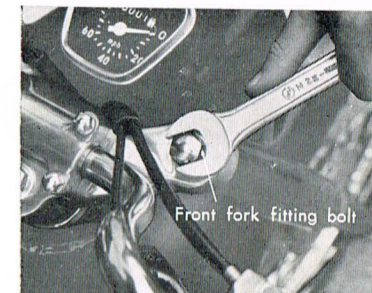


Fig. 40

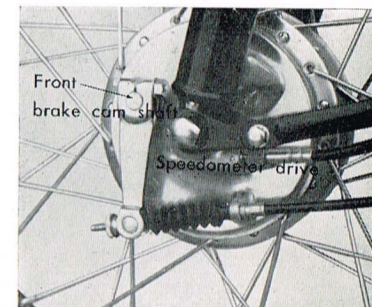


Fig. 41

Fig. 42

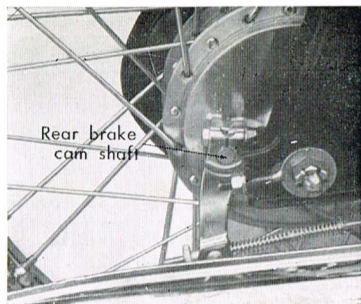


Fig. 43

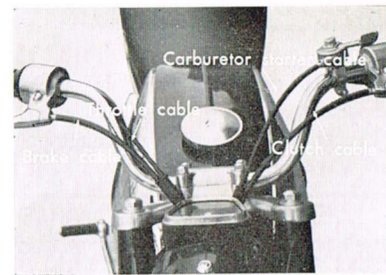


Fig. 44

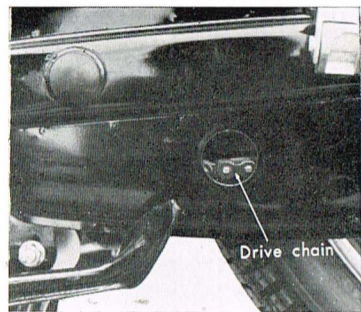
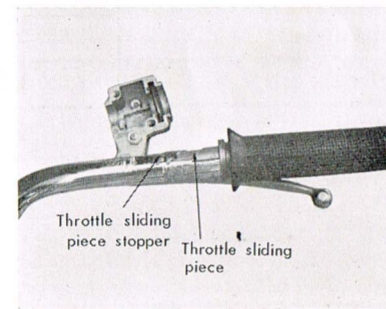


Fig. 45



### ◇ Tightening Bolts and Nuts

Bolts and nuts on the engine and frame become loose from vibrations during riding. Tighten these bolts and nuts periodically to prevent a dangerous accident.

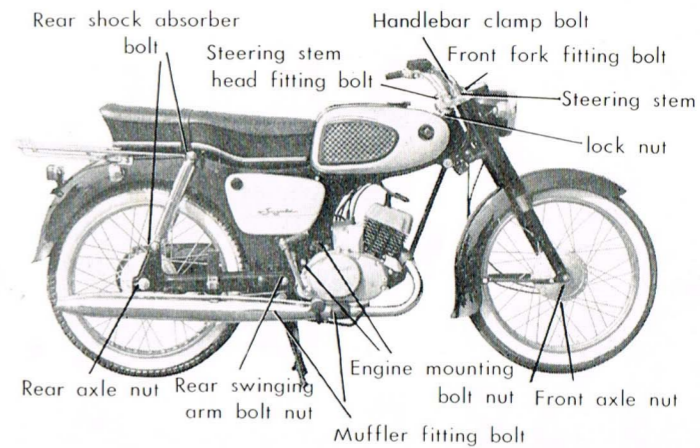


Fig .46

## 8. OPTIONAL PARTS

These parts are available at your Suzuki dealer as optional parts.

