SUZUKI

OWNER'S MANUAL

SUZUKI

80

MODEL

K10P

SUZUKI SPORT

80

MODEL

K11P

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.

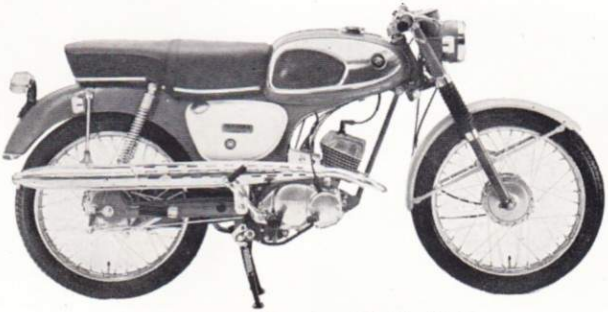
You are assured of satisfactory performance in a Suzuki motorcycle which is manufactured with high engineering techniques such as won the Isle of Man T.T. and many Grand Prix races, is based on the company's rich experience gained since 1936 when it began motorcycles and automobiles, and is produced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

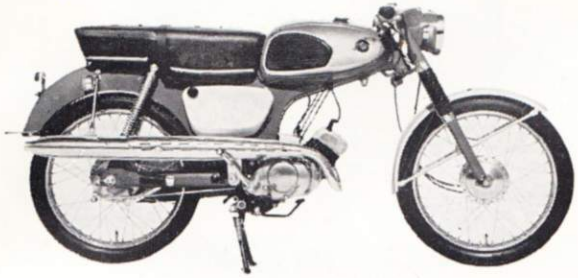
SIDE VIEWS OF K10P & K11P

SUZUKI 80 MODEL K10P

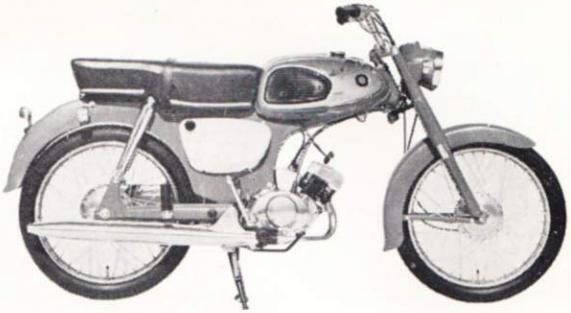


SUZUKI SPORT 80 MODEL K11P

OUTSTANDING SUZUKI MOTORCYCLES



SUZUKI SPORT 50 MODEL M12 MARK 2



SUZUKI 50 MODEL M15 MARK 2

SUZUKI 50 MODEL M30

SUZUKI TRAIL 80 MODEL K15

SUZUKI 120 MODEL B100P

SUZUKI 150 MODEL S32-2

SUZUKI 250 MODEL T10

SUPER SPORT SUZUKI 250 MODEL T20

CONTENTS

1. REVOLUTIONARY "SUZUKI POSI-FORCE LUBRICATION"

The "Suzuki Posi-Force Lubrication" is the most advanced lubrication system for 2-cycle engines.
Conventional 2-cycle engines require gas/oil mixture as fuel but the K10P & K11P engines do not.
Oil is not mixed with gasoline for this 2-cycle engine or fed through the carburetor or manifold as seen in some 2-cycle engines, so that oil is not thinned by gasoline before it reaches destinations, assuring more effective and positive lubrication.
Oil is pumped directly to the crankshaft, crankshaft bearings, connecting rod big end and splashed on the connecting rod small end and cylinder wall.
The oil pump is driven by the engine crankshaft and its stroke is controlled by the throttle grip, therefore the amount of oil fed to the engine is determined by both engine speed and load.
Thus the engine is always fed just the right amount of oil that it requires. This revolutionary "Suzuki Posi-Force Lubrication" does away with problems of carbon accumulation, smoky exhaust and oily engine as well as reducing oil consumption.

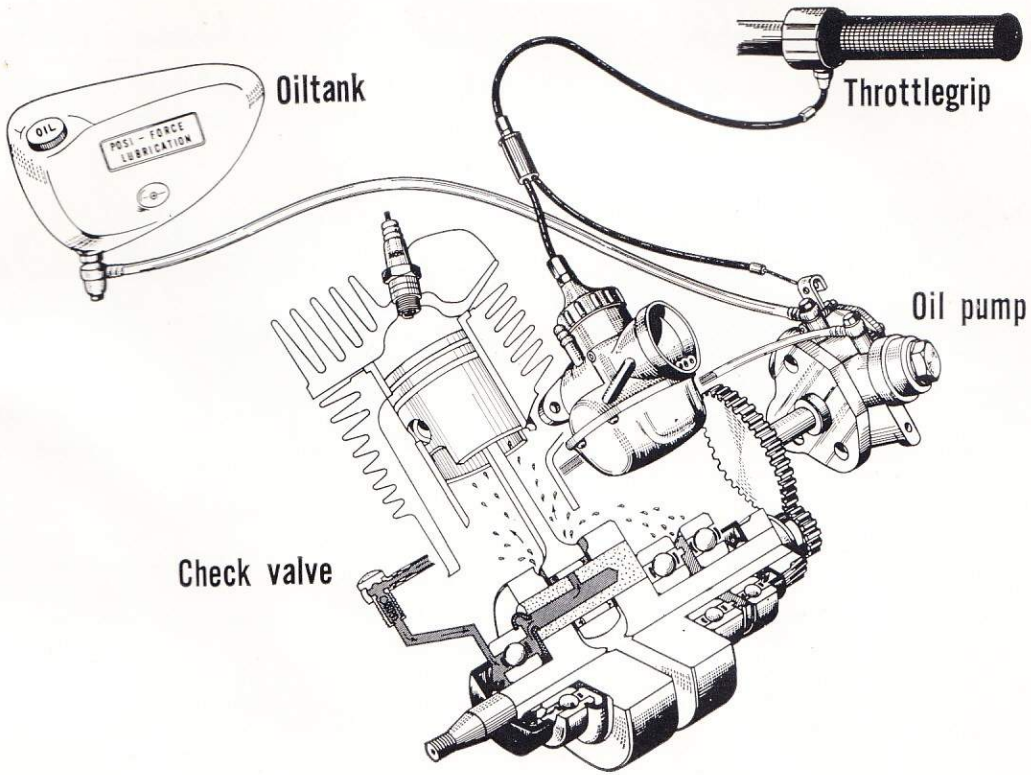


Fig. 1—"Suzuki Posi-Force Lubrication"

2. BREAKING IN

The first 1,600 km (1,000 mi) is what you call a break in period. During the break-in period the engine must be handled with utmost care just as with a newborn baby so that all moving and rubbing parts are properly broken in.

Keep the maximum speed below 50 kph (30 mph) during that period.

The break-in indicator overlaying the speedometer face is meant to help the rider follow the above limitation.
Please adhere to the speeds in each gear as instructed.
Additionally, do not overload or labor the engine on uphill grades or against headwinds.
Recommended fuel for the K10P and K11P, as for all Suzuki motorcycles, is a premium grade gasoline.
Recommended oil for the Posi-Force System is a quality grade 2-stroke oil.

3. LOCATION OF PARTS

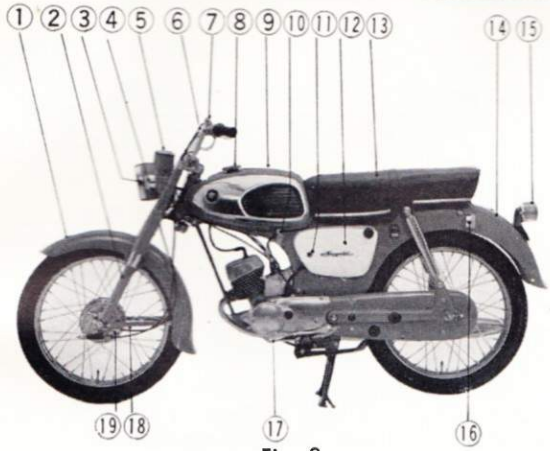


Fig. 2

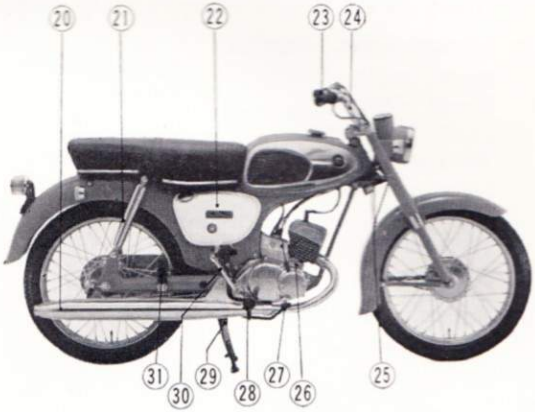


Fig. 3

(1) Front Fender
(2) Front Fork
(3) Head Lamp
(4) Front Turn Signal Lamp
(5) Speedometer
(6) Clutch lever
(7) Carburetor Choke Lever
(8) Fuel Tank Cap
(9) Fuel Tank
(10) Fuel Cock
(11) Ignition Switch
(12) Battery/Tool Box
(13) Dual Seat
(14) Rear Fender
(15) Tail/Brake Lamp
(16) Rear Turn Signal Lamp
(17) Gear Shifting Lever
(18) Speedometer Cable
(19) Front Brake Cable
(20) Muffler
(21) Rear Shock Absorber
(22) Oil Tank
(23) Throttle Grip
(24) Front Brake Lever
(25) Steering Lock
(26) Power Unit
(27) Brake Pedal
(28) Front Footrest
(29) Center Stand
(30) Kick Stater Lever
(31) Rear Footrest

4. SPECIFICATIONS

*Items marked with an asterisk * are for model K11P only.

