

SUZUKI
RM125

OWNER'S MANUAL

B

FOREWORD

Welcome to the world of Suzuki motorcycles.

The confidence you have shown by the purchase of our products is very much appreciated. Each Suzuki motorcycle backs this confidence by a long record of manufacturing and engineering excellence. The same excellence that has produced a long history of world-championship racing successes at the famous Isle of Man as well as the motorcross tracks of Europe.

Suzuki now presents the new RM125, a competition proved racing machine, capable of competing on any race course in the world.

This handbook is presented as a means whereby you can maintain your RM125 in top working condition at all times. Your riding skill and the maintenance steps outlined in this manual will assure you of top performance from your machine under any type of competition conditions.

We sincerely wish you and your Suzuki motorcycle a successful partnership for many years of happy riding.

SUZUKI MOTOR CO., LTD.





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NOTE: All information, illustrations, photographs and specifications contained in this manual are based on the latest product information available at the time of publication.

The right is reserved to make changes at any time without notice.

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SPECIFICATIONS

DIMENSIONS AND WEIGHT

Overall length	2,060 mm (81.1 in)
Overall width	840 mm (33.1 in)
Overall height	1,120 mm (44.1 in)
Wheelbase	1,405 mm (55.3 in)
Ground clearance	300 mm (11.8 in)
Dry weight	88 kg (194 lbs)

ENGINE

Type	Two-stroke cycle, air-cooled
Intake system	Piston and reed valve
Number of cylinder	1
Bore	54.0 mm (2.13 in)
Stroke	54.0 mm (2.13 in)
Piston displacement	123 cc (7.5 cu.in)
Corrected compression ratio ...	8.0 : 1
Carburetor	MIKUNI VM32SS
Air cleaner	Polyurethane foam element
Starter system	Primary kick
Lubrication system	Fuel/oil premixture 20 : 1

TRANSMISSION

Clutch	Wet multi-plate type
Transmission	6-speed constant mesh
Gearshift pattern	1-down 5-up
Primary reduction	3.444 (62/18)
Final reduction	4.214 (59/14)
Gear ratios, Low	2.333 (28/12)
2nd	1.750 (28/16)
3rd	1.411 (24/17)
4th	1.190 (25/21)
5th	1.045 (23/22)
Top	0.956 (22/23)
Drive chain	DAIDO #428TR, 132 links

CHASSIS

Front suspension.	Telescopic, pneumatic/coil spring, oil dampened
Rear suspension	Swinging arm, gas/oil dampened, spring 3-way adjustable
Steering angle	45° (right & left)
Caster	60°
Trail	129 mm (5.08 in)
Turning radius	2.3 m (7.5 ft)
Front brake.	Internal expanding
Rear brake	Internal expanding
Front tire size.	3.00-21-4PR
Rear tire size.	4.10-18-4PR

ELECTRICAL

Ignition type.	SUZUKI "PEI" (Pointless Electronic Ignition)
Ignition timing	17° B.T.D.C. at 10,000 rpm
Spark plug	NGK B-9EV (NGK BR-9EV)

NOTE: The parenthesized figure shows the specification for Canada Market.

CAPACITIES

Fuel tank	6.0 lit (1.6/1.3 US/Imp gal)
Front fork oil	264 cc (8.92/9.30 US/Imp oz) in each leg.
Transmission oil	Oil bath, 800 cc (1.7/1.4 US/Imp pt)

* Your motorcycle might differ in minor respects from the contents in this manual. This is because some minor modifications had to be made in the motorcycle to comply with statutory requirements of your country.

GENERAL INSTRUCTION

Fuel

The RM125 is of the two-stroke design, which requires a premixture of gasoline and oil.

Use a premium (high-octane) gasoline with an octane number of at least 95.

Engine oil

For the oil to be mixed with gasoline, any of the following brands or its equivalent will do:

- * SHELL SUPER M
- * CASTROL R30
- * GOLDEN SPECTRO
SYNTHETIC BLEND
- * B.P. RACING
- * BEL-RAY MC-1 TWO-CYCLE
RACING LUBRICANT

CAUTION:

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

Mixing ratio

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

FUEL OIL MIXTURE RATIO OF 20 : 1

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

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

CAUTION:

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

Mixing procedure

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

Transmission oil

Use of Suzuki Transmission oil is highly recommended. If it is not available, a good quality SAE20W/40 multi-grade motor oil should be used.

Front fork oil

For the oil in the two legs, use a motor oil of SAE 20W/20.

Use of genuine Suzuki parts

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

BREAKING-IN

The RM125 is manufactured using the latest technology relating to the two-stroke engine and thus requires a relatively short breaking-in. No programed breaking-in operation is necessary: the only thing is that the machine should not be continuously operated in full-load condition for the first one hour or 30 km (20 miles). This practice will help all moving parts to break in and will assist in acquainting you with machine. Once the machine is fully broken in, you can be assured of high performance in competition.

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

CARBURETOR CHOKE KNOB

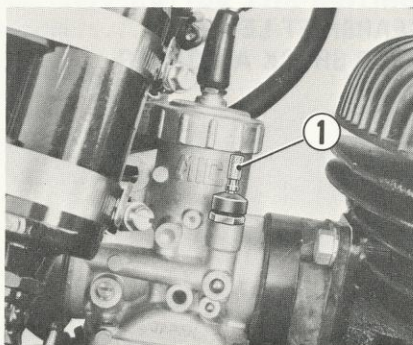
*** When the engine is cold:**

Pull up the choke knob ①. Depress the kick starter lever without opening the throttle.

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

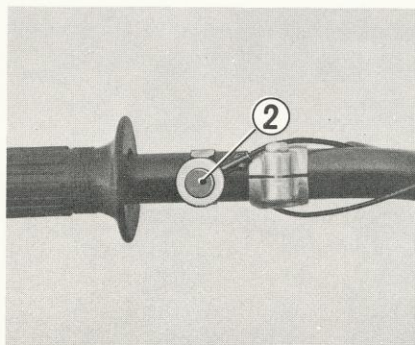
*** When the engine is warm:**

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



IGNITION KILL BUTTON

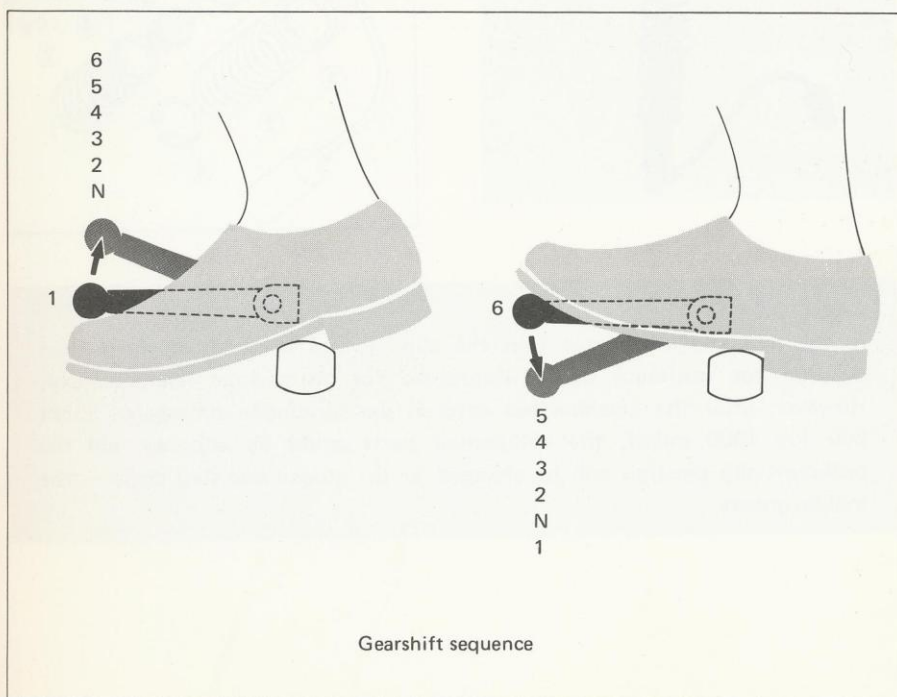
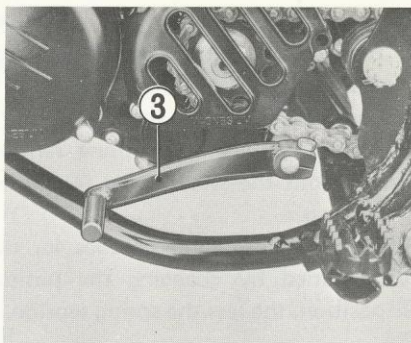
No ignition switch is provided. To start the engine, just depress the kick starter lever. To stop the engine, push the ignition kill button ② as shown in photo.



GEARSHIFT LEVER

The RM125 is equipped with a 6-speed transmission which operates as shown in figure.

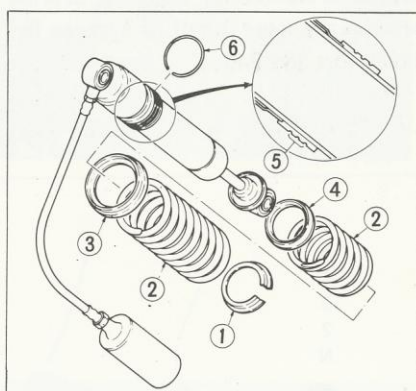
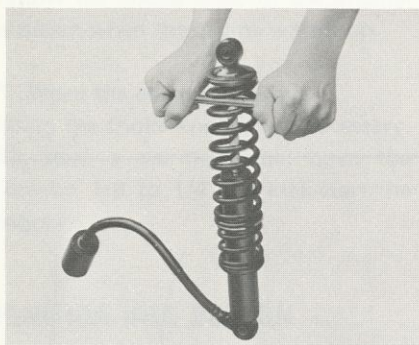
Neutral is located between low and 2nd. Low gear is located by fully depressing the lever ③ from the neutral position. Shifting into succeeding higher gears is accomplished by pulling up on the shift lever once for each gear. When shifting from low to 2nd, neutral is automatically missed. When neutral is wanted for stopping, depress or raise the lever a half of a stroke between low and 2nd.



REAR SHOCK ABSORBER

To rear shock absorber can be adjusted to give three different spring settings.

1. Remove the upper and lower rear shock absorber bolts and dismount the absorber.
2. Compress the shock absorber spring as shown below.
3. While compressing the spring, remove the lower spring seat ①.
4. Take out the two springs ②, spring joint ③ and upper spring seat ④ from the unit.
5. Each unit has three grooves for the clip position ⑤. The spring tension can be varied by changing the position of the clip ⑥. The higher the clip position, the less the spring tension.



CAUTION:

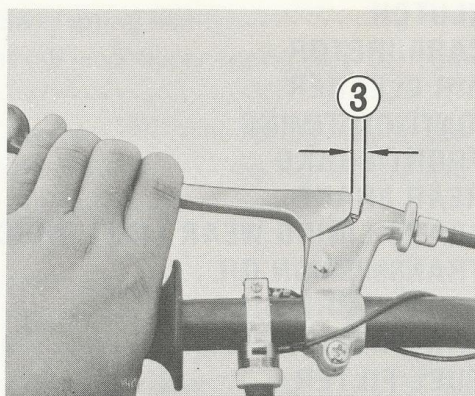
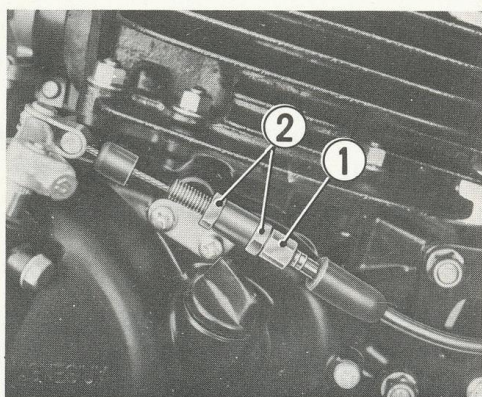
In the new shock absorber unit the clip ⑥ has been set at the highest position for optimum shock absorption for an average rider's weight. However, after the machine has covered the running-in mileage of about 500 km (300 miles), the component parts could be adjusted and the optimum clip position will be changed to the groove one step down — the middle groove.

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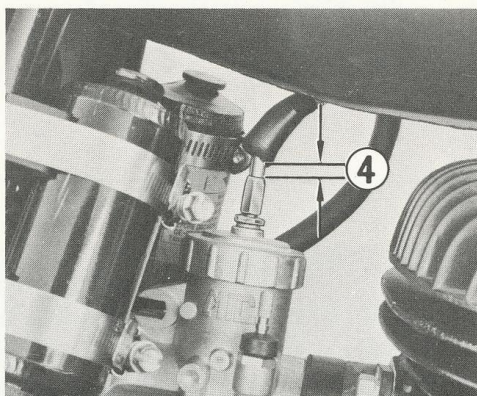
CLUTCH

Adjust the clutch with the clutch cable adjuster ① by loosening lock nut ②. The play ③ of the clutch cable should be 4 mm (0.16 in.) measured at the clutch lever holder before pressure can be felt indicating disengagement of the clutch.



CARBURETOR

For correct safe throttle operation the throttle cable should be adjusted to have 0.5 mm (0.02 in.) play ④ at the carburetor. This adjustment can be made at the cable adjuster on the carburetor cap.



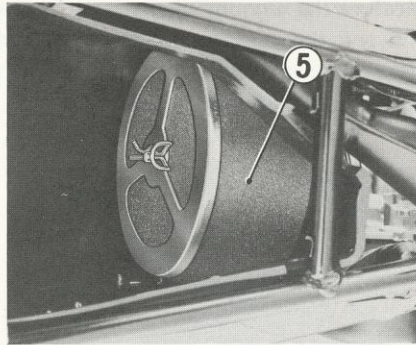
AIR CLEANER

When the air cleaner is clogged with dust, it affects the engine performance and therefore, it should be cleaned periodically.

- 1) Wash the filter ⑤ with gasoline.
- 2) After wringing gasoline out of the filter, soak it with the recommended engine oil or motor oil.
- 3) Wring oil out of the filter and then fit it to the element.

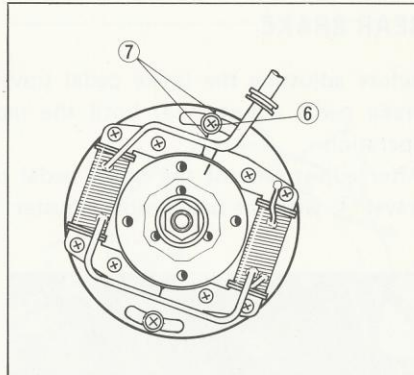
CAUTION:

If the element is not installed properly, dirt and dust may enter, resulting in rapid wear of the piston rings and cylinder.



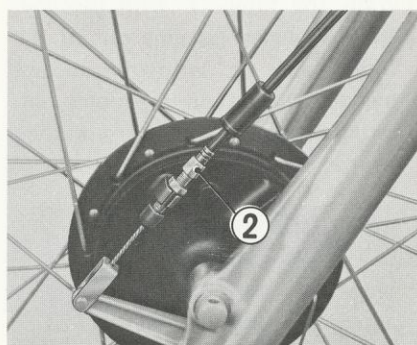
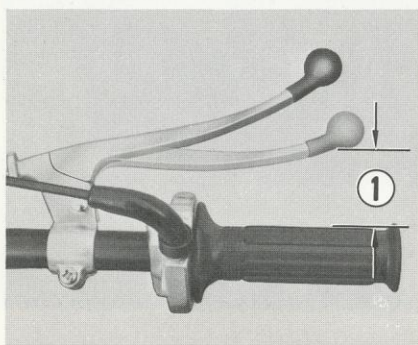
IGNITION TIMING

Ignition timing is adjusted at the factory and should normally require no adjustment. However, if the stator is removed or tampered with, adjustment may be necessary. In this case the top mounting screw ⑥ should be aligned with the mark ⑦ stamped on the stator plate.



FRONT BRAKE

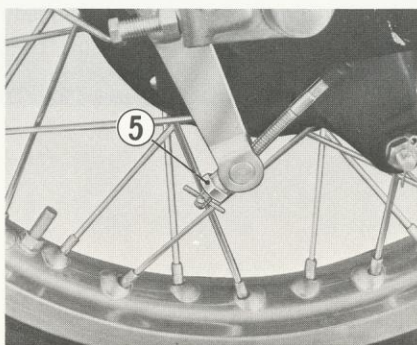
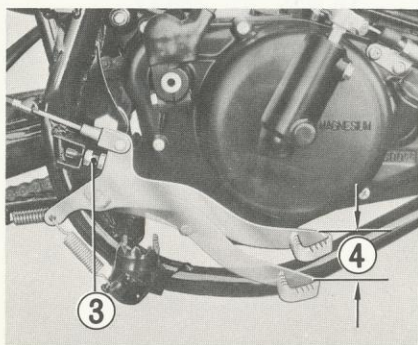
Measure the amount of the front brake lever distance ① between the brake lever end and throttle grip. The distance should be 20 ~ 30 mm (0.8 ~ 1.2 in.). If adjustment is necessary, turning the front brake adjusting nut ② in the clockwise direction will increase the distance.



REAR BRAKE

Before adjusting the brake pedal travel, adjust the brake pedal position with the brake pedal adjuster ③ until the most suitable position is obtained for quick operation.

After adjustment of the brake pedal position completed, adjust the brake pedal travel ④ with the brake cable adjuster ⑤ to 20 ~ 30 mm (0.8 ~ 1.2 in.).



BRAKE LINING WEAR LIMIT INDICATOR

This motorcycle is equipped with brake lining wear limit indicators on both front and rear brakes. As shown in the *figure A*, at the condition of normal lining wear, the extension line of the index mark on the brake cam shaft should be within the range embossed on the brake panel with brake on.