Part Name	Part NO.	Remarks
Flat handlebar	KIIF - 5611 T09	width 550 mm (21.7 in)
Brake cable ass'y	KIIF - 5751	for flat handlebar
Clutch cable ass'y	KIIF - 5752A	"
Throttle cable	KIIF - 5753	"
Starter cable	KIIF - 5754	"
Western handlebar	KIOU - 5611T09	height 173 mm (6.8 in) width 645 mm (25.4 in)
Brake cable ass'y	KIOU - 5751A	for western handlebar
Clutch cable ass'y	KIOU - 5752A	"
Throttle cable	KIOU - 5753	"
Starter cable	KIOU - 5754	"
Left switch ass'y	KIOU - 5741	"
Engine sprocket	MA 2511S12	12-tooth, for power
"	MA 2511S14	14-tooth, for speed
Carrier	KIOB - 4611T09	for carrying luggage
Windshield ass'y	M15 - 8211T01	for rain, cold weather
Legshield ass'y	K10 - 8100T01A	" (for K10)
"	K11 - 8100T01	" (for K11)
Front tire	KIOB - 5511K3	white side wall tire
Rear tire	KIOB - 6511K3	"

## 9. TROUBLE SHOOTING

Regardless of how excellent the design and manufacture may be, all machinery is subject to wear and occasional breakdowns. The following trouble shooting list will help you find the cause of most troubles.

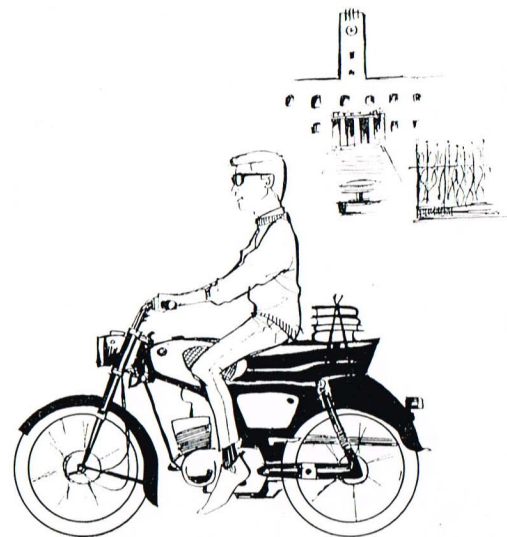
### 1) If Engine Is Hard to Start or Does Not Start

#### ◇ Fuel System

- No fuel in tank
- Fuel cock closed
- Fuel line clogged
- Fuel cock strainer clogged
- Fuel tank air vent hole clogged
- Not enough compression
- Carburetor main jet or pilot jet clogged
- Air leaking into carburetor
- Carburetor float punctured
- Air/fuel mixture too lean or too rich
- Fuel mixture ratio incorrect
- Fuel line connections loose
- Carburetor out of adjustment

#### ◇ Electrical System

- Switch not turned on
- Spark plug fouled
- Defective spark plug
- Spark plug gap incorrect
- Wrong heat range spark plug



- Loose spark plug
- Contact breaker points fouled
- Contact breaker points gap incorrect
- Loose wiring connection
- Ignition timing out of adjustment
- Malfunctioning condenser
- High tension cord shorted or disconnected

## 2) *If Engine Starts But Does Not Run Properly*

### ◇ Engine Fails to Develop Power

#### Weak Compression

- Loose spark plug
- Leaking oil seal
- Worn Cylinder base gasket
- Worn piston rings
- Worn piston
- Worn cylinder
- Loose bolts and nuts
- Worn cylinder head gasket
- Worn crankcase gasket

#### Ignition Timing Out of Adjustment

#### Malfunctioning Carburetor

- Jet needle clipped in wrong groove
- Fuel mixture too lean
- Wrong size main jet



#### Fuel System

- Tank cap vent hole clogged
- Fuel line clogged
- Incorrect fuel mixture
- Poor quality gasoline

#### Drive Chain Too Tight

#### Tire Air Pressure Too High

### ◇ Engine Makes Unusual Noises

#### Metallic Knock

- Worn cylinder
- Worn crank pin or roller bearings
- Worn piston or connecting rod

#### Gas Ping

- Ignition timing advanced or retarded
- Too low octane rated gasoline

#### Engine Overheats

- Slipping clutch
- Severe strain on engine
- Not enough oil in fuel mixture
- Carbon deposits in engine
- Carburetor air/fuel mixture too lean
- Poor quality oil in fuel mixture
- Incorrect spark plug
- Exhaust pipe clogged with carbon



### 3) *If Engine Misfires*

#### ◇ *Malfunctioning Carburetor*

- Fuel mixture too rich
- Fuel flow to carburetor insufficient
- Water in fuel supply system
- Main jet clogged