◇ Dimensions, Weight

Overall length	1,790 mm (70.5 in)	*1,820 mm (71.6 in)
Overall width	665 mm (26.2 in)	*565 mm (22.2 in)
Overall height	965 mm (38.0 in)	*860 mm (33,9 in)
Wheelbase	1.160 mm (45.7 in)	
Ground clearance	135 mm (5.3 in)	
Tire size (front & rear)	2.50-17 in, 4PR	
Dry weight	76 kg (167 lb)	

◇ Performance

Maximum speed	90 Kph (56 mph) *95 Kph (60 mph)
Fuel consumption	80 Kpl (188/226 mpg, US/Imp) @ 40 Kph (25 mph) on paved flat road *75 Kpl (177/211 mpg, US/Imp) @ 40 Kph (25 mph) on paved flat road
Climbing ability	18°
Braking distance	7m (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	sleeved aluminum single, inclined forward
Corrected compression ratio	6.7 : 1
Maximum horsepower	7.5 hp @ 6,500 rpm *8.0 hp @ 7 500 rpm

Maximum torque	0.89 kg-m (6.4 ft-lb) @ 5,000 rpm *0.86 kg-m (6.1 ft-lb) @ 6,000 rpm
Starting	Kick

◇ Fuel System

Carburetor	Amal VM 20 SH
Air cleaner	resin-processed filter
Fuel tank capacity	6 ltr (1.6/1.3 gal, US/Imp) including 1 ltr (2.1/1.8pt, US/Imp) reserve

◇ Lubrication

Engine	"SUZUKI POSI-FORCE LUBRICATION"
Gearbox	oil bath
Oil tank capacity	1.3 ltr (1.4/1.1 qt, US/Imp)

◇ Ignition System

Ignition	flywheel magneto
Ignition timing	20° before TDC
Spark plug	NGK B-7
Generator	flywheel magneto

◇ Transmission System

Clutch	wet multi-disc
Gearbox	4-speed forward, constantmesh
Gear shifting	left foot, return shifting type
Primary reduction ratio	73-tooth gear/19-tooth pinion=3.841
Final reduction ratio	30-tooth rear sprocket/14-tooth engine sprocket=2.143
Overall reduction ratio	8.8 (in top gear)

◇ Suspension

Front suspension	hydraulically damped telescopic fork
Rear suspension	hydraulically damped swinging arm

◇ Steering

Steering angle (right & left)	45°
Castor	63°
Trail	73 mm (2.9 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	6V, 15/15W
Tail/brake lamp	6V, 3/21 CP
Turn signal lamps	6V 8W×4
Speedometer lamp	6V, 1.5W
Neutral indicator lamp	6V, 1.5W
Battery	6V, 4AH
Fuse	15A

5. TIPS ON OPERATION

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

◇ The K10P & K11P engines require no gas/oil mixture as fuel unlike conventional 2-cycle engines. The engine's moving parts such as crankshaft, crankshaft bearings, con-rod, piston and cylinder wall are positively lubricated by fresh oil which is separately perssure-delivered from the variable displacement oil pump.

This unique forced oiling system is called "Suzuki Posi-Force Lubrication". Put gasoline only in the fuel tank and lubrication oil in the oil tank. As for lubrication oil, be sure to use one of these prescribed oils :-

* If the temperature is below 10°C (50°F)

SHELL 2T TWO STROKE OIL	SUPER SHELL MOTOR OIL
MOBIL SUPER MOTOR OIL	

* If the temperature is above 10°C (50°F)

SHELL 2T TWO STROKE OIL	SHELL OUTBOARD ENGINE OIL
SUPER SHELL MOTOR OIL	MOBIL MIX TT
MOBIL OUTBOARD OIL	MOBIL SUPER MOTOR OIL
ESSO 2T MOTOR OIL	ESSO OUTBOARD OIL
CALTEX 2T PLUS MOTOR OIL	STANDARD OUTBOARD OIL
UNION 76 OUTBOARD OIL	TEXACO OUTBOARD OIL

If low grade oil is used in an ill-advised attempt to save on expenses, lubrication can become incomplete with resultant engine overheating and rapid wear of engine parts, requiring expensive repairs, so that it is more costly.

Make it a rule to check the oil level in the oil tank and see if oil is properly fed to the engine without a break before riding the motorcycle, lest the engine is spoiled.

◇ The life of the motorcycle depends on the breaking-in of the engine and the way the motorcycle is treated. Just as with a newborn baby, it must be given the best care possible.
During the break-in period, do not ride the motorcycle at high speeds nor allow the engine to run wide open. Keep to the specified break-in speed limitation. Gradually raise the speed as the covered milage increases.

for first 1,600 km (1,000 mi).....below 50 kph (30 mph)

◇ Do not alter any original part or fit any part other than a genuine Suzuki Part on the motorcycle, for this will shorten the life of the motorcycle as well as lowering performance. All original parts are accurately designed following repeated research and tests.

◇ When replacing parts, always use genuine Suzuki Parts, which are precision-made under severe quality control. If imitation parts (not genuine parts) are used, good performance cannot be expected from the motorcycle and, in the worst case, they can cause a breakdown.

6. 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. 4—Identification Plate

◇ Fuel Cock

The fuel cock on this motorcycle has three positions, 0 (off) 1 (on) 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.

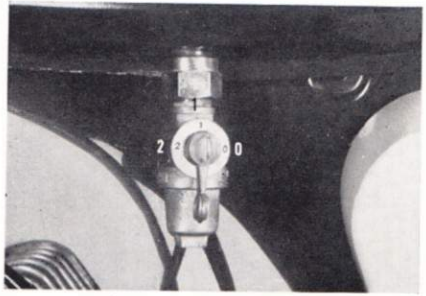


Fig. 5—Fuel Cock

◇ Oil Tank

The oil tank located on the right side of the frame holds lubricant oil for the engine. Be sure to check the oil level in the oil tank before starting the engine. If the oil level is found below the red line marked on the oil level inspection eye, replenish the oil tank with one of the prescribed oils. The oil tank capacity is 1.3 ltr (1.4/1.1 qt, US/Imp).

Fig. 6—Oil Tank

◇ 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. 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 / Item	Ignition	Neutral Indicator Lamp	Horn	Brake Lamp	High Beam Indicator Lamp	Head Lamp	Tail Lamp
0 (Off)							
1 (Day)	o	o	o	o			
2 (Night)	o	o	o	o	o	o	o

Fig. 7—Ignition Switch

◇ Carburetor Choke System

The carburetor choke system gives easy starts even in cold weather by supplying a rich fuel air mixture to the engine. The choke system is operated by a lever fitted on the handlebar. When starting a cold engine, pull the choke lever. Be sure to return it when the engine warms up and motorcycle is run. Do not turn the throttle grip when the carburetor choke system lever is pulled. If the throttle grip is turned even a small amount, the engine becomes hard to start.

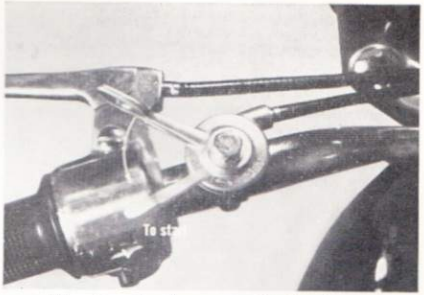


Fig. 8—Carburetor Choke Lever

◇ 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 sqeezing the clutch lever.

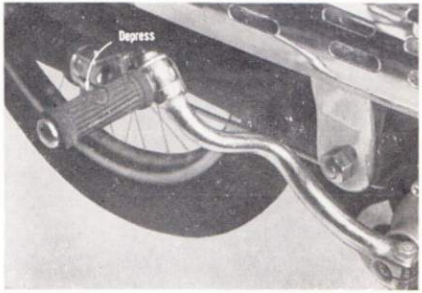


Fig. 9—Kick Starter Lever

◇ 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.

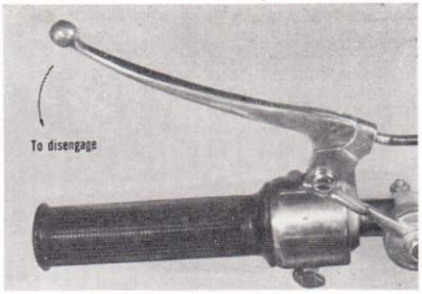


Fig. 10—Clutch Lever

◇ Gear Shifting Lever

A transmission system is installed as the motorcycle requires more torque than speed when starting and more speed than torque when running. A leftfoot operated gear shifting lever changes the transmission gears.

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

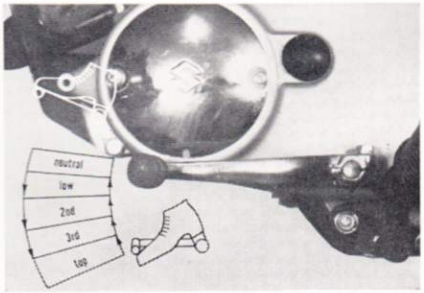


Fig. 11—Gear Shifting Lever

◇ Throttle Grip

Engine speed is controlled by the throttle grip on the right end of the handlebar. If the throttle grip is twisted inward toward you, engine speed rises. The racing type quick action throttle grip is so sensitive that a quarter turn of it opens the throttle valve fully.