To check wear of the brake lining, perform the following steps:

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

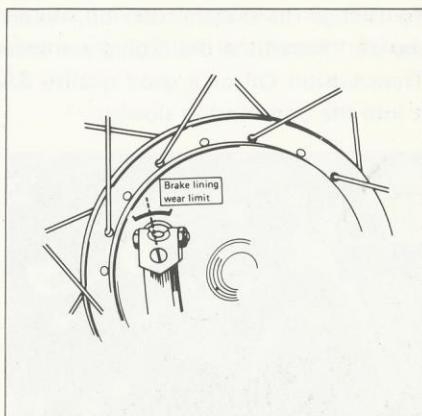


Fig. A

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

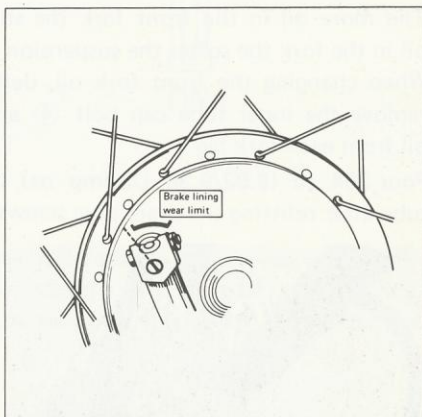
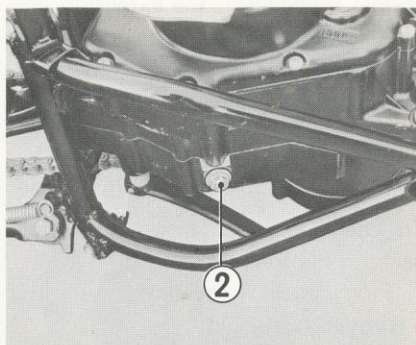
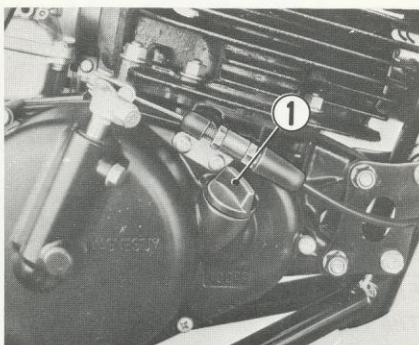


Fig. B

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

TRANSMISSION OIL

To change the transmission oil, remove the filler ① and drain ② plug and drain the oil. Install the drain plug and measure **800 cc (1.7/1.4 US/Imp pt)** of Suzuki Transmission Oil or a good quality **SAE 20W/40** multigrade motor oil, then pour it into the transmission slowly.

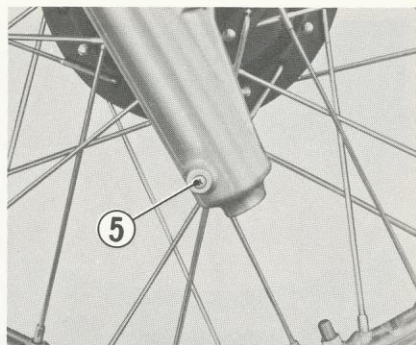
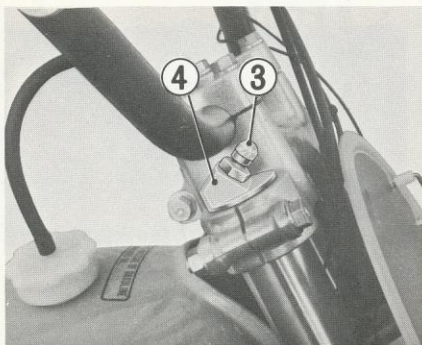


FRONT FORK OIL

The more oil in the front fork the stiffer the suspension becomes, while the less oil in the fork the softer the suspension becomes.

When changing the front fork oil, deflate front fork by pushing in the valve ③, remove the inner tube cap bolt ④ and drain plug ⑤, and completely drain the oil from each fork leg.

Pour **264 cc (8.92/9.30 US/Imp oz)** of **SAE 20W/20 motor oil** into each inner tube after refitting the drain plug screws.



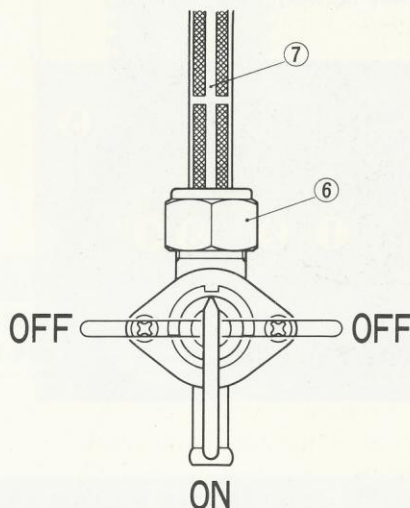
After pouring oil into the inner tube, be sure to supply compressed air through valve ③ until the pressure value shown below is reached by pressure gauge.

Pressure: 1.4 kg/cm² (20 psi)

FUEL FILTER

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

1. Drain the fuel from the fuel tank.
2. Remove the fuel cock by unscrewing the fitting nut ⑥.
3. Wash the screen filter ⑦ in cleaning solvent.



TIRE PRESSURE

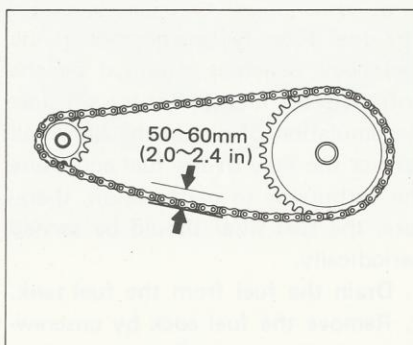
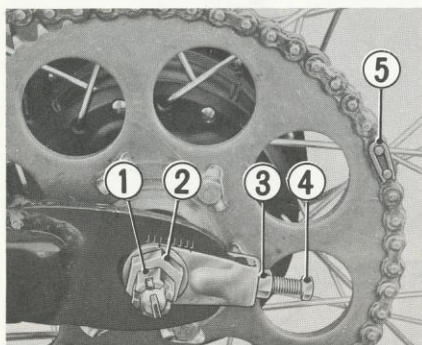
If the tire pressure is too high, the machine will tend to bounce up and down. Conversely, if the tire pressure is too low, steering will be adversely affected. Therefore, maintain the correct tire pressure for good roadability or shorter tire life will result.

Front 0.7 kg/cm² (10 psi)
Rear 0.7 kg/cm² (10 psi)

DRIVE CHAIN

Adjust the drive chain at the rear axle by loosening nuts ① and ② (as shown). Then loosen lock nut ③ and adjust the chain tension by turning bolt ④ in or out. Be sure the marks stamped on the adjuster yoke aligns with the same mark on the swing arm on both sides of the motorcycle.

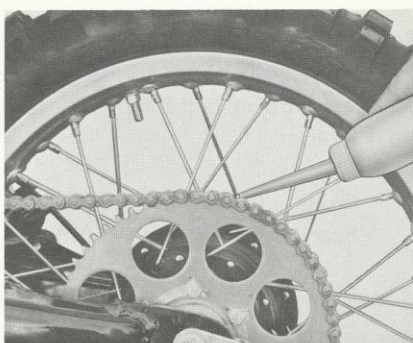
Proper chain tension is obtained when there is 50 ~ 60 mm (2.0 ~ 2.4 in) up and down slack in the chain with taking off the chain tensioner, at a point midway between the sprockets.



NOTE: When refitting the drive chain, be sure the drive chain joint clip ⑤ is attached in the way that the slit end will face opposite to the turning direction.

The drive chain must be kept well lubricated; otherwise it may break due to increased running resistance. Before lubricating the drive chain, wash it with detergent or gasoline, and apply chain oil (molybdenum bisulfide) to it.

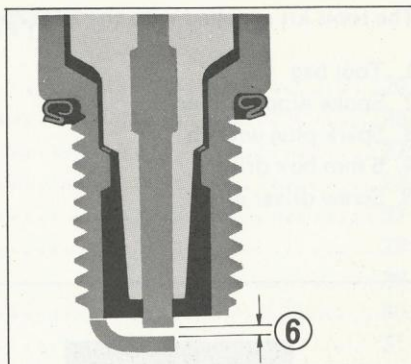
If proper chain oil is not available, dip it in gear oil for about three hours and allow to drain before installation.



SPARK PLUG

When carbon accumulates on the spark plug, a hot, strong spark will not be produced. Remove carbon deposits with a wire or pin and adjust the spark plug gap ⑥ to 0.5 ~ 0.6 mm (0.020 ~ 0.024 in.) by measuring with a feeler gauge.

Generally, when the spark plug heat range is correct, the plug electrode shows a light brown or tan color. Spark plug of a different heat may be chosen according the following table.



HOT TYPE	STANDARD TYPE	COLD TYPE
NGK B-8EV (NGK BR-8EV)	NGK B-9EV (NGK BR-9EV)	NGK B-10EV (NGK BR-10EV)

NOTE: The parenthesized figures show the specification for Canada market.

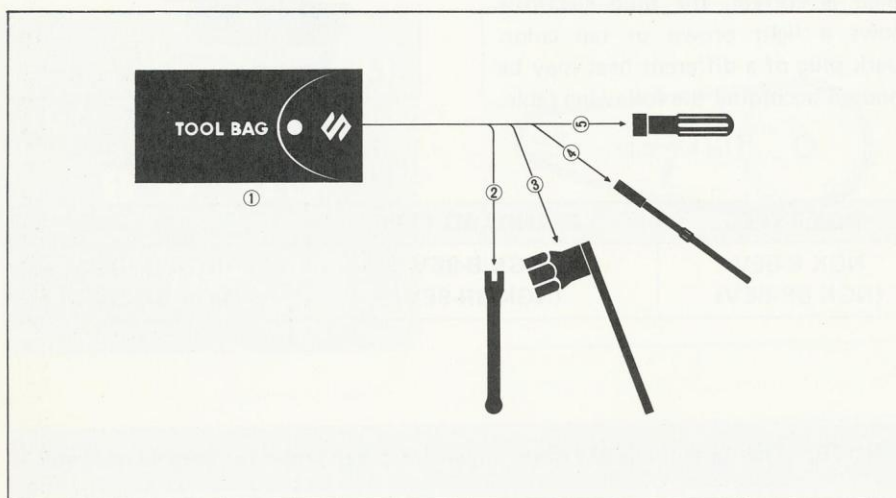
CAUTION:

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

TOOL KIT

The tools kit supplied with the RM125 contains the following tools.

1. Tool bag
2. Spoke nipple wrench
3. Spark plug wrench
4. 6 mm box driver
5. Screw driver grip



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DESCRIPTION

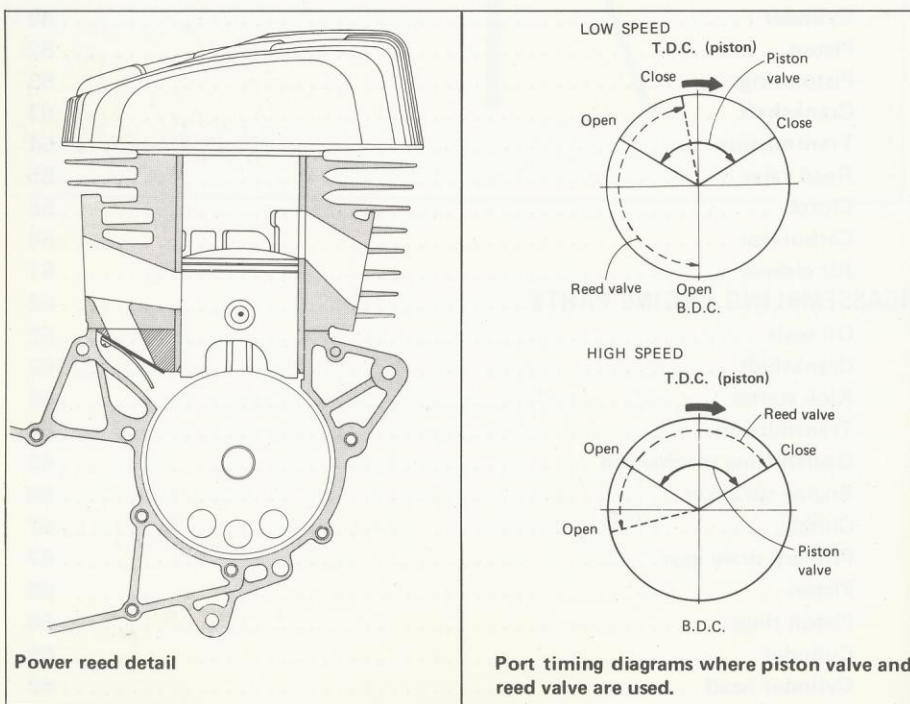
The following description of engine parts applies to the RM125.

"POWER REED" INTAKE SYSTEM

POWER REED signifies that the intake system feeds the mixture through two distinct actions, one by the piston valve and the other by the reed valve.

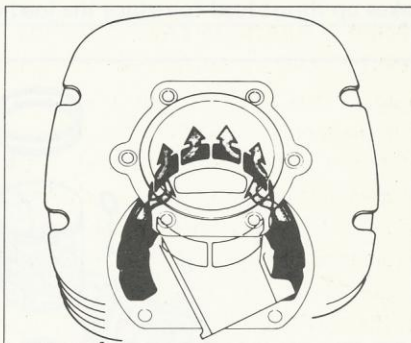
The open-close timing of reed valve changes freely to suit the mixture requirement of the engine, as will be noted in the circle diagrams given below. Against this characteristic, piston valve is characterized by its low resistance to mixture flow though its timing does not change. These two characteristics additively show up to great advantage in the high speed region. Here's how:

In the RM125, the port timing is slightly delayed as far as inlet port is concerned. This delay is calculated to produce greater output torque in the low and medium speed region. Stated otherwise, piston valve closes the suction port earlier and thus minimizes the chances of mixture blowback when the engine is in that speed region. In the high speed region, the amount of mixture being drawn in would be less than when there were no delay in port timing. This deficiency, however, is made up for by the action of reed valve to increase output power and torque in this speed region.



CYLINDER

Six scavenging ports are provided. It is this feature, coupled with the POWER REED INTAKE SYSTEM, that explains the high performance of this engine.



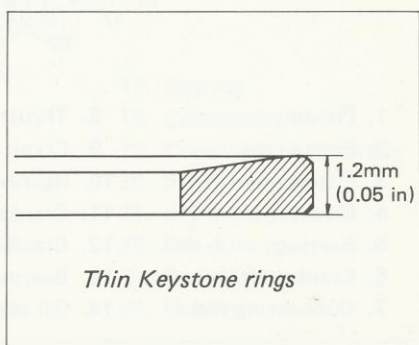
PISTON

Note that there are two holes, one above the other. These holes open out inside the piston to let out the air-fuel mixture toward the exhaust port side. The mixture coming out through these holes lubricates the exhaust port side surface of the piston and also the rib in the exhaust port.



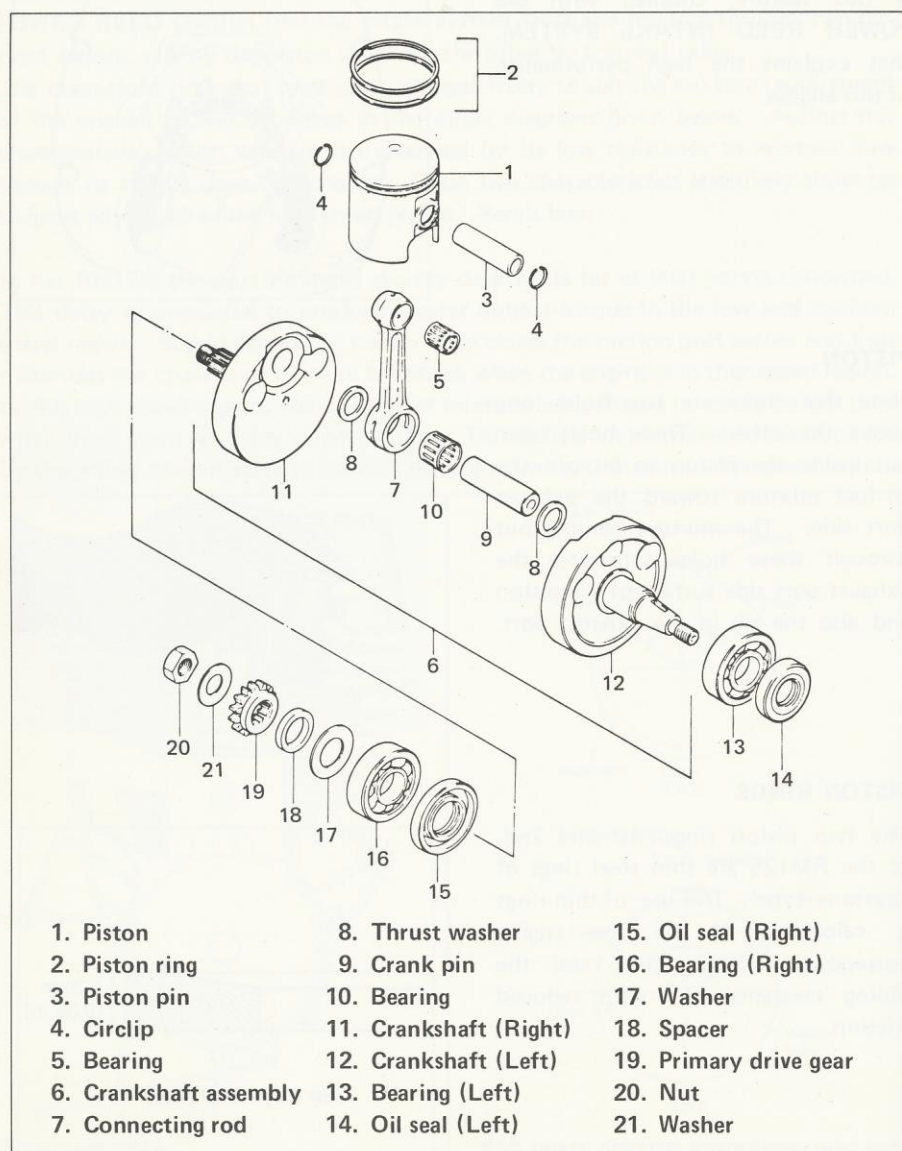
PISTON RINGS

The two piston rings, 1st and 2nd, of the RM125 are thin steel rings of keystone type. The use of thin rings is calculated to up the engine horsepower output: they seal the sliding clearance but with reduced friction.