#### ◇ *Irregular Ignition*

- Wiring shorted
- Loose wiring connections
- Incorrect contact breaker points gap
- Fouled spark plug
- Incorrect heat range spark plug

### 4) *If Engine Stops Suddenly*

- Spark plug bridged with carbon
- Piston seized in cylinder
- Various other reasons  
(See "If Engine Does Not Start" Section)

### 5) *If Battery Fails to Charge Sufficiently*

- Malfunctioning magneto
- Broken selenium rectifier
- Battery terminals reversed
- Short in electrical system



- Loose wiring connections
- Broken battery
- Insufficient solution in battery
- Incorrect solution in battery
- Battery breather tube clogged

### 6) *If Shifting Is Not Smooth*

- Dragging clutch
- Insufficient oil in transmission
- Too much oil in transmission
- Poor quality oil in transmission
- Wrong grade of oil in transmission

### 7) *If Brakes Do Not Work Properly*

#### ◇ *Fail to Brake Properly*

- Improper brake adjustment
- Oil or water on brake lining
- Worn brake lining

#### ◇ *Fail to Release Properly*

- Too little play
- Moving parts rusted
- Weak brake shoe spring



### 8) If Motorcycle Difficult to Ride

#### ◇ Does Not Ride Smoothly

- Tire air pressure too low
- Steering stem nut tightened too much
- Steering stem bearings need grease

#### ◇ Does Not Steer Properly

- Tire air pressure too high
- Tire air pressure too low
- Front and rear wheels not aligned
- Front or rear wheel loose or wobbling
- Wheel bearings worn or bearing races broken
- Spokes loose or broken



## 10. MIXING FUEL

The Suzuki 2-cycle engine requires a mixture of oil and gasoline as fuel. Never put gasoline only in the fuel tank.

The fuel must be mixed in the proper ratio. Two-cycle oil is recommended. Follow the prescribed fuel mixture ratios exactly.

2-cycle oil or high grade motor oil

for the first 1,000 km (620 mi).....gasoline 15 : oil 1

after 1,000 km (620 mi) .....gasoline 20 : oil 1

The gasoline and oil must be mixed well. Be sure to stir the fuel mixture until it is well blended. 2-cycle oil is easier to mix with gasoline than motor oil.

FUEL MIXING RATIO CHART

Q'ty of gas	Q'ty of oil	
	15 : 1	20 : 1
0.25 gal	0.017 gal (0.13 pt)	0.013 gal (0.1 pt)
0.50 "	0.034 " (0.27 ")	0.025 " (0.2 ")
0.75 "	0.050 " (0.40 ")	0.038 " (0.3 ")
1.00 "	0.067 " (0.54 ")	0.050 " (0.4 ")
1.25 "	0.084 " (0.67 ")	0.063 " (0.5 ")
1.50 "	0.100 " (0.80 ")	0.075 " (0.6 ")
1.75 "	0.117 " (0.94 ")	0.088 " (0.7 ")
2.00 "	0.134 " (1.07 ")	0.100 " (0.8 ")
2.55 "	0.150 " (1.20 ")	0.113 " (0.9 ")
2.50 "	0.167 " (1.34 ")	0.125 " (1.0 ")

Q'ty of gas	Q'ty of oil	
	15 : 1	20 : 1
1 L	0.067 L ( 60 cc)	0.05 L ( 50 cc)
2 "	0.134 " (134 cc)	0.10 " (100 cc)
3 "	0.200 " (200 cc)	0.15 " (150 cc)
4 "	0.267 " (267 cc)	0.20 " (200 cc)
5 "	0.334 " (334 cc)	0.25 " (250 cc)
6 "	0.400 " (400 cc)	0.30 " (300 cc)
7 "	0.467 " (467 cc)	0.35 " (350 cc)
8 "	0.534 " (534 cc)	0.40 " (400 cc)
9 "	0.600 " (600 cc)	0.45 " (450 cc)
10 "	0.667 " (667 cc)	0.50 " (500 cc)

Always put freshly mixed fuel into the fuel tank. Mixed fuel which has been allowed to stand for a long time is not good for the engine. Never try to mix the gasoline and oil inside the fuel tank. Always make the fuel mixture in a container and then pour it into the fuel tank.

Suzuki distributes a handy "Oil Bottle" with every motorcycle. Always use the oil bottle when marking the fuel mixture.