Fig. 12—Throttle Grip

◇ Neutral Lamp

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

Fig. 13—Neutral Lamp

◇ Turn Signal Lamps

The turn signal lamp switch is located on the right side of the handlebar.

- Pushing knob to the right ·····turns on right front and rear turn signal lamps
- Pushing knob to the left·····turns on left front and rear turn signal lamps

◇ 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 other vehicles.

Adjusting Beam

The height of the head lamp beam can be adjusted by loosening front turn signal lamp stay nuts inside the head lamp housing and moving the housing up and down.

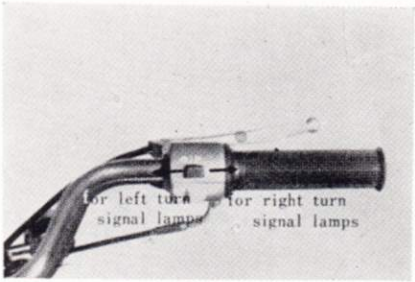


Fig. 14—Turn Signal Lamp Switch

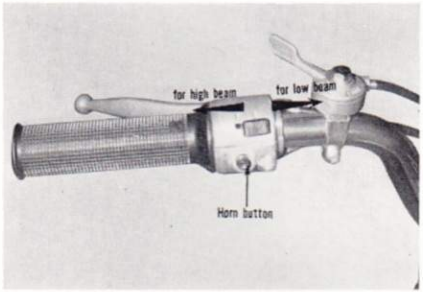


Fig. 15—Headlamp Dimmer Switch

Fig. 16—Adjusting Beam

◇ Steering Lock

An anti-theft steering lock is installed on the steering stem. To lock the steering, turn the steering handle all the way to the left and then insert the ignition switch key into the steering lock and turn counterclockwise. Don't forget to lock the steering when parking the motorcycle.

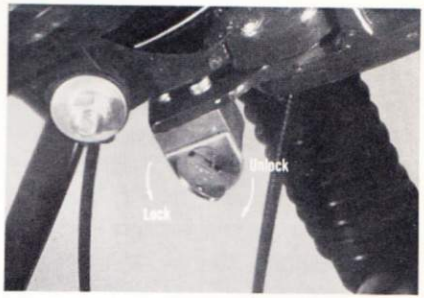


Fig. 17—Steering Lock

◇ Tool kit

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

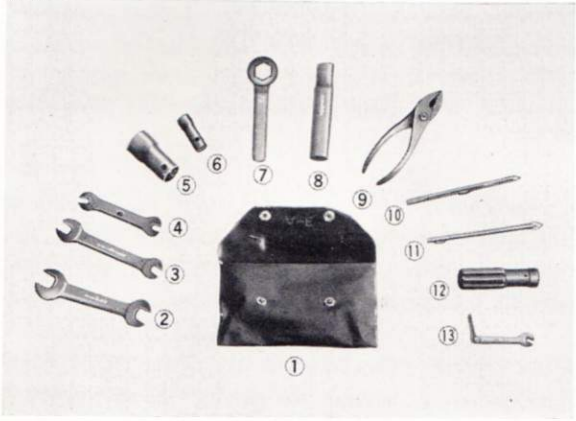


Fig. 18—Tool Kit

(1) Tool Bag
(2) 14×17mm Wrench
(3) 10×12mm Wrench
(4) 8×9mm Wrench
(5) 21mm Box Wrench
(6) 10mm Box Wrench
(7) 23mm Offset Wrench
(8) Offset Wrench Grip
(9) Pliers
(10) Combination Screw Driver
(11) Cross Head Screw Driver
(12) Screw Driver Grip
(13) Point Wrench

7. TIPS ON RIDING

◇ Starting Engine

When engine is cold:

* Check to see if there is sufficient oil in the tank.
* Turn the fuel cock lever to position "1".
* Insert the nigition key into the ignition switch and turn it to the right noe notch to the "day" position, and the green neutral indicactor lamp will turn on if the gears are in neutral. If the indicator lamp does not turn on, shift the gears into neutral by operating the gear shifting lever while pushing the motorcycle back and forth, with the clutch lever squeezed.
* Turn the carburetor choke system lever to the open position. Close the throttle grip completely. (If the throttle grip is open even a small amount, the choke system will not work efficiently.)
* Depress the kick starter 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 choke system lever until the engine has warmed up.

When engine is already warm:

* Open the throttle $\frac{1}{8}$ to $\frac{1}{4}$. Depress the kick starter. The engine will start easily. Operation of the carburetor choke 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 engine is run at too high speed or the clutch lever is released too rapidly, the motorcycle will start with jerky spurts or stall suddenly.

* When the speed of the motorcycle reaches about 16 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 the 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 th cycle into top gear.
* After shifting into top gear, the speed of the motorcycle is controlled by the throttle grip.

◇ Riding Tips

* If the speed of the motorcycle decreases when riding up a hill shift down into a lower gear so that the engine may always be operating in its power range.
  Shift the gears rapidly to prevent the motorcycle from losing momentum.
* When riding down a hill, don't depend upon the brakes alone but leave the motorcycle in gear and close the throttle completely to utilize engine brake. The lower-geared the transmission is, the more effective engine brake is, in other words engine brake is more noticeable in Low than in Second. Hence select the most suitable gear considering the degree of inclination.

◇ 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 skidding and loss of control. Make it a rule to always apply both brakes at the same time.
* Apply brakes lightly and with great care on wet highway pavement 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 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).

8. INSPECTION AND MAINTENANCE

Daily Inspection

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

(1) Is there enough oil in the oil tank?
(2) Is there enough fuel in the fuel tank?
(3) Do the front and rear brakes work effectively?
(4) Is the tire pressure correct?
(5) Does the clutch operate smoothly?
(6) Do the head lamp, tail lamp and brake lamp turn on properly?
(7) Does the horn sound?
(8) Is the steering handlebar turned to both right and left smoothly without any play in the steering stem?
(9) Is the drive chain correctly adjusted?

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 of the motorcycle. Make proper inspections and maintenance according to the distance the motorcycle is ridden as shown in the following inspection chart.

Take your motorcycle to your Suzuki dealer for these inspections.

Odometer Reading	Operation
First 800 km (500 mi)	* Check operation of oil pump * Clean spark plug * Change transmission oil * Adjust play of throttle cable * Adjust engine idling with carburetor throttle valve adjusting screw and pilot air adjusting screw * Check contact breaker point gap and ignition timing-adjust if necessary * Lubricate contact breaker cam oil felt * Retighten cylinder head nuts * Check battery electrolyte solution-add distilled water if necessary. * Adjust clutch * Adjust and lubricate drive chain * Adjust play of brakes * Retighten bolts, nuts and spokes * Adjust fork stem and crown bearings * Test ride
Every 1,500 km (1,000 mi)	* Check operation of oil pump—adjust control cable if necessary * Clean spark plug adjust gap if necessary * Check transmission oil level * Adjust play of throttle cable * Adjust engine idling with carburetor throttle valve adjusting screw and pilot air adjusting screw * Check contact breaker point gap and ignition timing—adjust if necessary

	* Lubricate contact breaker cam oil felt * Check battery electrolyte solution-add distilled water if necessary * Clean air cleaner * Adjust clutch * Adjust and lubricate drive chain * Adjust play of brakes * Retighten bolts, nuts and spokes * Lubricate cables * Test ride
Every, 6,000 km (4,000 mi)	* Check operation of oil pump—adjust control cable if necessary * Clean spark plug, adjust gap if necessary * Change transmission oil * Overhaul and clean carburetor * Check contact breaker point gap and ignition timing-adjust if necessary * Lubricate contact breaker cam oil felt * Check battery electrolyte solution-add distilled water if necessary * Clean fuel strainer * Clean oil tank outlet cup * Clean air cleaner * Adjust clutch * Remove carbon from combustion chamber and exhaust port * Remove carbon from exhaust pipe and muffler baffle pipe * Wash and lubricate drive chain * Adjust play of brakes * Retighten bolts, nuts and spokes * Lubricate cables * Test ride

◇ Adjusting Carburetor

Inspection and Maintenance Tips

The throttle cable, pilot air adjusting screw and throttle valve adjusting screw can get out of adjustment from vibrations when the motorcycle is running so periodical inspection and adjustment are necessary. Remember to retighten the mixing chamber cap to prevent dust and dirt from finding their ways into the carburetor each time adjustment of caburetor is necessary. Also be sure that the throttle cable end is fully seated in its seat in the throttle valve.

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 0.5~1.0mm (0.02~0.04 in) by turning the throttle cable adjuster under the throttle grip housing.