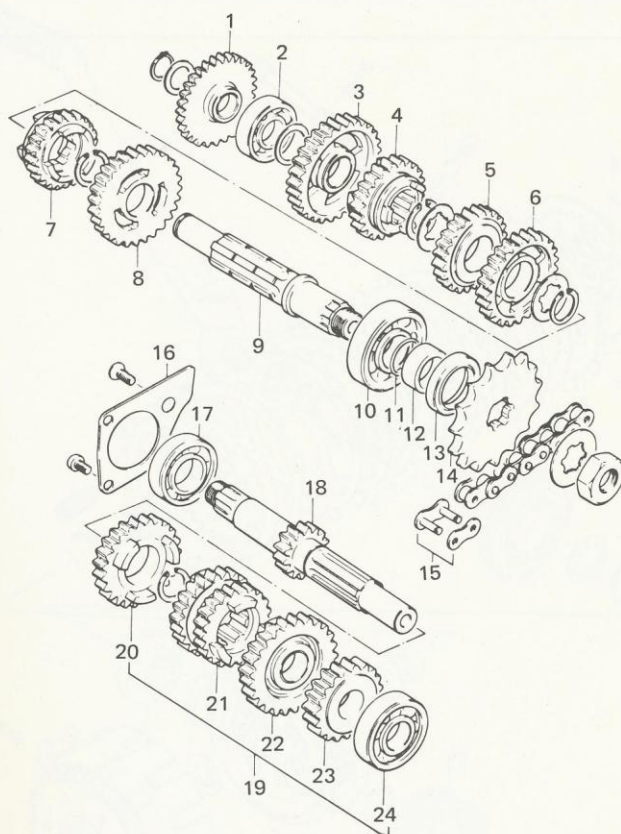
CRANKSHAFT

The big end of the connecting rod is durable. This is because the small end takes up thrust load to reduce the load on the big end.



TRANSMISSION

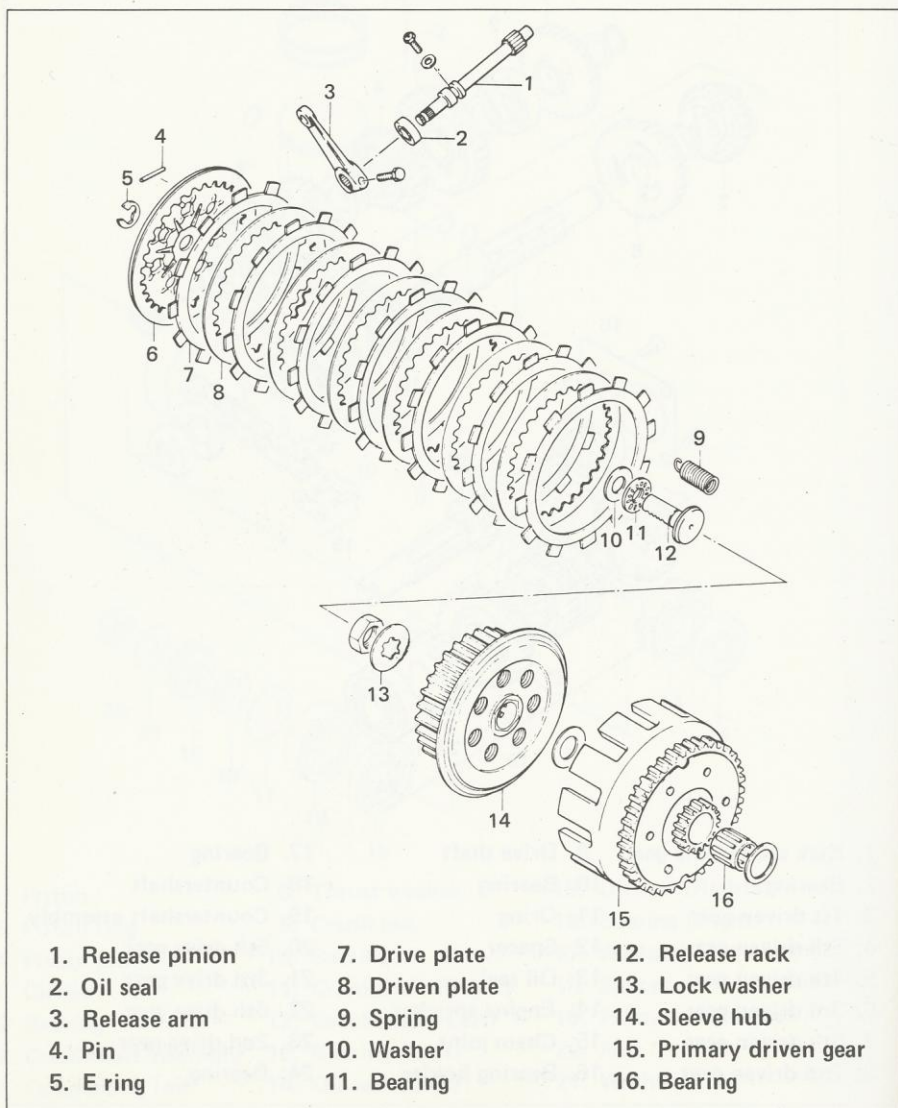
The transmission is of 6-speed constant-mesh type.



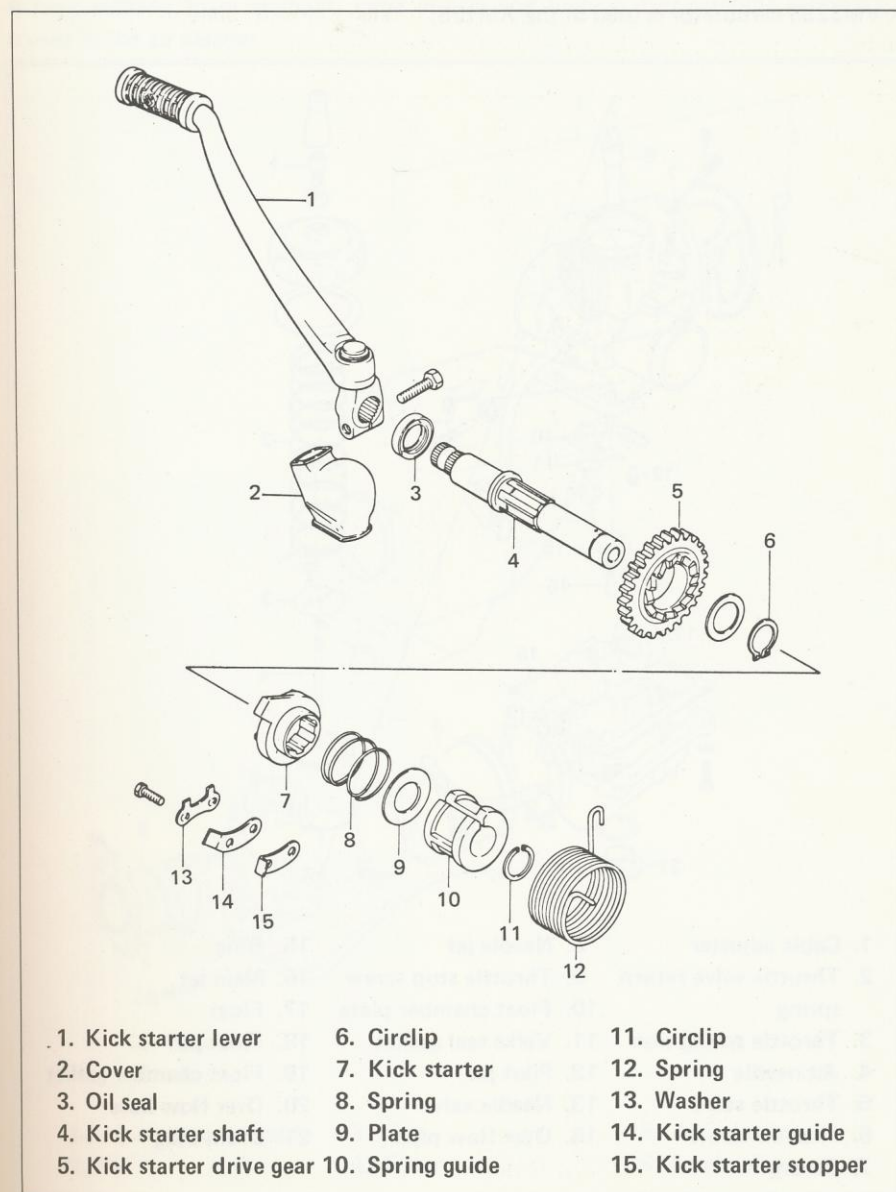
- | | | |
|---------------------------|---------------------|---------------------------|
| 1. Kick starter idle gear | 9. Drive shaft | 17. Bearing |
| 2. Bearing | 10. Bearing | 18. Countershaft |
| 3. 1st driven gear | 11. Oring | 19. Countershaft assembly |
| 4. 5th driven gear | 12. Spacer | 20. 5th drive gear |
| 5. 4th driven gear | 13. Oil seal | 21. 3rd drive gear |
| 6. 3rd driven gear | 14. Engine spricket | 22. 6th drive gear |
| 7. 6th driven gear | 15. Chain joint | 23. 2nd drive gear |
| 8. 2nd driven gear | 16. Bearing holder | 24. Bearing |

CLUTCH

In the wet multi-plate clutch, the light-in-weight driven plate is made of an alminum alloy and dissipates the heat of friction more readily.

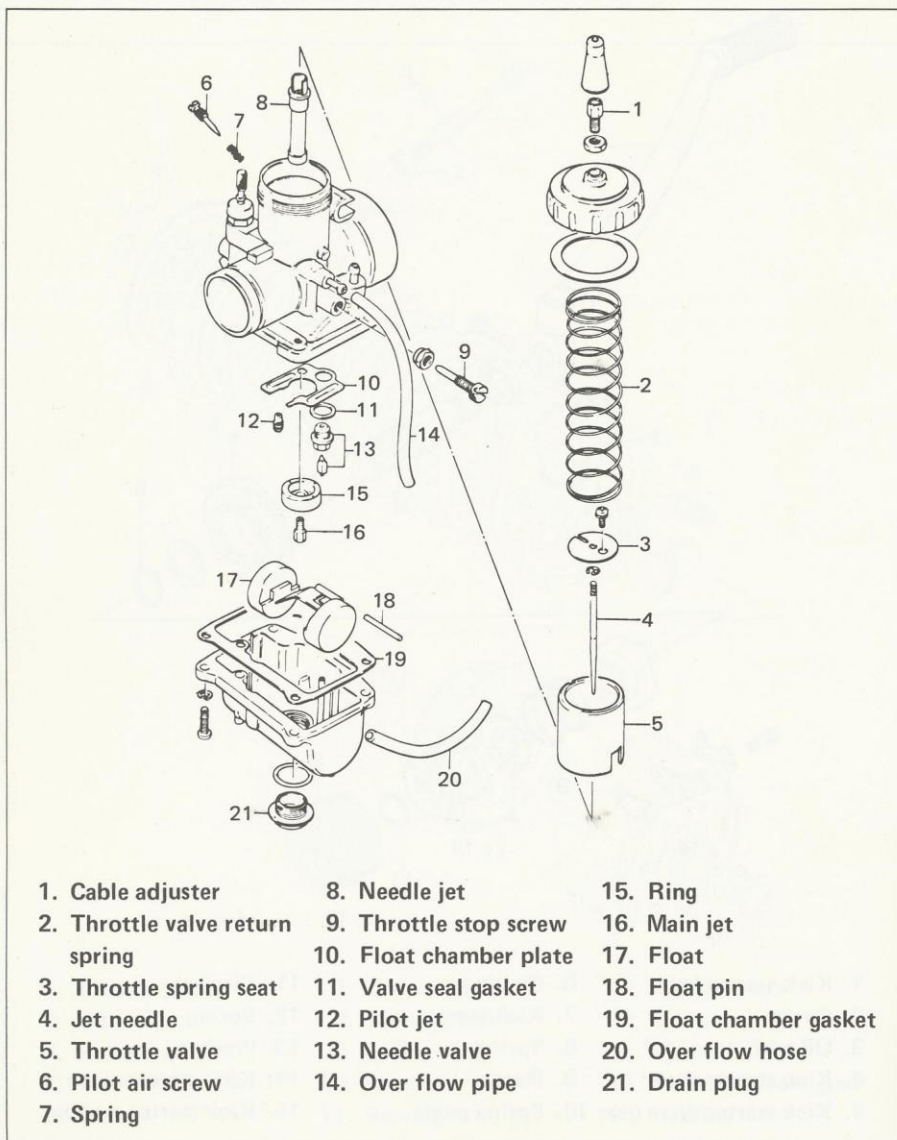


KICK STARTER



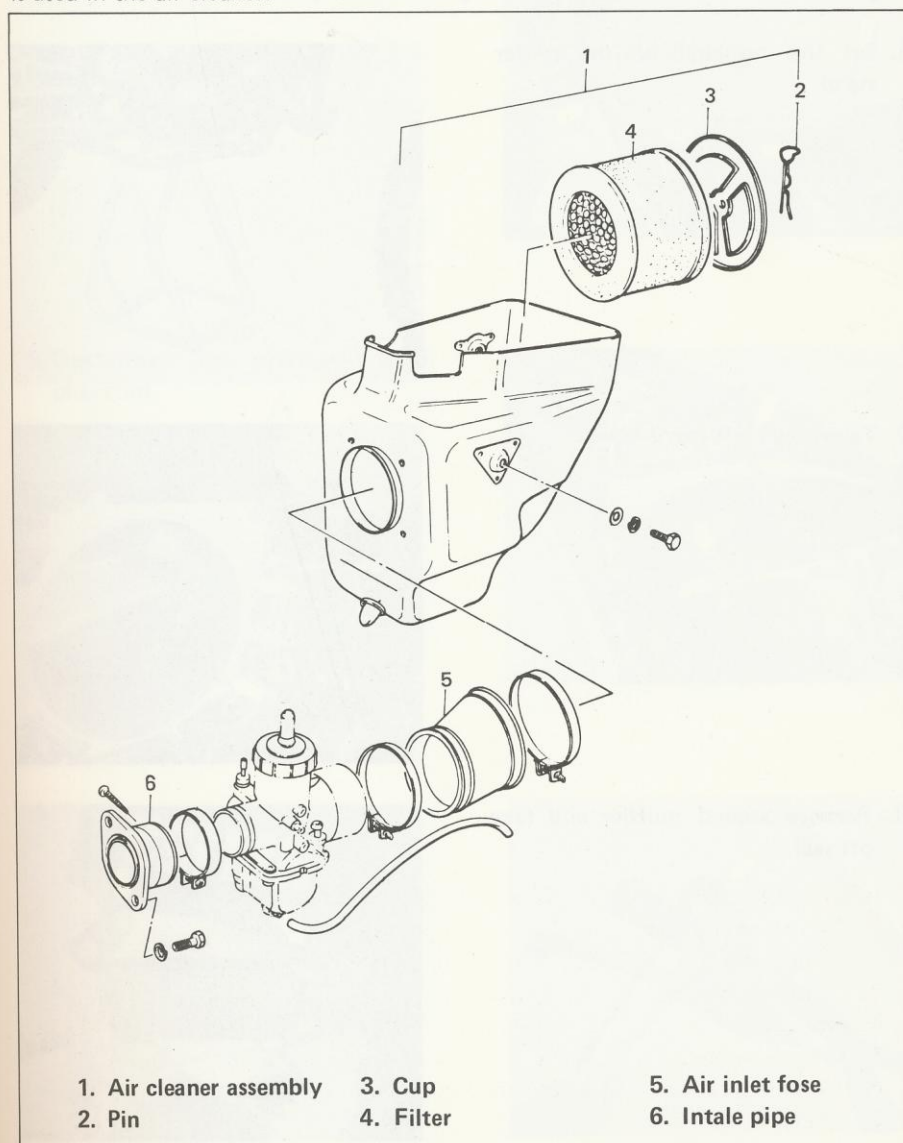
CARBURETOR

A VM32SS carburetor is used in the RM125.



AIR CLEANER

A polyurethane foam element, large in size and high in dust-catching efficiency, is used in the air cleaner.

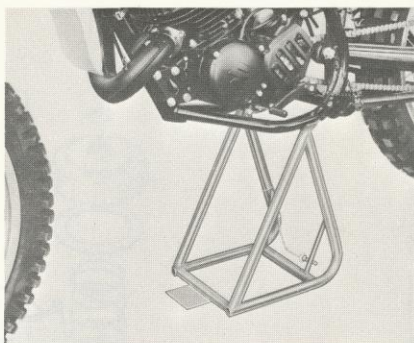


ENGINE REMOVAL AND DISASSEMBLY

REMOVAL AND INSTALLATION

The procedure of engine removal is sequentially explained in following steps. Engine installation is effected by reversing the removal procedures.