### Periodical Inspection and Maintenance Chart

Odometer Reading	Operation	Remarks
500 km (300 mi)	<ul style="list-style-type: none"> <li>◦ Clean spark plug</li> <li>◦ Change transmission oil</li> <li>◦ Adjust play of throttle cable</li> <li>◦ Adjust engine idling with carburetor throttle stop screw and air screw</li> <li>◦ Check battery electrolyte solution</li> <li>◦ Check contact breaker points gap and ignition timing, adjust if necessary</li> <li>◦ Lubricate magneto oil felt</li> <li>◦ Adjust play of brakes</li> <li>◦ Retighten cylinder head</li> <li>◦ Adjust drive chain</li> <li>◦ Retighten bolts, nuts and spokes</li> </ul>	<p>Play should be 0.5~1 mm (0.02~0.04 in)</p> <p>Solution must be kept above lower limit line at all times Points gap should be 0.3~0.4 mm (0.012~0.016 in) and ignition timing 27° before TDC Clean points surfaces if they are dirty</p> <p>Play should be 20~30 mm (0.8~1.2 in) with motorcycle put on center stand</p>
3,000 km (2,000 mi)	<ul style="list-style-type: none"> <li>◦ Clean spark plug and adjust gap if necessary</li> <li>◦ Change transmission oil</li> <li>◦ Adjust play of throttle cable</li> <li>◦ Adjust engine idling with throttle stop screw and air screw</li> <li>◦ Check battery electrolyte solution—add distilled water if necessary</li> <li>◦ Check contact breaker points gap and ignition timing—adjust if necessary</li> </ul>	

Odometer Reading	Operation	Remarks
3,000 km (2,000 mi)	<ul style="list-style-type: none"> <li>◦ Lubricate magneto oil felt</li> <li>◦ Clean air cleaner</li>   <li>◦ Adjust play of brakes</li> <li>◦ Retighten cylinder head</li> <li>◦ Adjust drive chain</li> <li>◦ Retighten bolts, nuts and spokes</li> <li>◦ Lubricate cables and grease nipples</li> </ul>	Remove dust and dirt with air pressure or brush
6,000 km (4,000 mi)	<ul style="list-style-type: none"> <li>◦ Clean spark plug and adjust gap if necessary</li> <li>◦ Change transmission oil</li> <li>◦ Adjust play of throttle cable</li> <li>◦ Adjust engine idling with throttle stop screw and air screw</li> <li>◦ Check battery electrolyte solution—add distilled water if necessary</li> <li>◦ Check battery terminals for loose connections—retighten if loose</li> <li>◦ Check contact breaker points gap and ignition timing—adjust if necessary</li> <li>◦ Lubricate magneto oil felt</li> <li>◦ Clean air Cleaner</li> <li>◦ Adjust play of brakes</li> <li>◦ Decarbonize exhaust port and combustion chamber</li> <li>◦ Decarbonize exhaust pipe and muffler-baffle pipe</li> <li>◦ Adjust drive chain</li> <li>◦ Retighten bolts, nuts and spokes</li> <li>◦ Lubricate cables and grease nipples</li> </ul>	