*Turning adjuster out ..... decreases play
*Turning adjuster in ..... increases play

* Take the air cleaner tube off of the carburetor and check to see, with your fingers inserted into the air intake of the carburetor, 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. The pilot air adjusting screw regulates the mixing ratio of fuel and air at low speed. In case the mixture is on the lean or rich

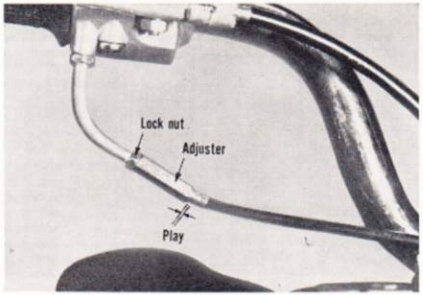


Fig. 19—Throttle Cable Adjuster

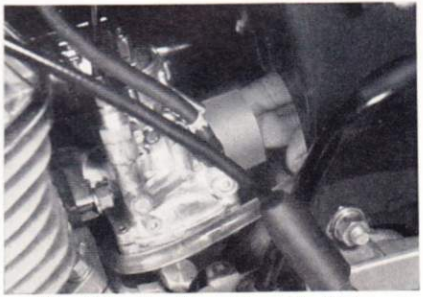


Fig. 20—Checking Throttle Valve Movement

side, adjust the carburetion with the pilot air adjusting screw in the following manner:

* Turn the pilot air adjusting screw in and $\frac{1}{4}$ of a turn from its position backed off $1\frac{1}{2}$ turns ($1\frac{1}{4}$ turns for K11P). The speed of the engine idling increases and decreases according to the turing of the pilot air adjusting screw. Find the position where the engine runs most smoothly and fix the pilot air adjusting screw.
* Obtain the proper engine idling speed again with the throttle valve adjusting screw.

* Turning pilot air adjusting screw in·····makes mixture rich
* Turning pilot air adjusting screw out·····makes mixture lean
* Turning throttle valve adjusting screw in ···lowers engine rpm
* Turning throttle valve adjusting screw out···raises engine rpm

3. Jet Needle Position

The jet needle is clipped into the fourth groove (for K11P, 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 will 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 fifth (fourth for K11P) groove from the top for these service conditions.

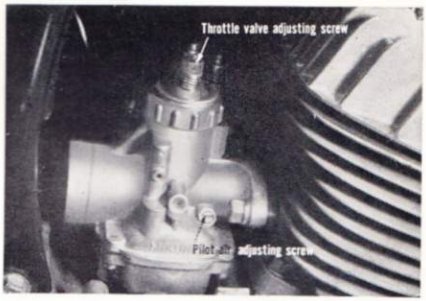


Fig. 21—Carburetion Adjuster

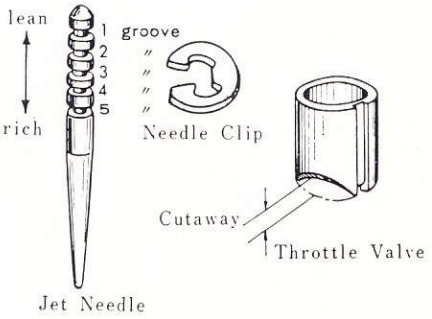


Fig. 22—Throttle Valve & Jet Needle

◇ Adjusting Oil Pump Control Cable

The oil pump control cable must be adjusted with the adjuster so that about 1 mm (0.04 in) of clearance is left between the control lever and stop when the throttle valve is fully opened.
It is to be noted that too much clearance can cause insufficient lubrication, whereas no clearance increases oil consumption.

To adjust the oil pump control cable, remove the oil pump inspection cap with a cross head screw driver, loosen the control cable adjuster lock nut with a 12 mm wrench and then turn the adjuster in or out until proper clearance is obtained. After adjustment, be sure to secure the adjuster with the lock nut.

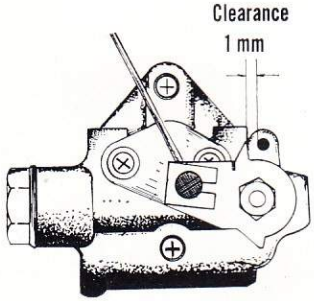


Fig. 23—Oil Pump Control Lever Clearance

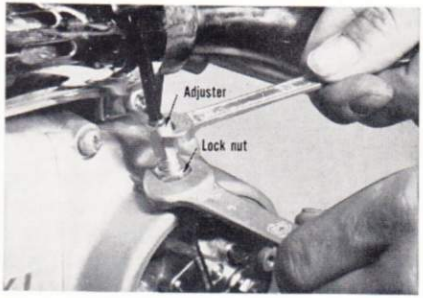


Fig. 24—Adjusting Oil Pump Control Cable

◇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 point gap first and then adjust the ignition timing. If the ignition timing is adjusted first, adjusting the point gap will make the ignition timing incorrect again.

* Remove the magneto inspection cap on the crankcase left cover.
* Turn the rotor and find the position where the contact breaker point gap is the largest.
* Check the point gap with the feeler gauge fitted on the point wrench. The standard gap is 0.35 mm. 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 point gap is adjusted, adjust the ignition timing.
* Turn the flywheel rotor by a wrench to the point at which the contact breaker points just begin to open. Check to see if projection "A" on the crankcase left cover aligns with arrow "B" on the rotor. If arrow "B" is on the left side of projection "A", ignition timing is advanced. If arrow "B" is on the right side, ignition timing is retarded.

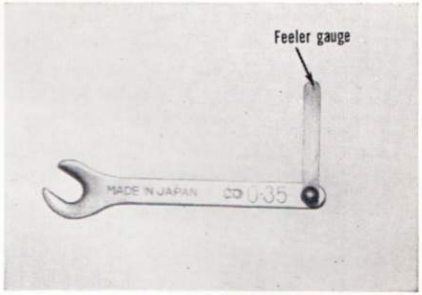


Fig. 25—Contact Point Wrench

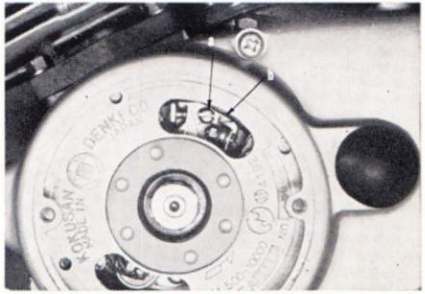


Fig. 26—Flywheel Magneto

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

If ignition timing is slightly advanced, adjust by setting the point 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 point gap within the limit 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.

* Point surfaces 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 NGK B-7 spark plug with a 14 mm (0.55 in) thread diameter and a 9.5 mm (0.37 in) reach is standard for this motorcycle. Bear in mind that the spark plug must be correct in what is called the "heat range" as well as the size of the threaded part. The wrong heat range spark plug causes overheating, hard starting, etc. When the heat range is correct, the spark plug shows a light brown appearance, sometimes with greyish deposits. If the standard spark plug (NGK B-7) is apt to get wet or dirty with carbon, try a hotter plug (NGK B-6). This hotter spark plug may be necessary during the break-in period to avoid fouling, but should not be used under high load or high speed conditions at any time.

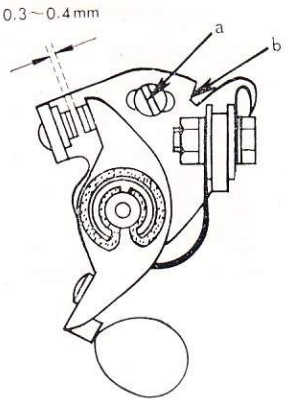


Fig. 27—Contact Breaker Point Gap

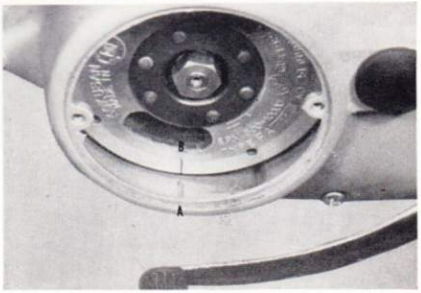


Fig. 28—Timing Marks

When carbon accumulates on the spark plug, a hot, strong spark will not be produced. Remove carbon deposits with a 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 0.5-0.7 mm (0.020-0.028 in). Measure with a feeler gauge.

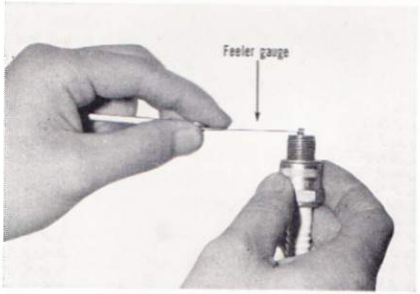


Fig. 29—Checking Spark Plug Gap

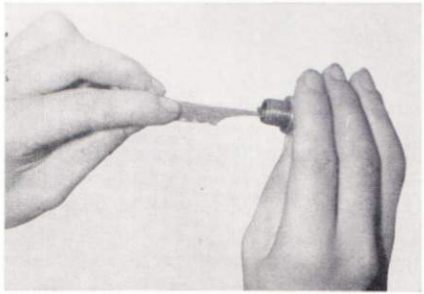


Fig. 30—Cleaning Spark Plug

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

Champion	J-6 or J-5
AC	42 or C42
KLG	FS 75
Autolite	A-3 or A23
Bosch	W190 or W225 T3
Lodge	2HAN

Caution :

When putting in the spark plug, first clean the seat in the cylinder head. Be careful not to let dirt or dust fall into the cylinder through the spark plug hole. Be sure the spark plug gasket is in good condition. If the

spark plug gasket loses flexibility, compression will leak.
Use a new gasket. Next screw the spark plug with your fingers, not a wrench, to prevent stripping the threads. After you set it lightly with your fingers, tighten with a wrench.
The air cleaner is fitted with one screw inside the frame, with access through the frame left cover.

◇ Cleaning Air Cleaner

If the air cleaner is clogged with dust, intake resistance will be increased with a resultant decrease in output and increase in fuel consumption.
Check and clean every 3,000 km (2,000 mi).
* Remove the frame left cover and take out the battery.
* Remove the air cleaner fitting screw.
* Loosen the air cleaner tube clamp and take out the air cleaner from inside the frame.
* Remove the air cleaner cover by loosening the fitting screws and take out the air cleaner element.
* Use air pressure or a brush to clean dust and dirt from the air cleaner element.