1. Set the machine on the center stand.



2. Take down left frame cover.



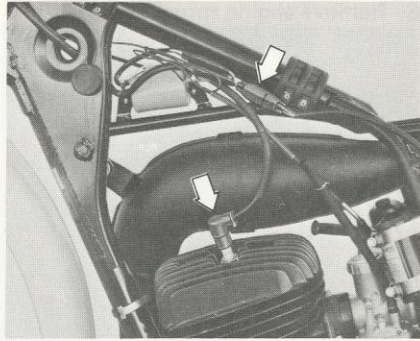
3. Remove second muffler and take off seat.



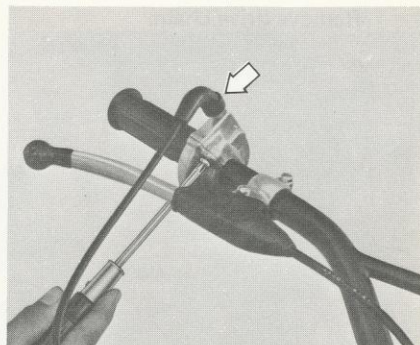
4. Take down fuel tank by unhooking two bands and disconnecting fuel pipe.



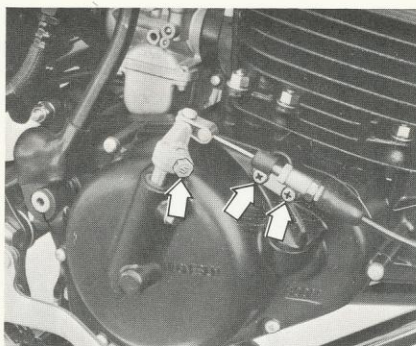
5. Disconnect lead wires and spark plug cord.



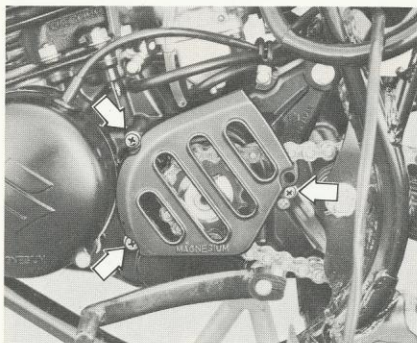
6. Disconnect throttle cable.



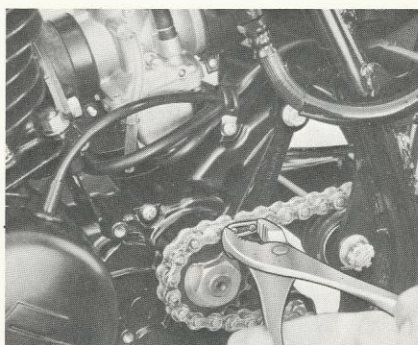
7. Disconnect clutch cable.



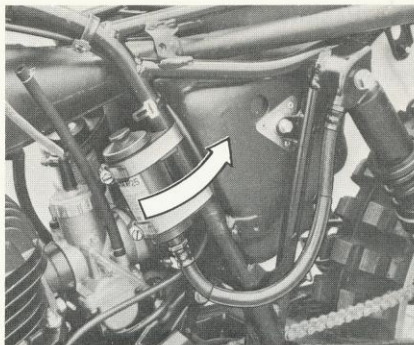
8. Remove engine sprocket cover.



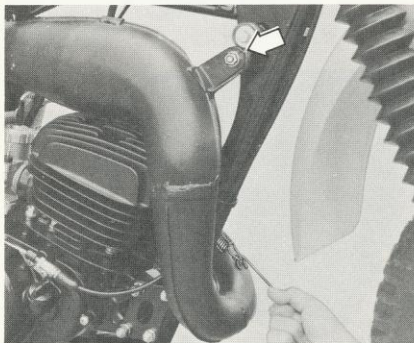
Remove drive chain.



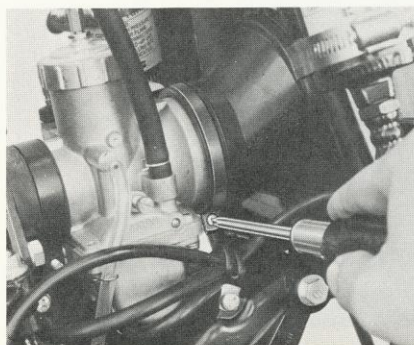
10. Loosen securing screws of gas tank for left side rear shock absorber unit and turn the gas tank to the direction as shown.



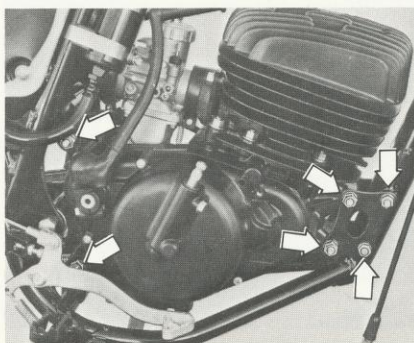
11. Remove muffler.



12. Loosen clamp screw of air inlet hose.



13. Remove the bolts indicated by arrows, and take down the engine.

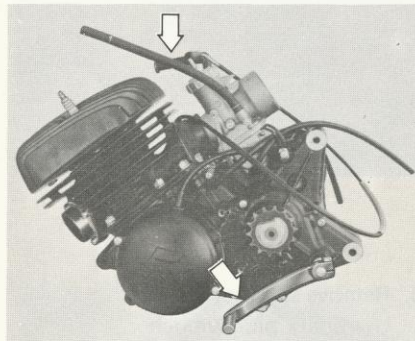


DISASSEMBLY

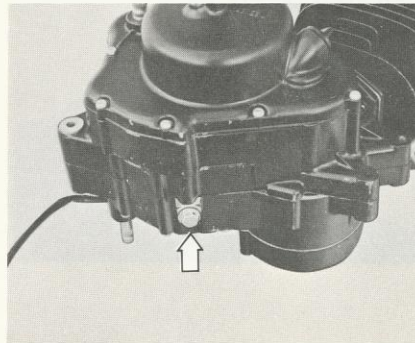
Disassembly procedure is as follows.

Reassembly is reverse of disassembly, and is effected by carrying out the following steps.

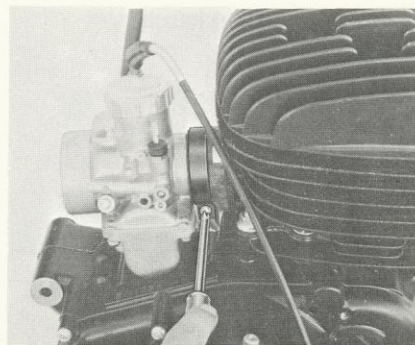
1. Remove gearshift lever and kick starter lever.



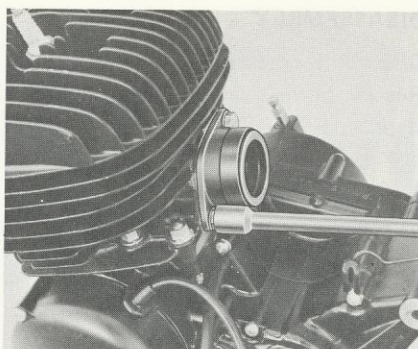
2. Drain gear oil.



3. Remove carburetor.



4. Disconnect intake pipe.



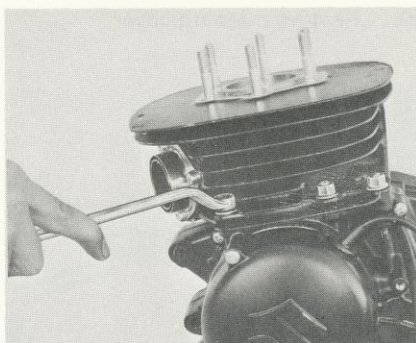
5. Remove spark plug.
Use Spark plug wrench
(09930-10111).



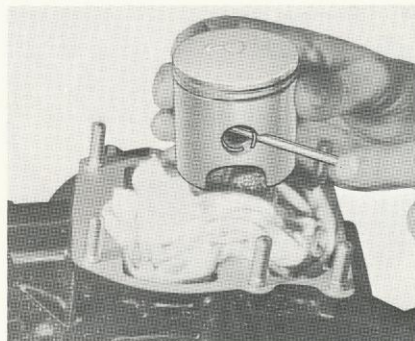
6. Remove cylinder head.



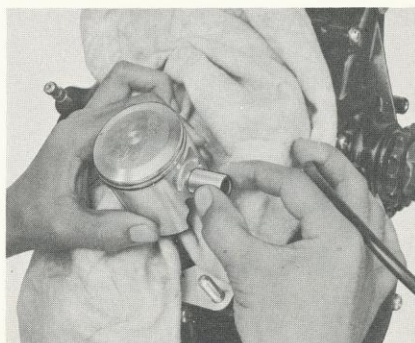
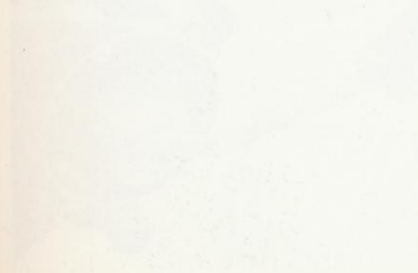
7. Remove cylinder.



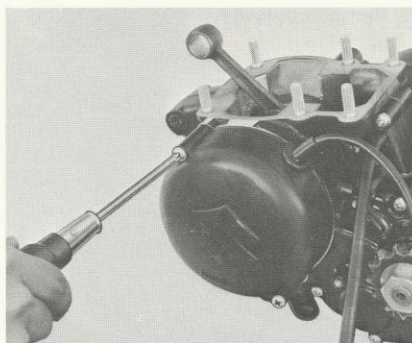
8. Remove piston pin circlip. Use a piece of cloth as shown, in order to avoid dropping the circlip into the crankcase.



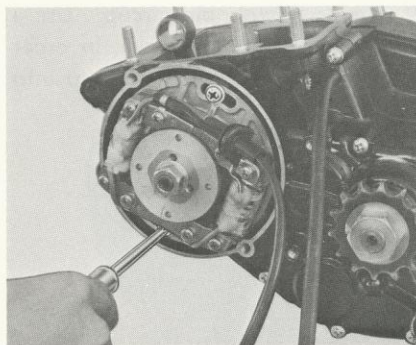
9. Draw out piston pin and take off piston.



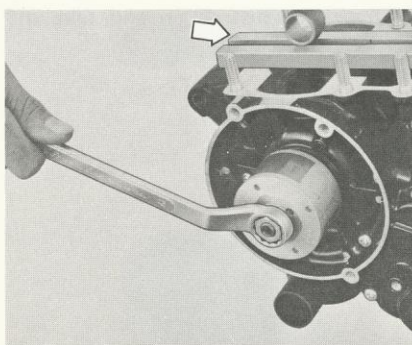
10. Remove magneto cover.



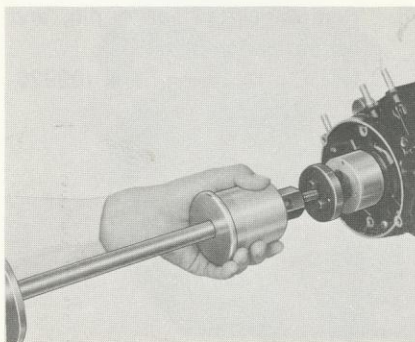
11. Remove stator.



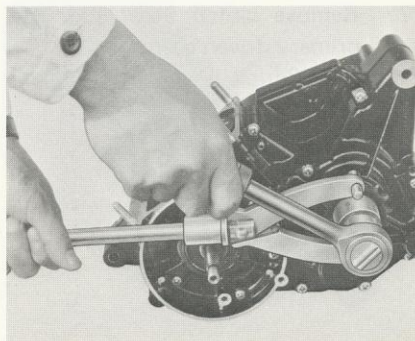
12. Remove rotor nut.
Use Con-rod stopper
(09910-20114).



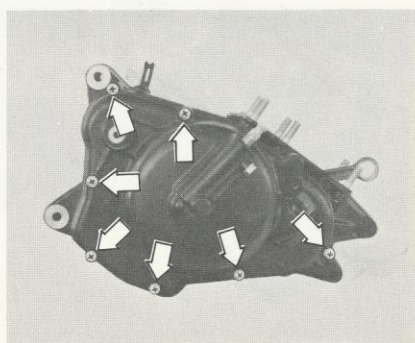
13. Take out rotor.
Use Rotor remover shaft (09930-30101), and rotor remover attachment (09930-30211).



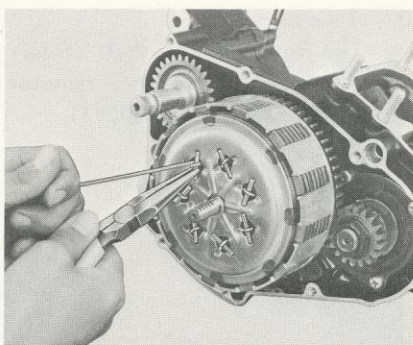
14. Remove engine sprocket.
Use Engine sprocket and flywheel holder (09930-40113).



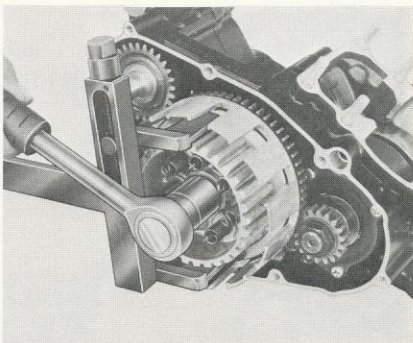
15. Remove clutch cover.



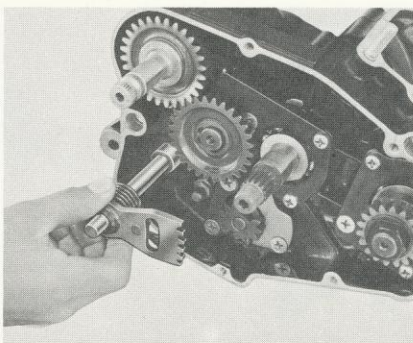
16. Remove clutch spring pin, and lift out clutch plates. Use Clutch spring hook (09920-20310).



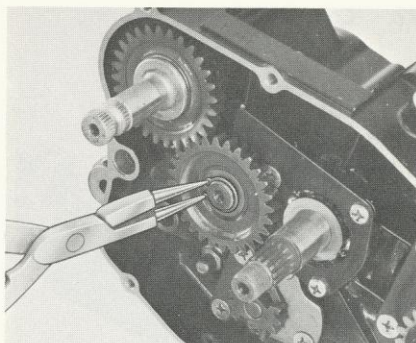
17. Remove clutch sleeve hub and primary driven gear. Use Clutch sleeve hub holder (09920-53710).



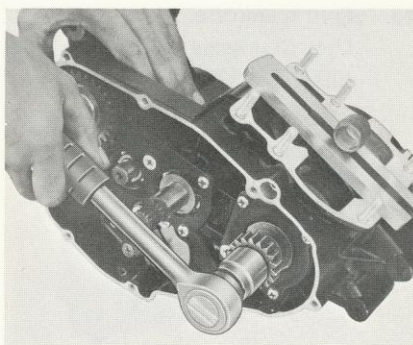
18. Draw out gearshift shaft.



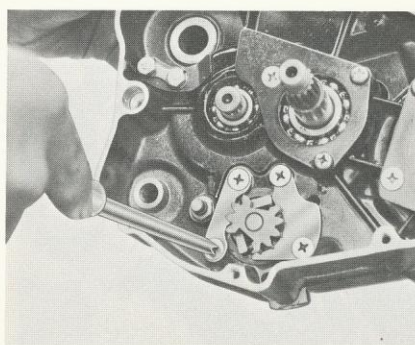
19. Take out kick idle gear.
Use Snap ring opener (09920-70111).



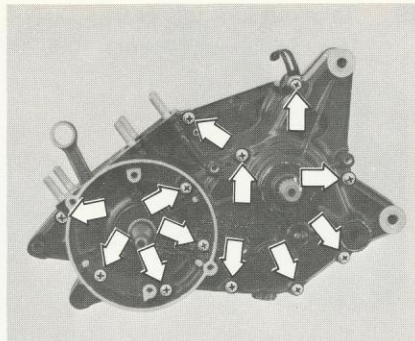
20. Remove primary drive gear.
Use Con-rod stopper (09920-53710).



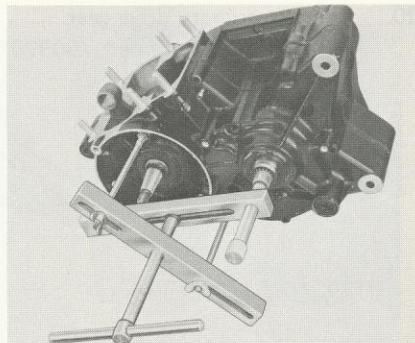
21. Remove gear shifting cam guide.



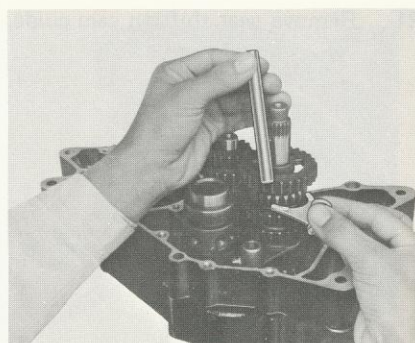
22. Loosen crankcase securing screws.