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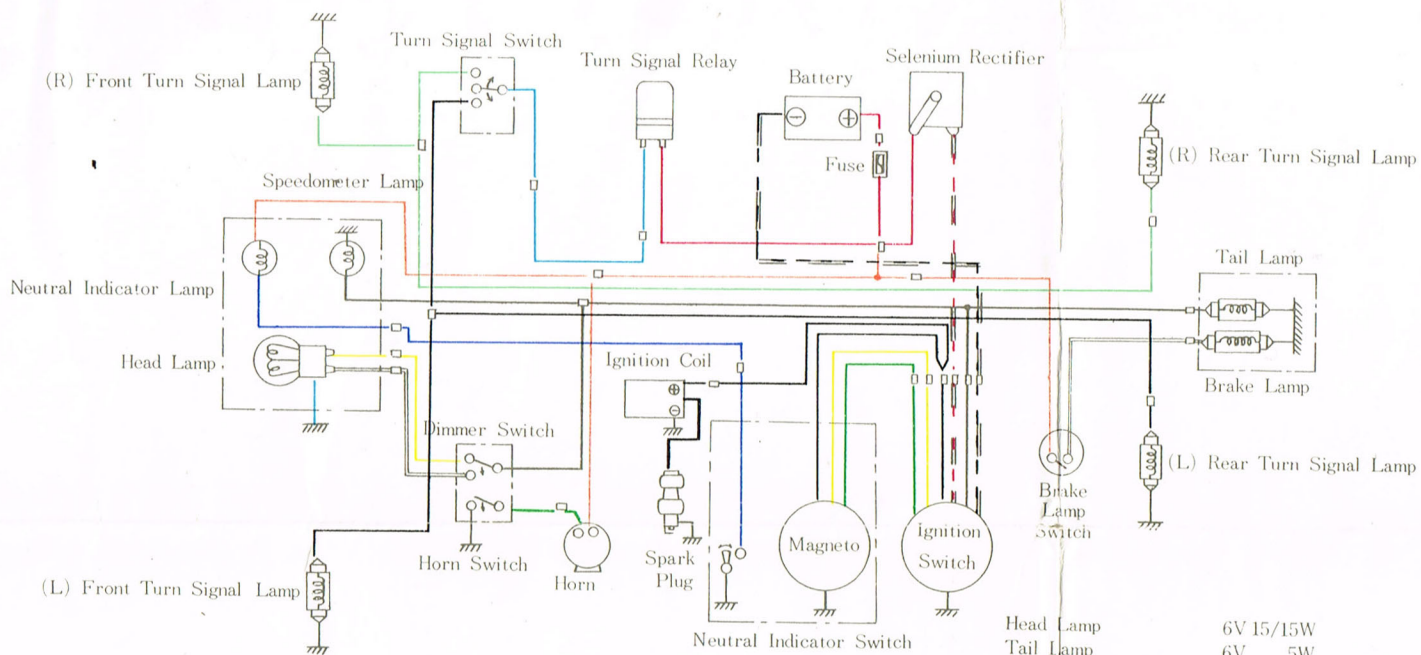
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Singapore Representative Office : P.O. Box Killiney 97, Singapore 9, Malaysia

U. S. SUZUKI MOTOR CORPORATION : 200 West Central Ave., Santa Ana, California, U.S.A.



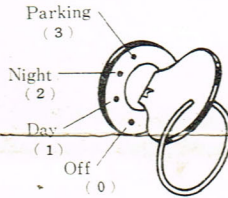
**Suzuki 80 Model K10  
Suzuki Sports 80 Model K11** Wiring Diagram



Head Lamp	6V	15/15W
Tail Lamp	6V	5W
Brake Lamp	6V	10W
Speedometer Lamp	6V	1.5W
Neutral Indicator Lamp	6V	1.5W
Turn Signal Lamps	6V	8W × 2 × 2
Battery	6V	4 AH
Fuse		15A

### ◇ Notice for Operating Ignition Switch

1. The ignition switch is located on the frame left cover.
2. The ignition switch key cannot be removed unless it is turned to the position (0) or (3).
3. The key works as follows



	0	1	2	3
	Day time parking	Day time riding	Night time riding	Night time parking
Engine starting		○	○	
Head lamp			○	
Tail/parking lamp			○	○
Brake lamp		○	○	
Neutral indicator lamp		○	○	
Speedometer lamp			○	
Horn		○	○	
Turn signal lamps		○	○	
Front parking lamp				○