Caution :
Washing the air cleaner element with water or gasoline decreases its performance, so do not wash the air cleaner element. If the motorcycle is run without the air cleaner in an ill-advised attempt to get more power from the engine, wear of engine parts will be hastened, so that this must be strictly avoided.

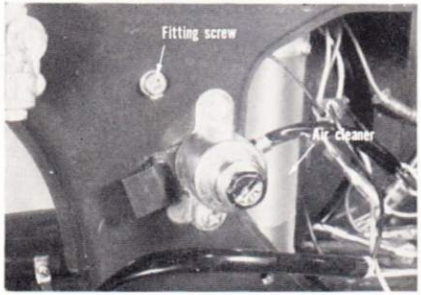


Fig. 31—Air Cleaner Location

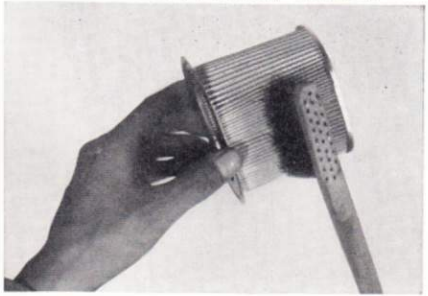


Fig. 32—Cleaning Air Cleaner Element

◇ Cleaning Fuel Strainer

If the fuel strainer is clogged with impurities, fuel flow to the carburetor become insufficient, causing poor engine performance.

* Turn the fuel cock lever off.
* Loosen the strainer cup with a 10 mm wrench and remove by turning with your fingers.
* Wash the strainer cup and screen throughly with gasoline.

◇ Cleaning Oil Tank Outlet Cup

A piece of magnet is provided in the oil tank outlet cup to attract iron dust and prevent it from getting into the oil pump and causing malfunction of the pump. Remove and clean the oil tank outlet cup every 3,000 km (2,000 mi). To clean the oil tank outlet cup, use compressed air or tweezers.

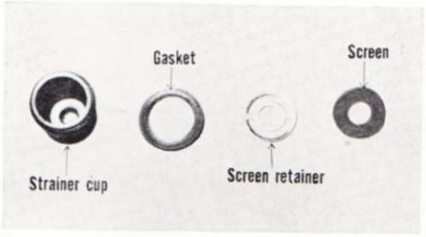


Fig. 34—Fuel Cock Strainer Components

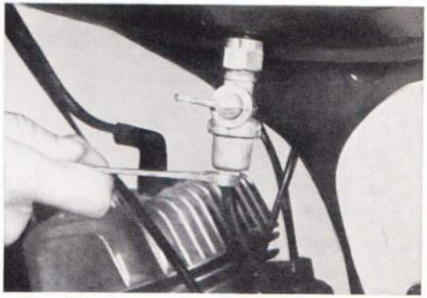


Fig. 33—Removing Fuel Strainer Cup

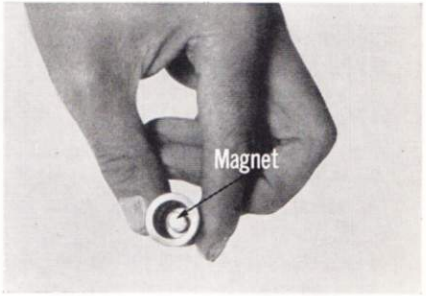


Fig. 35—Oil Tank Outlet Cup

◇ Changing Gearbox Oil

Oil in the gearbox deteriorates and its lubricating performance decreases if it is used too long. Change oil after the first 800 km (500 mi) and every 3,000 km (2,000 mi) after the first oil change.

* Use a good brand of SAE 20W/40 multigrade motor oil.
* The gearbox holds 0.65 ltr (0.7/0.6 qt., US/Imp) of oil.

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

To accomplish this completely and quickly, drain the used oil while the engine is warm and the oil viscosity is low.

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.

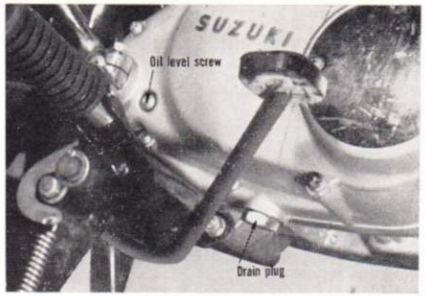


Fig. 36—Drain Plug & Oil Level Screw

◇ Adjusting Clutch

The clutch inner wire stretches and the clutch plates wear as the bike's milage increases, with a consequent change in the amount of clutch lever play.

So the clutch should be adjusted periodically. Adjust the clutch with both the clutch cable adjuster and release adjusting screw until about 4mm (0.16 in) of play measured at the clutch lever base is available.

To adjust the clutch, first screw in the clutch cable adjuster which is fitted to the crankcase left cover and give sufficient play to the clutch cable. Next remove the clutch release adjusting cap and loosen the lock nut to temporarily back the release adjusting screw.

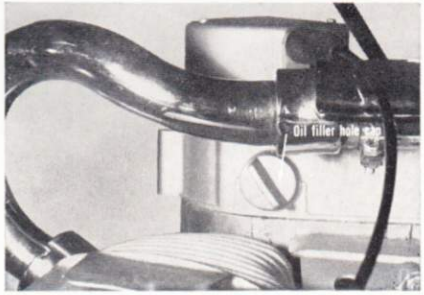


Fig. 37—Oil Filler Hole Cap

Now turn in the release adjusting screw until it seats the push rod and then back it out half a turn. Fix the release adjusting screw with the lock nut after the adjustment is made.
Finally adjust the clutch cable adjuster again until about 4 mm (0.16 in) of play measured at the clutch lever base is left in the cable.

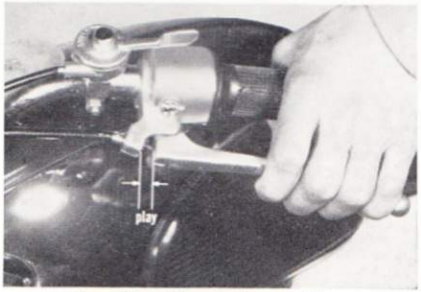


Fig. 38—Clutch Lever Play

Fig. 39—Adjusting Clutch Cable

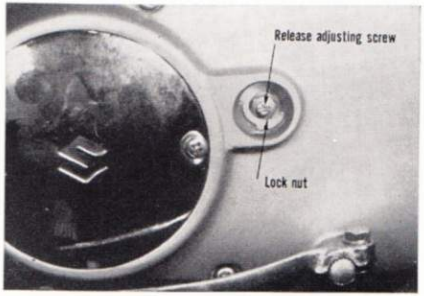


Fig. 40—Clutch Release Adjusting Screw

◇ Removing Carvon from Muffler Baffle Pipe

Carbon produced when fuel is burned in the engine accumulates 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 a poor grade oil is used, particularly, carbon accumulates rapidly. Clean carbon deposits from the muffler baffle pipe every 6,000 km (4,000 mi). This job is comparatively easy and can be done by yourself.

* Remove the fitting screw and washer at the end of the muffler and pull out the baffle pipe with a pair of pliers.
* Remove carbon deposits by gently strinking the baffle pipe.
* Wash the baffle pipe with gasoline or cleaning solvent.

If the carbon deposit is hard and cannot be removed from the baffle pipe by strinking it gently, heat it with a burner or a welding torch until flames cease to be seen on the baffle pipe and then strike it gently. The carbon can be removed in this manner.

Caution :

Some riders remove the muffler baffle pipe so that their motorcycle will make more exhaust noise. With a two-cycle engine, however, the muffler baffle pipe not only silences engine exhaust noise but also prevents the blow-by of fuel mixture. Running without the muffler baffle pipe installed reduces engine output. Do not remove the baffle pipe.

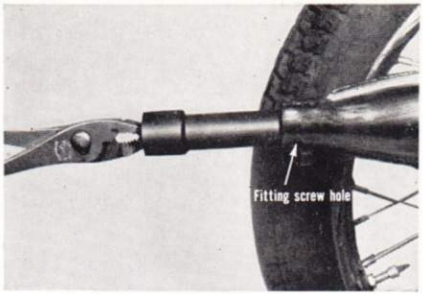


Fig. 41—Extracting Baffle Pipe

◇ Battery

The battery for this model is 6V, 4AH. The battery is mounted inside the frame. A loose battery wire connection results in insufficient battery charging. When inspecting the battery, always check the battery wire connections to see if they are fastened firmly. 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 found below the lower limit line, add pure distilled water up to the upper limit line. Do not add diluted sulphuric acid. Check the battery every two weeks.

Caution :

Be careful not to bend the battery breather tube made of nylon sharply. If it is pinched shut between the frame and the battery or bent sharply, gas generated in the battery during operation cannot be exhausted and sometimes the battery case will crack.

Be sure the tube end is open and exhausts well inside the frame.