23. Split crankcase.
Use Crankcase separating tool (09910-80113).

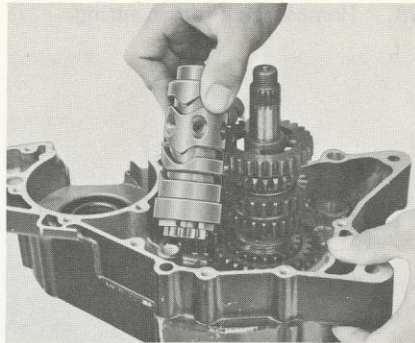


24. Remove gear shift fork shaft and shift forks.

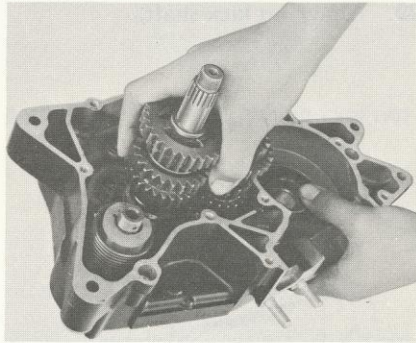


INSPECTION AND SELECTING ENGINE PARTS

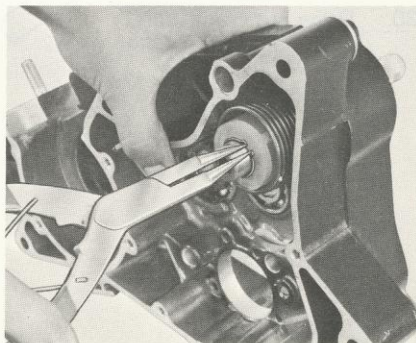
25. Draw out cam and gear shifting cam driven gear.



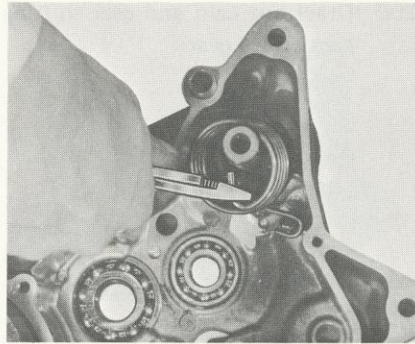
26. Remove gears altogether, without disturbing their order, so that gear installation in reassembly will be facilitated.



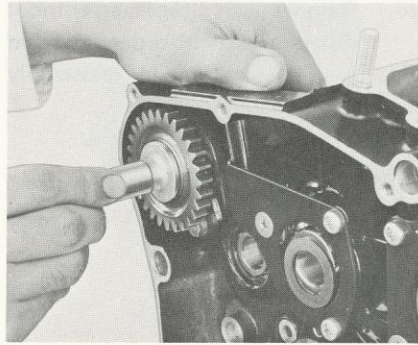
27. Remove circlip on kick starter shaft and spring guide.
Use Snap ring oepner (09920-70111).



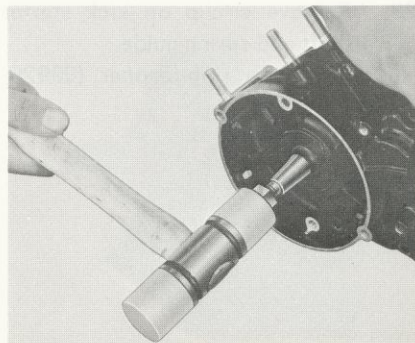
28. Remove kick return spring.



29. Draw out kick shaft.



30. Draw out crankshaft.

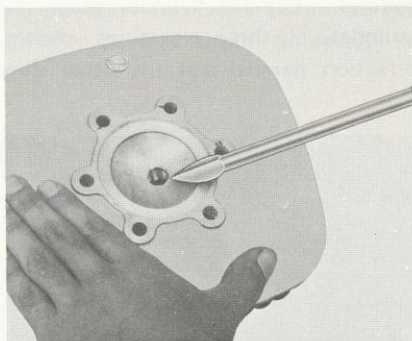


INSPECTION AND SERVICING ENGINE PARTS

CYLINDER HEAD

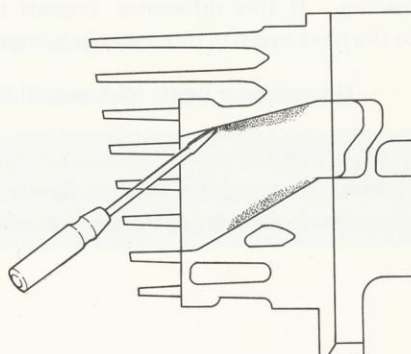
Observe the combustion chamber surface, on which more or less carbon will be found, and evaluate the amount and the shade of color of the carbon as a basis for diagnosing the fuel combustion.

Remove the carbon and clean the cylinder head.

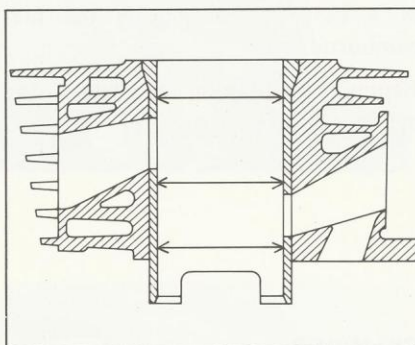
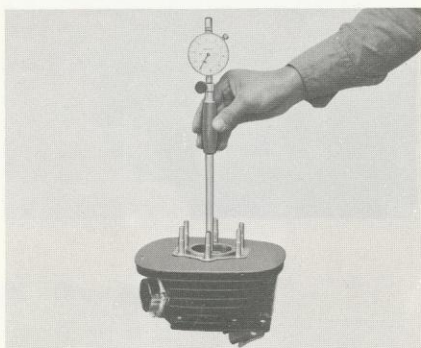


CYLINDER

Decarbon the exhaust ports and the upper part of the cylinder, taking care not to damage the cylinder wall surface.



Check the cylinder for wear, and determine the piston-to-cylinder clearance, as follows: Using a cylinder gauge, take a total of six diameter readings on the cylinder, at three elevations, shown, in two directions at each elevation: one direction parallel and the other direction transverse to the axis of piston pin.



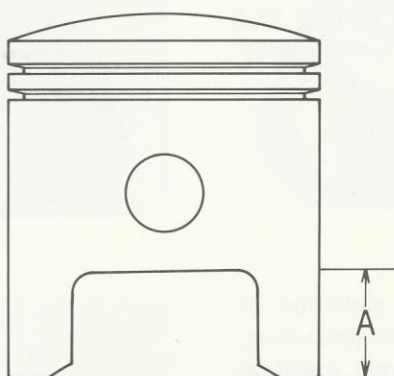
Of the six readings, compute the difference between the largest and the smallest reading. If this difference exceeds the limit, stated below, rebore the cylinder to the next oversize or replace it by new one:

Uneven wear limit: 0.1 mm (0.004 in)

CAUTION:

After reboring, be sure to lightly chamfer the port edges with a scraper and smoothen the chamfers with sandpaper.

Piston-to-cylinder clearance is the difference between two diameter readings, one taken on the piston at the height "A" in the direction transverse to the axis of piston pin hole and the other taken on cylinder bore at about **5 mm (0.4 in)** above the exhaust port in the fore-aft direction.



Height "A": 18 mm (0.71 in)

The clearance is prescribed to be within the following range:

Piston-to-cylinder clearance: 0.065 ~ 0.080 mm (0.0026 ~ 0.0031 in)

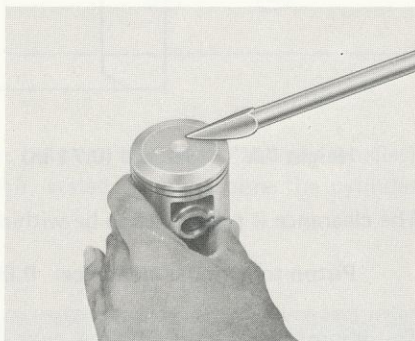
To rebore the cylinder to the next oversize, check the available clearance with the replacement (oversize) piston and determine the amounts of stock to be removed by boring and honing to bring the resultant clearance into the range specified above.

PISTON

A piston found scored at its sliding surface could lower engine performance or roughen the cylinder wall. Such scores, if any, must be eliminated by grinding; for this purpose of smoothening a scored surface, #400 sandpaper may be used.



Observe the carboned condition of the piston crown. This observation, together with the observed condition of the cylinder head, is an important guide for adjusting the carburetor. Decarbon the piston crown, taking care not to mar the metal.



Inspect the piston ring grooves for carbon or gummy matter. Clean the ring grooves, and check to see if each piston ring is capable of smooth movement in the groove.



PISTON RINGS

To check the piston rings for wear, fit each ring around the skirt part of the cylinder and measure the end gap in this condition of the rings, as shown. If the reading taken exceeds the limit, replace it by a new one.

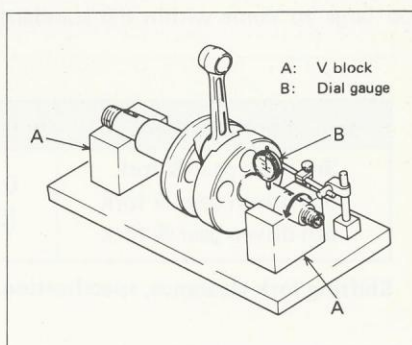
Standard: 0.15 ~ 0.35 mm
(0.006 ~ 0.014 in)
Limit: 0.80 mm (0.031 in)



CRANKSHAFT

Set the crankshaft on "V" blocks, as shown, and, with a dial gauge arranged in the manner indicated, take a runout reading on the shaft on each side. This reading is the crankshaft deflection, which is required to be within this limit:

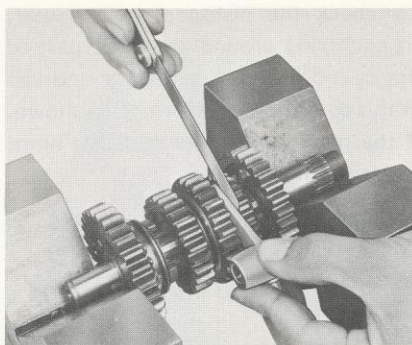
Crankshaft deflection limit:
0.05 mm (0.002 in)



A deflection reading is a measure of straightness of the crankshaft. If the crankshaft is bowed to exceed the limit, it must be replaced by a new one. Using such a crankshaft will result in poor engine performance or, for worse, in an engine failure.

TRANSMISSION

Just before disassembling the transmission in engine disassembly, inspect the gears inside the transmission for damage and for meshed condition, and check the clearance of each shift fork in the groove. There are three forks to be checked for clearance: use the thickness gauge (09900-20804).



If a shift fork exhibiting an excessive clearance is re-used, the gear will tend to come off the engagement in the subsequent service, and therefore must be replaced. If the clearance with the replacement shift fork is noted to be still too large to come within the standard range, then the gear too must be replaced.

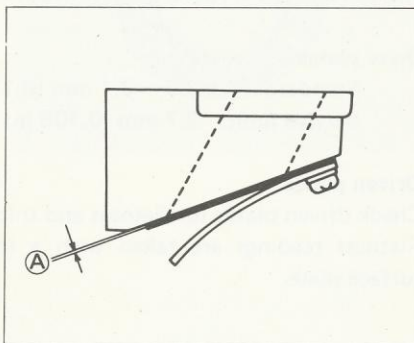
Fork and gear	Standard	Limit
3rd drive gear & fork 5th driven gear & fork 6th driven gear & fork	0.05 ~ 0.25 mm (0.002 ~ 0.010 in.)	0.45 mm (0.018 in.)

Shifting fork clearance, specification.

NOTE: Clearance readings are valid only when the shift forks are checked as fitted into their respective gears. For details, refer to the cross sectional view of the transmission given in page 29.

REED VALVE

Using a thickness gauge, check the clearance between the reed valve and its seat: the clearance is indicated as A. If the clearance read is in excess of **0.2 mm (0.008 in)**, replace the reed valve assembly.



CLUTCH

Because the clutch plates remain wet with oil in the normal operating condition of the clutch, the plates removed in disassembly will be found with little or no wear. After long use, however, the plates might exhibit more or less wear to give rise to a slipping tendency in the clutch. For this reason, it is essential that the plates should be checked for **THICKNESS**, using calipers, as shown, and be replaced if found to have worn down beyond the service limit.

Drive plates

Standard: 2.9 ~ 3.1 mm (0.114 ~ 0.122 in)

Service limit: 2.7 mm (0.106 in)

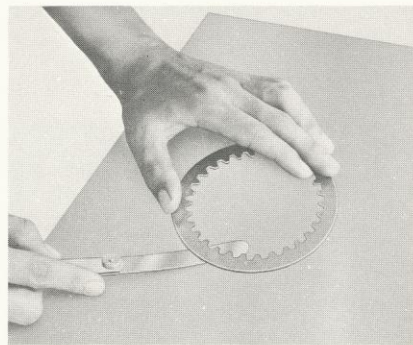
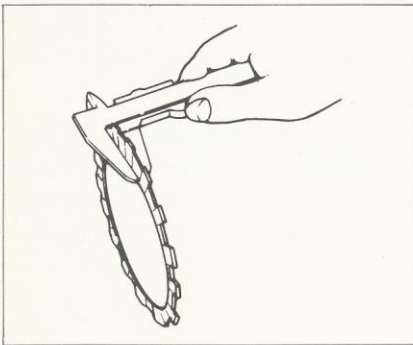
Driven plates

Check driven plates for flatness and thickness.

Flatness readings are taken with a thickness gauge on the plate placed on the surface plate.

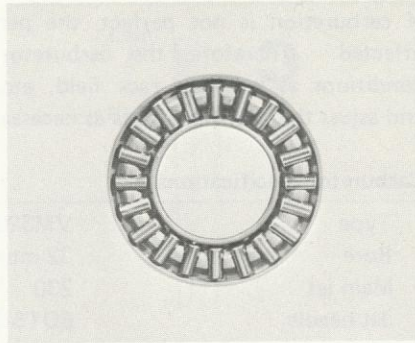
	Standard	Service limit
THICKNESS	1.60 mm (0.063 in)	1.50 mm (0.059 in)
FLATNESS		0.1 mm (0.004 in)

Drive plate flatness and thickness specification.



Clutch release rack bearing

Smooth engaging and disengaging actions presume that the release bearing is in good condition. With this in mind, inspect the bearing for damage and, as necessary, replace it by a new one.



CARBURETOR

If carburetion is not perfect, the performance of the engine will be adversely affected. Therefore, the carburetor should be set correctly to meet such conditions as weather, race field, etc.. First, check the carburetor thoroughly, and adjust the following parts as necessary:

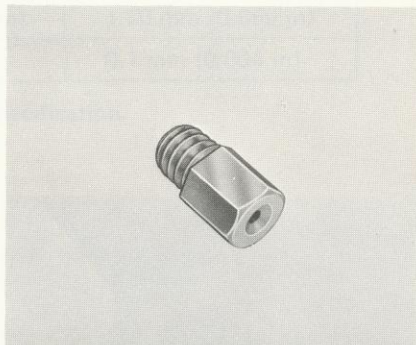
Carburetor specifications

Type	VM32SS
Bore	32 mm (1.26 in)
Main jet	230
Jet needle	6DT5-3
Needle jet	R-0
Cut-way	2.0
Pilot jet	30
Pilot air adjusting screw	1 turns back open
Float level	31.75 mm (1.25 in)

Main jet

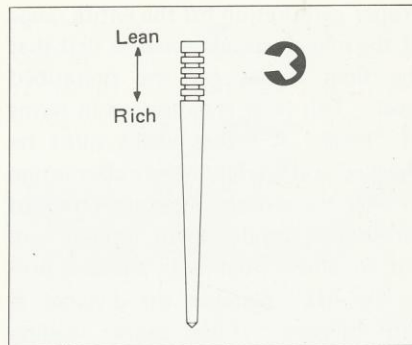
During operation, this jet controls the supply of fuel for a range from $\frac{3}{4}$ throttle to full throttle. To test the main jet, drive the machine on a racing course for a distance of about **10 km (6 miles)**, with the throttle kept open in that range; after this test run, open the engine to observe the carboned color of the spark plug, cylinder head and piston. If the color is black or if the surface is wet, it means that the mixture is too rich: in this case, the main jet must be replaced by the one with a smaller number.

If a grey-brownish or whitish color is noted, it means that the mixture is too lean: in this case, a main jet with a larger number is needed.



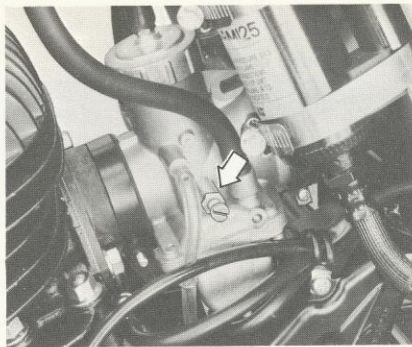
Jet needle

The jet needle determines the fuel-air mixture ratio at half-throttle. It has five grooves for the clip position. The gasoline flow rate can be varied by changing the position of the clip. The higher the clip position, the less the gasoline flow rate.



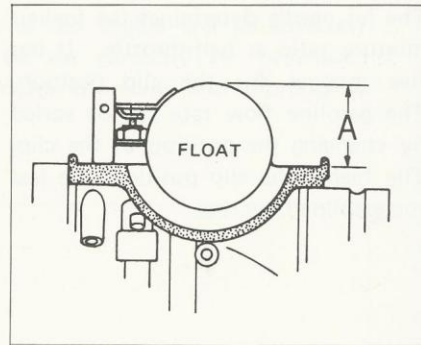
Pilot air screw

Warm up the engine and turn the pilot air screw clockwise until it seats in the carburetor. Open the pilot air screw $1\frac{1}{2}$ turn counter-clockwise. Slowly turn the pilot air screw in or out within $\frac{1}{4}$ turn from the standard setting ($1\frac{1}{2}$ turn) until the engine runs smoothly.



Float level

Proper carburetion for the entire range of the engine speeds assumes first that the float is set for the prescribed level. This level is expressed in terms of "height A"; the height must be checked and set right before attempting to alter the jetting. Hold the removed carburetor upside down, taking care not to allow float arm pin and arm to slip off. Measure the distance A with calipers. If the caliper reading is off the specification (stated below), bend the tongue.