### ◇ Notice for Night-time Parking Lamps

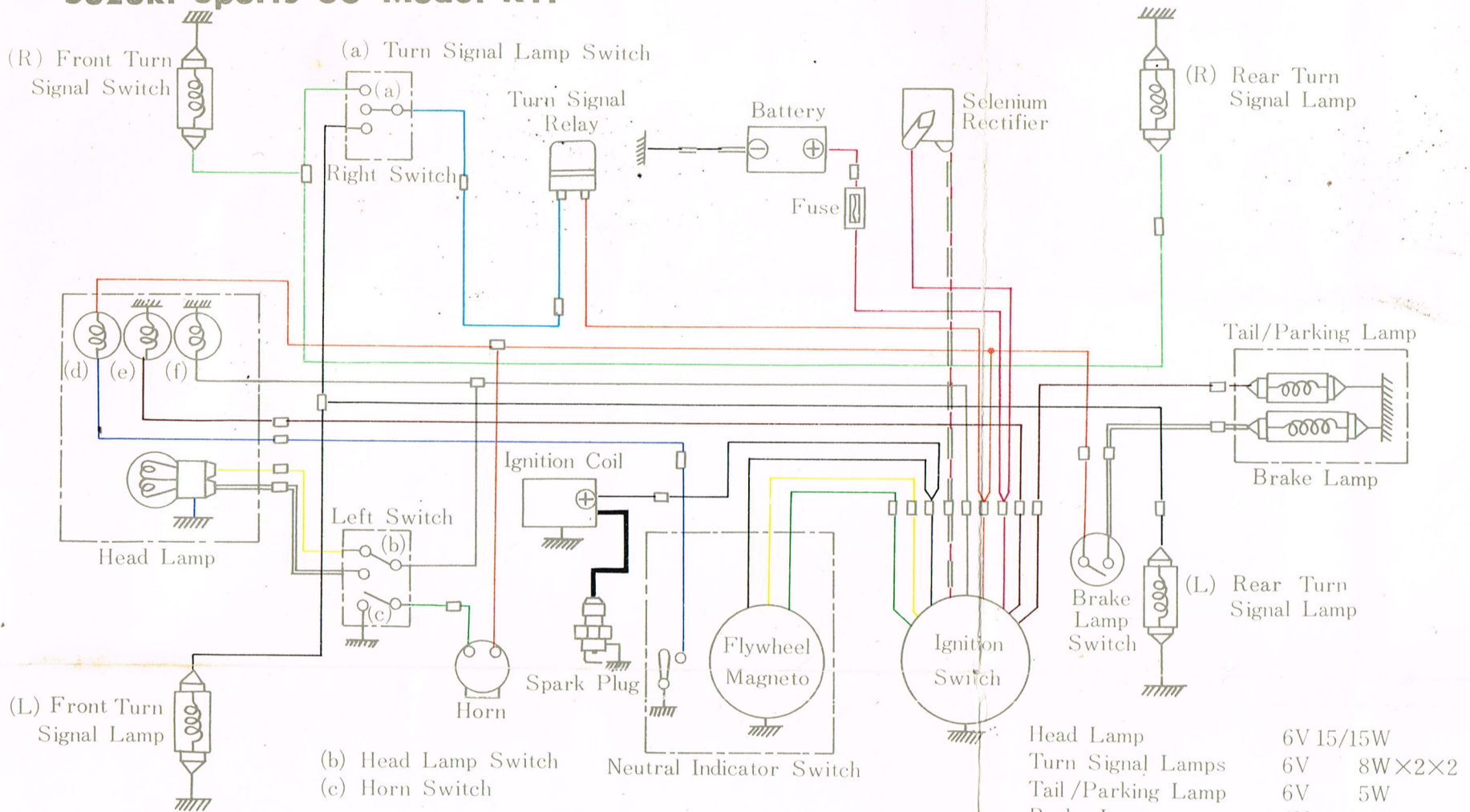
1. The night-time parking lamps light up on the position (3).
2. When parking in day-time, turn the key to the position (0) and never fail to remove it.

### ◇ Notice for Battery

1. The battery type for this motorcycle is 6V 4AH.
2. Be sure to check the battery electrolyte solution every week in summer and every two weeks in winter, and keep the electrolyte solution between the upper and lower limit lines.
3. Never fail not to put on the parking lamps for more than 1.5 hours continuously, or the battery will be discharged and the other electric equipment will not work.
4. When the battery has been discharged, give it supplementary charge at your dealer.  
If the discharged battery is kept being placed in service, it will not be fit for use.

**Suzuki 80 Model K10**  
**Suzuki Sports 80 Model K11**

**Wiring Diagram (Shipped to British Market)**



- (L) Front Turn Signal Lamp
- (d) Neutral Indicator Lamp
- (e) Front Parking Lamp
- (f) Speedometer Lamp

- (b) Head Lamp Switch
- (c) Horn Switch

Head Lamp	6V 15/15W
Turn Signal Lamps	6V 8W×2×2
Tail/Parking Lamp	6V 5W
Brake Lamp	6V 10W
Speedometer Lamp	6V 1.5W
Neutral Indicator Lamp	6V 1.5W
Front Parking Lamp	6V 3W
Battery	6V 4 AH
Fuse	15A