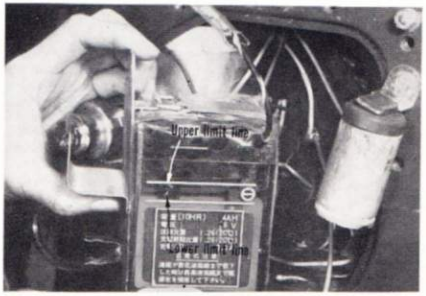


Fig. 42—Battery Solution Level

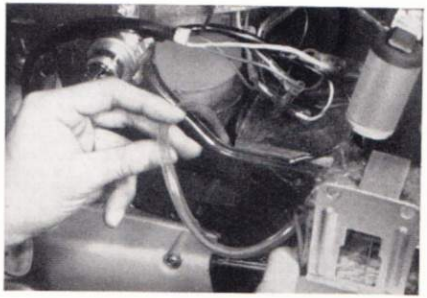


Fig. 43—Guiding Battery Breather Tube

◇ Servicing Drive Chain

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

* Put the motorcycle on the center stand.
* Remove the chain inspection hole cap.
* Removing the cotter pin from the rear axle, loosen two nuts.
* Adjust the drive chain by turning the right and left chain adjuster nuts until it has 20-30 mm (0.8-1.2 in) of play at the inspection hole when pushed up and down by fingers.

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

Marks on both chain adjusters must indicate the same position to keep the wheel aligned correctly. After the drive chain adjustment is correct, tighten the nuts and fix with a cotter pin. Otherwise it could become loose while you are riding the motorcycle.
Adjust and lubricate the chain at the first 500 km (300 mi) and every 1,500 km (1,000 mi) afterward. Use chain lube oil or motor oil for lubricating the drive chain.

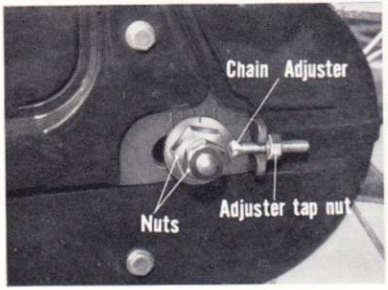


Fig. 44—Chain Adjuster

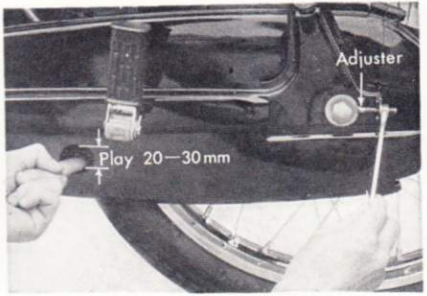


Fig. 45—Drive Chain Play

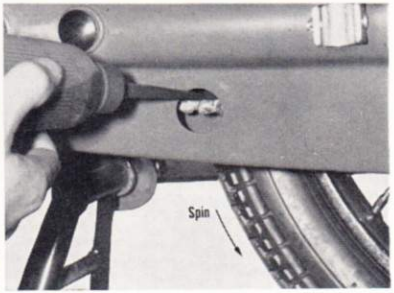


Fig. 46—Lubricating Drive Chain

Caution :

Dirt on the drive chain hastens wear of the drive chain itself and also the sprockets. Wash a dirty drive chain in cleaning solvent, drain and dry.

Then soak the chain in melted grease for several minutes or soak overnight in light motor oil.

Install it on the motorcycle after it is drained and dried.

◇ 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 brake cam adjusting nut so that there is 20-30 mm (0.8-1.2 in) of clearance between the front brake lever and the throttle grip when the brake engages.

Turning adjusting nut in ····· increases clearance

Turning adjusting nut out ····· decreases clearance

Fig. 47—Brake Lever Clearance

Fig. 48—Adjusting Front Brake

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, increases brake pedal travel slightly.

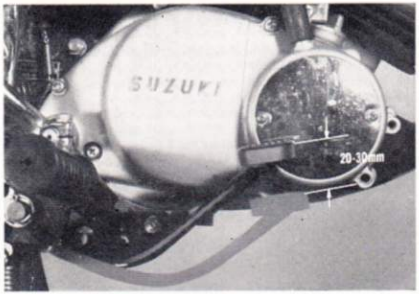


Fig. 49—Brake Pedal Travel

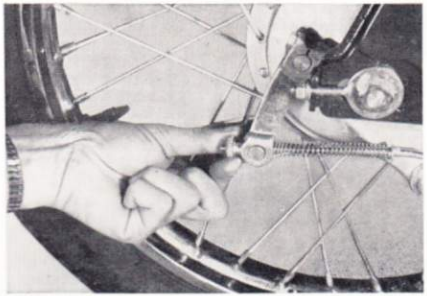


Fig. 50—Adjusting Rear Brake

◇ 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. Loosen the switch lock nuts and 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.

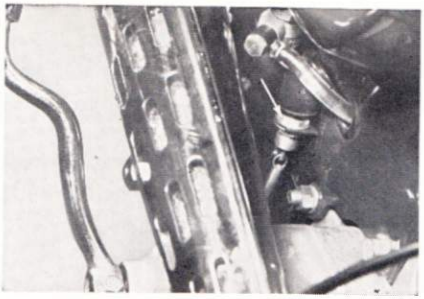


Fig. 51—Brake Lamp Switch

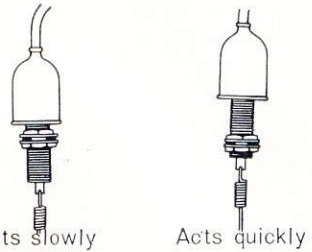


Fig. 52—Brake Lamp Switch Adjustment

◇ Tire Pressure

Insufficient air pressure in the tires hastens tire wear and increases road resistance which, in turn, increases fuel consumption and adversely affects the performance of the motorcycle. Soft tires also make smooth cornering difficult. Over-inflated tires decrease the amount of tire in contact with the 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·····**1.4 kg/sq cm (20 lb/sq in)**
Rear ·····**solo riding**·····**2.0 kg/sq cm (28 lb/sq in)**
dual riding·····**2.8 kg/sq cm (40 lb/sq in)**

◇ Changing Front Fork Oil

The front fork is a telescopic type with oil damping. When changing oil of the front fork:

* Remove the drain plug at the end of one leg. Pump the fork up and down to drain all of the oil. Refit the drain plug when the oil inside has been completely drained out.
* Repeat the same procedure on the other leg.
* Loosen the two fork fitting bolts and pour in #30 motor oil, about 125 cc (4.2/4.4 oz, US/Imp) for each leg. The more oil in the fork the stiffer the suspension becomes, while the less oil in the fork the softer the suspension becomes. Too little oil, however, causes an abnormal noise when running on bad roads.

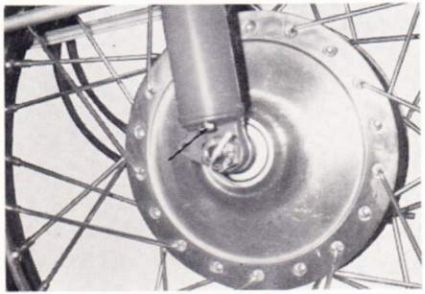


Fig. 53—Front Fork Oil Drain Plug

Fig. 54—Fork Fitting Bolts

◇ Lubrication

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

Lubricate these parts periodically.

Item	Interval	Rubricant
Clutch cable & brake cable	Every 1,500 km (1,000 mi)	motor oil
Drive chain	Every 1,500 km (4,000 mi)	chain lube or motor oil
Front brake cam shaft	Every 3,000 km (2,000 mi)	grease
Rear brake cam shaft	Every 3,000 km (2,000 mi)	grease
Throttle grip	Every 6,000 km (4,000 mi)	grease

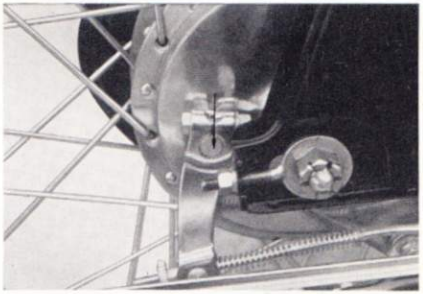


Fig. 55—Rear Brake Cam Shaft

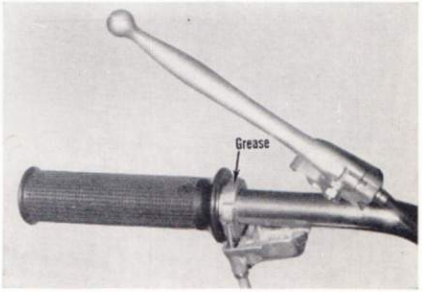


Fig. 56—Throttle Grip

◇ Tightening Bolts & Nuts

Bolts and nuts on the engine and frame can become loose from vibrations during riding. Tighten these bolts and nuts periodically.