How to judge carburetion

Item	Proper	Mixture is rich	Mixture is lean
Spark plug	Porcelain is light brown. Porcelain is tan color.	Porcelain is sooty. Porcelain is oily.	Porcelain is whitish. Porcelain is burned away.
Engine revolution	Engine runs smoothly.	Engine does not run smoothly.	Engine rpm fluctuates even if the throttle grip is held steady.

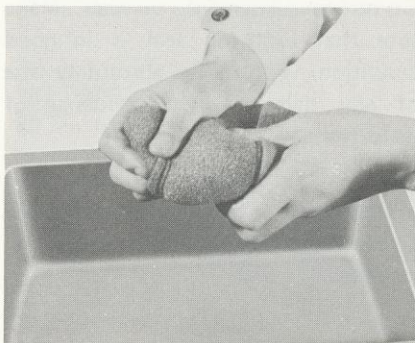
Over all carburetor adjustment

Item	When mixture is rich	When mixture is lean
Engine idling	Screw out pilot air screw.	Screw in pilot air screw.
Half-throttle	Raise needle clip position.	Lower needle clip position.
Full-throttle	Replace with main jet having a smaller calibration number.	Replace with main jet having a larger calibration number.

AIR CLEANER

How to clean the element.

1. Fill a washing pan of a proper size with gasoline. Immerse the element in the gasoline and wash it clean.
2. Squeeze gasoline off the washed element by pressing it between the palms of hands: do not twist and wring the element, or it will develop fissures.
3. Immerse the element in a pool of motor oil, and squeeze the oil off the element to make it slightly wet with motor oil.



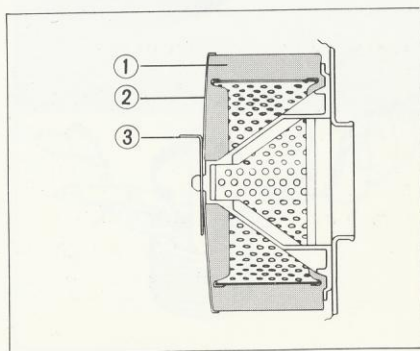
CAUTION:

Before and during the cleaning operation, examine the element to see if it has a rupture or fissure. A ruptured or fissured element must be replaced.

How to install the washed element.

Refer to the figure shown below.

After putting on the cover, secure it by inserting clip.



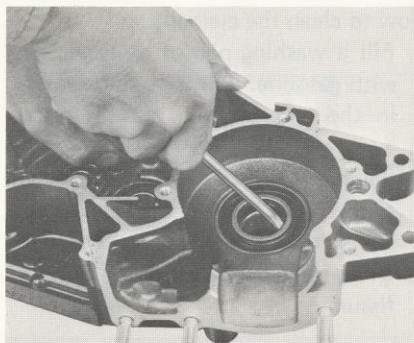
1. Cleaner element
2. Cleaner cover
3. Pin

REASSEMBLING ENGINE PARTS

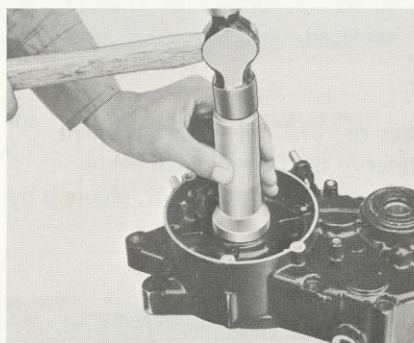
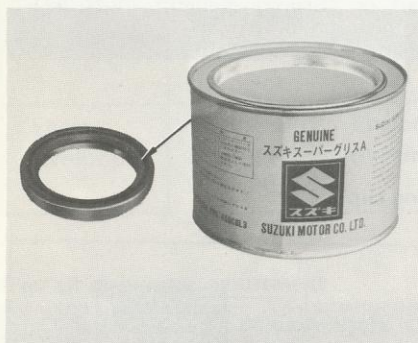
OIL SEALS

Do not re-use damaged oil seals. Make sure that each oil seal is in good condition, with its lip absolutely free of any damage or of evidence of distortion.

It is a good practice to discard all oil seals removed in engine disassembly and use new oil seals in engine re-assembly.



When fitting an oil seal, be sure to have its lip part lightly coated with SUZUKI SUPER GREASE "A" and to install it with the oil seal installing tool. With this tool, the oil seal can be held true and square as it goes into its position.

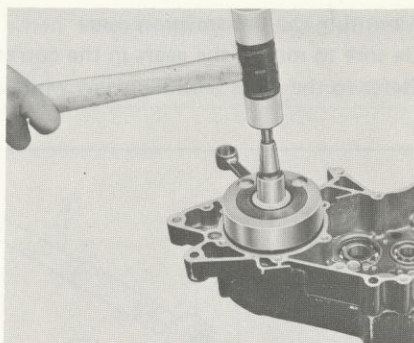


CRANKSHAFT

Use a plastic hammer to drive the crankshaft into its position. Be sure to deliver light blows to the end of crankshaft in order to force it into the righthand half of crankcase, as shown.

CAUTION:

Bear in mind that this crankshaft does not require any shim (or washer) between crank journal bearing and itself.

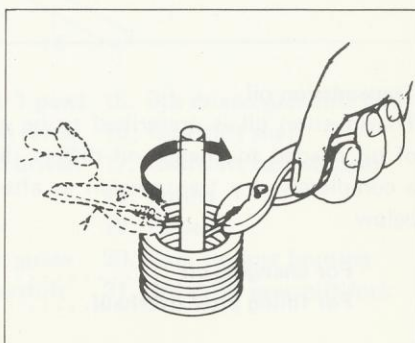
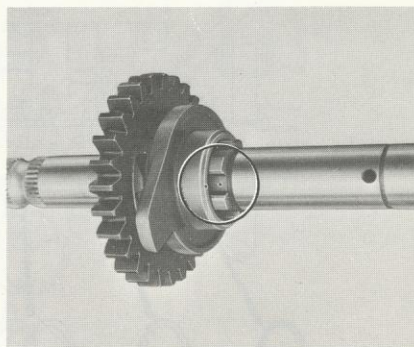


KICK STARTER

CAUTION:

When the kick starter to the shaft, be sure to match the two punched marks.

The kick starter return spring is to be installed after setting the shaft in the crankcase. To install this spring, hitch the inner end of the spring to the stopper provided on the crankcase, turn the shaft clockwise as viewed from kick lever side end until the shaft will not turn any further, and then rotate the spring about 180 deg. to insert the other end of the spring into the hole provided in kick starter shaft. Insert the spring guide, and retain it by fitting a circlip.

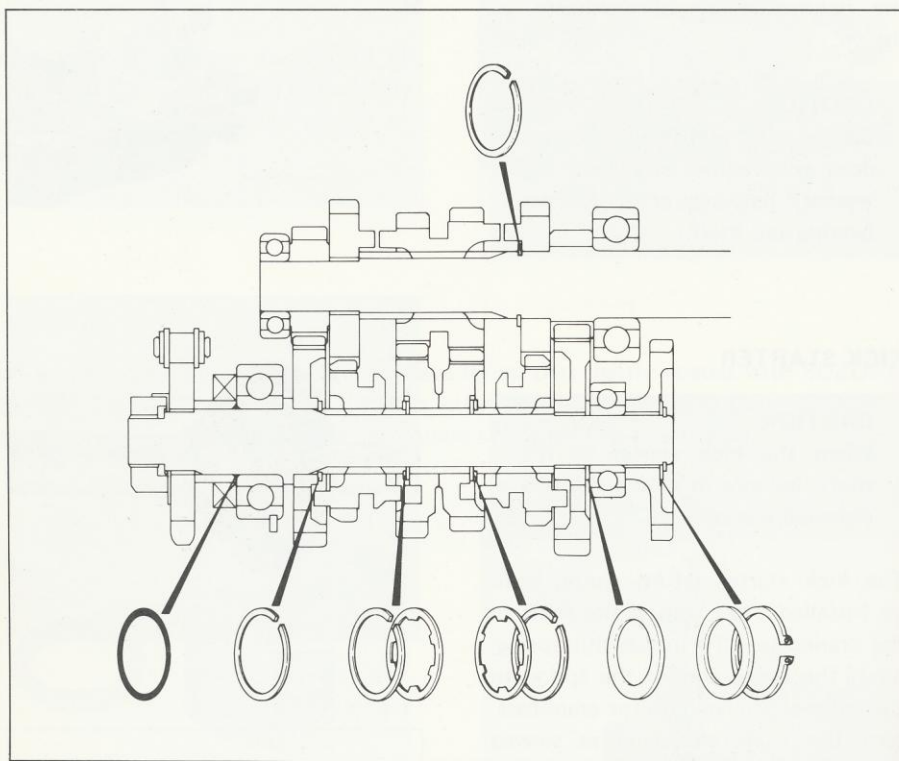


TRANSMISSION

Mounting the transmission gears

Be sure to mount the gears in the correct order.

Refer to the cross sectional view while and after mounting the gears:



Transmission oil

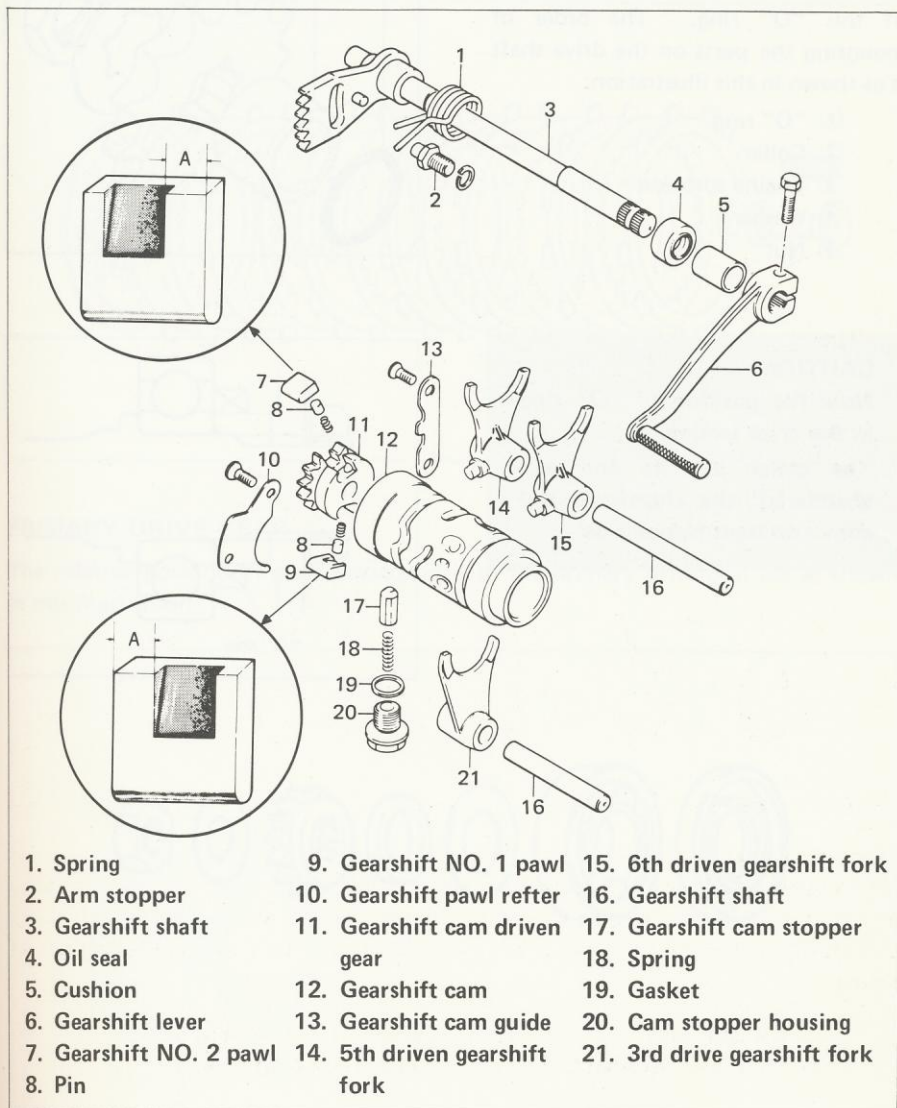
Transmission oil is prescribed to be a motor oil of SAE 20W/40. The quantity of oil needed to change oil differs slightly from that which is needed to fill up a completely dry transmission as after overhauling. The two quantities are stated below.

For changing oil 800 cc (1.7/1.4 US/Imp pt)

For filling after overhaul 900 cc (1.9/1.6 US/Imp pt)

GEARSHIFTING MECHANISM

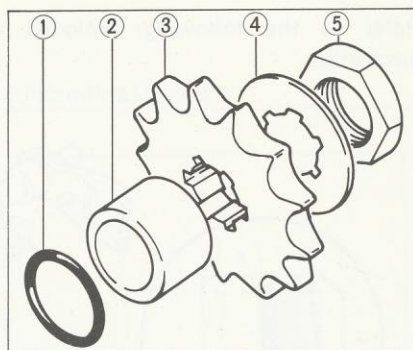
Refer to the following exploded view when reassembling the gearshifting mechanism.



ENGINE SPROCKET

Be sure to install "O" ring ① between bearing and collar. Oil leakage from the sprocket is often due to absence of this "O" ring. The order of mounting the parts on the drive shaft is as shown in this illustration:

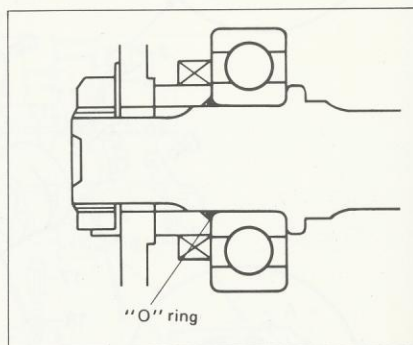
- ① "O" ring
- ② Collar
- ③ Engine sprocket
- ④ Washer
- ⑤ Nut



CAUTION:

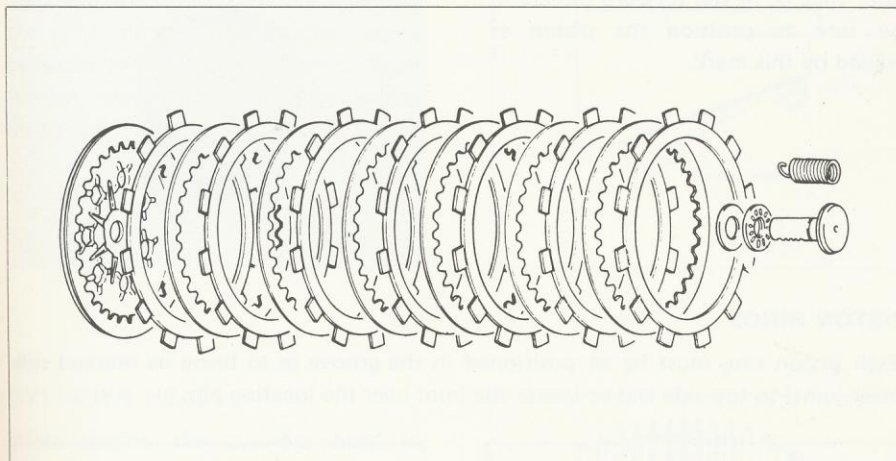
Note the position of "O" ring in this cross section.

The collar has its one end chamfered: the chamfered end comes on transmission side.



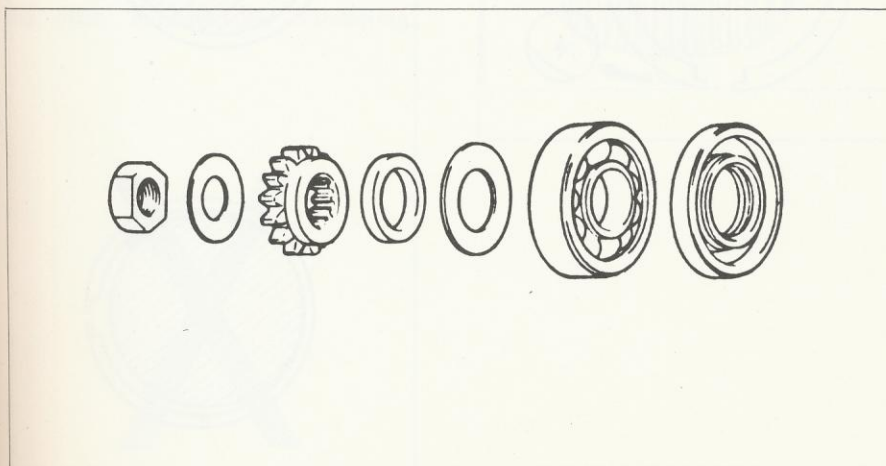
CLUTCH

Refer to the following illustration for to reassemble the clutch, giving attention to the way the two kinds of clutch plate alternate in the stack.



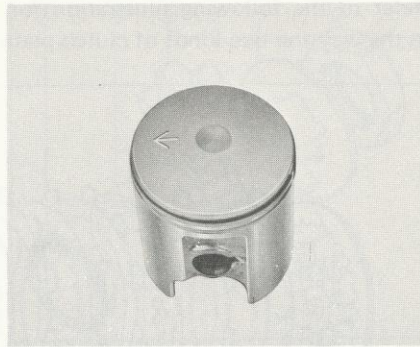
PRIMARY DRIVE GEAR

The relative position of parts associated with the primary drive gear are as shown in this illustration:



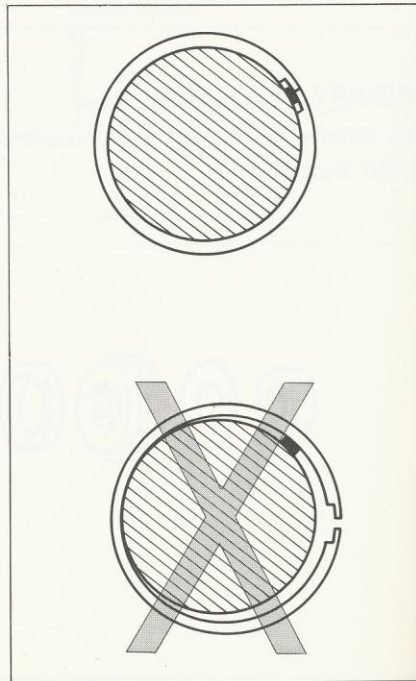
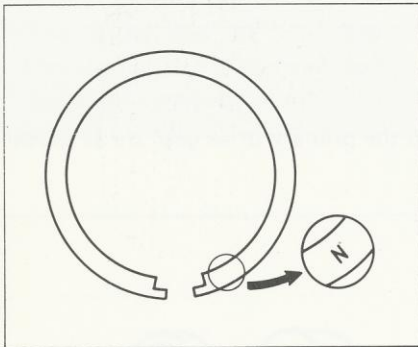
PISTON

The arrow mark on the piston crown is meant to point to exhaust port side, that is, in the forward direction. Be sure to position the piston as guided by this mark.