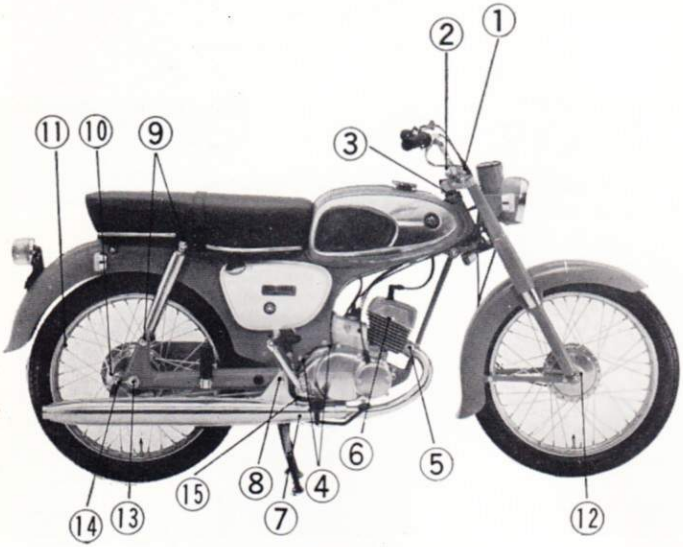


Fig. *57*—Tightening Points

Item	Q'ty
(1) Handlebar Fitting Bolts	4
(2) Steering Stem Head Fitting Bolts	3
(3) Steering Stem Lock Nut	1
(4) Engine Mounting Bolt Nuts	3
(5) Exhaust Pipe Ring Nut	1
(6) Cylinder Head Nuts	4
(7) Muffler Fitting Nuts	2
(8) Swinging Arm Pivot Shaft Nut	1
(9) Rear Shock Absorber Bolt Nuts	3
(10) Brake Cam Lever Bolt Nuts	2
(11) Spoke Nipples	72
(12) Front Axle Nut	1
(13) Rear Axle Nut	1
(14) Chain Adjuster Tap Nuts	2
(15) Kick Starter Lever Fitting Bolt	1

9. OPTIONAL PARTS

Part No.	Part Name	Remarks
MA2511S12	Engine Sprocket	12-tooth, for power
MA2511S14	Engine Sprocket	14-tooth, for speed
SB3210K1A	Sdark Plug Assy	NGK B-6
K-S10-4420K2T01	Fuel Tank Cap Assy	key lock type
K10B-5511K3	Front Tire	white side wall
K10B-6511K3	Rear Tire	white side wall
K10-6441S28	Rear Sprocket	28-tooth, for speed
MA-6441S32	Rear Sprocket	28-tooth, for speed
MA-6441S32	Rear Sprocket	32-tooth, for power
K10-8100T80	Leg Shield Assy	for rain, cold weather
M15-8200T01	Wind Shield Assy	for rain, cold weather
K10B-8331A	Carrier	
K10-9110K1T80	Rear View Mirror Assy	
M10-9271T01	Tire Levers	
M10-9280T01	Inner Tube Repairing Tool Set	

10. 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.

If Engine does not Start

When the engine is hard to start or does not start, there is something wrong with the fuel system or ignition system.

1. Check to see if the spark plug porcelain insulator and electrodes are wet or dirty with carbon.
   If so, clean the inside of the spark plug completely. Do not sandblast. In case the spark plug remains dry and the engine does not start even if the engine is turned with the kick starter lever, check to see if there is fuel in the tank and the fuel cock is not clogged.
2. Place the spark plug, with cap connected, on the cylinder head after removing from the spark plug hole. Turn on the ignition switch and check to see that a strong blue spark jumps between the electrodes by turning the engine with the kick starter lever.
   In case no spark is produced, take your motorcycle to your Suzuki dealer to remedy the trouble.

Caution :

Do not place the spark plug near the spark plug hole since the fuel mixture inside the cylinder could be ignited.

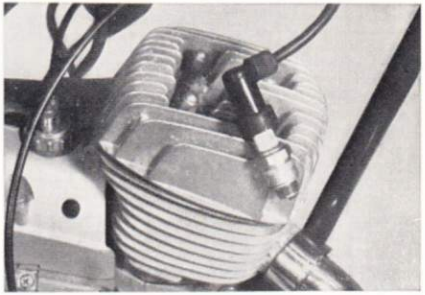


Fig. 58—Checking Ignition

If Engine Fails to Develop Power

1. When the engine fails to develop power and the engine gets dirty excessively, there can be loose points which allow compression to leak in the engine. Check the following points:-
   *A loose spark plug causes the portion (1) to get dirty.
   *Loose cylinder head nuts cause the portion (2) to get dirty.
   *Loose cylinder fitting nuts cause the portion (3) to get dirty.
   The cylinder head gasket and/or base gasket must be replaced if compression still leaks after the above-mentioned parts are properly tightened with a torque wrench. Cylinder head nuts should be tightened to 100 kg-cm (7.2 ft-lb or 82 in-lb)
2. Holding your palm at about 15 cm (6 in) from the muffler end, check to see if the fumes are exhausted vigorously. If not, carbon may be collected in the cylinder exhaust port, exhaust pipe and on the muffler baffle pipe.
   Have your dealer inspect and clean.

If Engine Stops Suddenly

1. Check to see if there is fuel in the tank and the fuel cock and fuel tank cap air vent are not clogged.
2. Check too see if the spark plug electrodes are not bridged with carbon.
3. When the engine seems to be overheated, take your motorcycle to your Suzuki dealer and have him check it immediately.

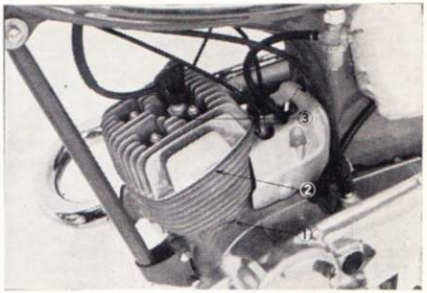


Fig. 59—Diagnosing Loose Points

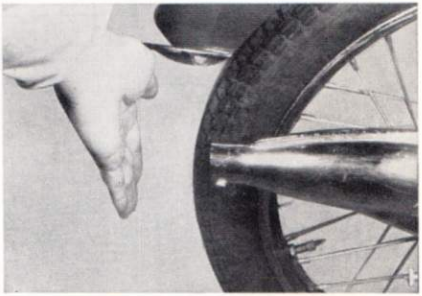


Fig. 60—Checking Exhaust Pressure

Bad Stabilization and Steering

1. Check to see if the front and rear tire pressures are proper.
2. Check to see if there is play in the front fork fitting.
3. Check to see if the rear axle is fitted squarely in the swinging arm and the rear wheel is perfectly aligned. If not, adjust by using the drive chain adjusters.

If the Transmission Gears Fail to Shift Smoothly

1. Check to see if the clutch is disengaged completely when the clutch lever is squeezed.
2. In case the gear shifting is not smooth until the engine is warmed up enough, check the viscosity of the transmission oil.
   The standard transmission oil is SAE 20W/40 multigrade motor oil.

Fig. 61—Checking Front Fork Fitting

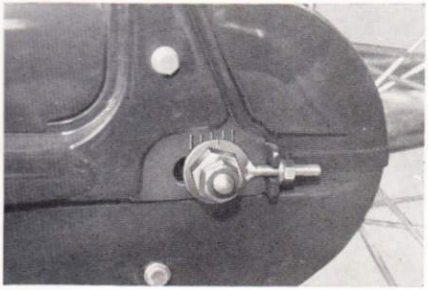


Fig. 62—Rear Wheel Alignment Marks

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U.S. SUZUKI MOTOR CORPORATION :	200 West Central Ave., Santa Ana, California 90670 U.S.A.

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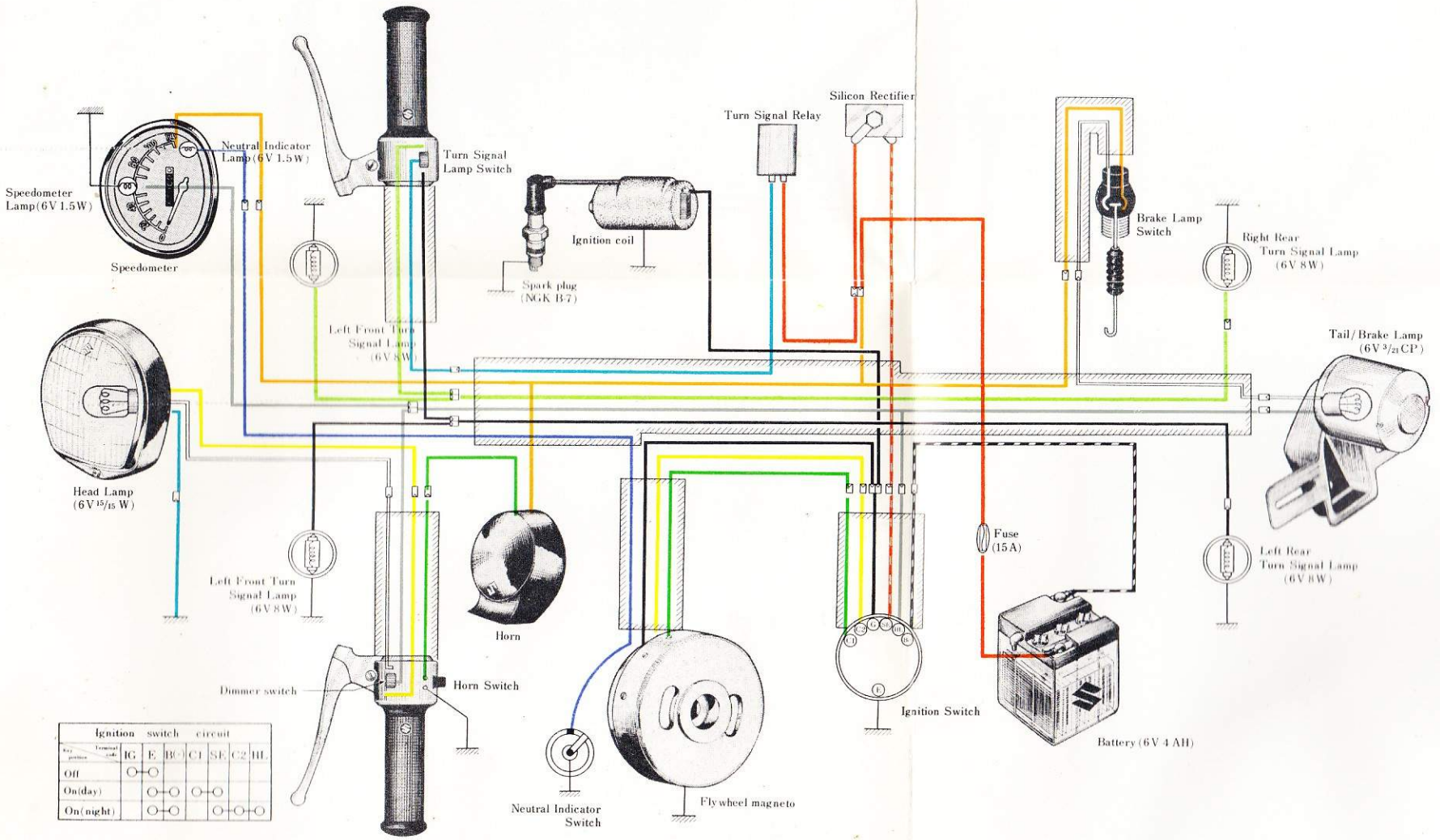
SUZUKI 80 Models K10P & K11P Wiring Diagram



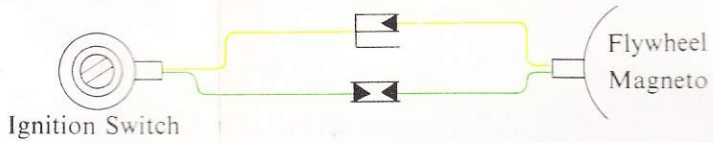
Ignition switch circuit

Key position / Terminal code	IG	E	BO	C1	SE	C2	HL
Off	O—O						
On(day)		O—O		O—O			
On(night)		O—O				O—O—O	

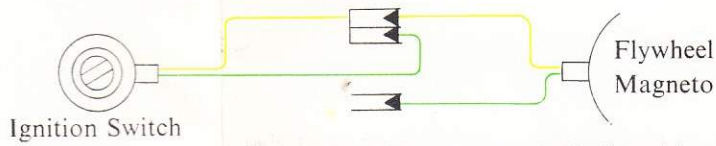
Note:

In case the battery is not charged sufficiently from the flywheel magneto because of constant running at low speed or at night and frequently needs to be given a supplemental charge at your dealer's workshop, it is advised to change the battery charging circuit by altering the standard connection to the specific connection for increased charging amount as illustrated below.

(1) Standard connection

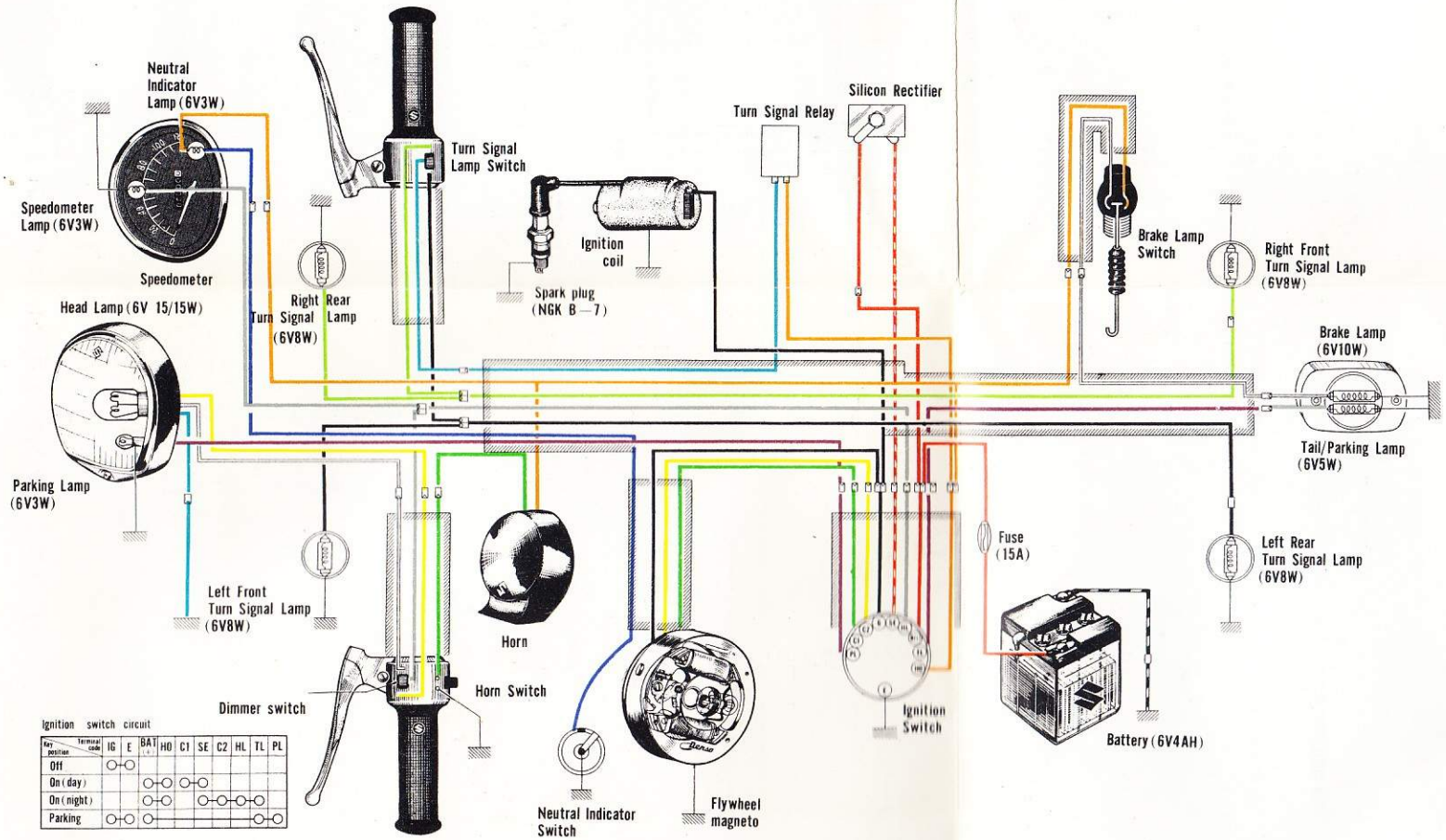


(2) Specific connection for increased charging amount



Be sure to check that this terminal is completely insulated by a vinyl cover.

SUZUKI 80 MODELS K10P & K11P WIRING DIAGRAM

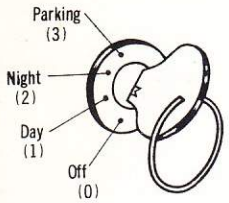


Ignition switch circuit

Key position / Terminal code	IG	E	BAT	HO	C1	SE	C2	HL	TL	PL
Off	○	○								
On (day)			○	○	○	○				
On (night)			○	○		○	○	○	○	
Parking	○	○								○

◇ 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
	Off	On (day)	On (night)	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 on (day) 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 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.

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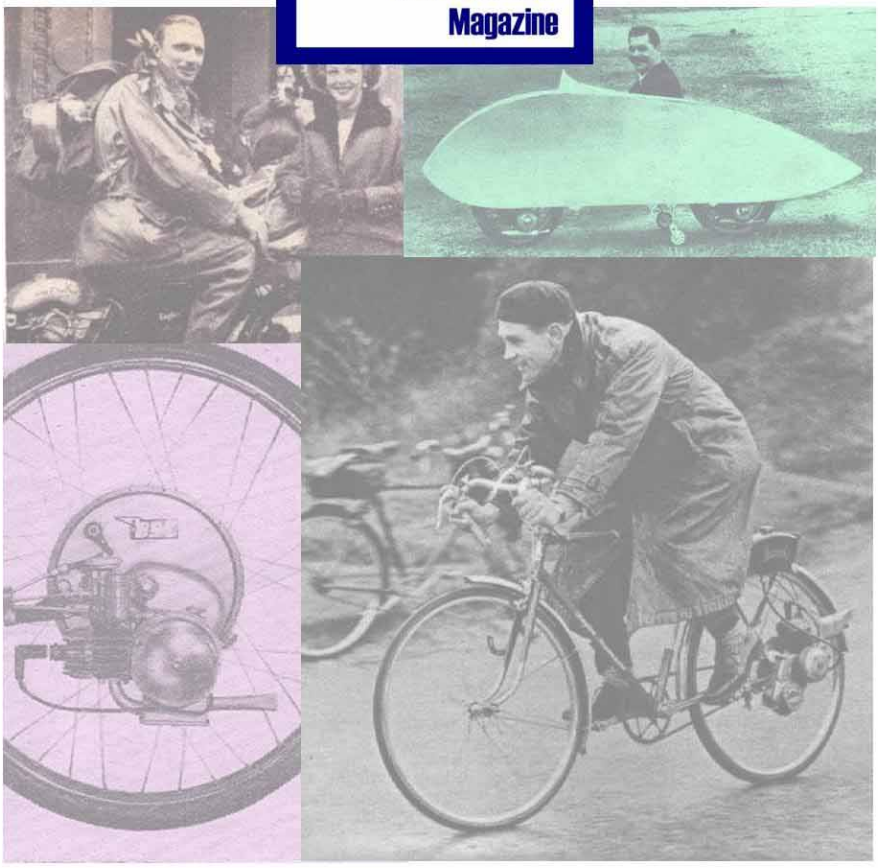

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