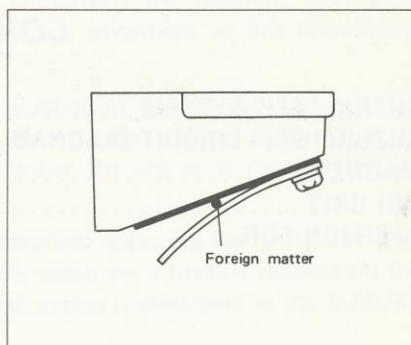
PISTON RINGS

Each piston ring must be so positioned in the groove as to bring its marked side (near joint) to top side and to locate the joint over the locating pin.



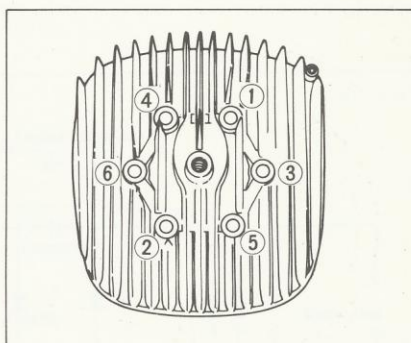
CYLINDER

The reed valve is located below the cylinder inlet port. Just before installing the cylinder, make sure that there is no foreign matter stuck between the reed and its seat. Such foreign matter could reduce engine output performance.



CYLINDER HEAD

After setting the cylinder head in place, run in the cylinder head nuts with fingers, making each nut finger-tight. Using the wrench, tighten the nuts sequentially and uniformly to equalize the pressure, moving the wrench from one nut to another in the order indicated by numbering.



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SUZUKI "PEI" SYSTEM

In the RM125, ignition energy is supplied to the spark plug through electronically triggered capacitor discharge in a system comprising the magneto, CDI unit, ignition coil and spark plug. Three outstanding advantages of this proprietary system are:

1. High voltage induced in the secondary winding of the ignition coil is stable over the entire range of engine speeds, so that the ignition performance of the plug is dependable, regardless of whether the engine is running fast or slow.
2. There is no need of so frequently checking and adjusting the ignition system components as in the conventional system based on a breaker mechanism for make-break contacting action. Make-break action is electronic in the SUZUKI "PEI" system.
3. Ignition timing is automatically advanced in a manner best suited to the operating characteristic of the engine.

SUZUKI "PEI" CIRCUIT DIAGRAM

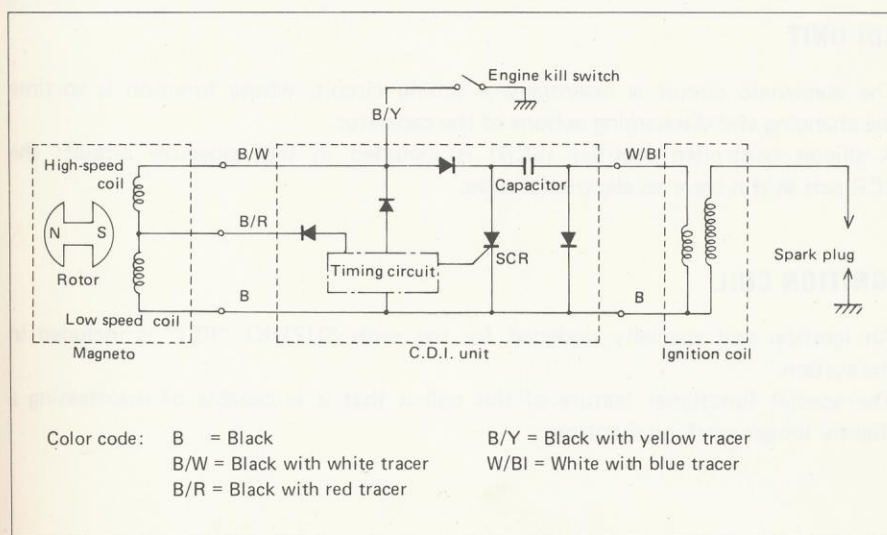
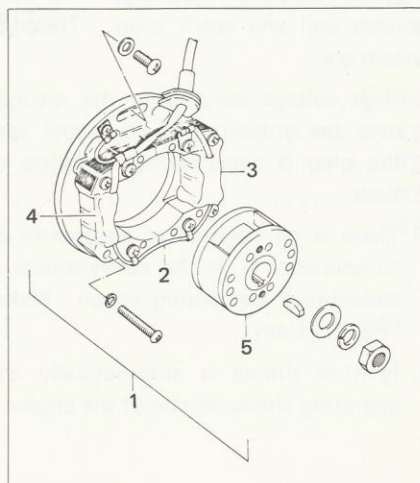


Fig. 3-1-1

MAGNETO

Rotor presents two magnetic poles, N and S, to the two coils mounted on the stator. One is an exciter coil and the other is a pulser coil.

- ① Magneto assembly
- ② Stator assembly
- ③ Primary coil
- ④ Pulser coil
- ⑤ Rotor



CDI UNIT

The electronic circuit is essentially a timing circuit, whose function is to time the changing and discharging actions of the capacitor.

A silicon controlled rectifier (SCR) is included in the capacitor circuit: the SCR acts as if it were an electronic valve.

IGNITION COIL

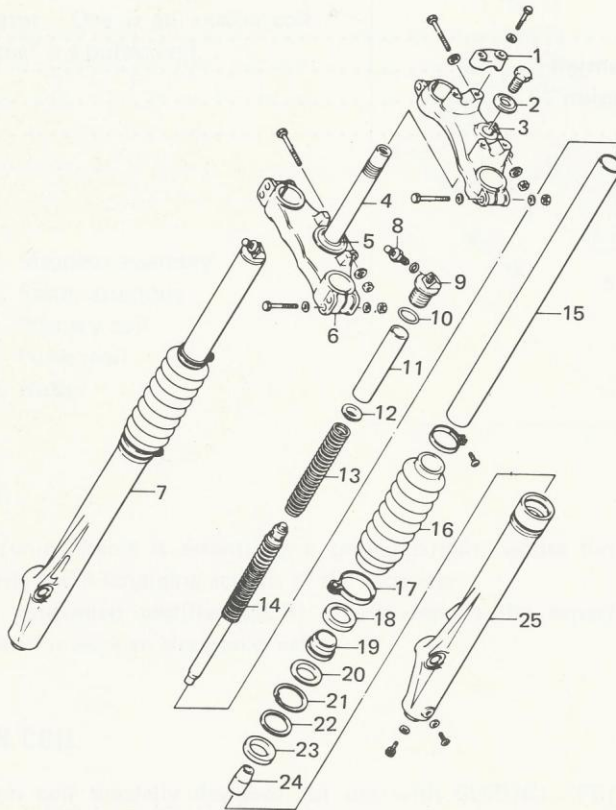
An ignition coil specially designed for use with SUZUKI "PEI" is included in the system.

The special functional feature of this coil is that it is capable of maintaining a slightly longer sparking duration.

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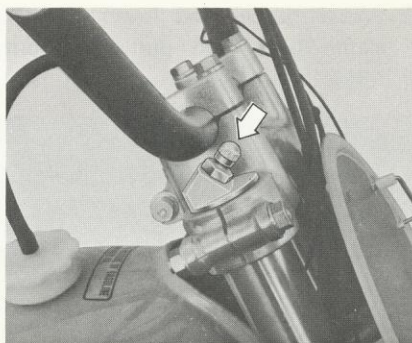
FRONT SUSPENSION



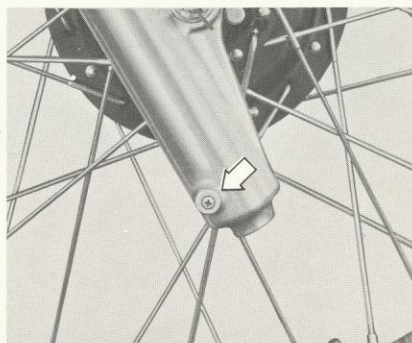
- | | | |
|-----------------------|------------------------|---------------------|
| 1. Handlebar holder | 9. Inner tube cap bolt | 17. Clip |
| 2. Washer | 10. O ring | 18. Dust seal case |
| 3. Steering stem head | 11. Spacer | 19. Dust seal |
| 4. Steering shaft | 12. Spring guide | 20. Snap ring guide |
| 5. Outer race | 13. Spring | 21. Snap ring |
| 6. Steering stem | 14. Cylinder | 22. Washer |
| 7. Outer tube | 15. Inner tube | 23. Oil seal |
| 8. Valve | 16. Bolt | 24. Oil lock piece |

Front fork disassembly:

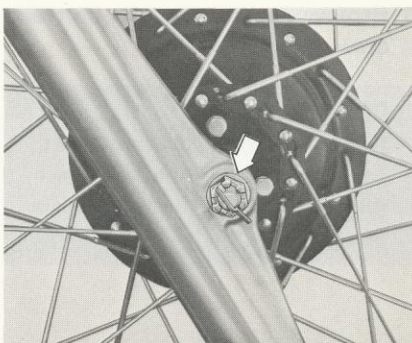
1. Deflate front fork by pushing in the valve.



2. Remove drain plug and drain oil.

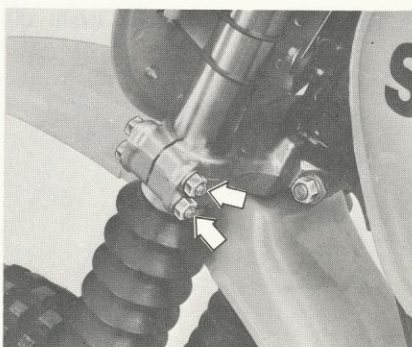


3. Remove front wheel by taking off split pin and removing axle nut.



- 4 Loosen upper and lower bracket clamp bolts and pull out front forks.

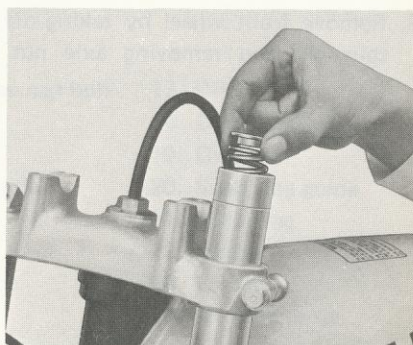
NOTE: To facilitate the remaining work, have inner tube cap bolt loose.



5. Remove inner tube cap bolt and draw out spring.

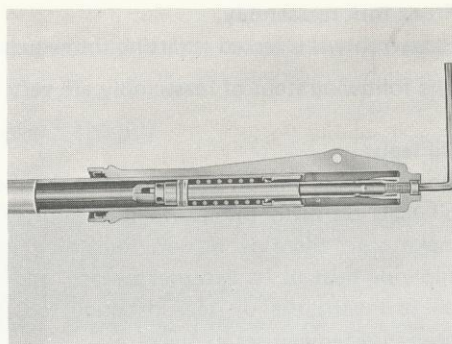
CAUTION:

When removing the cap bolt, be sure to firmly hold the inner tube not to fly away the cap bolt.



6. Remove cylinder fixing bolt and draw out inner tube.

Use "T" hexagon wrench (09914-25811) and front fork assembling tool set (09940-34511).



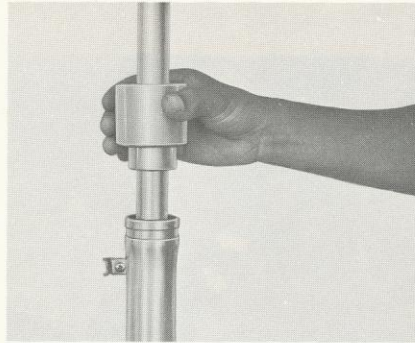
Front fork reassembly:

Reassembly is effected reversing the sequence of disassembly.

The following steps of reassembly are very important.

Oil seals:

Do not re-use the oil seals found to show evidence of oil leakage: have replacement oil seals on hand for use in reassembly. To replace the oil seal, remove circlip, make sure there is no oil remaining in outer tube, warm the outer tube by applying heat to its external surface, and draw the oil seal. Install the replacement oil seal with the oil seal installing tool (09940-53111) after the inner tube has been inserted and set in place.

**Spring seat bolt:**

Before running in this bolt, be sure to lower the inner tube all the way in and to center the internal parts in place. The seat bolt may be tightened only when the internals are so positioned.

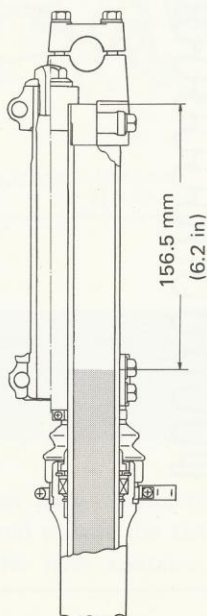
Air pressure:

After pouring oil into the inner tube, be sure to supply compressed air until the prescribed pressure value is reached.

Standard setting pressure: 1.4 kg/cm^2 (20 psi)

CAUTION:

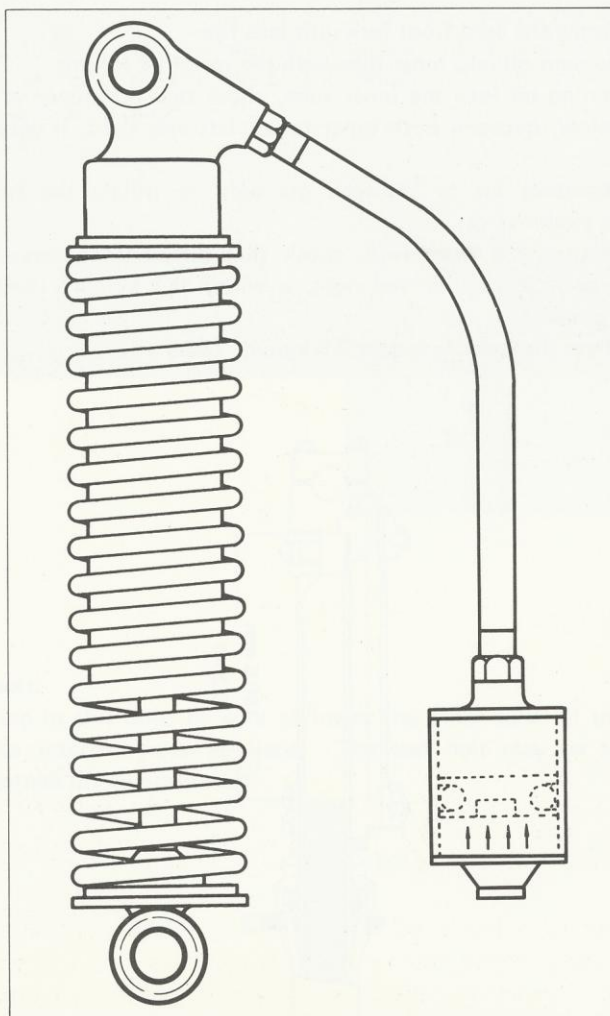
- * Do not throw the used front fork unit into fire.
- * Adhere to pour oil into inner tube with the specified volume.
- * When pouring oil into the inner tube, check that difference of oil level, shown below, between both inner tubes, left and right, is within 1 mm (0.04 in).
- * Use compressed air or nitrogen gas only to inflate the front fork. Never use explosive gas.
- * When inflating the front fork, check that difference of pressure value between both forks, left and right, is within 0.1 kg/cm^2 (1.42 psi) by pressure gauge.
- * Never inflate the front fork over 2.5 kg/cm^2 (35.5 psi).



REAR SUSPENSION

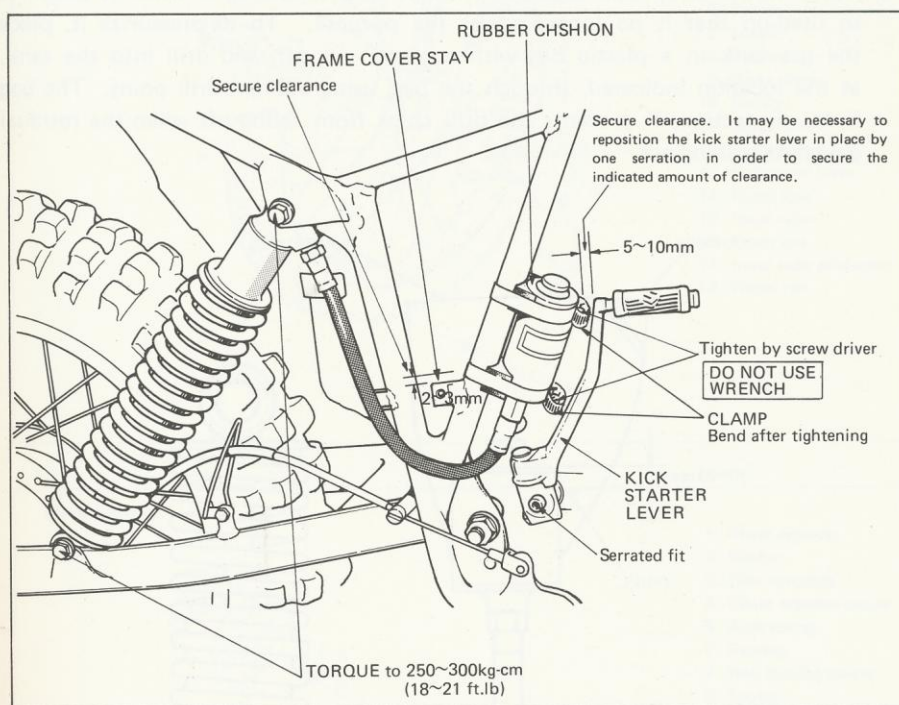
Advantage of the gas-filled shock absorber

Inside the damper, oil space and gas space are isolated from each other by a free piston, so that the oil is free from bubbling and hence contribute to stable damping action. Since oil is under pressure, it is sensitive even to small-amplitude motions of the rear wheel. The damper of single tube type, so that the heat generated in it quickly dissipates to uphold its high damping performance even for a continuous run of many hours on rough ground.



Installation

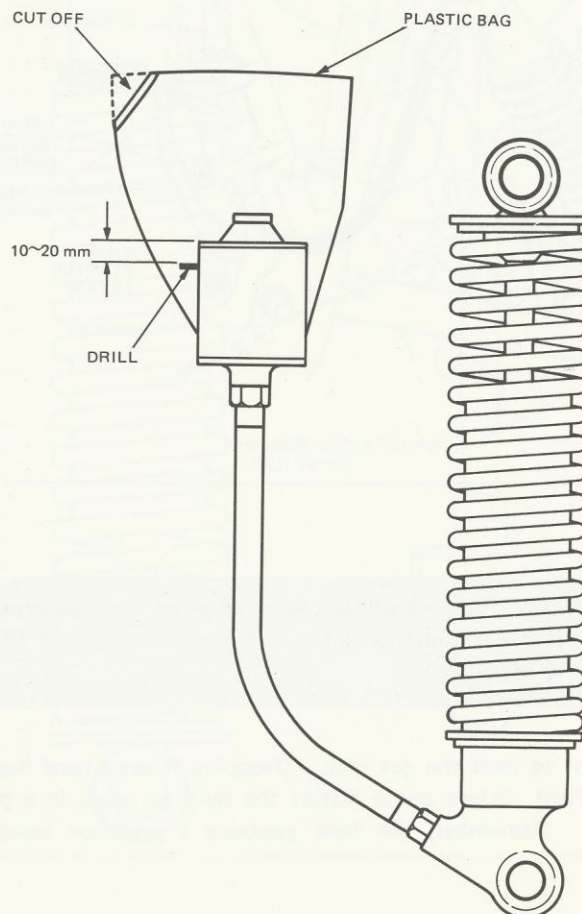
Remove the existing rear shock absorber. Install this absorber in the same position, and attach its gas tank, as shown:



WARNING: Three things must be kept in mind for correctly handling the rear shock absorber unit with the separate gas tank for its absorber:

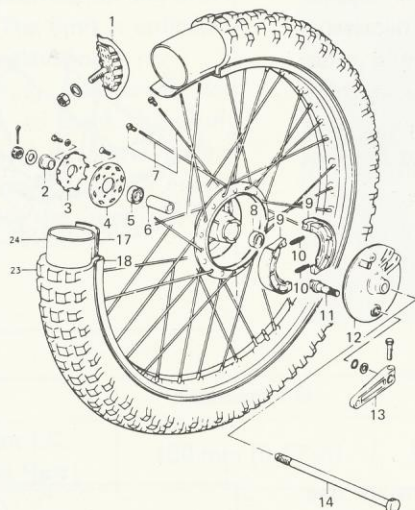
1. Be careful not to dent the gas tank. Dropping it onto hard floor or banging it against a hard surface could distort the tank to result in a poor absorber performance. Remember, the tank contains a precision machined piston.

2. This absorber does not permit oil change or refilling. Never attempt to loosen either nut securing the hose end to the absorber or to the tank. The piston inside separates high-pressure nitrogen gas from the oil, and transmits the gas pressure to the oil: the oil will spurt out if the nut is loosened.
3. Never throw away this absorber without de-pressurizing it when it becomes so used-up that it no longer serves the purpose. To de-pressurize it, place the gas tank in a plastic bag with a corner cut off, and drill into the tank, at the location indicated, through the bag, using a 3-mm drill point. The bag is for protection; it prevents the drill chips from flying off when the residual gas starts rushing out.



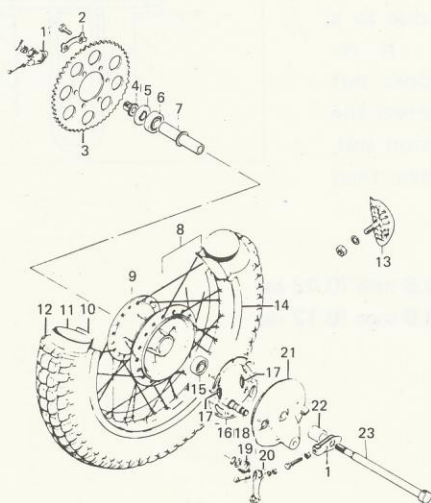
WHEELS

Front wheel



1. Bend stopper
2. Spacer
3. Hub bearing holder
4. Front hub flange
5. Bearing
6. Spacer
7. Spoke
8. Bearing
9. Brake shoe
10. Spring
11. Brake cam
12. Front hub panel
13. Brake cam lever
14. Front axle
15. Inner tube
16. Front tire
17. Inner tube protector
18. Wheel rim

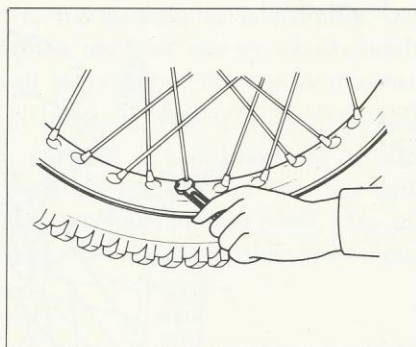
Rear wheel



1. Chain adjuster
2. Washer
3. Rear sprocket
4. Chain adjuster spacer
5. Axle spacer
6. Bearing
7. Hub bearing spacer
8. Spoke
9. Rear hub drum
10. Inner tube protector
11. Inner tube
12. Tire
13. Bead stopper
14. Rim
15. Bearing
16. Brake shoe
17. Spring
18. Brake cam
19. Spring
20. Brake cam lever
21. Rear hub panel
22. Spacer
23. Rear axle

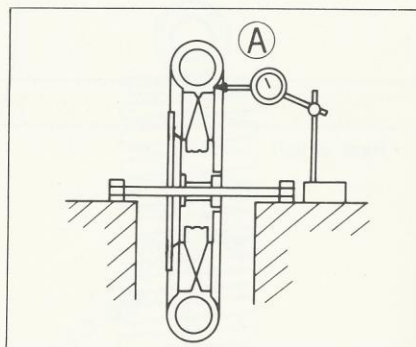
Retightening spoke nipples

After each race, check the nipples for tightness and, as necessary, retighten them to the torque value indicated below. Driving the machine with these nipples loose will damage not only the spokes but also the rim.



Rim runout

Always be sure that the rims are free of any runout exceeding the limit indicated below. To check the rim for runout, use a dial gauge A with its spindle pointed squarely to the vertical flat of the rim, as shown. Excessive runout is usually due to a worn-down wheel bearing. If replacement of the bearing does not reduce the runout, try to correct the wheel by adjusting spoke tension and, if this should prove ineffective, then the rim must be replaced.



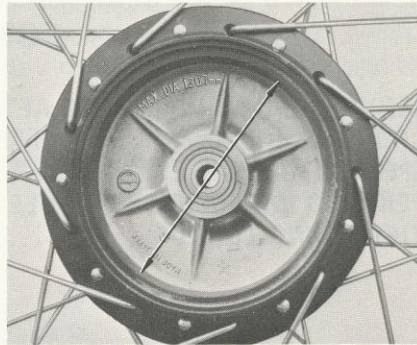
Standard rim runout: 0.5 mm (0.02 in)

Service limit: 3.0 mm (0.12 in)

Brake drums

A wear limit is specified for the drum of each brake. The limit is indicated inside the drum, as shown.

Upon disassembling the brake for servicing, be sure to check the drum I.D. (inner diameter), and if the reading is noted to be equal to or in excess of the limit, replace the drum.



	Standard I.D.	Service limit
Brake drum I.D. (Front and Rear)	130 mm (5.12 in)	130.7 mm (5.15 in)

NOTE: Minor surface flaws can be corrected by grinding with sandpaper.

GROUP 7

SERVICE DATA

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SERVICE AND MAINTENANCE AFTER COMPETITION

Wash the motorcycle after each race. To obtain the best washing efficiency, wash the machine with hot water and detergent after having washed it with water. But never squirt water directly on the air cleaner or front and rear brake drums. After washing the motorcycle, wipe it with a dry cloth and run the engine to evaporate water on the engine components.

Running the engine also allows oil to be applied to the major components inside the engine, thus preventing rust. After washing, perform the service below in preparation for the next race.

AFTER EACH RACE

Apply oil and grease to the rotating and sliding parts.

See if there are any cracks in the rear sprocket mounting drum shock damper.

Check each tightening bolt, nut and spoke nipple for tightness.

Clean the air cleaner element and fuel cock strainer.

AFTER FIVE RACES

Check the front fork and rear shock absorber for oil leakage.

Check the front and rear brake shoes for wear.

Replace the transmission oil with fresh oil.

AFTER TEN RACES

Remove the carbon deposited on the combustion chamber, piston crown, cylinder exhaust port and expansion chamber. Check the cylinder, piston and piston rings for wear.

IN PREPARATION FOR RACING NEXT SEASON

It is recommended that your RM125 be overhauled by an authorized Suzuki Service Shop to maintain its performance.

TROUBLESHOOTING

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

ENGINE WILL NOT START

Fuel system

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

Spark plug

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

CLUTCH SLIPPAGE

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

EXCESSIVE ENGINE VIBRATION

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

ENGINE OVERHEATS

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

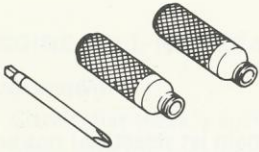

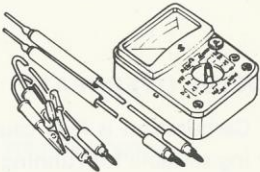
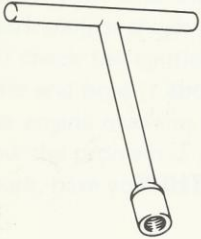
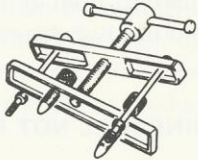
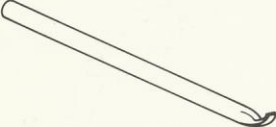
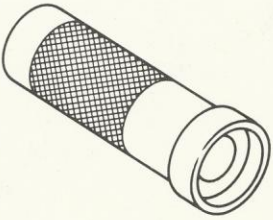

BAD RUNNING STABILITY

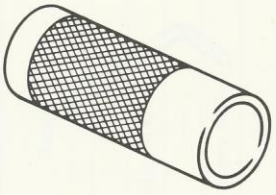
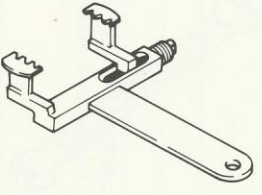
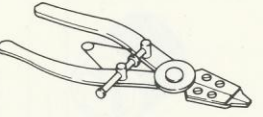
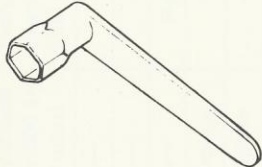

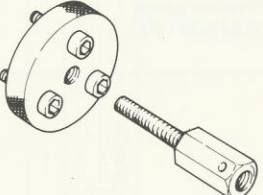
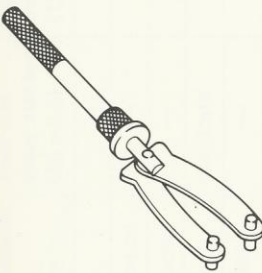
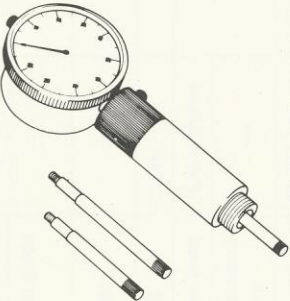
1. Improper front or rear tire air pressure.
2. Improper front or rear wheel alignment.
3. Improperly tightened front axle nut or steering stem lock nut.


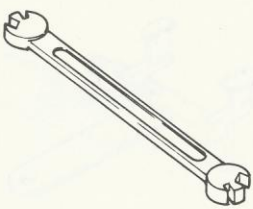

ENGINE WILL NOT REV UP OR WILL NOT RUN SMOOTHLY

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

SPECIAL TOOLS

		
<p>Shock driver set 09900-09002</p>	<p>Thickness gauge 09900-20804</p>	<p>Pocket tester 09900-25001</p>
		
<p>8 mm stud installing tool 09910-10710</p>	<p>Con-rod stopper 09910-20114</p>	<p>Crankcase separating tool 09910-80113</p>
		
<p>Oil seal remover 09913-50110</p>	<p>Bearing and oil seal installing tool 09913-70122</p>	<p>Clutch spring hook 09920-20310</p>

		
<p>Bearing and oil seal installing tool 09913-80111</p>	<p>Clutch sleeve hub holder 09920-53710</p>	<p>Snap ring opener 09920-70111</p>
		
<p>Spark plug wrench 09930-10111</p>	<p>Rotor remover shaft 09930-30101</p>	<p>Rotor remover attachment 09930-30211</p>
		
<p>Engine sprocket and flywheel holder 09930-40113</p>	<p>Timing gauge 09931-00112</p>	<p>Steering stem lock nut wrench 09940-10122</p>

		
<p>Front fork oil seal installing tool 09940-53111</p>	<p>Spoke nipple wrench 09940-60112</p>	<p>8 mm hexagon "L" type wrench 09911-71510</p>

<p>Pressure gauge 09943-74110</p>	<p>Front fork oil level gauge 09940-44110</p>
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PERIODIC INSPECTION SCHEDULE

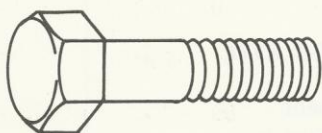
Interval Service Item	Each race Every 100 km (60 miles)	Every 2 races Every 200 km (120 miles)	Every 3 races Every 300 km (180 miles)	Every 5 races Every 500 km (300 miles)	Remarks
Piston ring	—	Replace	—	—	—
Transmission oil	—	Change	—	—	Change at initial 100 km
Engine sprocket	—	—	—	Replace	—
Drive chain	Lubricate	—	Replace	—	Adjust slack every 40 km
Rear sprocket	—	—	Replace	—	—
Drive chain buffer	—	—	Replace	—	—
Drive chain guide roller	—	—	Replace	—	—
Spoke nipple	—	—	—	—	Within 0 - 50 km retighten every 10 km. After 50 km retighten every 50 km.
Air Cleaner	Clean	—	—	—	—
Kick starter lever	Apply grease	—	—	—	—
Throttle, brake & clutch cable	—	—	Replace	—	—
Bolts and nuts (see page 44)	Retighten	—	—	—	Retighten initial 20 km
Spark plug	Check & clean	—	—	—	—
Piston	—	—	—	Replace	—
Front fork oil	—	—	Change	—	Change at initial 100 km

TIGHTENING TORQUE

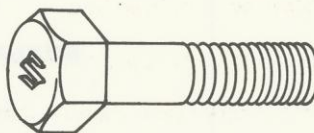
Part Torque	kg-cm	lb-ft
Cylinder head nuts	230 ~ 270	16.6~19.4
Magneto rotor nut	300 ~ 400	21.6~28.8
Engine sprocket nut	400 ~ 600	28.8~43.2
Clutch sleeve hub nut	600 ~ 700	43.2~50.0
Primary drive gear nut	900 ~1000	64.8~72.0
Front brake cam lever bolt	50 ~ 80	4.0~ 5.5
Front axle nut	400 ~ 520	29.0~37.0
Steering stem head bolt	400 ~ 550	29.0~39.5
Steering stem upper clamp bolt	150 ~ 230	11.0~16.5
Front-fork upper clamp bolts (left & right)	150 ~ 250	10.5~18.0
Steering stem lower clamp bolt	200 ~ 300	14.5~21.5
Front-fork lower clamp bolts (left & right)	250 ~ 300	18.0~25.0
Rear axle nut	400 ~ 520	29.0~37.0
Rear shock absorber fitting bolts	200 ~ 300	14.5~21.5
Rear swinging arm pivot nut	550 ~ 700	39.9~50.0
Handlebar clamp bolts	160 ~ 200	11.5~14.0
Rear brake cam lever bolt	50 ~ 80	4.0~ 5.5
Rear torque link nuts	120 ~ 150	8.5~10.5

For other bolts and nuts not listed left, refer to this chart:

Bolt Diameter (mm)	Conventional Bolt		"⚡" Marked Bolt	
	kg-cm	lb-ft	kg-cm	lb-ft
5	20 ~ 40	1.5 ~ 2.9	30 ~ 60	2.2 ~ 4.4
6	40 ~ 70	2.9 ~ 5.1	60 ~ 100	4.4 ~ 7.3
8	90 ~ 140	6.6 ~ 10.0	130 ~ 230	9.5 ~ 17.0
10	180 ~ 280	13.0 ~ 20.0	250 ~ 400	18.0 ~ 29.0



Normal bolt



"⚡" type bolt

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